

# **Appendix F**

## **Traffic Impact Analysis**

# Traffic Counts

## MAX QUEUE STUDY

**Location:** Risling Ct/Shasta Dr (NS) & W Covell Blvd (EW)

**City:** Davis, CA

**Day:** Thursday

**Date:** 3/16/2017

TIME	MAX QUEUE LENGTH		
	EB Lane	SB Lane	SB Thru-Right
7:00 AM	1	1	1
7:15 AM	1	1	0
7:30 AM	3	2	1
7:45 AM	3	3	1
8:00 AM	2	1	1
8:15 AM	2	3	3
8:30 AM	2	2	1
8:45 AM	3	2	1
4:00 PM	2	5	1
4:15 PM	1	3	2
4:30 PM	2	9	2
4:45 PM	1	3	1
5:00 PM	1	3	3
5:15 PM	2	3	2
5:30 PM	0	3	1
5:45 PM	1	3	1

Notes:

## MAX QUEUE STUDY

**Location:** John Jones Rd (NS) & W Covell Blvd (EW)

**City:** Davis, CA

**Day:** Thursday

**Date:** 3/16/2017

TIME	MAX QUEUE LENGTH			
	EB (Inside Lane)	EB (Outside Lane)	WB (Inside Lane)	WB (Outside Lane)
7:00 AM	4	3	2	4
7:15 AM	5	7	8	7
7:30 AM	5	11	8	7
7:45 AM	10	11	6	7
8:00 AM	12	12	7	5
8:15 AM	10	17	10	8
8:30 AM	7	14	7	5
8:45 AM	8	14	10	5
4:00 PM	7	12	11	4
4:15 PM	12	13	11	11
4:30 PM	9	7	5	5
4:45 PM	8	6	9	7
5:00 PM	11	10	11	8
5:15 PM	4	2	6	3
5:30 PM	3	2	8	6
5:45 PM	9	5	12	9

**Notes:**

Traffic backed up in EB Outside Lane for 8:15AM and 8:30 AM time segments

## National Data and Surveying Services

City of Davis  
 All Vehicles & Uturns On Unshifted  
 Bikes & Peds On Bank 1  
 Nothing On Bank 2

(323) 782-0090  
[info@ndsdata.com](mailto:info@ndsdata.com)

