



**APPENDIX M-1**  
**Traffic Impact Assessment Report Update**  
**Dated December 20, 2016**

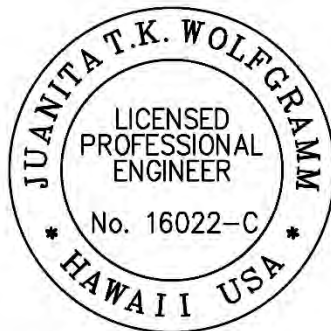
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## **Pi'ilani Promenade Traffic Impact Analysis Report Update**

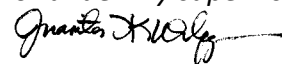
Kihei, Maui

**December 20, 2016**

Prepared for  
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*This work was prepared by me  
or under my supervision:*

A handwritten signature in black ink, appearing to read "Juanita T.K. Wolfgramm".

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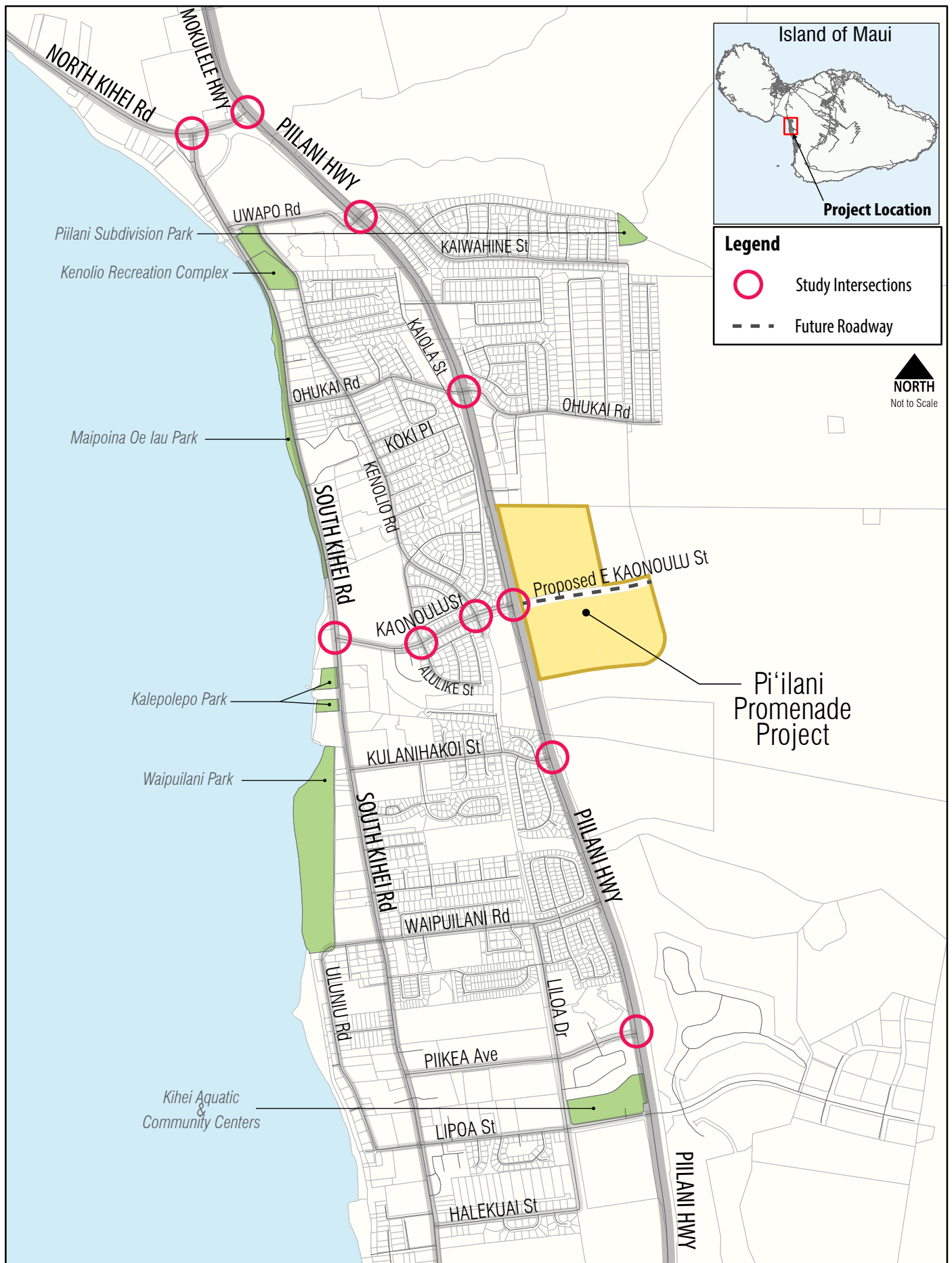
## **I. INTRODUCTION**

Pi'ilani Promenade is a planned multi-use development proposed on 68-acres of undeveloped land in Kihei on the island of Maui (see project location map in Figure 1). Pi'ilani Promenade is proposing to include 530,000 square feet of commercial area, 5 acres of light industrial uses, and 226 units of one and two-bedroom rental apartments (see site plan in Figure 2). The project site is approximately 10 miles south of Kahului Airport on the east side of Pi'ilani Highway with access coming off of Pi'ilani Highway through the intersection with Kaonoulu Street.

The developer anticipates having a full build-out and occupancy by the year 2032. Access to and from the project will be from an easterly extension of Kaonoulu Street, which will be called East Kaonoulu Street. Hawai'i Department of Transportation (HDOT) plans are for a future extension of East Kaonoulu Street to provide a mauka-makai (mountain to ocean) connector between Kihei and Upcountry Maui. The full construction of East Kaonoulu Street to Upcountry Maui is not currently funded and, therefore, the traffic impact of the full construction of this road will not be included in the analysis of future conditions for the year 2032.

A traffic impact analysis report (TIAR) was completed by Phillip Rowell Associates (PRA) in June 6, 2014 for Pi'ilani Promenade. HDOT provided comments on the report in a letter dated October 6, 2014 letter. Subsequent coordination between HDOT, the owner, and traffic engineer resulted in a comment-response matrix (see Appendix A) that addressed outstanding concerns and ways to resolve concerns.

This current report is an update to the June 6, 2014 TIAR. It will evaluate existing (2016) conditions, assess impacts to the surrounding area as a result of the proposed development and changes associated with anticipated surrounding area development. As stated previously, the proposed master planned project includes multifamily residential, light industrial and business commercial uses. The initial phases of the project are proposed to include multifamily rental units as well as the light industrial and a portion of the business commercial component of the project. There is an existing demand for the multifamily rental housing on Maui which is addressed in the initial phases. The light industrial and business commercial components of the project will be developed as driven by market demand for such space.



**Figure 1: Project Location Map**

*Pi'ilani Promenade – Kihei, Maui*

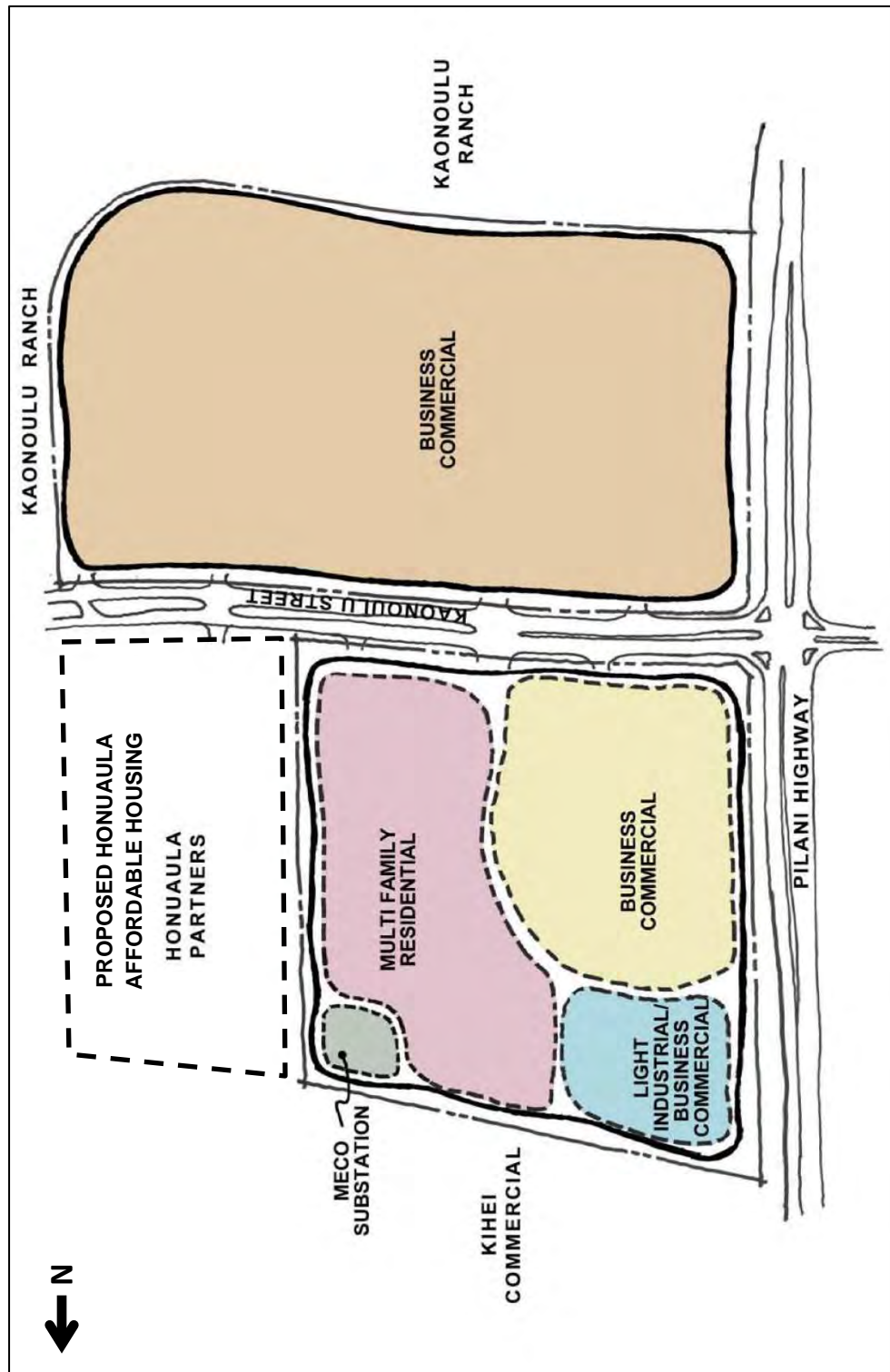


Figure 2: Site Plan



## **II. EXISTING (2016) CONDITIONS**

The area surrounding the project site is suburban in nature, consisting of single family and multi-family homes with some commercial uses that include shopping and resort hotels. Pi'ilani Highway is the primary arterial that provides north-south access along the mauka side of Kihei. South Kihei Road runs parallel to Pi'ilani Highway along the coast, and provides more direct access to residential, commercial, and beach uses. Mauka-makai connectors such as Kaonoulu Street exist every ¼-mile to ½-mile and are controlled by stop signs or traffic signals at the major intersections.

### **A. Existing Geometric Configuration**

#### **1. Existing Roadway Configuration**

Pi'ilani Highway (State Route 31) is a four-lane, undivided highway, near the project site, with a north-south orientation connecting Mokulele Highway to the north with the Wailea Resort to the south. The posted speed limit is 40 miles per hour (mph) south of Kaiwahine Street/Uwapo Road and 45 mph north of Kaiwahine Street/Uwapo Road.

Ohukai Road is a two-lane, two-way street, but widens to provide two approach lanes as it approaches Pi'ilani Highway. The posted speed limit is 20 mph.

Kaonoulu Street currently connects Pi'ilani Highway with South Kihei Road. Currently, it is a two-lane, two-way street with separate left turn lanes at intersections. The posted speed limit is 20 mph.

Kaiwahine Street is a two-lane, two-way residential collector street. The posted speed limit is 20 mph. Residential parking is allowed along both sides of the street.

Uwapo Road is an extension of Kaiwahine Street west of Pi'ilani Highway to South Kihei Road. Uwapo Road is a two-lane, two-way roadway. There is no development along the north side and there are multi-family residential unit along the south side. No parking is allowed along either side. The assumed speed limit is 20 miles per hour.

Kulanihakoi Street currently connects Pi'ilani Highway with South Kihei Road. It is a two-lane, two-way street. Residential parking is allowed on both sides of the street. The posted speed limit is 20 mph.

Pi'ikea Avenue also connects Pi'ilani Highway with South Kihei Road. It is a four-lane, two-way street between Pi'ilani Highway and Liloa Drive. This segment provides access to commercial areas on the north side of Pi'ikea Avenue and to multifamily residential units on the south side. There is a roundabout at the intersection with Liloa Drive with rectangular rapid flashing beacons for each pedestrian crossing. Pi'ikea Avenue becomes a two-lane, two-way street between Liloa Drive and South Kihei Road. The posted speed limit is 20 mph.

South Kihei Road is a two-lane, two-way roadway which starts at North Kihei Road on the north and travels south through Kihei. This roadway provides access to residential, commercial, parks and hotel areas. The posted speed limit is 30 mph.

North Kihei Road is primarily an undivided, two-lane, two-way street. The posted speed limit is 30 mph near South Kihei Road and Mokulele Highway and is 45 mph west of South Kihei Road. There is a center lane that provides left turns for opposing directions west of South Kihei Road to access beach front hotels.

## **2. Existing Intersection Configuration**

Primary study intersections in the project area, based on prior consultation with HDOT, include the following:

1. South Kihei Road and North Kihei Road
2. Pi'ilani Highway and North Kihei Road
3. Pi'ilani Highway and Uwapo Road/Kaiwahine Street
4. Pi'ilani Highway and Ohukai Road
5. Pi'ilani Highway and Kaonoulou Street
6. Pi'ilani Highway and Kulanihakoi Street
7. Pi'ilani Highway and Pi'ikea Avenue
8. Kaonoulou Street and Kenolio Road
9. Kaonoulou Street and Alulike Street
10. Kaonoulou Street and South Kihei Road

Existing (2016) lane configurations, marked pedestrian crosswalks, and traffic controls at the study intersections are shown in Figure 3.

The study intersections were selected in consultation with HDOT. There are no signalized intersections north of North Kihei Road or west of South Kihei Road for several miles. The intersection of Pi'ilani Highway at Pi'ikea Avenue is the southernmost intersection and is approximately 1.25 miles from the project.

The intersection of Pi'ilani Highway at Ohukai Road is located approximately 2,950 feet north of Kaonoulou Street. The intersection is a four-legged signalized intersection. The northbound and southbound approaches are Pi'ilani Highway and the eastbound and westbound approaches are Ohukai Road. There are separate left turn lanes and separate right turn lanes along the northbound and southbound approaches of Pi'ilani Highway. The northbound and southbound left turns are protected. Recent construction added dedicated left-turn lanes for the eastbound and westbound approaches with a through lane and separate right turn lane. The eastbound and westbound left turn traffic signals are protected only.

The intersection of Pi'ilani Highway at Kaiwahine Street and Uwapo Road is located approximately 1,290 feet north of Ohukai Road along Pi'ilani Highway. The intersection is a four-leg signalized intersection. The northbound and southbound approaches are Pi'ilani Highway, the eastbound approach is Uwapo Road and the westbound approach is Kaiwahine Street. There are

separate left turn lanes and separate right turn lanes along the northbound and southbound approaches of Pi'ilani Highway. Left turns are protected. The eastbound and westbound approaches each have an optional left turn or through lane and a separate right turn lane. The eastbound and westbound left turns are permitted.

The intersection of Pi'ilani Highway at North Kihei Road is located approximately 2,175 feet north of Uwapo Road along Pi'ilani Highway. The intersection is a four-legged signalized intersection. The northbound approach is Pi'ilani Highway, the southbound approach is Mokulele Highway and the eastbound and westbound approaches are North Kihei Road. The northbound approach has two left turn lanes, two through lanes and a right turn lane. The southbound approach has one left turn lane, two through lanes and one right turn lane. The northbound and southbound left turns are protected. The eastbound approach has one left turn lane, a shared through/left turn lane and two right turn lanes. Right turns are allowed on right turn green arrows only. The westbound approach is a left turn lane and a shared through/right turn lane.

The intersection of North Kihei Road at South Kihei Road is located approximately 1,500 feet west of Pi'ilani Highway along North Kihei Road. The intersection is a three-legged signalized intersection. The northbound approach is South Kihei Road. The eastbound and westbound approaches are North Kihei Road. The northbound approach has two left turn lanes and one right turn lane. The eastbound approach has one through lane and one right turn lane. The westbound approach has one left turn lane and two through lanes. The westbound left turns are protected.

The intersection of Pi'ilani Highway at Kaonoulu Street is a three-legged unsignalized intersection. The northbound and southbound approaches are Pi'ilani Highway and the eastbound approach is Kaonoulu Street. The northbound approach has one left turn lane and two through lanes. The southbound approach has two through lanes and one right turn lane. The eastbound approach is the stop sign controlled approach and has one left turn lane and one right turn lane. The eastbound and southbound right turns are channelized.

The intersection of Pi'ilani Highway at Kulanihakoi Street is located approximately 2,100 feet south of Kaonoulu Street along Pi'ilani Highway. The intersection is a three-legged unsignalized intersection. The northbound and southbound approaches are Pi'ilani Highway. The northbound approach has one left turn lane and two through lanes. The southbound approach has two through lanes and one right turn lane. The eastbound approach is Kulanihakoi Street and is the stop sign controlled approach. The Kulanihakoi Street approach has one left turn lane and one right turn lane. There is a refuge lane for the eastbound left turning movements. The eastbound and southbound right turns are channelized.

The intersection of Pi'ilani Highway at Pi'ikea Avenue is located approximately 3,850 feet south of Kulanihakoi Street. The intersection is a three-legged signalized intersection. The northbound and southbound approaches are Pi'ilani Highway and the eastbound approach is Pi'ikea Avenue. The northbound approach has one left turn lane and two through lanes. The northbound left turns are protected. The southbound approach has two through lanes and one right turn lane. The

eastbound approach has one left turn lane and one right turn lane. The eastbound and southbound right turns are channelized.

The intersection of South Kihei Road at Kaonoulu Street is located approximately 3,230 along Kaonoulu Street west of Pi'ilani Highway. The intersection is a three-legged, stop sign controlled intersection. The northbound and southbound approaches are South Kihei Road. The northbound approach has one shared through/right turn lane. The southbound approach has one shared through/left turn lane. The westbound approach is Kaonoulu Street and is the controlled approach. The westbound approach has one left turn lane and one right turn lane.

The intersection of Kaonoulu Street at Kenolio Road is located approximately 500 feet along Kaonoulu Street west of Pi'ilani Highway. The intersection is a four-legged stop sign controlled intersection. The eastbound and westbound approaches are Kaonoulu Street and the northbound and southbound approaches are Kenolio Road. The northbound and southbound approaches are the controlled approaches. Each approach has a left turn lane and a shared through/right turn lane.

The intersection of Kaonoulu Street at Alulike Street is located approximately 830 feet west of Kenolio Street. The intersection is a four-legged stop sign controlled intersection. The eastbound and westbound approaches each have one left turn lane and a shared through/right turn lane. The northbound and southbound approaches are the controlled approaches and each have one lane for all movements.

## **B. Existing Traffic Volumes**

### **1. Existing 24-Hour Roadway Volumes**

Average daily traffic (ADT) along Pi'ilani Highway between Kaonoulu Street and Kulanihakoi Street taken from HDOT *Historical Traffic Station Maps* is shown in Table 1. The 2013 ADT along Pi'ilani Highway, is approximately 34,100 vehicles per day (vpd). No weekend 24-hour roadway data are available from HDOT. Detailed 24-hour counts are included in Appendix B.

**Table 1: Existing Roadway ADT**

<b>Roadway</b>	<b>Station</b>	<b>Location</b>	<b>Year</b>	<b>ADT</b>
Pi'ilani Highway	B74 0031 00000	Between Kaonoulu Street and Kulanihakoi Street	2013	34,100

Source: *Historical Traffic Station Maps* (HDOT)

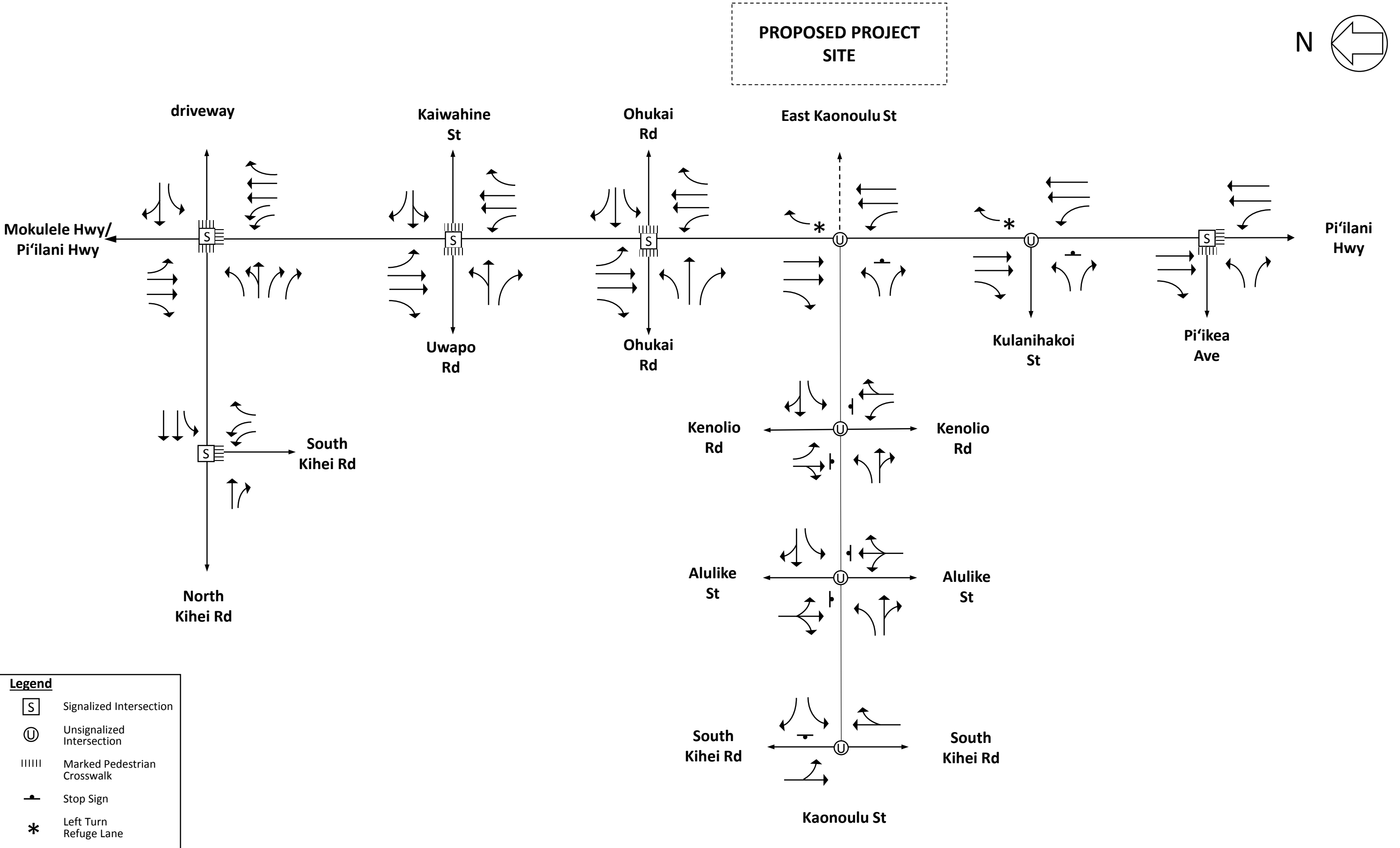


Figure 3: Existing (2016) Lane Configuration

Pi'ilani Promenade - Kihei , Maui

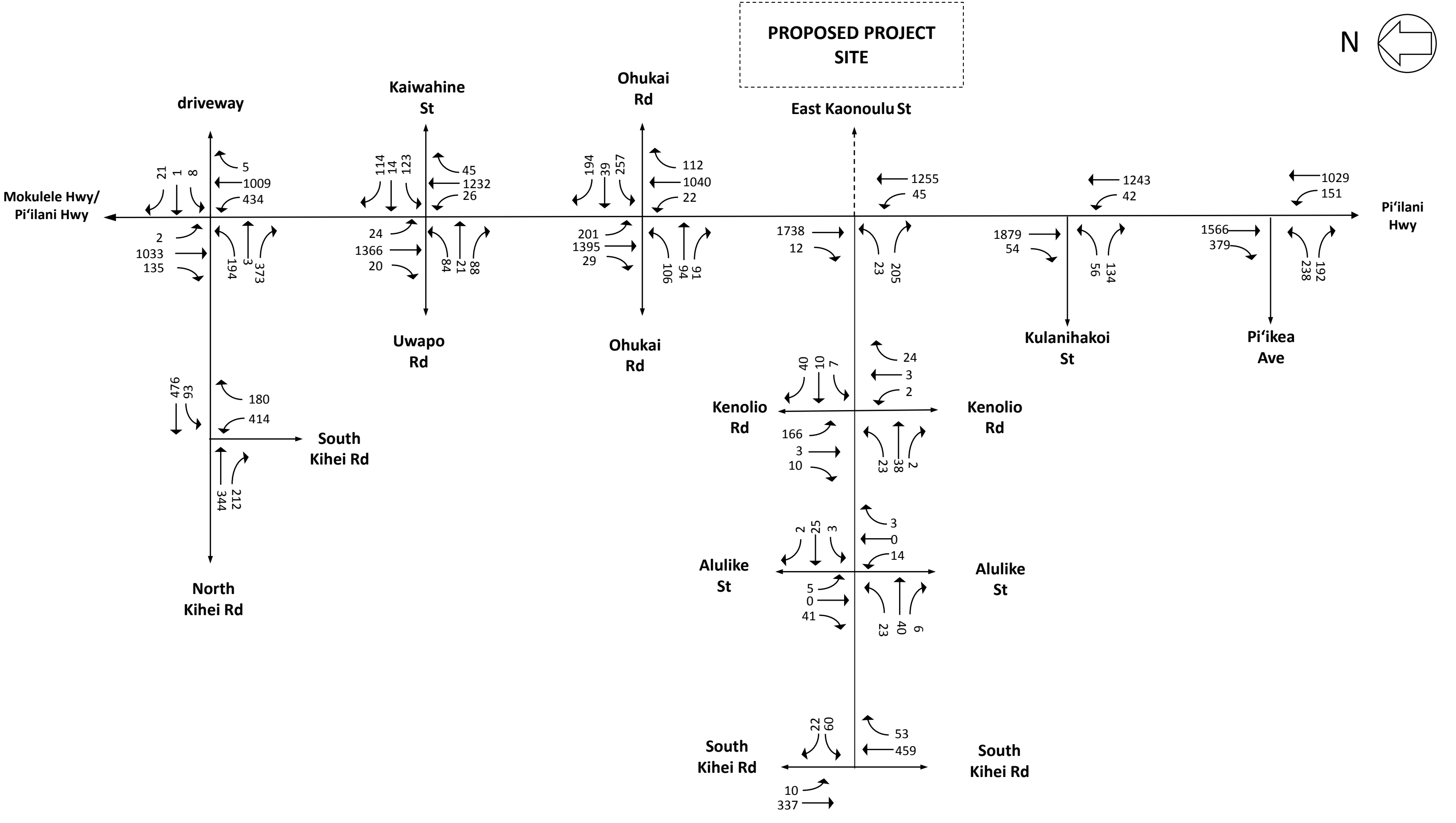
## 2. Existing Peak Hour Volumes

Intersection peak period turning movement traffic counts were taken on Tuesday, January 12, 2016. These counts also included the tabulation of heavy vehicles, bicycles, and pedestrian movements at all intersections. Counts were taken during the AM and PM peak periods on a weekday from 6:00 to 9:00 AM and 3:00 to 6:00 PM, respectively and during the mid-day peak period on a Saturday from 10:00 AM to 2:00 PM.

Peak hours varied per intersection and are provided in Table 2. AM, PM and Saturday peak hour vehicular volumes are shown in Figure 4, Figure 5 and Figure 6, respectively. Appendix B includes the detailed traffic count data.

**Table 2: Intersection Peak Hours**

<b>Intersection</b>	<b>AM Peak Hour</b>	<b>PM Peak Hour</b>	<b>Saturday Peak Hour</b>
Pi'ilani Highway and Ohukai Road	7:15 – 8:15 AM	3:15 – 4:15 PM	11:45 AM – 12:45 PM
Pi'ilani Highway and Kaiwahine Street	7:15 – 8:15 AM	3:30 – 4:30 PM	11:15 AM – 12:15 PM
Pi'ilani Highway and North Kihei Road/Mokulele Highway	7:15 – 8:15 AM	3:30 – 4:30 PM	11:15 AM – 12:15 PM
North Kihei Road and South Kihei Road	7:00 – 8:00 AM	3:45 – 4:45 PM	12:30 – 1:30 PM
Pi'ilani Highway and Pi'ikea Avenue	7:30 – 8:30 AM	3:30 – 4:30 PM	12:00 – 1:00 PM
Pi'ilani Highway and Kaonoulu Street	7:15 – 8:15 AM	3:15 – 4:15 PM	11:15 AM – 12:15 PM
South Kihei Road and Kaonoulu Street	7:15 – 8:15 AM	4:30 – 5:30 PM	12:15 – 1:15 PM
Pi'ilani Highway and Kulanihakoi Street	7:15 – 8:15 AM	3:15 – 4:15 PM	11:00 AM – 12:00 PM
Kenolio Road and Kaonoulu Street	7:15 – 8:15 AM	4:45 – 5:45 PM	10:15 – 11:15 AM
Alulike Street and Kaonoulu Street	8:00 – 9:00 AM	4:45 – 5:45 PM	10:00 – 11:00 AM



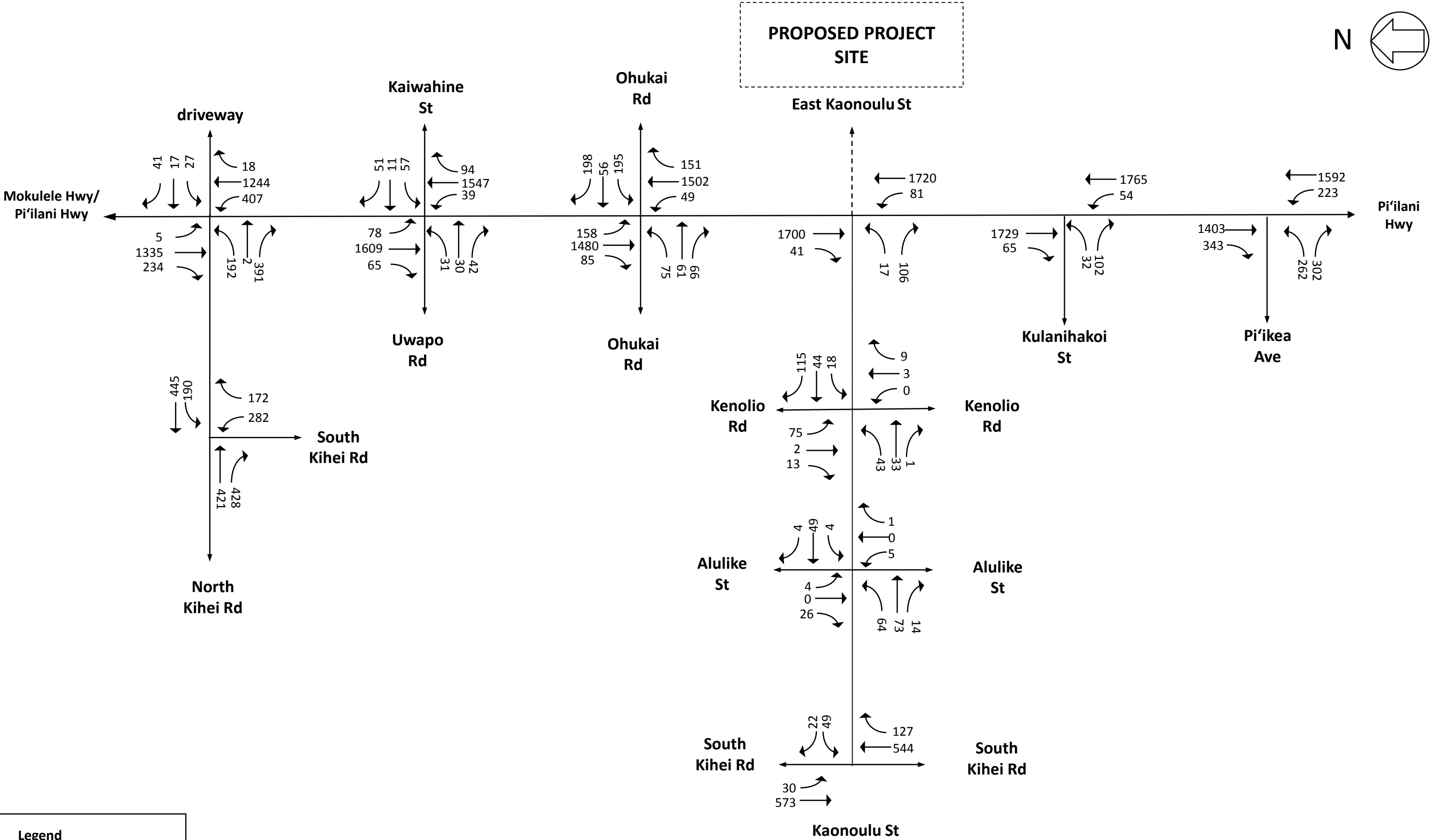


Figure 5: Existing (2016) PM Peak Hour Volumes

Pi'ilani Promenade - Kihei, Maui



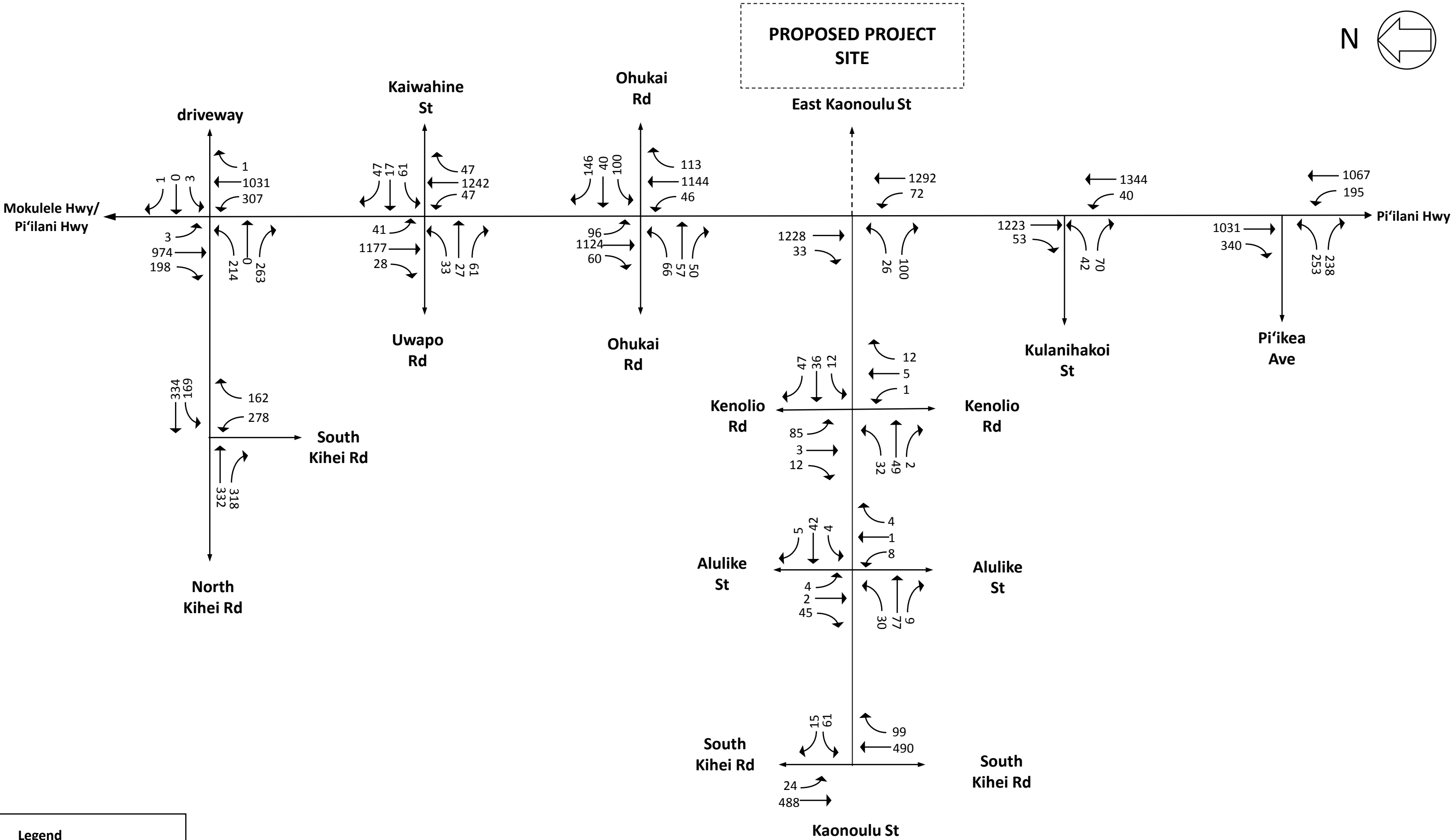


Figure 6: Existing (2016) Saturday Peak Hour Volumes

Pi'ilani Promenade - Kihei, Maui

### 3. Existing Multi-Modal Volumes

#### a) Heavy Vehicles and Buses

Heavy vehicles included public transit buses, tourist bus/trolleys, delivery trucks, and other large commercial vehicles. The heavy vehicle intersection peak hour volume and percentage of heavy vehicles compared to the total vehicles counted is shown in Table 3. The percentages of heavy vehicles counted are relatively small, ranging from 0.4% to 2.5%.

**Table 3: Existing Intersection Peak Hour Heavy Vehicle Volumes and Percentage**

Intersection	AM Peak Hour		PM Peak Hour		Saturday Peak Hour	
	Volume	%	Volume	%	Volume	%
Pi'ilani Highway and Ohukai Road	69	1.9	67	1.6	42	1.4
Pi'ilani Highway and Kaiwahine Street	62	2.0	68	1.9	24	0.8
Pi'ilani Highway and North Kihei Road/Mokulele Highway	72	2.2	81	2.1	39	1.3
North Kihei Road and South Kihei Road	25	1.5	26	1.3	21	1.3
Pi'ilani Highway and Pi'ikea Avenue	70	2.0	52	1.3	31	1.0
Pi'ilani Highway and Kaonoulu Street	66	2.0	66	1.8	31	1.1
South Kihei Road and Kaonoulu Street	11	1.2	8	0.6	13	1.1
Pi'ilani Highway and Kulanihakoi Street	66	1.9	66	1.8	30	1.1
Kenolio Road and Kaonoulu Street	3	0.9	0	0.0	2	0.7
Alulike Street and Kaonoulu Street	4	2.5	1	0.4	2	0.9

The County of Maui public transit, Maui Bus, has two routes in the project area: Kihei Islander Route 10 and Kihei Villager Route 15. Both routes travel along South Kihei Road in the northbound and southbound directions. Route 10 has two busses running continuously along South Kihei Road from the Queen Ka'ahumanu Center to Wailea Ike Drive throughout the day from 5:30 AM to 9:30 PM. Within the study area there are seven bus stops each in the northbound and southbound direction. Route 15 has one bus running continuously along Kihei Road from Ma'alaea Harbor Village to the Pi'ilani Shopping Center. The two routes share stops along South Kihei Road from Uwapo Road to Pi'ilani Shopping Center. The bus runs from 6:05 AM to 8:55 PM. Table 4 provides ridership at several stops within or near the study area. Appendix C includes bus route maps and timetables.

**Table 4: Bus Daily Ridership**

Stop # (Geoid)	Maui Bus Stop	Daily Totals	
		Boarding	Alighting
1036	Uwapo St/S. Kihei Rd	39	34
1039	Ohukai Rd/S. Kihei Rd	28	22
1041	Kaonoulu St/S. Kihei Rd	16	25
1043	Kulanihakoi St/S. Kihei Rd	22	45
1045	Waipuilani Rd/S. Kihei Rd	17	58
1047	Pi'ikea Ave/S. Kihei Rd	20	51
1038	Pi'ilani Shopping Center	109	102
1181	Lipoa St/Haggai Institute	6	3
1048	St Theresa's Church	17	17
1051	Welakahoa Rd/S. Kihei Rd	7	15
1050	Welakahoa Rd/S. Kihei Rd	12	3
1129	Lipoa St	11	26
1182	Lipoa St/Liloa Dr	8	3
1046	Pi'ikea Ave/S. Kihei Rd	54	4
1044	Waipuilani Rd/S. Kihei Rd	18	6
1042	Kulanihakoi St/S. Kihei Rd	22	16
1040	Kaonoulu St/S. Kihei Rd	22	31
1037	Ohukai St/S. Kihei Rd	29	31
1035	Uwapo Rd/S. Kihei Rd	36	39
1034	Ma'alaea Harbor Village/Maui Ocean Ctr	68	54
Totals		561	585

Source: County of Maui, Maui Bus Public Transit System (2014)

**b) Pedestrians**

Small pedestrian volumes were counted at most study intersections during the AM, PM and Saturday peak hours (see Table 5). This is a result of the lack of sidewalks or pedestrian facilities, and the suburban nature of the development along Pi'ilani Highway and areas in mauka Kihei. Conditions and resources along South Kihei Road are more amenable to pedestrian use which is reflected in the higher volume at the one intersection. Other intersections with higher pedestrian volumes were located in the more residential areas.

**Table 5: Existing Intersection Peak Hour Pedestrian Volumes**

Intersection	Peak Hour Pedestrian Volumes		
	AM	PM	Saturday
Pi'ilani Highway and Ohukai Road	9	8	8
Pi'ilani Highway and Kaiwahine Street	17	11	5
Pi'ilani Highway and North Kihei Road/Mokulele Highway	2	2	0
North Kihei Road and South Kihei Road	1	0	2
Pi'ilani Highway and Pi'ikea Avenue	2	3	5
Pi'ilani Highway and Kaonoulou Street	1	1	0
South Kihei Road and Kaonoulou Street	24	21	18
Pi'ilani Highway and Kulanihakoi Street	0	0	0
Kenolio Road and Kaonoulou Street	18	10	8
Alulike Street and Kaonoulou Street	20	14	5

**c) Bicycles**

Moderate bicycle volumes were counted at the project intersections during the AM, PM and Saturday peak hours (see Table 6) near the project area. Saturday volumes were higher than weekday which is reflective of the use of the roads more for recreational riding than commuting. Pi'ilani Highway is a designated bike route with designated travel in the paved shoulders.

**Table 6: Existing Intersection Peak Hour Bicycle Volumes**

Intersection	AM Peak Hour	PM Peak Hour	Saturday Peak Hour
Pi'ilani Highway and Ohukai Road	10	11	12
Pi'ilani Highway and Kaiwahine Street	14	11	18
Pi'ilani Highway and North Kihei Road/Mokulele Highway	10	9	36
North Kihei Road and South Kihei Road	18	10	17
Pi'ilani Highway and Pi'ikea Avenue	6	8	9
Pi'ilani Highway and Kaonoulou Street	9	9	11
South Kihei Road and Kaonoulou Street	21	14	29
Pi'ilani Highway and Kulanihakoi Street	9	9	9
Kenolio Road and Kaonoulou Street	4	5	2
Alulike Street and Kaonoulou Street	4	6	8

**C. Existing Intersection Level of Service****1. LOS Methodology**

Level of service (LOS) is an operational analysis rating system used in traffic engineering to measure the effectiveness of vehicular roadway operating conditions. There are six LOS ranging from A to F. LOS A is defined as being the least interrupted flow conditions with little or no delays, whereas LOS F is defined as conditions where extreme delays exist. Guidelines from *A Policy on*

*Geometric Design of Highways and Streets* (AASHTO, 2011) states that appropriate LOS for an urban arterial or collector is LOS D or better. Therefore, study intersections will be studied for adherence to this operating level.

**a) Two-Way Stop Controlled Intersection LOS**

The *Highway Capacity Manual* (TRB, 2010) (referred to hereafter as *HCM*) states that LOS for a two-way stop controlled (TWSC) intersection is determined by the measured control delay (see Table 7). It is defined for each minor movement, not for the intersection as a whole. Vehicles traveling along the major, free-flow road of a TWSC intersection proceed through with minimal delay. Those vehicles approaching the intersection along the minor movement are controlled by a stop sign and thus experience delay attributable to the volume of vehicles passing along the free-flow road and the gaps available.

**Table 7: LOS Criteria for Unsignalized Intersections**

Average Control Delay (s/veh)	LOS by v/c Ratio	
	$\leq 1.0$	$> 1.0$
$\leq 10.0$	A	F
$> 10$ and $\leq 15$	B	F
$> 15$ and $\leq 25$	C	F
$> 25$ and $\leq 35$	D	F
$> 35$ and $\leq 50$	E	F
$> 50$	F	F

Source: *HCM* (TRB, 2010)

**b) Signalized Intersection LOS**

The LOS analysis for signalized intersections is based on the average total vehicle delay based on the methodologies of the *HCM* (TRB, 2010) shown in Table 8. High numbers of vehicles passing the intersection, long cycle lengths, inappropriate signal phasing, or a poor signal progression can result in long delays, and consequently poor LOS.

**Table 8: LOS Criteria for Signalized Intersections**

Average Control Delay (s/veh)	LOS by v/c Ratio	
	$\leq 1.0$	$> 1.0$
$\leq 10.0$	A	F
$> 10$ and $\leq 20$	B	F
$> 20$ and $\leq 35$	C	F
$> 35$ and $\leq 55$	D	F
$> 55$ and $\leq 80$	E	F
$> 80$	F	F

Source: *HCM* (TRB, 2010)

Another measure of intersection operation is the volume to capacity (v/c) ratio. This is the ratio of the volume of traffic utilizing the intersection compared to the maximum volume of vehicles that can be accommodated by the intersection during a specific period of time. A v/c ratio under 0.85 means the intersection is operating under capacity and excessive delays are not experienced. An intersection is operating near its capacity when v/c ratios range from 0.85 to 0.95. Unstable flows are expected when the v/c ratio is between 0.95 and 1.0. Any v/c ratio greater than or equal to 1.0 indicates that the intersection is operating at or above capacity which results in a LOS F per the HCM (TRB, 2010). A traffic movement can have a poor LOS but low v/c which suggests that the traffic volumes along that movement are low but have to wait a long time to make the movement. This is common for low volume protected turn movements or side streets that have to wait through a long cycle length for their split to come up.

## 2. Existing Intersection LOS Conditions

Existing (2016) unsignalized and signalized intersection LOS, v/c ratio and delay were determined for the weekday AM and PM and weekend (Saturday) mid-day peak hours (see Table 9). All signalized intersection LOS resulted in LOS D or better; however, individual traffic movements for the signalized and unsignalized intersections resulted in LOS E or F conditions with some having v/c greater than 1.0. The worst conditions were seen for the minor movements at the unsignalized intersections of Pi'ilani Highway at Pi'ikea Avenue, Pi'ilani Highway at Kaonoulu Street, and Pi'ilani Highway at Kulanihakoi Street which resulted in LOS F conditions and high v/c. Detailed analysis reports for these intersections during Existing (2016) conditions are provided in Appendix D.

**Table 9: Existing (2016) Intersection Level of Service**

Intersection	Traffic Control		AM Peak Hour			PM Peak Hour			Weekend Peak Hour		
	Appr	Mvmt	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS
<b>Pi'ilani Highway and Ohukai Road</b>	Signalized		47.3	-	D	26.0	-	C	24.2	-	C
	EB	L	<b>64.3</b>	0.74	<b>E</b>	77.7	0.71	<b>E</b>	52.6	0.65	D
		T	51.4	0.42	D	62.9	0.32	<b>E</b>	31.3	0.20	C
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	WB	L	<b>82.4</b>	0.92	<b>F</b>	<b>87.9</b>	0.86	<b>F</b>	43.0	0.68	D
		T	40.0	0.10	D	52.6	0.18	D	28.9	0.12	C
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	NB	L	<b>57.4</b>	0.25	<b>E</b>	<b>68.4</b>	0.44	<b>E</b>	36.5	0.29	D
		T	31.3	0.71	C	29.9	0.79	C	24.9	0.78	C
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	SB	L	<b>73.0</b>	0.84	<b>E</b>	<b>78.1</b>	0.85	<b>E</b>	32.8	0.37	C
		T	47.5	0.79	D	1.7	0.72	A	18.4	0.67	B
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*

Table 9 (Continued): Existing (2016) Intersection Level of Service

Intersection	Traffic Control		AM Peak Hour			PM Peak Hour			Weekend Peak Hour		
	Appr	Mvmt	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS
<b>Pi'ilani Highway and Uwapo Road/ Kaiwahine Street</b>	Signalized		6.1	-	A	5.5	-	A	8.3	-	A
	EB	LT	52.7	0.43	D	<b>69.9</b>	0.41	<b>E</b>	28.4	0.25	C
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	WB	LT	<b>56.1</b>	0.60	<b>E</b>	<b>71.6</b>	0.48	<b>E</b>	29.0	0.32	C
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	NB	L	<b>58.9</b>	0.48	<b>E</b>	<b>71.1</b>	0.64	<b>E</b>	30.3	0.45	C
		T	0.5	0.50	A	6.1	0.57	A	6.3	0.54	A
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	SB	L	<b>59.3</b>	0.46	<b>E</b>	<b>71.9</b>	0.73	<b>E</b>	30.6	0.42	C
		T	0.7	0.56	A	5.1	0.57	A	6.3	0.51	A
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
<b>Pi'ilani Highway and North Kihei Road</b>	Signalized		19.3	-	B	22.4	-	C	15.7	-	B
	EB	LT	<b>56.6</b>	0.64	<b>E</b>	<b>69.0</b>	0.67	<b>E</b>	37.8	0.58	D
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	WB	L	<b>58.2</b>	0.12	<b>E</b>	<b>70.0</b>	0.30	<b>E</b>	40.6	0.06	D
		TR	<b>62.0</b>	0.35	<b>E</b>	<b>90.9</b>	0.69	<b>F</b>	41.3	0.02	D
	NB	L	47.7	0.86	D	<b>60.3</b>	0.87	<b>E</b>	37.1	0.71	D
		T	0.4	0.42	A	0.5	0.49	A	7.1	0.45	A
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	SB	L	<b>98.2</b>	0.53	<b>F</b>	<b>93.5</b>	0.56	<b>F</b>	<b>67.4</b>	0.53	<b>E</b>
		T	17.3	0.54	B	20.3	0.65	C	13.1	0.52	B
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
<b>South Kihei Road and North Kihei Road</b>	Signalized		26.0	-	C	31.2	-	C	12.2	-	B
	EB	T	8.9	0.29	A	12.3	0.35	B	11.6	0.51	B
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	WB	L	<b>56.1</b>	0.78	<b>E</b>	<b>60.0</b>	0.90	<b>E</b>	18.7	0.69	B
		T	0.1	0.18	A	0.1	0.16	A	3.7	0.16	A
	NB	L	51.1	0.77	D	<b>61.1</b>	0.61	<b>E</b>	14.6	0.41	B
<b>Pi'ilani Highway and Pi'ikea Avenue</b>	Signalized		20.4	-	C	23.0	-	C	13.3	-	B
	EB	L	<b>72.0</b>	0.89	<b>E</b>	<b>80.4</b>	0.91	<b>F</b>	30.2	0.81	C
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	NB	L	<b>73.1</b>	0.85	<b>E</b>	<b>83.5</b>	0.90	<b>F</b>	38.2	0.81	D
		T	5.0	0.40	A	7.5	0.58	A	4.8	0.45	A
	SB	T	17.7	0.74	B	20.2	0.65	C	13.1	0.62	B
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*

Table 9 (Continued): Existing (2016) Intersection Level of Service

Intersection	Traffic Control		AM Peak Hour			PM Peak Hour			Weekend Peak Hour		
	Appr	Mvmt	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS
<b>Pi'ilani Highway and Kaonoulu Street</b>	Unsignalized		-	-	-	-	-	-	-	-	-
	NB	L	17.7	0.14	C	18.6	0.24	C	12.6	0.14	B
	EB	L	500+	1.35	F	500+	1.61	F	201.5	0.67	F
		R	53.1	0.79	F	25.1	0.38	D	16.3	0.24	C
<b>South Kihei Road and Kaonoulu Street</b>	Unsignalized		-	-	-	-	-	-	-	-	-
	SB	L	8.6	0.01	A	9.1	0.03	A	8.9	0.03	A
	WB	L	20.4	0.22	C	32.2	0.27	D	30.7	0.32	D
		R	11.8	0.04	B	12.7	0.05	B	12.3	0.03	B
<b>Pi'ilani Highway and Kulanihakoi Street</b>	Unsignalized		-	-	-	-	-	-	-	-	-
	NB	L	19.7	0.15	C	17.2	0.16	C	12.3	0.08	B
	EB	L	500+	4.21	F	500+	2.51	F	304.4	1.05	F
		R	37.6	0.57	E	24.3	0.36	C	15.5	0.18	C
<b>Kenolio Road and Kaonoulu Street</b>	Unsignalized		-	-	-	-	-	-	-	-	-
	NB	L	9.5	0.01	A	0.0	0.00	A	10.2	0.01	B
		TR	8.8	0.03	A	9.3	0.02	A	9.3	0.02	A
	EB	L	7.4	0.02	A	7.7	0.03	A	7.5	0.03	A
	WB	L	7.3	0.01	A	7.3	0.01	A	7.4	0.01	A
	SB	L	10.9	0.22	B	11.6	0.13	B	11.1	0.14	B
		TR	8.8	0.01	A	9.2	0.02	A	9.1	0.02	A
<b>Kaonoulu Street and Alulike Street</b>	Unsignalized		-	-	-	-	-	-	-	-	-
	NB	LTR	9.6	0.02	A	10.7	0.01	B	10.0	0.02	B
	EB	L	7.3	0.02	A	7.4	0.05	A	7.4	0.02	A
	WB	L	7.3	0.01	A	7.4	0.01	A	7.4	0.01	A
	SB	LTR	8.7	0.05	A	9.0	0.04	A	9.0	0.06	A

\* Right turn channelization; Appr = Approach; Mvmt = Movement; v/c = volume to capacity ratio;

NB = Northbound; EB = Eastbound; WB = Westbound; SB = Southbound;

L = Left turn movement; R = Right turn movement; T = Through movement



## **D. Mitigation Measures for Existing Conditions**

At the intersections of Pi'ilani Highway at Kaonoulu Street and Pi'ilani Highway at Kulanihako Street, the westbound left turn movements resulted in LOS F during all peak hours with the v/c ratio greater than 1.0 which suggests that capacity is exceeded. Mitigating measures were considered to address existing intersection conditions. Potential mitigation considered included the need for signalizing the intersections.

### **1. Signal Warrant Methodology**

The *Manual on Uniform Traffic Control Devices (MUTCD)* (FHWA, 2009) states that prior to signalization of an intersection, an engineering study of traffic conditions, pedestrian characteristics, and physical characteristics of the location shall be performed to determine whether installation of a traffic signal is justified. It is noted that the satisfaction of a traffic signal warrant shall not in itself require the installation of a traffic control signal.

The *Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD)* (FHWA, 2009) lists nine warrants for consideration of providing a traffic signal at an intersection:

- Warrant 1: Eight-Hour Vehicular Volume – a combination of major and minor street minimum vehicular volumes reached for each of any eight hours of an average day;
- Warrant 2: Four-Hour Vehicular Volume - a combination of major and minor street minimum vehicular volumes reached for each of any four hours of an average day;
- Warrant 3: Peak Hour – where traffic conditions are such that for a minimum of one hour of an average day, the minor-street traffic suffers undue delay when entering or crossing the major street;
- Warrant 4: Pedestrian Volume – where traffic volume on a major street is so heavy that pedestrians experience excessive delay in crossing the major street;
- Warrant 5: School Crossing – where the fact that schoolchildren cross the major street is the principal reason to consider installing a traffic control signal;
- Warrant 6: Coordinated Signal System – where progressive movement in a coordinated signal system necessitates installing traffic control signals at intersections where they would not otherwise be needed in order to maintain proper platooning of vehicles;
- Warrant 7: Crash Experience – for application where the severity and frequency of crashes are the principal reasons to consider installing a traffic control signal;
- Warrant 8: Roadway Network – to encourage concentration and organization of traffic flow on a roadway network;
- Warrant 9: Intersection Near a Grade Crossing – where none of the conditions described in the other eight traffic signal warrants are met but the proximity to the intersection of a grade crossing on an intersection approach controlled by a STOP or YIELD sign is the principal reason to consider installing a traffic control signal.

## **2. Existing Intersection Signal Warrant Analysis**

With the traffic volumes collected, Warrant 1: Eight-Hour, Warrant 2: Four-Hour and Warrant 3: Peak Hour were run for the intersection of both intersection, utilizing the existing lane configurations. Both intersections were analyzed for the configuration with two lanes along the major roadway approach and two lanes along the minor roadway approach.

- For the intersection of Pi'ilani Highway and Kaonoulou Street, Warrant 1: Eight-Hour and Warrant 3: Peak Hour traffic signal warrants passed for existing conditions.
- For the intersection of Pi'ilani Highway and Kulanihakoi Street, Warrant 3: Peak Hour passed for existing conditions.

These results suggest that current intersection conditions may benefit from signalization. Traffic signal warrant analysis reports are shown in Appendix D.

### III. FUTURE WITHOUT PROJECT CONDITIONS

Plans are to construct Pi'ilani Promenade in phases with approximately half of the project being completed by 2025 with full construction expected by 2032. Therefore, the Future conditions were evaluated for the years 2025 and 2032.

#### A. Future Roadway Construction

Planned roadway construction in the area includes the North-South Collector Road, between Kaonoulu Street and Waipuilani Road, as well as the mauka roadway, between Ohukai Road and Lipoa Street. These roads will add additional capacity and should help alleviate the vehicle demand on Pi'ilani Highway. However, without additional information on timing, these projects were not included in the future analysis.

#### B. Future Surrounding Area Development

Known developments in the surrounding area that were considered likely to be constructed by 2025 and 2032 are shown in Figure 7. The description of each development is explained in the following sections.

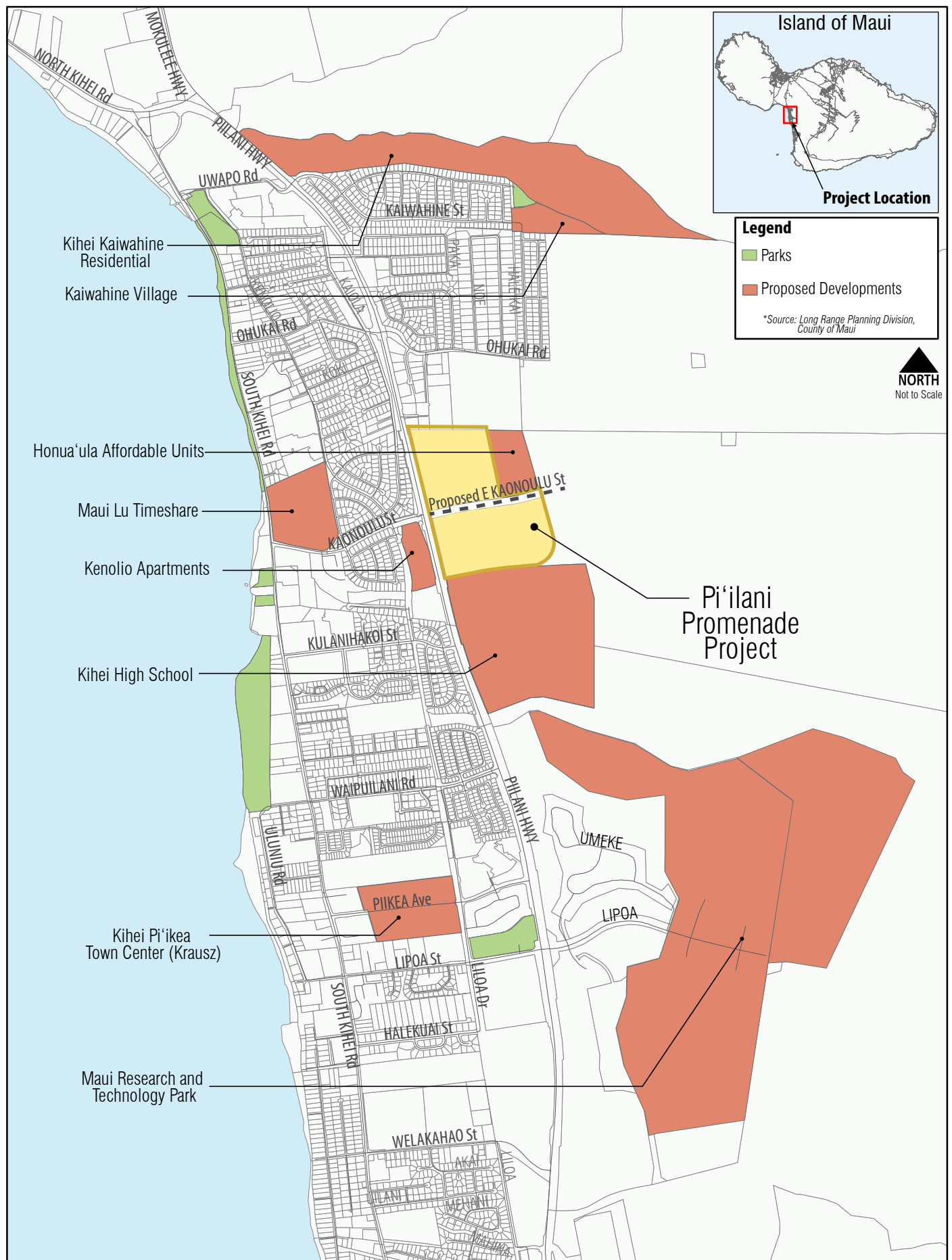
##### 1. Kaiwahine Village

The proposed Kaiwahine Village is located at the east end of Kaiwahine Street. This affordable housing residential development will consist of 120 multi-family units. The traffic assignments for the subdivision were obtained from the *Traffic Impact Analysis Report for Kaiwahine Village* (PRA, 2010). This project is anticipated to be completed by 2025.

##### 2. Maui Lu Resort

Maui Lu Resort currently exists in the northeast quadrant of the intersection of South Kihei Road at Kaonoulu Street. Plans are for the existing resort to be demolished and a 400-unit timeshare constructed in its place. It is also proposed that each timeshare unit will have one lock off unit which may be used as a separate hotel room. As part of the Maui Lu project, the intersection of South Kihei Road at Kaonoulu Street will be signalized. Construction has started on the redevelopment of this resort with a proposed opening in 2017. The proposed signalization had not been completed at the time of this report. The traffic assignments for the project were obtained from *TIAR for Maui Lu Resort* (PRA, 2004).

The intersection of South Kihei Road at Kaonoulu Street will be signalized and the southbound approach has been modified to provide a separate left turn lane. These improvements are recommended as part of the Maui Lu Resort Redevelopment project.



**Figure 7: Surrounding Area Developments**

*Pi'ilani Promenade – Kihei, Maui*

### 3. Kihei High School

The proposed Kihei High School will be located along the east side of Pi'ilani Highway, south of the proposed Pi'ilani Promenade development. According to the *Traffic Impact Report for Kihei High School* (WOC, 2012), the school will have a capacity of approximately 1,650 students serving grades 9 through 12. The development of the school will be in two phases with 800 students in Phase 1 and 850 students in Phase 2. Both phases are expected to be completed by 2025.

Access and egress will be via the intersection of Pi'ilani Highway at Kulanihakoi Street, which will be modified with an extension of Kulanihakoi Street across Pi'ilani Highway. The intersection of Pi'ilani Highway at Kulanihakoi Street will be signalized to accommodate the trips generated proposed high school.

The number of trips that the high school will generate during weekday peak hours was obtained from the *Traffic Impact Report for Kihei High School* (WOC, 2012) for the project. Based on the trip generation data, the number of trips generated on a Saturday will be negligible.

The intersection of Pi'ilani Highway at Kulanihakoi Street will be signalized. The northbound approach will be modified to provide a dedicated right turn lane, the southbound approach will be modified to provide a left turn lane and the eastbound and westbound approaches will be modified to provide a shared through/left turn lane and a dedicated right turn lane. These improvements are those recommended in the TIAR to accommodate the traffic from the proposed Kihei High School.

### 4. Kenolio Apartments

The Kenolio Apartments is located between Pi'ilani Highway and Kenolio Road in the southwest quadrant of the intersection of Kaonoulu Street at Pi'ilani Highway. The project is a 186 unit multi-family affordable housing development. It is anticipated that the project will be completed in 2017. Access to and egress from will be via two driveways along the east side of Kenolio Road. The traffic assignments for the project were obtained from the *TIAR for Kenolio Apartments, An Affordable Housing Project* (PRA, 2014).

### 5. Kihei Residential

The proposed Kihei Residential development is located on the east side of Pi'ilani Highway, north of Kaiwahine Street. The project includes 400 single-family units, 200 multi-family units, 3,000 square feet of commercial area, 7,000 square feet of offices, and a 10 acre park. Groundbreaking occurred in mid-January 2016. It is anticipated that 25% of the project will be completed by 2025 and full build out will be by 2032. Access to and egress from will be via a driveway along Kaiwahine Street and a driveway along Pi'ilani Highway. The traffic assignments for the project were obtained from the *TIAR Kihei Residential Project* (ATA, 2007).

It was recommended to modify the southbound approach on Pi'ilani Highway to provide an additional left-turn lane. It was also recommended that the westbound approach on Kaiwahine Street have an additional left-turn lane and the eastbound approach on Uwapo Road has a left turn lane, a through lane and a right turn lane. These modifications were included in the future analyses.

## **6. Krausz Companies Commercial Mixed-Use Development (Downtown Kihei)**

The proposed Krausz Companies commercial mixed-use development (referred as Downtown Kihei) is located along Pi'ikea Avenue between Liloa Drive and South Kihei Road. The project includes 249,450 square feet of retail space, approximately 18,500 square feet of office space, and a 150-room hotel. The traffic assignment for the project were obtained from the *TIAR Krausz Companies Commercial Mixed-Use Development (Downtown Kihei)* (ATA, 2012). Proposed completion is expected by 2025.

It was recommended to install an additional left-turn lane on the eastbound approach of Pi'ikea Avenue at the intersection of Pi'ilani Highway. It was also recommended to monitor the northbound left-turn movement along Pi'ilani Highway at this intersection in case an additional left-turn lane is needed. However, the status of the construction of the additional turn lane is unknown at this time and will not be included in the future analyses.

## **7. Honua'ula Affordable Housing**

The proposed Honua'ula Affordable Housing is located north of Pi'ilani Promenade. This development will include 125 units of affordable apartments and 125 owner-occupied units, meeting the requirements of the County Work Force Housing Ordinance. Access to this development will be through East Kaonoulu Street. If construction of the Honua'ula Affordable Housing commences prior to the construction of East Kaonoulu Street extension, temporary construction access to this development will be through a driveway off of Ohukai Road. Once the East Kaonoulu Street extension is open, the temporary access will be closed and all trips generated by this trip will use East Kaonoulu Street. This development is anticipated to be completed by 2025.

## **8. Maui Research and Technology Park**

The Maui Research and Technology Park (MRTP) is located south of Kihei High School on the mauka side of Pi'ilani Highway. Primary access to MRTP will be through the intersection of Pi'ilani Highway and Lipoa Parkway. According to the *Traffic Impact Analysis for Maui Research and Technology Park* (PB, 2013), the proposed development will be implemented in two phases. Phase 1 will consists of 723,200 square feet (sf) of employment, 100,000 sf of retail, 750 residential dwelling units, 150 hotel rooms and 102,000 sf of an elementary school. Phase 2 will consist of over one-million sf of employment, and 500 residential dwelling units. Phase 1 of the MRTP is projected to be completed by 2024. Phase 2 is projected to be completed by 2034. Traffic associated with the MRTP would be accounted for in the background growth as the primary access to the MRTP is located outside the study area (south of the intersection of Pi'ilani Highway and Pi'ikea Avenue).

## **9. Other Developments**

There were several additional developments identified within Kihei, Wailea and Mākena. However, upon research, the status of these developments was in flux. It was therefore assumed that the increase in traffic associated with these developments would be accounted for in the

background growth. Appendix E includes a County of Maui map showing all known developments within the area.

### **C. Future Geometric Configuration**

Changes in roadway configuration are expected as described above and are anticipated to be completed by 2025. In addition to the changes in roadway configuration due to surrounding area developments, the intersection of Pi'ilani Highway and Kaonoulu Street passed signal warrants and therefore was analyzed as a signalized intersection. Lane configuration for Future Without Project are shown in Figure 8.

### **D. Future Traffic Volumes**

Future traffic volumes were projected by applying an ambient background growth in addition to trip volumes related to specific development. Ambient background growth is associated with regional growth not attributed to a specific project. This growth also considers traffic associated with minor, or small, projects for which no traffic data, or traffic study, are available. The second component is estimated traffic that will be generated by other major development projects in the vicinity of the proposed project. Included in the assessment of future background conditions are roadway improvements that are part of the related projects.

#### **1. Background Growth**

According to the *Maui Long Range Land Transportation Plan* model (CH2M Hill/HDOT, 2013), traffic volumes along Pi'ilani Highway are projected to increase an average of 1.25% per year from 2007 to 2020 and 1.24% per year from 2020 to 2035. The annual compounded growth rate along South Kihei Road was 3.60% from 2007 to 2020 and 2.05% from 2020 to 2035. These growth rates were used to calculate the projected background growth from 2016 to 2025 and from 2025 to 2032.

The respective growth factors were applied to the northbound and southbound through traffic movements along Pi'ilani Highway and South Kihei Road at the study intersections. Intersection turning movement traffic volumes are considered a reflection of individual project trips and not regional growth, and therefore no ambient growth rate was applied.

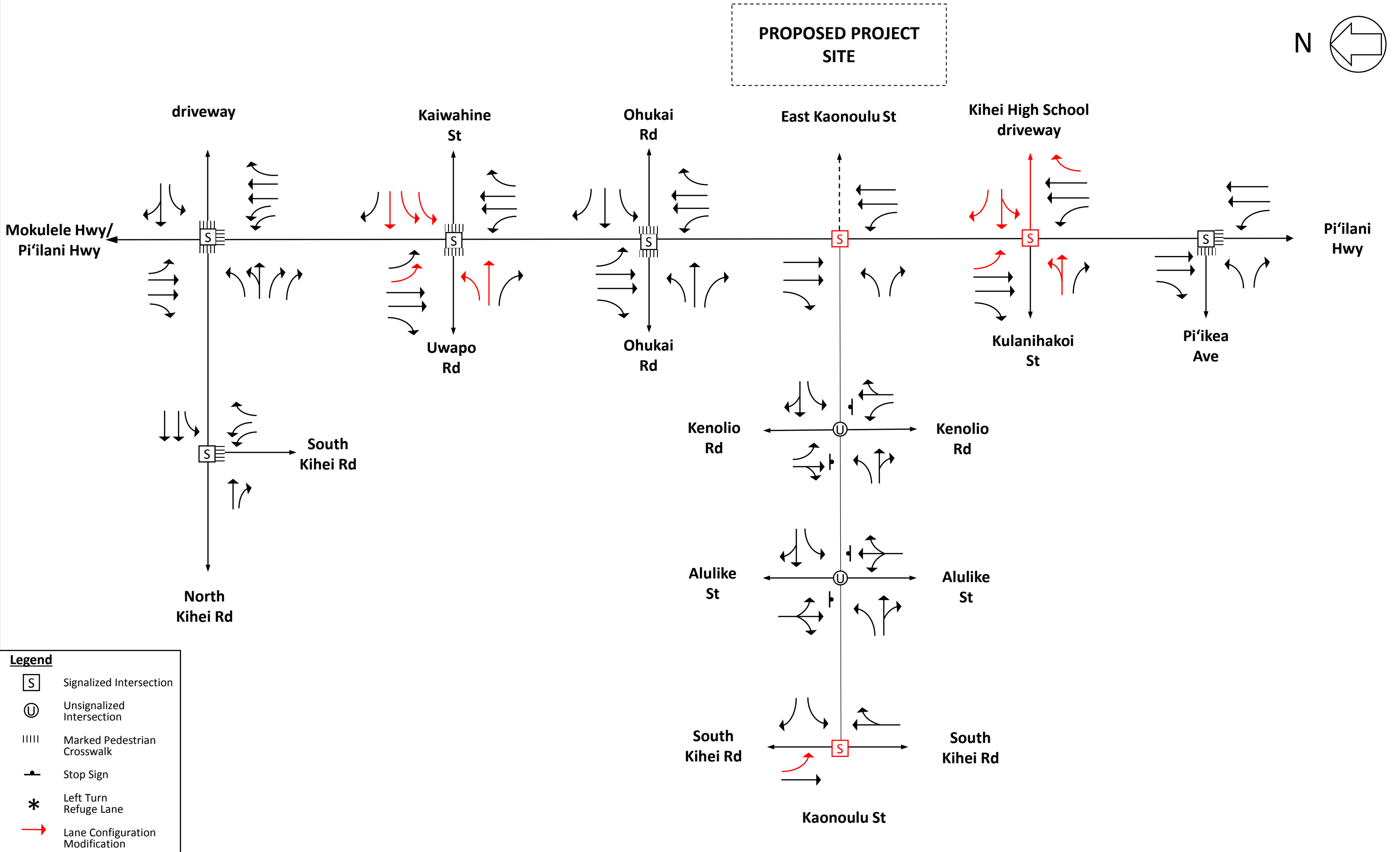


Figure 8: Future Without Project Lane Configuration

Pi'ilani Promenade - Kihei , Maui



## 2. Other Project Related Volumes

The addition of trips resulting from the surrounding area projects are shown in Table 10. This data was taken from the respective traffic impact analysis reports or calculated.