File Name : 17-7217-001 Lake Blvd & W Covell Blvd  
 Date : 3/16/2017

### Unshifted Count = All Vehicles & Uturns

START TIME	Lake Blvd Southbound					W Covell Blvd Westbound					Lake Blvd Northbound					W Covell Blvd Eastbound					Total	Uturns Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL		
7:00	2	6	4	0	12	18	32	4	0	54	7	8	25	0	40	4	39	3	0	46	152	0
7:15	4	10	8	0	22	13	33	2	0	48	1	9	29	0	39	3	51	4	0	58	167	0
7:30	5	10	2	0	17	19	39	2	0	60	9	15	51	0	75	3	71	10	0	84	236	0
7:45	12	14	4	0	30	14	53	4	0	71	9	15	41	0	65	2	64	8	0	74	240	0
<b>Total</b>	<b>23</b>	<b>40</b>	<b>18</b>	<b>0</b>	<b>81</b>	<b>64</b>	<b>157</b>	<b>12</b>	<b>0</b>	<b>233</b>	<b>26</b>	<b>47</b>	<b>146</b>	<b>0</b>	<b>219</b>	<b>12</b>	<b>225</b>	<b>25</b>	<b>0</b>	<b>262</b>	<b>795</b>	<b>0</b>
8:00	9	15	2	0	26	17	36	3	0	56	6	15	60	0	81	2	60	12	0	74	237	0
8:15	10	14	2	0	26	43	46	2	0	91	10	16	50	0	76	2	63	9	0	74	267	0
8:30	11	8	3	0	22	32	44	1	0	77	8	9	63	0	80	3	42	8	0	53	232	0
8:45	10	8	3	0	21	26	28	4	0	58	5	9	35	0	49	2	48	6	0	56	184	0
<b>Total</b>	<b>40</b>	<b>45</b>	<b>10</b>	<b>0</b>	<b>95</b>	<b>118</b>	<b>154</b>	<b>10</b>	<b>0</b>	<b>282</b>	<b>29</b>	<b>49</b>	<b>208</b>	<b>0</b>	<b>286</b>	<b>9</b>	<b>213</b>	<b>35</b>	<b>0</b>	<b>257</b>	<b>920</b>	<b>0</b>
16:00	4	8	5	0	17	61	53	8	0	122	9	12	43	0	64	10	56	5	0	71	274	0
16:15	2	12	7	0	21	61	68	7	0	136	8	9	32	0	49	13	59	6	0	78	284	0
16:30	3	9	1	0	13	45	59	9	0	113	3	10	49	0	62	14	62	6	0	82	270	0
16:45	8	14	0	0	22	51	64	14	0	129	7	13	34	0	54	5	61	6	0	72	277	0
<b>Total</b>	<b>17</b>	<b>43</b>	<b>13</b>	<b>0</b>	<b>73</b>	<b>218</b>	<b>244</b>	<b>38</b>	<b>0</b>	<b>500</b>	<b>27</b>	<b>44</b>	<b>158</b>	<b>0</b>	<b>229</b>	<b>42</b>	<b>238</b>	<b>23</b>	<b>0</b>	<b>303</b>	<b>1105</b>	<b>0</b>
17:00	5	10	2	0	17	52	76	13	0	141	9	10	46	0	65	7	68	11	0	86	309	0
17:15	2	16	3	0	21	52	57	2	0	111	11	12	54	0	77	4	48	8	0	60	269	0
17:30	6	10	6	0	22	55	70	5	0	130	11	11	52	0	74	6	50	12	0	68	294	0
17:45	3	9	5	0	17	56	53	1	0	110	7	9	40	0	56	5	46	10	0	61	244	0
<b>Total</b>	<b>16</b>	<b>45</b>	<b>16</b>	<b>0</b>	<b>77</b>	<b>215</b>	<b>256</b>	<b>21</b>	<b>0</b>	<b>492</b>	<b>38</b>	<b>42</b>	<b>192</b>	<b>0</b>	<b>272</b>	<b>22</b>	<b>212</b>	<b>41</b>	<b>0</b>	<b>275</b>	<b>1116</b>	<b>0</b>
<b>Grand Total</b>	<b>96</b>	<b>173</b>	<b>57</b>	<b>0</b>	<b>326</b>	<b>615</b>	<b>811</b>	<b>81</b>	<b>0</b>	<b>1507</b>	<b>120</b>	<b>182</b>	<b>704</b>	<b>0</b>	<b>1006</b>	<b>85</b>	<b>888</b>	<b>124</b>	<b>0</b>	<b>1097</b>	<b>3936</b>	<b>0</b>
Apprch %	29.4%	53.1%	17.5%	0.0%		40.8%	53.8%	5.4%	0.0%		11.9%	18.1%	70.0%	0.0%		7.7%	80.9%	11.3%	0.0%			
Total %	2.4%	4.4%	1.4%	0.0%	8.3%	15.6%	20.6%	2.1%	0.0%	38.3%	3.0%	4.6%	17.9%	0.0%	25.6%	2.2%	22.6%	3.2%	0.0%	27.9%	100.0%	

AM PEAK HOUR	Lake Blvd Southbound					W Covell Blvd Westbound					Lake Blvd Northbound					W Covell Blvd Eastbound					Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
7:30	5	10	2	0	17	19	39	2	0	60	9	15	51	0	75	3	71	10	0	84	236
7:45	12	14	4	0	30	14	53	4	0	71	9	15	41	0	65	2	64	8	0	74	240
8:00	9	15	2	0	26	17	36	3	0	56	6	15	60	0	81	2	60	12	0	74	237
8:15	10	14	2	0	26	43	46	2	0	91	10	16	50	0	76	2	63	9	0	74	267
Total Volume	36	53	10	0	99	93	174	11	0	278	34	61	202	0	297	9	258	39	0	306	980
% App Total	36.4%	53.5%	10.1%	0.0%		33.5%	62.6%	4.0%	0.0%		11.4%	20.5%	68.0%	0.0%		2.9%	84.3%	12.7%	0.0%		
PHF	.750	.883	.625	.000	.825	.541	.821	.688	.000	.764	.850	.953	.842	.000	.917	.750	.908	.813	.000	.911	.918

PM PEAK HOUR	Lake Blvd Southbound					W Covell Blvd Westbound					Lake Blvd Northbound					W Covell Blvd Eastbound					Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 16:45 to 17:45																					
Peak Hour For Entire Intersection Begins at 16:45																					
16:45	8	14	0	0	22	51	64	14	0	129	7	13	34	0	54	5	61	6	0	72	277
17:00	5	10	2	0	17	52	76	13	0	141	9	10	46	0	65	7	68	11	0	86	309
17:15	2	16	3	0	21	52	57	2	0	111	11	12	54	0	77	4	48	8	0	60	269
17:30	6	10	6	0	22	55	70	5	0	130	11	11	52	0	74	6	50	12	0	68	294
Total Volume	21	50	11	0	82	210	267	34	0	511	38	46	186	0	270	22	227	37	0	286	1149
% App Total	25.6%	61.0%	13.4%	0.0%		41.1%	52.3%	6.7%	0.0%		14.1%	17.0%	68.9%	0.0%		7.7%	79.4%	12.9%	0.0%		
PHF	.656	.781	.458	.000	.932	.955	.878	.607	.000	.906	.864	.885	.861	.000	.877	.786	.835	.771	.000	.831	.930

## National Data and Surveying Services

City of Davis  
 All Vehicles & Uturns On Unshifted  
 Bikes & Peds On Bank 1  
 Nothing On Bank 2

(323) 782-0090  
[info@ndsdata.com](mailto:info@ndsdata.com)

File Name : 17-7217-001 Lake Blvd & W Covell Blvd  
 Date : 3/16/2017

### Bank 1 Count = Bikes & Peds

START TIME	Lake Blvd Southbound					W Covell Blvd Westbound					Lake Blvd Northbound					W Covell Blvd Eastbound					Total	Peds Total	
	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL			
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	0	1	0	0	1	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	3	0
<b>Total</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>0</b>	
8:00	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	0	0	0	0	0	0	2	2
8:15	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
8:30	0	0	0	0	0	1	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	2	1
8:45	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	2	0
<b>Total</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>2</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>3</b>	
16:00	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0
16:15	0	0	0	0	0	1	0	0	0	1	0	2	0	0	2	0	0	0	0	0	0	3	0
16:30	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
16:45	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>2</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>7</b>	<b>0</b>	
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	2	0
17:30	0	0	0	0	0	0	0	0	0	0	0	3	0	1	3	0	0	0	0	0	0	3	1
17:45	0	0	0	0	0	1	0	0	0	1	0	0	0	4	0	0	0	0	0	0	0	1	4
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>2</b>	<b>5</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>5</b>	
<b>Grand Total</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>6</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>8</b>	<b>0</b>	<b>5</b>	<b>8</b>	<b>7</b>	<b>13</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>25</b>	<b>8</b>	
Apprch %	0.0%	100.0%	0.0%			75.0%	25.0%	0.0%			0.0%	38.5%	61.5%			0.0%	0.0%	0.0%					
Total %	0.0%	16.0%	0.0%		16.0%	24.0%	8.0%	0.0%		32.0%	0.0%	20.0%	32.0%		52.0%	0.0%	0.0%	0.0%		0.0%	100.0%		

AM PEAK HOUR	Lake Blvd Southbound					W Covell Blvd Westbound					Lake Blvd Northbound					W Covell Blvd Eastbound					Total	
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total	
Peak Hour Analysis From 07:30 to 08:30																						
Peak Hour For Entire Intersection Begins at 07:30																						
7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	0	1	0	0	1	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	3
8:00	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	0	0	0	0	0	0	2
8:15	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
<b>Total Volume</b>	<b>0</b>	<b>2</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>	<b>4</b>	<b>2</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6</b>	
% App Total	0.0%	100.0%	0.0%			0.0%	0.0%	0.0%			0.0%	0.0%	100.0%			0.0%	0.0%	0.0%				
PHF	.000	.500	.000		.500	.000	.000	.000		.000	.000	.000	.500		.500	.000	.000	.000		.000	.500	