**Table 10: Other Project Related Trips**

Project Name	AM Peak Hour			PM Peak Hour			Saturday Peak Hour		
	In	Out	Total	In	Out	Total	In	Out	Total
Kaiwahine Village	10	50	60	47	23	70	42	35	77
Maui Lu Resort	213	103	316	157	206	363	157	206	363
Kihei High School Phase 1	228	108	336	49	55	104	0	0	0
Kihei High School Phase 2	243	114	357	52	59	111	0	0	0
Kenolio Apartments	19	76	95	78	42	120	47	48	95
Kihei Residential	213	403	616	405	332	737	330	311	641
Krauz Development	143	78	21	249	270	519	338	305	643
	87	55	142	259	270	529	361	333	694
Honua'ula Affordable Housing	24	103	127	104	54	158	78	71	149

Note is made about Honua'ula Affordable Housing Project because of its proximity to Pi'ilani Promenade. These are two separate projects under two different ownerships. However, the two projects will undergo entitlement reviews and if approved construction, in fairly close proximity, so explanation is offered. While it is possible that the Honua'ula Affordable Housing Project would proceed without Pi'ilani Promenade if the latter fails to gain entitlements, this is not considered a likely scenario.

This TIAR treats Honua'ula Affordable Housing Project in the following way:

- Trip generation rates were calculated using trip generation equations for Apartment (125 units) and Residential Condominium/Townhouse (125 units) from the *Trip Generation, 8th Edition* (ITE, 2008). The results in Table 10 show that during the AM peak hour, 103 outbound trips are generated and 24 inbound for a total of 127 trips. The PM peak hour has slightly more traffic generated, 104 in and 54 out movements for a total of 158 trips. Saturday peak hour has 78 in movements and 71 out for a total of 149 trips.
- Access for the Honua'ula Affordable Housing project is through a new mauka leg East Kaonoulu Street and assigned to that roadway. This roadway extension will be completed as part of Pi'ilani Promenade. The traffic analysis for **With Project** includes both projects using East Kaonoulu Street. See Figures 14 to 16 for project related trips

associated with Pi'ilani Promenade and see Figure 17 for project related trips associated with Honua'ula Affordable Housing Project.

- In order to isolate the effects of Pi'ilani Promenade, Honua'ula Affordable Housing Project is treated as part of background traffic in the **Without Project**. Because East Kaonoulu Street is not assumed to be completed under this condition, traffic associated with Honua'ula Affordable Housing Project is assigned to use a possible temporary driveway access off of Ohukai Road. Ohukai Road temporary access is subsequently closed when East Kaonoulu Street is constructed and opened. See Figures 18 to 20.

### **3. Future Without Project Volumes**

Future Without Project volumes for the AM, PM and Saturday Peak Hour Volumes are shown in Figures 9 through 11 respectively.

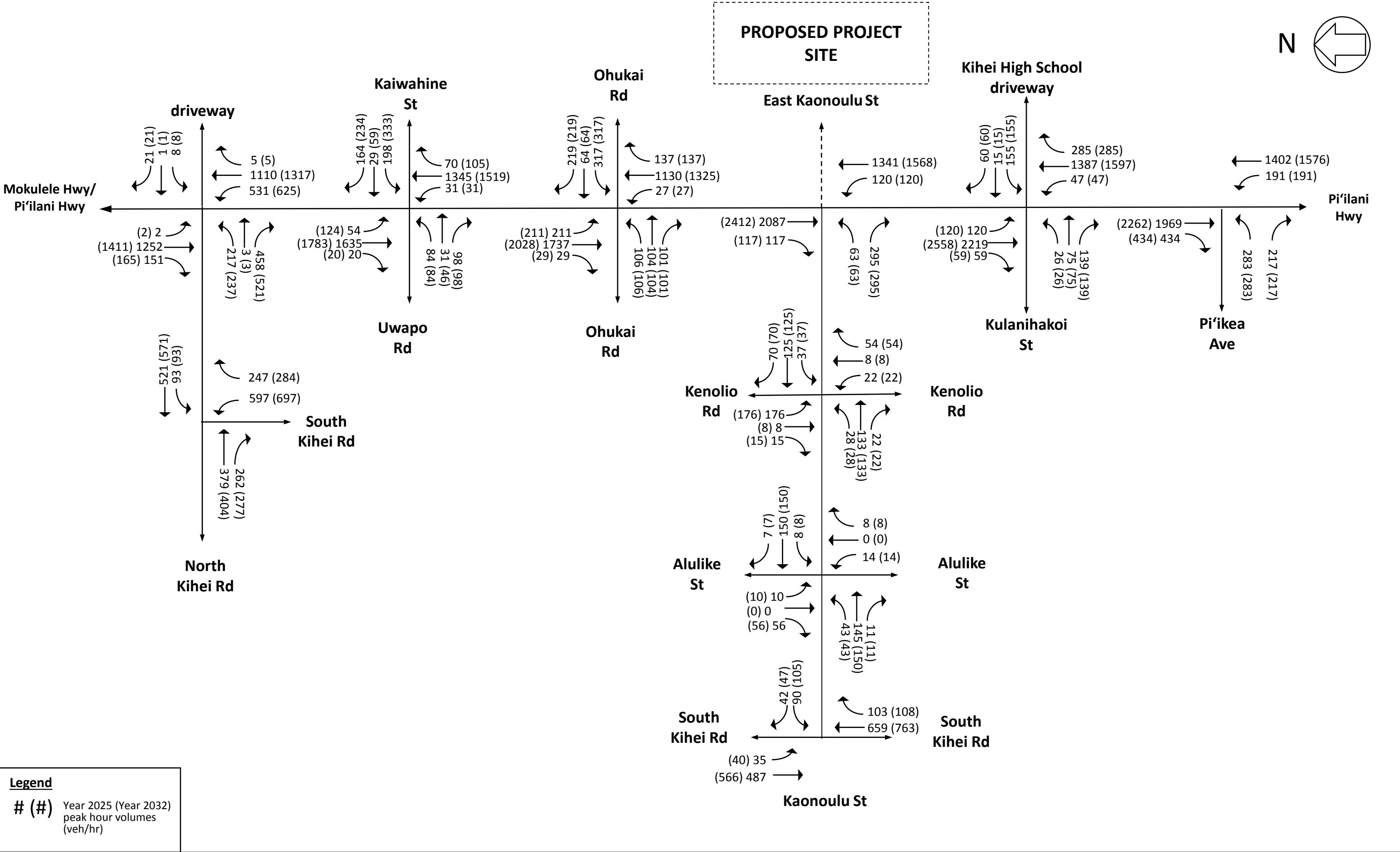


Figure 9: Future (2025 and 2032) Without Project AM Peak Hour Volumes

Pi'ilani Promenade - Kihei, Maui

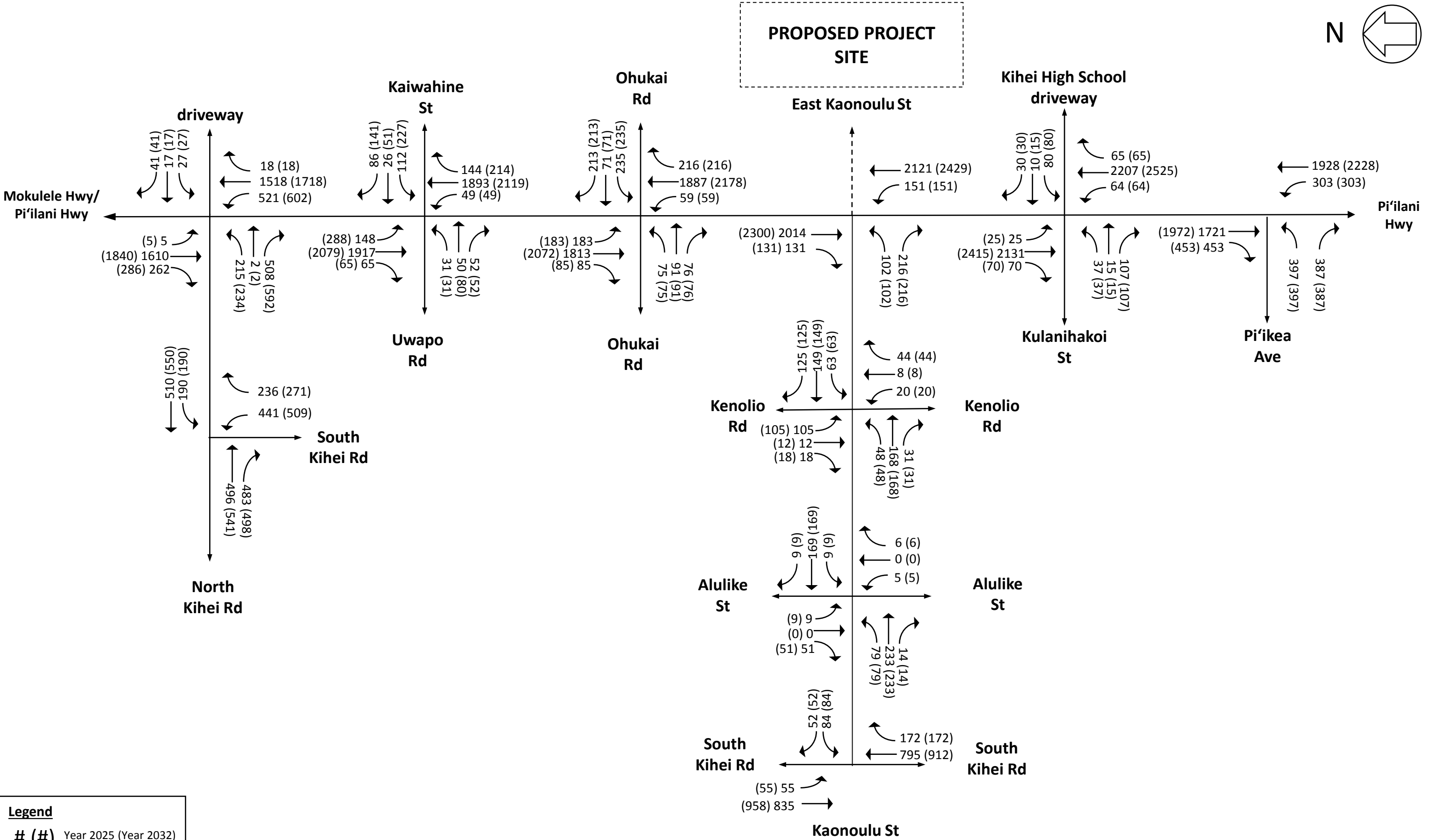


Figure 10: Future (2025 and 2032) Without Project PM Peak Hour Volumes

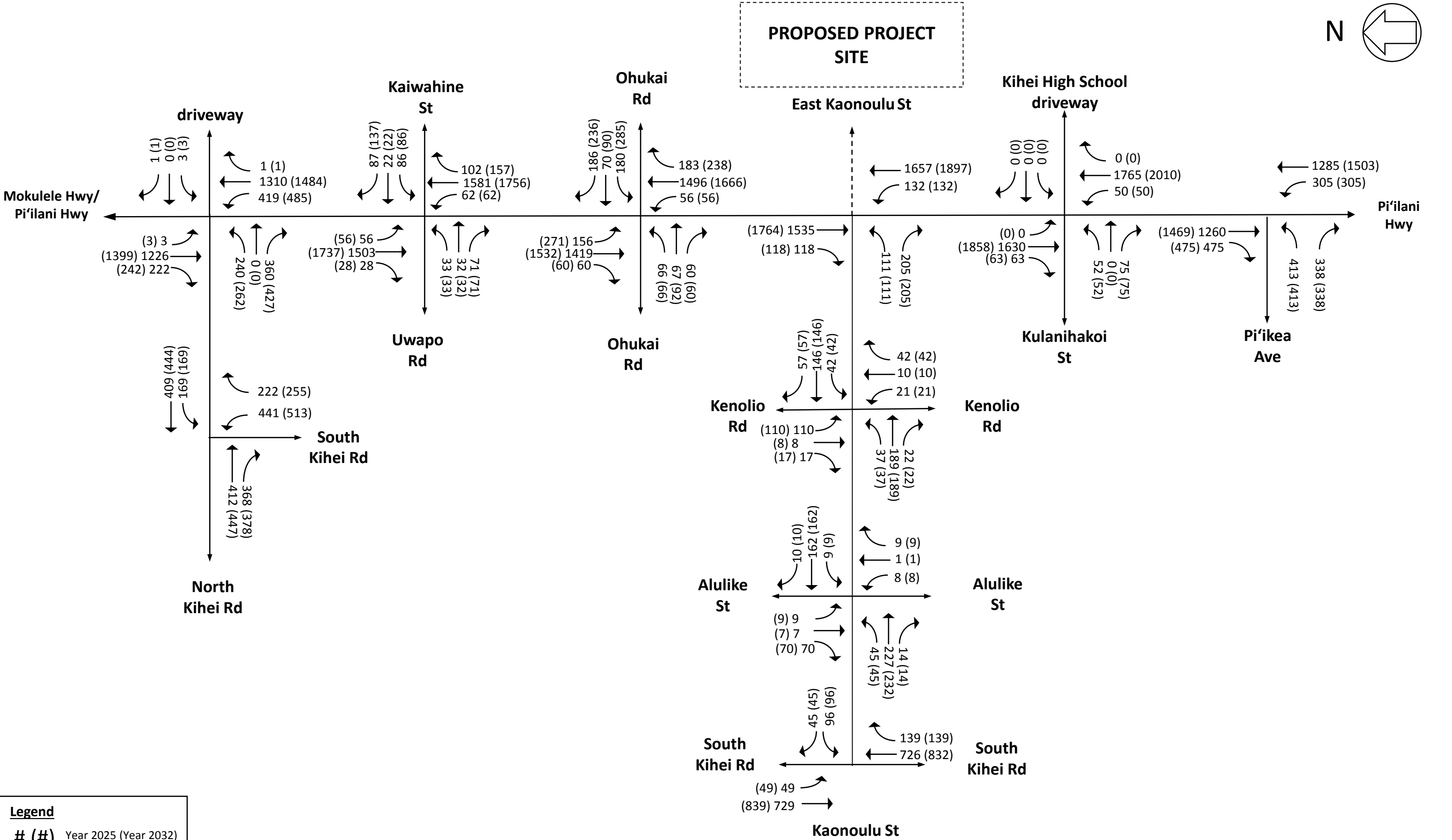


Figure 11: Future (2025 and 2032) Without Project Saturday Peak Hour Volumes

Pi'ilani Promenade - Kihei , Maui

## E. Future Without Project Intersection Level of Service

### 1. Future (2025) Without Project LOS

Future (2025) Without Project intersection LOS, v/c ratio and delay were determined for the AM, PM and Saturday peak hours (see Table 11). For Future (2025) Without Project conditions, all signalized intersection LOS maintained LOS D or better results. Individual turning movement LOS and v/c remained poor for some signalized intersections. All unsignalized intersections resulted in LOS C or better. Detailed analysis reports for these intersections are provided in Appendix F.

**Table 11: Future (2025) Without Project Intersection Level of Service**

Intersection	Traffic Control		AM Peak Hour			PM Peak Hour			Weekend Peak Hour		
	Appr	Mvmt	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS
<b>Pi'ilani Highway and Ohukai Road</b>	Signalized		48.9	-	D	48.4	-	D	33.2	-	C
	EB	L	<b>75.4</b>	0.77	<b>E</b>	<b>89.7</b>	0.73	<b>F</b>	<b>68.8</b>	0.68	<b>E</b>
		T	<b>63.2</b>	0.54	<b>E</b>	<b>76.0</b>	0.54	<b>E</b>	53.5	0.30	D
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	WB	L	<b>141.6</b>	<b>1.10</b>	<b>F</b>	<b>133.8</b>	<b>1.01</b>	<b>F</b>	<b>74.3</b>	0.83	<b>E</b>
		T	48.4	0.18	D	<b>61.3</b>	0.23	<b>E</b>	45.1	0.20	D
	NB	L	<b>66.5</b>	0.30	<b>E</b>	<b>80.4</b>	0.56	<b>F</b>	<b>59.2</b>	0.44	<b>E</b>
		T	33.8	0.72	C	45.5	0.95	D	29.7	0.83	C
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	SB	L	<b>75.1</b>	0.87	<b>E</b>	<b>123.4</b>	<b>1.01</b>	<b>F</b>	<b>72.3</b>	0.81	<b>E</b>
		T	35.9	0.93	D	28.1	0.85	C	23.0	0.73	C
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
<b>Pi'ilani Highway and Uwapo Road/ Kaiwahine Street</b>	Signalized		34.7	-	C	20.4	-	C	14.2	-	B
	EB	L	<b>150.4</b>	0.98	<b>F</b>	44.4	0.48	D	<b>72.0</b>	0.60	<b>E</b>
		T	<b>67.1</b>	0.40	<b>E</b>	39.9	0.41	D	<b>64.9</b>	0.40	<b>E</b>
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	WB	L	<b>193.1</b>	<b>1.19</b>	<b>F</b>	40.8	0.55	D	<b>63.6</b>	0.55	<b>E</b>
		T	<b>66.6</b>	0.37	<b>E</b>	35.2	0.16	D	<b>59.6</b>	0.20	<b>E</b>
	NB	L	40.8	0.08	D	37.3	0.40	D	<b>56.9</b>	0.41	<b>E</b>
		T	7.5	0.54	A	17.9	0.88	B	8.4	0.61	A
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	SB	L	<b>63.7</b>	0.42	<b>E</b>	40.4	0.61	D	<b>61.6</b>	0.40	<b>E</b>
		T	29.6	0.88	C	18.5	0.89	B	11.0	0.61	B
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
<b>Pi'ilani Highway and North Kihei Road</b>	Signalized		23.9	-	C	32.3	-	C	19.4	-	B
	EB	LT	35.9	0.59	D	45.5	0.61	D	47.0	0.63	D
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	WB	L	36.1	0.09	D	46.3	0.23	D	51.8	0.07	D
		TR	38.5	0.26	D	52.2	0.54	D	52.3	0.03	D
	NB	L	42.8	0.88	D	<b>55.6</b>	0.89	<b>E</b>	47.4	0.80	D
		T	9.1	0.54	A	11.4	0.68	B	7.6	0.54	A
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	SB	L	<b>74.6</b>	0.52	<b>E</b>	<b>68.3</b>	0.54	<b>E</b>	<b>79.0</b>	0.53	<b>E</b>
		T	26.4	0.86	C	41.7	0.98	D	16.9	0.64	B
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*

Table 11 (Continued): Future (2025) Without Project Intersection Level of Service

Intersection	Traffic Control		AM Peak Hour			PM Peak Hour			Weekend Peak Hour		
	Appr	Mvmt	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS
South Kihei Road and North Kihei Road	Signalized		18.3	-	B	18.0	-	B	15.2	-	B
	EB	T	11.7	0.44	B	14.3	0.65	B	13.0	0.58	B
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	WB	L	28.6	0.63	C	29.2	0.76	C	22.2	0.72	C
		T	4.8	0.24	A	4.1	0.23	A	4.1	0.20	A
	NB	L	26.3	0.79	C	20.6	0.64	C	17.9	0.61	B
		R	33.8	0.79	C	41.9	0.86	D	29.1	0.79	C
Pi'ilani Highway and Pi'ikea Avenue	Signalized		36.7	-	D	41.1	-	D	35.0	-	D
	EB	L	<b>75.2</b>	0.95	<b>E</b>	<b>84.8</b>	<b>1.02</b>	<b>F</b>	<b>74.1</b>	0.93	<b>E</b>
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	NB	L	<b>112.3</b>	<b>1.03</b>	<b>F</b>	<b>99.2</b>	<b>1.03</b>	<b>F</b>	<b>80.4</b>	0.92	<b>F</b>
		T	6.5	0.57	A	12.5	0.80	B	11.8	0.54	B
	SB	T	<b>45.4</b>	<b>1.02</b>	<b>F</b>	<b>52.8</b>	<b>1.03</b>	<b>F</b>	34.9	0.77	C
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
Pi'ilani Highway and Kaonoulu Street	Signalized		11.3	-	B	17.9	-	B	12.6	-	B
	EB	L	<b>55.3</b>	0.76	<b>E</b>	<b>94.3</b>	0.84	<b>F</b>	<b>74.7</b>	0.82	<b>E</b>
		L	<b>92.5</b>	0.91	<b>F</b>	<b>65.9</b>	0.52	<b>E</b>	<b>55.2</b>	0.49	<b>E</b>
	NB	T	1.9	0.46	A	4.6	0.71	A	3.2	0.56	A
	SB	T	11.4	0.84	B	24.6	0.86	C	14.5	0.66	B
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
South Kihei Road and Kaonoulu Street	Signalized		9.3	-	A	9.2	-	A	10.2	-	B
	WB	L	31.4	0.65	C	27.6	0.61	C	24.5	0.63	C
		R	24.7	0.34	C	25.4	0.42	C	21.3	0.33	C
	NB	T	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
		R	8.3	0.67	A	10.4	0.83	B	12.6	0.85	B
	SB	L	42.6	0.68	D	38.3	0.74	D	33.6	0.70	C
		T	2.7	0.36	A	3.0	0.59	A	3.2	0.58	A
Pi'ilani Highway and Kulanihakoi Street	Signalized		24.7	-	C	24.6	-	C	6.0	-	A
	EB	LT	45.2	0.33	D	<b>75.7</b>	0.32	<b>E</b>	<b>64.6</b>	0.45	<b>E</b>
		R	0.0	0.00	*				0.0	0.00	*
	WB	LT	52.9	0.68	D	<b>81.1</b>	0.62	<b>F</b>	<b>59.7</b>	0.05	<b>E</b>
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	NB	L	<b>118.0</b>	0.83	<b>F</b>	<b>98.0</b>	0.80	<b>F</b>	<b>79.4</b>	0.77	<b>E</b>
		T	14.0	0.64	B	32.1	0.93	C	2.9	0.60	A
	SB	L	<b>67.4</b>	0.83	<b>E</b>	<b>59.5</b>	0.09	<b>E</b>	0.0	0.00	*
		T	23.9	0.94	C	10.3	0.76	B	5.1	0.59	A
Kenolio Road and Kaonoulu Street	Unsignalized		-	-	-	-	-	-	-	-	-
	NB	L	13.0	0.05	B	17.6	0.07	C	15.7	0.07	C
		TR	9.9	0.08	A	11.0	0.09	B	11.0	0.09	B
	EB	L	7.7	0.02	A	8.0	0.04	A	7.8	0.03	A
	WB	L	7.6	0.03	A	7.8	0.05	A	7.8	0.04	A
	SB	L	19.3	0.43	C	24.9	0.39	C	22.0	0.38	C
		TR	10.5	0.04	B	12.6	0.07	B	11.3	0.05	B

**Table 11 (Continued): Future (2025) Without Project Intersection Level of Service**

Intersection	Traffic Control		AM Peak Hour			PM Peak Hour			Weekend Peak Hour		
	Appr	Mvmt	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS
<b>Kaonoulu Street and Alulike Street</b>	Unsignalized		-	-	-	-	-	-	-	-	-
	NB	LTR	11.9	0.05	B	12.9	0.03	B	12.6	0.04	B
	EB	L	7.7	0.03	A	7.8	0.06	A	7.7	0.04	A
	WB	L	7.6	0.01	A	7.8	0.01	A	7.8	0.01	A
	SB	LTR	10.1	0.09	B	10.7	0.10	B	10.8	0.13	B

\* Right turn channelization; Appr = Approach; Mvmt = Movement; v/c = volume to capacity ratio;

NB = Northbound; EB = Eastbound; WB = Westbound; SB = Southbound;

L = Left turn movement; R = Right turn movement; T = Through movement

## 2. Future (2032) Without Project LOS

Future (2032) Without Project intersection LOS, v/c ratio and delay were determined for the AM, PM and Saturday peak hours (see Table 12). For Future (2032) Without Project conditions, all signalized intersection LOS maintained LOS D or better results except for the intersection of Pi'ilani Highway at Ohukai Road which resulted in LOS E during the AM and Weekend peak hours. Individual turning movement LOS and v/c remained poor for some signalized intersections. All unsignalized intersections resulted in LOS C or better. Detailed analysis reports for these intersections are provided in Appendix F.

**Table 12: Future (2032) Without Project Intersection Level of Service**

Intersection	Traffic Control		AM Peak Hour			PM Peak Hour			Weekend Peak Hour		
	Appr	Mvmt	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS
<b>Pi'ilani Highway and Ohukai Road</b>	Signalized		<b>61.3</b>	-	<b>E</b>	52.7	-	<b>D</b>	<b>60.0</b>	-	<b>E</b>
	EB	L	<b>79.1</b>	0.77	<b>E</b>	<b>147.6</b>	0.80	<b>F</b>	<b>71.6</b>	0.69	<b>E</b>
		T	<b>66.1</b>	0.56	<b>E</b>	<b>142.9</b>	0.81	<b>F</b>	<b>57.7</b>	0.44	<b>E</b>
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	WB	L	<b>222.3</b>	<b>1.30</b>	<b>F</b>	<b>181.7</b>	<b>1.02</b>	<b>F</b>	<b>135.9</b>	<b>1.08</b>	<b>F</b>
		T	53.9	0.21	<b>D</b>	<b>104.2</b>	0.28	<b>F</b>	44.8	0.23	<b>D</b>
	NB	L	<b>69.0</b>	0.31	<b>E</b>	<b>155.7</b>	0.77	<b>F</b>	61.9	0.45	<b>E</b>
		T	32.9	0.78	<b>C</b>	<b>61.7</b>	0.98	<b>E</b>	<b>64.0</b>	<b>1.02</b>	<b>F</b>
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	SB	L	<b>89.3</b>	0.95	<b>F</b>	<b>170.1</b>	<b>1.03</b>	<b>F</b>	<b>136.5</b>	<b>1.08</b>	<b>F</b>
		T	<b>50.9</b>	<b>1.03</b>	<b>F</b>	6.2	0.86	<b>A</b>	28.4	0.81	<b>C</b>
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*



Table 12 (Continued): Future (2032) Without Project Intersection Level of Service

Intersection	Traffic Control		AM Peak Hour			PM Peak Hour			Weekend Peak Hour		
	Appr	Mvmt	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS
<b>Pi'ilani Highway and Uwapo Road/ Kaiwahine Street</b>	Signalized		21.4	-	C	19.9	-	B	18.0	-	B
	EB	L	<b>77.2</b>	0.74	<b>E</b>	<b>145.6</b>	0.67	<b>F</b>	36.9	0.46	D
		T	<b>76.5</b>	0.54	<b>E</b>	<b>144.8</b>	0.80	<b>F</b>	31.8	0.24	C
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	WB	L	<b>107.0</b>	0.98	<b>F</b>	<b>143.4</b>	0.86	<b>F</b>	32.8	0.42	C
		T	<b>66.9</b>	0.39	<b>E</b>	<b>111.6</b>	0.26	<b>F</b>	29.5	0.13	C
	NB	L	36.9	0.09	D	<b>103.1</b>	0.31	<b>F</b>	33.5	0.57	C
		T	0.9	0.67	A	0.8	0.86	A	16.9	0.86	B
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	SB	L	<b>66.6</b>	0.67	<b>E</b>	<b>118.0</b>	0.90	<b>F</b>	31.4	0.27	C
		T	14.0	0.99	B	1.5	0.84	A	16.5	0.85	B
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
<b>Pi'ilani Highway and North Kihei Road</b>	Signalized		26.4	-	C	44.0	-	D	22.5	-	C
	EB	LT	<b>69.5</b>	0.72	<b>E</b>	<b>130.2</b>	0.81	<b>F</b>	33.6	0.63	C
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	WB	L	<b>70.6</b>	0.13	<b>E</b>	<b>151.2</b>	0.61	<b>F</b>	34.9	0.05	C
		TR	<b>75.5</b>	0.39	<b>E</b>	<b>415.8</b>	<b>1.42</b>	<b>F</b>	35.6	0.02	D
	NB	L	52.7	0.92	D	<b>93.1</b>	0.95	<b>F</b>	29.7	0.75	C
		T	0.5	0.53	A	0.4	0.62	A	10.3	0.70	B
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	SB	L	<b>111.3</b>	0.53	<b>F</b>	<b>158.2</b>	0.61	<b>F</b>	<b>61.4</b>	0.52	<b>E</b>
		T	30.6	0.79	C	44.1	0.86	D	30.7	0.94	C
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
<b>South Kihei Road and North Kihei Road</b>	Signalized		22.6	-	C	32.9	-	C	17.1	-	B
	EB	T	14.2	0.46	B	18.8	0.52	B	14.3	0.63	B
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	WB	L	36.8	0.67	D	<b>57.9</b>	0.89	<b>E</b>	25.1	0.73	C
		T	15.5	0.27	B	0.1	0.22	A	4.6	0.21	A
	NB	L	28.1	0.79	C	52.3	0.73	D	19.4	0.67	B
		R	30.3	0.75	C	<b>73.4</b>	0.90	<b>E</b>	33.8	0.83	C
<b>Pi'ilani Highway and Pi'ikea Avenue</b>	Signalized		49.6	-	D	51.7	-	D	34.6	-	C
	EB	L	<b>121.5</b>	<b>1.05</b>	<b>F</b>	<b>119.0</b>	<b>1.08</b>	<b>F</b>	<b>86.7</b>	<b>1.05</b>	<b>F</b>
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	NB	L	<b>140.7</b>	<b>1.06</b>	<b>F</b>	<b>130.2</b>	<b>1.09</b>	<b>F</b>	<b>85.3</b>	<b>1.01</b>	<b>F</b>
		T	7.2	0.61	A	17.1	0.88	B	8.8	0.65	A
	SB	T	<b>62.4</b>	<b>1.06</b>	<b>F</b>	<b>65.1</b>	<b>1.06</b>	<b>F</b>	35.9	0.96	D
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
<b>Pi'ilani Highway and Kaonoulu Street</b>	Signalized		15.2	-	B	25.6	-	C	14.7	-	B
	EB	L	<b>84.9</b>	0.78	<b>F</b>	<b>155.0</b>	0.89	<b>F</b>	<b>64.7</b>	0.81	<b>E</b>
		T	<b>138.3</b>	0.97	<b>F</b>	<b>111.4</b>	0.60	<b>F</b>	42.8	0.39	D
	NB	L	2.0	0.52	A	6.5	0.79	A	4.0	0.65	A
		T	15.8	0.90	B	34.4	0.91	C	21.0	0.82	C
	SB	R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*

Table 12 (Continued): Future (2032) Without Project Intersection Level of Service

Intersection	Traffic Control		AM Peak Hour			PM Peak Hour			Weekend Peak Hour		
	Appr	Mvmt	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS
South Kihei Road and Kaonoulu Street	Signalized		11.2	-	B	10.3	-	B	12.3	-	B
	WB	L	30.6	0.67	C	35.0	0.64	C	28.3	0.65	C
		R	26.5	0.34	C	32.2	0.44	C	24.7	0.34	C
	NB	T	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
		R	11.7	0.78	B	11.5	0.86	B	16.2	0.89	B
	SB	L	42.7	0.71	D	53.1	0.80	D	39.6	0.74	D
		T	3.3	0.43	A	3.2	0.65	A	3.8	0.64	A
Pi'ilani Highway and Kulanihako Street	Signalized		49.4	-	D	33.0	-	C	6.6	-	A
	EB	L	56.5	0.34	E	119.4	0.35	F	58.6	0.42	E
		TR	0.0	0.00	*				0.0	0.00	*
	WB	L	72.6	0.74	E	130.7	0.73	F	54.3	0.11	D
		TR	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	NB	L	215.1	1.04	F	161.7	0.84	F	74.0	0.77	E
		T	41.6	0.91	D	40.0	0.96	D	3.5	0.68	A
	SB	L	47.3	0.31	D	106.7	0.13	F	0.0	0.00	*
		T	49.5	1.04	F	15.6	0.84	B	6.4	0.69	A
Kenolio Road and Kaonoulu Street	Unsignalized		-	-	-	-	-	-	-	-	-
	NB	L	13.0	0.05	B	17.6	0.07	C	15.7	0.07	C
		TR	9.9	0.08	A	11.0	0.09	B	11.0	0.09	B
	EB	L	7.7	0.02	A	8.0	0.04	A	7.8	0.03	A
	WB	L	7.6	0.03	A	7.8	0.52	A	7.8	0.04	A
	SB	L	19.3	0.43	C	24.9	0.39	C	22.0	0.38	C
		TR	10.5	0.04	B	12.6	0.07	B	11.3	0.05	B
Kaonoulu Street and Alulike Street	Unsignalized		-	-	-	-	-	-	-	-	-
	NB	LTR	12.0	0.05	B	12.9	0.03	B	12.7	0.04	B
	EB	L	7.7	0.03	A	7.8	0.06	A	7.7	0.04	A
	WB	L	7.6	0.01	A	7.8	0.01	A	7.8	0.01	A
	SB	LTR	10.1	0.09	B	10.7	0.10	B	10.8	0.13	B

\* Right turn channelization; Appr = Approach; Mvmt = Movement; v/c = volume to capacity ratio;

NB = Northbound; EB = Eastbound; WB = Westbound; SB = Southbound;

L = Left turn movement; R = Right turn movement; T = Through movement

## F. Future Without Project Mitigation Measures

### 1. Future (2025) Without Project Mitigation

With all signalized intersections maintaining LOS D or better results and unsignalized intersection turning movements resulting in LOS C or better, no mitigation measures are deemed necessary.

### 2. Future (2032) Without Project Mitigation

#### a) Pi'ilani Highway and Ohukai Road

The intersection of Pi'ilani Highway and Ohukai Road resulted in poor LOS for Future (2032) Without Project conditions. Possible mitigation measures include signal optimization or the construction of additional turning lanes.

## IV. FUTURE WITH PROJECT CONDITIONS

### A. Future With Project Geometric Configuration

A portion of East Kaonoulu Street is being constructed with the development of Pi'ilani Promenade by 2025. This will add a mauka leg to the intersection of Pi'ilani Highway and Kaonoulu Street. Additional intersection modifications include:

- Southbound approach will have double left turn lanes, two through lanes, and a channelized right turn lane.
- Northbound approach will have a dedicated left turn lane, two through lanes, and a channelized right turn lane.
- Eastbound approach will have a left turn lane, a through lane, and a channelized right turn lane.
- Westbound approach will have dual left turn lanes, a through lane and channelized right turn lane with an acceleration lane.

The lane configuration for Future With Project conditions are shown in Figure 12.

The Pi'ilani Promenade project also includes the construction of a shared-use pedestrian and bike path along the mauka-side of Pi'ilani Highway, adjacent to the proposed development and within the project site, in addition to the bike lanes on Pi'ilani Highway. A pedestrian plan created for the project is included in Appendix G.

### B. Future With Project Traffic Volumes

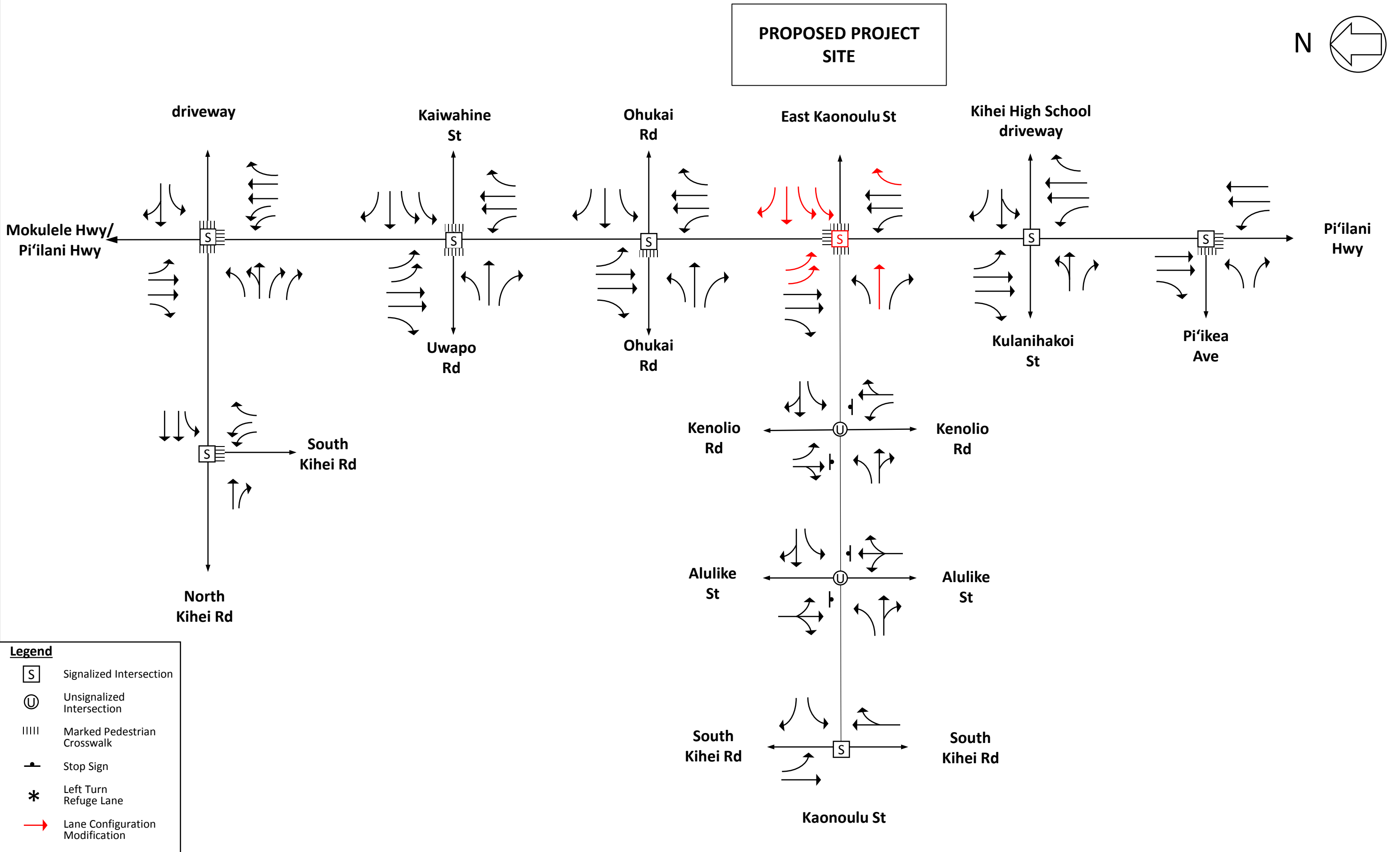
#### 1. Project Related Volumes

The addition of trips resulting from the project was calculated using the four-step trip generation methodology: trip generation, trip distribution, modal choice, route assignment.

##### a) *Trip Generation*

##### (1) Trip Generation Methodology

The proposed mixed-use development is planning to include commercial, light industrial and affordable apartment units. Resulting trip generation for the proposed development was calculated using *Trip Generation, 8<sup>th</sup> Edition* (ITE, 2008) and related trip generation rates are shown in Table 13.



**Table 13: Development Trip Generation Rates**

Land Use [ITE Code]	Quantity	Trip Generation Equation		
		AM Peak Hour	PM Peak Hour	Saturday Peak Hour
Commercial [820]	530,000 sq. ft.	$\text{Ln}(T) = 0.59\text{Ln}(X) + 2.32$	$\text{Ln}(T) = 0.67\text{Ln}(X) + 3.37$	$\text{Ln}(T) = 0.65\text{Ln}(X) + 3.76$
Light Industrial [110]	5 acres	$T = 7.51(X)$	$T = 3.68(X) + 116.82$	$T = 0.96(X)$
Apartment [220]	226 units	$T = 0.49(X) + 3.73$	$T = 0.55(X) + 17.65$	$T = 0.41(X) + 19.23$

Methodologies described in *Trip Generation Handbook, 2<sup>nd</sup> Edition* (ITE, June 2004) state that although total project trips are calculated for a specified development, the total trips will not necessarily be new vehicles added to the adjacent roadways. The three types of project related trips considered are pass-by trips, diverted trips, and primary trips. The definition of each type of trip is shown in Table 14.

**Table 14: Project Related Trip Definitions**

Type	Definition
Pass-by	Traffic currently passing the site on an adjacent street or roadway that offers direct access to the generator.
Diverted	Trips that are attracted from the traffic volume on roadways within the vicinity of the generator but require a diversion from that roadway to another roadway to gain access to the site.
Primary	Trips made for the specific purpose of visiting the generator. The stop at the generator is the primary reason for the trip.

Source: *Trip Generation Handbook, 2<sup>nd</sup> Edition* (ITE, June 2004)

## (2) Trip Generation Calculation

It is anticipated that by 2025 all the apartments will be fully occupied and 50% of the commercial and industrial areas will be completed. The remaining development will be constructed by 2032. Resulting project related trips for year 2025, 2032, and the total are shown in Table 15.

**Table 15: Phased Project Related Trip Generation Volumes**

Land Use [ITE Code]	Years	Project Related Trips								
		AM Peak Hour			PM Peak Hour			Saturday Peak Hour		
		In	Out	Total	In	Out	Total	In	Out	Total
Commercial [820]	2025	126	81	207	540	562	1,102	659	608	1,267
	2032	125	80	205	540	563	1,103	659	608	1,267
	Total	251	161	412	1,080	1,125	2,205	1,318	1,216	2,534
Light Industrial [110]	2025	16	3	19	16	53	69	1	2	3
	2032	16	3	19	14	52	67	1	1	2
	Total	32	6	38	30	105	135	2	3	5
Apartment [220]	2025	23	91	114	92	50	142	56	56	112
	2032	0	0	0	0	0	0	0	0	0
	Total	23	91	114	92	50	142	56	56	112
Total Project	2025	165	175	340	648	665	1,313	716	665	1,382
	2032	141	84	225	554	615	1,170	660	609	1,270
	Total	306	258	564	1,202	1,280	2,482	1,376	1,275	2,651

The percentage of pass-by trips generated by the commercial use was estimated using the data provided in the *Trip Generation Handbook, 2<sup>nd</sup> Edition*. The pass-by trip reduction rates used for the AM, PM and Saturday peak hours is 10%, 24% and 39%, respectively. No pass-by reduction factors were applied to the industrial or apartment trips generated. No diverted trips were accounted for in the analysis. Table 16 provides a breakdown of the primary and pass-by trips generated, including 2025, 2032, and then the total project.

**Table 16: Project Related Trip Generation Breakdown**

Trip Type	Years	Project Related Trips								
		AM Peak Hour			PM Peak Hour			Saturday Peak Hour		
		In	Out	Total	In	Out	Total	In	Out	Total
Primary	2025	152	167	319	518	530	1,047	459	428	888
	2032	129	76	205	425	480	906	403	372	776
	Total	281	243	524	943	1,010	1,953	862	800	1,664
Pass-By	2025	13	8	21	130	135	265	257	237	494
	2032	12	8	20	129	135	264	257	237	494
	Total	25	16	41	259	270	259	514	474	988
Total Trips	2025	165	175	340	648	665	1,312	716	665	1,382
	2032	141	84	225	554	615	1,170	660	609	1,270
	Total	306	258	564	1,202	1,280	2,482	1,376	1,275	2,651

**b) Trip Distribution**

The project-related trips were distributed along the anticipated approach routes to the project site based on following assumptions:

1. The purpose of the project is to provide services for the residents and tourists of South Maui. Thus marketing and advertising will be directed toward this area. Accordingly, it was assumed that 75% of the traffic to and from the project will be generated by Kihei and South Maui.
2. 25% of the project generated traffic will approach and depart via Mokulele Highway (10%) and North Kihei Road (15%). Of the 15% from North Kihei Road, 10% will use North Kihei Road to Pi'ilani Highway and then Pi'ilani Highway to the project. The remaining 5% will use South Kihei Road and Kaonoulu Street.
3. The traffic generated from within Kihei (75%) was distributed based on the distribution of residential units and hotel rooms (including timeshares and vacation rentals) using the data presented in the *Maui Long-Range Land Transportation Plan* with adjustments to reflect Maui Lu Resort Redevelopment, the Kihei Residential Development, Honua'ula, Mākena Resort and additional Wailea Resort units. Using this distribution, 20% of the trips associated from within Kihei would be generated by the area north of Kaonoulu Street and 80% would be generated by the area south of Kaonoulu Street.

Trip distribution is shown in Figure 13.

**c) Modal Choice**

Without additional connectivity and access, the resulting number of users likely to travel by foot, bike, or transit is relatively small and thus no factor was applied to the resulting volumes. However, improvements are being made to accommodate pedestrian and bicycle travel adjacent to and within this project. Recognizing that the availability of existing off street pedestrian and bike pathways is limited in south Maui, and that there is a need for projects to offer options to vehicular traffic, a description of the pedestrian and bike pathway system adjacent to and within the project area is included in a figure in Appendix G. The red bike lane shown in the figure is located within the Pi'ilani Highway right of way. The blue system shown provides for a series of pedestrian and bike pathways with the project area and East Kaonoulu Street allowing for safe off street interconnectivity for the public using the various components of the land plan and providing for future connectivity to the areas north, south and east of the project area.

**d) Trip Assignment**

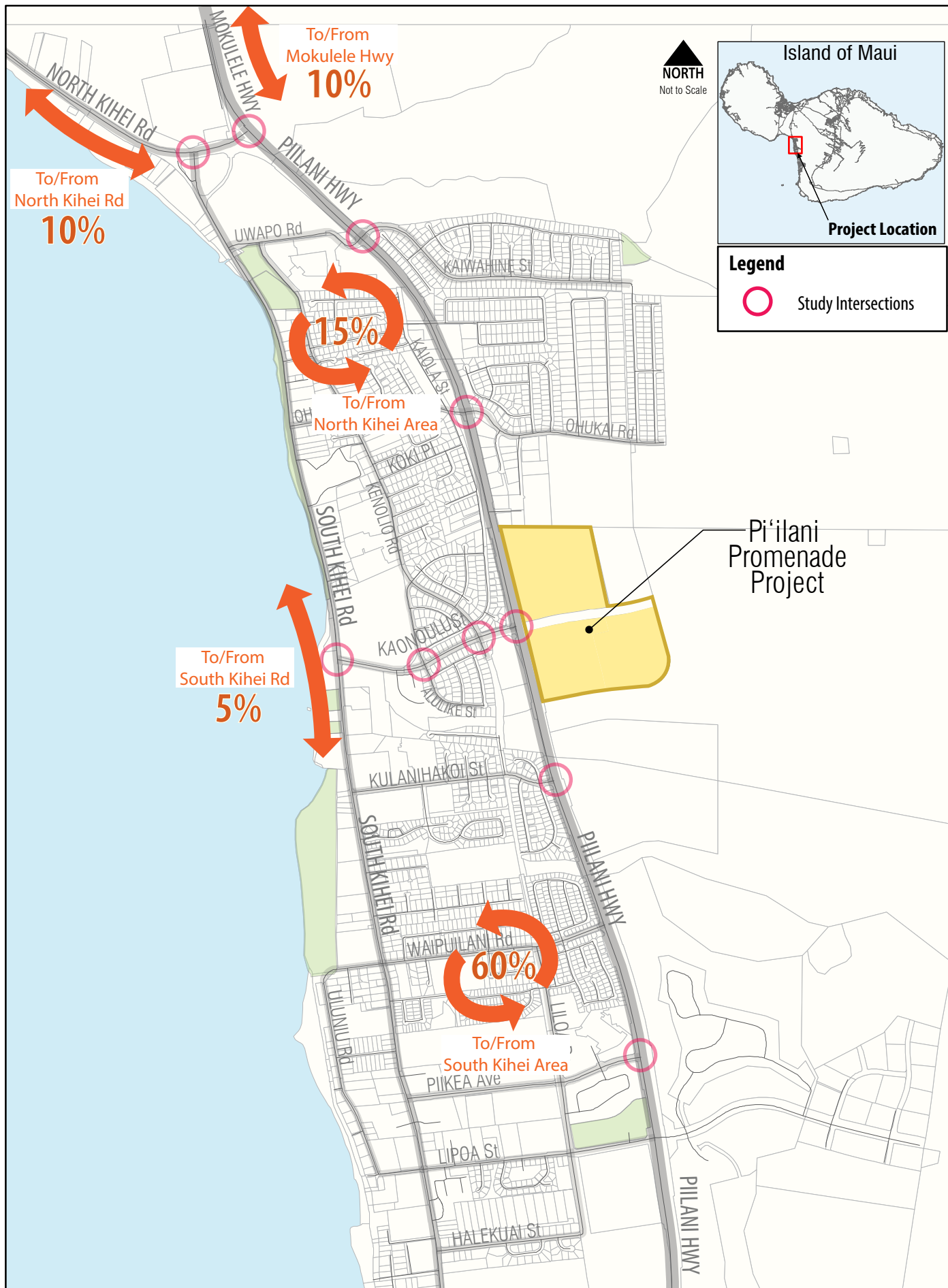
Total project related vehicular trips for 2025 and 2032 are shown in Figures 14 through 16. Figure 14 shows AM peak hour. Figure 15 shows PM peak hour. Figure 16 shows Saturday peak hour.

Volumes associated with Honua'ula Affordable Housing for the Future With Project analysis were rerouted from the temporary access off Ohukai Road to the new mauka leg of East Kaonoulu Street. It is anticipated that Honua'ula Affordable Housing will be completed by 2025. Figure 17

shows the trips associated with Honua'ula Affordable Housing with access only at East Kaonoulu Street.

Primary project related vehicular volumes were added to the Future Without Project traffic volumes. In addition, pass-by trips for Pi'ilani Promenade and the Honua'ula Affordable Housing project related volumes were rerouted which resulted in the Future (2025 and 2032) With Project traffic volumes shown in Figures 18 through 20 for AM, PM and Saturday peak hours.





**Figure 13: Future Trip Distribution**

*Pi'ilani Promenade – Kihei, Maui*

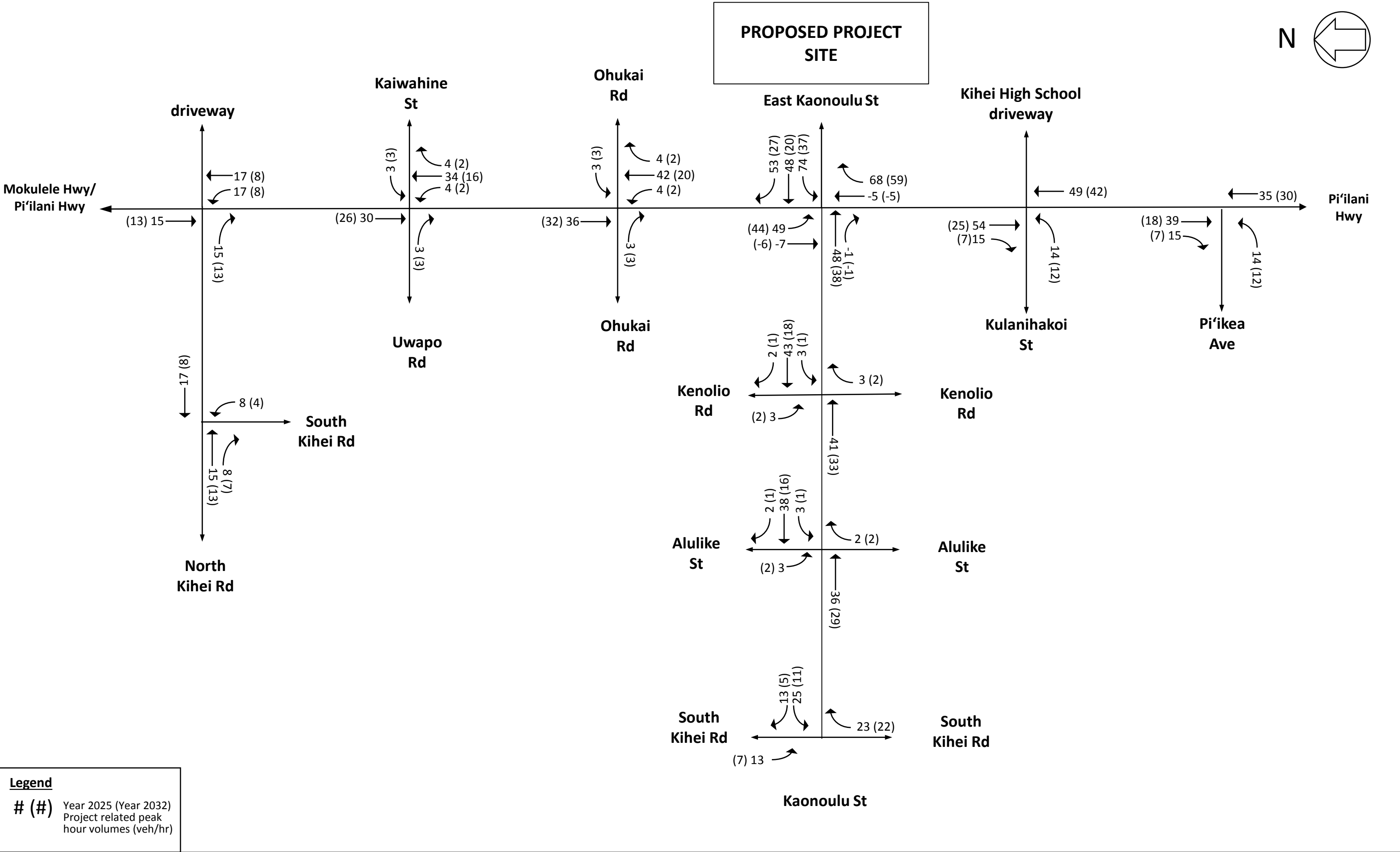


Figure 14: Project Related Trips (2025 and 2032) AM Peak Hour

Pi'ilani Promenade - Kihei, Maui

SSFM

International

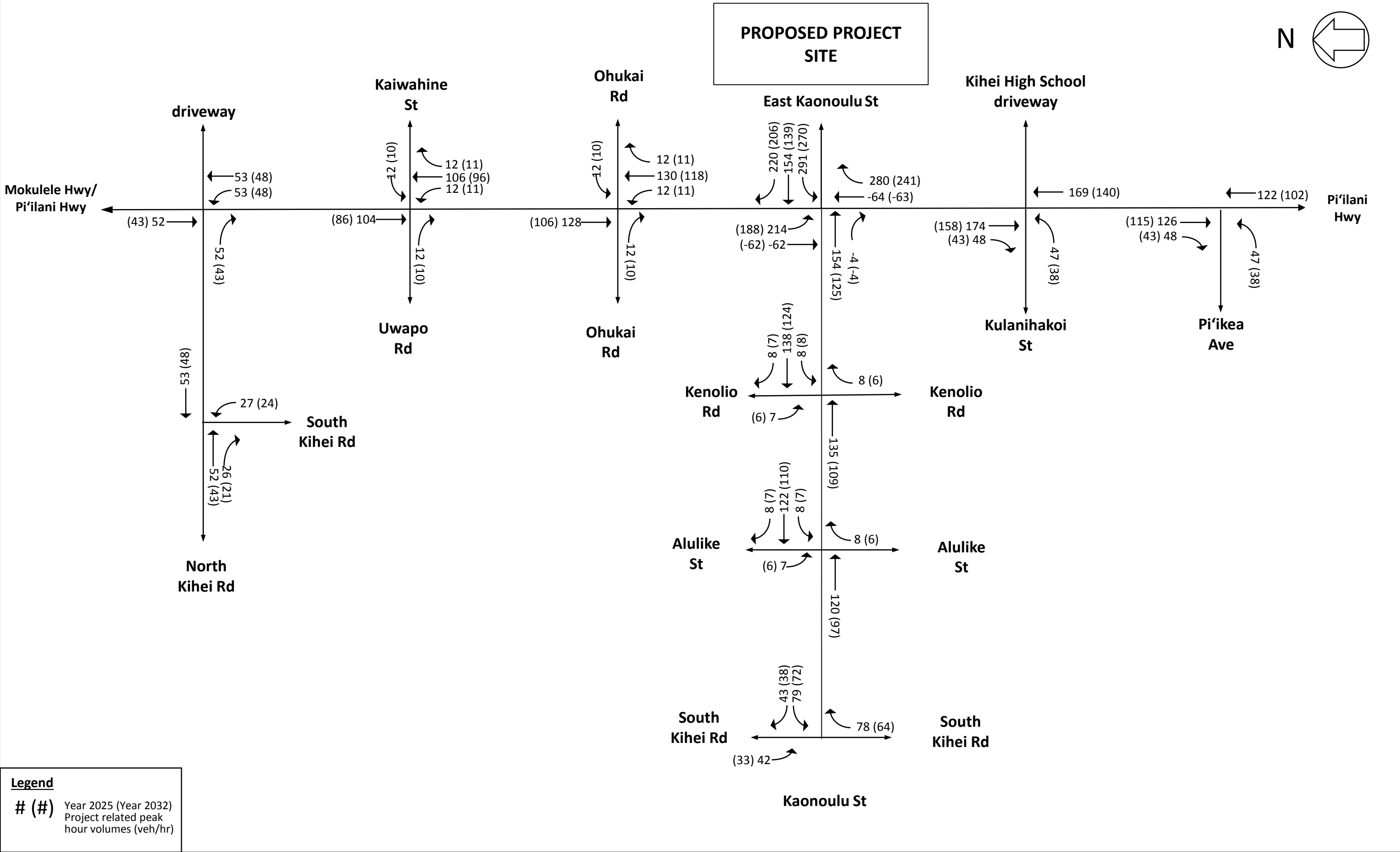


Figure 15: Project Related Trips (2025 and 2032) PM Peak Hour

Pi'ilani Promenade - Kihei, Maui

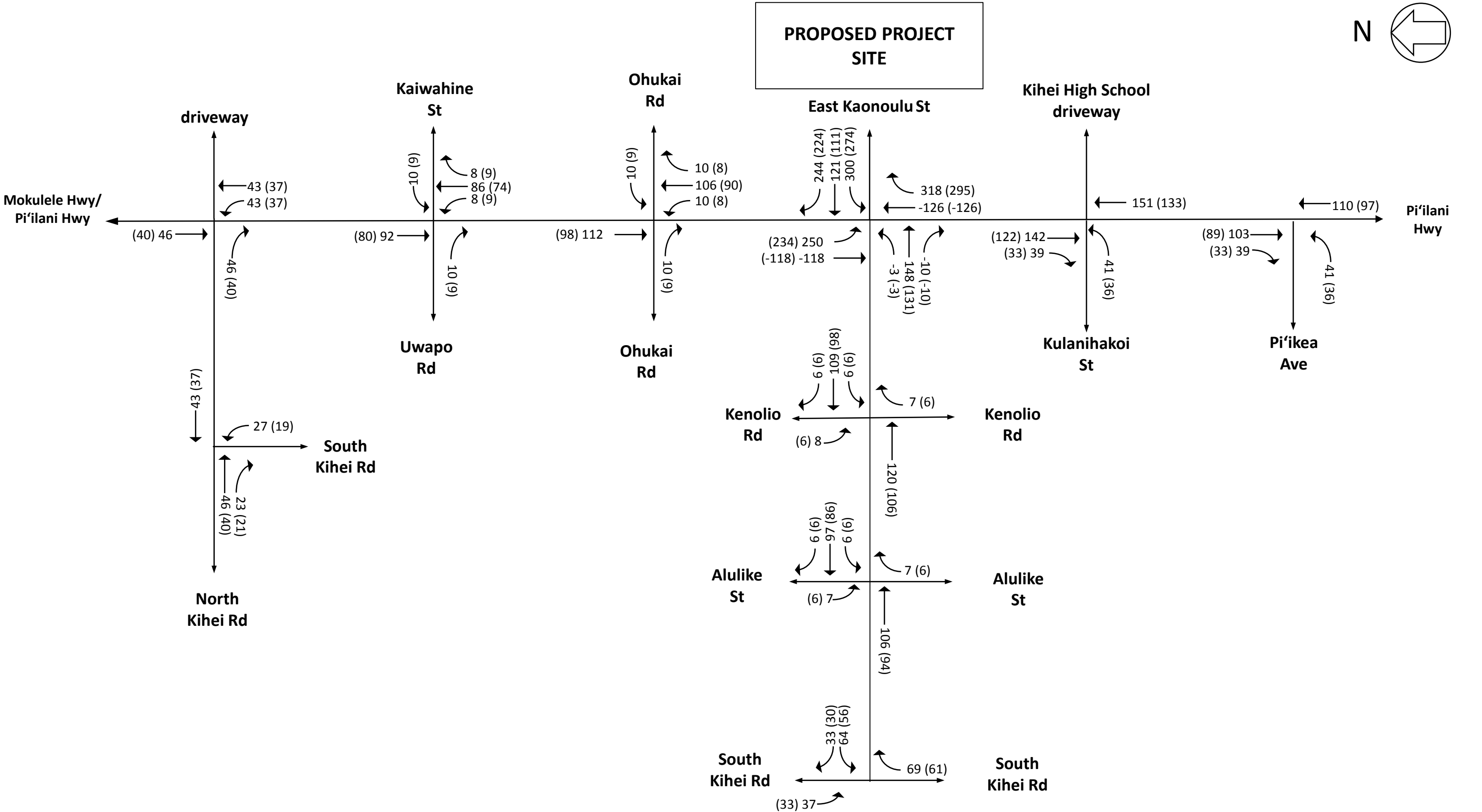


Figure 16: Project Related Trips (2025 and 2032) Saturday Peak Hour

Pi'ilani Promenade - Kihei, Maui

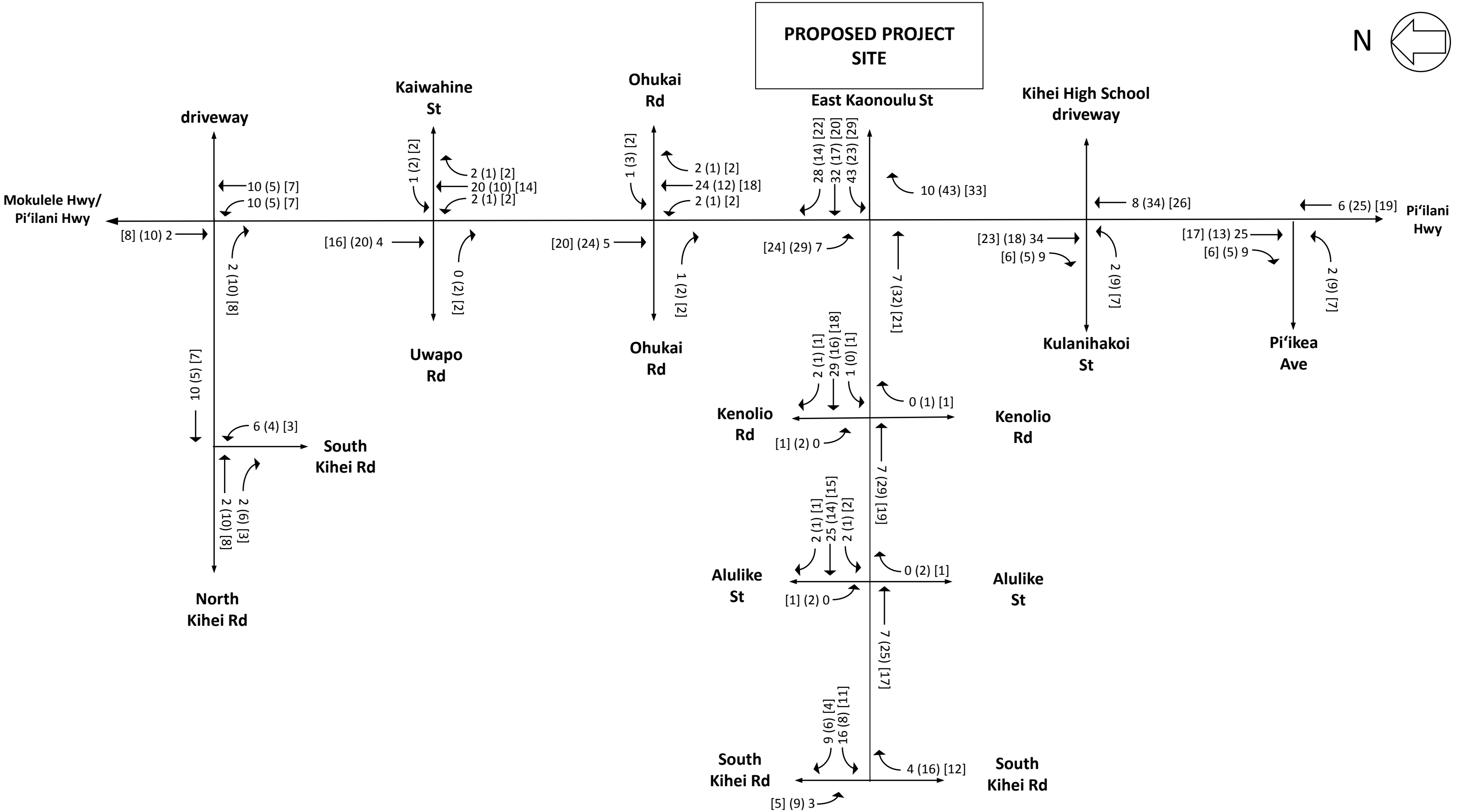


Figure 17: Honua'ula Affordable Housing Project Related Trips – AM, PM and Saturday Peak Hour

Pi'ilani Promenade - Kihei, Maui

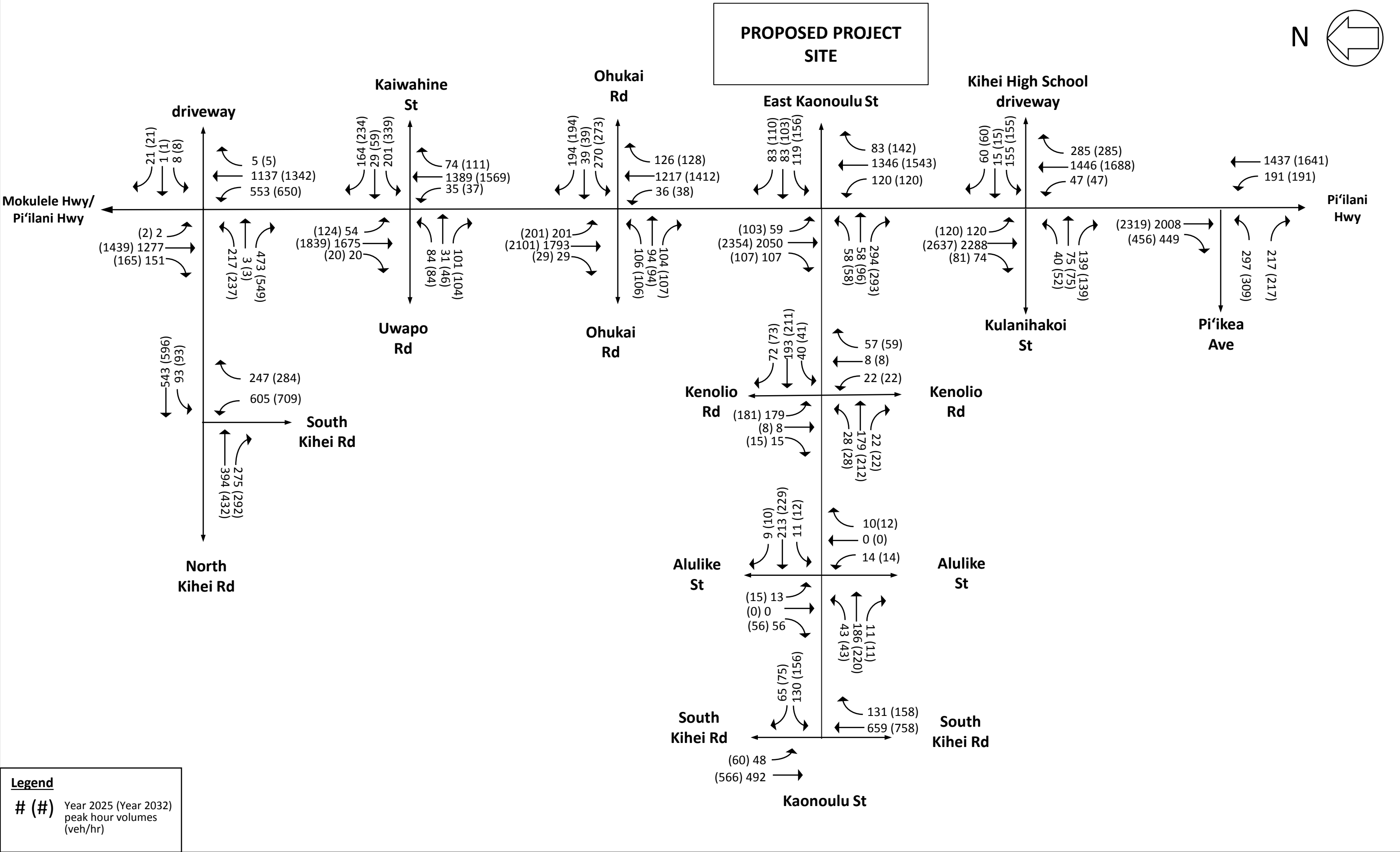


Figure 18: Future (2025 and 2032) With Project AM Peak Hour Volumes

Pi'ilani Promenade - Kihei, Maui



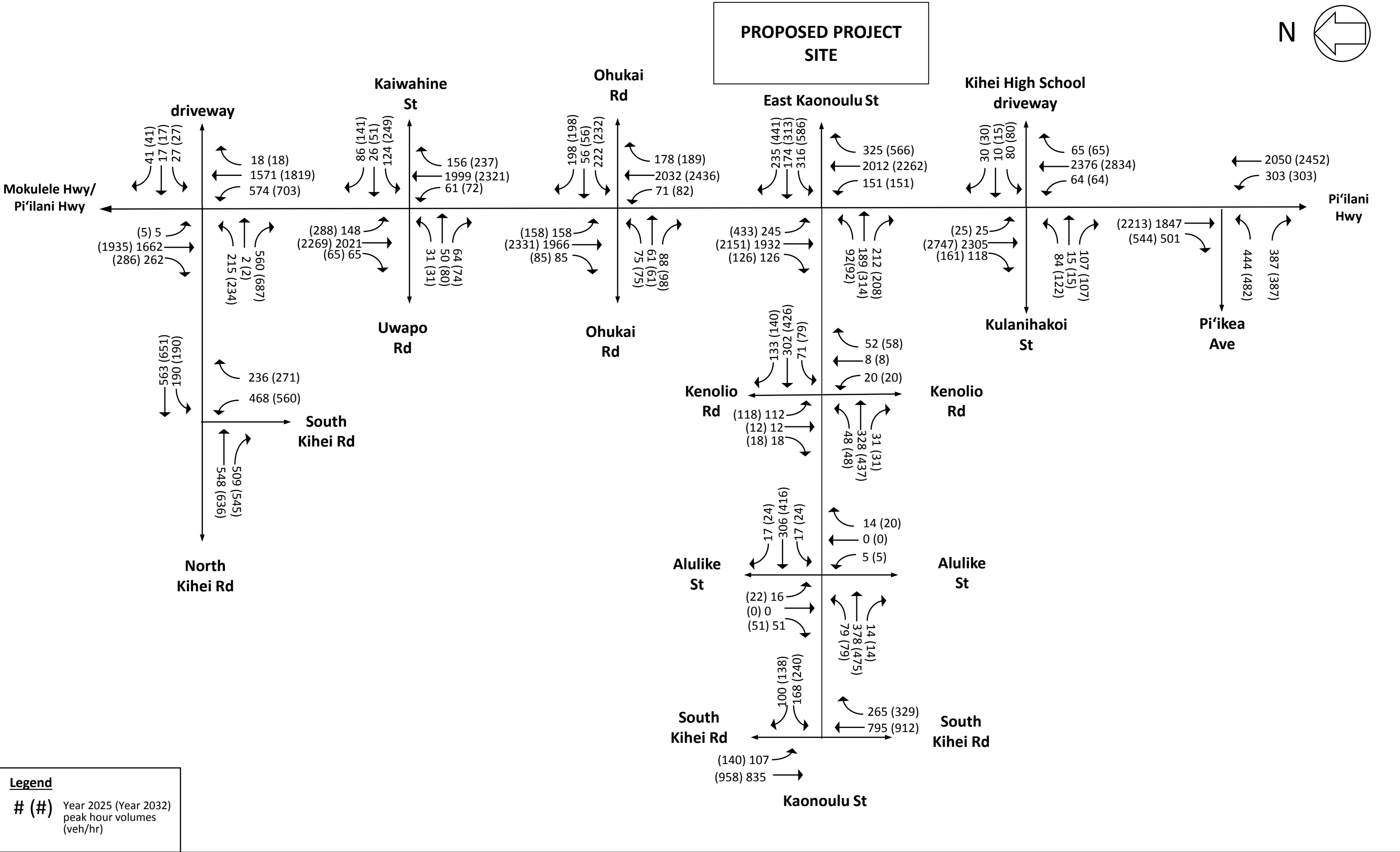


Figure 19: Future (2025 and 2032) With Project PM Peak Hour Volumes

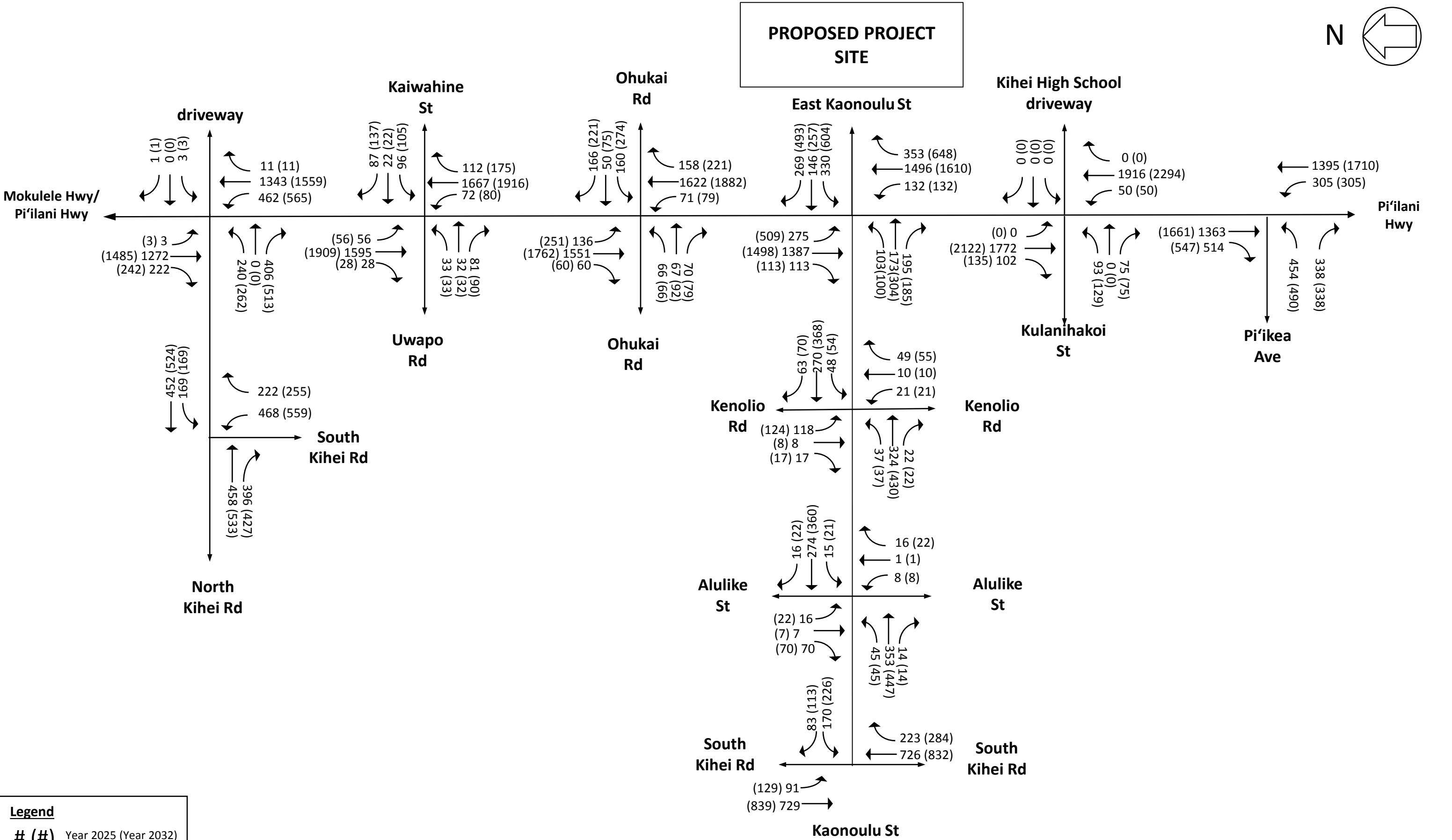


Figure 20: Future (2025 and 2032) With Project Saturday Peak Hour Volumes

Pi'ilani Promenade - Kihei, Maui



## C. Future With Project Level of Service

### 1. Future (2025) With Project LOS

Future (2025) With Project conditions intersection LOS, v/c ratio and delay were determined for the AM, PM and Saturday peak hours (see Table 17). For Future (2025) With Project conditions, all signalized intersection LOS maintained LOS D or better results except the intersection of Pi'ilani Highway at Kaonoulu Street which operated at LOS E during the PM peak hour. Individual turning movement LOS and v/c remained poor for some signalized intersections. Most unsignalized intersections resulted in LOS D or better for individual movements, except for the southbound left turn movement at Kenolio Road and Kaonoulu Street which operated at LOS F for PM and Saturday peak hours. Detailed analysis reports for these intersections are provided in Appendix H.