PM PEAK HOUR	Lake Blvd Southbound					W Covell Blvd Westbound					Lake Blvd Northbound					W Covell Blvd Eastbound					Total	
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total	
Peak Hour Analysis From 16:45 to 17:45																						
Peak Hour For Entire Intersection Begins at 16:45																						
16:45	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	2
17:30	0	0	0	0	0	0	0	0	0	0	0	3	0	1	3	0	0	0	0	0	0	3
<b>Total Volume</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>	<b>0</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6</b>	
% App Total	0.0%	0.0%	0.0%			0.0%	100.0%	0.0%			0.0%	60.0%	40.0%			0.0%	0.0%	0.0%				
PHF	.000	.000	.000		.000	.000	.250	.000		.250	.000	.250	.250		.417	.000	.000	.000		.000	.500	

## National Data and Surveying Services

City of Davis  
 All Vehicles & Uturns On Unshifted  
 Bikes & Peds On Bank 1  
 Nothing On Bank 2

(323) 782-0090  
[info@ndsdata.com](mailto:info@ndsdata.com)

File Name : 17-7217-001 Lake Blvd & W Covell Blvd  
 Date : 3/16/2017

### Unshifted Count = All Vehicles & Uturns

START TIME	Lake Blvd Southbound					W Covell Blvd Westbound					Lake Blvd Northbound					W Covell Blvd Eastbound					Total	Uturns Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL		
7:00	2	6	4	0	12	18	32	4	0	54	7	8	25	0	40	4	39	3	0	46	152	0
7:15	4	10	8	0	22	13	33	2	0	48	1	9	29	0	39	3	51	4	0	58	167	0
7:30	5	10	2	0	17	19	39	2	0	60	9	15	51	0	75	3	71	10	0	84	236	0
7:45	12	14	4	0	30	14	53	4	0	71	9	15	41	0	65	2	64	8	0	74	240	0
<b>Total</b>	<b>23</b>	<b>40</b>	<b>18</b>	<b>0</b>	<b>81</b>	<b>64</b>	<b>157</b>	<b>12</b>	<b>0</b>	<b>233</b>	<b>26</b>	<b>47</b>	<b>146</b>	<b>0</b>	<b>219</b>	<b>12</b>	<b>225</b>	<b>25</b>	<b>0</b>	<b>262</b>	<b>795</b>	<b>0</b>
8:00	9	15	2	0	26	17	36	3	0	56	6	15	60	0	81	2	60	12	0	74	237	0
8:15	10	14	2	0	26	43	46	2	0	91	10	16	50	0	76	2	63	9	0	74	267	0
8:30	11	8	3	0	22	32	44	1	0	77	8	9	63	0	80	3	42	8	0	53	232	0
8:45	10	8	3	0	21	26	28	4	0	58	5	9	35	0	49	2	48	6	0	56	184	0
<b>Total</b>	<b>40</b>	<b>45</b>	<b>10</b>	<b>0</b>	<b>95</b>	<b>118</b>	<b>154</b>	<b>10</b>	<b>0</b>	<b>282</b>	<b>29</b>	<b>49</b>	<b>208</b>	<b>0</b>	<b>286</b>	<b>9</b>	<b>213</b>	<b>35</b>	<b>0</b>	<b>257</b>	<b>920</b>	<b>0</b>
16:00	4	8	5	0	17	61	53	8	0	122	9	12	43	0	64	10	56	5	0	71	274	0
16:15	2	12	7	0	21	61	68	7	0	136	8	9	32	0	49	13	59	6	0	78	284	0
16:30	3	9	1	0	13	45	59	9	0	113	3	10	49	0	62	14	62	6	0	82	270	0
16:45	8	14	0	0	22	51	64	14	0	129	7	13	34	0	54	5	61	6	0	72	277	0
<b>Total</b>	<b>17</b>	<b>43</b>	<b>13</b>	<b>0</b>	<b>73</b>	<b>218</b>	<b>244</b>	<b>38</b>	<b>0</b>	<b>500</b>	<b>27</b>	<b>44</b>	<b>158</b>	<b>0</b>	<b>229</b>	<b>42</b>	<b>238</b>	<b>23</b>	<b>0</b>	<b>303</b>	<b>1105</b>	<b>0</b>
17:00	5	10	2	0	17	52	76	13	0	141	9	10	46	0	65	7	68	11	0	86	309	0
17:15	2	16	3	0	21	52	57	2	0	111	11	12	54	0	77	4	48	8	0	60	269	0
17:30	6	10	6	0	22	55	70	5	0	130	11	11	52	0	74	6	50	12	0	68	294	0
17:45	3	9	5	0	17	56	53	1	0	110	7	9	40	0	56	5	46	10	0	61	244	0
<b>Total</b>	<b>16</b>	<b>45</b>	<b>16</b>	<b>0</b>	<b>77</b>	<b>215</b>	<b>256</b>	<b>21</b>	<b>0</b>	<b>492</b>	<b>38</b>	<b>42</b>	<b>192</b>	<b>0</b>	<b>272</b>	<b>22</b>	<b>212</b>	<b>41</b>	<b>0</b>	<b>275</b>	<b>1116</b>	<b>0</b>
<b>Grand Total</b>	<b>96</b>	<b>173</b>	<b>57</b>	<b>0</b>	<b>326</b>	<b>615</b>	<b>811</b>	<b>81</b>	<b>0</b>	<b>1507</b>	<b>120</b>	<b>182</b>	<b>704</b>	<b>0</b>	<b>1006</b>	<b>85</b>	<b>888</b>	<b>124</b>	<b>0</b>	<b>1097</b>	<b>3936</b>	<b>0</b>
Apprch %	29.4%	53.1%	17.5%	0.0%		40.8%	53.8%	5.4%	0.0%		11.9%	18.1%	70.0%	0.0%		7.7%	80.9%	11.3%	0.0%			
Total %	2.4%	4.4%	1.4%	0.0%	8.3%	15.6%	20.6%	2.1%	0.0%	38.3%	3.0%	4.6%	17.9%	0.0%	25.6%	2.2%	22.6%	3.2%	0.0%	27.9%	100.0%	