**Table 17: Future (2025) With Project Intersection Level of Service**

Intersection	Traffic Control		AM Peak Hour			PM Peak Hour			Weekend Peak Hour		
	Appr	Mvmt	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS
<b>Pi'ilani Highway and Ohukai Road</b>	Signalized		45.3	-	D	54.2	-	D	33.0	-	C
	EB	L	<b>75.4</b>	0.77	E	<b>76.5</b>	0.71	E	<b>69.9</b>	0.68	E
		T	<b>62.4</b>	0.49	E	<b>60.2</b>	0.31	E	54.7	0.31	D
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	WB	L	<b>135.0</b>	<b>1.07</b>	F	<b>182.1</b>	<b>1.17</b>	F	<b>76.7</b>	0.82	E
		T	50.1	0.12	D	53.2	0.20	D	46.8	0.16	D
	NB	L	<b>66.1</b>	0.35	E	<b>68.0</b>	0.57	E	<b>60.6</b>	0.53	E
		T	32.0	0.74	C	<b>56.1</b>	<b>1.02</b>	F	30.0	0.86	C
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	SB	L	<b>73.8</b>	0.87	E	<b>100.3</b>	0.95	F	<b>70.8</b>	0.76	E
		T	34.5	0.94	C	32.7	0.95	C	24.1	0.78	C
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
<b>Pi'ilani Highway and Uwapo Road/ Kaiwahine Street</b>	Signalized		37.7	-	D	33.7	-	C	15.0	-	B
	EB	L	<b>77.2</b>	0.74	E	<b>61.2</b>	0.57	F	<b>72.2</b>	0.60	E
		T	<b>76.2</b>	0.44	E	<b>55.8</b>	0.50	E	<b>65.1</b>	0.40	E
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	WB	L	<b>114.1</b>	0.96	F	<b>79.7</b>	0.82	E	<b>63.7</b>	0.57	E
		T	<b>62.7</b>	0.17	E	49.5	0.21	D	<b>59.3</b>	0.19	E
	NB	L	48.3	0.10	D	35.8	0.17	D	<b>57.6</b>	0.47	E
		T	12.7	0.61	B	11.0	0.81	B	9.1	0.64	A
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	SB	L	<b>71.4</b>	0.46	E	<b>60.8</b>	0.82	E	<b>61.8</b>	0.40	E
		T	44.9	0.97	D	<b>50.1</b>	<b>1.04</b>	F	12.0	0.65	B
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*

Table 17 (Continued): Future (2025) With Project Intersection Level of Service

Intersection	Traffic Control		AM Peak Hour			PM Peak Hour			Weekend Peak Hour		
	Appr	Mvmt	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS
<b>Pi'ilani Highway and North Kihei Road</b>	Signalized		24.0	-	C	32.8	-	C	20.9	-	C
	EB	LT	43.3	0.66	D	53.7	0.65	D	51.3	0.65	D
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	WB	L	41.0	0.09	D	<b>55.4</b>	0.27	<b>E</b>	<b>56.2</b>	0.08	<b>E</b>
		TR	43.7	0.28	D	<b>68.4</b>	0.63	<b>E</b>	<b>56.7</b>	0.03	<b>E</b>
	NB	L	44.6	0.88	D	<b>74.3</b>	1.00	<b>E</b>	50.7	0.82	D
		T	8.3	0.52	A	10.5	0.66	B	7.4	0.54	A
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	SB	L	<b>79.9</b>	0.52	<b>E</b>	<b>77.5</b>	0.55	<b>E</b>	<b>83.6</b>	0.53	<b>F</b>
		T	25.2	0.82	C	35.2	0.93	D	18.5	0.66	B
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
<b>South Kihei Road and North Kihei Road</b>	Signalized		18.2	-	B	21.3	-	C	15.9	-	B
	EB	T	12.0	0.46	B	15.3	0.64	B	13.5	0.62	B
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	WB	L	28.6	0.63	C	29.3	0.81	C	24.3	0.73	C
		T	4.9	0.25	A	0.1	0.24	A	4.1	0.21	A
	NB	L	26.4	0.79	C	27.5	0.75	C	19.6	0.66	B
		R	32.9	0.78	C	66.9	0.95	<b>E</b>	30.9	0.79	C
	Signalized		38.6	-	D	51.0	-	D	39.8	-	D
<b>Pi'ilani Highway and Pi'ikea Avenue</b>	EB	L	<b>88.3</b>	0.99	<b>F</b>	<b>114.1</b>	<b>1.08</b>	<b>F</b>	<b>77.2</b>	0.95	<b>E</b>
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	NB	L	<b>119.9</b>	<b>1.04</b>	<b>F</b>	<b>130.2</b>	<b>1.09</b>	<b>F</b>	<b>87.4</b>	0.93	<b>F</b>
		T	6.9	0.58	A	16.5	0.84	B	14.5	0.60	B
	SB	T	<b>46.2</b>	<b>1.02</b>	<b>F</b>	<b>61.0</b>	<b>1.04</b>	<b>F</b>	42.5	0.87	D
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	Signalized		28.5	-	C	<b>70.3</b>	-	<b>E</b>	35.9	-	D
<b>Pi'ilani Highway and Kaonoulu Street</b>	EB	L	<b>79.1</b>	0.69	<b>E</b>	<b>61.6</b>	0.42	<b>E</b>	<b>87.0</b>	0.53	<b>F</b>
		T	<b>78.3</b>	0.68	<b>E</b>	<b>80.3</b>	0.86	<b>F</b>	<b>119.3</b>	0.90	<b>F</b>
	WB	L	<b>70.1</b>	0.57	<b>E</b>	<b>69.5</b>	0.81	<b>E</b>	<b>103.6</b>	0.88	<b>F</b>
		T	<b>76.7</b>	0.73	<b>E</b>	<b>75.1</b>	0.82	<b>E</b>	<b>94.0</b>	0.72	<b>F</b>
	NB	L	<b>275.9</b>	<b>1.33</b>	<b>F</b>	<b>214.4</b>	<b>1.21</b>	<b>F</b>	41.9	0.6	D
		T	8.8	0.54	A	<b>55.6</b>	<b>1.02</b>	<b>F</b>	15.5	0.61	B
	SB	T	<b>78.2</b>	0.63	<b>E</b>	<b>231.5</b>	<b>1.29</b>	<b>F</b>	<b>58.6</b>	0.77	<b>E</b>
		R	18.2	0.84	B	52.2	1.00	D	14.5	0.57	B
<b>South Kihei Road and Kaonoulu Street</b>	Signalized		12.0	-	B	21.6	-	C	20.5	-	C
	WB	L	32.2	0.70	<b>C</b>	46.5	0.79	D	36.1	0.77	D
		R	28.2	0.40	C	39.4	0.53	D	30.6	0.42	C
	NB	T	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
		R	10.6	0.71	B	21.2	0.88	C	23.7	0.91	C
	SB	L	48.8	0.78	D	<b>98.3</b>	0.91	<b>F</b>	<b>69.7</b>	0.83	<b>E</b>
		T	3.3	0.38	A	5.3	0.57	A	5.4	0.56	A

**Table 17 (Continued): Future (2025) With Project Intersection Level of Service**

Intersection	Traffic Control		AM Peak Hour			PM Peak Hour			Weekend Peak Hour		
	Appr	Mvmt	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS
<b>Pi'ilani Highway and Kulanihakoi Street</b>	Signalized		31.3	-	C	30.4	-	C	8.6	-	A
	EB	L	<b>138.5</b>	<b>1.05</b>	<b>F</b>	39.4	0.48	D	<b>65.0</b>	0.58	<b>E</b>
		TR	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	WB	L	<b>92.2</b>	0.94	<b>F</b>	34.2	0.32	C	<b>57.5</b>	0.03	<b>E</b>
		TR	37.3	0.26	D	32.5	0.14	C	0.0	0.00	*
	NB	L	<b>86.3</b>	0.78	<b>F</b>	<b>81.0</b>	0.79	<b>F</b>	<b>82.2</b>	0.78	<b>F</b>
		T	13.8	0.68	B	28.4	0.99	C	4.5	0.67	A
		R	9.4	0.31	A	4.3	0.06	A	0.0	0.00	
	SB	L	<b>55.3</b>	0.81	<b>E</b>	<b>61.5</b>	0.69	<b>E</b>	0.0	0.00	*
		T	32.4	0.99	C	31.0	0.99	C	7.8	0.67	A
<b>Kenolio Road and Kaonoulou Street</b>	Unsignalized		-	-	-	-	-	-	-	-	-
	NB	L	15.0	0.06	C	30.0	0.13	D	23.9	0.11	C
		TR	10.4	0.09	B	13.5	0.14	B	13.2	0.13	B
	EB	L	7.9	0.02	A	8.5	0.05	A	8.2	0.04	A
	WB	L	7.7	0.03	A	8.3	0.07	A	8.3	0.05	A
	SB	L	26.4	0.54	D	<b>85.6</b>	0.80	<b>F</b>	<b>57.3</b>	0.70	<b>F</b>
		TR	11.4	0.04	B	16.9	0.10	C	13.9	0.07	B
<b>Kaonoulou Street and Alulike Street</b>	Unsignalized		-	-	-	-	-	-	-	-	-
	NB	LTR	13.0	0.06	B	14.9	0.06	B	15.0	0.07	C
	EB	L	7.8	0.04	A	8.2	0.07	A	8.0	0.04	A
	WB	L	7.7	0.01	A	8.3	0.02	A	8.2	0.01	A
	SB	LTR	11.0	0.11	B	14.8	0.17	B	13.9	0.20	B

\* Right turn channelization; Appr = Approach; Mvmt = Movement; v/c = volume to capacity ratio;

NB = Northbound; EB = Eastbound; WB = Westbound; SB = Southbound;

L = Left turn movement; R = Right turn movement; T = Through movement

## 2. Future (2032) With Project LOS

Future (2032) With Project conditions intersection LOS, v/c ratio and delay were determined for the AM, PM and Saturday peak hours (see Table 18). For Future (2032) With Project conditions, the signalized intersections of Pi'ilani Highway at Ohukai Road, at Pi'ikea Avenue and at Kulanihakoi Street operated at poor LOS E or F. The unsignalized intersection of Kenolio Road and Kaonoulou Street resulted in LOS E and F for the northbound left turn movement and the southbound left turn movement. Detailed analysis reports for these intersections are provided in Appendix H.

Table 18: Future (2032) With Project Intersection Level of Service

Intersection	Traffic Control		AM Peak Hour			PM Peak Hour			Weekend Peak Hour		
	Appr	Mvmt	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS
<b>Pi'ilani Highway and Ohukai Road</b>	Signalized		<b>74.0</b>	-	<b>E</b>	<b>105.3</b>	-	<b>F</b>	<b>71.5</b>	-	<b>E</b>
	EB	L	<b>68.6</b>	0.75	<b>E</b>	<b>76.5</b>	0.71	<b>E</b>	<b>71.6</b>	0.69	<b>E</b>
		T	<b>57.2</b>	0.45	<b>E</b>	<b>60.2</b>	0.31	<b>E</b>	<b>57.7</b>	0.44	<b>E</b>
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	WB	L	<b>167.9</b>	<b>1.17</b>	<b>F</b>	<b>274.9</b>	<b>1.40</b>	<b>F</b>	<b>161.6</b>	<b>1.15</b>	<b>F</b>
		T	47.5	0.13	D	55.0	0.21	D	46.1	0.21	D
	NB	L	<b>61.3</b>	0.13	<b>E</b>	<b>73.2</b>	0.65	<b>E</b>	65.0	0.59	<b>E</b>
		T	34.1	0.35	C	<b>122.7</b>	<b>1.20</b>	<b>F</b>	<b>83.7</b>	<b>1.09</b>	<b>F</b>
		R	0.0	0.85	*	0.0	0.00	*	0.0	0.00	*
	SB	L	<b>92.4</b>	0.91	<b>F</b>	<b>87.5</b>	0.95	<b>F</b>	<b>151.5</b>	<b>1.11</b>	<b>F</b>
		T	<b>88.7</b>	<b>1.11</b>	<b>F</b>	<b>75.8</b>	<b>1.10</b>	<b>F</b>	35.5	0.92	D
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
<b>Pi'ilani Highway and Uwapo Road/ Kaiwahine Street</b>	Signalized		45.8	-	D	34.5	-	C	39.3	-	D
	EB	L	<b>94.8</b>	0.76	<b>F</b>	<b>82.8</b>	0.61	<b>F</b>	<b>55.2</b>	0.56	<b>E</b>
		T	<b>93.1</b>	0.58	<b>F</b>	<b>76.7</b>	0.66	<b>E</b>	47.8	0.32	D
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	WB	L	<b>148.2</b>	<b>1.09</b>	<b>F</b>	<b>165.5</b>	<b>1.12</b>	<b>F</b>	53.3	0.62	D
		T	<b>65.0</b>	0.20	<b>E</b>	<b>63.1</b>	0.27	<b>E</b>	44.5	0.17	D
	NB	L	<b>64.9</b>	0.14	<b>E</b>	<b>59.7</b>	0.33	<b>E</b>	30.7	0.20	C
		T	25.0	0.76	C	22.5	0.97	C	10.7	0.80	B
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	SB	L	<b>82.8</b>	0.71	<b>F</b>	<b>150.9</b>	<b>1.18</b>	<b>F</b>	46.2	0.33	D
		T	<b>37.7</b>	<b>1.07</b>	<b>F</b>	<b>14.2</b>	<b>1.02</b>	<b>F</b>	<b>67.0</b>	<b>1.08</b>	<b>F</b>
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
<b>Pi'ilani Highway and North Kihei Road</b>	Signalized		26.0	-	C	45.1	-	C	23.1	-	C
	EB	LT	45.9	0.72	D	<b>69.2</b>	0.72	<b>E</b>	47.4	0.73	D
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	WB	L	41.0	0.09	D	<b>71.6</b>	0.34	<b>E</b>	45.7	0.06	D
		TR	43.7	0.28	D	<b>112.2</b>	0.79	<b>F</b>	46.3	0.02	D
	NB	L	50.2	0.99	D	<b>82.8</b>	<b>1.07</b>	<b>F</b>	40.4	0.84	D
		T	0.7	0.61	A	0.3	0.73	A	8.8	0.66	A
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	SB	L	<b>79.9</b>	0.52	<b>E</b>	<b>93.5</b>	0.56	<b>F</b>	<b>72.6</b>	0.53	<b>E</b>
		T	35.0	0.94	C	<b>68.1</b>	<b>1.05</b>	<b>F</b>	27.0	0.87	C
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
<b>South Kihei Road and North Kihei Road</b>	Signalized		19.0	-	B	23.0	-	C	21.4	-	C
	EB	T	14.1	0.53	B	21.2	0.78	C	16.8	0.66	B
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	WB	L	30.6	0.66	C	35.2	0.83	D	34.7	0.77	C
		T	5.8	0.29	A	4.7	0.29	A	4.6	0.24	A
	NB	L	26.5	0.82	C	26.7	0.77	C	26.7	0.77	C
		R	31.4	0.79	C	54.8	0.92	D	45.1	0.87	D

Table 18 (Continued): Future (2032) With Project Intersection Level of Service

Intersection	Traffic Control		AM Peak Hour			PM Peak Hour			Weekend Peak Hour		
	Appr	Mvmt	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS
<b>Pi'ilani Highway and Pi'ikea Avenue</b>	Signalized		<b>58.1</b>	-	<b>E</b>	<b>87.9</b>	-	<b>F</b>	51.1	-	<b>D</b>
	EB	L	<b>133.1</b>	<b>1.07</b>	<b>F</b>	<b>150.8</b>	<b>1.16</b>	<b>F</b>	<b>101.2</b>	<b>1.06</b>	<b>F</b>
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	WB	L	<b>153.1</b>	<b>1.07</b>	<b>F</b>	<b>184.4</b>	<b>1.21</b>	<b>F</b>	<b>116.6</b>	<b>1.05</b>	<b>F</b>
		T	8.8	0.64	A	35.7	0.99	D	15.3	0.74	B
	SB	T	<b>75.2</b>	<b>1.09</b>	<b>F</b>	<b>118.8</b>	<b>1.18</b>	<b>F</b>	<b>16.1</b>	<b>1.03</b>	<b>F</b>
		R	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
<b>Pi'ilani Highway and Kaonoulu Street</b>	Signalized		44.7	-	<b>D</b>	<b>204.6</b>	-	<b>F</b>	<b>101.2</b>	-	<b>F</b>
	EB	L	<b>69.5</b>	0.47	<b>E</b>	54.8	0.31	D	<b>55.0</b>	0.33	<b>E</b>
		T	<b>77.2</b>	0.77	<b>E</b>	<b>127.6</b>	<b>1.06</b>	<b>F</b>	<b>117.9</b>	<b>1.02</b>	<b>F</b>
	WB	L	<b>69.2</b>	0.62	<b>E</b>	<b>118.3</b>	<b>1.07</b>	<b>F</b>	<b>129.7</b>	<b>1.10</b>	<b>F</b>
		T	<b>75.4</b>	0.76	<b>E</b>	<b>126.7</b>	<b>1.05</b>	<b>F</b>	<b>81.1</b>	0.86	<b>F</b>
	NB	L	<b>275.9</b>	<b>1.33</b>	<b>F</b>	<b>327.9</b>	<b>1.47</b>	<b>F</b>	<b>131.5</b>	0.96	<b>F</b>
		T	14.2	0.66	B	<b>245.2</b>	<b>1.45</b>	<b>F</b>	<b>113.7</b>	<b>1.13</b>	<b>F</b>
	SB	T	<b>84.9</b>	0.72	<b>F</b>	<b>344.6</b>	<b>1.58</b>	<b>F</b>	<b>176.4</b>	<b>1.21</b>	<b>F</b>
		R	<b>46.1</b>	<b>1.02</b>	<b>F</b>	<b>178.4</b>	<b>1.30</b>	<b>F</b>	49.1	0.93	D
<b>South Kihei Road and Kaonoulu Street</b>	Signalized		16.4	-	B	45.8	-	D	45.3	-	D
	WB	L	39.6	0.77	D	<b>116.7</b>	<b>1.02</b>	<b>F</b>	<b>67.1</b>	0.88	<b>E</b>
		R	33.8	0.42	C	<b>56.7</b>	0.66	<b>E</b>	39.9	0.50	D
	NB	T	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
		R	15.1	0.81	B	<b>52.9</b>	<b>1.03</b>	<b>F</b>	<b>61.5</b>	<b>1.06</b>	<b>F</b>
	SB	L	<b>71.5</b>	0.78	<b>E</b>	<b>114.8</b>	0.95	<b>F</b>	<b>115.6</b>	0.98	<b>F</b>
		T	3.9	0.43	A	7.2	0.65	A	7.7	0.64	A
<b>Pi'ilani Highway and Kulanihakoi Street</b>	Signalized		<b>59.3</b>	-	<b>E</b>	52.7	-	D	13.7	-	B
	EB	L	<b>361.2</b>	<b>1.58</b>	<b>F</b>	<b>148.1</b>	<b>1.02</b>	<b>F</b>	41.0	0.56	D
		TR	0.0	0.00	*	0.0	0.00	*	0.0	0.00	*
	WB	L	107.7	0.96	<b>F</b>	<b>58.6</b>	0.41	<b>E</b>	0.0	0.00	*
		TR	44.9	0.26	D	<b>55.6</b>	0.17	<b>E</b>	0.0	0.00	*
	NB	L	<b>118.0</b>	0.83	<b>F</b>	<b>188.3</b>	<b>1.03</b>	<b>F</b>	<b>77.7</b>	0.78	<b>E</b>
		T	17.0	0.77	B	50.2	<b>1.06</b>	<b>F</b>	9.6	0.86	A
	SB	R	9.7	0.30	A	3.8	0.06	A	0.0	0.00	
		L	<b>75.6</b>	0.83	<b>E</b>	<b>107.1</b>	0.80	<b>F</b>	0.0	0.00	*
<b>Kenolio Road and Kaonoulu Street</b>	Unsignalized		-	-	-	-	-	-	-	-	-
	NB	L	16.0	0.07	C	50.4	0.22	<b>F</b>	<b>36.0</b>	0.17	<b>E</b>
		TR	10.7	0.10	B	16.4	0.19	C	15.8	0.18	C
	EB	L	7.9	0.02	A	9.0	0.06	A	8.5	0.04	A
	WB	L	7.8	0.03	A	8.8	0.08	A	8.7	0.06	A
	SB	L	31.7	0.60	D	<b>324.8</b>	<b>1.43</b>	<b>F</b>	<b>198.6</b>	<b>1.16</b>	<b>F</b>
		TR	11.7	0.04	B	22.6	0.14	C	16.9	0.09	C

**Table 18 (Continued): Future (2032) With Project Intersection Level of Service**

Intersection	Traffic Control		AM Peak Hour			PM Peak Hour			Weekend Peak Hour		
	Appr	Mvmt	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS
<b>Kaonoulu Street and Alulike Street</b>	Unsignalized		-	-	-	-	-	-	-	-	-
	NB	LTR	13.5	0.06	B	17.4	0.09	C	17.5	0.11	C
	EB	L	7.9	0.04	A	8.7	0.08	A	8.3	0.04	A
	WB	L	7.8	0.01	A	8.6	0.03	A	8.5	0.02	A
	SB	LTR	11.5	0.13	B	22.4	0.28	C	18.7	0.30	C

\* Right turn channelization; Appr = Approach; Mvmt = Movement; v/c = volume to capacity ratio;

NB = Northbound; EB = Eastbound; WB = Westbound; SB = Southbound;

L = Left turn movement; R = Right turn movement; T = Through movement

## **D. Future With Project Mitigation Measures**

### **1. Future (2025) With Project Mitigation**

#### **a) Pi'ilani Highway and Kaonoulu Street**

The signalized intersection of Pi'ilani Highway and Kaonoulu Street resulted in poor LOS for Future (2025) With Project conditions. Additional roadway capacity, such as the construction of the North-South Collector Road or mauka roadway, is needed to accommodate the vehicle demand at this intersection and improve LOS.

#### **b) Kenolio Road and Kaonoulu Street**

The unsignalized intersection of Kenolio Road and Kaonoulu Street resulted in poor LOS for the southbound left turn movement. Possible mitigation includes reconstructing as a single lane roundabout.

### **2. Future (2032) With Project Mitigation**

#### **a) Pi'ilani Highway and Ohukai Road**

The signalized intersection of Pi'ilani Highway at Ohukai Road will continue to operate at a poor LOS similar to Future (2032) Without Project conditions. Possible mitigation includes providing additional left turn lanes for the westbound and southbound approaches.

#### **b) Pi'ilani Highway and Pi'ikea Avenue**

The signalized intersection of Pi'ilani Highway at Pi'ikea Avenue also resulted in poor LOS. Possible mitigation includes adding an additional eastbound left turn lane.

#### **c) Pi'ilani Highway and Kulanihakoi Street**

The signalized intersection of Pi'ilani Highway at Kulanihakoi Street resulted in poor LOS for Future (2032) With Project conditions. Possible mitigation measures include the construction of additional turning lanes for the northbound and southbound approaches.

***d) Pi'ilani Highway and Kaonoulu Street***

The signalized intersection of Pi'ilani Highway at Kaonoulu Street resulted in poor LOS as well. Additional roadway capacity, such as the construction of the North-South Collector Road or mauka roadway, is needed to accommodate the vehicle demand at this intersection and improve LOS.

***e) Kenolio Road and Kaonoulu Street***

The unsignalized intersection of Kenolio Road and Kaonoulu Street resulted in poor LOS for the northbound and southbound left turn movements. Possible mitigation includes reconstructing as a single lane roundabout.

## **V. SUMMARY**

The developer of Pi'ilani Promenade is proposing to construct 530,000 square feet of commercial area, 5 acres of light industrial uses, and 226 units of one and two-bedroom rental apartments on 68-acres of undeveloped land in Kihei. Primary access will be through the intersection of Pi'ilani Highway and Kaonoulu Street which will be modified to include a traffic signal and fourth leg. The developer anticipates having a full build-out and occupancy by 2032.

Existing (2016) conditions resulted in appropriate LOS conditions for all signalized intersections. Two unsignalized study intersections of Pi'ilani Highway at Kaonoulu Street and Pi'ilani Highway at Kulanihakoi Street resulted in individual turning movements with poor LOS. Signal warrants passed for these two intersections.

Future (2025) Without Project conditions resulted in appropriate intersection operations for signalized intersections and appropriate turning movement operations for unsignalized intersections. Future (2032) Without Project conditions resulted in all signalized intersections maintaining LOS D or better results except for the intersection of Pi'ilani Highway at Ohukai Road. All unsignalized intersection turning movements resulted in LOS C or better.

A portion of East Kaonoulu Street is being constructed with the development of Pi'ilani Promenade by 2025. This will add a mauka leg to the intersection of Pi'ilani Highway and Kaonoulu Street. Honua'ula Affordable Housing is also anticipated to be completed by 2025 and will use access through East Kaonoulu Street. Additional intersection modifications include:

- Southbound approach will have double left turn lanes, two through lanes, and a channelized right turn lane.
- Northbound approach will have a dedicated left turn lane, two through lanes, and a channelized right turn lane.
- Eastbound approach will have a left turn lane, a through lane, and a channelized right turn lane.
- Westbound approach will have dual left turn lanes, a through lane and channelized right turn lane with an acceleration lane.

The project also includes the construction of a shared-use pedestrian and bike path along the mauka-side of Pi'ilani Highway, adjacent to the proposed development and within the project site, in addition to bike lanes on Pi'ilani Highway.

Future (2025) With Project conditions resulted in all signalized intersection LOS maintaining LOS D or better results except the intersection of Pi'ilani Highway at Kaonoulu Street. Most unsignalized intersections resulted in LOS D or better for individual movements, except for the intersection of Kenolio Road at Kaonoulu Street. For Future (2032) With Project conditions, the signalized intersections of Pi'ilani Highway at Ohukai Road, Pi'ikea Avenue, and Kulanihakoi Street operated at poor LOS E or F. The unsignalized intersection of Kenolio Road and Kaonoulu Street also resulted in poor LOS for some turning movements. Future roadway construction in the area will provide additional capacity which should alleviate the vehicle demand on Pi'ilani Highway and improve intersection LOS.



## VI. REFERENCES

American Association of State Highway and Transportation Officials. *A Policy on Geometric Design of Highways and Streets*, 2011.

Austin Tsutsumi and Associates. *Traffic Impact Analysis Report Kihei Residential Project*, 2007.

Austin Tsutsumi and Associates. *Traffic Impact Analysis Report Krausz Companies Commercial Mixed-Use Development (Downtown Kihei)*, 2012.

Parsons Brinckerhoff. *Traffic Impact Analysis Maui Research and Technology Park*, 2013.

CH2M Hill/Hawai'i DOT. *Maui Long Range Land Transportation Plan*, 2013.

County of Maui, Maui Bus Public Transit System. Bus Routes <  
<http://www.co.maui.hi.us/609/Maui-Bus-Public-Transit-System>>, accessed January 2016.

Federal Highway Administration. *Manual on Uniform Traffic Control Devices (MUTCD)*, 2009.

Institute of Transportation Engineers, *Trip Generation, 8th Edition: An ITE Informational Report*, December 2008.

Institute of Transportation Engineers, *Trip Generation Handbook, 2nd Edition: An ITE Recommended Practice*, June 2004.

Philip Rowell and Associates. *Traffic Impact Analysis Report for Kaiwahine Village*, 2010.

Philip Rowell and Associates. *Traffic Impact Analysis Report for Kenolio Apartments, An Affordable Housing Project*, 2014.

Philip Rowell and Associates. *Traffic Impact Analysis Report for Maui Lu*, 2004.

State of Hawaii, Department of Transportation. *Historical Traffic Station Maps*, CD-ROM.

State of Hawaii, Office of Environmental Quality Control. *Map-Based Library of EA's and EIS's*.

Transportation Research Board, National Research Council, *Highway Capacity Manual*, Washington, D.C., 2010 Edition.

Wilson Okamoto Corporation. *Traffic Impact Report for Kihei High School*, 2012.

# Appendix A

## HDOT Comment-Response Matrix

## Hawaii Department of Transportation Comment-Response Matrix

	10/6/14 - HDOT Comment	8/11/15 - PRA Response	2/2/16 - SSFM Proposed Action	2/19/16 - HDOT Response (Nami Wong)
1	Drive B South and Drive B North are too close to the Piilani Highway/Kaonoulou Street intersection.	Acknowledged.	Need to define acceptable from State standpoint so can plan appropriate access control.	Leave as is; no need to move.
2	The forecasted future background traffic volumes should include the Kihei Residential and the Downtown Kihei (Krauz) development or a discussion justifying why these projects were not included.	Acknowledged. An updated list of other known projects that will be included in the background forecasts is attached.	Have identified latest credible projects in area for consideration.	OK.
3	The 2018 background Level of Service (LOS) analysis includes several transportation improvements at the Piilani Highway/Ohukai Road intersection and Piilani Highway/Kaiwahine Street/Uwapo Road intersection that were assumed to be in place. For this assumption to be considered valid, the TIAR must confirm by whom and when these improvements are programmed or committed to be constructed. Otherwise, these improvements cannot be assumed to be in place or Piilani Promenade must commit to providing the improvements.	The improvements referred to at the intersection of Piilani Highway and Ohukai Road have since been constructed. It is our understanding that the improvements were constructed at the State's expense. The improvements shown as recommended in the Piilani Promenade TIAR will be revised to reflect this improvement.	Pi'ilani Highway/Ohukai intersection improvements were constructed late 2015. Pi'ilani Highway/Uwapo intersection improvements have not been made and programming is not known.	Verify when improvements done or proposed, and by who.
4	Tables 10 through 14 in the TIAR should include reference to the applicable ITE code for developing the trip generation for each land use. We note that the net new trips generated by the North Parcel's retail land use, as indicated in Table 15, is not consistent for a 100,000 square foot size development.	Land Use codes will be added to the tables. The trip generation analysis for the North Parcel will be corrected. The trip generation calculations will also be revised to reflect minor changes in the development plan.	Will include information as it relates to most recent site plan.	OK.
5	The application of the pass-by trips appears to be incorrect since access to the development would be more typically classified as diverted link trips being that all trips to Piilani Promenade would be via the Piilani Highway and Kaonoulou Street intersection. However, the Department of Transportation (DOT) may consider allowing trip reductions to be applied in determining the net new trips generated, with justification.	Pass-by trips are defined as trips "attracted from traffic passing the site on an adjacent street or roadway that offers direct access to the generator. Pass-by trips are not diverted from another roadway." Piilani Highway is adjacent to the project site and for all practical purposes, the intersection of Piilani Highway at Kaonoulou Street is a driveway to and from the project until the Upcountry Highway is constructed.	Will use definition/rates as previously detailed from PRA.	Expand discussion of pass-by vs. diverted links.
6	The methodology used to develop the AM peak hour pass-by trips in Table 15 based on Table 11, which indicates that no formula was provided, must be validated.	Justification will be added to the TIAR.	Will use definition/rates as previously detailed from PRA.	Justify.
7	Trip distribution (75% Kihei and south Maui, 25% north) is acceptable. However, Indicate how the northern traffic will also impact Piilani Highway, not just Mokulele Highway, State Route 311, and North Kihei Road, State Route 310.	Clarification is needed. Intersections along these roadways were included in the TIAR	Will update report to justify use and show how volumes are distributed.	OK.
8	For consistency, regional traffic growth factors must be applied to all analyzed movements not just through movements.	We have modified the horizon year and expanded the list of other known projects to be included in the background projections. The new list essentially represents build out of South Maui. Recommend that the background growth rate be eliminated as suggested by State of Hawaii Department of Transportation at one of our earlier meetings.	Will follow recommendations noted by PRA.	Do own analysis based on research.
9	Piilani Promenade shall provide satisfactory pedestrian connections between the project and Kihei High School	A pedestrian circulation plan has been developed since the TIAR was prepared. The plan will be included in the final TIAR.	See reponse from PRA.	Address pedestrian refuge at intersection.
10	The discussion for acceptable LOS on Piilani Highway, State Route 31, does not reflect current DOT requirements. It implies that LOS E or F on minor approaches is acceptable as a default threshold. Existing LOS conditions worse (lower) than D are generally not acceptable by the DOT. In accordance with the DOT guidelines, the Applicant shall mitigate all transportation impacts due to the project in order to maintain the satisfactory traffic operating LOS and delay levels at the without the project conditions for the horizon (background) year. In addition, should the background year LOS without the project be lower than the desirable DOT threshold of LOS D, the Applicant may be required to provide mitigation improvements to improve the State facilities to LOS D or better with the project condition.	Acknowledged. However, the last sentence implies that this project may be required to mitigate an unacceptable background (without project) level-of-service that is the result of traffic generated by another project.	Per latest discussions with HDOT, it is understood that LOS E/F may result at some intersections however this is a known issue which the administration has decided to address on a regional level.	"...which the administration has decided to address on a regional level." Exception taken to underscore (quotation). Project to mitigate own impacts.
11	Piilani Promenade shall provide all transportation mitigation improvements recommended in the TIAR that is accepted by the DOT, and at no cost to the State.	Acknowledged.	See reponse from PRA.	OK.

# Hawaii Department of Transportation Comment-Response Matrix

10/6/14 - HDOT Comment	8/11/15 - PRA Response	2/2/16 - SSFM Proposed Action	2/19/16 - HDOT Response (Nami Wong)
<p>12 We are concerned about when the Honuauula Affordable Housing project will actually be constructed. The TIAR included Piilani Promenade and Honuauula Affordable Housing in its analysis with 2018 as the common background year, but no information about the plans for the actual buildout of the Affordable Housing project was provided. If the actual development year is different from Piilani Promenade, an updated TIAR will be required to determine what impacts the Affordable Housing project may have at its buildout year and any additional improvements that are required shall be provided by its developer, and at no cost to the State.</p>	<p>Acknowledged.</p>	<p>The Honuauula Affordable Housing project is a separate development and will be accounted for under "without project" conditions.</p>	<p>OK.</p>

# Appendix B

## Intersection Peak Period Traffic Counts and 24-Hour Traffic Data

# ITM Peak Hour Summary

Prepared by:



National Data & Surveying Services

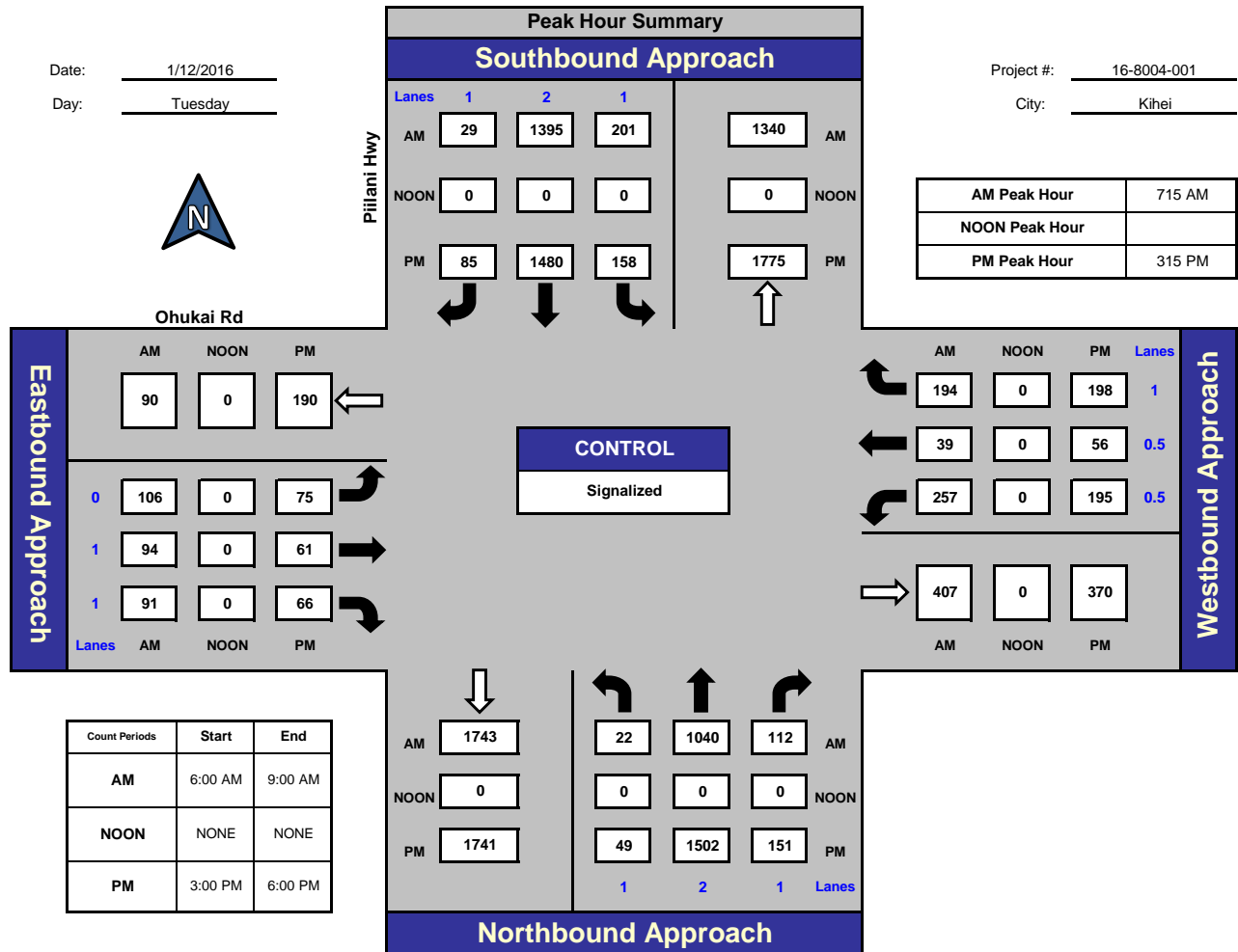
## Piilani Hwy and Ohukai Rd , Kihei

Date: 1/12/2016

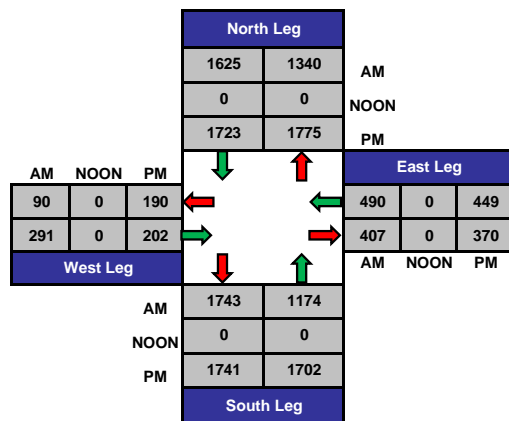
Day: Tuesday

Project #: 16-8004-001

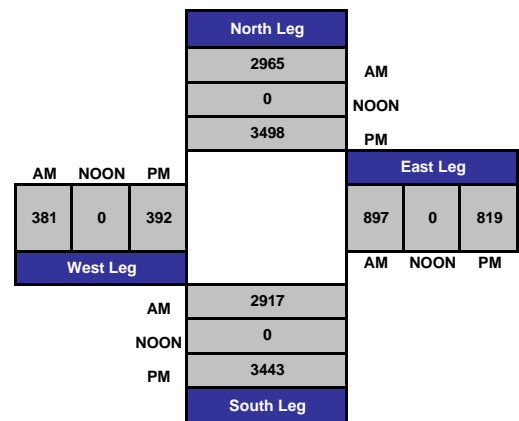
City: Kihei



### Total Ins & Outs



### Total Volume Per Leg



# Intersection Turning Movement

Prepared by:  
National Data & Surveying Services

Project ID: 16-8004-001

City: Kihel

**TOTALS**

Day: Tuesday

Date: 1/12/2016

AM													
NS/EW Streets:	Pillani Hwy			Pillani Hwy			Ohukai Rd			Ohukai Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 0	ET 1	ER 1	WL 0.5	WT 0.5	WR 1	TOTAL
6:00 AM	2	113	7	13	122	4	6	6	4	11	3	24	315
6:15 AM	2	154	13	24	189	1	8	5	8	23	4	30	461
6:30 AM	1	216	6	21	262	4	23	5	12	30	5	41	626
6:45 AM	4	212	18	22	218	1	24	13	18	36	3	31	600
7:00 AM	4	273	15	26	303	9	26	11	25	36	7	42	777
7:15 AM	7	250	27	47	321	12	31	18	22	62	7	52	856
7:30 AM	1	285	23	47	389	2	28	22	37	62	6	51	953
7:45 AM	12	253	32	62	375	8	22	32	15	72	12	46	941
8:00 AM	2	252	30	45	310	7	25	22	17	61	14	45	830
8:15 AM	7	230	26	48	327	4	12	17	14	44	3	37	769
8:30 AM	3	225	25	40	307	10	27	16	16	43	4	43	759
8:45 AM	6	212	25	33	296	10	22	12	13	39	6	21	695
<b>TOTAL VOLUMES :</b>	NL 51	NT 2675	NR 247	SL 428	ST 3419	SR 72	EL 254	ET 179	ER 201	WL 519	WT 74	WR 463	TOTAL 8582
<b>APPROACH %'s :</b>	1.72%	89.98%	8.31%	10.92%	87.24%	1.84%	40.06%	28.23%	31.70%	49.15%	7.01%	43.84%	
<b>PEAK HR START TIME :</b>	715 AM												<b>TOTAL</b>
<b>PEAK HR VOL :</b>	22	1040	112	201	1395	29	106	94	91	257	39	194	3580
<b>PEAK HR FACTOR :</b>	0.950			0.913			0.836			0.942			0.939

CONTROL : Signalized

UTURNS			
NB	SB	EB	WB
0			
0			
0			
0			
0			
0			
1			
0			
0			
0			
NB 1	SB 0	EB 0	WB 0

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-001

TOTALS

Day: Tuesday

City: Kihei

Date: 1/12/2016

PM														
NS/EW Streets:		Pilihi Hwy			Pilihi Hwy			Ohukai Rd			Ohukai Rd			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 0	ET 1	ER 1	WL 0.5	WT 0.5	WR 1	TOTAL
	3:00 PM	8	354	27	41	324	14	10	17	15	55	9	40	914
	3:15 PM	15	388	39	47	355	25	21	16	14	41	10	38	1009
	3:30 PM	8	424	37	42	341	19	20	18	14	47	15	61	1046
	3:45 PM	10	355	35	31	399	18	11	9	23	56	14	54	1015
	4:00 PM	16	335	40	38	385	23	23	18	15	51	17	45	1006
	4:15 PM	11	356	39	37	327	22	16	23	13	51	16	51	962
	4:30 PM	15	390	46	79	310	11	12	24	13	54	19	51	1024
	4:45 PM	12	320	40	44	373	22	13	18	20	56	20	40	978
	5:00 PM	14	288	23	40	342	25	19	22	14	62	25	53	927
	5:15 PM	9	307	21	39	359	17	18	10	13	42	14	33	882
	5:30 PM	6	263	25	33	382	26	19	9	10	34	8	39	854
	5:45 PM	13	229	28	35	317	23	11	21	7	38	12	32	766
TOTAL VOLUMES : APPROACH %'s :		NL 137 3.01%	NT 4009 88.19%	NR 400 8.80%	SL 506 10.19%	ST 4214 84.87%	SR 245 4.93%	EL 193 33.92%	ET 205 36.03%	ER 171 30.05%	WL 587 45.05%	WT 179 13.74%	WR 537 41.21%	TOTAL 11383
PEAK HR START TIME :		315 PM												TOTAL
PEAK HR VOL :		49	1502	151	158	1480	85	75	61	66	195	56	198	4076
PEAK HR FACTOR :		0.907			0.961			0.902			0.905			0.974

CONTROL : Signalized

UTURNS			
NB	SB	EB	WB

NB 0	SB 0	EB 0	WB 0
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# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-001

Cars

Day: Tuesday

City: Kihel

Date: 1/12/2016

AM													
NS/EW Streets:		Pillani Hwy			Pillani Hwy			Ohukai Rd			Ohukai Rd		
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND		
LANES:		NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 0	ET 1	ER 1	WL 0.5	WT 0.5	WR 1
6:00 AM	2	111	7	13	114	4	6	6	4	11	3	24	305
6:15 AM	2	149	12	24	183	1	8	5	8	23	4	30	449
6:30 AM	1	213	6	19	250	4	22	5	12	30	4	41	607
6:45 AM	4	207	18	20	211	1	22	12	18	34	3	29	579
7:00 AM	3	268	15	25	292	9	26	11	25	36	6	42	758
7:15 AM	6	248	26	45	311	9	31	18	21	61	7	52	835
7:30 AM	1	283	21	47	381	2	28	21	37	61	6	51	939
7:45 AM	12	247	32	61	368	8	22	32	15	70	12	46	925
8:00 AM	2	248	29	43	304	7	25	22	17	59	13	43	812
8:15 AM	7	223	26	46	317	4	12	17	14	43	3	35	747
8:30 AM	3	219	24	40	300	9	27	16	16	42	4	42	742
8:45 AM	5	205	25	32	287	10	22	12	13	37	6	20	674
TOTAL VOLUMES :	NL 48	NT 2621	NR 241	SL 415	ST 3318	SR 68	EL 251	ET 177	ER 200	WL 507	WT 71	WR 455	TOTAL 8372
APPROACH %'s :	1.65%	90.07%	8.28%	10.92%	87.29%	1.79%	39.97%	28.18%	31.85%	49.08%	6.87%	44.05%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	21	1026	108	196	1364	26	106	93	90	251	38	192	3511
PEAK HR FACTOR :	0.947			0.907			0.840			0.939			0.935

CONTROL : Signalized

UTURNS			
NB	SB	EB	WB
0			
0			
0			
0			
0			
0			
1			
0			
0			
0			
0			
NB 1	SB 0	EB 0	WB 0

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-001

Cars

Day: Tuesday

City: Kihei

Date: 1/12/2016

PM														
NS/EW Streets:		Pilihi Hwy			Pilihi Hwy			Ohukai Rd			Ohukai Rd			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 0	ET 1	ER 1	WL 0.5	WT 0.5	WR 1	TOTAL
	3:00 PM	8	343	26	40	315	14	10	17	14	55	9	40	891
	3:15 PM	15	381	38	47	342	25	21	16	13	41	10	38	987
	3:30 PM	8	415	37	42	336	19	20	16	14	47	15	60	1029
	3:45 PM	10	351	35	30	395	18	11	9	23	55	14	53	1004
	4:00 PM	15	327	39	37	380	23	23	18	15	51	17	44	989
	4:15 PM	11	354	39	37	323	22	16	23	13	51	16	50	955
	4:30 PM	14	379	45	76	308	11	12	24	13	54	19	50	1005
	4:45 PM	12	306	39	44	371	22	13	18	19	56	20	40	960
	5:00 PM	14	285	23	38	337	25	19	22	14	62	25	53	917
5:15 PM	9	302	21	39	356	17	17	10	13	42	14	33	873	
5:30 PM	6	258	25	32	380	26	19	9	10	34	8	37	844	
5:45 PM	13	226	28	35	309	23	11	21	7	36	12	32	753	
TOTAL VOLUMES : APPROACH %'s :		NL 135 3.03%	NT 3927 88.11%	NR 395 8.86%	SL 497 10.16%	ST 4152 84.84%	SR 245 5.01%	EL 192 34.10%	ET 203 36.06%	ER 168 29.84%	WL 584 45.17%	WT 179 13.84%	WR 530 40.99%	11207
PEAK HR START TIME :		315 PM												TOTAL
PEAK HR VOL :		48	1474	149	156	1453	85	75	59	65	194	56	195	4009
PEAK HR FACTOR :		0.908			0.956			0.888			0.912			0.974

CONTROL : Signalized

UTURNS			
NB	SB	EB	WB

NB 0	SB 0	EB 0	WB 0
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# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-001

2 Axle+ Trucks

Day: Tuesday

City: Kihei

Date: 1/12/2016

AM													
NS/EW Streets:	Pillani Hwy			Pillani Hwy			Ohukai Rd			Ohukai Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 0	ET 1	ER 1	WL 0.5	WT 0.5	WR 1	TOTAL
6:00 AM	0	2	0	0	8	0	0	0	0	0	0	0	10
6:15 AM	0	5	1	0	6	0	0	0	0	0	0	0	12
6:30 AM	0	3	0	2	12	0	1	0	0	0	1	0	19
6:45 AM	0	5	0	2	7	0	2	1	0	2	0	2	21
7:00 AM	1	5	0	1	11	0	0	0	0	0	1	0	19
7:15 AM	1	2	1	2	10	3	0	0	1	1	0	0	21
7:30 AM	0	2	2	0	8	0	0	1	0	1	0	0	14
7:45 AM	0	6	0	1	7	0	0	0	0	2	0	0	16
8:00 AM	0	4	1	2	6	0	0	0	0	2	1	2	18
8:15 AM	0	7	0	2	10	0	0	0	0	1	0	2	22
8:30 AM	0	6	1	0	7	1	0	0	0	1	0	1	17
8:45 AM	1	7	0	1	9	0	0	0	0	2	0	1	21
TOTAL VOLUMES :	NL 3	NT 54	NR 6	SL 13	ST 101	SR 4	EL 3	ET 2	ER 1	WL 12	WT 3	WR 8	TOTAL 210
APPROACH %'s :	4.76%	85.71%	9.52%	11.02%	85.59%	3.39%	50.00%	33.33%	16.67%	52.17%	13.04%	34.78%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	1	14	4	5	31	3	0	1	1	6	1	2	69
PEAK HR FACTOR :	0.792			0.650			0.500			0.450			0.935

CONTROL : Signalized

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-001

2 Axle+ Trucks

Day: Tuesday

City: Kihei

Date: 1/12/2016

PM													
NS/EW Streets:	Pillani Hwy			Pillani Hwy			Ohukai Rd			Ohukai Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 0	ET 1	ER 1	WL 0.5	WT 0.5	WR 1	TOTAL
3:00 PM	0	11	1	1	9	0	0	0	1	0	0	0	23
3:15 PM	0	7	1	0	13	0	0	0	1	0	0	0	22
3:30 PM	0	9	0	0	5	0	0	2	0	0	0	1	17
3:45 PM	0	4	0	1	4	0	0	0	0	1	0	1	11
4:00 PM	1	8	1	1	5	0	0	0	0	0	0	1	17
4:15 PM	0	2	0	0	4	0	0	0	0	0	0	1	7
4:30 PM	1	11	1	3	2	0	0	0	0	0	0	1	19
4:45 PM	0	14	1	0	2	0	0	0	1	0	0	0	18
5:00 PM	0	3	0	2	5	0	0	0	0	0	0	0	10
5:15 PM	0	5	0	0	3	0	1	0	0	0	0	0	9
5:30 PM	0	5	0	1	2	0	0	0	0	0	0	2	10
5:45 PM	0	3	0	0	8	0	0	0	0	2	0	0	13
TOTAL VOLUMES : APPROACH %'s :	NL 2 2.25%	NT 82 92.13%	NR 5 5.62%	SL 9 12.68%	ST 62 87.32%	SR 0 0.00%	EL 1 16.67%	ET 2 33.33%	ER 3 50.00%	WL 3 30.00%	WT 0 0.00%	WR 7 70.00%	TOTAL 176
PEAK HR START TIME :	315 PM												TOTAL
PEAK HR VOL :	1	28	2	2	27	0	0	2	1	1	0	3	67
PEAK HR FACTOR :	0.775			0.558			0.375			0.500			0.974

CONTROL : Signalized

UTURNS			
NB	SB	EB	WB

NB 0	SB 0	EB 0	WB 0
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# ITM Peak Hour Summary

Prepared by:



National Data & Surveying Services

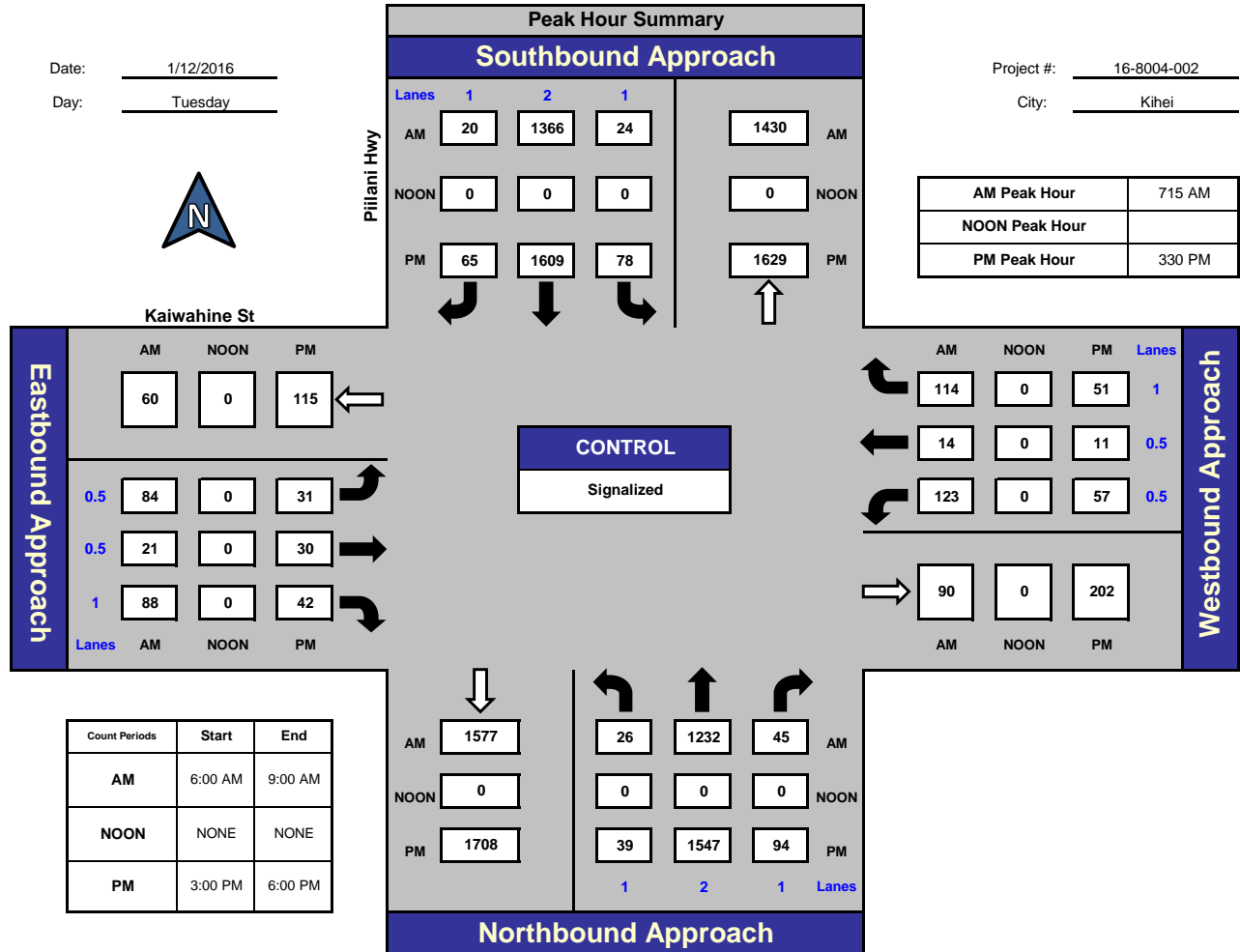
## Piilani Hwy and Kaiwahine St, Kihei

Date: 1/12/2016

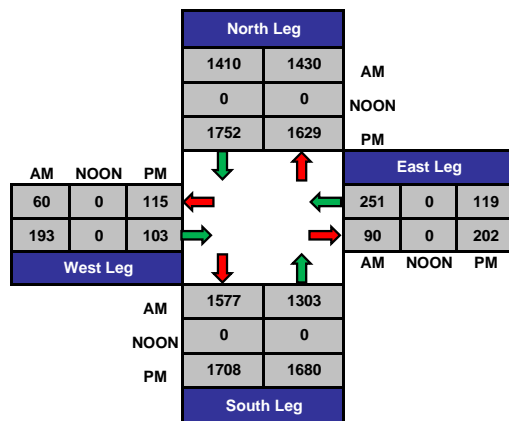
Day: Tuesday

Project #: 16-8004-002

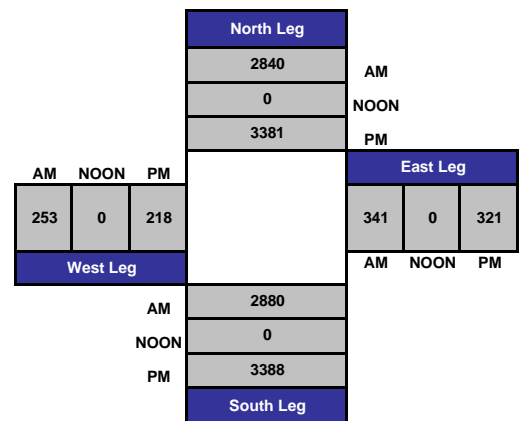
City: Kihei



### Total Ins & Outs



### Total Volume Per Leg



# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-002

TOTALS

Day: Tuesday

City: Kihel

Date: 1/12/2016

AM														
NS/EW Streets:		Pillani Hwy			Pillani Hwy			Kaiwahine St			Kaiwahine St			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 0.5	ET 0.5	ER 1	WL 0.5	WT 0.5	WR 1	TOTAL
6:00 AM		3	134	4	5	122	2	7	1	6	16	4	15	319
6:15 AM		6	185	4	1	195	5	6	3	5	13	7	19	449
6:30 AM		3	248	4	7	246	3	21	0	17	19	2	19	589
6:45 AM		6	268	11	2	206	3	23	3	11	18	6	32	589
7:00 AM		8	308	5	2	272	5	12	2	14	30	7	30	695
7:15 AM		4	355	9	2	339	5	21	3	28	31	4	49	850
7:30 AM		4	312	6	1	339	7	23	8	25	42	8	31	806
7:45 AM		10	278	13	8	366	4	11	4	16	33	1	19	763
8:00 AM		8	287	17	13	322	4	29	6	19	17	1	15	738
8:15 AM		7	257	4	5	340	7	8	9	22	10	5	17	691
8:30 AM		7	310	9	4	327	5	15	3	12	13	6	19	730
8:45 AM		7	220	7	10	305	10	9	4	15	13	2	16	618
TOTAL VOLUMES : APPROACH %'s :		NL 73 2.19%	NT 3162 95.01%	NR 93 2.79%	SL 60 1.71%	ST 3379 96.57%	SR 60 1.71%	EL 185 43.94%	ET 46 10.93%	ER 190 45.13%	WL 255 43.29%	WT 53 9.00%	WR 281 47.71%	TOTAL 7837
PEAK HR START TIME :		715 AM												TOTAL
PEAK HR VOL :		26	1232	45	24	1366	20	84	21	88	123	14	114	3157
PEAK HR FACTOR :		0.885			0.933			0.862			0.747			0.929

CONTROL : Signalized

UTURNS			
NB	SB	EB	WB

NB 0	SB 0	EB 0	WB 0
---------	---------	---------	---------

# Intersection Turning Movement

Prepared by:  
National Data & Surveying Services

Project ID: 16-8004-002

City: Kihel

**TOTALS**

Day: Tuesday

Date: 1/12/2016

PM															
NS/EW Streets:		Pillani Hwy			Pillani Hwy			Kalwahine St			Kalwahine St				
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND				
LANES:		NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 0.5	ET 0.5	ER 1	WL 0.5	WT 0.5	WR 1	TOTAL	
3:00 PM		18	359	14	22	338	11	9	9	9	17	5	8	819	
3:15 PM		12	406	15	18	395	12	8	12	8	15	3	12	916	
3:30 PM		6	411	22	24	360	18	11	9	9	17	3	8	898	
3:45 PM		10	378	26	22	443	14	9	5	11	9	5	8	940	
4:00 PM		12	349	13	14	424	15	6	6	9	12	1	18	879	
4:15 PM		11	409	33	18	382	18	5	10	13	19	2	17	937	
4:30 PM		9	380	25	18	339	17	7	10	13	15	0	9	842	
4:45 PM		12	331	14	31	381	13	5	9	14	19	1	10	840	
5:00 PM		12	329	14	19	405	11	3	6	16	18	8	9	850	
5:15 PM		11	332	16	34	375	29	9	13	14	13	3	13	862	
5:30 PM		7	313	14	18	407	16	7	9	23	23	4	12	853	
5:45 PM		11	246	19	17	360	18	4	10	19	11	3	12	730	
TOTAL VOLUMES :		NL 131	NT 4243	NR 225	SL 255	ST 4609	SR 192	EL 83	ET 108	ER 158	WL 188	WT 38	WR 136	TOTAL 10366	
APPROACH %'s :		2.85%	92.26%	4.89%	5.04%	91.16%	3.80%	23.78%	30.95%	45.27%	51.93%	10.50%	37.57%		
PEAK HR START TIME :		330 PM													TOTAL
PEAK HR VOL :		39	1547	94	78	1609	65	31	30	42	57	11	51	3654	
PEAK HR FACTOR :		0.927			0.914			0.888			0.783			0.972	

CONTROL : Signalized

UTURNS			
NB	SB	EB	WB
0			
0			
0			
0			
0			
0			
0			
0			
0			
1			
0			
NB 1	SB 0	EB 0	WB 0

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-002

City: Kihei

Cars

Day: Tuesday

Date: 1/12/2016

AM													
NS/EW Streets:													
Pillani Hwy				Pillani Hwy			Kaiwahine St			Kaiwahine St			
NORTHBOUND				SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 0.5	ET 0.5	ER 1	WL 0.5	WT 0.5	WR 1	TOTAL
6:00 AM	3	132	4	5	117	1	7	0	5	15	4	15	308
6:15 AM	6	179	4	0	189	4	6	3	4	13	7	19	434
6:30 AM	3	247	3	4	233	2	20	0	17	19	2	17	567
6:45 AM	5	256	11	2	197	3	23	3	11	16	6	32	565
7:00 AM	6	306	4	1	264	5	11	2	13	29	7	30	678
7:15 AM	4	353	9	2	324	5	20	3	26	31	4	49	830
7:30 AM	4	311	5	1	334	6	23	8	24	42	8	31	797
7:45 AM	10	271	13	8	357	4	11	3	15	33	1	17	743
8:00 AM	8	281	17	13	317	4	28	6	18	17	1	15	725
8:15 AM	6	248	4	5	327	7	8	9	21	10	5	17	667
8:30 AM	7	303	9	4	320	5	14	3	12	13	6	19	715
8:45 AM	7	214	7	10	294	9	9	4	15	13	2	16	600
TOTAL VOLUMES :	NL 69	NT 3101	NR 90	SL 55	ST 3273	SR 55	EL 180	ET 44	ER 181	WL 251	WT 53	WR 277	TOTAL 7629
APPROACH %'s :	2.12%	95.12%	2.76%	1.63%	96.75%	1.63%	44.44%	10.86%	44.69%	43.20%	9.12%	47.68%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	26	1216	44	24	1332	19	82	20	83	123	14	112	3095
PEAK HR FACTOR :	0.878			0.932			0.841			0.741			0.932

CONTROL : Signalized

UTURNS			
NB	SB	EB	WB

NB 0	SB 0	EB 0	WB 0
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# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-002

Cars

Day: Tuesday

City: Kihel

Date: 1/12/2016

PM															
NS/EW Streets:		Pillani Hwy			Pillani Hwy			Kaiwahine St			Kaiwahine St				
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND				
LANES:		NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 0.5	ET 0.5	ER 1	WL 0.5	WT 0.5	WR 1	TOTAL	
	3:00 PM	18	344	13	21	324	11	9	9	9	17	4	8	787	
	3:15 PM	11	399	15	18	379	12	8	12	8	15	3	10	890	
	3:30 PM	6	401	22	24	355	18	11	9	9	17	3	8	883	
	3:45 PM	10	370	25	22	433	14	9	5	11	9	5	8	921	
	4:00 PM	12	337	13	14	416	15	6	6	9	12	1	18	859	
	4:15 PM	11	404	33	18	375	18	5	9	13	19	2	16	923	
	4:30 PM	9	376	25	18	338	17	7	10	13	15	0	9	837	
	4:45 PM	11	319	13	31	380	13	5	9	14	19	1	10	825	
	5:00 PM	12	328	14	18	398	11	3	6	16	18	8	9	841	
	5:15 PM	11	328	16	34	372	29	9	13	14	13	3	13	855	
	5:30 PM	7	307	14	18	405	16	7	9	23	23	4	12	845	
	5:45 PM	11	245	19	17	356	17	4	10	19	11	3	12	724	
TOTAL VOLUMES :		NL 129	NT 4158	NR 222	SL 253	ST 4531	SR 191	EL 83	ET 107	ER 158	WL 188	WT 37	WR 133	TOTAL 10190	
APPROACH %'s :		2.86%	92.22%	4.92%	5.09%	91.08%	3.84%	23.85%	30.75%	45.40%	52.51%	10.34%	37.15%		
PEAK HR START TIME :		330 PM													TOTAL
PEAK HR VOL :		39	1512	93	78	1579	65	31	29	42	57	11	50	3586	
PEAK HR FACTOR :		0.917			0.918			0.879			0.797			0.971	

CONTROL : Signalized

UTURNS			
NB	SB	EB	WB
0			
0			
0			
0			
0			
0			
0			
0			
0			
0			
1			
0			
NB 1	SB 0	EB 0	WB 0

# Intersection Turning Movement

Prepared by:  
National Data & Surveying Services

Project ID: 16-8004-002

2 Axle+ Trucks

Day: Tuesday

City: Kihei

Date: 1/12/2016

AM													
NS/EW Streets:	Pillani Hwy			Pillani Hwy			Kaiwahine St			Kaiwahine St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 0.5	ET 0.5	ER 1	WL 0.5	WT 0.5	WR 1	TOTAL
6:00 AM	0	2	0	0	5	1	0	1	1	1	0	0	11
6:15 AM	0	6	0	1	6	1	0	0	1	0	0	0	15
6:30 AM	0	1	1	3	13	1	1	0	0	0	0	2	22
6:45 AM	1	12	0	0	9	0	0	0	0	2	0	0	24
7:00 AM	2	2	1	1	8	0	1	0	1	1	0	0	17
7:15 AM	0	2	0	0	15	0	1	0	2	0	0	0	20
7:30 AM	0	1	1	0	5	1	0	0	1	0	0	0	9
7:45 AM	0	7	0	0	9	0	0	1	1	0	0	2	20
8:00 AM	0	6	0	0	5	0	1	0	1	0	0	0	13
8:15 AM	1	9	0	0	13	0	0	0	1	0	0	0	24
8:30 AM	0	7	0	0	7	0	1	0	0	0	0	0	15
8:45 AM	0	6	0	0	11	1	0	0	0	0	0	0	18
TOTAL VOLUMES :	NL 4	NT 61	NR 3	SL 5	ST 106	SR 5	EL 5	ET 2	ER 9	WL 4	WT 0	WR 4	TOTAL 208
APPROACH %'s :	5.88%	89.71%	4.41%	4.31%	91.38%	4.31%	31.25%	12.50%	56.25%	50.00%	0.00%	50.00%	
PEAK HR START TIME :	715 AM												
PEAK HR VOL :	0	16	1	0	34	1	2	1	5	0	0	2	62
PEAK HR FACTOR :	0.607			0.583			0.667			0.250			0.932

CONTROL : Signalized

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-002

2 Axle+ Trucks

Day: Tuesday

City: Kihei

Date: 1/12/2016

PM													
NS/EW Streets:	Pilihi Hwy			Pilihi Hwy			Kaiwaha St			Kaiwaha St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 0.5	ET 0.5	ER 1	WL 0.5	WT 0.5	WR 1	TOTAL
3:00 PM	0	15	1	1	14	0	0	0	0	0	1	0	32
3:15 PM	1	7	0	0	16	0	0	0	0	0	0	2	26
3:30 PM	0	10	0	0	5	0	0	0	0	0	0	0	15
3:45 PM	0	8	1	0	10	0	0	0	0	0	0	0	19
4:00 PM	0	12	0	0	8	0	0	0	0	0	0	0	20
4:15 PM	0	5	0	0	7	0	0	1	0	0	0	1	14
4:30 PM	0	4	0	0	1	0	0	0	0	0	0	0	5
4:45 PM	1	12	1	0	1	0	0	0	0	0	0	0	15
5:00 PM	0	1	0	1	7	0	0	0	0	0	0	0	9
5:15 PM	0	4	0	0	3	0	0	0	0	0	0	0	7
5:30 PM	0	6	0	0	2	0	0	0	0	0	0	0	8
5:45 PM	0	1	0	0	4	1	0	0	0	0	0	0	6
TOTAL VOLUMES :	NL 2	NT 85	NR 3	SL 2	ST 78	SR 1	EL 0	ET 1	ER 0	WL 0	WT 1	WR 3	TOTAL 176
APPROACH %'s :	2.22%	94.44%	3.33%	2.47%	96.30%	1.23%	0.00%	100.00%	0.00%	0.00%	25.00%	75.00%	
PEAK HR START TIME :	330 PM												TOTAL
PEAK HR VOL :	0	35	1	0	30	0	0	1	0	0	0	1	68
PEAK HR FACTOR :	0.750			0.750			0.250			0.250			0.971

CONTROL : Signalized

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

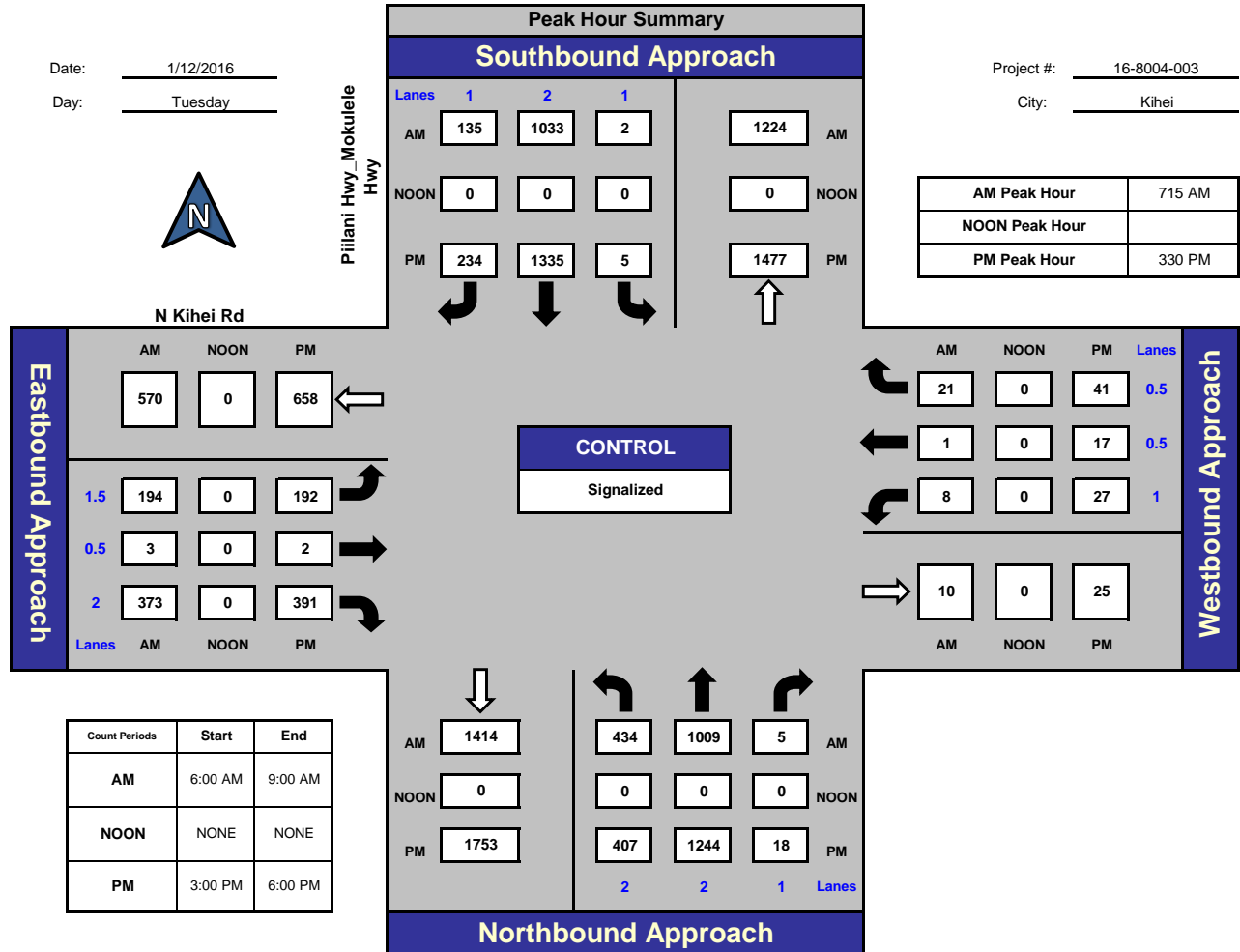
# ITM Peak Hour Summary

Prepared by:

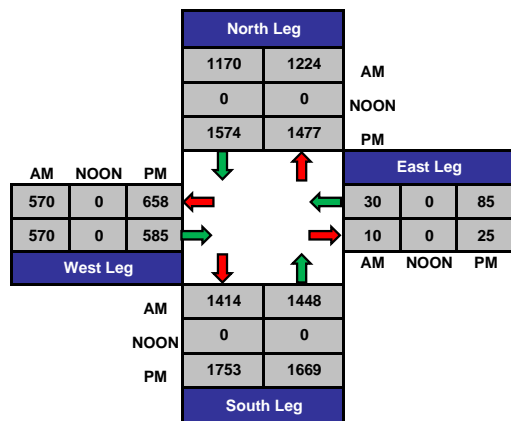


National Data & Surveying Services

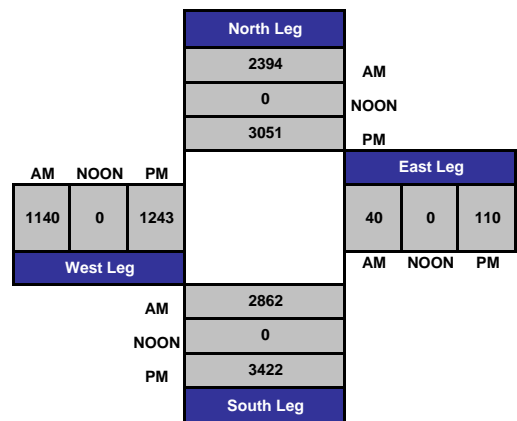
## Piilani Hwy Mokulele Hwy and N Kihei Rd , Kihei



### Total Ins & Outs



### Total Volume Per Leg



# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-003

TOTALS

Day: Tuesday

City: Kihei

Date: 1/12/2016

AM													
NS/EW Streets:	Pillani Hwy_Mokulele Hwy			Pillani Hwy_Mokulele Hwy			N Kihei Rd			N Kihei Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1.5	ET 0.5	ER 2	WL 1	WT 0.5	WR 0.5	TOTAL
6:00 AM	50	108	2	3	109	13	8	1	34	0	1	0	329
6:15 AM	66	124	8	14	138	10	36	0	44	6	0	0	446
6:30 AM	100	191	11	21	188	19	38	0	52	6	2	4	632
6:45 AM	91	216	8	12	172	27	37	10	43	3	0	3	622
7:00 AM	105	234	2	0	227	19	44	1	50	1	0	1	684
7:15 AM	115	299	3	0	241	39	50	2	95	4	1	13	862
7:30 AM	110	269	1	1	249	26	59	1	98	1	0	4	819
7:45 AM	107	228	0	1	300	42	42	0	91	1	0	4	816
8:00 AM	102	213	1	0	243	28	43	0	89	2	0	0	721
8:15 AM	76	208	3	3	269	28	32	0	80	0	1	0	700
8:30 AM	77	253	0	0	235	25	36	1	92	1	1	1	722
8:45 AM	62	196	0	2	230	23	44	0	95	2	0	1	655
TOTAL VOLUMES :	NL 1061	NT 2539	NR 39	SL 57	ST 2601	SR 299	EL 469	ET 16	ER 863	WL 27	WT 6	WR 31	TOTAL 8008
APPROACH %'s :	29.16%	69.77%	1.07%	1.93%	87.96%	10.11%	34.79%	1.19%	64.02%	42.19%	9.38%	48.44%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	434	1009	5	2	1033	135	194	3	373	8	1	21	3218
PEAK HR FACTOR :	0.868			0.853			0.902			0.417			0.933

CONTROL : Signalized

UTURNS			
NB	SB	EB	WB

NB 0	SB 0	EB 0	WB 0
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# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-003

TOTALS

Day: Tuesday

City: Kihel

Date: 1/12/2016

PM													
NS/EW Streets:	Pillani Hwy_Mokulele Hwy			Pillani Hwy_Mokulele Hwy			N Kihel Rd			N Kihel Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1.5	ET 0.5	ER 2	WL 1	WT 0.5	WR 0.5	TOTAL
3:00 PM	104	275	4	3	313	59	59	1	83	7	0	1	909
3:15 PM	96	313	4	17	306	44	46	1	89	1	0	1	918
3:30 PM	104	337	9	3	343	50	47	0	79	15	8	31	1026
3:45 PM	95	286	3	1	353	67	51	0	112	5	2	7	982
4:00 PM	92	289	5	1	345	60	51	2	92	4	6	3	950
4:15 PM	116	332	1	0	294	57	43	0	108	3	1	0	955
4:30 PM	110	302	2	0	289	56	47	0	91	0	0	3	900
4:45 PM	86	247	1	0	333	61	27	0	104	0	0	1	860
5:00 PM	92	236	0	0	312	35	39	0	112	0	1	0	827
5:15 PM	103	241	1	2	330	61	39	0	102	0	1	0	880
5:30 PM	90	233	0	0	323	44	30	0	100	1	0	0	821
5:45 PM	80	188	0	0	289	50	31	0	103	0	0	0	741
TOTAL VOLUMES : APPROACH %'s :	NL 1168 26.09%	NT 3279 73.24%	NR 30 0.67%	SL 27 0.60%	ST 3830 85.09%	SR 644 14.31%	EL 510 30.20%	ET 4 0.24%	ER 1175 69.57%	WL 36 35.29%	WT 19 18.63%	WR 47 46.08%	TOTAL 10769
PEAK HR START TIME :	330 PM												
PEAK HR VOL :	407	1244	18	5	1335	234	192	2	391	27	17	41	3913
PEAK HR FACTOR :	0.927			0.935			0.897			0.394			0.953

CONTROL : Signalized

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-003

City: Kihel

Cars

Day: Tuesday

Date: 1/12/2016

AM													
NS/EW Streets:	Pillani Hwy_Mokulele Hwy			Pillani Hwy_Mokulele Hwy			N Kihei Rd			N Kihei Rd			
NORTHBOUND				SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1.5	ET 0.5	ER 2	WL 1	WT 0.5	WR 0.5	TOTAL
6:00 AM	49	106	2	3	103	12	8	1	34	0	1	0	319
6:15 AM	66	119	8	14	131	10	36	0	44	6	0	0	434
6:30 AM	99	187	11	21	171	18	38	0	51	6	2	4	608
6:45 AM	91	205	8	12	167	25	36	10	41	3	0	3	601
7:00 AM	104	230	2	0	217	17	43	1	50	1	0	1	666
7:15 AM	115	297	3	0	229	37	47	2	93	4	1	6	834
7:30 AM	110	267	1	1	242	25	59	1	98	1	0	3	808
7:45 AM	105	223	0	1	292	40	42	0	90	1	0	4	798
8:00 AM	102	206	1	0	238	27	42	0	88	2	0	0	706
8:15 AM	75	201	2	2	257	27	31	0	80	0	1	0	676
8:30 AM	76	248	0	0	227	22	34	1	91	1	1	1	702
8:45 AM	61	190	0	2	221	20	43	0	94	1	0	1	633
TOTAL VOLUMES : APPROACH %'s :	NL 1053 29.50%	NT 2479 69.44%	NR 38 1.06%	SL 56 1.98%	ST 2495 88.13%	SR 280 9.89%	EL 459 34.54%	ET 16 1.20%	ER 854 64.26%	WL 26 47.27%	WT 6 10.91%	WR 23 41.82%	TOTAL 7785
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	432	993	5	2	1001	129	190	3	369	8	1	13	3146
PEAK HR FACTOR :	0.861			0.850			0.889			0.500			0.943

CONTROL : Signalized

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-003

Cars

Day: Tuesday

City: Kihel

Date: 1/12/2016

PM

NS/EW Streets:		Pillani Hwy_Mokulele Hwy			Pillani Hwy_Mokulele Hwy			N Kihel Rd			N Kihel Rd			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 2	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1.5	ET 0.5	ER 2	WL 1	WT 0.5	WR 0.5	TOTAL
	3:00 PM	102	261	4	3	301	59	56	1	82	5	0	1	875
	3:15 PM	94	308	4	8	296	44	44	1	85	1	0	1	886
	3:30 PM	103	326	9	3	339	49	45	0	77	15	7	30	1003
	3:45 PM	95	279	3	1	346	65	50	0	110	5	2	7	963
	4:00 PM	91	276	5	1	337	60	47	2	91	4	6	3	923
	4:15 PM	115	328	1	0	291	56	42	0	106	3	1	0	943
	4:30 PM	109	297	2	0	288	56	47	0	91	0	0	3	893
	4:45 PM	84	239	1	0	333	60	27	0	102	0	0	1	847
	5:00 PM	91	234	0	0	309	34	36	0	108	0	1	0	813
	5:15 PM	103	238	1	2	328	61	39	0	101	0	1	0	874
	5:30 PM	88	229	0	0	321	43	30	0	100	1	0	0	812
	5:45 PM	80	186	0	0	283	49	31	0	101	0	0	0	730
TOTAL VOLUMES :		1155	3201	30	18	3772	636	494	4	1154	34	18	46	10562
APPROACH %'s :		26.33%	72.98%	0.68%	0.41%	85.22%	14.37%	29.90%	0.24%	69.85%	34.69%	18.37%	46.94%	
PEAK HR START TIME :		330 PM												TOTAL
PEAK HR VOL :		404	1209	18	5	1313	230	184	2	384	27	16	40	3832
PEAK HR FACTOR :		0.918			0.939			0.891			0.399			0.955

CONTROL : Signalized

UTURNS			
NB	SB	EB	WB

NB 0	SB 0	EB 0	WB 0
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# Intersection Turning Movement

Prepared by:  
National Data & Surveying Services

Project ID: 16-8004-003

2 Axle+ Trucks

Day: Tuesday

City: Kihei

Date: 1/12/2016

AM														
NS/EW Streets:		Pillani Hwy_Mokulele Hwy			Pillani Hwy_Mokulele Hwy			N Kihei Rd			N Kihei Rd			
NORTHBOUND				SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL	
LANES:	NL 2	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1.5	ET 0.5	ER 2	WL 1	WT 0.5	WR 0.5		
6:00 AM	1	2	0	0	6	1	0	0	0	0	0	0	10	
6:15 AM	0	5	0	0	7	0	0	0	0	0	0	0	12	
6:30 AM	1	4	0	0	17	1	0	0	1	0	0	0	24	
6:45 AM	0	11	0	0	5	2	1	0	2	0	0	0	21	
7:00 AM	1	4	0	0	10	2	1	0	0	0	0	0	18	
7:15 AM	0	2	0	0	12	2	3	0	2	0	0	7	28	
7:30 AM	0	2	0	0	7	1	0	0	0	0	0	1	11	
7:45 AM	2	5	0	0	8	2	0	0	1	0	0	0	18	
8:00 AM	0	7	0	0	5	1	1	0	1	0	0	0	15	
8:15 AM	1	7	1	1	12	1	1	0	0	0	0	0	24	
8:30 AM	1	5	0	0	8	3	2	0	1	0	0	0	20	
8:45 AM	1	6	0	0	9	3	1	0	1	1	0	0	22	
TOTAL VOLUMES :		NL 8	NT 60	NR 1	SL 1	ST 106	SR 19	EL 10	ET 0	ER 9	WL 1	WT 0	WR 8	TOTAL 223
APPROACH %'s :		11.59%	86.96%	1.45%	0.79%	84.13%	15.08%	52.63%	0.00%	47.37%	11.11%	0.00%	88.89%	
PEAK HR START TIME :		715 AM												TOTAL
PEAK HR VOL :		2	16	0	0	32	6	4	0	4	0	0	8	72
PEAK HR FACTOR :		0.643			0.679			0.400			0.286			0.943

CONTROL : Signalized

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-003

2 Axle+ Trucks

Day: Tuesday

City: Kihei

Date: 1/12/2016

PM													
NS/EW Streets:	Pillani Hwy_Mokulele Hwy			Pillani Hwy_Mokulele Hwy			N Kihei Rd			N Kihei Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	2	2	1	1	2	1	1.5	0.5	2	1	0.5	0.5	
3:00 PM	2	14	0	0	12	0	3	0	1	2	0	0	34
3:15 PM	2	5	0	9	10	0	2	0	4	0	0	0	32
3:30 PM	1	11	0	0	4	1	2	0	2	0	1	1	23
3:45 PM	0	7	0	0	7	2	1	0	2	0	0	0	19
4:00 PM	1	13	0	0	8	0	4	0	1	0	0	0	27
4:15 PM	1	4	0	0	3	1	1	0	2	0	0	0	12
4:30 PM	1	5	0	0	1	0	0	0	0	0	0	0	7
4:45 PM	2	8	0	0	0	1	0	0	2	0	0	0	13
5:00 PM	1	2	0	0	3	1	3	0	4	0	0	0	14
5:15 PM	0	3	0	0	2	0	0	0	1	0	0	0	6
5:30 PM	2	4	0	0	2	1	0	0	0	0	0	0	9
5:45 PM	0	2	0	0	6	1	0	0	2	0	0	0	11
TOTAL VOLUMES :	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
APPROACH %'s :	13	78	0	9	58	8	16	0	21	2	1	1	207
	14.29%	85.71%	0.00%	12.00%	77.33%	10.67%	43.24%	0.00%	56.76%	50.00%	25.00%	25.00%	
PEAK HR START TIME :	330 PM												TOTAL
PEAK HR VOL :	3	35	0	0	22	4	8	0	7	0	1	1	81
PEAK HR FACTOR :	0.679			0.722			0.750			0.250			0.955

CONTROL : Signalized

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

# ITM Peak Hour Summary

Prepared by:



National Data & Surveying Services

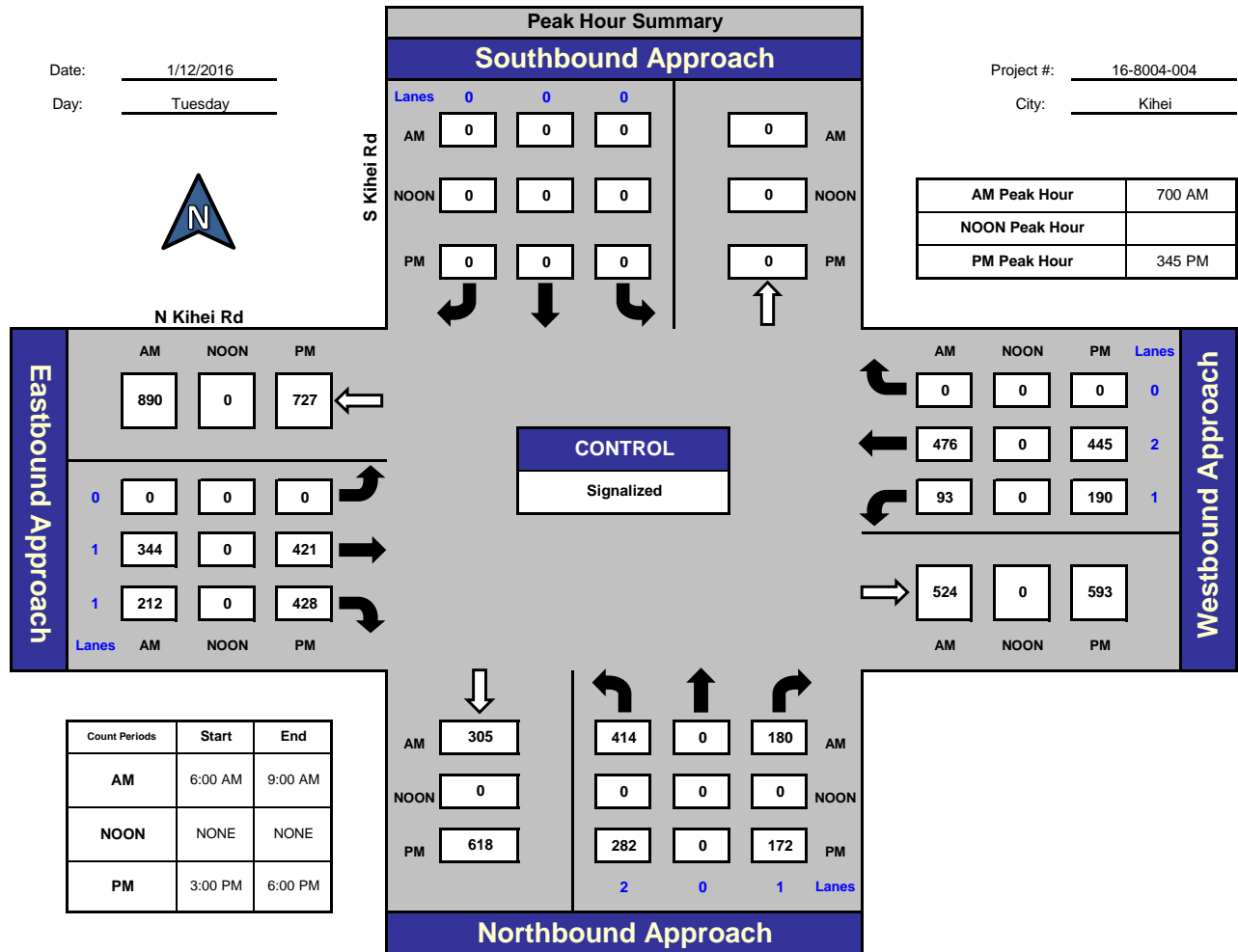
## S Kihei Rd and N Kihei Rd , Kihei

Date: 1/12/2016

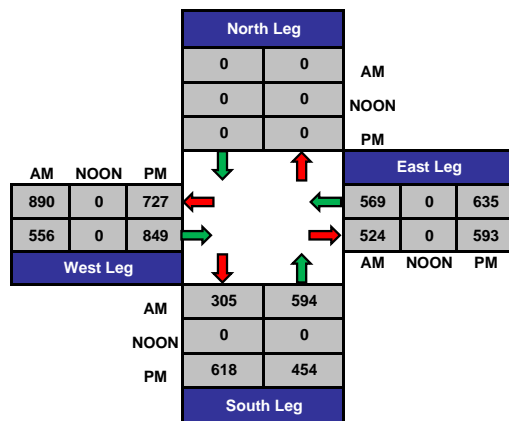
Day: Tuesday

Project #: 16-8004-004

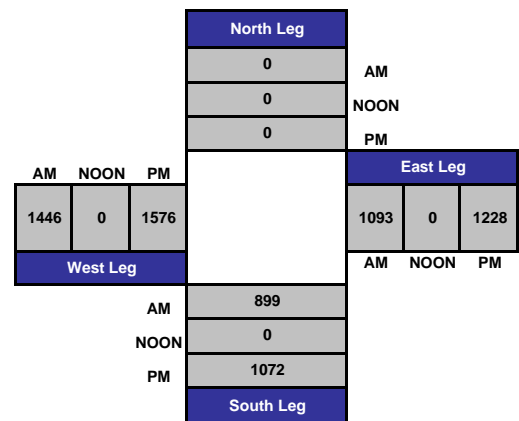
City: Kihei



## Total Ins & Outs



## Total Volume Per Leg



# Intersection Turning Movement

Prepared by:  
National Data & Surveying Services

Project ID: 16-8004-004

City: Kihei

TOTALS

Day: Tuesday

Date: 1/12/2016

AM													
NS/EW Streets:	S Kihei Rd			S Kihei Rd			N Kihei Rd			N Kihei Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 0	NR 1	SL 0	ST 0	SR 0	EL 0	ET 1	ER 1	WL 1	WT 2	WR 0	TOTAL
6:00 AM	71	0	9	0	0	0	0	28	19	10	51	0	188
6:15 AM	62	0	33	0	0	0	0	53	20	8	70	0	246
6:30 AM	76	0	34	0	0	0	0	62	23	17	99	0	311
6:45 AM	89	0	39	0	0	0	0	58	33	18	107	0	344
7:00 AM	143	0	40	0	0	0	0	59	42	17	112	0	413
7:15 AM	106	0	47	0	0	0	0	95	52	19	131	0	450
7:30 AM	92	0	52	0	0	0	0	100	61	24	114	0	443
7:45 AM	73	0	41	0	0	0	0	90	57	33	119	0	413
8:00 AM	78	0	37	0	0	0	0	100	45	21	106	0	387
8:15 AM	70	0	29	0	0	0	0	81	58	22	81	0	341
8:30 AM	64	0	33	0	0	0	0	108	59	26	78	0	368
8:45 AM	65	0	33	0	0	0	0	92	55	14	65	0	324
TOTAL VOLUMES :	NL 989	NT 0	NR 427	SL 0	ST 0	SR 0	EL 0	ET 926	ER 524	WL 229	WT 1133	WR 0	TOTAL 4228
APPROACH %'s :	69.84%	0.00%	30.16%	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	63.86%	36.14%	16.81%	83.19%	0.00%	
PEAK HR START TIME :	700 AM												
PEAK HR VOL :	414	0	180	0	0	0	0	344	212	93	476	0	1719
PEAK HR FACTOR :	0.811			0.000			0.863			0.936			0.955

CONTROL : Signalized

UTURNS			
NB	SB	EB	WB
			0
			0
			0
			0
			0
			0
			1
			0
			0
			0
			0
NB 0	SB 0	EB 0	WB 1

Prepared by:  
**National Data & Surveying Services**

**Day:** Tuesday

City: Kihei

**TOTALS**

**Date:** 1/12/2016

PM

**0**

NB 0	SB 0	EB 0	WB 1
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NB 0	SB 0	EB 0	WB 1
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**CONTROL** : Signalized

# Intersection Turning Movement

Prepared by:  
National Data & Surveying Services

Project ID: 16-8004-004

City: Kihei

Cars

Day: Tuesday

Date: 1/12/2016

NS/EW Streets:

AM

NS/EW Streets:		S Kihei Rd			S Kihei Rd			N Kihei Rd			N Kihei Rd				
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND				
LANES:		NL 2	NT 0	NR 1	SL 0	ST 0	SR 0	EL 0	ET 1	ER 1	WL 1	WT 2	WR 0	TOTAL	
	6:00 AM	70	0	9	0	0	0	0	28	16	10	50	0	183	
	6:15 AM	61	0	33	0	0	0	0	52	20	8	70	0	244	
	6:30 AM	73	0	34	0	0	0	0	61	23	16	98	0	305	
	6:45 AM	89	0	38	0	0	0	0	57	33	16	107	0	340	
	7:00 AM	142	0	39	0	0	0	0	56	41	16	110	0	404	
	7:15 AM	104	0	47	0	0	0	0	93	51	19	129	0	443	
	7:30 AM	91	0	52	0	0	0	0	100	59	23	114	0	439	
	7:45 AM	73	0	41	0	0	0	0	88	57	32	117	0	408	
	8:00 AM	77	0	36	0	0	0	0	100	45	21	104	0	383	
	8:15 AM	70	0	28	0	0	0	0	81	57	22	79	0	337	
	8:30 AM	63	0	32	0	0	0	0	105	58	24	74	0	356	
	8:45 AM	64	0	32	0	0	0	0	90	53	11	64	0	314	
TOTAL VOLUMES :		NL 977	NT 0	NR 421	SL 0	ST 0	SR 0	EL 0	ET 911	ER 513	WL 218	WT 1116	WR 0	TOTAL 4156	
APPROACH %'s :		69.89%	0.00%	30.11%	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	63.97%	36.03%	16.34%	83.66%	0.00%		
PEAK HR START TIME :		700 AM													TOTAL
PEAK HR VOL :		410	0	179	0	0	0	0	337	208	90	470	0	1694	
PEAK HR FACTOR :		0.814			0.000			0.857			0.940			0.956	

CONTROL : Signalized

UTURNS			
NB	SB	EB	WB
			0
			0
			0
			0
			0
			0
			1
			0
			0
			0
			0
NB	SB	EB	WB
0	0	0	1

Prepared by:  
**National Data & Surveying Services**

**Day:** Tuesday

City: Kihei

## Cars

**Date:** 1/12/2016

PM

UTURNS			
NB	SB	EB	WB
			0
			0
			0
			0
			0
			0
			0
			0
			1
			0
NB 0	SB 0	EB 0	WB 1

**CONTROL** : Signalized

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-004

2 Axle+ Trucks

Day: Tuesday

City: Kihei

Date: 1/12/2016

AM													
NS/EW Streets:	S Kihei Rd			S Kihei Rd			N Kihei Rd			N Kihei Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	2	0	1	0	0	0	0	1	1	1	2	0	
6:00 AM	1	0	0	0	0	0	0	0	3	0	1	0	5
6:15 AM	1	0	0	0	0	0	0	1	0	0	0	0	2
6:30 AM	3	0	0	0	0	0	0	1	0	1	1	0	6
6:45 AM	0	0	1	0	0	0	0	1	0	2	0	0	4
7:00 AM	1	0	1	0	0	0	0	3	1	1	2	0	9
7:15 AM	2	0	0	0	0	0	0	2	1	0	2	0	7
7:30 AM	1	0	0	0	0	0	0	0	2	1	0	0	4
7:45 AM	0	0	0	0	0	0	0	2	0	1	2	0	5
8:00 AM	1	0	1	0	0	0	0	0	0	0	2	0	4
8:15 AM	0	0	1	0	0	0	0	0	1	0	2	0	4
8:30 AM	1	0	1	0	0	0	0	3	1	2	4	0	12
8:45 AM	1	0	1	0	0	0	0	2	2	3	1	0	10
TOTAL VOLUMES :	NL 12	NT 0	NR 6	SL 0	ST 0	SR 0	EL 0	ET 15	ER 11	WL 11	WT 17	WR 0	TOTAL 72
APPROACH %'s :	66.67%	0.00%	33.33%	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	57.69%	42.31%	39.29%	60.71%	0.00%	
PEAK HR START TIME :	700 AM												
PEAK HR VOL :	4	0	1	0	0	0	0	7	4	3	6	0	25
PEAK HR FACTOR :	0.625			0.000			0.688			0.750			0.956

CONTROL : Signalized

UTURNS			
NB	SB	EB	WB

NB 0	SB 0	EB 0	WB 0
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# Intersection Turning Movement

Prepared by:  
National Data & Surveying Services

Project ID: 16-8004-004

2 Axle+ Trucks

Day: Tuesday

City: Kihei

Date: 1/12/2016

PM													
NS/EW Streets:	S Kihei Rd			S Kihei Rd			N Kihei Rd			N Kihei Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	2	0	1	0	0	0	0	1	1	1	2	0	
3:00 PM	2	0	1	0	0	0	0	3	2	0	3	0	11
3:15 PM	2	0	1	0	0	0	0	5	0	0	1	0	9
3:30 PM	2	0	1	0	0	0	0	4	2	1	1	0	11
3:45 PM	1	0	1	0	0	0	0	2	0	1	1	0	6
4:00 PM	3	0	4	0	0	0	0	2	1	0	1	0	11
4:15 PM	0	0	1	0	0	0	0	3	0	0	2	0	6
4:30 PM	1	0	0	0	0	0	0	0	0	0	2	0	3
4:45 PM	0	0	0	0	0	0	0	2	0	1	2	0	5
5:00 PM	0	0	3	0	0	0	0	3	1	0	2	0	9
5:15 PM	1	0	0	0	0	0	0	1	1	0	0	0	3
5:30 PM	1	0	0	0	0	0	0	0	1	0	1	0	3
5:45 PM	0	0	0	0	0	0	0	1	1	1	1	0	4
TOTAL VOLUMES :	NL 13	NT 0	NR 12	SL 0	ST 0	SR 0	EL 0	ET 26	ER 9	WL 4	WT 17	WR 0	TOTAL 81
APPROACH %'s :	52.00%	0.00%	48.00%	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	74.29%	25.71%	19.05%	80.95%	0.00%	
PEAK HR START TIME :	345 PM												
PEAK HR VOL :	5	0	6	0	0	0	0	7	1	1	6	0	26
PEAK HR FACTOR :	0.393			0.000			0.667			0.875			0.972

CONTROL : Signalized

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

# ITM Peak Hour Summary

Prepared by:



National Data & Surveying Services

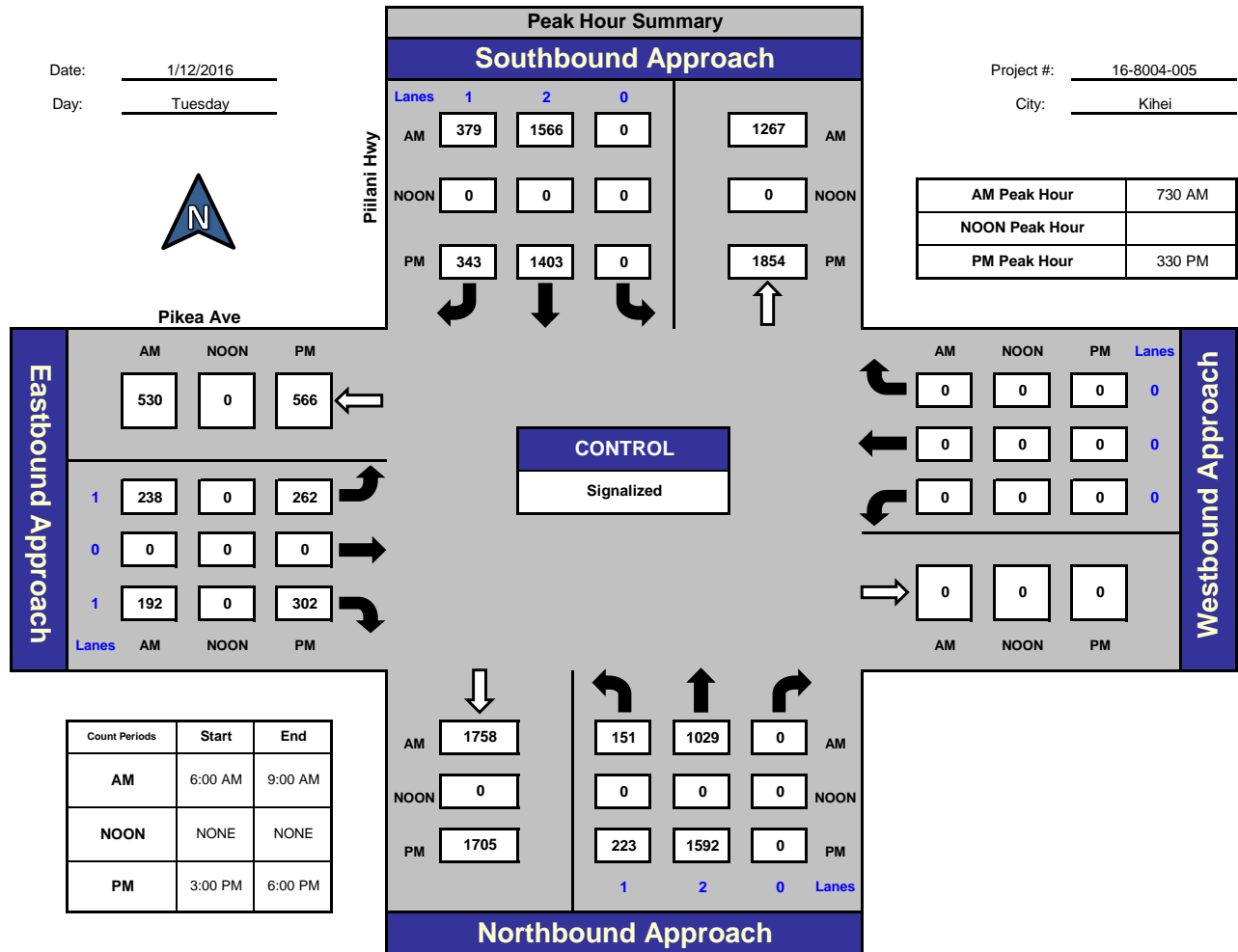
## Piilani Hwy and Pikea Ave , Kihei

Date: 1/12/2016

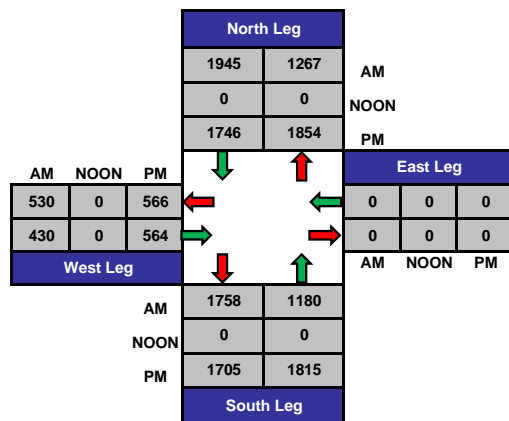
Day: Tuesday

Project #: 16-8004-005

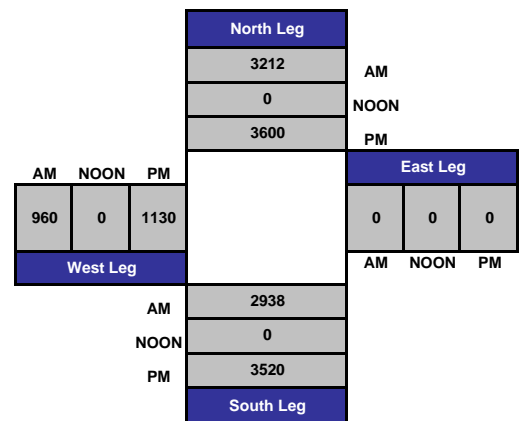
City: Kihei



## Total Ins & Outs



## Total Volume Per Leg



# Intersection Turning Movement

Prepared by:  
National Data & Surveying Services

Project ID: 16-8004-005

City: Kihei

**TOTALS**

Day: Tuesday

Date: 1/12/2016

AM														
NS/EW Streets:		Pillani Hwy			Pillani Hwy			Pikea Ave			Pikea Ave			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 1	NT 2	NR 0	SL 0	ST 2	SR 1	EL 1	ET 0	ER 1	WL 0	WT 0	WR 0	TOTAL
6:00 AM		4	100	0	0	116	31	23	0	18	0	0	0	292
6:15 AM		12	136	0	0	165	46	30	0	17	0	0	0	406
6:30 AM		10	194	0	0	280	45	35	0	32	0	0	0	596
6:45 AM		14	197	0	0	269	60	47	0	38	0	0	0	625
7:00 AM		16	247	0	0	333	60	33	0	50	0	0	0	739
7:15 AM		21	277	0	0	366	62	48	0	39	0	0	0	813
7:30 AM		30	267	0	0	407	104	61	0	37	0	0	0	906
7:45 AM		37	246	0	0	452	94	76	0	45	0	0	0	950
8:00 AM		44	267	0	0	343	95	53	0	50	0	0	0	852
8:15 AM		40	249	0	0	364	86	48	0	60	0	0	0	847
8:30 AM		42	241	0	0	346	62	52	0	44	0	0	0	787
8:45 AM		39	210	0	0	301	82	56	0	47	0	0	0	735
TOTAL VOLUMES :		NL 309	NT 2631	NR 0	SL 0	ST 3742	SR 827	EL 562	ET 0	ER 477	WL 0	WT 0	WR 0	TOTAL 8548
APPROACH %'s :		10.51%	89.49%	0.00%	0.00%	81.90%	18.10%	54.09%	0.00%	45.91%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :		730 AM												TOTAL
PEAK HR VOL :		151	1029	0	0	1566	379	238	0	192	0	0	0	3555
PEAK HR FACTOR :		0.949			0.891			0.888			0.000			0.936

CONTROL : Signalized

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-005

TOTALS

Day: Tuesday

City: Kihei

Date: 1/12/2016

PM														
NS/EW Streets:	Pillani Hwy			Pillani Hwy			Pikea Ave			Pikea Ave				
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND				
LANES:	NL 1	NT 2	NR 0	SL 0	ST 2	SR 1	EL 1	ET 0	ER 1	WL 0	WT 0	WR 0	TOTAL	
3:00 PM	46	385	0	0	348	91	72	0	50	0	0	0	992	
3:15 PM	52	421	0	0	348	81	75	0	58	0	0	0	1035	
3:30 PM	54	423	0	0	334	83	64	0	79	0	0	0	1037	
3:45 PM	55	351	0	0	382	91	53	0	72	0	0	0	1004	
4:00 PM	56	392	0	0	347	95	74	0	76	0	0	0	1040	
4:15 PM	58	426	0	0	340	74	71	0	75	0	0	0	1044	
4:30 PM	66	395	0	0	328	103	70	0	61	0	0	0	1023	
4:45 PM	66	352	0	0	331	108	67	0	68	0	0	0	992	
5:00 PM	61	330	0	0	317	92	56	0	73	0	0	0	929	
5:15 PM	58	302	0	0	333	90	68	0	78	0	0	0	929	
5:30 PM	51	276	0	0	292	85	60	0	82	0	0	0	846	
5:45 PM	51	234	0	0	283	76	61	0	57	0	0	0	762	
TOTAL VOLUMES : APPROACH %'s :	NL 674 13.59%	NT 4287 86.41%	NR 0 0.00%	SL 0 0.00%	ST 3983 78.84%	SR 1069 21.16%	EL 791 48.83%	ET 0 0.00%	ER 829 51.17%	WL 0 #DIV/0!	WT 0 #DIV/0!	WR 0 #DIV/0!	TOTAL 11633	
PEAK HR START TIME :	330 PM													TOTAL
PEAK HR VOL :	223	1592	0	0	1403	343	262	0	302	0	0	0	4125	
PEAK HR FACTOR :	0.938		0.923			0.940			0.000			0.988		

CONTROL : Signalized

UTURNS			
NB	SB	EB	WB

NB 0	SB 0	EB 0	WB 0
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# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-005

City: Kihel

Cars

Day: Tuesday

Date: 1/12/2016

AM														
NS/EW Streets:		Pillani Hwy			Pillani Hwy			Pikea Ave			Pikea Ave			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 1	NT 2	NR 0	SL 0	ST 2	SR 1	EL 1	ET 0	ER 1	WL 0	WT 0	WR 0	TOTAL
6:00 AM	3	98	0	0	112	30	23	0	18	0	0	0	0	284
6:15 AM	12	128	0	0	157	45	30	0	16	0	0	0	0	388
6:30 AM	10	190	0	0	276	44	35	0	32	0	0	0	0	587
6:45 AM	14	191	0	0	257	59	45	0	38	0	0	0	0	604
7:00 AM	15	242	0	0	325	60	33	0	49	0	0	0	0	724
7:15 AM	21	276	0	0	352	60	47	0	38	0	0	0	0	794
7:30 AM	29	262	0	0	402	100	59	0	37	0	0	0	0	889
7:45 AM	37	244	0	0	445	91	74	0	45	0	0	0	0	936
8:00 AM	44	262	0	0	334	95	53	0	50	0	0	0	0	838
8:15 AM	39	239	0	0	356	82	48	0	58	0	0	0	0	822
8:30 AM	42	233	0	0	335	61	52	0	43	0	0	0	0	766
8:45 AM	39	202	0	0	290	79	55	0	45	0	0	0	0	710
TOTAL VOLUMES :		NL 305	NT 2567	NR 0	SL 0	ST 3641	SR 806	EL 554	ET 0	ER 469	WL 0	WT 0	WR 0	TOTAL 8342
APPROACH %'s :		10.62%	89.38%	0.00%	0.00%	81.88%	18.12%	54.15%	0.00%	45.85%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :		730 AM												TOTAL
PEAK HR VOL :		149	1007	0	0	1537	368	234	0	190	0	0	0	3485
PEAK HR FACTOR :		0.944			0.889			0.891			0.000			0.931

CONTROL : Signalized

UTURNS			
NB	SB	EB	WB

NB 0	SB 0	EB 0	WB 0
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# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-005

Cars

Day: Tuesday

City: Kihel

Date: 1/12/2016

PM														
NS/EW Streets:	Pillani Hwy			Pillani Hwy			Pikea Ave			Pikea Ave				
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND				
LANES:	NL 1	NT 2	NR 0	SL 0	ST 2	SR 1	EL 1	ET 0	ER 1	WL 0	WT 0	WR 0	TOTAL	
3:00 PM	46	372	0	0	340	90	70	0	50	0	0	0	968	
3:15 PM	52	410	0	0	333	81	75	0	58	0	0	0	1009	
3:30 PM	54	419	0	0	327	82	63	0	79	0	0	0	1024	
3:45 PM	54	345	0	0	376	90	52	0	72	0	0	0	989	
4:00 PM	56	383	0	0	346	93	74	0	76	0	0	0	1028	
4:15 PM	57	422	0	0	335	74	70	0	74	0	0	0	1032	
4:30 PM	65	389	0	0	327	103	69	0	61	0	0	0	1014	
4:45 PM	66	348	0	0	330	107	65	0	68	0	0	0	984	
5:00 PM	61	329	0	0	313	91	55	0	73	0	0	0	922	
5:15 PM	58	297	0	0	332	90	67	0	77	0	0	0	921	
5:30 PM	51	272	0	0	291	85	60	0	82	0	0	0	841	
5:45 PM	51	231	0	0	278	74	61	0	57	0	0	0	752	
TOTAL VOLUMES : APPROACH %'s :	NL 671 13.73%	NT 4217 86.27%	NR 0 0.00%	SL 0 0.00%	ST 3928 78.75%	SR 1060 21.25%	EL 781 48.57%	ET 0 0.00%	ER 827 51.43%	WL 0 #DIV/0!	WT 0 #DIV/0!	WR 0 #DIV/0!	TOTAL 11484	
PEAK HR START TIME :	330 PM													TOTAL
PEAK HR VOL :	221	1569	0	0	1384	339	259	0	301	0	0	0	4073	
PEAK HR FACTOR :	0.934		0.924			0.933			0.000			0.987		

CONTROL : Signalized

UTURNS			
NB	SB	EB	WB

NB 0	SB 0	EB 0	WB 0
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Prepared by:  
**National Data & Surveying Services**

**Day:** Tuesday

## 2 Axle+ Trucks

**Date:** 1/12/2016

NB 0	SB 0	EB 0	WB 0
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# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-005

City: Kihei

2 Axle+ Trucks

Day: Tuesday

Date: 1/12/2016

PM													
NS/EW Streets:	Pillani Hwy			Pillani Hwy			Pikea Ave			Pikea Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 0	ST 2	SR 1	EL 1	ET 0	ER 1	WL 0	WT 0	WR 0	TOTAL
3:00 PM	0	13	0	0	8	1	2	0	0	0	0	0	24
3:15 PM	0	11	0	0	15	0	0	0	0	0	0	0	26
3:30 PM	0	4	0	0	7	1	1	0	0	0	0	0	13
3:45 PM	1	6	0	0	6	1	1	0	0	0	0	0	15
4:00 PM	0	9	0	0	1	2	0	0	0	0	0	0	12
4:15 PM	1	4	0	0	5	0	1	0	1	0	0	0	12
4:30 PM	1	6	0	0	1	0	1	0	0	0	0	0	9
4:45 PM	0	4	0	0	1	1	2	0	0	0	0	0	8
5:00 PM	0	1	0	0	4	1	1	0	0	0	0	0	7
5:15 PM	0	5	0	0	1	0	1	0	1	0	0	0	8
5:30 PM	0	4	0	0	1	0	0	0	0	0	0	0	5
5:45 PM	0	3	0	0	5	2	0	0	0	0	0	0	10
TOTAL VOLUMES :	NL 3	NT 70	NR 0	SL 0	ST 55	SR 9	EL 10	ET 0	ER 2	WL 0	WT 0	WR 0	TOTAL 149
APPROACH %'s :	4.11%	95.89%	0.00%	0.00%	85.94%	14.06%	83.33%	0.00%	16.67%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	330 PM												TOTAL
PEAK HR VOL :	2	23	0	0	19	4	3	0	1	0	0	0	52
PEAK HR FACTOR :	0.694			0.719			0.500			0.000			0.987

CONTROL : Signalized

UTURNS			
NB	SB	EB	WB

NB 0	SB 0	EB 0	WB 0
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# ITM Peak Hour Summary

Prepared by:



National Data & Surveying Services

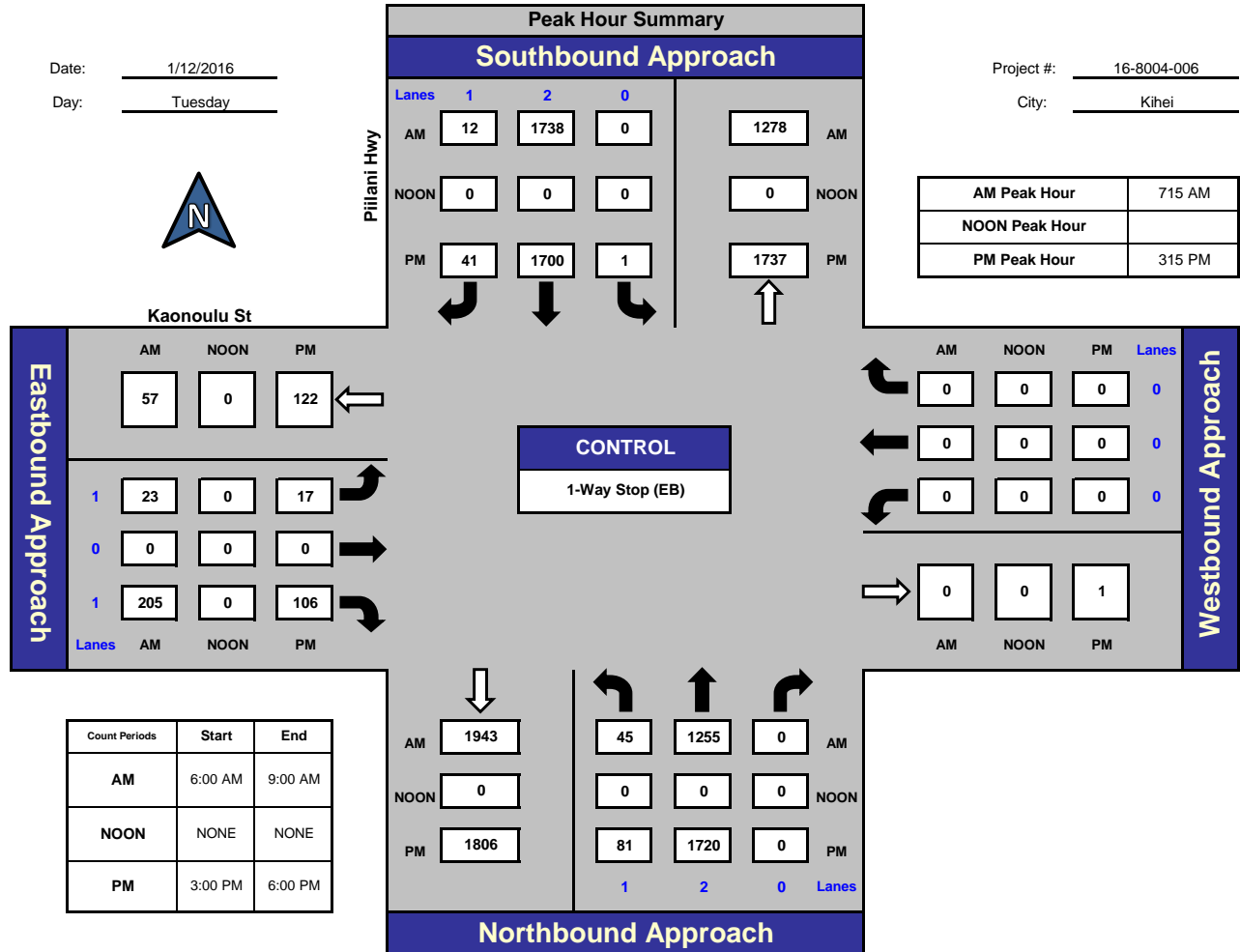
## Piilani Hwy and Kaonoulu St, Kihei

Date: 1/12/2016

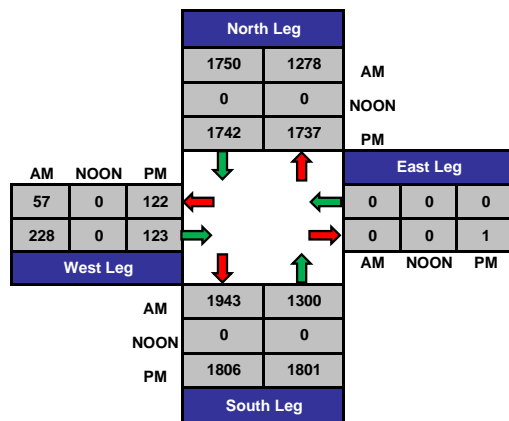
Day: Tuesday

Project #: 16-8004-006

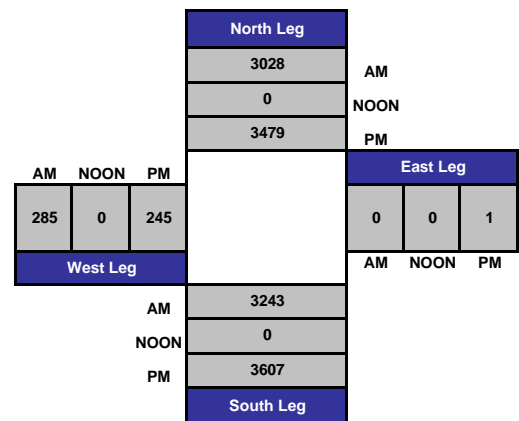
City: Kihei



### Total Ins & Outs



### Total Volume Per Leg



# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-006

TOTALS

Day: Tuesday

City: Kihei

Date: 1/12/2016

AM														
NS/EW Streets:		Pillani Hwy			Pillani Hwy			Kaonoulu St			Kaonoulu St			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 1	NT 2	NR 0	SL 0	ST 2	SR 1	EL 1	ET 0	ER 1	WL 0	WT 0	WR 0	TOTAL
6:00 AM		1	123	0	0	140	1	4	0	10	0	0	0	279
6:15 AM		7	165	0	0	200	4	6	0	15	0	0	0	397
6:30 AM		7	213	0	0	314	3	14	0	30	0	0	0	581
6:45 AM		12	242	0	0	273	1	11	0	28	0	0	0	567
7:00 AM		9	284	0	0	357	3	6	0	38	0	0	0	697
7:15 AM		14	312	0	0	386	5	8	0	48	0	0	0	773
7:30 AM		9	318	0	0	476	3	5	0	56	0	0	0	867
7:45 AM		13	322	0	0	463	0	6	0	57	0	0	0	861
8:00 AM		9	303	0	0	413	4	4	0	44	0	0	0	777
8:15 AM		15	280	0	0	372	4	6	0	35	0	0	0	712
8:30 AM		13	284	0	0	374	7	10	0	28	0	0	0	716
8:45 AM		10	256	0	0	343	6	3	0	26	0	0	0	644
TOTAL VOLUMES :		NL 119	NT 3102	NR 0	SL 0	ST 4111	SR 41	EL 83	ET 0	ER 415	WL 0	WT 0	WR 0	TOTAL 7871
APPROACH %'s :		3.69%	96.31%	0.00%	0.00%	99.01%	0.99%	16.67%	0.00%	83.33%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :		715 AM												TOTAL
PEAK HR VOL :		45	1255	0	0	1738	12	23	0	205	0	0	0	3278
PEAK HR FACTOR :		0.970			0.913			0.905			0.000			0.945

CONTROL : 1-Way Stop (EB)

UTURNS			
NB	SB	EB	WB

NB 0	SB 0	EB 0	WB 0
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Prepared by:  
**National Data & Surveying Services**

**Day:** Tuesday

City: Kihei

**TOTALS**

**Date:** 1/12/2016

UTURNS			
NB	SB	EB	WB
	0		
	0		
	1		
	0		
	0		
	0		
	0		
	0		
	0		
	0		
	0		
NB 0	SB 1	EB 0	WB 0

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-006

Cars

Day: Tuesday

City: Kihel

Date: 1/12/2016

AM														
NS/EW Streets:		Pillani Hwy			Pillani Hwy			Kaonoulu St			Kaonoulu St			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 1	NT 2	NR 0	SL 0	ST 2	SR 1	EL 1	ET 0	ER 1	WL 0	WT 0	WR 0	TOTAL
	6:00 AM	1	121	0	0	133	1	4	0	10	0	0	0	270
	6:15 AM	7	158	0	0	193	4	6	0	15	0	0	0	383
	6:30 AM	7	208	0	0	303	3	14	0	30	0	0	0	565
	6:45 AM	12	236	0	0	263	1	11	0	27	0	0	0	550
	7:00 AM	9	278	0	0	346	3	6	0	38	0	0	0	680
	7:15 AM	14	307	0	0	374	5	8	0	47	0	0	0	755
	7:30 AM	8	311	0	0	468	3	5	0	53	0	0	0	848
	7:45 AM	13	316	0	0	454	0	6	0	57	0	0	0	846
	8:00 AM	9	298	0	0	404	4	4	0	44	0	0	0	763
	8:15 AM	15	273	0	0	363	4	5	0	34	0	0	0	694
	8:30 AM	13	277	0	0	363	7	9	0	28	0	0	0	697
	8:45 AM	10	248	0	0	332	6	3	0	25	0	0	0	624
TOTAL VOLUMES :		NL 118	NT 3031	NR 0	SL 0	ST 3996	SR 41	EL 81	ET 0	ER 408	WL 0	WT 0	WR 0	TOTAL 7675
APPROACH %'s :		3.75%	96.25%	0.00%	0.00%	98.98%	1.02%	16.56%	0.00%	83.44%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :		715 AM												TOTAL
PEAK HR VOL :		44	1232	0	0	1700	12	23	0	201	0	0	0	3212
PEAK HR FACTOR :		0.970			0.909			0.889			0.000			0.947

CONTROL : 1-Way Stop (EB)

UTURNS			
NB	SB	EB	WB

NB 0	SB 0	EB 0	WB 0
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Prepared by:  
**National Data & Surveying Services**

**Day:** Tuesday

City: Kihei

## Cars

**Date:** 1/12/2016

PM

UTURNS			
NB	SB	EB	WB
	0		
	0		
	1		
	0		
	0		
	0		
	0		
	0		
	0		
	0		
	0		
NB 0	SB 1	EB 0	WB 0

**CONTROL : 1-Way Stop (EB)**

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-006

2 Axle+ Trucks

Day: Tuesday

City: Kihei

Date: 1/12/2016

AM													
NS/EW Streets:	Pillani Hwy			Pillani Hwy			Kaonoulu St			Kaonoulu St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 0	ST 2	SR 1	EL 1	ET 0	ER 1	WL 0	WT 0	WR 0	TOTAL
6:00 AM	0	2	0	0	7	0	0	0	0	0	0	0	9
6:15 AM	0	7	0	0	7	0	0	0	0	0	0	0	14
6:30 AM	0	5	0	0	11	0	0	0	0	0	0	0	16
6:45 AM	0	6	0	0	10	0	0	0	1	0	0	0	17
7:00 AM	0	6	0	0	11	0	0	0	0	0	0	0	17
7:15 AM	0	5	0	0	12	0	0	0	1	0	0	0	18
7:30 AM	1	7	0	0	8	0	0	0	3	0	0	0	19
7:45 AM	0	6	0	0	9	0	0	0	0	0	0	0	15
8:00 AM	0	5	0	0	9	0	0	0	0	0	0	0	14
8:15 AM	0	7	0	0	9	0	1	0	1	0	0	0	18
8:30 AM	0	7	0	0	11	0	1	0	0	0	0	0	19
8:45 AM	0	8	0	0	11	0	0	0	1	0	0	0	20
TOTAL VOLUMES :	NL 1	NT 71	NR 0	SL 0	ST 115	SR 0	EL 2	ET 0	ER 7	WL 0	WT 0	WR 0	TOTAL 196
APPROACH %'s :	1.39%	98.61%	0.00%	0.00%	100.00%	0.00%	22.22%	0.00%	77.78%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	715 AM												
PEAK HR VOL :	1	23	0	0	38	0	0	0	4	0	0	0	66
PEAK HR FACTOR :	0.750			0.792			0.333			0.000			0.947

CONTROL : 1-Way Stop (EB)

UTURNS			
NB	SB	EB	WB

NB 0	SB 0	EB 0	WB 0
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# Intersection Turning Movement

Prepared by:  
National Data & Surveying Services

Project ID: 16-8004-006

2 Axle+ Trucks

Day: Tuesday

City: Kihei

Date: 1/12/2016

PM													
NS/EW Streets:	Pilihi Hwy			Pilihi Hwy			Kaonolu St			Kaonolu St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 0	ST 2	SR 1	EL 1	ET 0	ER 1	WL 0	WT 0	WR 0	TOTAL
3:00 PM	0	18	0	0	9	0	0	0	0	0	0	0	27
3:15 PM	0	10	0	0	16	0	0	0	0	0	0	0	26
3:30 PM	0	7	0	0	8	0	0	0	0	0	0	0	15
3:45 PM	0	6	0	0	7	0	0	0	0	0	0	0	13
4:00 PM	0	10	0	0	2	0	0	0	0	0	0	0	12
4:15 PM	0	3	0	0	6	0	0	0	0	0	0	0	9
4:30 PM	0	5	0	0	1	0	0	0	0	0	0	0	6
4:45 PM	0	10	0	0	1	0	0	0	0	0	0	0	11
5:00 PM	0	2	0	0	5	0	0	0	0	0	0	0	7
5:15 PM	0	6	0	0	1	0	0	0	0	0	0	0	7
5:30 PM	0	3	0	0	2	0	0	0	0	0	0	0	5
5:45 PM	0	2	0	0	8	0	0	0	0	0	0	0	10
TOTAL VOLUMES :	NL 0	NT 82	NR 0	SL 0	ST 66	SR 0	EL 0	ET 0	ER 0	WL 0	WT 0	WR 0	TOTAL 148
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	315 PM												
PEAK HR VOL :	0	33	0	0	33	0	0	0	0	0	0	0	66
PEAK HR FACTOR :	0.825			0.516			0.000			0.000			0.969

CONTROL : 1-Way Stop (EB)

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

# ITM Peak Hour Summary

Prepared by:



National Data & Surveying Services

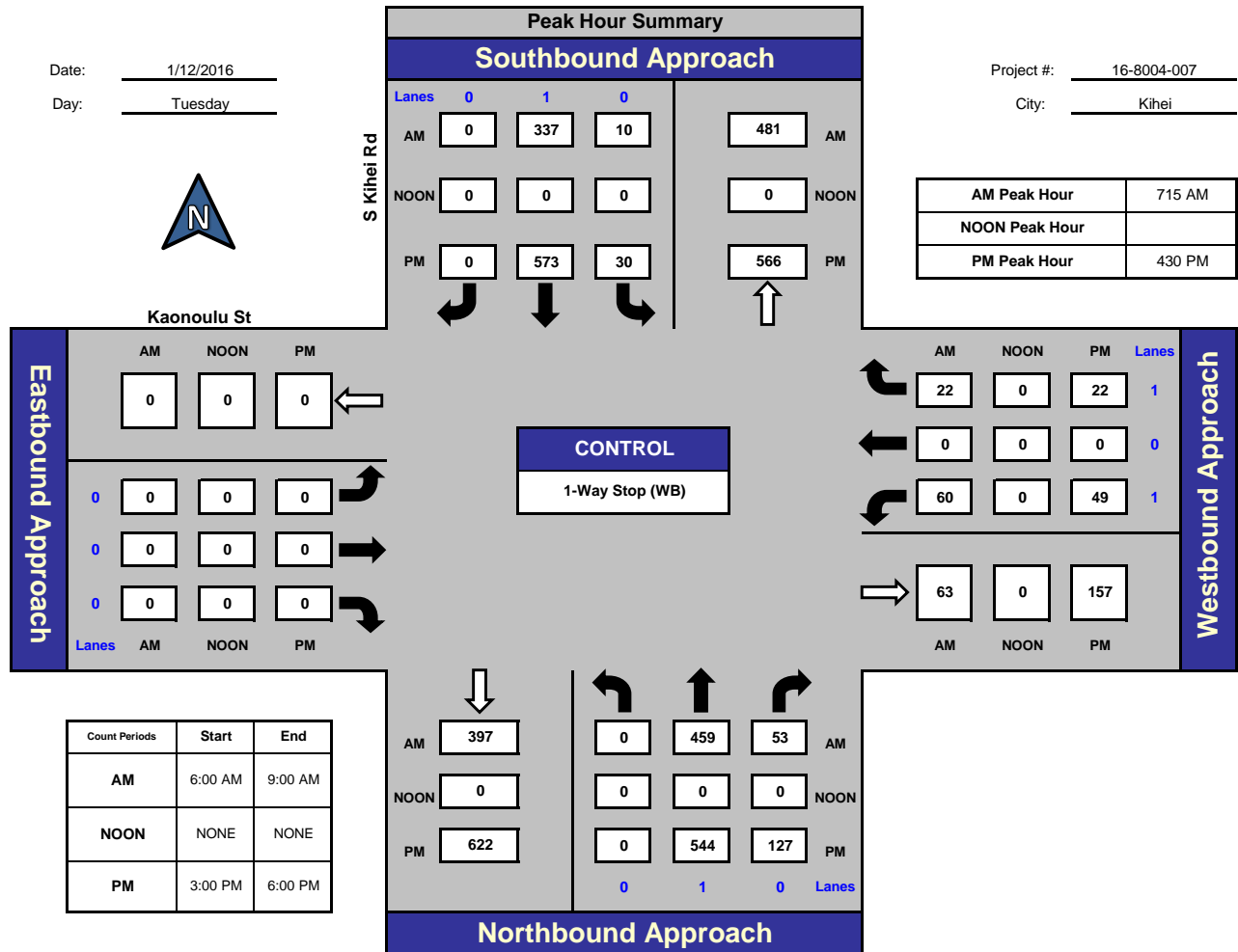
## S Kihei Rd and Kaonoulu St, Kihei

Date: 1/12/2016

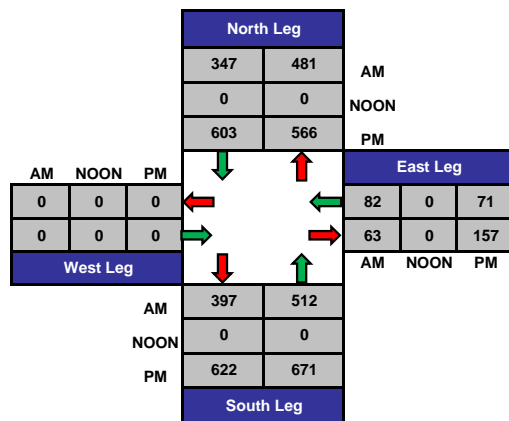
Day: Tuesday

Project #: 16-8004-007

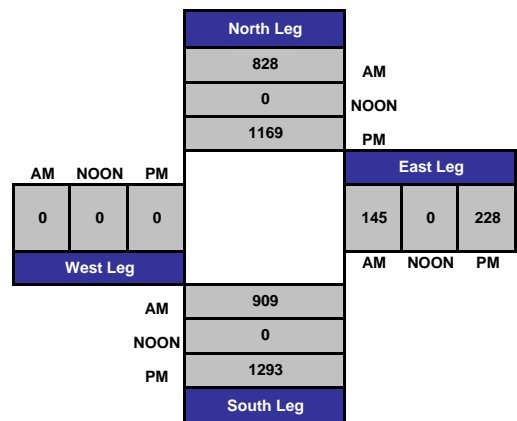
City: Kihei



### Total Ins & Outs



### Total Volume Per Leg





# Intersection Turning Movement

Prepared by:  
National Data & Surveying Services

Project ID: 16-8004-007

City: Kihei

TOTALS

Day: Tuesday

Date: 1/12/2016

AM														
NS/EW Streets:		S Kihei Rd			S Kihei Rd			Kaonoulu St			Kaonoulu St			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 0	ER 0	WL 1	WT 0	WR 1	TOTAL
6:00 AM		0	51	1	4	16	0	0	0	0	4	0	5	81
6:15 AM		0	72	2	1	32	0	0	0	0	2	0	6	115
6:30 AM		0	91	4	4	38	0	0	0	0	7	0	6	150
6:45 AM		0	112	7	2	47	0	0	0	0	9	0	13	190
7:00 AM		0	112	2	4	54	0	0	0	0	10	0	11	193
7:15 AM		0	130	9	5	71	0	0	0	0	16	0	5	236
7:30 AM		0	111	15	1	74	0	0	0	0	21	0	7	229
7:45 AM		0	122	13	4	102	0	0	0	0	11	0	4	256
8:00 AM		0	96	16	0	90	0	0	0	0	12	0	6	220
8:15 AM		0	110	16	1	87	0	0	0	0	14	0	6	234
8:30 AM		0	105	10	2	79	0	0	0	0	18	0	5	219
8:45 AM		0	101	11	3	87	0	0	0	0	18	0	2	222
TOTAL VOLUMES :		NL 0	NT 1213	NR 106	SL 31	ST 777	SR 0	EL 0	ET 0	ER 0	WL 142	WT 0	WR 76	TOTAL 2345
APPROACH %'s :		0.00%	91.96%	8.04%	3.84%	96.16%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	65.14%	0.00%	34.86%	
PEAK HR START TIME :		715 AM												
PEAK HR VOL :		0	459	53	10	337	0	0	0	0	60	0	22	941
PEAK HR FACTOR :		0.921			0.818			0.000			0.732			0.919

CONTROL : 1-Way Stop (WB)

UTURNS			
NB	SB	EB	WB
	0		0
	0		0
	0		0
	0		0
	0		0
	1		0
	0		1
	0		0
	0		0
	0		0
	0		0
	0		0
	0		0
NB	SB	EB	WB
0	1	0	1

# Intersection Turning Movement

Prepared by:  
National Data & Surveying Services

Project ID: 16-8004-007

City: Kihei

TOTALS

Day: Tuesday

Date: 1/12/2016

PM														
NS/EW Streets:		S Kihei Rd			S Kihei Rd			Kaonoulu St			Kaonoulu St			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 0	ER 0	WL 1	WT 0	WR 1	TOTAL
3:00 PM	0	130	34	11	129	0	0	0	0	0	12	0	8	324
3:15 PM	0	137	27	6	136	0	0	0	0	0	8	0	4	318
3:30 PM	0	133	20	7	109	0	0	0	0	0	16	0	2	287
3:45 PM	0	134	32	5	143	0	0	0	0	0	26	0	6	346
4:00 PM	0	139	20	6	134	0	0	0	0	0	16	0	9	324
4:15 PM	0	127	31	7	129	0	0	0	0	0	13	0	1	308
4:30 PM	0	152	26	3	143	0	0	0	0	0	8	0	6	338
4:45 PM	0	116	28	8	169	0	0	0	0	0	16	0	4	341
5:00 PM	0	137	35	8	138	0	0	0	0	0	12	0	8	338
5:15 PM	0	139	38	11	123	0	0	0	0	0	13	0	4	328
5:30 PM	0	118	26	12	124	0	0	0	0	0	14	0	6	300
5:45 PM	0	132	25	3	104	0	0	0	0	0	12	0	6	282
TOTAL VOLUMES :		NL 0	NT 1594	NR 342	SL 87	ST 1581	SR 0	EL 0	ET 0	ER 0	WL 166	WT 0	WR 64	TOTAL 3834
APPROACH %'s :		0.00%	82.33%	17.67%	5.22%	94.78%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	72.17%	0.00%	27.83%	
PEAK HR START TIME :		430 PM												TOTAL
PEAK HR VOL :		0	544	127	30	573	0	0	0	0	49	0	22	1345
PEAK HR FACTOR :		0.942			0.852			0.000			0.888			0.986

CONTROL : 1-Way Stop (WB)

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

# Intersection Turning Movement

Prepared by:  
National Data & Surveying Services

Project ID: 16-8004-007

City: Kihei

Cars

Day: Tuesday

Date: 1/12/2016

NS/EW Streets:

AM

NS/EW Streets:		S Kihei Rd			S Kihei Rd			Kaonoulu St			Kaonoulu St				
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND				
LANES:		NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 0	ER 0	WL 1	WT 0	WR 1	TOTAL	
	6:00 AM	0	49	1	4	15	0	0	0	0	4	0	5	78	
	6:15 AM	0	70	2	1	31	0	0	0	0	2	0	6	112	
	6:30 AM	0	89	2	3	38	0	0	0	0	7	0	6	145	
	6:45 AM	0	110	7	2	46	0	0	0	0	9	0	13	187	
	7:00 AM	0	110	2	4	54	0	0	0	0	10	0	11	191	
	7:15 AM	0	129	9	5	70	0	0	0	0	16	0	5	234	
	7:30 AM	0	109	15	1	74	0	0	0	0	20	0	7	226	
	7:45 AM	0	120	13	4	101	0	0	0	0	11	0	4	253	
	8:00 AM	0	95	16	0	88	0	0	0	0	12	0	6	217	
	8:15 AM	0	109	16	1	86	0	0	0	0	14	0	6	232	
	8:30 AM	0	102	10	2	77	0	0	0	0	18	0	5	214	
	8:45 AM	0	97	11	3	82	0	0	0	0	18	0	2	213	
TOTAL VOLUMES :		NL 0	NT 1189	NR 104	SL 30	ST 762	SR 0	EL 0	ET 0	ER 0	WL 141	WT 0	WR 76	TOTAL 2302	
APPROACH %'s :		0.00%	91.96%	8.04%	3.79%	96.21%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	64.98%	0.00%	35.02%		
PEAK HR START TIME :		715 AM													TOTAL
PEAK HR VOL :		0	453	53	10	333	0	0	0	0	59	0	22	930	
PEAK HR FACTOR :		0.917			0.817			0.000			0.750			0.919	

CONTROL : 1-Way Stop (WB)

UTURNS			
NB	SB	EB	WB
	0		0
	0		0
	0		0
	0		0
	1		0
	0		1
	0		0
	0		0
	0		0
	0		0
	0		0
	0		0
	0		0
NB	SB	EB	WB
0	1	0	1

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-007

Cars

Day: Tuesday

City: Kihei

Date: 1/12/2016

PM													
NS/EW Streets:	S Kihei Rd			S Kihei Rd			Kaonoulu St			Kaonoulu St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	1	0	0	1	0	0	0	0	1	0	1	
3:00 PM	0	126	34	11	128	0	0	0	0	12	0	8	319
3:15 PM	0	136	27	6	134	0	0	0	0	7	0	4	314
3:30 PM	0	130	20	7	109	0	0	0	0	16	0	2	284
3:45 PM	0	132	32	5	142	0	0	0	0	25	0	6	342
4:00 PM	0	135	19	6	132	0	0	0	0	16	0	8	316
4:15 PM	0	126	31	7	128	0	0	0	0	13	0	1	306
4:30 PM	0	151	26	3	143	0	0	0	0	8	0	6	337
4:45 PM	0	115	28	8	169	0	0	0	0	16	0	4	340
5:00 PM	0	136	34	8	137	0	0	0	0	12	0	8	335
5:15 PM	0	138	38	11	121	0	0	0	0	13	0	4	325
5:30 PM	0	117	26	12	123	0	0	0	0	14	0	6	298
5:45 PM	0	131	25	3	103	0	0	0	0	12	0	6	280
TOTAL VOLUMES :	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
APPROACH %'s :	0	1573	340	87	1569	0	0	0	0	164	0	63	3796
	0.00%	82.23%	17.77%	5.25%	94.75%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	72.25%	0.00%	27.75%	
PEAK HR START TIME :	430 PM												
PEAK HR VOL :	0	540	126	30	570	0	0	0	0	49	0	22	1337
PEAK HR FACTOR :	0.941			0.847			0.000			0.888			0.983

CONTROL : 1-Way Stop (WB)

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-007

2 Axle+ Trucks

Day: Tuesday

City: Kihei

Date: 1/12/2016

AM													
NS/EW Streets:	S Kihei Rd			S Kihei Rd			Kaonoulu St			Kaonoulu St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	1	0	0	1	0	0	0	0	1	0	1	
6:00 AM	0	2	0	0	1	0	0	0	0	0	0	0	3
6:15 AM	0	2	0	0	1	0	0	0	0	0	0	0	3
6:30 AM	0	2	2	1	0	0	0	0	0	0	0	0	5
6:45 AM	0	2	0	0	1	0	0	0	0	0	0	0	3
7:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	2
7:15 AM	0	1	0	0	1	0	0	0	0	0	0	0	2
7:30 AM	0	2	0	0	0	0	0	0	0	1	0	0	3
7:45 AM	0	2	0	0	1	0	0	0	0	0	0	0	3
8:00 AM	0	1	0	0	2	0	0	0	0	0	0	0	3
8:15 AM	0	1	0	0	1	0	0	0	0	0	0	0	2
8:30 AM	0	3	0	0	2	0	0	0	0	0	0	0	5
8:45 AM	0	4	0	0	5	0	0	0	0	0	0	0	9
TOTAL VOLUMES :	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
APPROACH %'s :	0	24	2	1	15	0	0	0	0	1	0	0	43
	0.00%	92.31%	7.69%	6.25%	93.75%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	100.00%	0.00%	0.00%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	0	6	0	0	4	0	0	0	0	1	0	0	11
PEAK HR FACTOR :	0.750			0.500			0.000			0.250			0.919

CONTROL : 1-Way Stop (WB)

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-007

2 Axle+ Trucks

Day: Tuesday

City: Kihei

Date: 1/12/2016

PM														
NS/EW Streets:	S Kihei Rd			S Kihei Rd			Kaonoulu St			Kaonoulu St				
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND				
LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 0	ER 0	WL 1	WT 0	WR 1	TOTAL	
3:00 PM	0	4	0	0	1	0	0	0	0	0	0	0	5	
3:15 PM	0	1	0	0	2	0	0	0	0	1	0	0	4	
3:30 PM	0	3	0	0	0	0	0	0	0	0	0	0	3	
3:45 PM	0	2	0	0	1	0	0	0	0	1	0	0	4	
4:00 PM	0	4	1	0	2	0	0	0	0	0	0	1	8	
4:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	2	
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	
4:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	
5:00 PM	0	1	1	0	1	0	0	0	0	0	0	0	3	
5:15 PM	0	1	0	0	2	0	0	0	0	0	0	0	3	
5:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	2	
5:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	2	
TOTAL VOLUMES :	NL 0	NT 21	NR 2	SL 0	ST 12	SR 0	EL 0	ET 0	ER 0	WL 2	WT 0	WR 1	TOTAL 38	
APPROACH %'s :	0.00%	91.30%	8.70%	0.00%	100.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	66.67%	0.00%	33.33%		
PEAK HR START TIME :	430 PM													TOTAL
PEAK HR VOL :	0	4	1	0	3	0	0	0	0	0	0	0	8	
PEAK HR FACTOR :	0.625			0.375			0.000			0.000			0.983	

CONTROL : 1-Way Stop (WB)

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

## National Data & Surveying Services

**Piilani Hwy and Kulanihako St , Kihei**

Date: 1/12/2016

Day: Tuesday

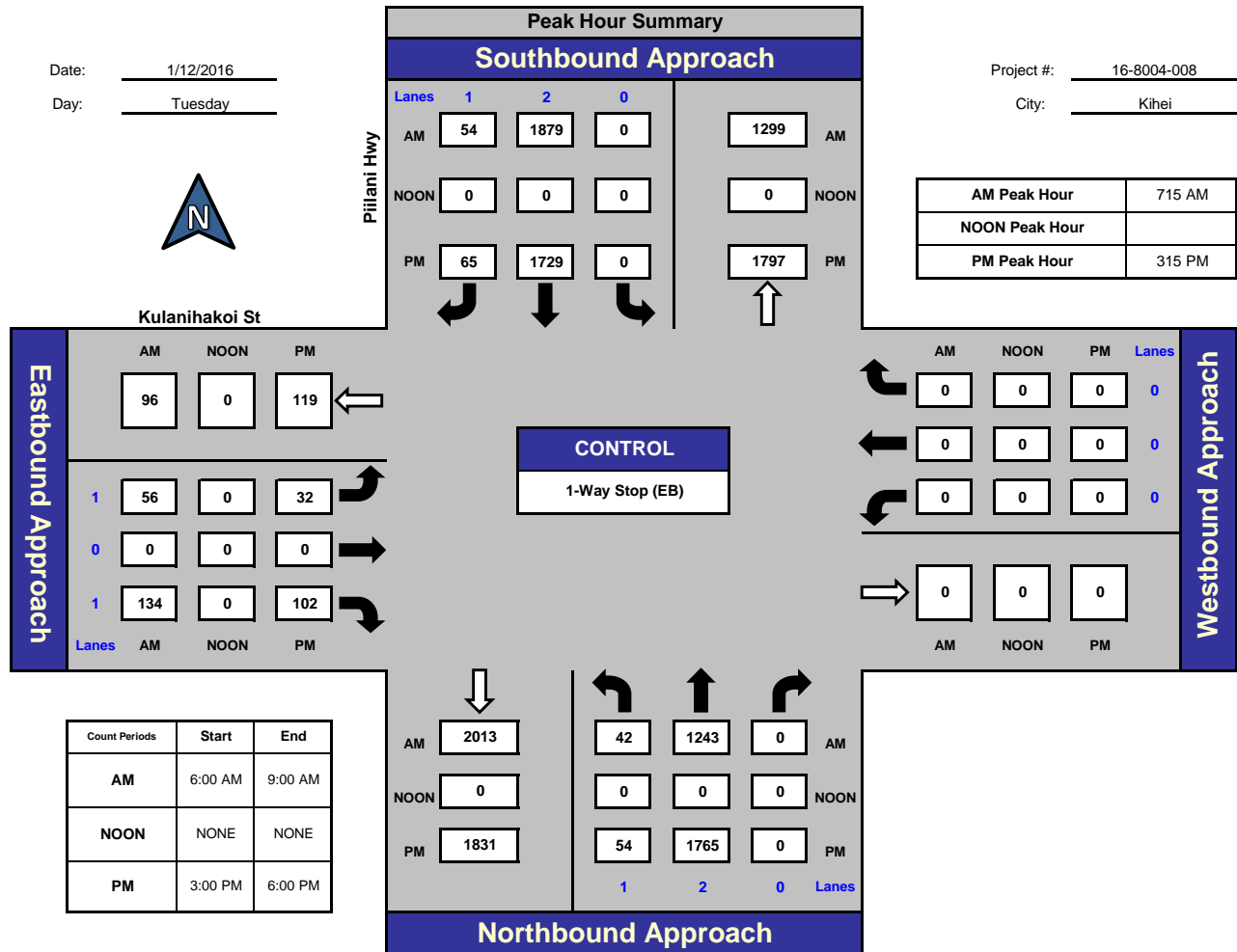


**Kulanihakoi St**

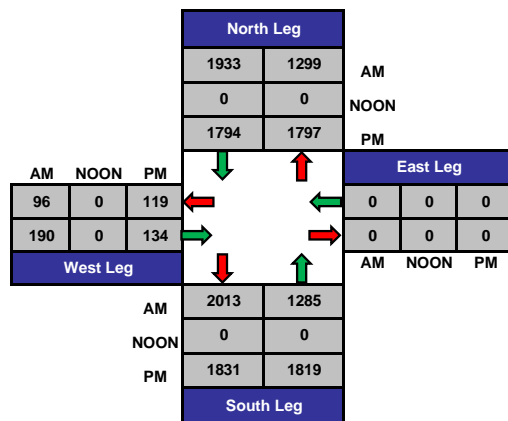
Project #: 16-8004-008

City: Kihei

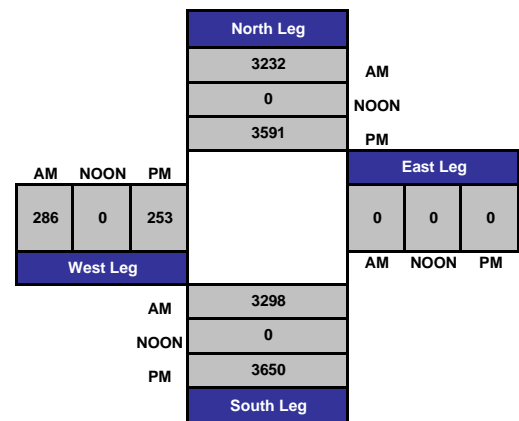
<b>AM Peak Hour</b>	715 AM
<b>NOON Peak Hour</b>	
<b>PM Peak Hour</b>	315 PM



## Total Ins & Outs



### Total Volume Per Leg



# Intersection Turning Movement

Prepared by:  
National Data & Surveying Services

Project ID: 16-8004-008

City: Kihei

TOTALS

Day: Tuesday

Date: 1/12/2016

AM													
NS/EW Streets:	Pillani Hwy			Pillani Hwy			Kulanihakoi St			Kulanihakoi St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 0	ST 2	SR 1	EL 1	ET 0	ER 1	WL 0	WT 0	WR 0	TOTAL
6:00 AM	2	126	0	0	152	0	6	0	7	0	0	0	293
6:15 AM	2	153	0	0	213	1	13	0	11	0	0	0	393
6:30 AM	4	204	0	0	301	2	13	0	11	0	0	0	535
6:45 AM	5	230	0	0	333	4	15	0	19	0	0	0	606
7:00 AM	3	280	0	0	377	6	19	0	26	0	0	0	711
7:15 AM	4	321	0	0	434	7	10	0	24	0	0	0	800
7:30 AM	7	314	0	0	521	5	14	0	29	0	0	0	890
7:45 AM	10	310	0	0	508	20	17	0	35	0	0	0	900
8:00 AM	21	298	0	0	416	22	15	0	46	0	0	0	818
8:15 AM	12	281	0	0	422	15	15	0	39	0	0	0	784
8:30 AM	10	292	0	0	384	11	12	0	26	0	0	0	735
8:45 AM	4	255	0	0	356	15	10	0	33	0	0	0	673
TOTAL VOLUMES :	NL 84	NT 3064	NR 0	SL 0	ST 4417	SR 108	EL 159	ET 0	ER 306	WL 0	WT 0	WR 0	TOTAL 8138
APPROACH %'s :	2.67%	97.33%	0.00%	0.00%	97.61%	2.39%	34.19%	0.00%	65.81%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	42	1243	0	0	1879	54	56	0	134	0	0	0	3408
PEAK HR FACTOR :	0.988			0.915			0.779			0.000			0.947

CONTROL : 1-Way Stop (EB)

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0



# Intersection Turning Movement

Prepared by:  
National Data & Surveying Services

Project ID: 16-8004-008

City: Kihei

**TOTALS**

Day: Tuesday

Date: 1/12/2016

PM														
NS/EW Streets:		Pilihi Hwy			Pilihi Hwy			Kulanihako St			Kulanihako St			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 1	NT 2	NR 0	SL 0	ST 2	SR 1	EL 1	ET 0	ER 1	WL 0	WT 0	WR 0	TOTAL
	3:00 PM	19	421	0	0	393	15	8	0	31	0	0	0	887
	3:15 PM	14	458	0	0	433	13	11	0	24	0	0	0	953
	3:30 PM	9	489	0	0	378	16	7	0	25	0	0	0	924
	3:45 PM	14	398	0	0	463	21	6	0	30	0	0	0	932
	4:00 PM	17	420	0	0	455	15	8	0	23	0	0	0	938
	4:15 PM	17	440	0	0	405	24	14	0	16	0	0	0	916
	4:30 PM	22	461	0	0	423	14	4	0	28	0	0	0	952
	4:45 PM	20	395	0	0	404	18	6	0	22	0	0	0	865
	5:00 PM	16	353	0	0	426	18	10	0	10	0	0	0	833
	5:15 PM	18	363	0	0	419	23	5	0	12	0	0	0	840
	5:30 PM	10	315	0	0	395	22	8	0	16	0	0	0	766
	5:45 PM	14	277	0	0	347	18	11	0	24	0	0	0	691
TOTAL VOLUMES :		NL 190	NT 4790	NR 0	SL 0	ST 4941	SR 217	EL 98	ET 0	ER 261	WL 0	WT 0	WR 0	TOTAL 10497
APPROACH %'s :		3.82%	96.18%	0.00%	0.00%	95.79%	4.21%	27.30%	0.00%	72.70%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :		315 PM												
PEAK HR VOL :		54	1765	0	0	1729	65	32	0	102	0	0	0	3747
PEAK HR FACTOR :		0.913			0.927			0.931			0.000			0.983

CONTROL : 1-Way Stop (EB)

UTURNS			
NB	SB	EB	WB
0		0	
0		0	
0		0	
0		0	
1		0	
0		0	
0		0	
0		0	
1		2	
1		0	
0		0	
0		0	
NB	SB	EB	WB
3	0	2	0

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-008

City: Kihei

Cars

Day: Tuesday

Date: 1/12/2016

AM														
NS/EW Streets:	Pillani Hwy			Pillani Hwy			Kulanihakoi St			Kulanihakoi St				
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND				
LANES:	NL 1	NT 2	NR 0	SL 0	ST 2	SR 1	EL 1	ET 0	ER 1	WL 0	WT 0	WR 0	TOTAL	
6:00 AM	2	125	0	0	146	0	6	0	7	0	0	0	286	
6:15 AM	2	144	0	0	205	1	12	0	11	0	0	0	375	
6:30 AM	4	200	0	0	292	2	13	0	11	0	0	0	522	
6:45 AM	5	224	0	0	322	3	15	0	19	0	0	0	588	
7:00 AM	3	273	0	0	367	6	19	0	26	0	0	0	694	
7:15 AM	4	319	0	0	422	6	10	0	21	0	0	0	782	
7:30 AM	7	307	0	0	512	3	13	0	28	0	0	0	870	
7:45 AM	10	306	0	0	498	20	17	0	35	0	0	0	886	
8:00 AM	21	292	0	0	408	22	15	0	46	0	0	0	804	
8:15 AM	12	275	0	0	410	15	15	0	39	0	0	0	766	
8:30 AM	9	283	0	0	371	11	12	0	26	0	0	0	712	
8:45 AM	4	249	0	0	344	15	10	0	33	0	0	0	655	
TOTAL VOLUMES : APPROACH %'s :	NL 83 2.69%	NT 2997 97.31%	NR 0 0.00%	SL 0 0.00%	ST 4297 97.64%	SR 104 2.36%	EL 157 34.20%	ET 0 0.00%	ER 302 65.80%	WL 0 #DIV/0!	WT 0 #DIV/0!	WR 0 #DIV/0!	TOTAL 7940	
PEAK HR START TIME :	715 AM													
PEAK HR VOL :	42	1224	0	0	1840	51	55	0	130	0	0	0	3342	
PEAK HR FACTOR :	0.980		0.913			0.758			0.000			0.943		

CONTROL : 1-Way Stop (EB)

UTURNS			
NB	SB	EB	WB

NB 0	SB 0	EB 0	WB 0
---------	---------	---------	---------

# Intersection Turning Movement

Prepared by:  
National Data & Surveying Services

Project ID: 16-8004-008

City: Kihei

Cars

Day: Tuesday

Date: 1/12/2016

PM													
NS/EW Streets:	Pilihi Hwy			Pilihi Hwy			Kulanihako St			Kulanihako St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 0	ST 2	SR 1	EL 1	ET 0	ER 1	WL 0	WT 0	WR 0	TOTAL
3:00 PM	19	404	0	0	383	15	8	0	31	0	0	0	860
3:15 PM	14	448	0	0	419	13	11	0	24	0	0	0	929
3:30 PM	9	481	0	0	369	16	7	0	24	0	0	0	906
3:45 PM	14	393	0	0	457	21	6	0	30	0	0	0	921
4:00 PM	17	410	0	0	452	15	8	0	23	0	0	0	925
4:15 PM	17	436	0	0	399	24	14	0	16	0	0	0	906
4:30 PM	22	457	0	0	422	14	4	0	28	0	0	0	947
4:45 PM	20	385	0	0	403	18	6	0	22	0	0	0	854
5:00 PM	16	351	0	0	421	18	10	0	10	0	0	0	826
5:15 PM	18	357	0	0	418	23	5	0	12	0	0	0	833
5:30 PM	10	311	0	0	394	22	8	0	16	0	0	0	761
5:45 PM	14	276	0	0	340	16	11	0	23	0	0	0	680
TOTAL VOLUMES :	NL 190	NT 4709	NR 0	SL 0	ST 4877	SR 215	EL 98	ET 0	ER 259	WL 0	WT 0	WR 0	TOTAL 10348
APPROACH %'s :	3.88%	96.12%	0.00%	0.00%	95.78%	4.22%	27.45%	0.00%	72.55%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	315 PM												
PEAK HR VOL :	54	1732	0	0	1697	65	32	0	101	0	0	0	3681
PEAK HR FACTOR :	0.911			0.922			0.924			0.000			0.991

CONTROL : 1-Way Stop (EB)

UTURNS			
NB	SB	EB	WB
0		0	
0		0	
0		0	
0		0	
1		0	
0		0	
0		0	
1		2	
1		0	
0		0	
0		0	
NB 3	SB 0	EB 2	WB 0

# Intersection Turning Movement

Prepared by:  
National Data & Surveying Services

Project ID: 16-8004-008

2 Axle+ Trucks

Day: Tuesday

City: Kihei

Date: 1/12/2016

AM													
NS/EW Streets:	Pillani Hwy			Pillani Hwy			Kulanihakoi St			Kulanihakoi St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 0	ST 2	SR 1	EL 1	ET 0	ER 1	WL 0	WT 0	WR 0	TOTAL
6:00 AM	0	1	0	0	6	0	0	0	0	0	0	0	7
6:15 AM	0	9	0	0	8	0	1	0	0	0	0	0	18
6:30 AM	0	4	0	0	9	0	0	0	0	0	0	0	13
6:45 AM	0	6	0	0	11	1	0	0	0	0	0	0	18
7:00 AM	0	7	0	0	10	0	0	0	0	0	0	0	17
7:15 AM	0	2	0	0	12	1	0	0	3	0	0	0	18
7:30 AM	0	7	0	0	9	2	1	0	1	0	0	0	20
7:45 AM	0	4	0	0	10	0	0	0	0	0	0	0	14
8:00 AM	0	6	0	0	8	0	0	0	0	0	0	0	14
8:15 AM	0	6	0	0	12	0	0	0	0	0	0	0	18
8:30 AM	1	9	0	0	13	0	0	0	0	0	0	0	23
8:45 AM	0	6	0	0	12	0	0	0	0	0	0	0	18
TOTAL VOLUMES :	NL 1	NT 67	NR 0	SL 0	ST 120	SR 4	EL 2	ET 0	ER 4	WL 0	WT 0	WR 0	TOTAL 198
APPROACH %'s :	1.47%	98.53%	0.00%	0.00%	96.77%	3.23%	33.33%	0.00%	66.67%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	0	19	0	0	39	3	1	0	4	0	0	0	66
PEAK HR FACTOR :	0.679			0.808			0.417			0.000			0.943

CONTROL : 1-Way Stop (EB)

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

# Intersection Turning Movement

Prepared by:  
National Data & Surveying Services

Project ID: 16-8004-008

2 Axle+ Trucks

Day: Tuesday

City: Kihei

Date: 1/12/2016

PM													
NS/EW Streets:	Pilihi Hwy			Pilihi Hwy			Kulanihako St			Kulanihako St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 0	ST 2	SR 1	EL 1	ET 0	ER 1	WL 0	WT 0	WR 0	TOTAL
3:00 PM	0	17	0	0	10	0	0	0	0	0	0	0	27
3:15 PM	0	10	0	0	14	0	0	0	0	0	0	0	24
3:30 PM	0	8	0	0	9	0	0	0	1	0	0	0	18
3:45 PM	0	5	0	0	6	0	0	0	0	0	0	0	11
4:00 PM	0	10	0	0	3	0	0	0	0	0	0	0	13
4:15 PM	0	4	0	0	6	0	0	0	0	0	0	0	10
4:30 PM	0	4	0	0	1	0	0	0	0	0	0	0	5
4:45 PM	0	10	0	0	1	0	0	0	0	0	0	0	11
5:00 PM	0	2	0	0	5	0	0	0	0	0	0	0	7
5:15 PM	0	6	0	0	1	0	0	0	0	0	0	0	7
5:30 PM	0	4	0	0	1	0	0	0	0	0	0	0	5
5:45 PM	0	1	0	0	7	2	0	0	1	0	0	0	11
TOTAL VOLUMES :	NL 0	NT 81	NR 0	SL 0	ST 64	SR 2	EL 0	ET 0	ER 2	WL 0	WT 0	WR 0	TOTAL 149
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	96.97%	3.03%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	315 PM												TOTAL
PEAK HR VOL :	0	33	0	0	32	0	0	0	1	0	0	0	66
PEAK HR FACTOR :	0.825			0.571			0.250			0.000			0.991

CONTROL : 1-Way Stop (EB)

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

# ITM Peak Hour Summary

Prepared by:



National Data & Surveying Services

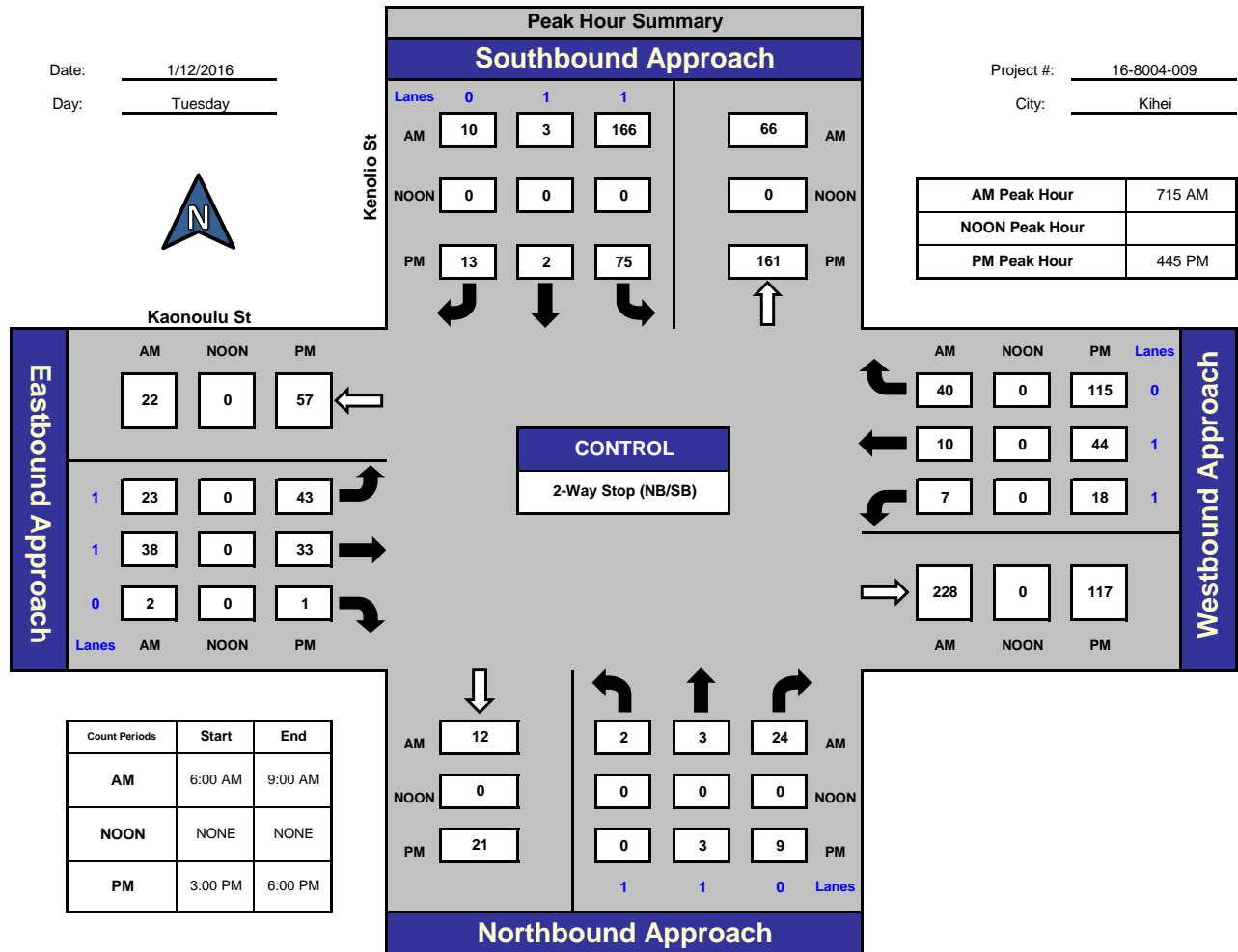
## Kenolio St and Kaonoulu St, Kihei

Date: 1/12/2016

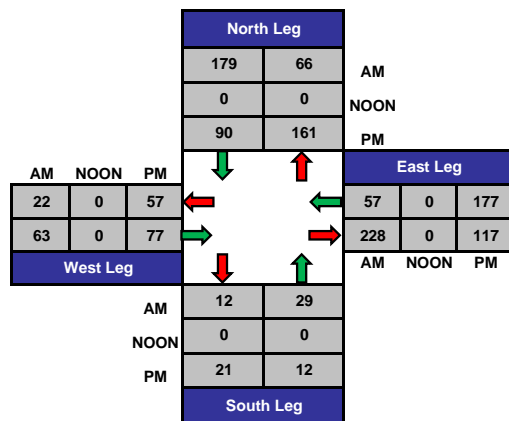
Day: Tuesday

Project #: 16-8004-009

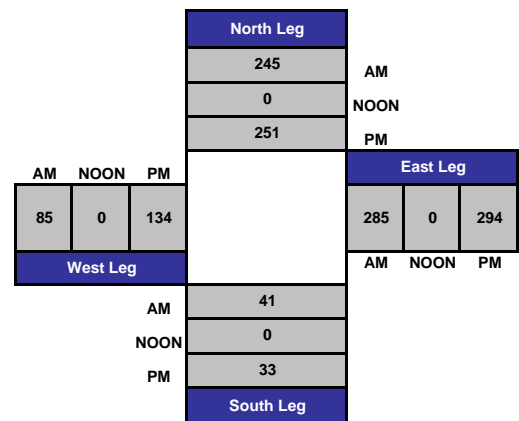
City: Kihei



## Total Ins & Outs



## Total Volume Per Leg



# Intersection Turning Movement

Prepared by:  
National Data & Surveying Services

Project ID: 16-8004-009

City: Kihei

**TOTALS**

Day: Tuesday

Date: 1/12/2016

AM													
NS/EW Streets:	Kenolio St			Kenolio St			Kaonoulu St			Kaonoulu St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 1	NR 0	SL 1	ST 1	SR 0	EL 1	ET 1	ER 0	WL 1	WT 1	WR 0	TOTAL
6:00 AM	0	0	4	7	0	1	0	4	0	1	0	1	18
6:15 AM	1	0	2	13	0	1	0	8	1	1	3	7	37
6:30 AM	0	2	6	30	1	0	4	8	1	0	1	9	62
6:45 AM	0	0	6	27	0	1	1	8	0	0	6	7	56
7:00 AM	0	3	4	31	0	2	2	7	0	2	3	7	61
7:15 AM	0	2	8	37	1	2	5	8	1	1	3	15	83
7:30 AM	0	0	8	47	2	4	5	8	0	1	3	8	86
7:45 AM	1	1	4	43	0	3	6	13	1	2	0	11	85
8:00 AM	1	0	4	39	0	1	7	9	0	3	4	6	74
8:15 AM	1	1	2	24	0	2	2	9	0	2	2	14	59
8:30 AM	0	0	4	20	1	3	2	11	0	1	9	10	61
8:45 AM	0	0	2	22	0	2	2	6	0	2	5	8	49
<b>TOTAL VOLUMES :</b>	NL 4	NT 9	NR 54	SL 340	ST 5	SR 22	EL 36	ET 99	ER 4	WL 16	WT 39	WR 103	TOTAL 731
<b>APPROACH %'s :</b>	5.97%	13.43%	80.60%	92.64%	1.36%	5.99%	25.90%	71.22%	2.88%	10.13%	24.68%	65.19%	
<b>PEAK HR START TIME :</b>	715 AM												<b>TOTAL</b>
<b>PEAK HR VOL :</b>	2	3	24	166	3	10	23	38	2	7	10	40	328
<b>PEAK HR FACTOR :</b>	0.725			0.844			0.788			0.750			0.953

CONTROL : 2-Way Stop (NB/SB)

UTURNS			
NB	SB	EB	WB

NB 0	SB 0	EB 0	WB 0
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Prepared by:  
**National Data & Surveying Services**

**Day:** Tuesday

City: Kihei

**TOTALS**

**Date:** 1/12/2016

PM

UTURNS			
NB	SB	EB	WB

NB 1	SB 0	EB 0	WB 0
---------	---------	---------	---------

PEAK HR START TIME :	445 PM												TOTAL
PEAK HR VOL :	0	3	9	75	2	13	43	33	1	18	44	115	356
PEAK HR FACTOR :	0.600			0.865			0.917			0.851			0.899

**CONTROL : 2-Way Stop (NB/SB)**



# Intersection Turning Movement

Prepared by:  
National Data & Surveying Services

Project ID: 16-8004-009

City: Kihei

Cars

Day: Tuesday

Date: 1/12/2016

NS/EW Streets:

AM

NS/EW Streets:		Kenolio St			Kenolio St			Kaonoulu St			Kaonoulu St			TOTAL
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 1	NT 1	NR 0	SL 1	ST 1	SR 0	EL 1	ET 1	ER 0	WL 1	WT 1	WR 0	
6:00 AM		0	0	4	7	0	1	0	4	0	1	0	1	18
6:15 AM		1	0	2	13	0	1	0	8	1	1	3	7	37
6:30 AM		0	2	6	30	1	0	2	8	0	0	1	9	59
6:45 AM		0	0	6	26	0	1	1	8	0	0	6	7	55
7:00 AM		0	3	4	31	0	2	2	7	0	2	3	7	61
7:15 AM		0	2	8	37	1	2	5	8	1	1	3	15	83
7:30 AM		0	0	7	46	2	4	5	8	0	1	3	7	83
7:45 AM		1	1	4	43	0	3	6	13	1	2	0	11	85
8:00 AM		1	0	4	39	0	1	7	9	0	3	4	6	74
8:15 AM		1	1	2	23	0	2	2	8	0	2	2	14	57
8:30 AM		0	0	4	20	1	3	2	10	0	1	9	10	60
8:45 AM		0	0	2	21	0	2	2	6	0	2	5	8	48
TOTAL VOLUMES :		NL 4	NT 9	NR 53	SL 336	ST 5	SR 22	EL 34	ET 97	ER 3	WL 16	WT 39	WR 102	TOTAL 720
APPROACH %'s :		6.06%	13.64%	80.30%	92.56%	1.38%	6.06%	25.37%	72.39%	2.24%	10.19%	24.84%	64.97%	TOTAL
PEAK HR START TIME :		715 AM												TOTAL
PEAK HR VOL :		2	3	23	165	3	10	23	38	2	7	10	39	325
PEAK HR FACTOR :		0.700			0.856			0.788			0.737			0.956

CONTROL : 2-Way Stop (NB/SB)

UTURNS

NB SB EB WB

NB	SB	EB	WB
0	0	0	0

Prepared by:  
**National Data & Surveying Services**

**Day:** Tuesday

City: Kihei

## Cars

**Date:** 1/12/2016

PM

[illegible]

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-009

2 Axle+ Trucks

Day: Tuesday

City: Kihei

Date: 1/12/2016

AM													
NS/EW Streets:	Kenolio St			Kenolio St			Kaonoulu St			Kaonoulu St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 1	NR 0	SL 1	ST 1	SR 0	EL 1	ET 1	ER 0	WL 1	WT 1	WR 0	TOTAL
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	2	0	1	0	0	0	3
6:45 AM	0	0	0	1	0	0	0	0	0	0	0	0	1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	1	1	0	0	0	0	0	0	0	1	3
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	1	0	0	0	1	0	0	0	0	2
8:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:45 AM	0	0	0	1	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES :	NL 0	NT 0	NR 1	SL 4	ST 0	SR 0	EL 2	ET 2	ER 1	WL 0	WT 0	WR 1	TOTAL 11
APPROACH %'s :	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	40.00%	40.00%	20.00%	0.00%	0.00%	100.00%	
PEAK HR START TIME :	715 AM												TOTAL
PEAK HR VOL :	0	0	1	1	0	0	0	0	0	0	0	1	3
PEAK HR FACTOR :	0.250			0.250			0.000			0.250			0.956

CONTROL : 2-Way Stop (NB/SB)

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-009

City: Kihel

2 Axle+ Trucks

Day: Tuesday

Date: 1/12/2016

PM													
NS/EW Streets:	Kenolio St			Kenolio St			Kaonoulu St			Kaonoulu St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 1	NR 0	SL 1	ST 1	SR 0	EL 1	ET 1	ER 0	WL 1	WT 1	WR 0	TOTAL
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	NL 0	NT 0	NR 0	SL 0	ST 1	SR 0	EL 1	ET 0	ER 0	WL 0	WT 0	WR 0	TOTAL 2
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	100.00%	0.00%	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	445 PM												
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000			0.000			0.000			0.000			0.899

CONTROL : 2-Way Stop (NB/SB)

UTURNS			
NB	SB	EB	WB

NB 0	SB 0	EB 0	WB 0
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# ITM Peak Hour Summary

Prepared by:



National Data & Surveying Services

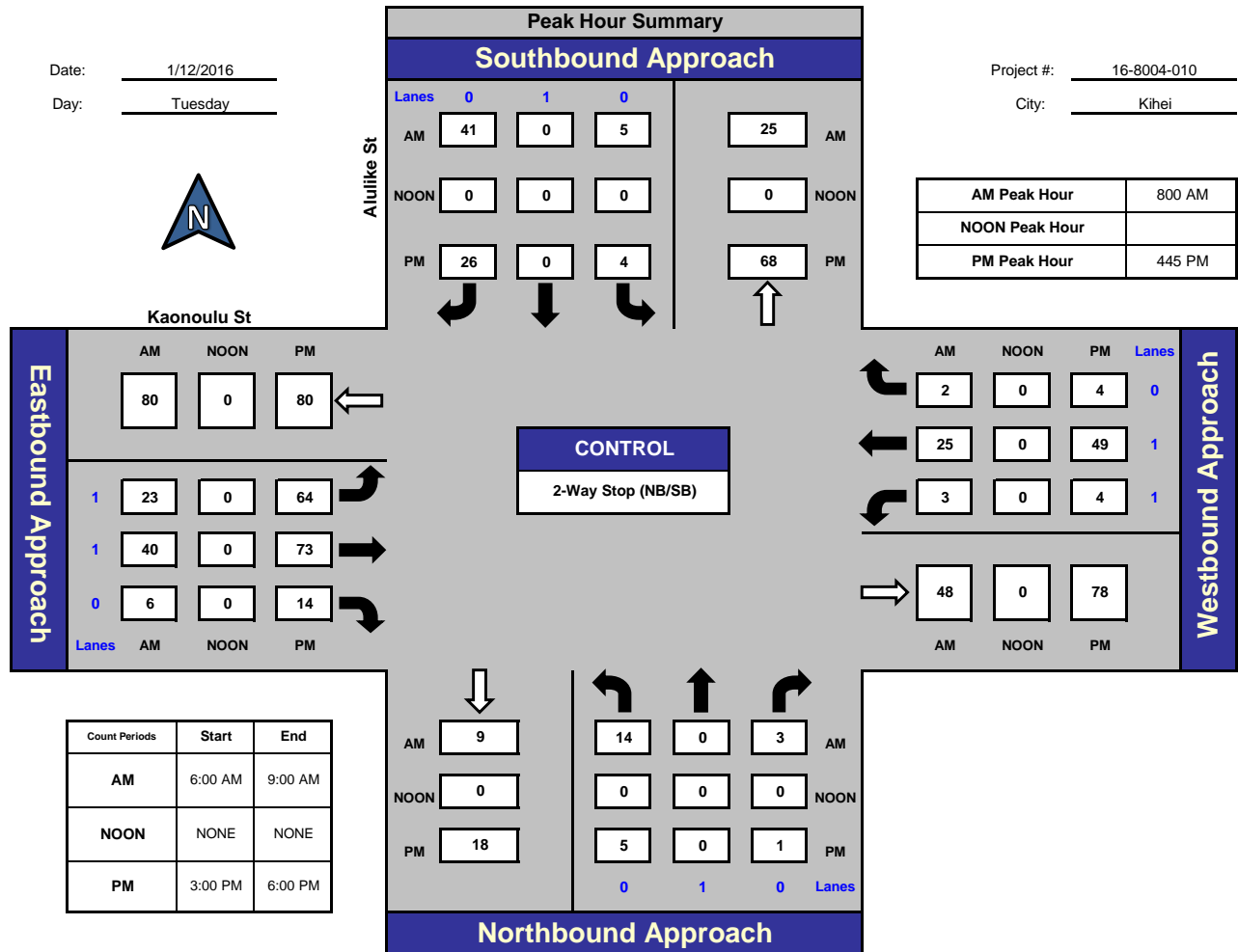
## Alulike St and Kaonoulu St, Kihei

Date: 1/12/2016

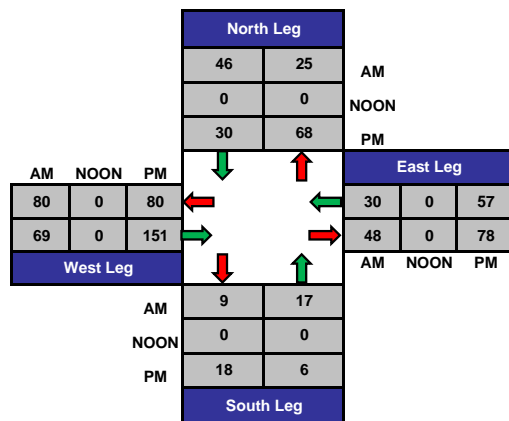
Day: Tuesday

Project #: 16-8004-010

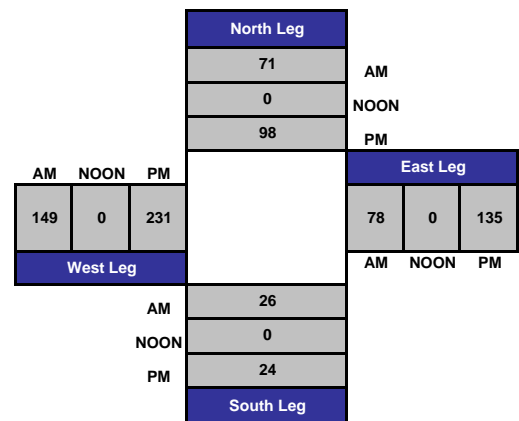
City: Kihei



## Total Ins & Outs



## Total Volume Per Leg



# Intersection Turning Movement

Prepared by:  
National Data & Surveying Services

Project ID: 16-8004-010

City: Kihei

**TOTALS**

Day: Tuesday

Date: 1/12/2016

AM													
NS/EW Streets:	Alulike St			Alulike St			Kaonoulu St			Kaonoulu St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	1	0	0	1	0	1	1	0	1	1	0	
6:00 AM	3	0	0	0	0	2	0	5	1	0	1	0	12
6:15 AM	1	0	3	0	0	0	0	5	0	1	3	1	14
6:30 AM	2	2	1	0	0	9	0	12	0	0	1	0	27
6:45 AM	3	0	2	0	0	9	3	7	2	0	7	0	33
7:00 AM	5	1	2	0	1	8	1	8	2	2	3	0	33
7:15 AM	2	1	0	0	0	9	1	13	0	0	5	0	31
7:30 AM	5	0	1	1	1	11	7	12	1	0	8	0	47
7:45 AM	0	0	1	1	0	5	1	18	2	0	4	0	32
8:00 AM	4	0	0	1	0	5	3	14	2	1	5	0	35
8:15 AM	4	0	1	3	0	13	8	9	2	0	5	0	45
8:30 AM	3	0	2	0	0	12	6	10	0	2	8	2	45
8:45 AM	3	0	0	1	0	11	6	7	2	0	7	0	37
<b>TOTAL VOLUMES :</b>	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
<b>APPROACH %'s :</b>	35	4	13	7	2	94	36	120	14	6	57	3	391
	67.31%	7.69%	25.00%	6.80%	1.94%	91.26%	21.18%	70.59%	8.24%	9.09%	86.36%	4.55%	
<b>PEAK HR START TIME :</b>	800 AM												<b>TOTAL</b>
<b>PEAK HR VOL :</b>	14	0	3	5	0	41	23	40	6	3	25	2	162
<b>PEAK HR FACTOR :</b>	0.850			0.719			0.908			0.625			0.900

CONTROL : 2-Way Stop (NB/SB)

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-010

TOTALS

Day: Tuesday

City: Kihei

Date: 1/12/2016

PM														
NS/EW Streets:	Alulike St			Alulike St			Kaonoulu St			Kaonoulu St				
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND				
LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 1	ET 1	ER 0	WL 1	WT 1	WR 0	TOTAL	
3:00 PM	0	1	0	0	0	8	13	25	4	2	11	1	65	
3:15 PM	3	2	1	0	0	3	13	19	3	0	10	0	54	
3:30 PM	4	1	0	1	0	6	10	11	5	1	12	0	51	
3:45 PM	1	0	1	0	0	13	11	23	5	0	17	0	71	
4:00 PM	3	0	1	1	0	10	12	13	1	0	9	1	51	
4:15 PM	3	2	1	1	0	6	12	21	4	0	3	1	54	
4:30 PM	1	0	1	2	0	8	10	17	2	0	9	0	50	
4:45 PM	2	0	0	0	0	7	14	18	3	2	12	1	59	
5:00 PM	2	0	1	1	0	7	19	19	5	0	9	1	64	
5:15 PM	1	0	0	2	0	5	13	15	4	1	11	1	53	
5:30 PM	0	0	0	1	0	7	18	21	2	1	17	1	68	
5:45 PM	4	0	0	0	0	5	14	8	4	3	8	1	47	
TOTAL VOLUMES : APPROACH %'s :	NL 24 66.67%	NT 6 16.67%	NR 6 16.67%	SL 9 9.57%	ST 0 0.00%	SR 85 90.43%	EL 159 38.69%	ET 210 51.09%	ER 42 10.22%	WL 10 6.85%	WT 128 87.67%	WR 8 5.48%	TOTAL 687	
PEAK HR START TIME :	445 PM													TOTAL
PEAK HR VOL :	5	0	1	4	0	26	64	73	14	4	49	4	244	
PEAK HR FACTOR :	0.500			0.938			0.878			0.750			0.897	

CONTROL : 2-Way Stop (NB/SB)

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-010

City: Kihel

Cars

Day: Tuesday

Date: 1/12/2016

AM													
NS/EW Streets:	Alulike St			Alulike St			Kaonoulu St			Kaonoulu St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	1	0	0	1	0	1	1	0	1	1	0	
6:00 AM	3	0	0	0	0	2	0	5	1	0	1	0	12
6:15 AM	1	0	3	0	0	0	0	5	0	1	3	1	14
6:30 AM	2	1	1	0	0	9	0	9	0	0	1	0	23
6:45 AM	3	0	2	0	0	9	3	7	2	0	7	0	33
7:00 AM	5	1	2	0	1	8	1	8	2	2	3	0	33
7:15 AM	2	1	0	0	0	9	1	13	0	0	5	0	31
7:30 AM	5	0	1	1	0	11	7	12	1	0	7	0	45
7:45 AM	0	0	1	1	0	5	1	18	2	0	4	0	32
8:00 AM	4	0	0	1	0	5	3	13	2	1	5	0	34
8:15 AM	4	0	1	2	0	13	8	9	2	0	5	0	44
8:30 AM	3	0	2	0	0	11	6	9	0	2	8	2	43
8:45 AM	3	0	0	1	0	11	6	7	2	0	7	0	37
TOTAL VOLUMES :	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
APPROACH %'s :	35	3	13	6	1	93	36	115	14	6	56	3	381
	68.63%	5.88%	25.49%	6.00%	1.00%	93.00%	21.82%	69.70%	8.48%	9.23%	86.15%	4.62%	
PEAK HR START TIME :	800 AM												TOTAL
PEAK HR VOL :	14	0	3	4	0	40	23	38	6	3	25	2	158
PEAK HR FACTOR :	0.850			0.733			0.882			0.625			0.898

CONTROL : 2-Way Stop (NB/SB)

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0



# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-010

Cars

Day: Tuesday

City: Kihei

Date: 1/12/2016

PM														
NS/EW Streets:	Alulike St			Alulike St			Kaonoulu St			Kaonoulu St				
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND				
LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 1	ET 1	ER 0	WL 1	WT 1	WR 0	TOTAL	
3:00 PM	0	1	0	0	0	8	13	25	4	2	11	1	65	
3:15 PM	3	2	1	0	0	2	13	19	3	0	10	0	53	
3:30 PM	3	1	0	1	0	6	10	11	5	1	12	0	50	
3:45 PM	1	0	1	0	0	13	11	23	5	0	17	0	71	
4:00 PM	3	0	1	1	0	9	12	12	1	0	9	1	49	
4:15 PM	3	2	1	1	0	6	12	21	4	0	3	1	54	
4:30 PM	1	0	1	2	0	8	10	17	2	0	9	0	50	
4:45 PM	2	0	0	0	0	7	14	18	3	2	12	1	59	
5:00 PM	2	0	1	1	0	7	19	18	5	0	9	1	63	
5:15 PM	1	0	0	2	0	5	13	15	4	1	11	1	53	
5:30 PM	0	0	0	1	0	7	18	21	2	1	17	1	68	
5:45 PM	4	0	0	0	0	5	14	8	4	3	8	1	47	
TOTAL VOLUMES : APPROACH %'s :	NL 23 65.71%	NT 6 17.14%	NR 6 17.14%	SL 9 9.78%	ST 0 0.00%	SR 83 90.22%	EL 159 38.88%	ET 208 50.86%	ER 42 10.27%	WL 10 6.85%	WT 128 87.67%	WR 8 5.48%	TOTAL 682	
PEAK HR START TIME :	445 PM													TOTAL
PEAK HR VOL :	5	0	1	4	0	26	64	72	14	4	49	4	243	
PEAK HR FACTOR :	0.500			0.938			0.893			0.750			0.893	

CONTROL : 2-Way Stop (NB/SB)

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

# Intersection Turning Movement

Prepared by:  
National Data & Surveying Services

Project ID: 16-8004-010

2 Axle+ Trucks

Day: Tuesday

City: Kihei

Date: 1/12/2016

AM													
NS/EW Streets:	Alulike St			Alulike St			Kaonoulu St			Kaonoulu St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	1	0	0	1	0	1	1	0	1	1	0	
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	1	0	0	0	0	0	3	0	0	0	0	4
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	1	0	0	0	0	0	1	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:15 AM	0	0	0	1	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
APPROACH %'s :	0	1	0	1	1	1	0	5	0	0	1	0	10
	0.00%	100.00%	0.00%	33.33%	33.33%	33.33%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR START TIME :	800 AM												TOTAL
PEAK HR VOL :	0	0	0	1	0	1	0	2	0	0	0	0	4
PEAK HR FACTOR :	0.000			0.500			0.500			0.000			0.898

CONTROL : 2-Way Stop (NB/SB)

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

# Intersection Turning Movement

Prepared by:  
National Data & Surveying Services

Project ID: 16-8004-010

2 Axle+ Trucks

Day: Tuesday

City: Kihel

Date: 1/12/2016

PM													
NS/EW Streets:	Alulike St			Alulike St			Kaonoulu St			Kaonoulu St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	1	0	0	1	0	1	1	0	1	1	0	
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	1
3:30 PM	1	0	0	0	0	0	0	0	0	0	0	0	1
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
APPROACH %'s :	1	0	0	0	0	2	0	2	0	0	0	0	5
	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	100.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	445 PM												
PEAK HR VOL :	0	0	0	0	0	0	0	1	0	0	0	0	1
PEAK HR FACTOR :	0.000			0.000			0.250			0.000			0.893

CONTROL : 2-Way Stop (NB/SB)

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

# ITM Peak Hour Summary

Prepared by:



National Data & Surveying Services

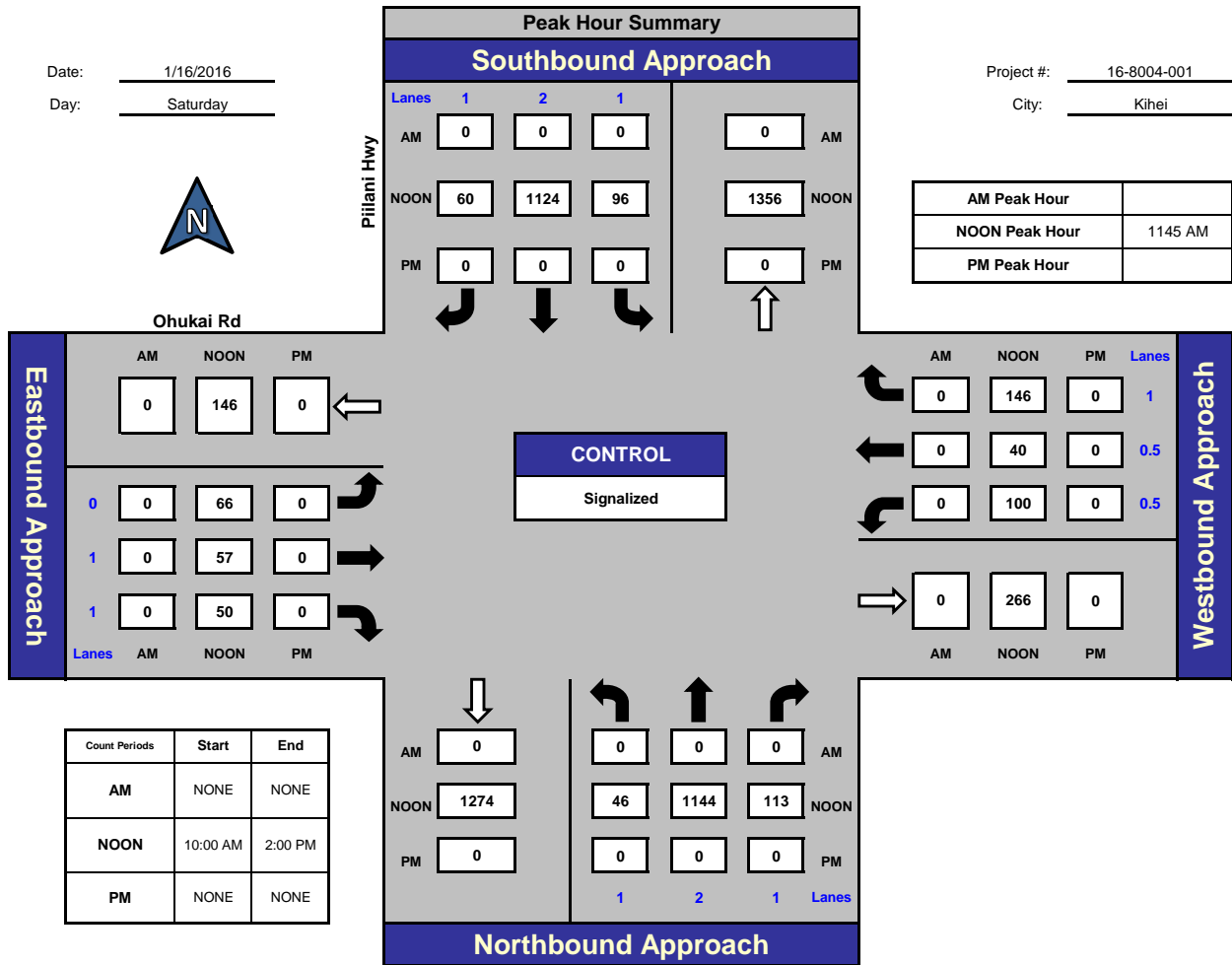
## Piilani Hwy and Ohukai Rd , Kihei

Date: 1/16/2016

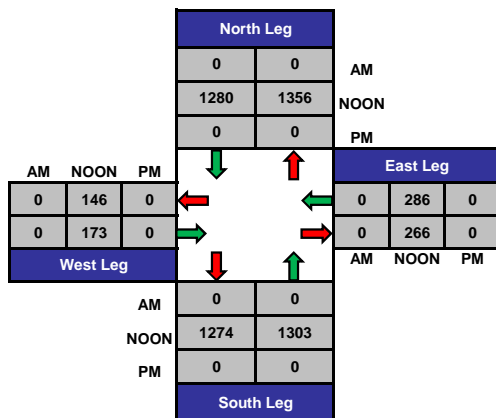
Day: Saturday

Project #: 16-8004-001

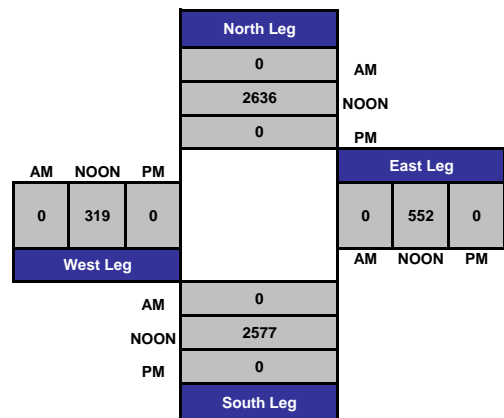
City: Kihei



### Total Ins & Outs



### Total Volume Per Leg



Prepared by:  
**National Data & Surveying Services**

## National Data & Surveying Services

**Day:** Saturday

**Date:** 1/16/2016

**Date:** 1/16/2016

**Date:** 1/16/2016

UTURNS			
NB	SB	EB	WB
0			
0			
0			
0			
1			
0			
0			
0			
1			
0			
0			
0			
0			
0			
0			
0			
0			
NB 2	SB 0	EB 0	WB 0

PEAK HR START TIME :	1145 AM												TOTAL
PEAK HR VOL :	46	1144	113	96	1124	60	66	57	50	100	40	146	3042
PEAK HR FACTOR :	0.910			0.964			0.848			0.883			0.969

Prepared by:  
**National Data & Surveying Services**

## National Data & Surveying Services

**Date:** 1/16/2016

**Date:** 1/16/2016

[illegible]

**CONTROL :** Signalized

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-001

Day: Saturday

City: Kihei

2 Axle+ Trucks

Date: 1/16/2016

NOON															
NS/EW Streets:		Pillani Hwy			Pillani Hwy			Ohukai Rd			Ohukai Rd				
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND				
LANES:		NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 0	ET 1	ER 1	WL 0.5	WT 0.5	WR 1	TOTAL	
10:00 AM		0	0	0	0	3	0	0	0	0	0	0	0	3	
10:15 AM		0	2	0	0	5	0	0	0	0	1	0	0	8	
10:30 AM		0	8	0	0	4	0	0	0	0	0	0	1	13	
10:45 AM		0	3	1	0	6	0	0	0	1	0	0	1	12	
11:00 AM		0	2	0	1	3	0	0	0	0	0	0	0	6	
11:15 AM		0	5	0	0	4	0	0	1	0	0	0	0	10	
11:30 AM		0	2	0	0	4	0	1	0	0	0	0	0	7	
11:45 AM		0	6	0	0	4	0	0	0	0	0	1	0	11	
12:00 PM		0	3	0	0	2	0	0	0	0	0	0	2	7	
12:15 PM		1	7	0	0	3	0	0	0	0	0	0	0	11	
12:30 PM		0	8	2	0	2	0	0	0	0	0	0	1	13	
12:45 PM		0	6	0	1	5	0	0	0	0	1	0	0	13	
1:00 PM		0	3	1	0	4	0	0	0	0	0	0	0	8	
1:15 PM		0	3	0	1	3	0	0	0	0	0	0	2	9	
1:30 PM		0	1	0	0	3	0	0	0	0	0	0	2	6	
1:45 PM		0	1	3	0	1	0	0	0	0	0	0	2	7	
TOTAL VOLUMES :		NL 1	NT 60	NR 7	SL 3	ST 56	SR 0	EL 1	ET 1	ER 1	WL 2	WT 1	WR 11	TOTAL 144	
APPROACH %'s :		1.47%	88.24%	10.29%	5.08%	94.92%	0.00%	33.33%	33.33%	33.33%	14.29%	7.14%	78.57%		
PEAK HR START TIME :		1145 AM													TOTAL
PEAK HR VOL :		1	24	2	0	11	0	0	0	0	0	1	3	42	
PEAK HR FACTOR :		0.675			0.688			0.000			0.500			0.969	

CONTROL : Signalized

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

# ITM Peak Hour Summary

Prepared by:

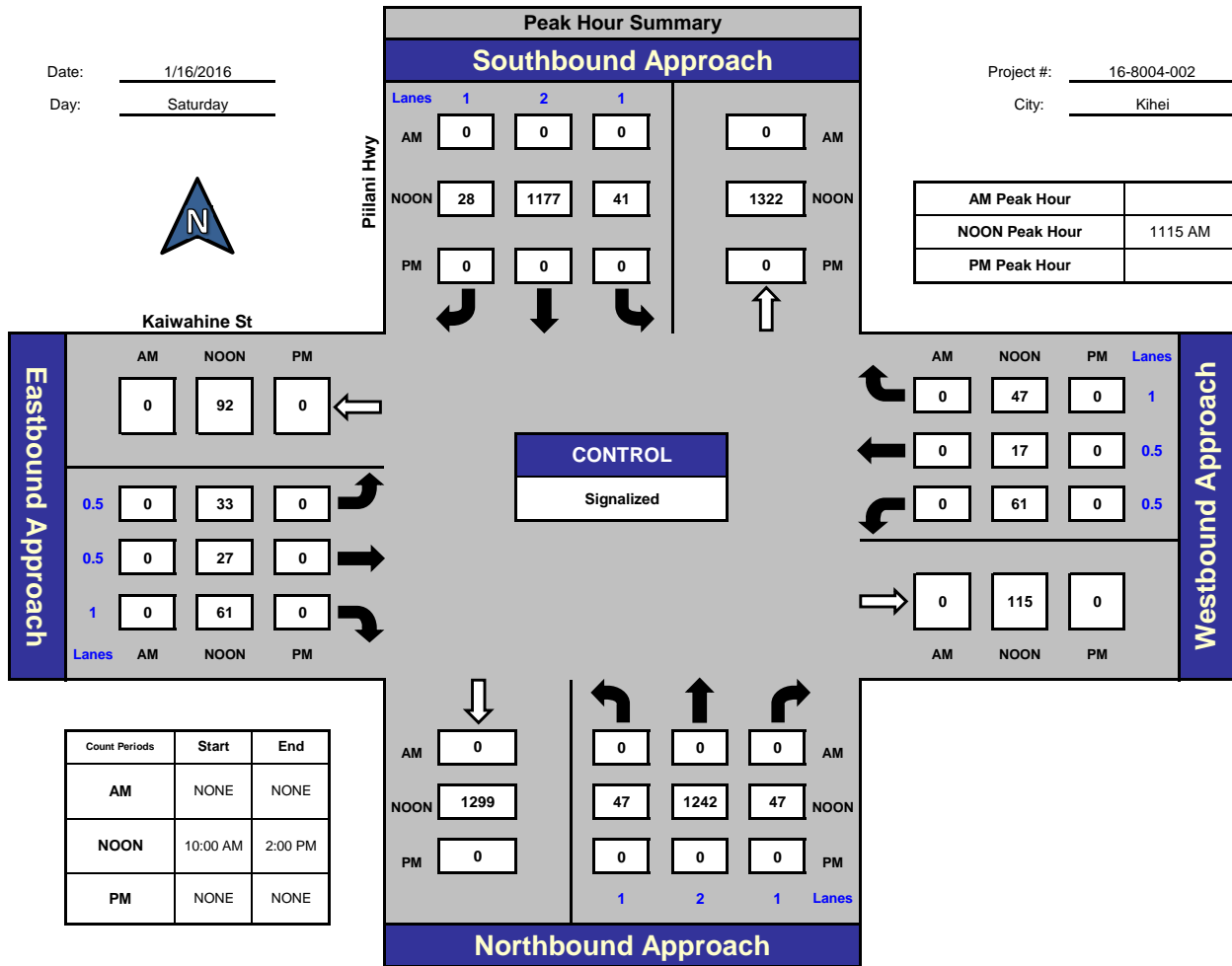


National Data & Surveying Services

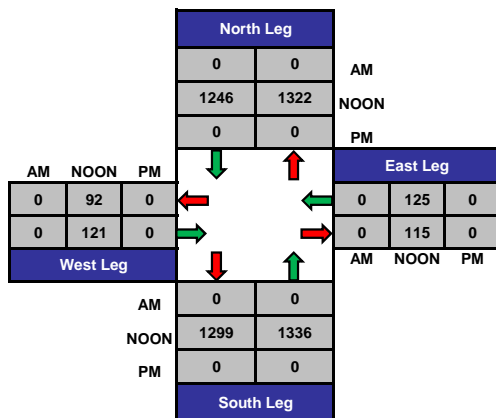
## Piilani Hwy and Kaiwahine St, Kihei

Date: 1/16/2016  
Day: Saturday

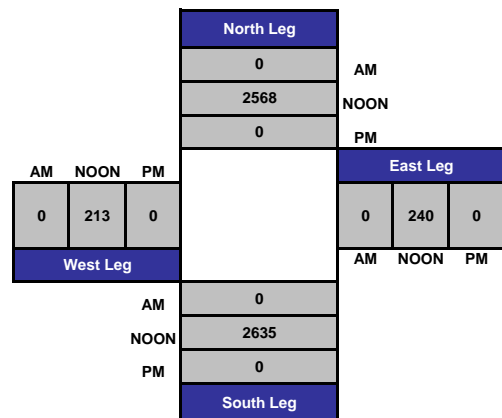
Project #: 16-8004-002  
City: Kihei



### Total Ins & Outs



### Total Volume Per Leg





Prepared by:  
**National Data & Surveying Services**

**Day:** Saturday

**Date:** 1/16/2016

**NOON**

**NOON**

<b>UTURNS</b>			
NB	SB	EB	WB
1			
0			
0			
0			
0			
0			
0			
0			
0			
0			
0			
0			
0			
0			

NB	SB	EB	WB
1	0	0	0

PEAK HR START TIME :	1115 AM												TOTAL
PEAK HR VOL :	47	1242	47	41	1177	28	33	27	61	61	17	47	2828
PEAK HR FACTOR :	0.886			0.922			0.658			0.727			0.978

**CONTROL :** Signalized

Prepared by:  
**National Data & Surveying Services**

## National Data & Surveying Services

**Date:** 1/16/2016

**Date:** 1/16/2016

[illegible]

**CONTROL :** Signalized

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-002

Day: Saturday

City: Kihei

2 Axle+ Trucks

Date: 1/16/2016

NOON														
NS/EW Streets:		Pillani Hwy			Pillani Hwy			Kaiwahine St			Kaiwahine St			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 1	NT 2	NR 1	SL 1	ST 2	SR 1	EL 0.5	ET 0.5	ER 1	WL 0.5	WT 0.5	WR 1	TOTAL
10:00 AM		0	3	0	0	3	0	0	0	0	0	0	0	6
10:15 AM		0	1	0	0	4	0	0	0	1	0	0	0	6
10:30 AM		0	9	0	0	5	1	0	0	0	0	0	0	15
10:45 AM		0	6	0	0	7	0	1	0	0	0	0	0	14
11:00 AM		0	4	0	1	6	0	0	0	0	0	1	0	12
11:15 AM		0	4	0	0	2	0	0	0	0	0	0	0	6
11:30 AM		0	3	0	0	4	0	0	0	0	0	0	0	7
11:45 AM		0	3	0	0	2	0	0	0	0	0	0	0	5
12:00 PM		0	5	0	0	1	0	0	0	0	0	0	0	6
12:15 PM		0	8	0	0	3	0	0	0	1	0	0	0	12
12:30 PM		0	6	0	0	1	0	0	0	0	0	0	0	7
12:45 PM		0	8	0	0	6	1	0	0	0	0	0	1	16
1:00 PM		0	3	0	0	5	1	0	0	1	0	0	0	10
1:15 PM		0	4	0	0	4	0	0	0	0	0	0	0	8
1:30 PM		0	2	0	0	3	0	0	0	0	0	0	0	5
1:45 PM		0	4	0	0	1	0	0	0	0	0	0	0	5
TOTAL VOLUMES :		NL 0.00%	NT 73 100.00%	NR 0 0.00%	SL 1 1.64%	ST 57 93.44%	SR 3 4.92%	EL 1 25.00%	ET 0 0.00%	ER 3 75.00%	WL 0 0.00%	WT 1 50.00%	WR 1 50.00%	TOTAL 140
PEAK HR START TIME :		1115 AM												TOTAL
PEAK HR VOL :		0	15	0	0	9	0	0	0	0	0	0	0	24
PEAK HR FACTOR :		0.750			0.563			0.000			0.000			0.978

CONTROL : Signalized

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

# ITM Peak Hour Summary

Prepared by:



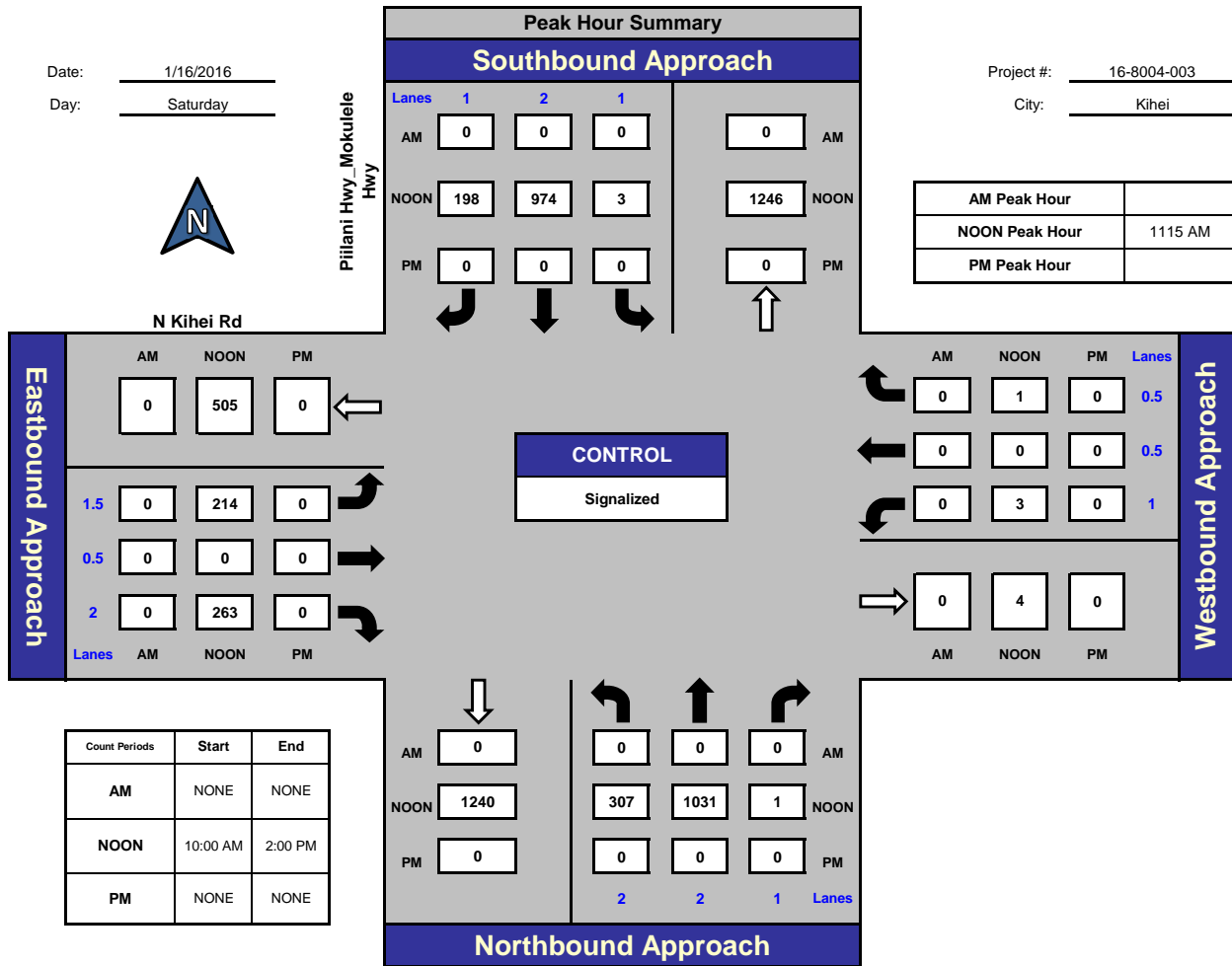
National Data & Surveying Services

## Piilani Hwy Mokulele Hwy and N Kihei Rd , Kihei

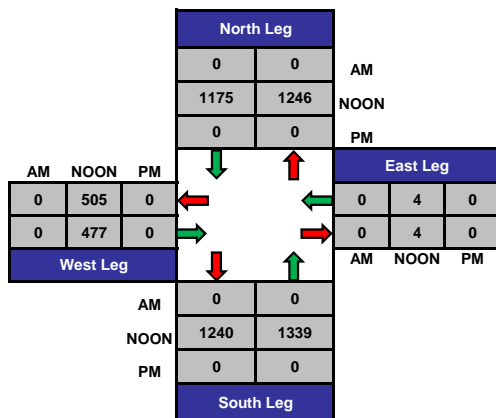
Date: 1/16/2016  
Day: Saturday



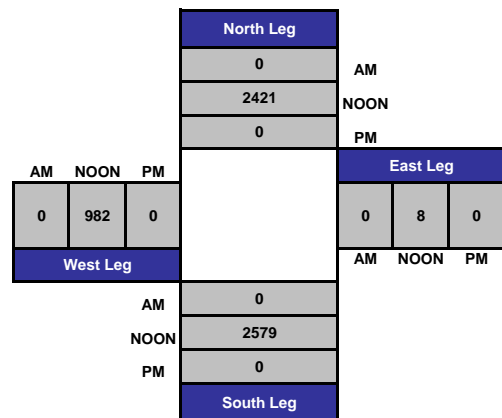
Project #: 16-8004-003  
City: Kihei



### Total Ins & Outs



### Total Volume Per Leg



# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-003

Day: Saturday

City: Kihei

TOTALS

Date: 1/16/2016

NOON													
NS/EW Streets:		Piilani Hwy_Mokulele Hwy			Piilani Hwy_Mokulele Hwy			N Kihei Rd			N Kihei Rd		
NORTHBOUND				SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
LANES:	NL 2	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1.5	ET 0.5	ER 2	WL 1	WT 0.5	WR 0.5	
10:00 AM	80	286	0	0	173	49	56	1	49	5	1	0	700
10:15 AM	68	265	0	2	180	35	46	2	66	0	0	0	664
10:30 AM	62	292	0	0	216	43	43	0	67	1	1	0	725
10:45 AM	69	277	0	0	204	45	51	0	59	0	0	0	705
11:00 AM	65	277	1	0	185	52	51	0	68	0	0	1	700
11:15 AM	72	278	1	1	236	51	52	0	58	0	0	1	750
11:30 AM	66	262	0	0	221	53	63	0	76	1	0	0	742
11:45 AM	90	240	0	2	242	43	45	0	59	1	0	0	722
12:00 PM	79	251	0	0	275	51	54	0	70	1	0	0	781
12:15 PM	78	241	5	0	235	47	37	0	64	1	0	0	708
12:30 PM	81	220	2	1	257	59	40	0	80	0	0	2	742
12:45 PM	86	237	0	0	263	44	39	0	81	1	1	0	752
1:00 PM	70	219	0	0	229	51	53	0	68	0	0	1	691
1:15 PM	60	215	1	1	243	47	51	1	75	2	0	0	696
1:30 PM	65	228	0	0	290	53	41	0	67	0	0	0	744
1:45 PM	55	232	0	1	289	66	37	0	57	0	0	1	738
TOTAL VOLUMES :	1146	4020	10	8	3738	789	759	4	1064	13	3	6	11560
APPROACH %'s :	22.14%	77.67%	0.19%	0.18%	82.43%	17.40%	41.54%	0.22%	58.24%	59.09%	13.64%	27.27%	
PEAK HR START TIME :	1115 AM												
PEAK HR VOL :	307	1031	1	3	974	198	214	0	263	3	0	1	2995
PEAK HR FACTOR :	0.954			0.901			0.858			1.000			0.959

CONTROL : Signalized

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-003

Day: Saturday

City: Kihei

Cars

Date: 1/16/2016

NOON

NS/EW Streets:		Pilihi Hwy_Mokulele Hwy			Pilihi Hwy_Mokulele Hwy			N Kihei Rd			N Kihei Rd			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1.5	ET 0.5	ER 2	WL 1	WT 0.5	WR 0.5	TOTAL	
10:00 AM	80	284	0	0	170	49	55	1	48	5	1	0	693	
10:15 AM	67	264	0	2	178	34	46	2	65	0	0	0	658	
10:30 AM	61	286	0	0	211	42	41	0	66	1	1	0	709	
10:45 AM	68	273	0	0	199	43	51	0	59	0	0	0	693	
11:00 AM	64	277	1	0	179	50	49	0	65	0	0	0	686	
11:15 AM	71	275	1	1	234	51	52	0	58	0	0	1	744	
11:30 AM	64	260	0	0	216	52	62	0	75	1	0	0	730	
11:45 AM	90	234	0	2	241	42	44	0	58	1	0	0	712	
12:00 PM	78	246	0	0	273	51	51	0	70	1	0	0	770	
12:15 PM	76	236	5	0	231	46	36	0	64	1	0	0	695	
12:30 PM	79	214	2	1	257	59	38	0	80	0	0	2	732	
12:45 PM	86	229	0	0	258	43	37	0	79	0	1	0	733	
1:00 PM	70	214	0	0	225	49	50	0	67	0	0	1	676	
1:15 PM	59	211	1	1	241	47	50	1	75	2	0	0	688	
1:30 PM	64	226	0	0	287	53	39	0	66	0	0	0	735	
1:45 PM	55	229	0	1	289	66	34	0	57	0	0	1	732	
TOTAL VOLUMES : APPROACH %'s :		1132 22.20%	3958 77.61%	10 0.20%	8 0.18%	3689 82.45%	777 17.37%	735 41.04%	4 0.22%	1052 58.74%	12 57.14%	3 14.29%	6 28.57%	11386
PEAK HR START TIME :		1115 AM												TOTAL
PEAK HR VOL :		303	1015	1	3	964	196	209	0	261	3	0	1	2956
PEAK HR FACTOR :		0.950			0.897			0.858			1.000			0.960

CONTROL : Signalized

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-003

Day: Saturday

City: Kihei

2 Axle+ Trucks

Date: 1/16/2016

NOON													
NS/EW Streets:	Piilani Hwy_Mokulele Hwy			Piilani Hwy_Mokulele Hwy			N Kihei Rd			N Kihei Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 2	NR 1	SL 1	ST 2	SR 1	EL 1.5	ET 0.5	ER 2	WL 1	WT 0.5	WR 0.5	TOTAL
10:00 AM	0	2	0	0	3	0	1	0	1	0	0	0	7
10:15 AM	1	1	0	0	2	1	0	0	1	0	0	0	6
10:30 AM	1	6	0	0	5	1	2	0	1	0	0	0	16
10:45 AM	1	4	0	0	5	2	0	0	0	0	0	0	12
11:00 AM	1	0	0	0	6	2	2	0	3	0	0	0	14
11:15 AM	1	3	0	0	2	0	0	0	0	0	0	0	6
11:30 AM	2	2	0	0	5	1	1	0	1	0	0	0	12
11:45 AM	0	6	0	0	1	1	1	0	1	0	0	0	10
12:00 PM	1	5	0	0	2	0	3	0	0	0	0	0	11
12:15 PM	2	5	0	0	4	1	1	0	0	0	0	0	13
12:30 PM	2	6	0	0	0	0	2	0	0	0	0	0	10
12:45 PM	0	8	0	0	5	1	2	0	2	1	0	0	19
1:00 PM	0	5	0	0	4	2	3	0	1	0	0	0	15
1:15 PM	1	4	0	0	2	0	1	0	0	0	0	0	8
1:30 PM	1	2	0	0	3	0	2	0	1	0	0	0	9
1:45 PM	0	3	0	0	0	0	3	0	0	0	0	0	6
TOTAL VOLUMES :	14	62	0	0	49	12	24	0	12	1	0	0	174
APPROACH %'s :	18.42%	81.58%	0.00%	0.00%	80.33%	19.67%	66.67%	0.00%	33.33%	100.00%	0.00%	0.00%	
PEAK HR START TIME :	1115 AM												
PEAK HR VOL :	4	16	0	0	10	2	5	0	2	0	0	0	39
PEAK HR FACTOR :	0.833			0.500			0.583			0.000			0.960