AM PEAK HOUR	Lake Blvd Southbound					W Covell Blvd Westbound					Lake Blvd Northbound					W Covell Blvd Eastbound					Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
7:30	5	10	2	0	17	19	39	2	0	60	9	15	51	0	75	3	71	10	0	84	236
7:45	12	14	4	0	30	14	53	4	0	71	9	15	41	0	65	2	64	8	0	74	240
8:00	9	15	2	0	26	17	36	3	0	56	6	15	60	0	81	2	60	12	0	74	237
8:15	10	14	2	0	26	43	46	2	0	91	10	16	50	0	76	2	63	9	0	74	267
Total Volume	36	53	10	0	99	93	174	11	0	278	34	61	202	0	297	9	258	39	0	306	980
% App Total	36.4%	53.5%	10.1%	0.0%		33.5%	62.6%	4.0%	0.0%		11.4%	20.5%	68.0%	0.0%		2.9%	84.3%	12.7%	0.0%		
PHF	.750	.883	.625	.000	.825	.541	.821	.688	.000	.764	.850	.953	.842	.000	.917	.750	.908	.813	.000	.911	.918

PM PEAK HOUR	Lake Blvd Southbound					W Covell Blvd Westbound					Lake Blvd Northbound					W Covell Blvd Eastbound					Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 16:45 to 17:45																					
Peak Hour For Entire Intersection Begins at 16:45																					
16:45	8	14	0	0	22	51	64	14	0	129	7	13	34	0	54	5	61	6	0	72	277
17:00	5	10	2	0	17	52	76	13	0	141	9	10	46	0	65	7	68	11	0	86	309
17:15	2	16	3	0	21	52	57	2	0	111	11	12	54	0	77	4	48	8	0	60	269
17:30	6	10	6	0	22	55	70	5	0	130	11	11	52	0	74	6	50	12	0	68	294
Total Volume	21	50	11	0	82	210	267	34	0	511	38	46	186	0	270	22	227	37	0	286	1149
% App Total	25.6%	61.0%	13.4%	0.0%		41.1%	52.3%	6.7%	0.0%		14.1%	17.0%	68.9%	0.0%		7.7%	79.4%	12.9%	0.0%		
PHF	.656	.781	.458	.000	.932	.955	.878	.607	.000	.906	.864	.885	.861	.000	.877	.786	.835	.771	.000	.831	.930