CONTROL : Signalized

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

# ITM Peak Hour Summary

Prepared by:



National Data & Surveying Services

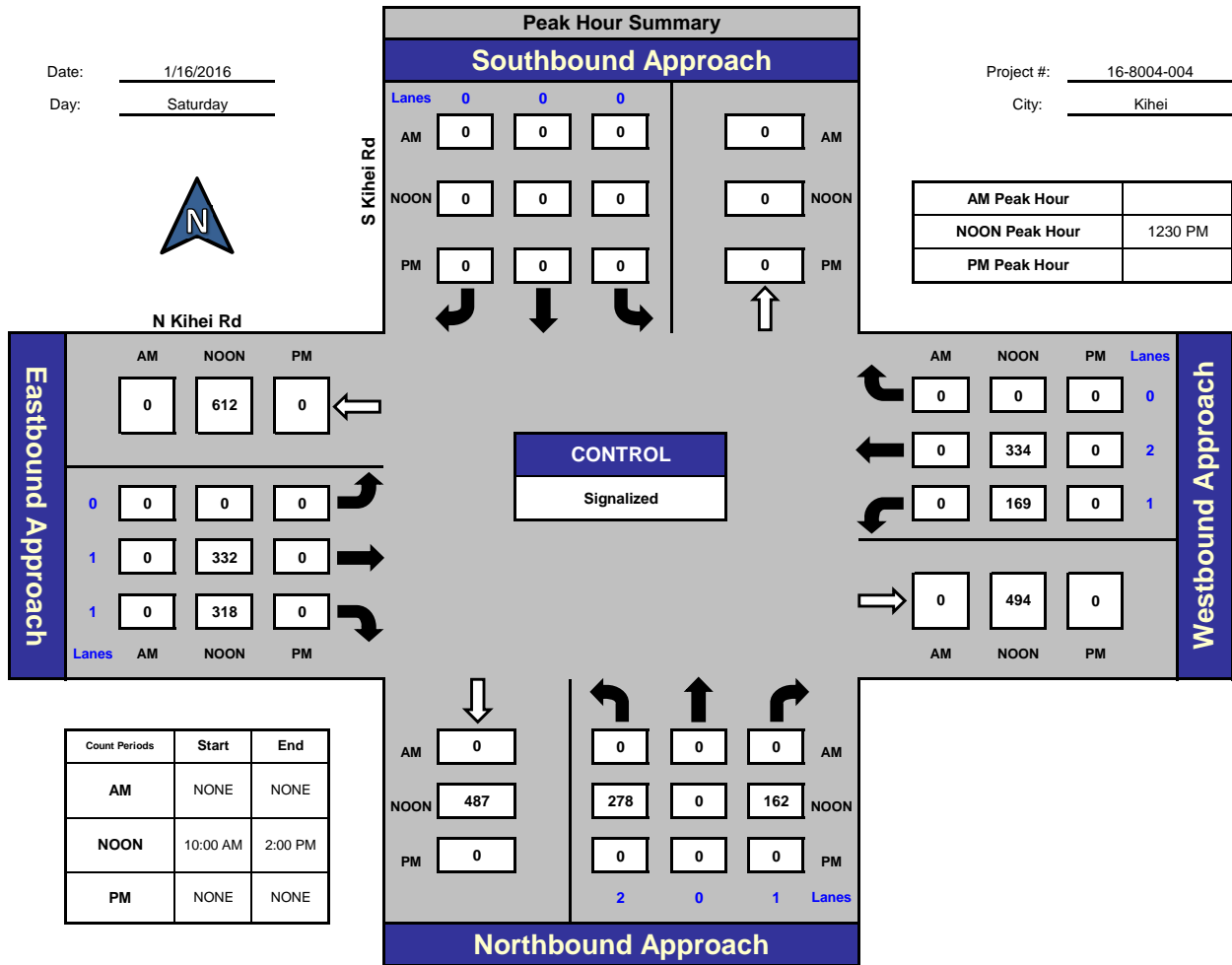
## S Kihei Rd and N Kihei Rd , Kihei

Date: 1/16/2016

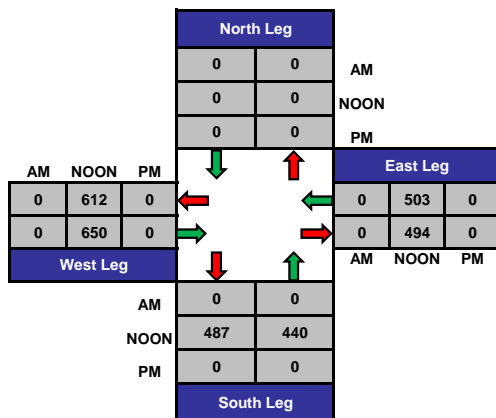
Day: Saturday

Project #: 16-8004-004

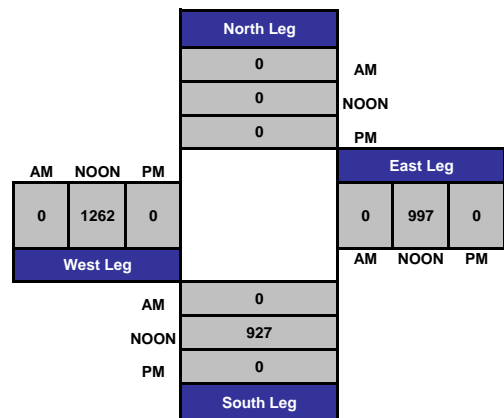
City: Kihei



### Total Ins & Outs



### Total Volume Per Leg





# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-004

Day: Saturday

City: Kihei

TOTALS

Date: 1/16/2016

NOON													
NS/EW Streets:	S Kihei Rd			S Kihei Rd			N Kihei Rd			N Kihei Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 0	NR 1	SL 0	ST 0	SR 0	EL 0	ET 1	ER 1	WL 1	WT 2	WR 0	TOTAL
10:00 AM	63	0	47	0	0	0	0	58	56	41	90	0	355
10:15 AM	76	0	43	0	0	0	0	66	63	33	72	0	353
10:30 AM	73	0	43	0	0	0	0	69	79	32	76	0	372
10:45 AM	62	0	49	0	0	0	0	63	50	36	73	0	333
11:00 AM	72	0	50	0	0	0	0	67	55	37	79	0	360
11:15 AM	75	0	46	0	0	0	0	68	75	42	85	0	391
11:30 AM	68	0	49	0	0	0	0	88	58	45	72	0	380
11:45 AM	55	0	46	0	0	0	0	54	61	39	95	0	350
12:00 PM	48	0	54	0	0	0	0	75	72	39	86	0	374
12:15 PM	57	0	28	0	0	0	0	71	83	47	82	0	368
12:30 PM	78	0	37	0	0	0	0	88	75	44	91	0	413
12:45 PM	63	0	37	0	0	0	0	90	82	45	88	0	405
1:00 PM	78	0	43	0	0	0	0	69	75	44	81	0	390
1:15 PM	59	0	45	0	0	0	0	85	86	36	74	0	385
1:30 PM	58	0	33	0	0	0	0	74	80	42	73	0	360
1:45 PM	61	0	35	0	0	0	0	62	94	58	68	0	378
TOTAL VOLUMES :	1046	0	685	0	0	0	0	1147	1144	660	1285	0	5967
APPROACH %'s :	60.43%	0.00%	39.57%	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	50.07%	49.93%	33.93%	66.07%	0.00%	
PEAK HR START TIME :	1230 PM												
PEAK HR VOL :	278	0	162	0	0	0	0	332	318	169	334	0	1593
PEAK HR FACTOR :	0.909			0.000			0.945			0.931			0.964

CONTROL : Signalized

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-004

Day: Saturday

City: Kihei

Cars

Date: 1/16/2016

NOON

NS/EW Streets:		S Kihei Rd			S Kihei Rd			N Kihei Rd			N Kihei Rd				
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND				
LANES:		NL 2	NT 0	NR 1	SL 0	ST 0	SR 0	EL 0	ET 1	ER 1	WL 1	WT 2	WR 0	TOTAL	
	10:00 AM	63	0	44	0	0	0	0	57	54	41	90	0	349	
	10:15 AM	76	0	43	0	0	0	0	66	62	33	71	0	351	
	10:30 AM	72	0	42	0	0	0	0	68	78	32	74	0	366	
	10:45 AM	62	0	49	0	0	0	0	63	49	34	72	0	329	
	11:00 AM	72	0	49	0	0	0	0	64	54	36	76	0	351	
	11:15 AM	75	0	46	0	0	0	0	68	74	42	84	0	389	
	11:30 AM	66	0	47	0	0	0	0	87	58	45	69	0	372	
	11:45 AM	55	0	45	0	0	0	0	53	61	38	95	0	347	
	12:00 PM	48	0	51	0	0	0	0	74	71	39	86	0	369	
	12:15 PM	57	0	28	0	0	0	0	71	81	47	79	0	363	
	12:30 PM	76	0	35	0	0	0	0	88	74	44	89	0	406	
	12:45 PM	63	0	35	0	0	0	0	87	81	44	88	0	398	
	1:00 PM	78	0	42	0	0	0	0	68	74	43	80	0	385	
	1:15 PM	59	0	45	0	0	0	0	84	86	36	73	0	383	
	1:30 PM	56	0	32	0	0	0	0	72	80	42	72	0	354	
	1:45 PM	61	0	34	0	0	0	0	60	93	57	68	0	373	
TOTAL VOLUMES : APPROACH %'s :		NL 1039 60.90%	NT 0 0.00%	NR 667 39.10%	SL 0 #DIV/0!	ST 0 #DIV/0!	SR 0 #DIV/0!	EL 0 0.00%	ET 1130 50.00%	ER 1130 50.00%	WL 653 34.03%	WT 1266 65.97%	WR 0 0.00%	TOTAL 5885	
PEAK HR START TIME :		1230 PM													TOTAL
PEAK HR VOL :		276	0	157	0	0	0	0	327	315	167	330	0	1572	
PEAK HR FACTOR :		0.902			0.000			0.944			0.934			0.968	

CONTROL : Signalized

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-004

Day: Saturday

City: Kihei

2 Axle+ Trucks

Date: 1/16/2016

NOON													
NS/EW Streets:	S Kihei Rd			S Kihei Rd			N Kihei Rd			N Kihei Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 2	NT 0	NR 1	SL 0	ST 0	SR 0	EL 0	ET 1	ER 1	WL 1	WT 2	WR 0	TOTAL
10:00 AM	0	0	3	0	0	0	0	1	2	0	0	0	6
10:15 AM	0	0	0	0	0	0	0	0	1	0	1	0	2
10:30 AM	1	0	1	0	0	0	0	1	1	0	2	0	6
10:45 AM	0	0	0	0	0	0	0	0	1	2	1	0	4
11:00 AM	0	0	1	0	0	0	0	3	1	1	3	0	9
11:15 AM	0	0	0	0	0	0	0	0	1	0	1	0	2
11:30 AM	2	0	2	0	0	0	0	1	0	0	3	0	8
11:45 AM	0	0	1	0	0	0	0	1	0	1	0	0	3
12:00 PM	0	0	3	0	0	0	0	1	1	0	0	0	5
12:15 PM	0	0	0	0	0	0	0	0	2	0	3	0	5
12:30 PM	2	0	2	0	0	0	0	0	1	0	2	0	7
12:45 PM	0	0	2	0	0	0	0	3	1	1	0	0	7
1:00 PM	0	0	1	0	0	0	0	1	1	1	1	0	5
1:15 PM	0	0	0	0	0	0	0	1	0	0	1	0	2
1:30 PM	2	0	1	0	0	0	0	2	0	0	1	0	6
1:45 PM	0	0	1	0	0	0	0	2	1	1	0	0	5
TOTAL VOLUMES :	7	0	18	0	0	0	0	17	14	7	19	0	82
APPROACH %'s :	28.00%	0.00%	72.00%	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	54.84%	45.16%	26.92%	73.08%	0.00%	
PEAK HR START TIME :	1230 PM												
PEAK HR VOL :	2	0	5	0	0	0	0	5	3	2	4	0	21
PEAK HR FACTOR :	0.438			0.000			0.500			0.750			0.968

CONTROL : Signalized

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

# ITM Peak Hour Summary

Prepared by:



National Data & Surveying Services

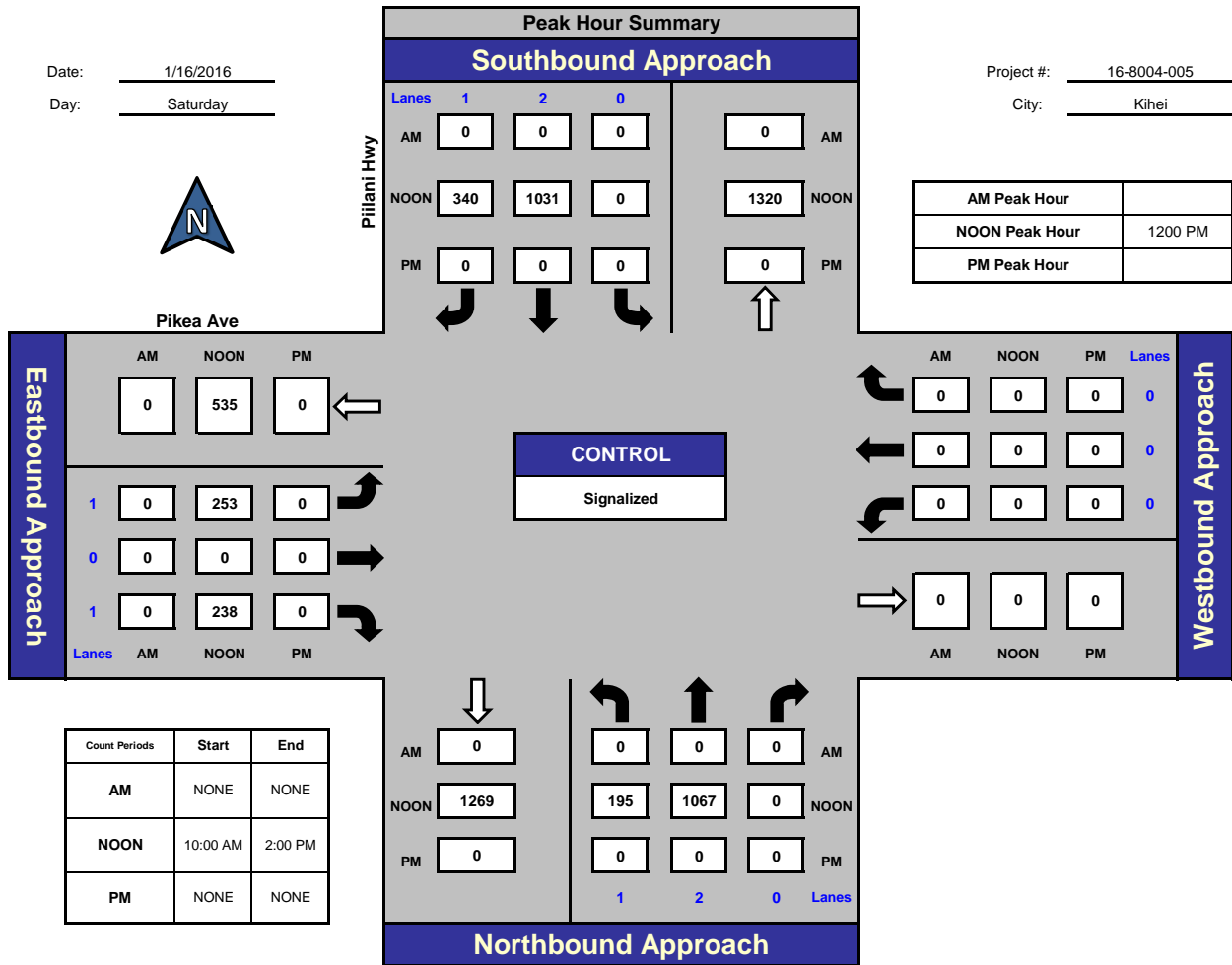
## Piilani Hwy and Pikea Ave , Kihei

Date: 1/16/2016

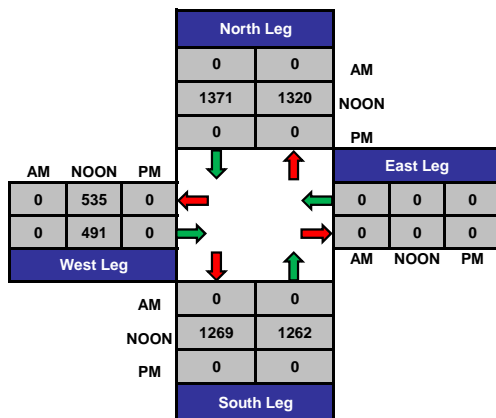
Day: Saturday

Project #: 16-8004-005

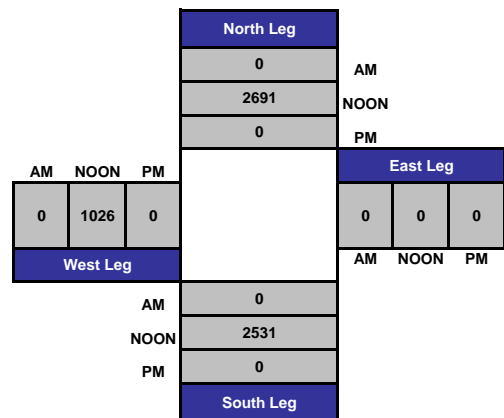
City: Kihei



### Total Ins & Outs



### Total Volume Per Leg



Prepared by:  
**National Data & Surveying Services**

## National Data & Surveying Services

**Date:** 1/16/2016

Pikea Ave

[illegible]

PEAK HR START TIME :	1200 PM											TOTAL	
PEAK HR VOL :	195	1067	0	0	1031	340	253	0	238	0	0	0	3124
PEAK HR FACTOR :	0.968				0.924		0.923				0.000		0.980

**CONTROL :** Signalized

Prepared by:  
**National Data & Surveying Services**

## National Data & Surveying Services

**Date:** 1/16/2016

**Date:** 1/16/2016

[illegible]

**CONTROL :** Signalized

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-005

Day: Saturday

City: Kihei

2 Axle+ Trucks

Date: 1/16/2016

NOON														
NS/EW Streets:		Pillani Hwy			Pillani Hwy			Pikea Ave			Pikea Ave			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 1	NT 2	NR 0	SL 0	ST 2	SR 1	EL 1	ET 0	ER 1	WL 0	WT 0	WR 0	TOTAL
	10:00 AM	0	0	0	0	4	0	0	0	0	0	0	0	4
	10:15 AM	0	2	0	0	4	0	0	0	0	0	0	0	6
	10:30 AM	0	8	0	0	4	0	1	0	0	0	0	0	13
	10:45 AM	0	2	0	0	7	0	0	0	0	0	0	0	9
	11:00 AM	0	2	0	0	0	1	0	0	0	0	0	0	3
	11:15 AM	0	4	0	0	2	0	1	0	0	0	0	0	7
	11:30 AM	0	1	0	0	3	0	0	0	1	0	0	0	5
	11:45 AM	0	3	0	0	3	0	2	0	0	0	0	0	8
	12:00 PM	1	4	0	0	1	0	0	0	0	0	0	0	6
	12:15 PM	0	5	0	0	0	0	3	0	0	0	0	0	8
	12:30 PM	0	5	0	0	0	2	2	0	0	0	0	0	9
	12:45 PM	0	4	0	0	4	0	0	0	0	0	0	0	8
	1:00 PM	1	1	0	0	4	0	1	0	0	0	0	0	7
	1:15 PM	1	2	0	0	1	0	1	0	0	0	0	0	5
	1:30 PM	0	3	0	0	6	0	0	0	0	0	0	0	9
	1:45 PM	0	1	0	0	2	0	0	0	0	0	0	0	3
TOTAL VOLUMES :		NL 3	NT 47	NR 0	SL 0	ST 45	SR 3	EL 11	ET 0	ER 1	WL 0	WT 0	WR 0	TOTAL 110
APPROACH %'s :		6.00%	94.00%	0.00%	0.00%	93.75%	6.25%	91.67%	0.00%	8.33%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :		1200 PM												TOTAL
PEAK HR VOL :		1	18	0	0	5	2	5	0	0	0	0	0	31
PEAK HR FACTOR :		0.950			0.438			0.417			0.000			0.980

CONTROL : Signalized

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

# ITM Peak Hour Summary

Prepared by:

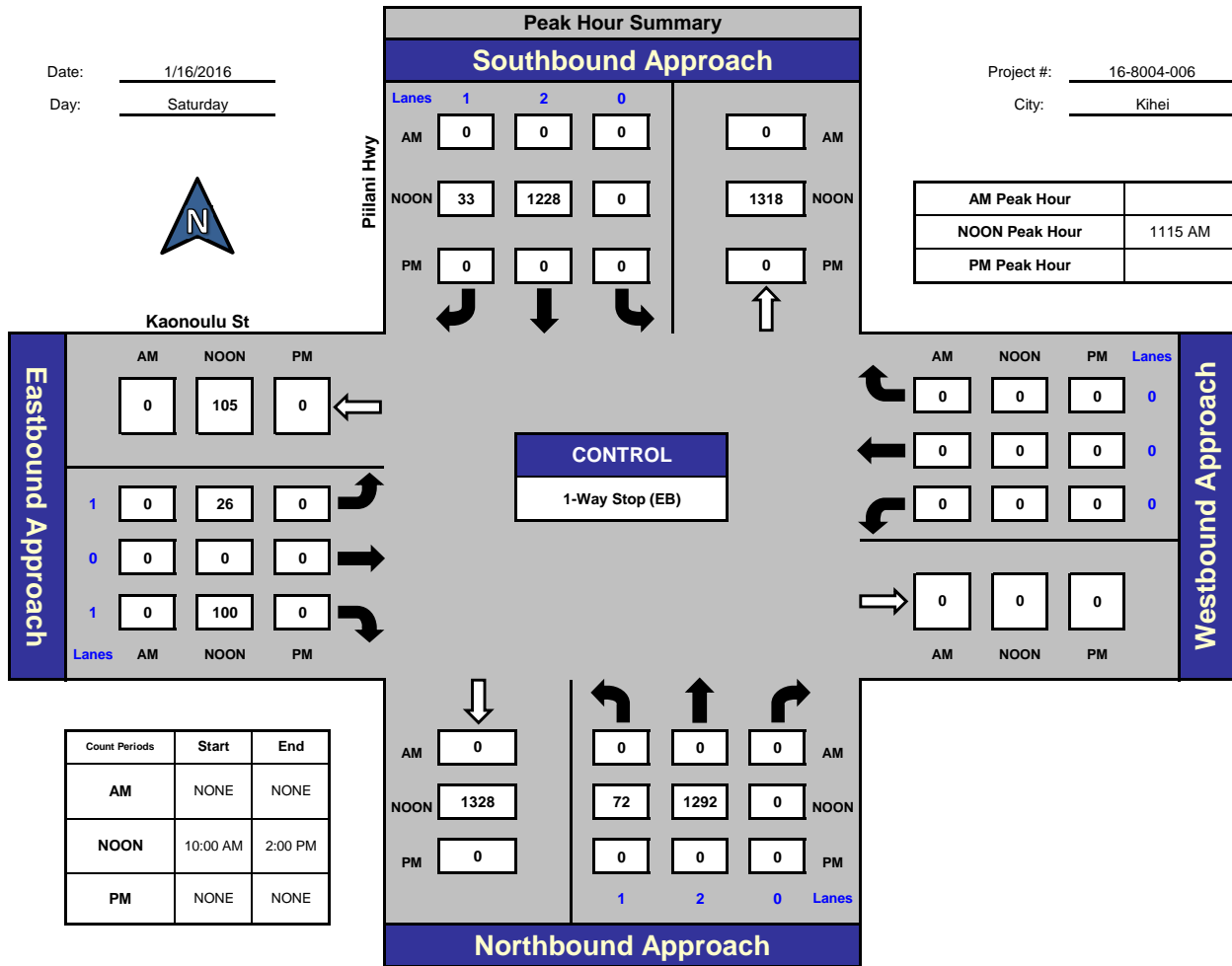


National Data & Surveying Services

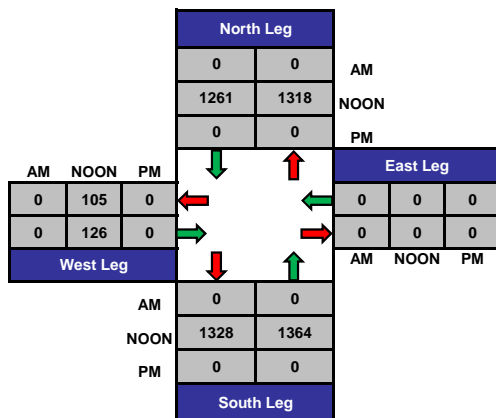
## Piilani Hwy and Kaonoulu St., Kihei

Date: 1/16/2016  
Day: Saturday

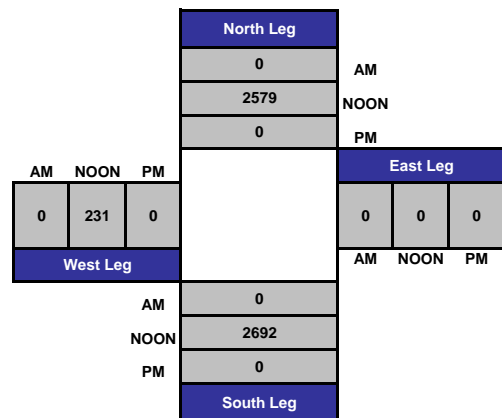
Project #: 16-8004-006  
City: Kihei



### Total Ins & Outs



### Total Volume Per Leg





# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-006

Day: Saturday

City: Kihel

TOTALS

Date: 1/16/2016

NOON														
NS/EW Streets:	Pillani Hwy			Pillani Hwy			Kaonoulu St			Kaonoulu St				
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND				
LANES:	NL 1	NT 2	NR 0	SL 0	ST 2	SR 1	EL 1	ET 0	ER 1	WL 0	WT 0	WR 0	TOTAL	
10:00 AM	11	337	0	0	240	6	10	0	29	0	0	0	633	
10:15 AM	11	318	0	0	294	11	6	0	28	0	0	0	668	
10:30 AM	17	309	0	0	290	9	10	0	30	0	0	0	665	
10:45 AM	13	313	0	0	296	2	8	0	24	0	0	0	656	
11:00 AM	20	353	0	0	248	12	10	0	27	0	0	0	670	
11:15 AM	19	337	0	0	301	14	4	0	34	0	0	0	709	
11:30 AM	17	288	0	0	314	10	10	0	20	0	0	0	659	
11:45 AM	16	339	0	0	309	3	7	0	25	0	0	0	699	
12:00 PM	20	328	0	0	304	6	5	0	21	0	0	0	684	
12:15 PM	14	296	0	0	299	11	2	0	27	0	0	0	649	
12:30 PM	7	295	0	0	324	3	8	0	26	0	0	0	663	
12:45 PM	14	294	0	0	348	10	2	0	27	0	0	0	695	
1:00 PM	19	299	0	0	311	12	6	0	15	0	0	0	662	
1:15 PM	17	302	0	0	320	5	4	0	31	0	0	0	679	
1:30 PM	13	266	0	0	339	10	5	0	27	0	0	0	660	
1:45 PM	16	290	0	0	315	4	5	0	17	0	0	0	647	
TOTAL VOLUMES : APPROACH %'s :	NL 244 4.69%	NT 4964 95.31%	NR 0 0.00%	SL 0 0.00%	ST 4852 97.43%	SR 128 2.57%	EL 102 20.00%	ET 0 0.00%	ER 408 80.00%	WL 0 #DIV/0!	WT 0 #DIV/0!	WR 0 #DIV/0!	TOTAL 10698	
PEAK HR START TIME :	1115 AM													TOTAL
PEAK HR VOL :	72	1292	0	0	1228	33	26	0	100	0	0	0	2751	
PEAK HR FACTOR :	0.958			0.973			0.829			0.000			0.970	

CONTROL : 1-Way Stop (EB)

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-006

Day: Saturday

City: Kihel

Cars

Date: 1/16/2016

NOON

NS/EW Streets:		Pillani Hwy			Pillani Hwy			Kaonoulu St			Kaonoulu St				
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND				
LANES:		NL 1	NT 2	NR 0	SL 0	ST 2	SR 1	EL 1	ET 0	ER 1	WL 0	WT 0	WR 0	TOTAL	
	10:00 AM	11	337	0		236	6	10	0	29	0	0	0	629	
	10:15 AM	11	316	0	0	289	11	6	0	28	0	0	0	661	
	10:30 AM	17	301	0	0	287	9	10	0	30	0	0	0	654	
	10:45 AM	13	307	0	0	290	2	8	0	24	0	0	0	644	
	11:00 AM	20	351	0	0	245	12	10	0	27	0	0	0	665	
	11:15 AM	19	333	0	0	297	14	4	0	34	0	0	0	701	
	11:30 AM	17	286	0	0	310	10	10	0	20	0	0	0	653	
	11:45 AM	15	333	0	0	306	3	7	0	25	0	0	0	689	
	12:00 PM	20	324	0	0	301	6	5	0	21	0	0	0	677	
	12:15 PM	14	288	0	0	297	11	2	0	27	0	0	0	639	
	12:30 PM	7	287	0	0	321	3	8	0	25	0	0	0	651	
	12:45 PM	14	288	0	0	344	10	2	0	27	0	0	0	685	
	1:00 PM	19	296	0	0	306	12	6	0	15	0	0	0	654	
	1:15 PM	17	299	0	0	318	5	4	0	31	0	0	0	674	
	1:30 PM	13	265	0	0	336	10	5	0	27	0	0	0	656	
	1:45 PM	16	287	0	0	312	4	5	0	17	0	0	0	641	
TOTAL VOLUMES : APPROACH %'s :		NL 243 4.73%	NT 4898 95.27%	NR 0 0.00%	SL 0 0.00%	ST 4795 97.40%	SR 128 2.60%	EL 102 20.04%	ET 0 0.00%	ER 407 79.96%	WL 0 #DIV/0!	WT 0 #DIV/0!	WR 0 #DIV/0!	TOTAL 10573	
PEAK HR START TIME :		1115 AM													TOTAL
PEAK HR VOL :		71	1276	0	0	1214	33	26	0	100	0	0	0	2720	
PEAK HR FACTOR :		0.957			0.974			0.829			0.000			0.970	

CONTROL : 1-Way Stop (EB)

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-006

Day: Saturday

City: Kihei

2 Axle+ Trucks

Date: 1/16/2016

NOON														
NS/EW Streets:		Pillani Hwy			Pillani Hwy			Kaonoulu St			Kaonoulu St			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 1	NT 2	NR 0	SL 0	ST 2	SR 1	EL 1	ET 0	ER 1	WL 0	WT 0	WR 0	TOTAL
10:00 AM		0	0	0	0	4	0	0	0	0	0	0	0	4
10:15 AM		0	2	0	0	5	0	0	0	0	0	0	0	7
10:30 AM		0	8	0	0	3	0	0	0	0	0	0	0	11
10:45 AM		0	6	0	0	6	0	0	0	0	0	0	0	12
11:00 AM		0	2	0	0	3	0	0	0	0	0	0	0	5
11:15 AM		0	4	0	0	4	0	0	0	0	0	0	0	8
11:30 AM		0	2	0	0	4	0	0	0	0	0	0	0	6
11:45 AM		1	6	0	0	3	0	0	0	0	0	0	0	10
12:00 PM		0	4	0	0	3	0	0	0	0	0	0	0	7
12:15 PM		0	8	0	0	2	0	0	0	0	0	0	0	10
12:30 PM		0	8	0	0	3	0	0	0	1	0	0	0	12
12:45 PM		0	6	0	0	4	0	0	0	0	0	0	0	10
1:00 PM		0	3	0	0	5	0	0	0	0	0	0	0	8
1:15 PM		0	3	0	0	2	0	0	0	0	0	0	0	5
1:30 PM		0	1	0	0	3	0	0	0	0	0	0	0	4
1:45 PM		0	3	0	0	3	0	0	0	0	0	0	0	6
TOTAL VOLUMES :		NL 1	NT 66	NR 0	SL 0	ST 57	SR 0	EL 0	ET 0	ER 1	WL 0	WT 0	WR 0	TOTAL 125
APPROACH %'s :		1.49%	98.51%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :		1115 AM												TOTAL
PEAK HR VOL :		1	16	0	0	14	0	0	0	0	0	0	0	31
PEAK HR FACTOR :		0.607			0.875			0.000			0.000			0.970

CONTROL : 1-Way Stop (EB)

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

# ITM Peak Hour Summary

Prepared by:

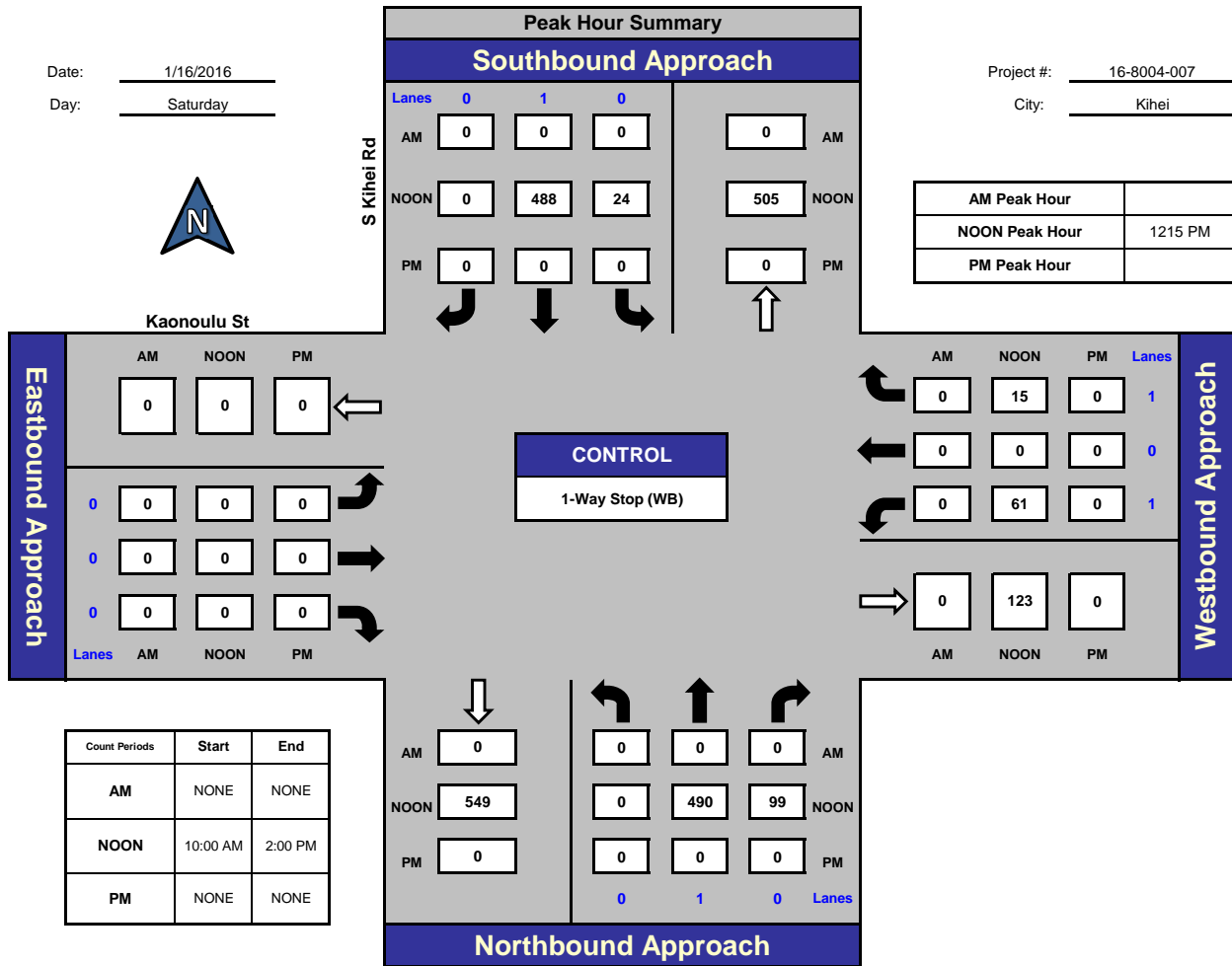


National Data & Surveying Services

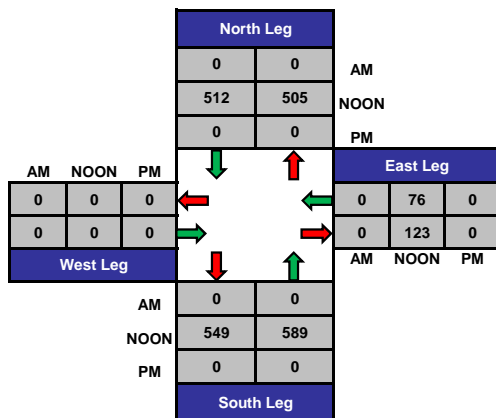
## S Kihei Rd and Kaonoulu St, Kihei

Date: 1/16/2016  
Day: Saturday

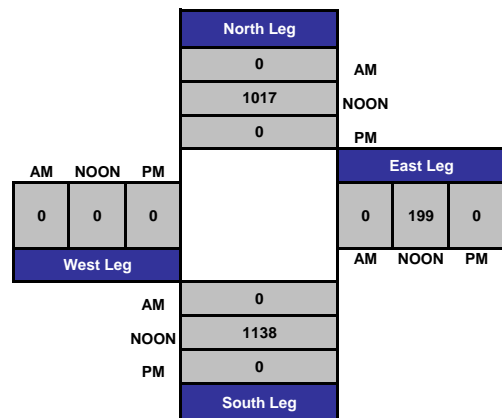
Project #: 16-8004-007  
City: Kihei



### Total Ins & Outs



### Total Volume Per Leg



# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-007

Day: Saturday

City: Kihei

TOTALS

Date: 1/16/2016

NOON													
NS/EW Streets:	S Kihei Rd			S Kihei Rd			Kaonoulu St			Kaonoulu St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 0	ER 0	WL 1	WT 0	WR 1	TOTAL
10:00 AM	0	132	18	5	94	0	0	0	0	18	0	4	271
10:15 AM	0	126	31	5	99	0	0	0	0	16	0	7	284
10:30 AM	0	124	19	7	129	0	0	0	0	23	0	7	309
10:45 AM	0	138	25	6	107	0	0	0	0	14	0	5	295
11:00 AM	0	121	28	2	89	0	0	0	0	15	0	2	257
11:15 AM	0	139	23	5	126	0	0	0	0	17	0	3	313
11:30 AM	0	138	24	6	106	0	0	0	0	14	0	10	298
11:45 AM	0	108	27	5	93	0	0	0	0	12	0	7	252
12:00 PM	0	123	23	0	97	0	0	0	0	12	0	2	257
12:15 PM	0	118	25	6	126	0	0	0	0	18	0	3	296
12:30 PM	0	122	18	8	102	0	0	0	0	18	0	1	269
12:45 PM	0	130	28	6	137	0	0	0	0	12	0	6	319
1:00 PM	0	120	28	4	123	0	0	0	0	13	0	5	293
1:15 PM	0	121	17	4	105	0	0	0	0	11	0	4	262
1:30 PM	0	114	16	5	111	0	0	0	0	12	0	1	259
1:45 PM	0	119	21	2	111	0	0	0	0	14	0	2	269
TOTAL VOLUMES :	NL 0	NT 1993	NR 371	SL 76	ST 1755	SR 0	EL 0	ET 0	ER 0	WL 239	WT 0	WR 69	TOTAL 4503
APPROACH %'s :	0.00%	84.31%	15.69%	4.15%	95.85%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	77.60%	0.00%	22.40%	
PEAK HR START TIME :	1215 PM												
PEAK HR VOL :	0	490	99	24	488	0	0	0	0	61	0	15	1177
PEAK HR FACTOR :	0.932			0.895			0.000			0.905			0.922

CONTROL : 1-Way Stop (WB)

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-007

Day: Saturday

City: Kihei

Cars

Date: 1/16/2016

NOON													
NS/EW Streets:	S Kihei Rd			S Kihei Rd			Kaonoulu St			Kaonoulu St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 0	ER 0	WL 1	WT 0	WR 1	TOTAL
10:00 AM	0	132	18	4	94	0	0	0	0	18	0	4	270
10:15 AM	0	125	31	5	97	0	0	0	0	16	0	7	281
10:30 AM	0	120	19	7	129	0	0	0	0	23	0	7	305
10:45 AM	0	137	25	5	105	0	0	0	0	14	0	5	291
11:00 AM	0	121	28	2	89	0	0	0	0	15	0	2	257
11:15 AM	0	136	23	5	122	0	0	0	0	16	0	3	305
11:30 AM	0	136	24	6	106	0	0	0	0	14	0	10	296
11:45 AM	0	106	27	5	91	0	0	0	0	12	0	7	248
12:00 PM	0	122	23	0	97	0	0	0	0	12	0	2	256
12:15 PM	0	118	25	6	124	0	0	0	0	18	0	3	294
12:30 PM	0	119	18	8	101	0	0	0	0	18	0	1	265
12:45 PM	0	127	28	6	135	0	0	0	0	11	0	6	313
1:00 PM	0	120	28	4	122	0	0	0	0	13	0	5	292
1:15 PM	0	120	17	4	104	0	0	0	0	10	0	4	259
1:30 PM	0	111	16	5	111	0	0	0	0	12	0	1	256
1:45 PM	0	117	21	2	109	0	0	0	0	14	0	2	265
TOTAL VOLUMES :	NL 0	NT 1967	NR 371	SL 74	ST 1736	SR 0	EL 0	ET 0	ER 0	WL 236	WT 0	WR 69	TOTAL 4453
APPROACH %'s :	0.00%	84.13%	15.87%	4.09%	95.91%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	77.38%	0.00%	22.62%	
PEAK HR START TIME :	1215 PM												
PEAK HR VOL :	0	484	99	24	482	0	0	0	0	60	0	15	1164
PEAK HR FACTOR :	0.940			0.897			0.000			0.893			0.930

CONTROL : 1-Way Stop (WB)

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-007

Day: Saturday

City: Kihei

2 Axle+ Trucks

Date: 1/16/2016

NOON													
NS/EW Streets:	S Kihei Rd			S Kihei Rd			Kaonoulu St			Kaonoulu St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 0	ER 0	WL 1	WT 0	WR 1	TOTAL
10:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	1
10:15 AM	0	1	0	0	2	0	0	0	0	0	0	0	3
10:30 AM	0	4	0	0	0	0	0	0	0	0	0	0	4
10:45 AM	0	1	0	1	2	0	0	0	0	0	0	0	4
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	3	0	0	4	0	0	0	0	1	0	0	8
11:30 AM	0	2	0	0	0	0	0	0	0	0	0	0	2
11:45 AM	0	2	0	0	2	0	0	0	0	0	0	0	4
12:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
12:15 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
12:30 PM	0	3	0	0	1	0	0	0	0	0	0	0	4
12:45 PM	0	3	0	0	2	0	0	0	0	1	0	0	6
1:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
1:15 PM	0	1	0	0	1	0	0	0	0	1	0	0	3
1:30 PM	0	3	0	0	0	0	0	0	0	0	0	0	3
1:45 PM	0	2	0	0	2	0	0	0	0	0	0	0	4
TOTAL VOLUMES :	NL 0	NT 26	NR 0	SL 2	ST 19	SR 0	EL 0	ET 0	ER 0	WL 3	WT 0	WR 0	TOTAL 50
APPROACH %'s :	0.00%	100.00%	0.00%	9.52%	90.48%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	100.00%	0.00%	0.00%	
PEAK HR START TIME :	1215 PM												
PEAK HR VOL :	0	6	0	0	6	0	0	0	0	1	0	0	13
PEAK HR FACTOR :	0.500			0.750			0.000			0.250			0.930

CONTROL : 1-Way Stop (WB)

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

# ITM Peak Hour Summary

Prepared by:

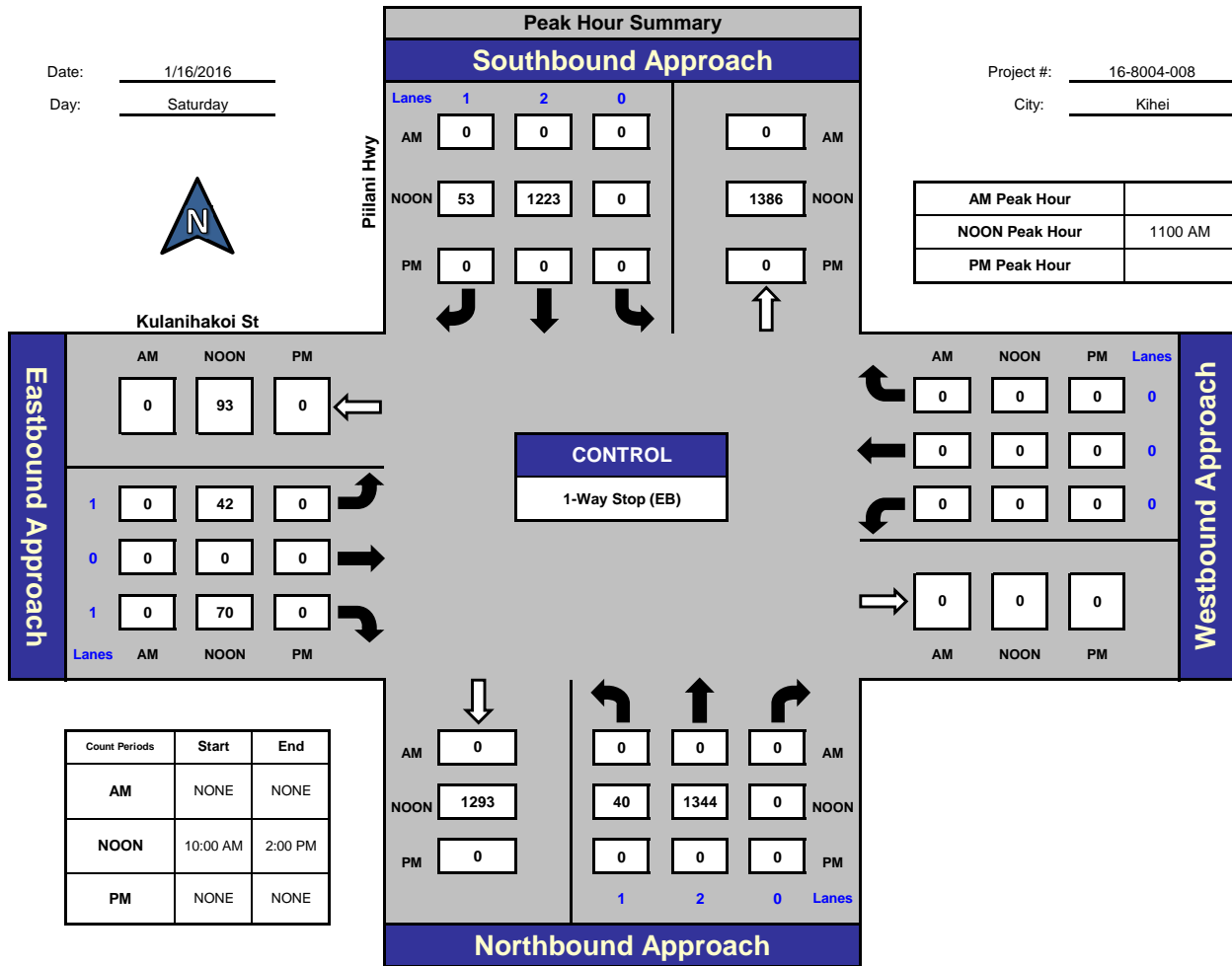


National Data & Surveying Services

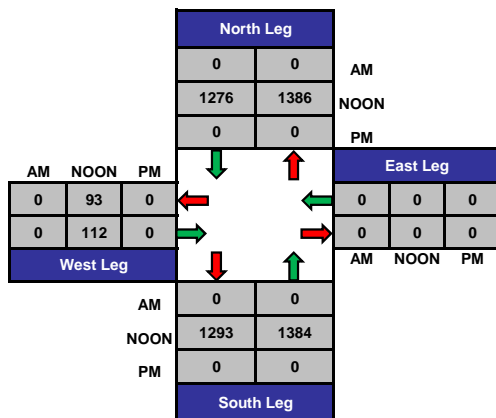
## Piilani Hwy and Kulanihakoi St, Kihei

Date: 1/16/2016  
Day: Saturday

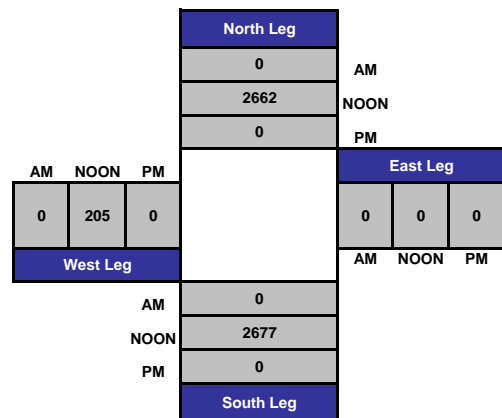
Project #: 16-8004-008  
City: Kihei



### Total Ins & Outs



### Total Volume Per Leg





# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-008

Day: Saturday

City: Kihei

TOTALS

Date: 1/16/2016

NOON

NS/EW Streets:		Pillani Hwy			Pillani Hwy			Kulanihakoi St			Kulanihakoi St			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 1	NT 2	NR 0	SL 0	ST 2	SR 1	EL 1	ET 0	ER 1	WL 0	WT 0	WR 0	TOTAL
10:00 AM		12	347	0	0	270	9	11	0	14	1	0	0	664
10:15 AM		5	318	0	0	294	12	15	0	22	0	0	1	667
10:30 AM		7	315	0	0	318	9	5	0	22	0	0	0	676
10:45 AM		18	316	0	0	303	14	7	0	18	0	0	0	676
11:00 AM		10	372	0	0	259	15	10	0	23	0	0	0	689
11:15 AM		13	344	0	0	325	12	7	0	20	0	0	0	721
11:30 AM		6	277	0	0	311	13	13	0	13	0	0	0	633
11:45 AM		11	351	0	0	328	13	12	0	14	0	0	0	729
12:00 PM		7	313	0	0	307	10	11	0	19	0	0	0	667
12:15 PM		20	313	0	0	324	8	4	0	17	0	0	0	686
12:30 PM		10	297	0	1	332	10	10	0	20	0	0	0	680
12:45 PM		13	306	0	0	369	16	10	0	15	0	0	0	729
1:00 PM		14	302	0	0	312	5	9	0	20	0	0	0	662
1:15 PM		8	307	0	0	340	15	6	0	8	0	0	0	684
1:30 PM		4	276	0	0	349	17	8	0	19	0	0	1	674
1:45 PM		14	298	0	0	319	9	7	0	22	0	0	0	669
TOTAL VOLUMES :		172	5052	0	1	5060	187	145	0	286	1	0	2	10906
APPROACH %'s :		3.29%	96.71%	0.00%	0.02%	96.42%	3.56%	33.64%	0.00%	66.36%	33.33%	0.00%	66.67%	

PEAK HR START TIME :	1100 AM												TOTAL
PEAK HR VOL :	40	1344	0	0	1223	53	42	0	70	0	0	0	2772
PEAK HR FACTOR :	0.906			0.935			0.848			0.000			0.951

CONTROL : 1-Way Stop (EB)

UTURNS			
NB	SB	EB	WB
2	0		
0	0		
0	0		
1	0		
0	0		
1	0		
1	0		
0	0		
0	0		
1	1		
0	0		
0	0		
0	0		
0	0		
0	0		

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-008

Day: Saturday

City: Kihei

Cars

Date: 1/16/2016

NOON

NS/EW Streets:		Pillani Hwy			Pillani Hwy			Kulanihakoi St			Kulanihakoi St			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 0	ST 2	SR 1	EL 1	ET 0	ER 1	WL 0	WT 0	WR 0	TOTAL	
10:00 AM	12	346	0	0	268	9	11	0	14	0	0	0	660	
10:15 AM	5	315	0	0	288	11	15	0	22	0	0	0	656	
10:30 AM	7	308	0	0	313	9	5	0	22	0	0	0	664	
10:45 AM	18	312	0	0	295	14	7	0	18	0	0	0	664	
11:00 AM	10	369	0	0	254	15	10	0	23	0	0	0	681	
11:15 AM	13	339	0	0	320	12	7	0	20	0	0	0	711	
11:30 AM	6	276	0	0	308	13	13	0	13	0	0	0	629	
11:45 AM	10	347	0	0	325	13	12	0	14	0	0	0	721	
12:00 PM	7	307	0	0	307	10	11	0	19	0	0	0	661	
12:15 PM	20	304	0	0	322	8	4	0	17	0	0	0	675	
12:30 PM	10	292	0	1	329	10	10	0	20	0	0	0	672	
12:45 PM	13	301	0	0	365	16	10	0	15	0	0	0	720	
1:00 PM	13	298	0	0	307	5	9	0	20	0	0	0	652	
1:15 PM	8	304	0	0	338	15	6	0	8	0	0	0	679	
1:30 PM	4	275	0	0	346	17	8	0	19	0	0	0	669	
1:45 PM	14	295	0	0	318	9	7	0	22	0	0	0	665	
TOTAL VOLUMES : APPROACH %'s :		NL 170 3.30%	NT 4988 96.70%	NR 0 0.00%	SL 1 0.02%	ST 5003 96.40%	SR 186 3.58%	EL 145 33.64%	ET 0 0.00%	ER 286 66.36%	WL 0 #DIV/0!	WT 0 #DIV/0!	WR 0 #DIV/0!	TOTAL 10779
PEAK HR START TIME :		1100 AM												TOTAL
PEAK HR VOL :		39	1331	0	0	1207	53	42	0	70	0	0	0	2742
PEAK HR FACTOR :		0.904			0.932			0.848			0.000			0.951

CONTROL : 1-Way Stop (EB)

UTURNS			
NB	SB	EB	WB
2	0		
0	0		
0	0		
1	0		
1	0		
0	0		
1	0		
1	0		
0	0		
0	0		
1	1		
0	0		
0	0		
0	0		
0	0		
0	0		
7	1	0	0

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-008

Day: Saturday

City: Kihei

2 Axle+ Trucks

Date: 1/16/2016

NOON													
NS/EW Streets:	Pillani Hwy			Pillani Hwy			Kulanihakoi St			Kulanihakoi St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 2	NR 0	SL 0	ST 2	SR 1	EL 1	ET 0	ER 1	WL 0	WT 0	WR 0	TOTAL
10:00 AM	0	1	0	0	2	0	0	0	0	1	0	0	4
10:15 AM	0	3	0	0	6	1	0	0	0	0	0	1	11
10:30 AM	0	7	0	0	5	0	0	0	0	0	0	0	12
10:45 AM	0	4	0	0	8	0	0	0	0	0	0	0	12
11:00 AM	0	3	0	0	5	0	0	0	0	0	0	0	8
11:15 AM	0	5	0	0	5	0	0	0	0	0	0	0	10
11:30 AM	0	1	0	0	3	0	0	0	0	0	0	0	4
11:45 AM	1	4	0	0	3	0	0	0	0	0	0	0	8
12:00 PM	0	6	0	0	0	0	0	0	0	0	0	0	6
12:15 PM	0	9	0	0	2	0	0	0	0	0	0	0	11
12:30 PM	0	5	0	0	3	0	0	0	0	0	0	0	8
12:45 PM	0	5	0	0	4	0	0	0	0	0	0	0	9
1:00 PM	1	4	0	0	5	0	0	0	0	0	0	0	10
1:15 PM	0	3	0	0	2	0	0	0	0	0	0	0	5
1:30 PM	0	1	0	0	3	0	0	0	0	0	0	1	5
1:45 PM	0	3	0	0	1	0	0	0	0	0	0	0	4
TOTAL VOLUMES :	NL 2	NT 64	NR 0	SL 0	ST 57	SR 1	EL 0	ET 0	ER 0	WL 1	WT 0	WR 2	TOTAL 127
APPROACH %'s :	3.03%	96.97%	0.00%	0.00%	98.28%	1.72%	#DIV/0!	#DIV/0!	#DIV/0!	33.33%	0.00%	66.67%	
PEAK HR START TIME :	1100 AM												
PEAK HR VOL :	1	13	0	0	16	0	0	0	0	0	0	0	30
PEAK HR FACTOR :	0.700			0.800			0.000			0.000			0.951

CONTROL : 1-Way Stop (EB)

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

# ITM Peak Hour Summary

Prepared by:

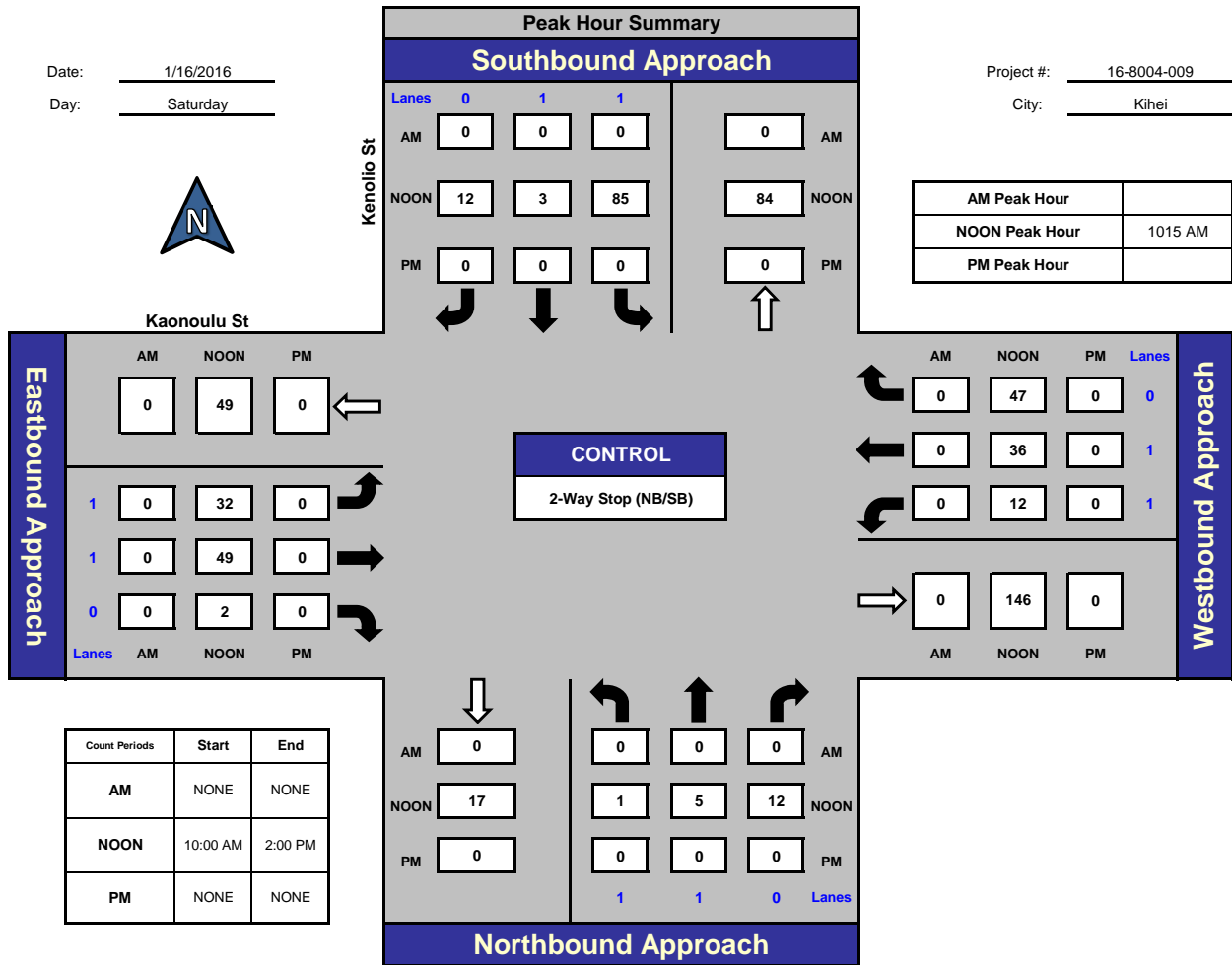


National Data & Surveying Services

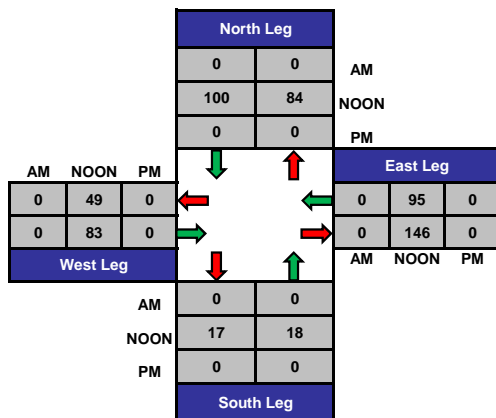
## Kenolio St and Kaonoulu St, Kihei

Date: 1/16/2016  
Day: Saturday

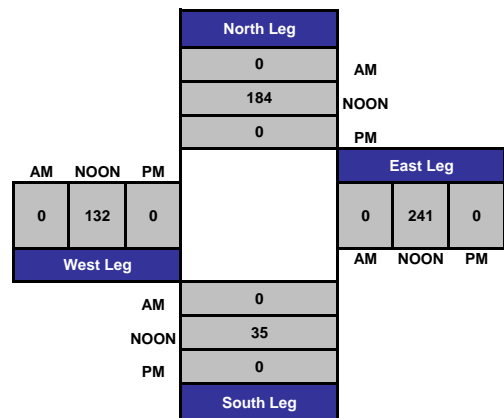
Project #: 16-8004-009  
City: Kihei



### Total Ins & Outs



### Total Volume Per Leg



# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-009

Day: Saturday

City: Kihei

TOTALS

Date: 1/16/2016

NOON

NS/EW Streets:	Kenolio St			Kenolio St			Kaonoulu St			Kaonoulu St			TOTAL	
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND				
LANES:	NL 1	NT 1	NR 0	SL 1	ST 1	SR 0	EL 1	ET 1	ER 0	WL 1	WT 1	WR 0		
10:00 AM	1	1	3	23	1	6	4	17	1	1	4	13	75	
10:15 AM	0	2	5	20	0	4	14	10	0	1	13	8	77	
10:30 AM	0	0	1	22	0	2	4	13	0	6	10	10	68	
10:45 AM	1	3	2	19	2	4	6	12	2	0	5	10	66	
11:00 AM	0	0	4	24	1	2	8	14	0	5	8	19	85	
11:15 AM	0	0	3	19	0	3	6	11	1	2	15	15	75	
11:30 AM	0	1	5	12	1	3	7	10	1	2	9	17	68	
11:45 AM	0	1	5	18	1	4	5	10	1	2	5	10	62	
12:00 PM	0	1	3	13	0	3	12	8	0	2	3	19	64	
12:15 PM	1	1	4	20	0	1	10	11	0	3	7	14	72	
12:30 PM	1	0	2	15	0	2	3	14	2	1	1	7	48	
12:45 PM	1	0	2	23	0	2	12	5	2	3	7	15	72	
1:00 PM	0	1	3	8	1	1	11	6	0	2	9	21	63	
1:15 PM	0	3	5	24	0	3	2	8	0	2	6	15	68	
1:30 PM	1	1	5	22	0	1	1	7	1	3	8	10	60	
1:45 PM	0	1	3	9	0	2	3	8	0	4	5	13	48	
TOTAL VOLUMES : APPROACH %'s :	NL 6 7.79%	NT 16 20.78%	NR 55 71.43%	SL 291 85.34%	ST 7 2.05%	SR 43 12.61%	EL 108 38.16%	ET 164 57.95%	ER 11 3.89%	WL 39 10.54%	WT 115 31.08%	WR 216 58.38%	TOTAL 1071	
PEAK HR START TIME :	1015 AM													TOTAL
PEAK HR VOL :	1	5	12	85	3	12	32	49	2	12	36	47	296	
PEAK HR FACTOR :	0.643			0.926			0.865			0.742			0.871	

CONTROL : 2-Way Stop (NB/SB)

UTURNS			
NB	SB	EB	WB
		0	0
		0	0
		0	0
		0	0
		0	0
		0	0
		1	0
		0	0
		0	1
		0	0
		0	0
		0	0
		0	0
		0	0
		0	0
NB 0	SB 0	EB 1	WB 1

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-009

Day: Saturday

City: Kihei

Cars

Date: 1/16/2016

NOON

NS/EW Streets:		Kenolio St			Kenolio St			Kaonoulu St			Kaonoulu St			
		NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:		NL 1	NT 1	NR 0	SL 1	ST 1	SR 0	EL 1	ET 1	ER 0	WL 1	WT 1	WR 0	TOTAL
	10:00 AM	1	1	3	23	1	6	4	17	1	1	4	13	75
	10:15 AM	0	1	5	20	0	4	14	10	0	1	13	8	76
	10:30 AM	0	0	1	22	0	2	4	13	0	6	10	10	68
	10:45 AM	1	3	2	19	2	4	6	11	2	0	5	10	65
	11:00 AM	0	0	4	24	1	2	8	14	0	5	8	19	85
	11:15 AM	0	0	3	19	0	3	6	11	1	2	15	15	75
	11:30 AM	0	1	5	12	1	3	7	10	1	2	9	17	68
	11:45 AM	0	1	5	18	1	4	5	10	1	2	4	10	61
	12:00 PM	0	1	3	13	0	3	12	8	0	2	3	19	64
	12:15 PM	1	1	4	20	0	1	10	11	0	3	7	14	72
	12:30 PM	1	0	2	15	0	2	3	14	2	1	1	7	48
	12:45 PM	1	0	2	23	0	2	12	5	2	3	7	15	72
	1:00 PM	0	1	3	8	0	1	11	6	0	2	9	21	62
	1:15 PM	0	2	5	24	0	3	2	8	0	2	6	15	67
	1:30 PM	1	1	5	22	0	1	1	7	1	3	8	10	60
	1:45 PM	0	1	3	9	0	2	3	8	0	4	5	13	48
TOTAL VOLUMES : APPROACH %'s :		NL 6 8.00%	NT 14 18.67%	NR 55 73.33%	SL 291 85.59%	ST 6 1.76%	SR 43 12.65%	EL 108 38.30%	ET 163 57.80%	ER 11 3.90%	WL 39 10.57%	WT 114 30.89%	WR 216 58.54%	TOTAL 1066
PEAK HR START TIME :		1015 AM												
PEAK HR VOL :		1	4	12	85	3	12	32	48	2	12	36	47	294
PEAK HR FACTOR :		0.708			0.926			0.854			0.742			0.865

CONTROL : 2-Way Stop (NB/SB)

UTURNS			
NB	SB	EB	WB
		0	0
		0	0
		0	0
		0	0
		0	0
		0	0
		1	0
		0	0
		0	1
		0	0
		0	0
		0	0
		0	0
		0	0
		0	0
NB 0	SB 0	EB 1	WB 1

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-009

Day: Saturday

City: Kihei

2 Axle+ Trucks

Date: 1/16/2016

NOON													
NS/EW Streets:	Kenolio St			Kenolio St			Kaonoulu St			Kaonoulu St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 1	NT 1	NR 0	SL 1	ST 1	SR 0	EL 1	ET 1	ER 0	WL 1	WT 1	WR 0	TOTAL
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
1:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	NL 0	NT 2	NR 0	SL 0	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL 5
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR START TIME :	1015 AM												
PEAK HR VOL :	0	1	0	0	0	0	0	1	0	0	0	0	2
PEAK HR FACTOR :	0.250			0.000			0.250			0.000			0.865

CONTROL : 2-Way Stop (NB/SB)

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

# ITM Peak Hour Summary

Prepared by:

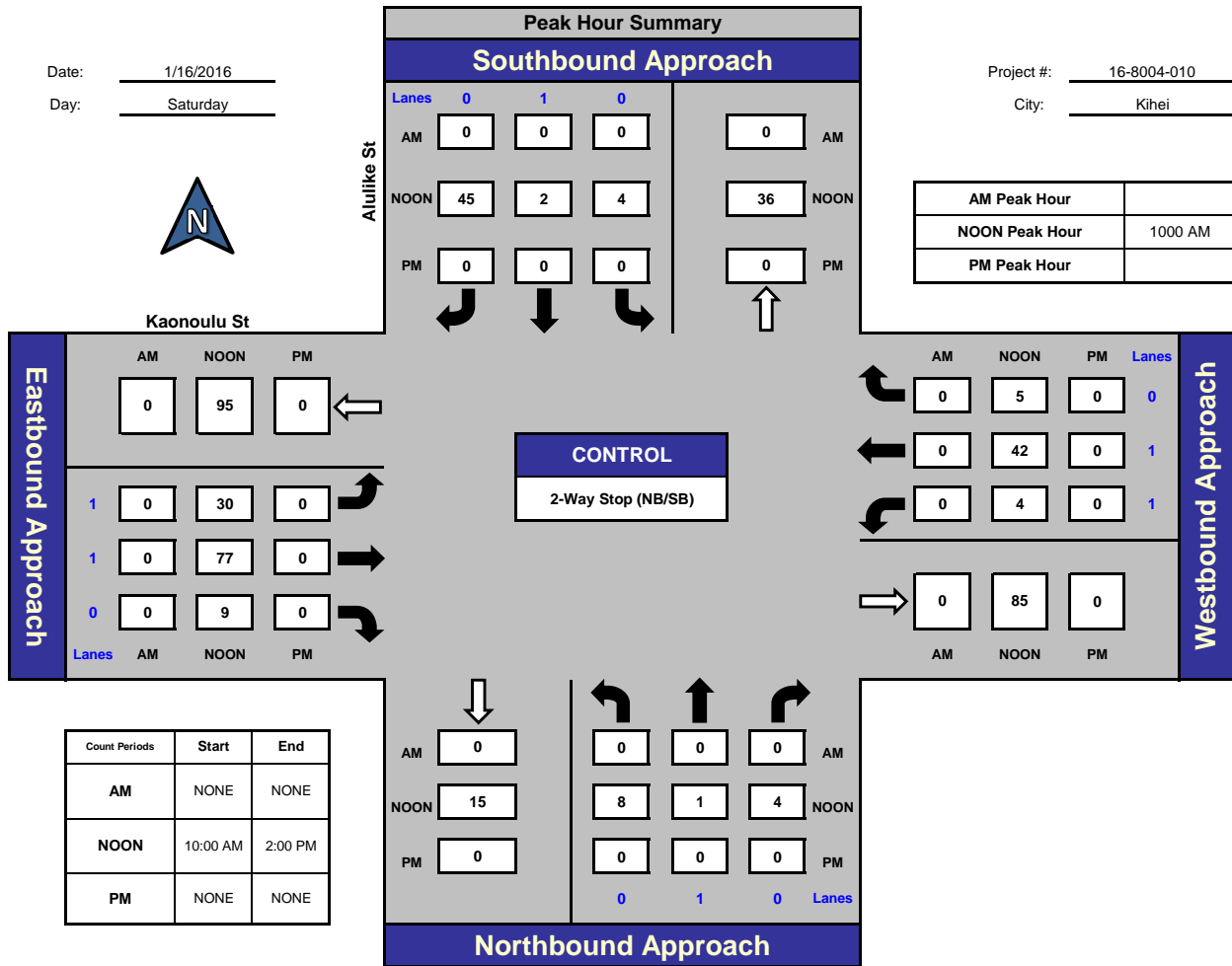


National Data & Surveying Services

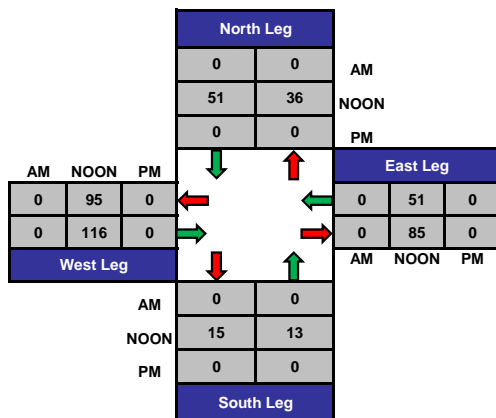
## Alulike St and Kaonoulu St, Kihei

Date: 1/16/2016  
Day: Saturday

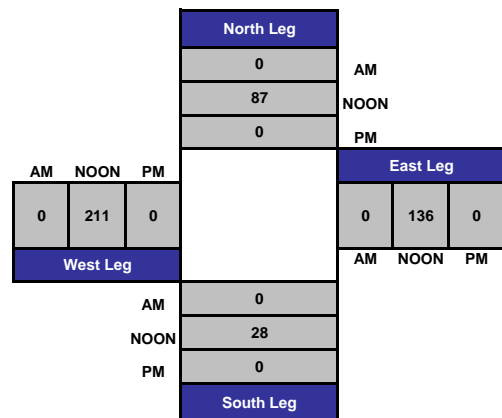
Project #: 16-8004-010  
City: Kihei



### Total Ins & Outs



### Total Volume Per Leg





Prepared by:  
**National Data & Surveying Services**

## National Data & Surveying Services

**Day:** Saturday

**Date:** 1/16/2016

**Date:** 1/16/2016

**Date:** 1/16/2016

[illegible]

NB 0	SB 0	EB 1	WB 0
---------	---------	---------	---------

**CONTROL : 2-Way Stop (NB/SB)**

Prepared by:  
**National Data & Surveying Services**

## National Data & Surveying Services

**Date:** 1/16/2016

WESTBOUND

[illegible]

**CONTROL : 2-Way Stop (NB/SB)**

# Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 16-8004-010

Day: Saturday

City: Kihei

2 Axle+ Trucks

Date: 1/16/2016

NOON													
NS/EW Streets:	Alulike St			Alulike St			Kaonoulu St			Kaonoulu St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 1	ET 1	ER 0	WL 1	WT 1	WR 0	TOTAL
10:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	1
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	1
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	NL 0	NT 0	NR 0	SL 0	ST 0	SR 1	EL 0	ET 1	ER 1	WL 0	WT 1	WR 0	TOTAL 4
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	0.00%	100.00%	0.00%	50.00%	50.00%	0.00%	100.00%	0.00%	
PEAK HR START TIME :	1000 AM												
PEAK HR VOL :	0	0	0	0	0	0	0	1	1	0	0	0	2
PEAK HR FACTOR :	0.000			0.000			0.500			0.000			0.895

CONTROL : 2-Way Stop (NB/SB)

UTURNS			
NB	SB	EB	WB

NB	SB	EB	WB
0	0	0	0

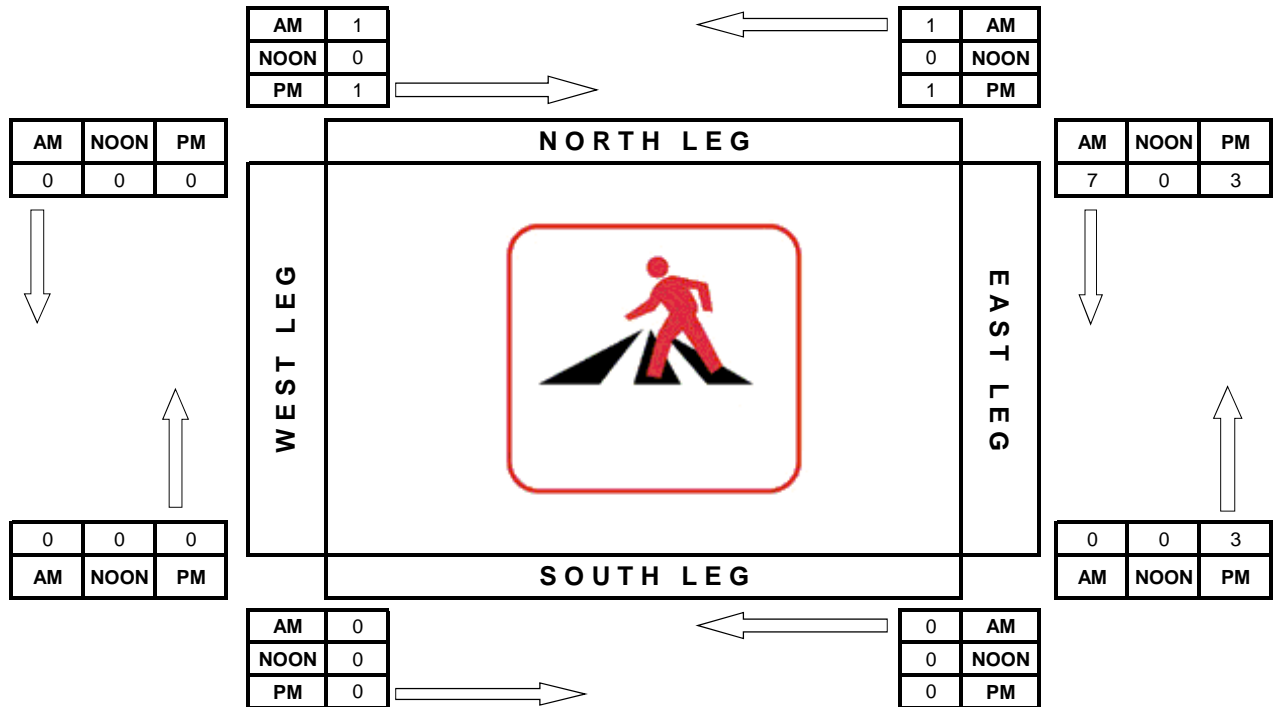
PREPARED BY NATIONAL DATA & SURVEYING SERVICES

Pedestrian Count Peak Hour

PROJECT#: 16-8004-001  
 N/S Street: Piilani Hwy  
 E/W Street: Ohukai Rd  
 DATE: 1/12/2016  
 CITY: Kihei

DAY: Tuesday

	Start:	End:
AM	6:00	9:00
NOON		
PM	15:00	18:00



PREPARED BY NATIONAL DATA & SURVEYING SERVICES

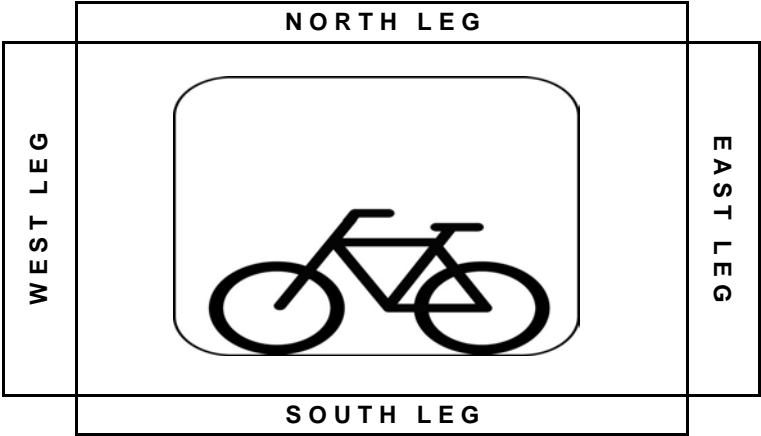
Bicycle Count Peak Hour

PROJECT#: 16-8004-001  
N/S Street: Piilani Hwy  
E/W Street: Ohukai Rd  
DATE: 1/12/2016  
CITY: Kihei

DAY: Tuesday

	Start:	End:
AM	6:00	9:00
NOON		
PM	15:00	18:00

AM	0	0	1
NOON	0	0	0
PM	1	3	1



AM	NOON	PM
0	0	0
3	0	4
0	0	0



AM	NOON	PM
0	0	0
6	0	1
0	0	0



AM	0	0	0
NOON	0	0	0
PM	0	0	1



# PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 16-8004-001  
N/S Street: Piilani Hwy  
E/W Street: Ohukai Rd  
DATE: 1/12/2016  
CITY: Kihei

DAY: Tuesday

## A M

### PEDESTRIANS

T I M E	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
6:00 AM	0	0	0	0	0	1	0	0
6:15 AM	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	1	0	0	0
6:45 AM	0	0	0	0	0	6	0	0
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	1	0	0
7:30 AM	1	1	0	0	0	0	0	0
7:45 AM	0	0	0	0	2	0	0	0
8:00 AM	0	0	0	0	1	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	1	1	0	0
8:45 AM	0	0	0	0	1	0	0	0
<b>TOTALS</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>9</b>	<b>0</b>	<b>0</b>

### BIKES

T I M E	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	1	0	0	0
7:00 AM	0	0	0	0	0	1	0	1	0	0	3	0
7:15 AM	0	1	0	0	0	0	0	1	1	0	0	0
7:30 AM	0	1	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	1	0
8:00 AM	0	0	0	0	0	0	0	1	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	4	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	1	0	0	0	2	0	0	2	0
<b>TOTALS</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>5</b>	<b>2</b>	<b>0</b>	<b>10</b>	<b>0</b>

## P M

### PEDESTRIANS

T I M E	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
3:00 PM	0	0	0	0	1	1	0	0
3:15 PM	0	0	0	0	1	0	0	0
3:30 PM	0	0	0	0	0	1	0	0
3:45 PM	0	0	0	0	0	1	0	0
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	1	0	0	0	1	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	1	0	0	0	0	1	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	3	2	0	0
5:45 PM	0	0	0	0	0	0	0	0
<b>TOTALS</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>6</b>	<b>0</b>	<b>0</b>

### BIKES

T I M E	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	2	0
3:30 PM	0	0	0	0	0	0	1	0	0	0	0	0
3:45 PM	0	0	0	1	0	1	0	1	0	0	1	0
4:00 PM	0	0	1	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	1	0	0	2	0	0	0	0
4:30 PM	0	0	0	0	2	0	0	1	0	0	0	0
4:45 PM	0	0	0	0	0	1	0	1	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	2	0	0	0	0
5:15 PM	0	1	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	1	0	0	0	0
5:45 PM	0	0	0	0	1	0	0	0	0	0	0	0
<b>TOTALS</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>4</b>	<b>2</b>	<b>1</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>

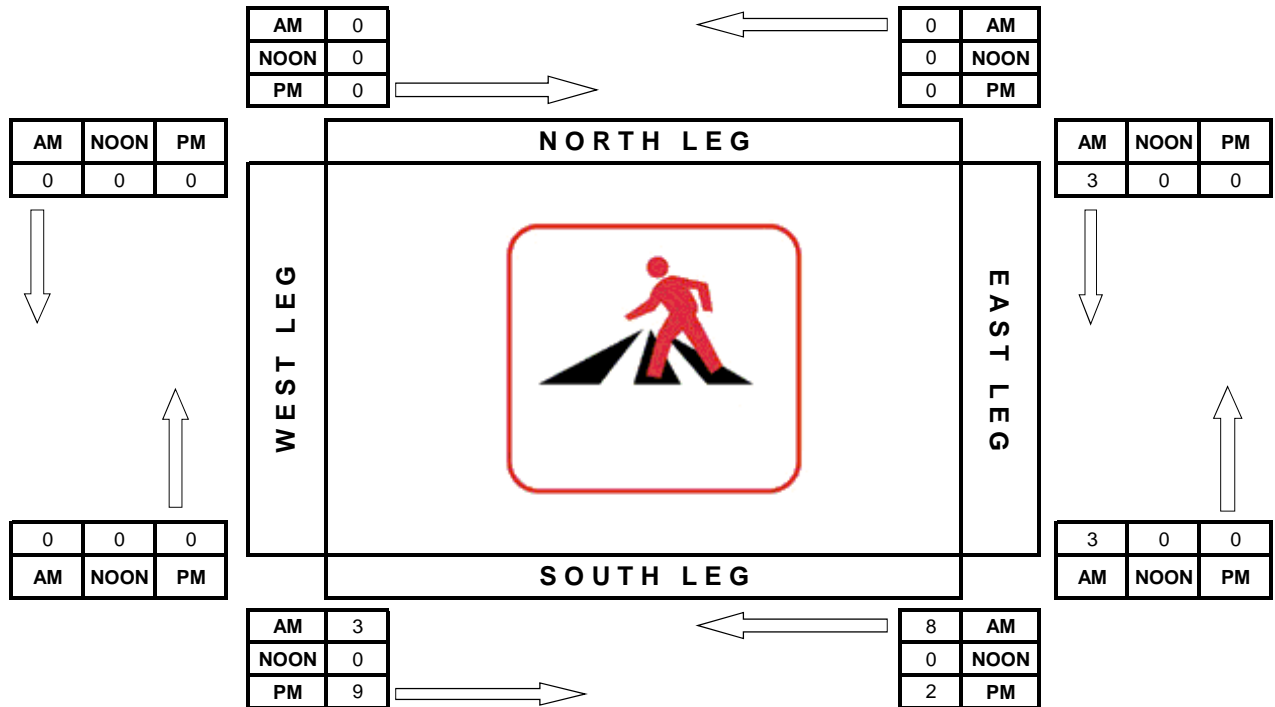
PREPARED BY NATIONAL DATA & SURVEYING SERVICES

Pedestrian Count Peak Hour

PROJECT#: 16-8004-002  
 N/S Street: Piilani Hwy  
 E/W Street: Kaiwahine St  
 DATE: 1/12/2016  
 CITY: Kihei

DAY: Tuesday

	Start:	End:
AM	6:00	9:00
NOON		
PM	15:00	18:00



PREPARED BY NATIONAL DATA & SURVEYING SERVICES

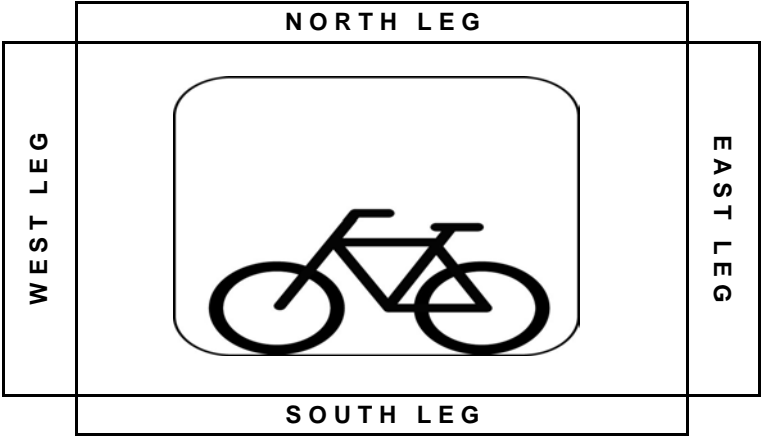
Bicycle Count Peak Hour

PROJECT#: 16-8004-002  
N/S Street: Piilani Hwy  
E/W Street: Kaiwahine St  
DATE: 1/12/2016  
CITY: Kihei

	Start:	End:
AM	6:00	9:00
NOON		
PM	15:00	18:00

DAY: Tuesday

AM	2	2	0
NOON	0	0	0
PM	1	7	0



AM	NOON	PM
2	0	0
2	0	0
0	0	0



AM	NOON	PM
0	0	1
1	0	0
0	0	2



AM	0	4	1
NOON	0	0	0
PM	0	0	0





# PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 16-8004-002  
N/S Street: Piilani Hwy  
E/W Street: Kaiwahine St  
DATE: 1/12/2016  
CITY: Kihei

DAY: Tuesday

## A M

### PEDESTRIANS

T I M E	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
6:00 AM	0	0	0	1	0	0	0	0
6:15 AM	0	0	1	2	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0
6:45 AM	0	0	2	2	2	0	0	0
7:00 AM	0	0	0	2	0	3	0	0
7:15 AM	0	0	0	1	0	0	0	0
7:30 AM	0	0	1	3	1	0	0	0
7:45 AM	0	0	1	1	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	1	2	0	1	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	1	0	0	0	0	0
<b>TOTALS</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>14</b>	<b>3</b>	<b>4</b>	<b>0</b>	<b>0</b>

### BIKES

T I M E	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
6:00 AM	0	0	0	0	0	0	1	0	0	0	0	0
6:15 AM	0	0	0	0	0	1	0	0	0	0	1	0
6:30 AM	0	0	0	0	0	0	0	1	0	0	0	0
6:45 AM	0	1	0	0	1	0	0	1	0	0	0	0
7:00 AM	0	3	1	0	1	1	2	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	1	0	0	1	2	0	0	0	0	0	0
8:15 AM	0	1	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	2	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	1	0	1	2	0	2	0	0	0	0	0
<b>TOTALS</b>	<b>0</b>	<b>10</b>	<b>1</b>	<b>1</b>	<b>5</b>	<b>4</b>	<b>5</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>

## P M

### PEDESTRIANS

T I M E	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
3:00 PM	0	0	2	0	0	0	0	0
3:15 PM	0	0	3	0	0	0	0	0
3:30 PM	0	0	0	2	0	0	0	0
3:45 PM	0	0	4	0	0	0	0	0
4:00 PM	0	0	1	0	0	0	0	0
4:15 PM	0	0	1	0	0	2	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	2	0	0	0	0	0
5:00 PM	0	0	3	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	1	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
<b>TOTALS</b>	<b>0</b>	<b>0</b>	<b>16</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>

### BIKES

T I M E	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
3:00 PM	0	0	0	0	1	0	0	0	0	0	0	0
3:15 PM	0	2	1	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	1	0	0	1	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	1	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	2	0	0
4:30 PM	0	0	0	0	4	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	1	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	2	1	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	2	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	1	0	0	0	0
<b>TOTALS</b>	<b>0</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>11</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>1</b>

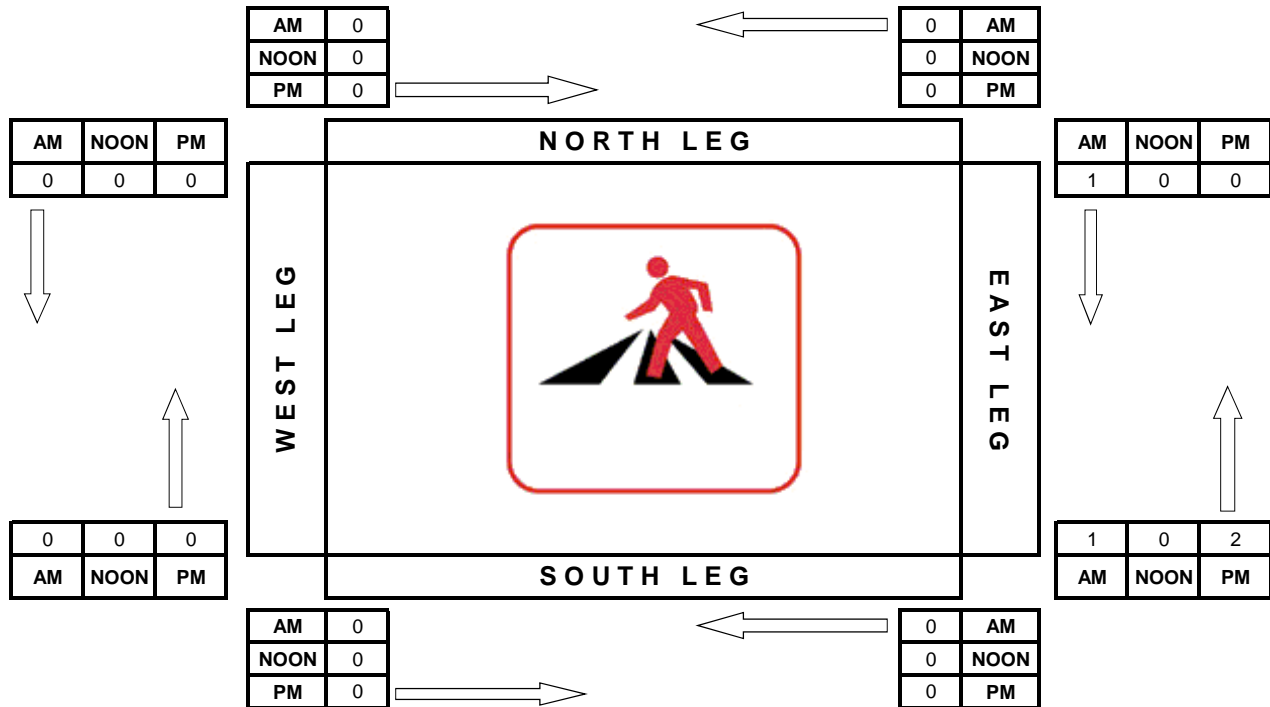
PREPARED BY NATIONAL DATA & SURVEYING SERVICES

Pedestrian Count Peak Hour

PROJECT#: 16-8004-003  
 N/S Street: Piilani Hwy/Mokulele Hwy  
 E/W Street: N Kihei Rd  
 DATE: 1/12/2016  
 CITY: Kihei

DAY: Tuesday

	Start:	End:
AM	6:00	9:00
NOON		
PM	15:00	18:00



PREPARED BY NATIONAL DATA & SURVEYING SERVICES

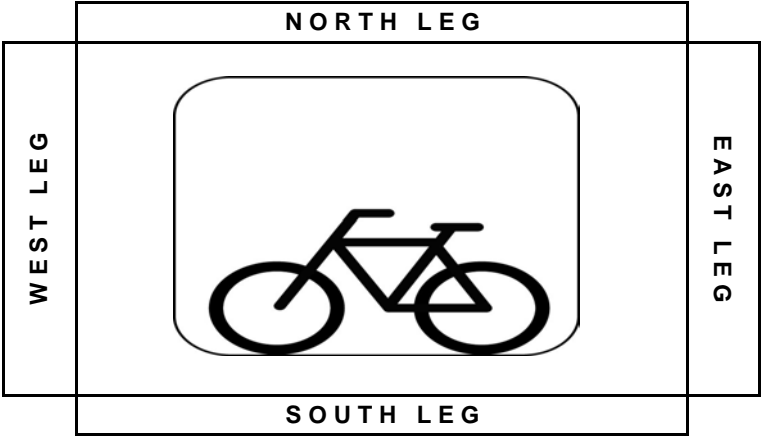
Bicycle Count Peak Hour

PROJECT#: 16-8004-003  
N/S Street: Piilani Hwy/Mokulele Hwy  
E/W Street: N Kihei Rd  
DATE: 1/12/2016  
CITY: Kihei

DAY: Tuesday

	Start:	End:
AM	6:00	9:00
NOON		
PM	15:00	18:00

AM	1	2	0
NOON	0	0	0
PM	1	6	0



AM	NOON	PM
0	0	0
1	0	0
0	0	1



AM	NOON	PM
0	0	0
0	0	0
0	0	0



AM	1	5	0
NOON	0	0	0
PM	0	1	0



# PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 16-8004-003  
N/S Street: Piilani Hwy/Mokulele Hwy  
E/W Street: N Kihei Rd  
DATE: 1/12/2016  
CITY: Kihei

DAY: Tuesday

## A M

### PEDESTRIANS

T I M E	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
6:00 AM	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	1	0	0	0
7:00 AM	0	0	0	0	0	1	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	1	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
<b>TOTALS</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>

### BIKES

T I M E	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	1	0	0	1	0	0	0
6:45 AM	0	1	0	0	0	0	0	0	0	0	0	0
7:00 AM	1	2	0	0	1	0	0	0	1	0	0	0
7:15 AM	0	1	0	0	0	0	0	1	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	1	0	0	0	0	0
8:00 AM	1	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	1	0	1	0	0	0	0
8:30 AM	0	3	0	0	1	0	0	0	0	0	0	0
8:45 AM	0	2	0	0	1	0	0	0	0	0	0	0
<b>TOTALS</b>	<b>2</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>

## P M

### PEDESTRIANS

T I M E	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
3:00 PM	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	1	0	0
4:45 PM	0	0	0	0	1	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	1	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
<b>TOTALS</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>

### BIKES

T I M E	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
3:00 PM	0	1	0	0	0	0	0	0	0	0	0	0
3:15 PM	2	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	1	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	3	1	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	1	0	0	0
4:45 PM	0	0	0	0	1	0	0	0	0	0	0	0
5:00 PM	0	1	0	0	2	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	1	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTALS</b>	<b>2</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>

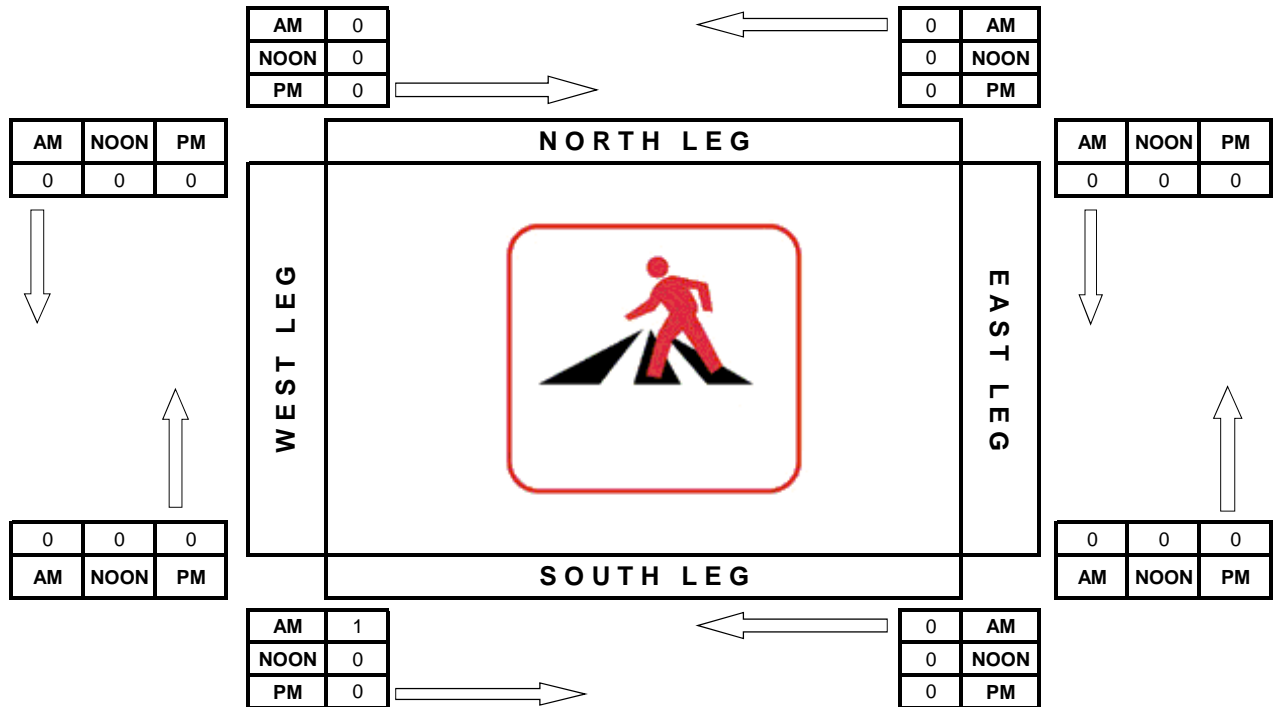
PREPARED BY NATIONAL DATA & SURVEYING SERVICES

Pedestrian Count Peak Hour

PROJECT#: 16-8004-004  
 N/S Street: S Kihei Rd  
 E/W Street: N Kihei Rd  
 DATE: 1/12/2016  
 CITY: Kihei

DAY: Tuesday

	Start:	End:
AM	6:00	9:00
NOON		
PM	15:00	18:00



PREPARED BY NATIONAL DATA & SURVEYING SERVICES

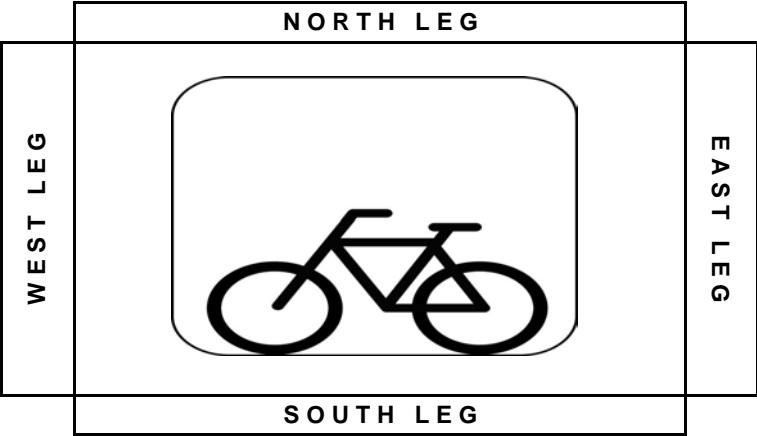
Bicycle Count Peak Hour

PROJECT#: 16-8004-004  
N/S Street: S Kihei Rd  
E/W Street: N Kihei Rd  
DATE: 1/12/2016  
CITY: Kihei

DAY: Tuesday

	Start:	End:
AM	6:00	9:00
NOON		
PM	15:00	18:00

AM	0	0	0
NOON	0	0	0
PM	0	0	0



AM	NOON	PM
0	0	0
1	0	1
2	0	4



AM	NOON	PM
0	0	0
3	0	3
0	0	0



AM	11	0	1
NOON	0	0	0
PM	2	0	0



# PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 16-8004-004  
N/S Street: S Kihei Rd  
E/W Street: N Kihei Rd  
DATE: 1/12/2016  
CITY: Kihei

DAY: Tuesday

## A M

### PEDESTRIANS

T I M E	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
6:00 AM	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	1	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
<b>TOTALS</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

### BIKES

T I M E	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	1	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	2	0	0	0	0	0	0	0	1	0	1	0
7:45 AM	2	0	0	0	0	0	0	0	1	0	0	0
8:00 AM	3	0	1	0	0	0	0	1	0	0	1	0
8:15 AM	4	0	0	0	0	0	0	0	0	0	1	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	1	0
8:45 AM	0	0	0	0	0	0	0	0	1	0	0	0
<b>TOTALS</b>	<b>11</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>4</b>	<b>0</b>

## P M

### PEDESTRIANS

T I M E	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
3:00 PM	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
<b>TOTALS</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

### BIKES

T I M E	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
3:00 PM	2	0	0	0	0	0	0	1	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	1	0	0	2	0
3:45 PM	0	0	0	0	0	0	0	0	3	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	1	0	0	0
4:15 PM	2	0	0	0	0	0	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	2	0	0	0
<b>TOTALS</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>6</b>	<b>0</b>	<b>3</b>	<b>0</b>

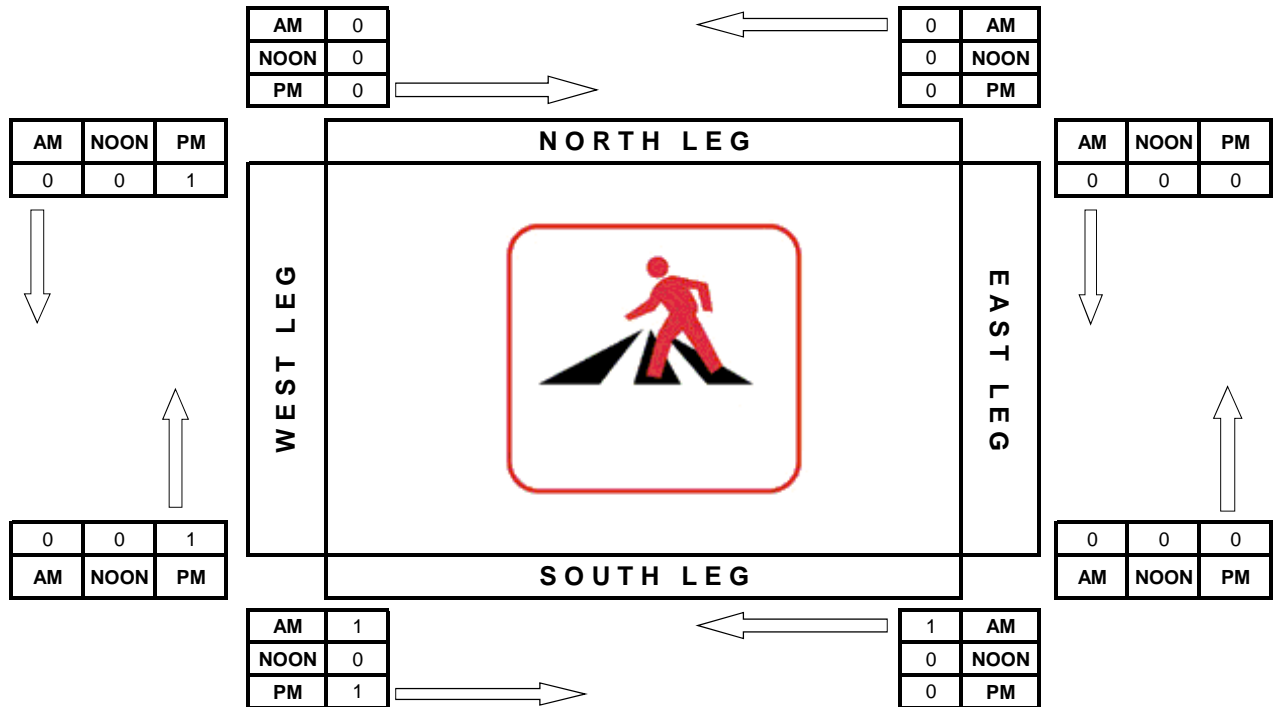
PREPARED BY NATIONAL DATA & SURVEYING SERVICES

Pedestrian Count Peak Hour

PROJECT#: 16-8004-005  
 N/S Street: Piilani Hwy  
 E/W Street: Pikea Ave  
 DATE: 1/12/2016  
 CITY: Kihei

DAY: Tuesday

	Start:	End:
AM	6:00	9:00
NOON		
PM	15:00	18:00





PREPARED BY NATIONAL DATA & SURVEYING SERVICES

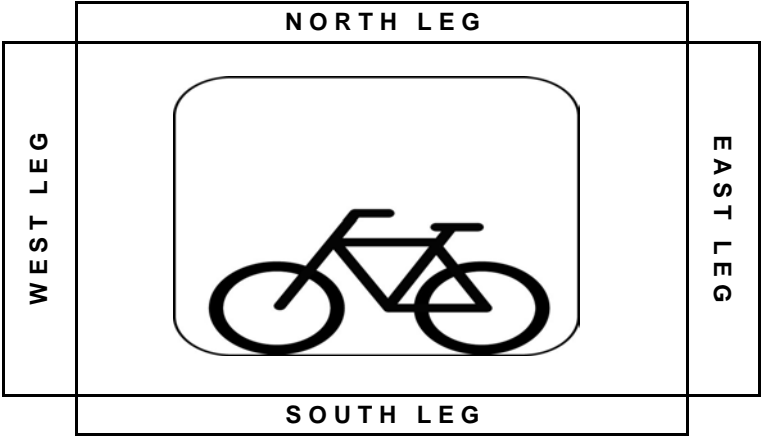
Bicycle Count Peak Hour

PROJECT#: 16-8004-005  
N/S Street: Piilani Hwy  
E/W Street: Pikea Ave  
DATE: 1/12/2016  
CITY: Kihei

DAY: Tuesday

	Start:	End:
AM	6:00	9:00
NOON		
PM	15:00	18:00

AM	0	1	0
NOON	0	0	0
PM	3	3	0



AM	NOON	PM
0	0	0
0	0	0
0	0	1



AM	NOON	PM
0	0	0
0	0	0
0	0	0



AM	0	5	0
NOON	0	0	0
PM	0	1	0



# PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 16-8004-005  
N/S Street: Piilani Hwy  
E/W Street: Pikea Ave  
DATE: 1/12/2016  
CITY: Kihei

DAY: Tuesday

## A M

### PEDESTRIANS

T I M E	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
6:00 AM	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0
6:30 AM	0	0	1	1	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	1	0	0	0	0	0
<b>TOTALS</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

### BIKES

T I M E	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	1	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	2	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	1	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	1	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	3	0	0	1	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	1	0	0	0	0	0	0	0	0	0	0
<b>TOTALS</b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

## P M

### PEDESTRIANS

T I M E	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
3:00 PM	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	1	0
4:00 PM	0	0	1	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
<b>TOTALS</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>

### BIKES

T I M E	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
3:00 PM	0	0	0	0	1	0	0	0	0	0	0	0
3:15 PM	0	2	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	2	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	2	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	1	0	0	0	0	0	0
4:30 PM	0	0	0	0	3	1	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	1	3	0	0	0	0	0	0
5:30 PM	0	0	0	0	2	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0	1	0	0	0
<b>TOTALS</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>

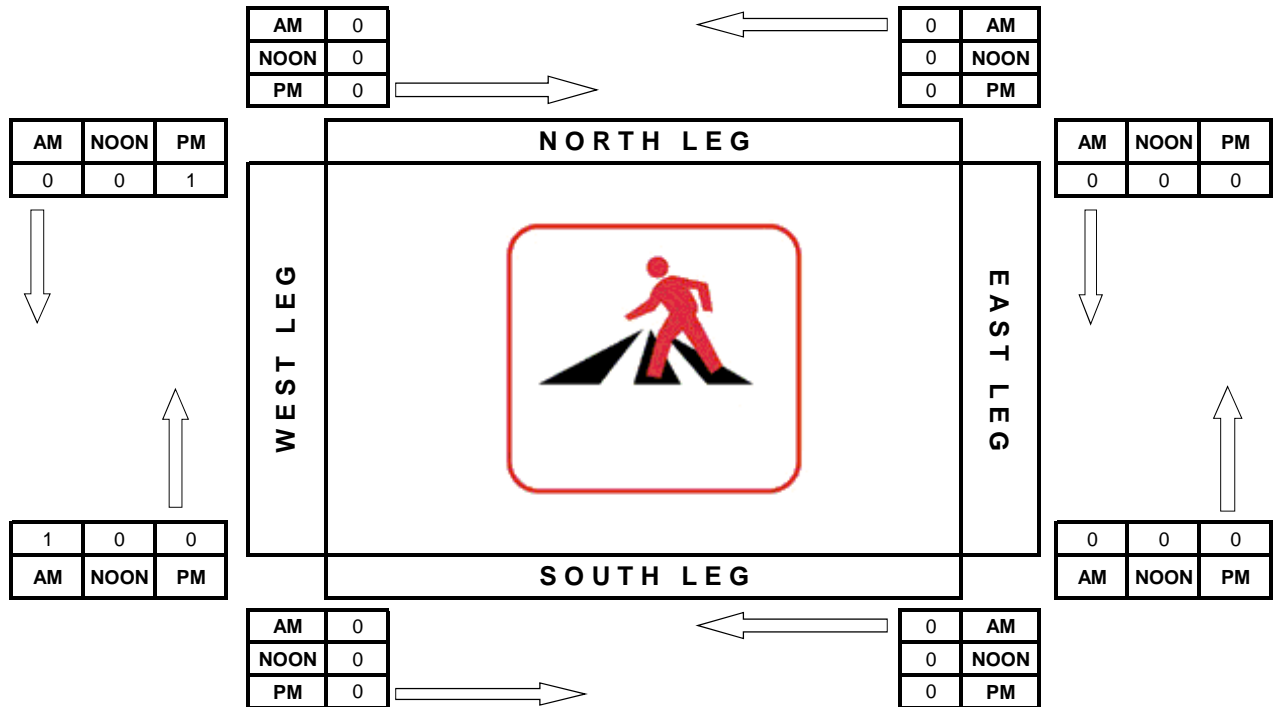
PREPARED BY NATIONAL DATA & SURVEYING SERVICES

Pedestrian Count Peak Hour

PROJECT#: 16-8004-006  
 N/S Street: Piilani Hwy  
 E/W Street: Kaonoulu St  
 DATE: 1/12/2016  
 CITY: Kihei

DAY: Tuesday

	Start:	End:
AM	6:00	9:00
NOON		
PM	15:00	18:00



PREPARED BY NATIONAL DATA & SURVEYING SERVICES

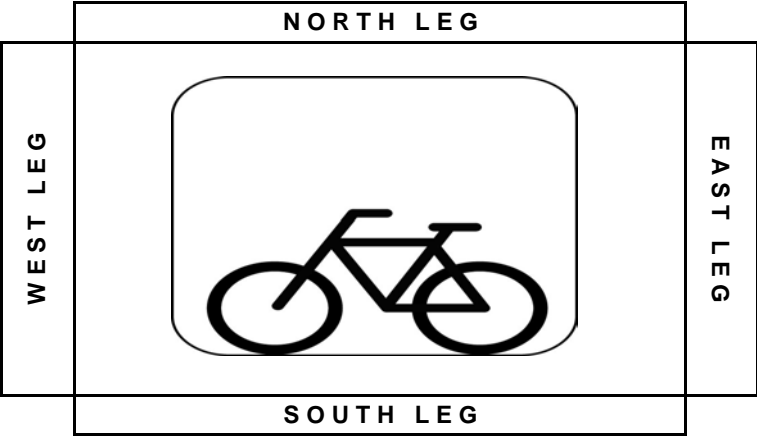
Bicycle Count Peak Hour

PROJECT#: 16-8004-006  
N/S Street: Piilani Hwy  
E/W Street: Kaonoulu St  
DATE: 1/12/2016  
CITY: Kihei

DAY: Tuesday

	Start:	End:
AM	6:00	9:00
NOON		
PM	15:00	18:00

AM	0	3	0
NOON	0	0	0
PM	1	6	0



AM	NOON	PM
1	0	1
0	0	0
0	0	0



AM	NOON	PM
0	0	0
0	0	0
0	0	0



AM	0	5	0
NOON	0	0	0
PM	0	1	0



# PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 16-8004-006  
N/S Street: Piilani Hwy  
E/W Street: Kaonoulu St  
DATE: 1/12/2016  
CITY: Kihei

DAY: Tuesday

## A M

### PEDESTRIANS

T I M E	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
6:00 AM	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	1	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
<b>TOTALS</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>

### BIKES

T I M E	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	3	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	1	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	1	0	0	0	0	0	0	0
8:15 AM	0	4	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	1	0	0	2	0	1	0	0	0	0	0
<b>TOTALS</b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

## P M

### PEDESTRIANS

T I M E	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
3:00 PM	0	0	0	0	0	0	0	1
3:15 PM	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
<b>TOTALS</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>

### BIKES

T I M E	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
3:00 PM	0	0	0	0	1	0	0	0	0	0	0	0
3:15 PM	0	2	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	1	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	1	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	2	0	1	0	0	0	0	0
4:45 PM	0	0	0	0	2	0	0	0	0	0	0	0
5:00 PM	0	1	0	0	2	1	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	1	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	1	0	0	0	0	0
<b>TOTALS</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

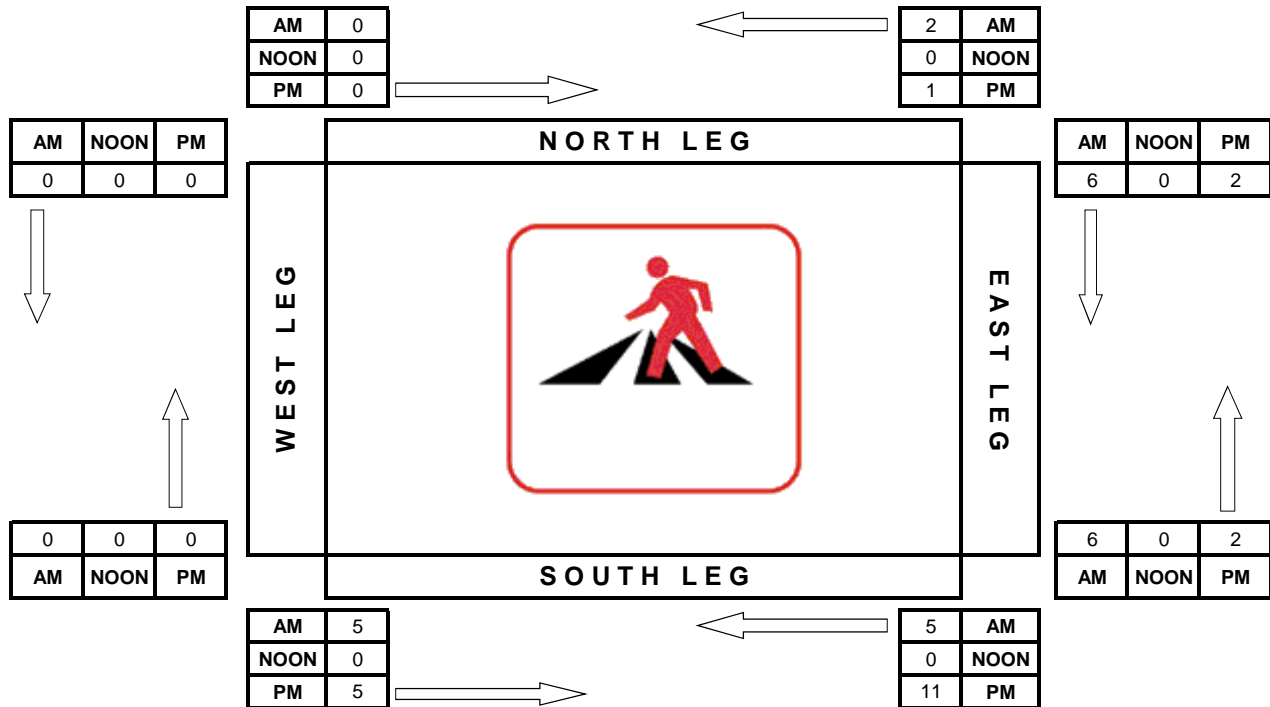
PREPARED BY NATIONAL DATA & SURVEYING SERVICES

Pedestrian Count Peak Hour

PROJECT#: 16-8004-007  
 N/S Street: S Kihei Rd  
 E/W Street: Kaonoulu St  
 DATE: 1/12/2016  
 CITY: Kihei

DAY: Tuesday

	Start:	End:
AM	6:00	9:00
NOON		
PM	15:00	18:00



PREPARED BY NATIONAL DATA & SURVEYING SERVICES

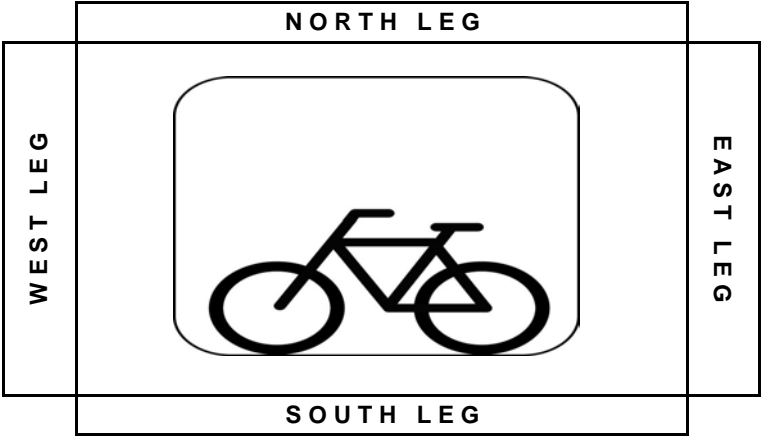
Bicycle Count Peak Hour

PROJECT#: 16-8004-007  
N/S Street: S Kihei Rd  
E/W Street: Kaonoulou St  
DATE: 1/12/2016  
CITY: Kihei

DAY: Tuesday

	Start:	End:
AM	6:00	9:00
NOON		
PM	15:00	18:00

AM	0	8	0
NOON	0	0	0
PM	0	6	1



AM	NOON	PM
0	0	0
0	0	0
0	0	0



AM	NOON	PM
0	0	0
0	0	0
2	0	2



AM	0	10	1
NOON	0	0	0
PM	0	4	1



# PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 16-8004-007  
N/S Street: S Kihei Rd  
E/W Street: Kaonoulu St  
DATE: 1/12/2016  
CITY: Kihei

DAY: Tuesday

## A M

### PEDESTRIANS

T I M E	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
6:00 AM	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	1	0	0
6:30 AM	0	2	1	1	4	2	0	0
6:45 AM	0	0	0	1	0	1	0	0
7:00 AM	0	0	1	1	1	1	0	0
7:15 AM	0	0	3	2	1	2	0	0
7:30 AM	0	0	1	3	0	4	0	0
7:45 AM	0	0	1	0	0	1	0	0
8:00 AM	0	0	1	0	1	2	0	0
8:15 AM	0	0	0	0	0	1	0	0
8:30 AM	0	0	0	0	3	2	0	0
8:45 AM	0	1	1	0	1	0	0	0
<b>TOTALS</b>	<b>0</b>	<b>3</b>	<b>9</b>	<b>8</b>	<b>11</b>	<b>17</b>	<b>0</b>	<b>0</b>

### BIKES

T I M E	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
6:00 AM	0	1	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	1	0	0	0	0	0	0	0	0	0
6:30 AM	0	1	0	0	2	0	0	0	0	1	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	3	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	4	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	4	0	0	2	0	0	0	0	0	0	0
7:45 AM	0	1	1	0	2	0	0	0	0	1	0	0
8:00 AM	0	4	0	0	1	0	0	0	0	1	0	0
8:15 AM	0	1	0	0	3	0	0	0	0	0	0	0
8:30 AM	0	4	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	2	0	0	0	0	0	0	0
<b>TOTALS</b>	<b>0</b>	<b>23</b>	<b>2</b>	<b>0</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>

## P M

### PEDESTRIANS

T I M E	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
3:00 PM	0	0	2	0	0	0	0	0
3:15 PM	0	0	1	0	1	1	0	0
3:30 PM	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	1	0	0	0	0
4:00 PM	0	0	2	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	1	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	5	0	2	0	0
5:30 PM	0	1	1	6	0	0	0	0
5:45 PM	0	0	4	0	2	0	0	0
<b>TOTALS</b>	<b>0</b>	<b>1</b>	<b>10</b>	<b>13</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>0</b>

### BIKES

T I M E	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
3:00 PM	0	2	0	0	1	0	0	0	0	1	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	2	0	0
3:30 PM	0	0	2	0	1	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	3	0	0	0	0	0	0	0
4:00 PM	0	2	0	0	1	0	0	0	0	1	0	0
4:15 PM	0	2	1	1	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	2	0	0	0	0	1	0	0
4:45 PM	0	2	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	2	0	1	0	0	0	0	1	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	1	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	3	0	0	0	0	0	0	0
<b>TOTALS</b>	<b>0</b>	<b>8</b>	<b>5</b>	<b>1</b>	<b>13</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>1</b>



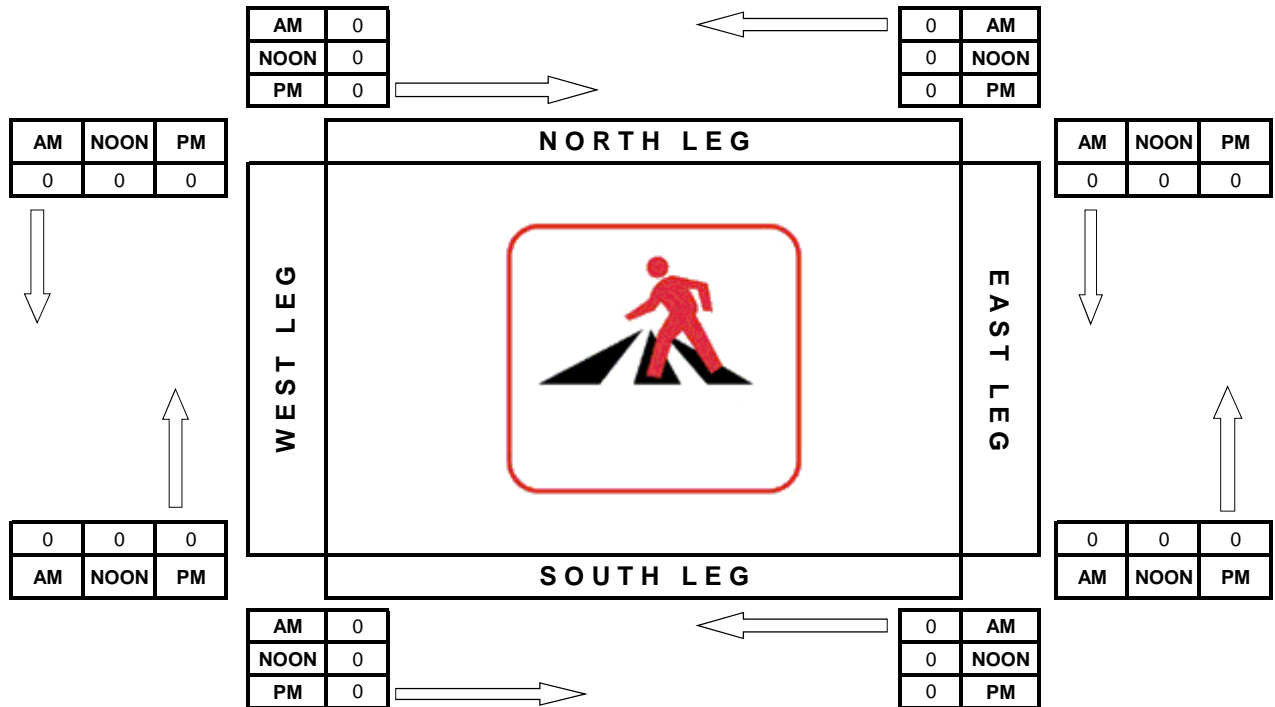
PREPARED BY NATIONAL DATA & SURVEYING SERVICES

Pedestrian Count Peak Hour

PROJECT#: 16-8004-008  
 N/S Street: Piilani Hwy  
 E/W Street: Kulanihakai St  
 DATE: 1/12/2016  
 CITY: Kihei

DAY: Tuesday

	Start:	End:
AM	6:00	9:00
NOON		
PM	15:00	18:00



PREPARED BY NATIONAL DATA & SURVEYING SERVICES

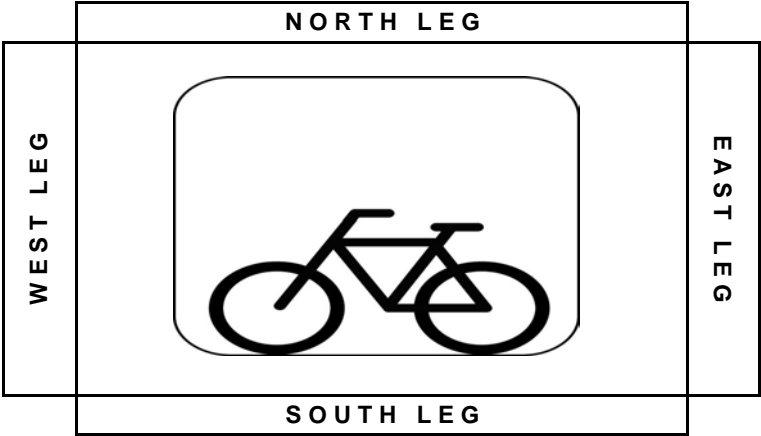
Bicycle Count Peak Hour

PROJECT#: 16-8004-008  
N/S Street: Piilani Hwy  
E/W Street: Kulanihakai St  
DATE: 1/12/2016  
CITY: Kihei

DAY: Tuesday

	Start:	End:
AM	6:00	9:00
NOON		
PM	15:00	18:00

AM	0	4	0
NOON	0	0	0
PM	2	6	0



AM	NOON	PM
0	0	0
0	0	0
0	0	0



AM	NOON	PM
0	0	0
0	0	0
0	0	0



AM	0	5	0
NOON	0	0	0
PM	0	1	0



# PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 16-8004-008  
N/S Street: Piilani Hwy  
E/W Street: Kulanihakoi St  
DATE: 1/12/2016  
CITY: Kihei

DAY: Tuesday

## A M

### PEDESTRIANS

T I M E	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
6:00 AM	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
<b>TOTALS</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

### BIKES

T I M E	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	1	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	2	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	1	0	0	0	0	0	0	0
7:30 AM	0	1	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	1	0	0	0	0	0	0	0
8:15 AM	0	4	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	1	0	0	3	0	0	0	0	0	0	0
<b>TOTALS</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

## P M

### PEDESTRIANS

T I M E	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
3:00 PM	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
<b>TOTALS</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

### BIKES

T I M E	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
3:00 PM	0	0	0	0	1	0	0	0	0	0	0	0
3:15 PM	0	2	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	1	0	0	0	0	0	0	1	0	0	0
3:45 PM	0	0	0	0	1	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	1	0	0	0	0	0	0	0
4:15 PM	0	1	0	0	1	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	3	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	1	1	0	0	0	0	0	0
5:00 PM	0	0	0	0	1	1	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	1	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0	0	0	0	0
<b>TOTALS</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>

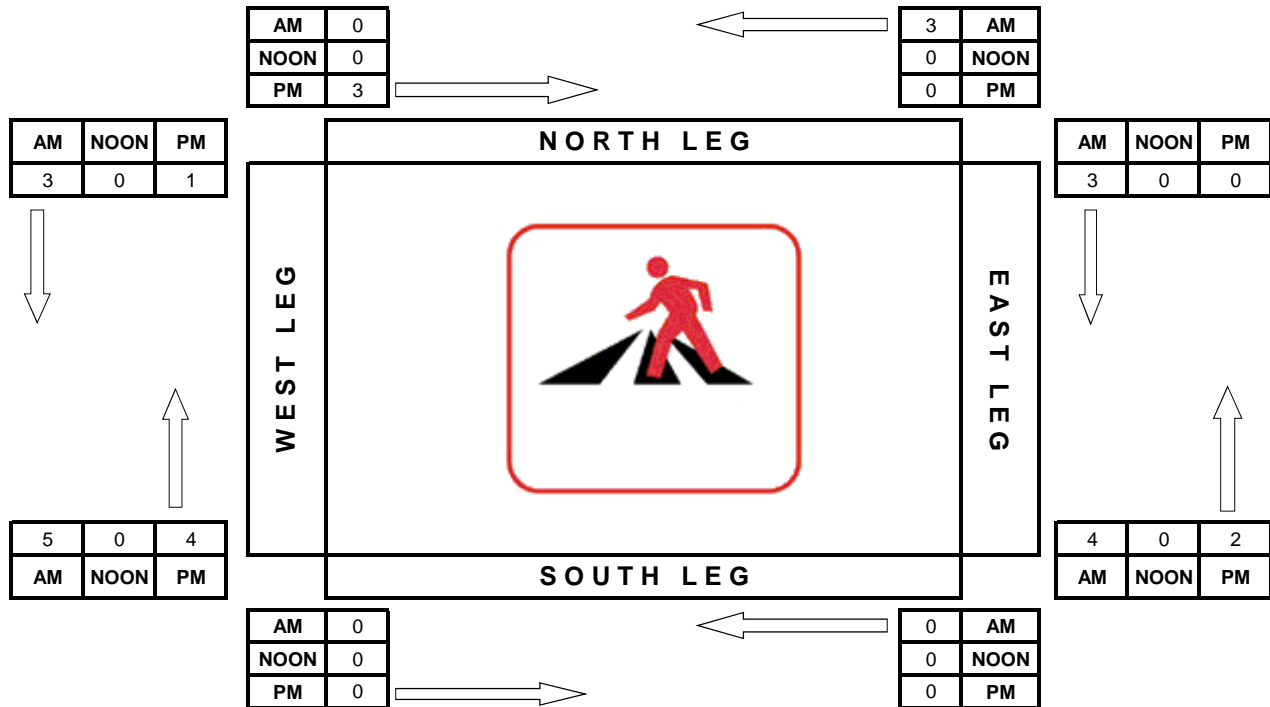
PREPARED BY NATIONAL DATA & SURVEYING SERVICES

Pedestrian Count Peak Hour

PROJECT#: 16-8004-009  
 N/S Street: Kenolio St  
 E/W Street: Kaonoulu St  
 DATE: 1/12/2016  
 CITY: Kihei

DAY: Tuesday

	Start:	End:
AM	6:00	9:00
NOON		
PM	15:00	18:00



PREPARED BY NATIONAL DATA & SURVEYING SERVICES

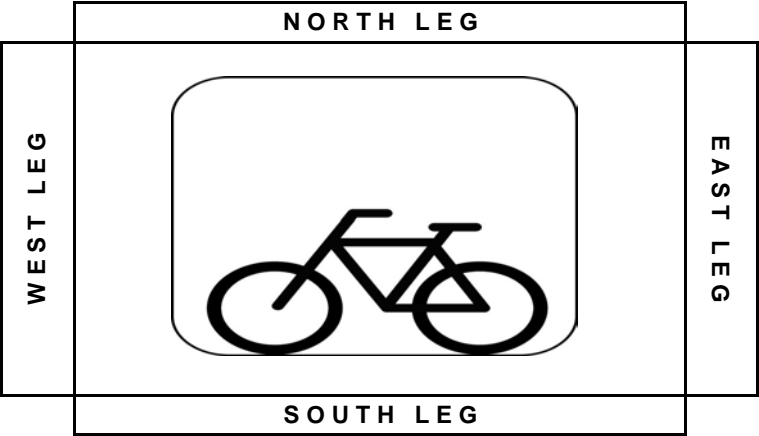
Bicycle Count Peak Hour

PROJECT#: 16-8004-009  
N/S Street: Kenolio St  
E/W Street: Kaonoulu St  
DATE: 1/12/2016  
CITY: Kihei

DAY: Tuesday

	Start:	End:
AM	6:00	9:00
NOON		
PM	15:00	18:00

AM	0	0	0
NOON	0	0	0
PM	0	0	0



AM	NOON	PM
0	0	1
0	0	1
1	0	0



AM	NOON	PM
0	0	1
0	0	0
0	0	1



AM	0	2	1
NOON	0	0	0
PM	0	0	1



# PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 16-8004-009  
N/S Street: Kenolio St  
E/W Street: Kaonoulu St  
DATE: 1/12/2016  
CITY: Kihei

DAY: Tuesday

## A M

### PEDESTRIANS

T I M E	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
6:00 AM	0	0	0	0	0	0	1	0
6:15 AM	0	0	0	0	0	0	1	0
6:30 AM	1	0	0	0	0	0	2	0
6:45 AM	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	1	0	0	1
7:15 AM	0	2	0	0	1	1	0	1
7:30 AM	0	1	0	0	0	0	1	1
7:45 AM	0	0	0	0	0	2	4	1
8:00 AM	0	1	0	0	0	1	0	0
8:15 AM	0	1	0	0	4	0	0	1
8:30 AM	0	1	0	0	0	0	0	0
8:45 AM	0	1	0	0	0	1	0	0
<b>TOTALS</b>	<b>1</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>5</b>	<b>9</b>	<b>5</b>

### BIKES

T I M E	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	2	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	1	0	0	0	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	1	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	1	1	0	0	0	0	0	1	0	0	0
<b>TOTALS</b>	<b>0</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>

## P M

### PEDESTRIANS

T I M E	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
3:00 PM	0	0	0	0	0	1	0	0
3:15 PM	0	0	0	0	0	3	0	0
3:30 PM	0	0	0	0	1	0	2	0
3:45 PM	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	1	1	0	0
4:15 PM	0	0	0	0	0	0	2	1
4:30 PM	1	0	0	0	1	0	1	0
4:45 PM	1	0	0	0	0	0	0	0
5:00 PM	1	0	0	0	1	0	1	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	2	0
5:45 PM	0	0	0	0	0	0	2	0
<b>TOTALS</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>5</b>	<b>10</b>	<b>1</b>

### BIKES

T I M E	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	1	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	1	0	0	0	0	1	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	1	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	1	0	1	0	0
5:45 PM	0	0	1	0	0	0	0	0	0	0	0	0
<b>TOTALS</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>

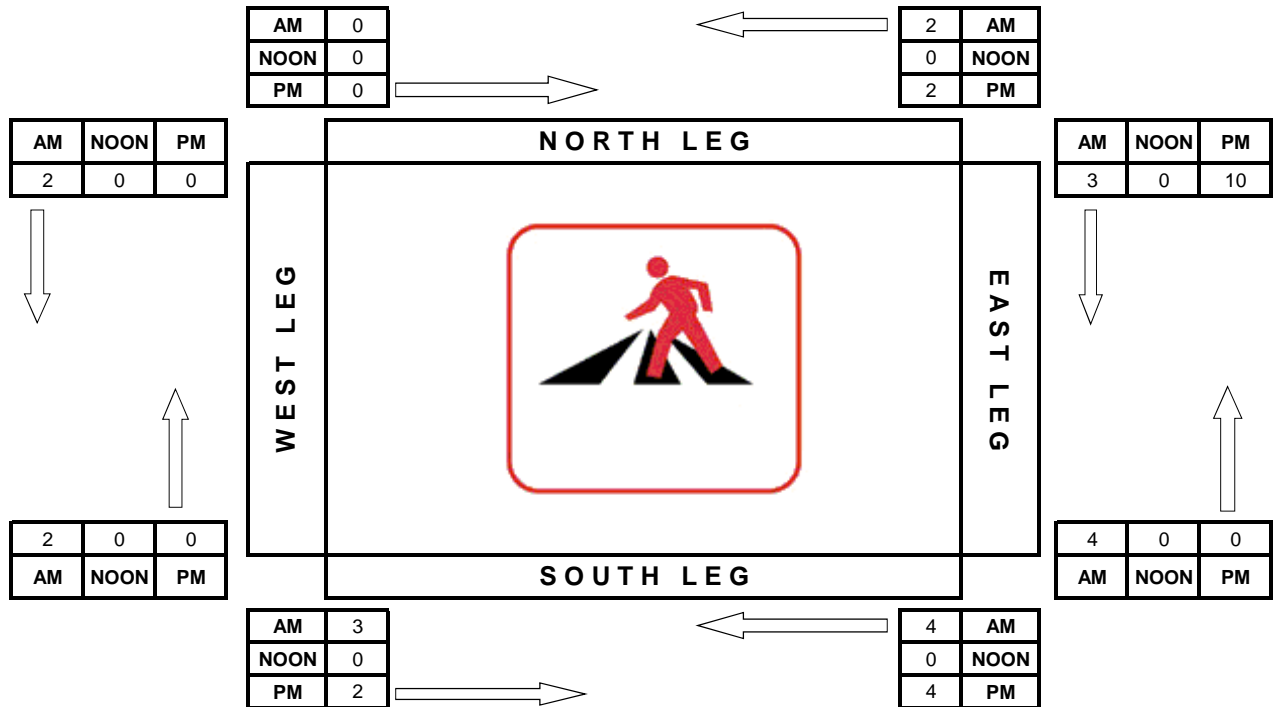
PREPARED BY NATIONAL DATA & SURVEYING SERVICES

Pedestrian Count Peak Hour

PROJECT#: 16-8004-010  
 N/S Street: Alulike St  
 E/W Street: Kaonoulu St  
 DATE: 1/12/2016  
 CITY: Kihei

DAY: Tuesday

	Start:	End:
AM	6:00	9:00
NOON		
PM	15:00	18:00



PREPARED BY NATIONAL DATA & SURVEYING SERVICES

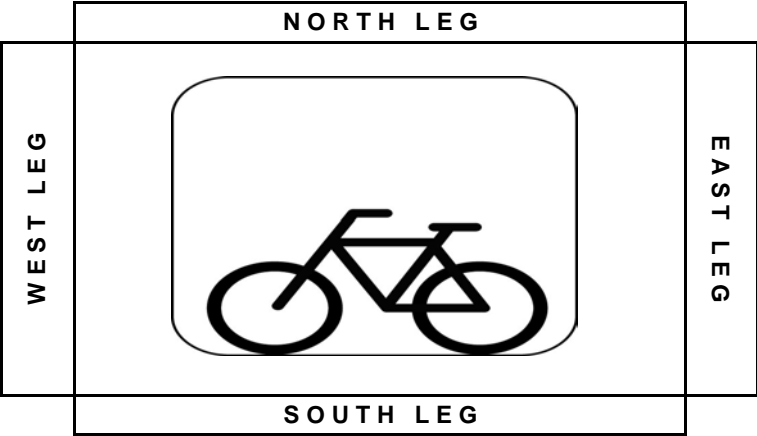
Bicycle Count Peak Hour

PROJECT#: 16-8004-010  
N/S Street: Alulike St  
E/W Street: Kaonoululu St  
DATE: 1/12/2016  
CITY: Kihei

DAY: Tuesday

	Start:	End:
AM	6:00	9:00
NOON		
PM	15:00	18:00

AM	1	0	0
NOON	0	0	0
PM	1	0	0



AM	NOON	PM
2	0	3
0	0	2
0	0	0



AM	NOON	PM
0	0	0
0	0	0
0	0	0



AM	0	0	1
NOON	0	0	0
PM	0	0	0





# PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 16-8004-010  
N/S Street: Alulike St  
E/W Street: Kaonoulu St  
DATE: 1/12/2016  
CITY: Kihei

DAY: Tuesday

## A M

### PEDESTRIANS

T I M E	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
6:00 AM	0	0	0	0	0	0	2	0
6:15 AM	0	0	0	0	0	0	0	1
6:30 AM	0	1	0	0	0	0	0	0
6:45 AM	1	0	0	0	0	0	0	0
7:00 AM	0	1	0	0	1	1	0	1
7:15 AM	0	0	1	2	3	1	1	0
7:30 AM	0	0	1	0	0	0	0	1
7:45 AM	0	2	0	1	1	1	0	0
8:00 AM	0	0	1	1	0	1	1	1
8:15 AM	0	0	1	0	1	0	0	0
8:30 AM	0	0	1	0	1	2	0	0
8:45 AM	1	0	0	0	0	1	0	0
<b>TOTALS</b>	<b>2</b>	<b>4</b>	<b>5</b>	<b>4</b>	<b>7</b>	<b>7</b>	<b>4</b>	<b>4</b>

### BIKES

T I M E	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	1	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	1	1	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	1	0	0	0	0	0
8:30 AM	0	0	1	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTALS</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

## P M

### PEDESTRIANS

T I M E	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
3:00 PM	1	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	1	0
3:30 PM	1	1	0	0	0	0	0	0
3:45 PM	0	1	0	0	0	0	0	0
4:00 PM	0	0	2	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	3	0	0
5:15 PM	0	1	1	4	0	2	0	0
5:30 PM	0	1	0	0	0	2	0	0
5:45 PM	0	0	1	0	0	3	0	0
<b>TOTALS</b>	<b>2</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>0</b>	<b>10</b>	<b>1</b>	<b>0</b>

### BIKES

T I M E	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
3:00 PM	0	0	0	0	0	1	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	1	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	1	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	1	1	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	1	2	1	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	1	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTALS</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

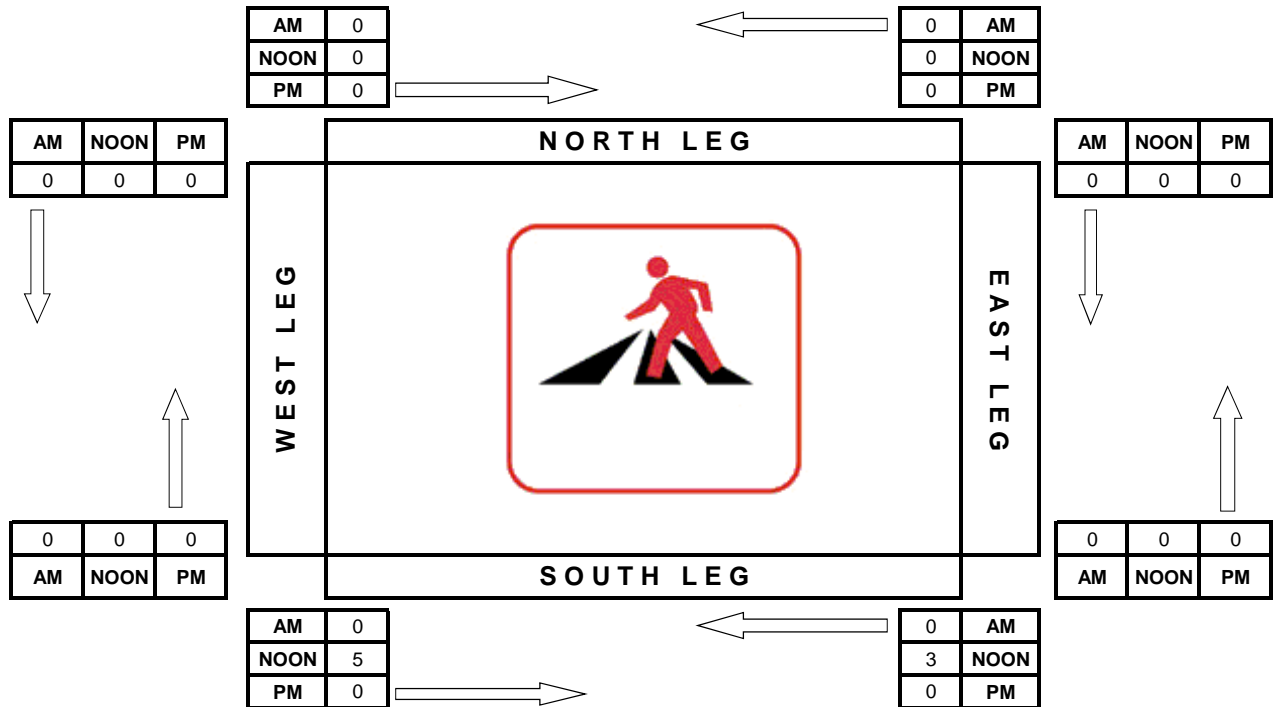
PREPARED BY NATIONAL DATA & SURVEYING SERVICES

Pedestrian Count Peak Hour

PROJECT#: 16-8004-001  
 N/S Street: Piilani Hwy  
 E/W Street: Ohukai Rd  
 DATE: 1/16/2016  
 CITY: Kihei

DAY: Saturday

	Start:	End:
AM		
NOON	10:00	14:00
PM		



PREPARED BY NATIONAL DATA & SURVEYING SERVICES

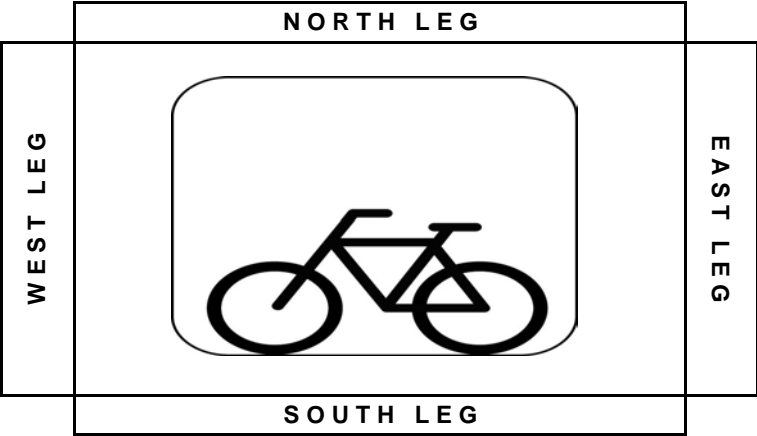
Bicycle Count Peak Hour

PROJECT#: 16-8004-001  
N/S Street: Piilani Hwy  
E/W Street: Ohukai Rd  
DATE: 1/16/2016  
CITY: Kihei

DAY: Saturday

	Start:	End:
AM		
NOON	10:00	14:00
PM		

AM	0	0	0
NOON	0	5	1
PM	0	0	0



AM	NOON	PM
0	0	0
0	1	0
0	0	0



AM	NOON	PM
0	0	0
0	1	0
0	0	0



AM	0	0	0
NOON	0	4	0
PM	0	0	0



# PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 16-8004-001  
 N/S Street: Piilani Hwy  
 E/W Street: Ohukai Rd  
 DATE: 1/16/2016  
 CITY: Kihei

DAY: Saturday

## NOON

### PEDESTRIANS

T I M E	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
10:00 AM	0	0	1	1	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	1	0	0	0	0
10:45 AM	0	0	1	0	0	0	0	0
11:00 AM	0	0	1	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0
11:30 AM	0	0	1	2	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0
12:00 PM	0	0	3	0	0	0	0	0
12:15 PM	0	0	1	0	0	0	0	0
12:30 PM	0	0	1	0	0	0	0	0
12:45 PM	0	0	0	3	0	0	0	0
1:00 PM	0	0	2	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0
<b>TOTALS</b>	<b>0</b>	<b>0</b>	<b>11</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

### BIKES

T I M E	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
10:00 AM	0	2	0	0	1	0	0	1	0	0	1	0
10:15 AM	0	2	0	0	0	0	0	1	0	0	0	0
10:30 AM	0	2	0	0	1	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	1	4	0	0	0	0	0	1	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	2	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	1	0	0	0	0	0	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	1	0
12:15 PM	0	0	0	0	1	0	0	1	1	0	1	0
12:30 PM	0	0	0	0	1	0	0	0	0	0	1	0
12:45 PM	0	1	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	1	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTALS</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>1</b>	<b>11</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>5</b>	<b>1</b>

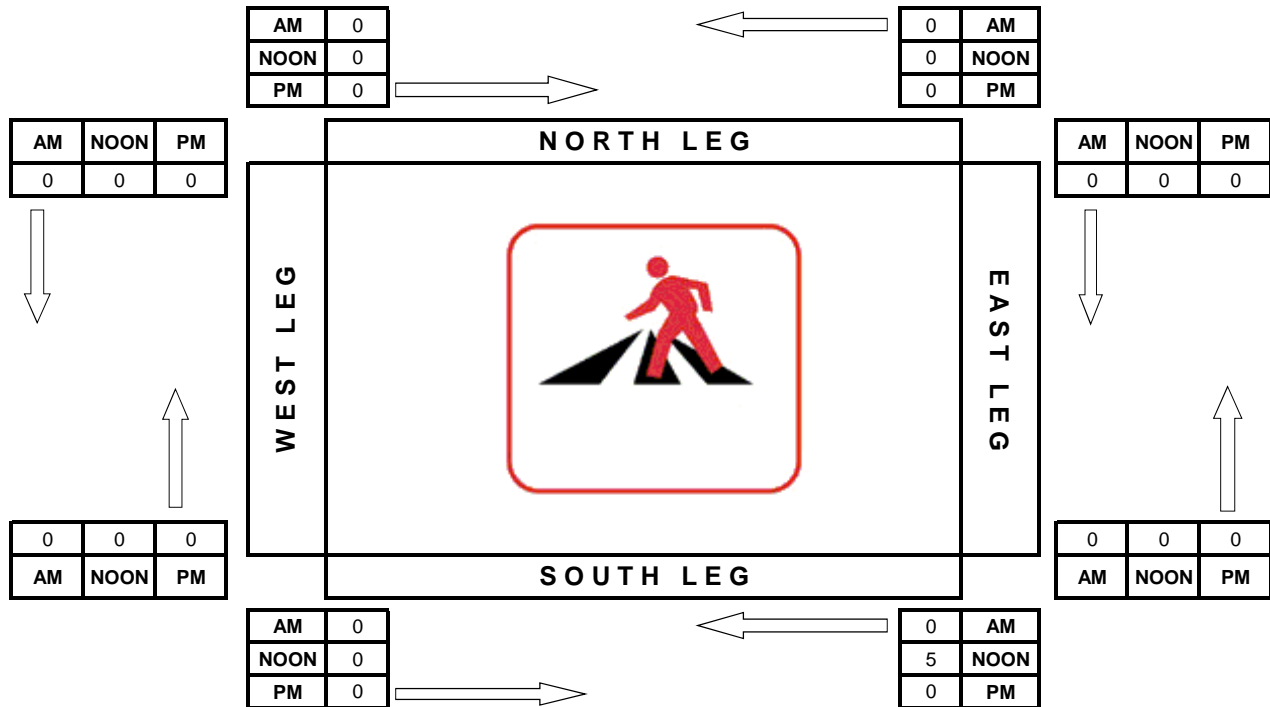
PREPARED BY NATIONAL DATA & SURVEYING SERVICES

Pedestrian Count Peak Hour

PROJECT#: 16-8004-002  
 N/S Street: Piilani Hwy  
 E/W Street: Kaiwahine St  
 DATE: 1/16/2016  
 CITY: Kihei

DAY: Saturday

	Start:	End:
AM		
NOON	10:00	14:00
PM		



PREPARED BY NATIONAL DATA & SURVEYING SERVICES

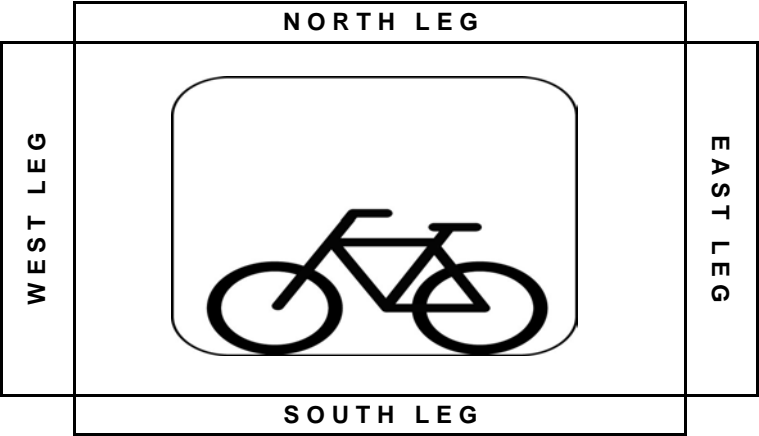
Bicycle Count Peak Hour

PROJECT#: 16-8004-002  
N/S Street: Piilani Hwy  
E/W Street: Kaiwahine St  
DATE: 1/16/2016  
CITY: Kihei

	Start:	End:
AM		
NOON	10:00	14:00
PM		

DAY: Saturday

AM	0	0	0
NOON	2	2	2
PM	0	0	0



AM	NOON	PM
0	1	0
0	2	0
0	0	0



AM	NOON	PM
0	0	0
0	1	0
0	0	0



AM	0	0	0
NOON	0	8	0
PM	0	0	0



# PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 16-8004-002  
N/S Street: Piilani Hwy  
E/W Street: Kaiwahine St  
DATE: 1/16/2016  
CITY: Kihei

DAY: Saturday

## NOON

### PEDESTRIANS

T I M E	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
10:00 AM	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	1	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	3	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	2	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	1	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0
12:45 PM	0	0	1	0	0	0	0	0
1:00 PM	0	0	1	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	1	0	0	1	0
<b>TOTALS</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>

### BIKES

T I M E	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
10:00 AM	0	4	0	2	0	0	0	1	0	0	1	0
10:15 AM	0	2	0	0	0	2	0	0	0	0	0	0
10:30 AM	0	2	0	0	1	0	1	1	0	0	0	0
10:45 AM	0	0	0	0	1	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	4	1	0	0	0	0	1	0
11:15 AM	0	0	0	0	2	0	0	1	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	1	0	0	1	0	0	1	0	0	0	0
12:00 PM	0	0	0	0	1	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	1	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	1	0	1	0	0	0	0	0	0	1	0
1:00 PM	0	0	0	0	0	1	0	0	0	0	2	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTALS</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>3</b>	<b>11</b>	<b>4</b>	<b>1</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>0</b>

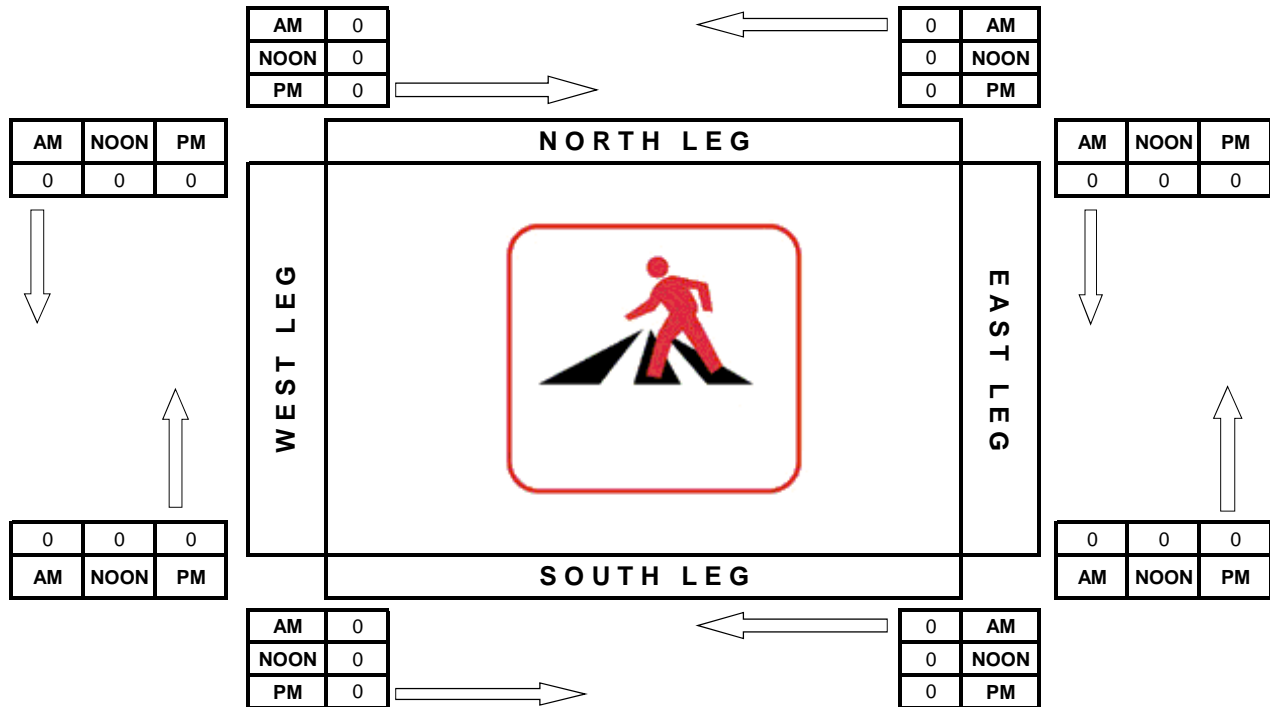
PREPARED BY NATIONAL DATA & SURVEYING SERVICES

Pedestrian Count Peak Hour

PROJECT#: 16-8004-003  
 N/S Street: Piilani Hwy/Mokulele Hwy  
 E/W Street: N Kihei Rd  
 DATE: 1/16/2016  
 CITY: Kihei

DAY: Saturday

	Start:	End:
AM		
NOON	10:00	14:00
PM		





PREPARED BY NATIONAL DATA & SURVEYING SERVICES

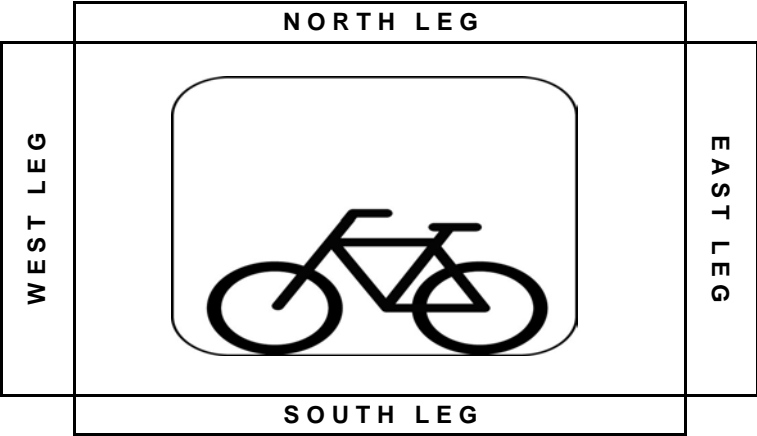
Bicycle Count Peak Hour

PROJECT#: 16-8004-003  
N/S Street: Piilani Hwy/Mokulele Hwy  
E/W Street: N Kihei Rd  
DATE: 1/16/2016  
CITY: Kihei

DAY: Saturday

	Start:	End:
AM		
NOON	10:00	14:00
PM		

AM	0	0	0
NOON	9	6	1
PM	0	0	0



AM	NOON	PM
0	9	0
0	0	0
0	1	0



AM	NOON	PM
0	0	0
0	2	0
0	0	0



AM	0	0	0
NOON	5	3	0
PM	0	0	0



# PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 16-8004-003  
N/S Street: Piilani Hwy/Mokulele Hwy  
E/W Street: N Kihei Rd  
DATE: 1/16/2016  
CITY: Kihei

DAY: Saturday

## NOON

### PEDESTRIANS

T I M E	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
10:00 AM	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0
<b>TOTALS</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

### BIKES

T I M E	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
10:00 AM	5	0	0	1	0	3	6	0	0	0	0	0
10:15 AM	0	0	0	0	2	6	3	0	0	0	2	0
10:30 AM	0	3	0	0	0	0	0	0	1	0	0	0
10:45 AM	0	0	0	0	4	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	2	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	2	0	0	0	0	0	0
11:45 AM	0	0	1	0	0	0	0	0	1	0	0	0
12:00 PM	0	0	1	0	2	0	0	0	0	0	0	0
12:15 PM	0	1	0	0	0	0	0	0	1	0	0	0
12:30 PM	0	0	0	0	2	0	0	0	0	0	0	0
12:45 PM	0	1	0	0	1	0	0	0	0	2	0	0
1:00 PM	0	0	0	0	2	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	1	0	1	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	2	1	1	0	0	0	0	0
<b>TOTALS</b>	<b>5</b>	<b>5</b>	<b>2</b>	<b>1</b>	<b>18</b>	<b>12</b>	<b>11</b>	<b>0</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>0</b>

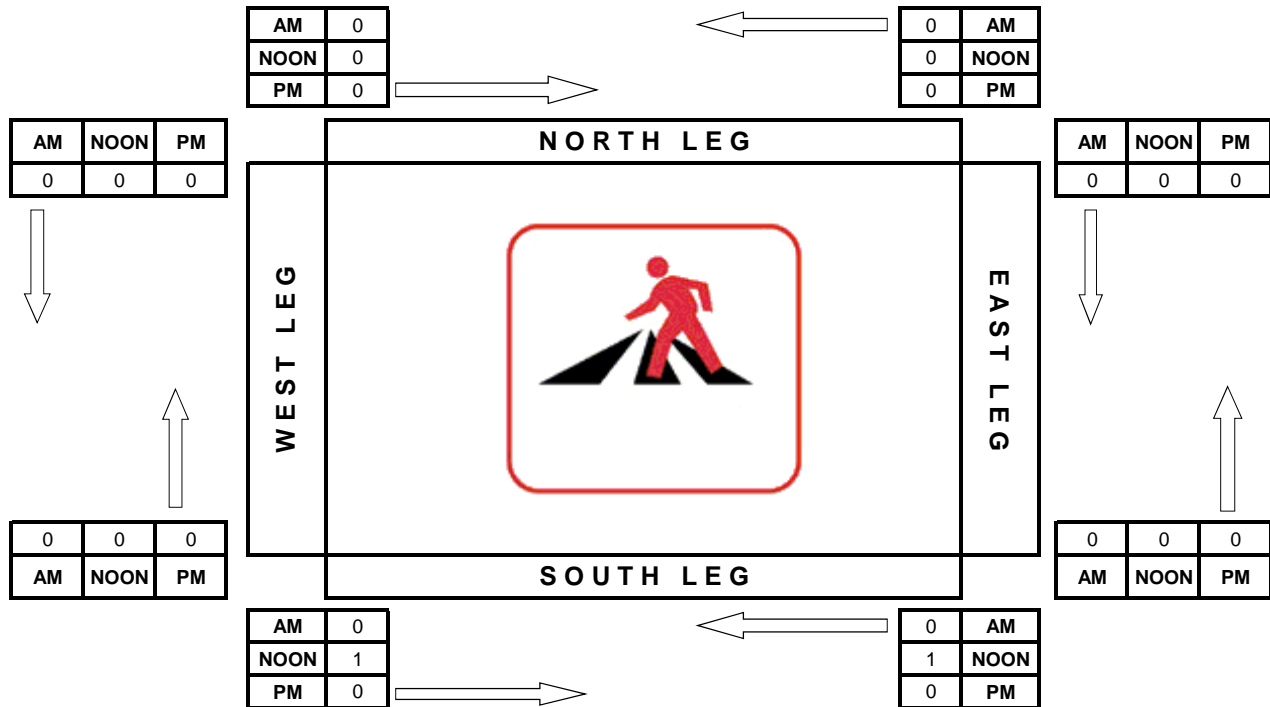
PREPARED BY NATIONAL DATA & SURVEYING SERVICES

Pedestrian Count Peak Hour

PROJECT#: 16-8004-004  
 N/S Street: S Kihei Rd  
 E/W Street: N Kihei Rd  
 DATE: 1/16/2016  
 CITY: Kihei

DAY: Saturday

	Start:	End:
AM		
NOON	10:00	14:00
PM		



PREPARED BY NATIONAL DATA & SURVEYING SERVICES

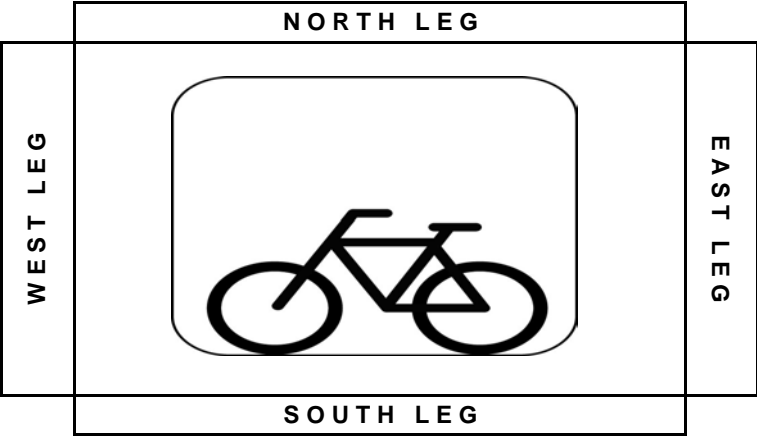
Bicycle Count Peak Hour

PROJECT#: 16-8004-004  
N/S Street: S Kihei Rd  
E/W Street: N Kihei Rd  
DATE: 1/16/2016  
CITY: Kihei

DAY: Saturday

	Start:	End:
AM		
NOON	10:00	14:00
PM		

AM	0	0	0
NOON	0	0	0
PM	0	0	0



AM	NOON	PM
0	0	0
0	1	0
0	4	0



AM	NOON	PM
0	0	0
0	3	0
0	0	0



AM	0	0	0
NOON	3	0	6
PM	0	0	0



# PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 16-8004-004  
N/S Street: S Kihei Rd  
E/W Street: N Kihei Rd  
DATE: 1/16/2016  
CITY: Kihei

DAY: Saturday

## NOON

### PEDESTRIANS

T I M E	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
10:00 AM	0	0	0	0	0	0	0	0
10:15 AM	0	0	1	1	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0
<b>TOTALS</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

### BIKES

T I M E	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
10:00 AM	2	0	5	0	0	0	0	1	0	0	3	0
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	0	1	0	0	0	0	0	1	0	0	0
10:45 AM	1	0	0	0	0	0	0	0	3	0	0	0
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	1	1	0
11:45 AM	0	0	0	0	0	0	0	1	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	3	0	0	0
12:15 PM	0	0	0	0	0	0	0	1	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	1	0	0	0
1:00 PM	0	0	1	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	1	0	1	0	0
<b>TOTALS</b>	<b>3</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>8</b>	<b>2</b>	<b>4</b>	<b>0</b>

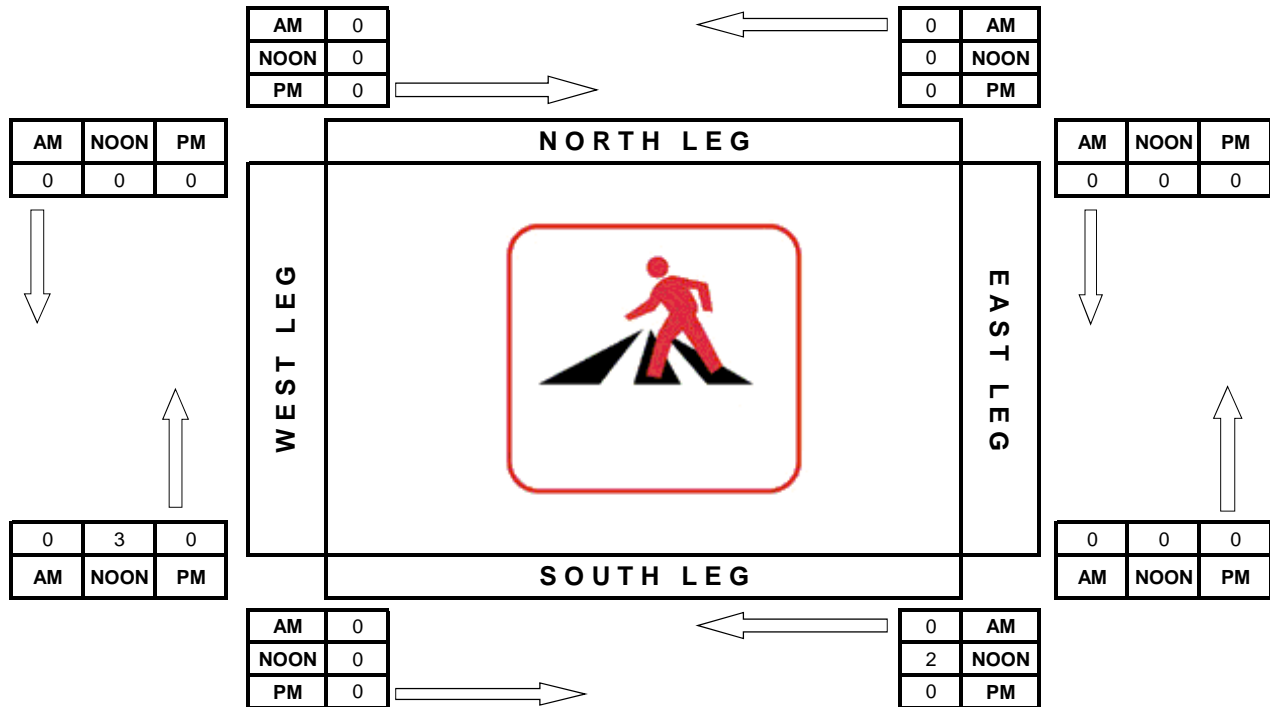
PREPARED BY NATIONAL DATA & SURVEYING SERVICES

Pedestrian Count Peak Hour

PROJECT#: 16-8004-005  
 N/S Street: Piilani Hwy  
 E/W Street: Pikea Ave  
 DATE: 1/16/2016  
 CITY: Kihei

DAY: Saturday

	Start:	End:
AM		
NOON	10:00	14:00
PM		



PREPARED BY NATIONAL DATA & SURVEYING SERVICES

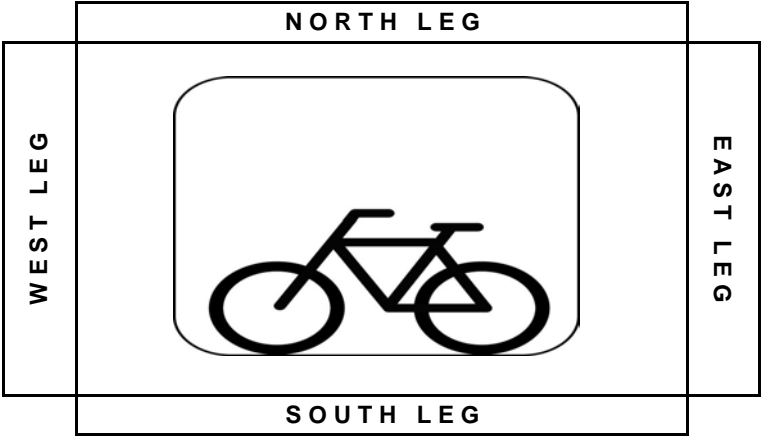
Bicycle Count Peak Hour

PROJECT#: 16-8004-005  
N/S Street: Piilani Hwy  
E/W Street: Pikea Ave  
DATE: 1/16/2016  
CITY: Kihei

	Start:	End:
AM		
NOON	10:00	14:00
PM		

DAY: Saturday

AM	0	0	0
NOON	0	8	0
PM	0	0	0



AM	NOON	PM
0	0	0
0	0	0
0	0	0



AM	NOON	PM
0	0	0
0	0	0
0	0	0



AM	0	0	0
NOON	0	1	0
PM	0	0	0



## DAY: Saturday

[illegible]



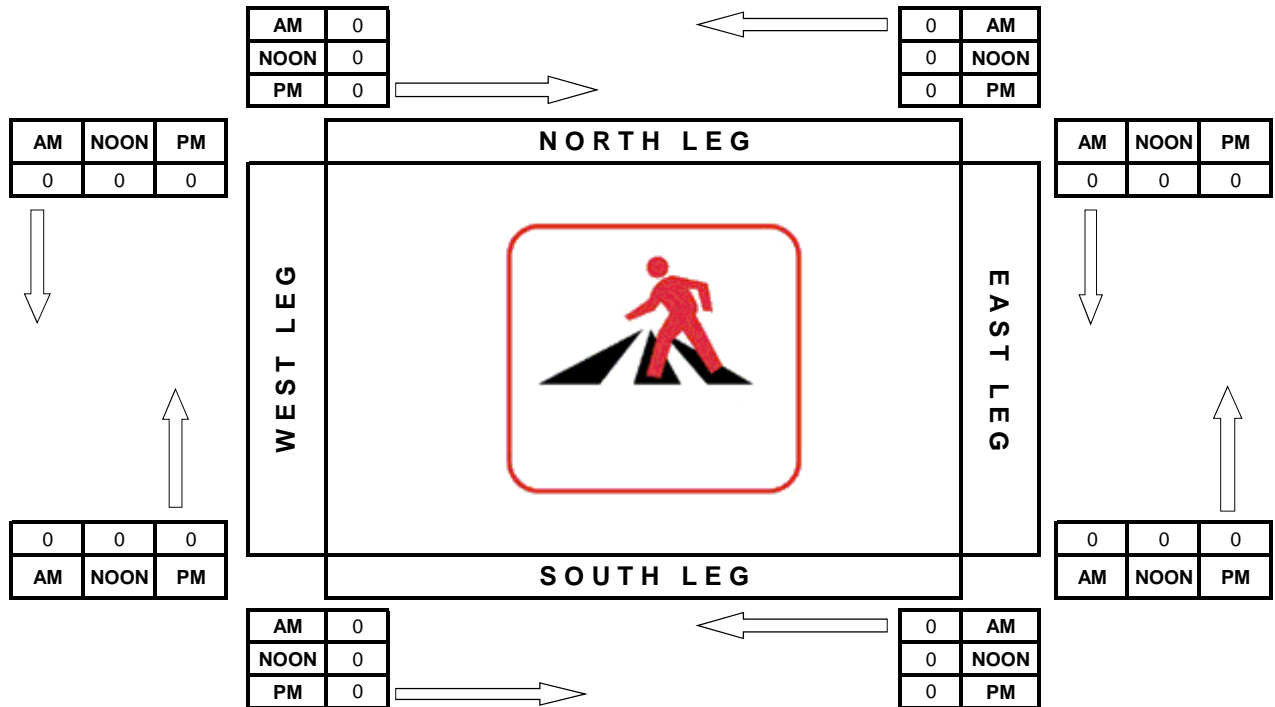
PREPARED BY NATIONAL DATA & SURVEYING SERVICES

Pedestrian Count Peak Hour

PROJECT#: 16-8004-006  
 N/S Street: Piilani Hwy  
 E/W Street: Kaonoulu St  
 DATE: 1/16/2016  
 CITY: Kihei

DAY: Saturday

	Start:	End:
AM		
NOON	10:00	14:00
PM		



PREPARED BY NATIONAL DATA & SURVEYING SERVICES

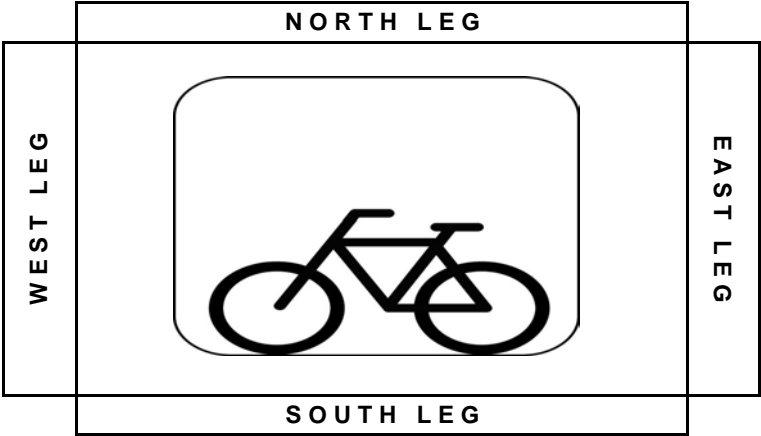
Bicycle Count Peak Hour

PROJECT#: 16-8004-006  
N/S Street: Piilani Hwy  
E/W Street: Kaonoulu St  
DATE: 1/16/2016  
CITY: Kihei

	Start:	End:
AM		
NOON	10:00	14:00
PM		

DAY: Saturday

AM	0	0	0
NOON	0	8	0
PM	0	0	0



AM	NOON	PM
0	1	0
0	0	0
0	0	0



AM	NOON	PM
0	0	0
0	0	0
0	0	0



AM	0	0	0
NOON	1	1	0
PM	0	0	0



# PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 16-8004-006  
 N/S Street: Piilani Hwy  
 E/W Street: Kaonoulu St  
 DATE: 1/16/2016  
 CITY: Kihei

DAY: Saturday

## NOON

### PEDESTRIANS

T I M E	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
10:00 AM	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0
<b>TOTALS</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

### BIKES

T I M E	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
10:00 AM	0	0	0	0	1	0	0	0	0	0	0	0
10:15 AM	0	1	0	0	0	0	0	0	0	0	0	0
10:30 AM	0	1	0	0	1	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	4	0	0	0	0	0	0	0
11:15 AM	0	1	0	0	0	0	1	0	0	0	0	0
11:30 AM	1	0	0	0	2	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	2	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	2	0	0	3	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	1	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTALS</b>	<b>1</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>13</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

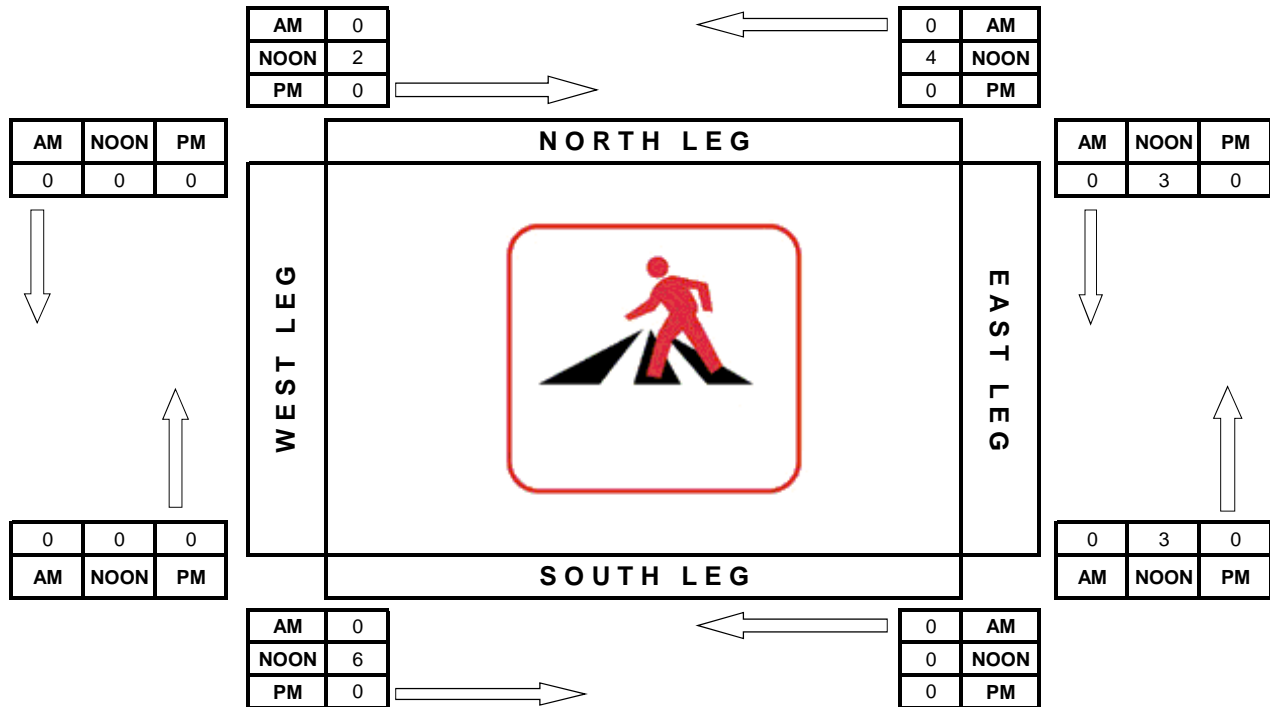
PREPARED BY NATIONAL DATA & SURVEYING SERVICES

Pedestrian Count Peak Hour

PROJECT#: 16-8004-007  
 N/S Street: S Kihei Rd  
 E/W Street: Kaonoulu St  
 DATE: 1/16/2016  
 CITY: Kihei

DAY: Saturday

	Start:	End:
AM		
NOON	10:00	14:00
PM		



PREPARED BY NATIONAL DATA & SURVEYING SERVICES

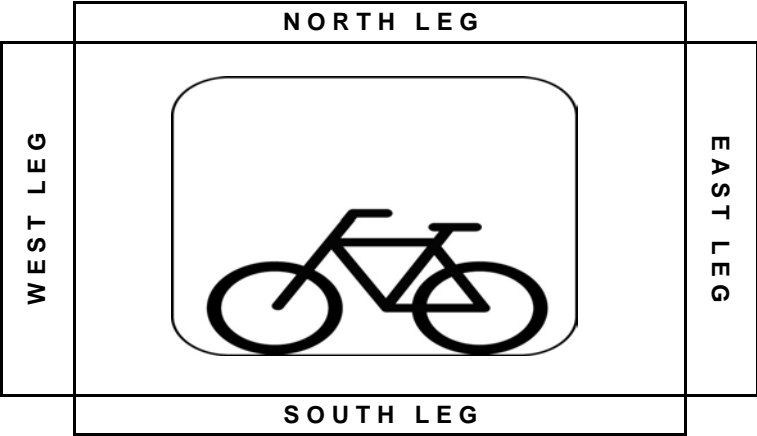
Bicycle Count Peak Hour

PROJECT#: 16-8004-007  
N/S Street: S Kihei Rd  
E/W Street: Kaonoululu St  
DATE: 1/16/2016  
CITY: Kihei

DAY: Saturday

	Start:	End:
AM		
NOON	10:00	14:00
PM		

AM	0	0	0
NOON	0	12	0
PM	0	0	0



AM	NOON	PM
0	0	0
0	0	0
0	0	0



AM	NOON	PM
0	0	0
0	0	0
0	3	0



AM	0	0	0
NOON	0	11	3
PM	0	0	0



# PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 16-8004-007  
N/S Street: S Kihei Rd  
E/W Street: Kaonoulu St  
DATE: 1/16/2016  
CITY: Kihei

DAY: Saturday

## NOON

### PEDESTRIANS

T I M E	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
10:00 AM	0	0	0	0	0	4	0	0
10:15 AM	0	0	0	1	2	0	0	0
10:30 AM	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0
11:00 AM	2	2	2	0	2	0	0	0
11:15 AM	0	0	0	0	0	0	0	0
11:30 AM	0	1	2	0	0	0	0	0
11:45 AM	0	1	2	0	1	3	0	0
12:00 PM	0	0	1	0	0	0	0	0
12:15 PM	0	0	0	2	0	2	0	0
12:30 PM	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	1	2	1	0	0
1:00 PM	0	0	1	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0
1:45 PM	0	0	2	0	0	0	0	0
<b>TOTALS</b>	<b>2</b>	<b>4</b>	<b>10</b>	<b>4</b>	<b>7</b>	<b>10</b>	<b>0</b>	<b>0</b>

### BIKES

T I M E	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
10:00 AM	0	5	2	0	3	0	0	0	0	1	0	0
10:15 AM	0	1	0	0	2	0	0	0	0	1	0	0
10:30 AM	0	4	0	0	5	0	0	0	0	1	0	0
10:45 AM	0	1	1	0	2	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	6	0	0	0	0	2	0	0
11:15 AM	0	2	1	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	2	0	3	0	0	0	0	0	0	0
11:45 AM	0	0	1	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	1	0	0	0	0	2	0	0
12:15 PM	0	2	0	0	1	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	1	0	0
12:45 PM	0	2	0	0	0	0	0	0	0	2	0	0
1:00 PM	0	0	1	0	2	0	0	0	0	2	0	0
1:15 PM	0	0	1	0	2	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	1	0	0	0	0	0	0	0
<b>TOTALS</b>	<b>0</b>	<b>17</b>	<b>9</b>	<b>0</b>	<b>28</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>0</b>	<b>0</b>

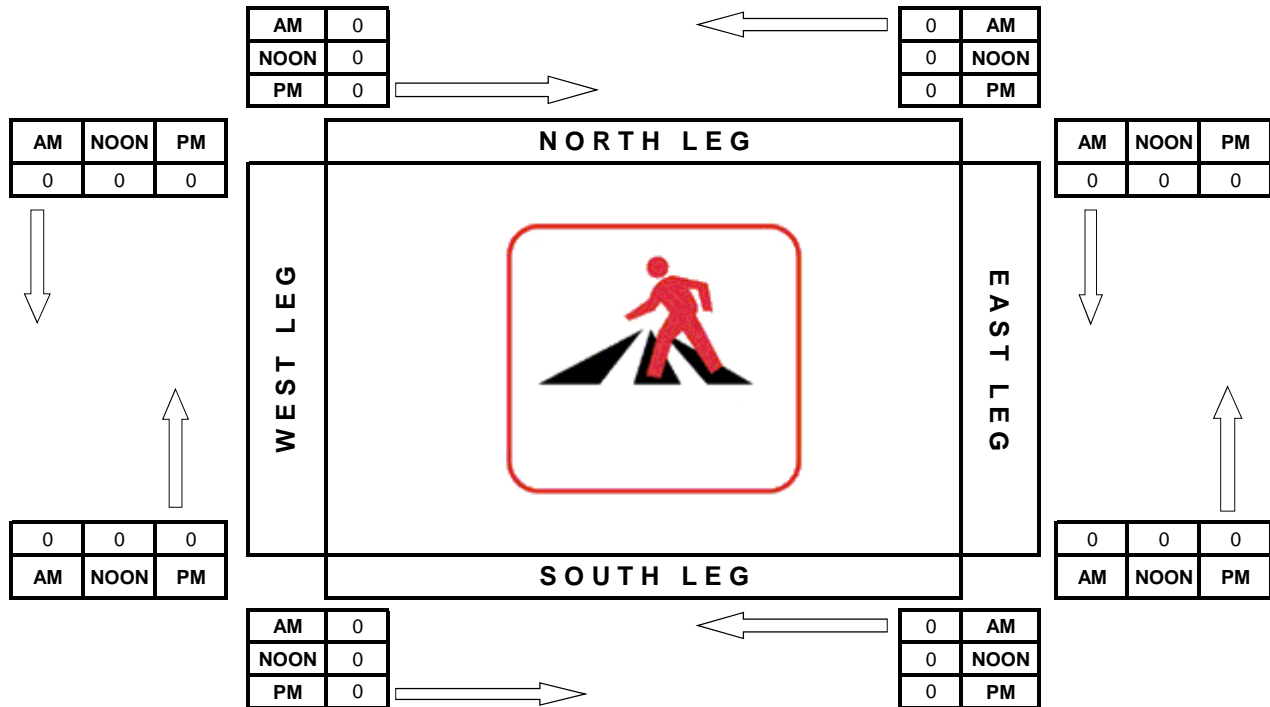
PREPARED BY NATIONAL DATA & SURVEYING SERVICES

Pedestrian Count Peak Hour

PROJECT#: 16-8004-008  
 N/S Street: Piilani Hwy  
 E/W Street: Kulanihako St  
 DATE: 1/16/2016  
 CITY: Kihei

DAY: Saturday

	Start:	End:
AM		
NOON	10:00	14:00
PM		



PREPARED BY NATIONAL DATA & SURVEYING SERVICES

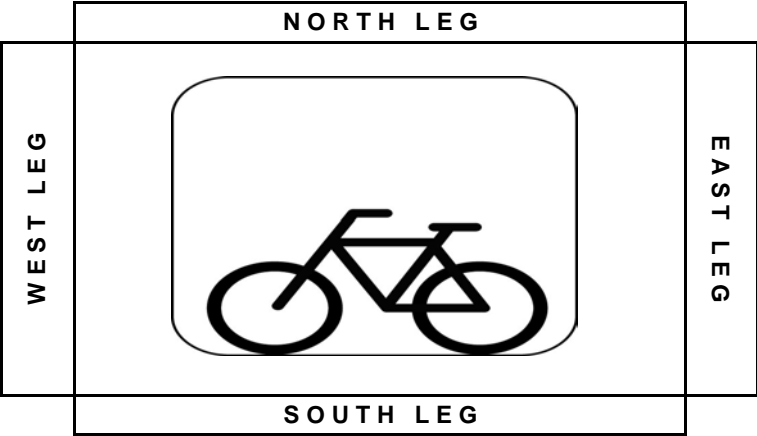
Bicycle Count Peak Hour

PROJECT#: 16-8004-008  
N/S Street: Piilani Hwy  
E/W Street: Kulanihakai St  
DATE: 1/16/2016  
CITY: Kihei

DAY: Saturday

	Start:	End:
AM		
NOON	10:00	14:00
PM		

AM	0	0	0
NOON	0	8	0
PM	0	0	0



AM	NOON	PM
0	0	0
0	0	0
0	0	0



AM	NOON	PM
0	0	0
0	0	0
0	0	0



AM	0	0	0
NOON	0	1	0
PM	0	0	0





PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 16-8004-008  
N/S Street: Piilani Hwy  
E/W Street: Kulanihakoi St  
DATE: 1/16/2016  
CITY: Kihei

DAY: Saturday

**NOON**

## PEDESTRIANS

T I M E	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
10:00 AM	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0
TOTALS	0	0	0	0	0	0	0	0

## BIKES

T I M E	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
10:00 AM	0	0	0	0	1	0	0	0	0	0	0	0
10:15 AM	0	2	0	0	0	0	0	0	0	0	0	1
10:30 AM	0	0	0	0	1	0	0	0	0	0	0	1
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	4	0	0	0	0	0	0	0
11:15 AM	0	1	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	3	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	1	0	0	0	0	0	0	0
12:00 PM	0	1	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	2	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	1	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	1	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	0	5	0	0	13	0	0	0	0	0	0	2

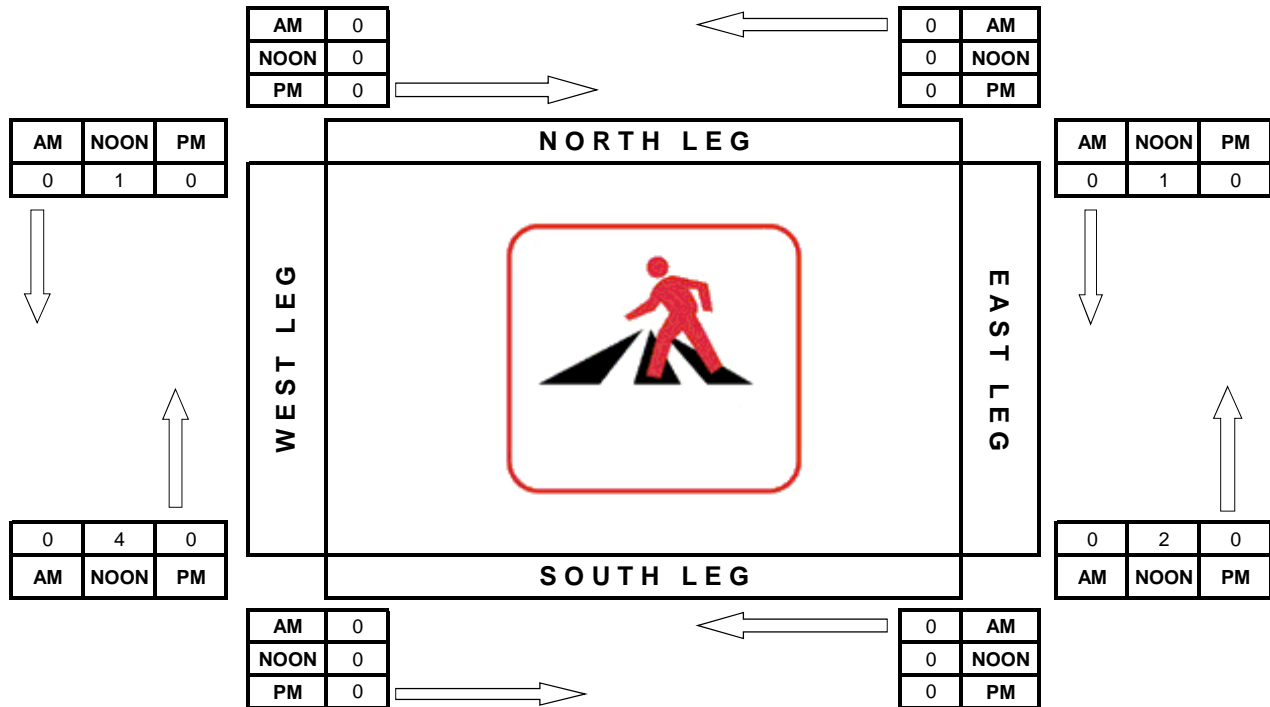
PREPARED BY NATIONAL DATA & SURVEYING SERVICES

Pedestrian Count Peak Hour

PROJECT#: 16-8004-009  
 N/S Street: Kenolio St  
 E/W Street: Kaonoulu St  
 DATE: 1/16/2016  
 CITY: Kihei

DAY: Saturday

	Start:	End:
AM		
NOON	10:00	14:00
PM		



PREPARED BY NATIONAL DATA & SURVEYING SERVICES

Bicycle Count Peak Hour

PROJECT#: 16-8004-009  
N/S Street: Kenolio St  
E/W Street: Kaonoulu St  
DATE: 1/16/2016  
CITY: Kihei

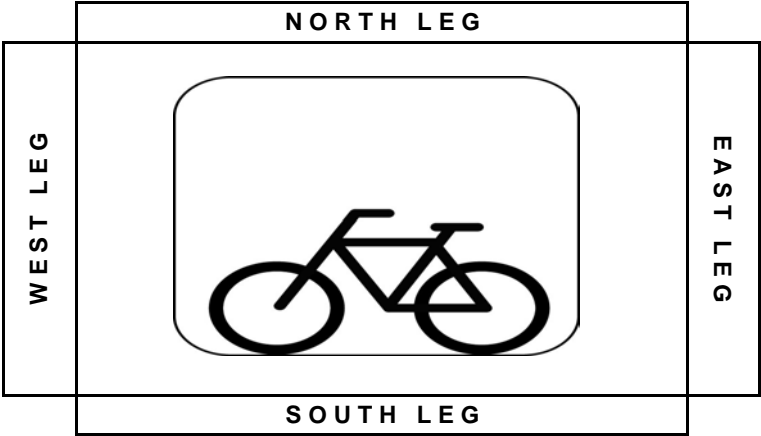
	Start:	End:
AM		
NOON	10:00	14:00
PM		

DAY: Saturday

AM	0	0	0
NOON	0	0	0
PM	0	0	0



AM	NOON	PM
0	0	0
0	0	0
0	0	0



AM	NOON	PM
0	0	0
0	0	0
0	1	0



AM	0	0	0
NOON	0	0	1
PM	0	0	0



# PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 16-8004-009  
 N/S Street: Kenolio St  
 E/W Street: Kaonoulu St  
 DATE: 1/16/2016  
 CITY: Kihei

DAY: Saturday

## NOON

### PEDESTRIANS

T I M E	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
10:00 AM	0	0	0	0	0	1	0	0
10:15 AM	0	0	0	0	1	0	0	1
10:30 AM	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	2	0	1	0
11:15 AM	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	1	1
11:45 AM	0	0	0	0	0	1	2	0
12:00 PM	0	1	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0
<b>TOTALS</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>2</b>	<b>4</b>	<b>2</b>

### BIKES

T I M E	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	0	2	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	1	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	1	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTALS</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>

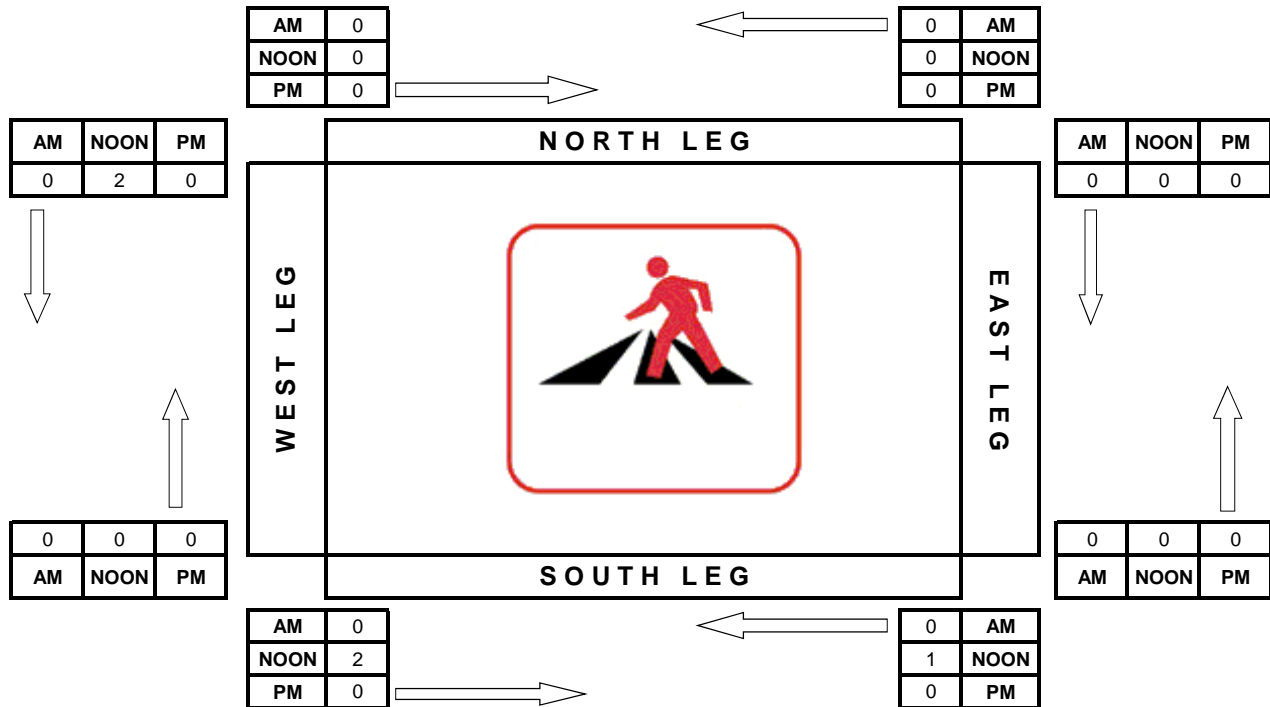
PREPARED BY NATIONAL DATA & SURVEYING SERVICES

Pedestrian Count Peak Hour

PROJECT#: 16-8004-010  
 N/S Street: Alulike St  
 E/W Street: Kaonoulu St  
 DATE: 1/16/2016  
 CITY: Kihei

DAY: Saturday

	Start:	End:
AM		
NOON	10:00	14:00
PM		



PREPARED BY NATIONAL DATA & SURVEYING SERVICES

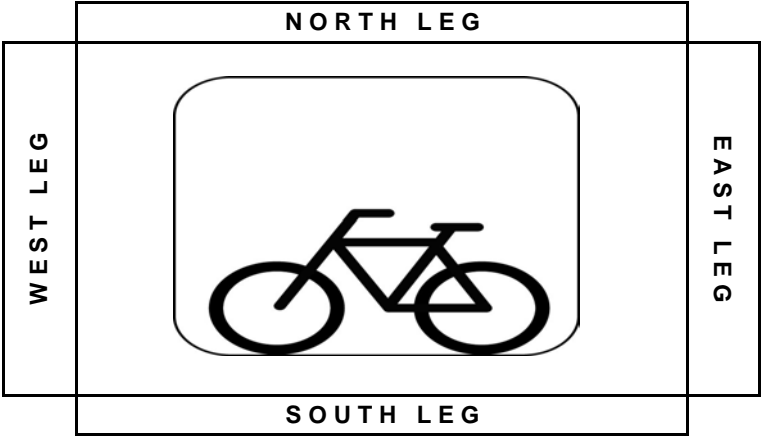
Bicycle Count Peak Hour

PROJECT#: 16-8004-010  
N/S Street: Alulike St  
E/W Street: Kaonoulu St  
DATE: 1/16/2016  
CITY: Kihei

	Start:	End:
AM		
NOON	10:00	14:00
PM		

DAY: Saturday

AM	0	0	0
NOON	0	2	0
PM	0	0	0



AM	NOON	PM
0	4	0
0	0	0
0	0	0



AM	NOON	PM
0	0	0
0	0	0
0	0	0



AM	0	0	0
NOON	2	0	0
PM	0	0	0



# PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 16-8004-010  
N/S Street: Alulike St  
E/W Street: Kaonoulu St  
DATE: 1/16/2016  
CITY: Kihei

DAY: Saturday

## NOON

### PEDESTRIANS

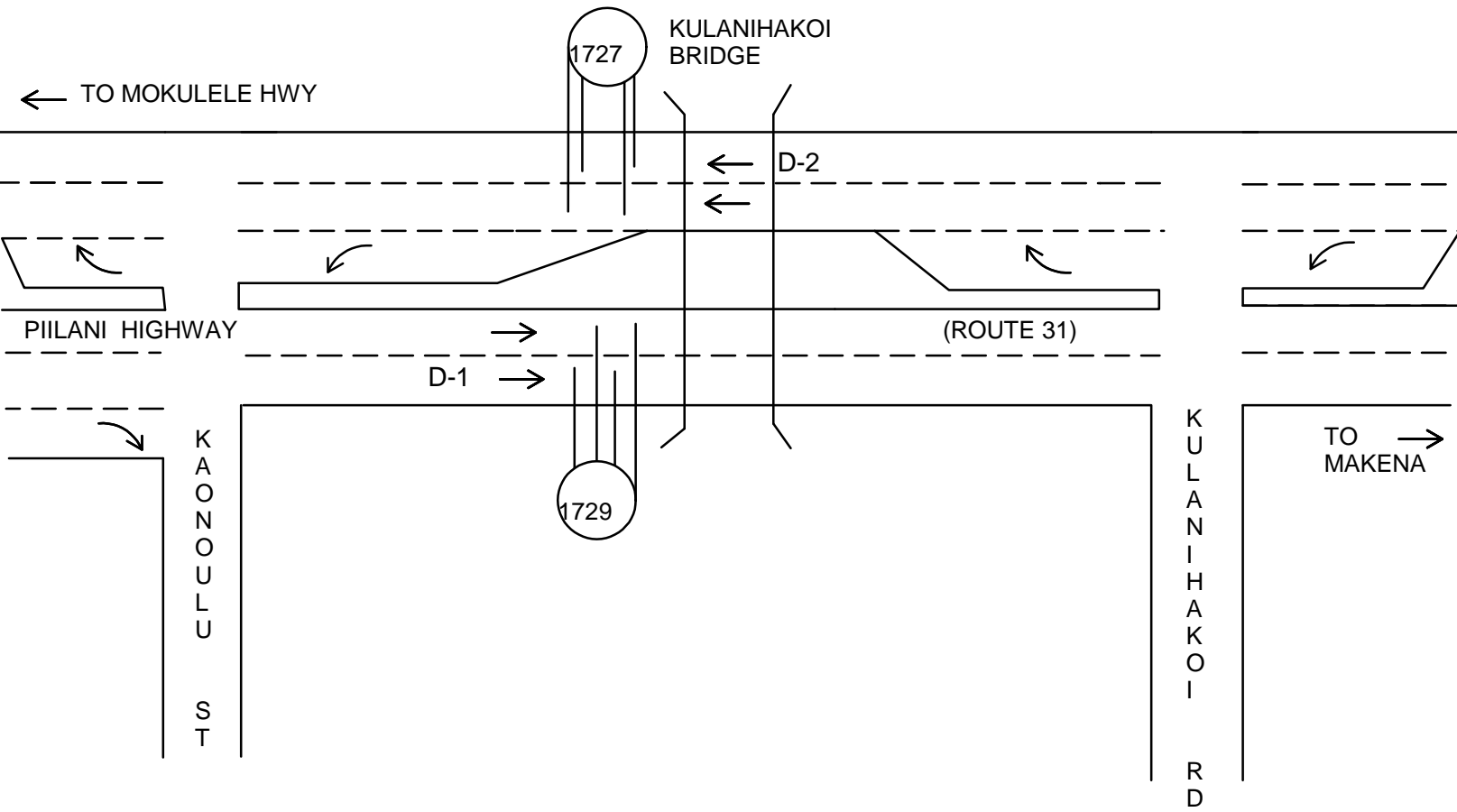
T I M E	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
10:00 AM	0	0	0	0	0	1	0	0
10:15 AM	0	0	0	0	0	0	0	0
10:30 AM	0	0	1	1	0	0	0	0
10:45 AM	0	0	1	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	2
11:15 AM	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0
12:00 PM	1	1	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	1	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0
<b>TOTALS</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>2</b>

### BIKES

T I M E	NB			SB			EB			WB		
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
10:00 AM	0	0	0	0	0	0	1	1	0	0	0	0
10:15 AM	0	0	1	1	0	1	0	0	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	1	0	0	0	0	0
11:00 AM	2	0	0	0	2	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	3	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	1	0	0	0	0	0
12:00 PM	0	0	0	0	0	2	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	2	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	1	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTALS</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>5</b>	<b>7</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

ISLAND: MAUI

AREA: KIHEI



Station No:

B74 0031 00000

Station Location:

Piilani Highway between Kaonoulu Street and Kulanihakoi Road at North side of Kulanihakoi Bridge

Station Mileage:	1.63	GPS Coord (Latitude):	20.75801 N
		GPS Coord (Longitude):	156.44873 W
Begin Survey (Date/Time):	5-6-13 0000	End Survey (Date/Time):	5-9-13 0000
Survey Method:	LOOP HOSE OTHER	Survey Type:	VOL CLASS SPEED OTHER
Survey Crew:	CA, LT	Module No.:	

HPMS DATA

Segment Description:

PIILANI HIGHWAY - MOKULELE HIGHWAY TO KILOHANA DRIVE

Segment Begin LRS	0.00	Segment End LRS	5.91	Length	5.91		
Facility Name	Juris	Func Class	Area Type	Route		D-1 = Direction to End of Route	
				No.	Mile	D-2 = Direction to Beginning of Route	
PIILANI HIGHWAY	S	14	2	31	1.63	D-1	TO KULA HIGHWAY
						D-2	TO MOKULELE HIGHWAY

Sketch By:

EPJ

Date:

6/6/2011

SLD:

2009



Run Date: 2014/06/17

# Hawaii Department of Transportation

## Highways Division

## Highways Planning Survey Section

**2013 Program Count - Summary**

Site ID: B74003100000

Town: Maui

DIR 1: +MP

DIR 2: -MP

Final AADT: 33700

Functional Class: URBAN:PRINCIPAL ARTERIAL - OTHER

Count Type: CLASS

Counter Type: Tube

Route No: 31

Location: Piilani Hwy btwn Kaonoulu St \_Kulanihakoī Rd @ North side of Kulanihakoī Bridge

TIME-AM	DIR 1	DIR 2	TOTAL	TIME-AM	DIR 1	DIR 2	TOTAL	TIME-PM	DIR 1	DIR 2	TOTAL	TIME-PM	DIR 1	DIR 2	TOTAL			
DATE : 05/07/2013																		
12:00-12:15	7	14	21	06:00-06:15	355	305	660	12:00-12:15	286	263	549	06:00-06:15	221	160	381			
12:15-12:30	7	13	20	06:15-06:30	460	368	828	12:15-12:30	309	271	580	06:15-06:30	210	173	383			
12:30-12:45	10	10	20	06:30-06:45	500	321	821	12:30-12:45	308	265	573	06:30-06:45	217	165	382			
12:45-01:00	6	19	25	06:45-07:00	417	299	716	12:45-01:00	326	301	627	06:45-07:00	161	126	287			
01:00-01:15	6	11	17	07:00-07:15	375	232	607	01:00-01:15	330	300	630	07:00-07:15	170	124	294			
01:15-01:30	14	12	26	07:15-07:30	353	264	617	01:15-01:30	340	348	688	07:15-07:30	170	121	291			
01:30-01:45	9	18	27	07:30-07:45	275	276	551	01:30-01:45	368	305	673	07:30-07:45	145	120	265			
01:45-02:00	15	16	31	07:45-08:00	325	248	573	01:45-02:00	384	343	727	07:45-08:00	145	101	246			
02:00-02:15	10	12	22	08:00-08:15	256	221	477	02:00-02:15	329	344	673	08:00-08:15	160	113	273			
02:15-02:30	16	18	34	08:15-08:30	254	251	505	02:15-02:30	362	362	724	08:15-08:30	147	136	283			
02:30-02:45	33	28	61	08:30-08:45	233	302	535	02:30-02:45	332	354	686	08:30-08:45	163	100	263			
02:45-03:00	20	18	38	08:45-09:00	277	275	552	02:45-03:00	367	372	739	08:45-09:00	101	91	192			
03:00-03:15	29	13	42	09:00-09:15	216	275	491	03:00-03:15	382	373	755	09:00-09:15	126	96	222			
03:15-03:30	45	24	69	09:15-09:30	233	264	497	03:15-03:30	402	431	833	09:15-09:30	107	90	197			
03:30-03:45	62	18	80	09:30-09:45	236	250	486	03:30-03:45	397	423	820	09:30-09:45	80	86	166			
03:45-04:00	62	36	98	09:45-10:00	269	260	529	03:45-04:00	386	345	731	09:45-10:00	70	86	156			
04:00-04:15	68	58	126	10:00-10:15	235	251	486	04:00-04:15	414	316	730	10:00-10:15	48	49	97			
04:15-04:30	92	60	152	10:15-10:30	256	256	512	04:15-04:30	329	363	692	10:15-10:30	58	79	137			
04:30-04:45	113	63	176	10:30-10:45	283	267	550	04:30-04:45	286	330	616	10:30-10:45	20	59	79			
04:45-05:00	164	81	245	10:45-11:00	261	258	519	04:45-05:00	320	274	594	10:45-11:00	32	38	70			
05:00-05:15	165	95	260	11:00-11:15	258	278	536	05:00-05:15	279	194	473	11:00-11:15	23	35	58			
05:15-05:30	253	129	382	11:15-11:30	238	297	535	05:15-05:30	248	198	446	11:15-11:30	11	43	54			
05:30-05:45	287	190	477	11:30-11:45	298	280	578	05:30-05:45	268	198	466	11:30-11:45	17	20	37			
05:45-06:00	331	226	557	11:45-12:00	294	216	510	05:45-06:00	232	197	429	11:45-12:00	17	27	44			
AM COMMUTER PERIOD (05:00-09:00)			DIR 1	DIR 2			PM COMMUTER PERIOD (15:00-19:00)			DIR 1	DIR 2							
TWO DIRECTIONAL PEAK			06:00 AM to 07:00 AM			TWO DIRECTIONAL PEAK			03:00 PM to 04:00 PM									
AM - PEAK HR TIME						PM - PEAK HR TIME												
AM - PEAK HR VOLUME			1732	1293			3025	PM - PEAK HR VOLUME			1567	1572			3139			
AM - K FACTOR (%)						8.18	PM - K FACTOR (%)						8.49					
AM - D (%)			57.26	42.74			100.00	PM - D (%)			49.92	50.08			100.00			
DIRECTIONAL PEAK			06:15 AM to 07:15 AM			06:00 AM to 07:00 AM			DIRECTIONAL PEAK			03:15 PM to 04:15 PM			03:00 PM to 04:00 PM			
AM - PEAK HR TIME									PM - PEAK HR TIME									
AM - PEAK HR VOLUME			1752	1293				PM - PEAK HR VOLUME			1599	1572						
AM PERIOD (00:00-12:00)								PM PERIOD (12:00-24:00)										
TWO DIRECTIONAL PEAK			06:00 AM to 07:00 AM			TWO DIRECTIONAL PEAK			02:45 PM to 03:45 PM									
AM - PEAK HR TIME						PM - PEAK HR TIME												
AM - PEAK HR VOLUME			1732	1293			3025	PM - PEAK HR VOLUME			1548	1599			3147			
AM - K FACTOR (%)						8.18	PM - K FACTOR (%)						8.51					
AM - D (%)			57.26	42.74			100.00	PM - D (%)			49.19	50.81			100.00			
NON-COMMUTER PERIOD (09:00-15:00)								6-HR, 12-HR, 24-HR PERIODS								DIR 1	DIR 2	Total
TWO DIRECTIONAL PEAK			02:00 PM to 03:00 PM			AM 6-HR PERIOD (06:00-12:00)			7,157	6,514			13,671					
PEAK HR TIME						AM 12-HR PERIOD (00:00-12:00)			8,981	7,696			16,677					
PEAK HR VOLUME			1390	1432			2822	PM 6-HR PERIOD (12:00-18:00)			7,984	7,470			15,454			
DIRECTIONAL PEAK			01:30 PM to 02:30 PM			02:00 PM to 03:00 PM			PM 12-HR PERIOD (12:00-24:00)			10,603	9,708			20,311		
PEAK HR TIME									24 HOUR PERIOD			19,584	17,404			36,988		
PEAK HR VOLUME			1443	1432				D (%)			52.95	47.05			100.00			

Run Date: 2014/06/17

# Hawaii Department of Transportation

## Highways Division

## Highways Planning Survey Section

**2013 Program Count - Summary**

Site ID: B74003100000

Town: Maui

DIR 1: +MP

DIR 2: -MP

Final AADT: 33700

Functional Class: URBAN:PRINCIPAL ARTERIAL - OTHER

Count Type: CLASS

Counter Type: Tube

Route No: 31

Location: Piilani Hwy btwn Kaonoulu St \_Kulanihakoī Rd @ North side of Kulanihakoī Bridge

TIME-AM	DIR 1	DIR 2	TOTAL	TIME-AM	DIR 1	DIR 2	TOTAL	TIME-PM	DIR 1	DIR 2	TOTAL	TIME-PM	DIR 1	DIR 2	TOTAL								
DATE : 05/08/2013																							
12:00-12:15	9	14	23	06:00-06:15	357	237	594	12:00-12:15	341	162	503	06:00-06:15	217	114	331								
12:15-12:30	13	19	32	06:15-06:30	447	280	727	12:15-12:30	346	178	524	06:15-06:30	179	104	283								
12:30-12:45	10	19	29	06:30-06:45	452	274	726	12:30-12:45	313	192	505	06:30-06:45	214	97	311								
12:45-01:00	5	15	20	06:45-07:00	404	248	652	12:45-01:00	312	190	502	06:45-07:00	192	81	273								
01:00-01:15	11	18	29	07:00-07:15	351	247	598	01:00-01:15	298	168	466	07:00-07:15	176	81	257								
01:15-01:30	12	20	32	07:15-07:30	352	208	560	01:15-01:30	309	197	506	07:15-07:30	172	116	288								
01:30-01:45	12	15	27	07:30-07:45	272	219	491	01:30-01:45	333	180	513	07:30-07:45	142	88	230								
01:45-02:00	13	12	25	07:45-08:00	306	175	481	01:45-02:00	361	175	536	07:45-08:00	174	83	257								
02:00-02:15	18	5	23	08:00-08:15	260	167	427	02:00-02:15	340	181	521	08:00-08:15	172	80	252								
02:15-02:30	16	15	31	08:15-08:30	265	174	439	02:15-02:30	345	211	556	08:15-08:30	152	85	237								
02:30-02:45	30	17	47	08:30-08:45	237	164	401	02:30-02:45	384	182	566	08:30-08:45	153	79	232								
02:45-03:00	27	14	41	08:45-09:00	242	184	426	02:45-03:00	399	230	629	08:45-09:00	130	74	204								
03:00-03:15	31	17	48	09:00-09:15	255	147	402	03:00-03:15	392	219	611	09:00-09:15	111	54	165								
03:15-03:30	39	11	50	09:15-09:30	272	172	444	03:15-03:30	393	251	644	09:15-09:30	105	83	188								
03:30-03:45	64	22	86	09:30-09:45	275	172	447	03:30-03:45	377	236	613	09:30-09:45	95	60	155								
03:45-04:00	48	25	73	09:45-10:00	250	171	421	03:45-04:00	355	219	574	09:45-10:00	88	56	144								
04:00-04:15	65	28	93	10:00-10:15	241	178	419	04:00-04:15	320	211	531	10:00-10:15	52	43	95								
04:15-04:30	87	31	118	10:15-10:30	244	176	420	04:15-04:30	339	176	515	10:15-10:30	43	62	105								
04:30-04:45	116	50	166	10:30-10:45	218	159	377	04:30-04:45	318	161	479	10:30-10:45	43	38	81								
04:45-05:00	148	63	211	10:45-11:00	271	157	428	04:45-05:00	312	183	495	10:45-11:00	27	27	54								
05:00-05:15	179	88	267	11:00-11:15	253	151	404	05:00-05:15	292	156	448	11:00-11:15	23	20	43								
05:15-05:30	241	132	373	11:15-11:30	305	169	474	05:15-05:30	299	138	437	11:15-11:30	24	29	53								
05:30-05:45	288	160	448	11:30-11:45	291	184	475	05:30-05:45	252	130	382	11:30-11:45	14	21	35								
05:45-06:00	316	207	523	11:45-12:00	356	152	508	05:45-06:00	194	103	297	11:45-12:00	11	16	27								
AM COMMUTER PERIOD (05:00-09:00)			DIR 1	DIR 2			PM COMMUTER PERIOD (15:00-19:00)			DIR 1	DIR 2												
TWO DIRECTIONAL PEAK			06:15 AM to 07:15 AM			TWO DIRECTIONAL PEAK			03:00 PM to 04:00 PM														
AM - PEAK HR TIME						PM - PEAK HR TIME																	
AM - PEAK HR VOLUME			1654	1049			2703	PM - PEAK HR VOLUME			1517	925			2442								
AM - K FACTOR (%)						8.66	PM - K FACTOR (%)						7.82										
AM - D (%)			61.19	38.81			100.00	PM - D (%)			62.12	37.88			100.00								
DIRECTIONAL PEAK						DIRECTIONAL PEAK																	
AM - PEAK HR TIME			06:00 AM to 07:00 AM			06:15 AM to 07:15 AM			PM - PEAK HR TIME			03:00 PM to 04:00 PM			03:00 PM to 04:00 PM								
AM - PEAK HR VOLUME			1660			1049			PM - PEAK HR VOLUME			1517			925								
AM PERIOD (00:00-12:00)								PM PERIOD (12:00-24:00)															
TWO DIRECTIONAL PEAK								TWO DIRECTIONAL PEAK															
AM - PEAK HR TIME								PM - PEAK HR TIME								02:45 PM to 03:45 PM							
AM - PEAK HR VOLUME								1654			1049			2703	PM - PEAK HR VOLUME			1561	936	2497			
AM - K FACTOR (%)														8.66	PM - K FACTOR (%)			8.00					
AM - D (%)								61.19			38.81			100.00	PM - D (%)			62.52	37.48	100.00			
NON-COMMUTER PERIOD (09:00-15:00)								6-HR, 12-HR, 24-HR PERIODS															
TWO DIRECTIONAL PEAK								AM 6-HR PERIOD (06:00-12:00)								7,176		4,565		11,741			
PEAK HR TIME								02:00 PM to 03:00 PM								AM 12-HR PERIOD (00:00-12:00)		8,974		5,582		14,556	
PEAK HR VOLUME								1468			804			2272	PM 6-HR PERIOD (12:00-18:00)			7,924		4,429		12,353	
DIRECTIONAL PEAK								PM 12-HR PERIOD (12:00-24:00)								10,633		6,020		16,653			
PEAK HR TIME								02:00 PM to 03:00 PM			02:00 PM to 03:00 PM			24 HOUR PERIOD			19,607		11,602		31,209		
PEAK HR VOLUME								1468			804			D (%)			62.82		37.18		100.00		

Run Date: 2014/06/17

**Hawaii Department of Transportation  
Highways Division  
Highways Planning Survey Section  
Vehicle Classification Data Summary  
2013**

Site ID: B74003100000

Route No: 31

Date From: 2013/05/07 0:00

Town: Maui

Direction: +MP

Date To: 2013/05/08 23:45

Location: Piilani Hwy btwn Kaonoulu St \_Kulanihakai Rd @ North side of Kulanihakai Bridge

Functional Classification: 14 URBAN:PRINCIPAL ARTERIAL - OTHER  
REPORT TOTALS - 48 HOURS RECORDED

	VOLUME	%	NUMBER OF AXLES
Cycles	361	0.53%	723
PC	58543	85.84%	117086
2A-4T	7434	10.90%	14868
<hr/>			
LIGHT VEHICLE TOTALS	66338	97.27%	132677
<hr/>			
<b><u>HEAVY VEHICLES</u></b>			
Bus	483	0.71%	1207
<b><u>SINGLE UNIT TRUCK</u></b>			
2A-6T	823	1.21%	1646
3A-SU	224	0.33%	672
4A-SU	2	0.00%	8
<b><u>SINGLE-TRAILER TRUCKS</u></b>			
4A-ST	152	0.22%	608
5A-ST	169	0.25%	845
6A-ST	8	0.01%	48
<b><u>MULTI-TRAILER TRUCKS</u></b>			
5A-MT	0	0.00%	0
6A-MT	0	0.00%	0
7A-MT	0	0.00%	0
<hr/>			
HEAVY VEHICLE TOTALS	1861	2.73%	5034
<hr/>			
CLASSIFIED VEHICLES TOTALS	68199 (A)	100.00%	137711 (B)
UNCLASSIFIED VEHICLES TOTALS	-2	-0.00%	

AXLE  
CORRECTION

FACTOR (A/C) = 0.990

ROADTUBE  
EQUIVALENT(B/2) = 68856 (C)

PEAK HOUR VOLUME : 3139 2013/05/07 15:00	PEAK HOUR TRUCK VOLUME	% TOTAL PEAK HOUR VOLUME	24 HOUR TRUCK VOLUME	AADT	% OF AADT	HPMS K-FACTOR (PEAK/AADT) (ITEM 66)
SINGLE UNIT TRUCKS (TYPE 4-7)	60	(65A-1) 1.91%	766	33700	(65A-2) 2.27%	9.31%
COMBINATION (TYPE 8-13)	16	(65B-1) 0.51%	164		(65B-2) 0.49%	9.31%