## National Data and Surveying Services

City of Davis  
 All Vehicles & Uturns On Unshifted  
 Bikes & Peds On Bank 1  
 Nothing On Bank 2

(323) 782-0090  
[info@ndsdata.com](mailto:info@ndsdata.com)

File Name : 17-7217-001 Lake Blvd & W Covell Blvd  
 Date : 3/16/2017

### Bank 1 Count = Bikes & Peds

START TIME	Lake Blvd Southbound					W Covell Blvd Westbound					Lake Blvd Northbound					W Covell Blvd Eastbound					Total	Peds Total	
	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL			
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	0	1	0	0	1	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	3	0
<b>Total</b>	0	3	0	0	3	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	5	0
8:00	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	0	0	0	0	0	0	2	2
8:15	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
8:30	0	0	0	0	0	1	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	2	1
8:45	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	2	0
<b>Total</b>	0	1	0	0	1	1	1	0	1	2	0	0	4	2	4	0	0	0	0	0	0	7	3
16:00	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0
16:15	0	0	0	0	0	1	0	0	0	1	0	2	0	0	2	0	0	0	0	0	0	3	0
16:30	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
16:45	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
<b>Total</b>	0	0	0	0	0	4	1	0	0	5	0	2	0	0	2	0	0	0	0	0	0	7	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	2	0
17:30	0	0	0	0	0	0	0	0	0	0	0	3	0	1	3	0	0	0	0	0	0	3	1
17:45	0	0	0	0	0	1	0	0	0	1	0	0	0	4	0	0	0	0	0	0	0	1	4
<b>Total</b>	0	0	0	0	0	1	0	0	0	1	0	3	2	5	5	0	0	0	0	0	0	6	5
<b>Grand Total</b>	0	4	0	0	4	6	2	0	1	8	0	5	8	7	13	0	0	0	0	0	0	25	8
Apprch %	0.0%	100.0%	0.0%			75.0%	25.0%	0.0%			0.0%	38.5%	61.5%			0.0%	0.0%	0.0%					
Total %	0.0%	16.0%	0.0%		16.0%	24.0%	8.0%	0.0%		32.0%	0.0%	20.0%	32.0%		52.0%	0.0%	0.0%	0.0%		0.0%	100.0%		

AM PEAK HOUR	Lake Blvd Southbound					W Covell Blvd Westbound					Lake Blvd Northbound					W Covell Blvd Eastbound					Total	
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total	
Peak Hour Analysis From 07:30 to 08:30																						
Peak Hour For Entire Intersection Begins at 07:30																						
7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	0	1	0	0	1	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	3
8:00	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	0	0	0	0	0	0	2
8:15	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
<b>Total Volume</b>	0	2	0	0	2	0	0	0	0	0	0	0	4	2	4	0	0	0	0	0	0	6
% App Total	0.0%	100.0%	0.0%			0.0%	0.0%	0.0%			0.0%	0.0%	100.0%			0.0%	0.0%	0.0%				
PHF	.000	.500	.000		.500	.000	.000	.000		.000	.000	.500		.500	.000	.000	.000			.000	.500	

PM PEAK HOUR	Lake Blvd Southbound					W Covell Blvd Westbound					Lake Blvd Northbound					W Covell Blvd Eastbound					Total	
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total	
Peak Hour Analysis From 16:45 to 17:45																						
Peak Hour For Entire Intersection Begins at 16:45																						
16:45	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	2
17:30	0	0	0	0	0	0	0	0	0	0	0	3	0	1	3	0	0	0	0	0	0	3
<b>Total Volume</b>	0	0	0	0	0	0	1	0	0	1	0	3	2	1	5	0	0	0	0	0	0	6
% App Total	0.0%	0.0%	0.0%			0.0%	100.0%	0.0%			0.0%	60.0%	40.0%			0.0%	0.0%	0.0%				
PHF	.000	.000	.000		.000	.000	.250	.000		.250	.000	.250	.250		.417	.000	.000	.000			.000	.500



## National Data and Surveying Services

City of Davis  
 All Vehicles & Uturns On Unshifted  
 Bikes & Peds On Bank 1  
 Nothing On Bank 2

(323) 782-0090  
[info@ndsdata.com](mailto:info@ndsdata.com)

File Name : 17-7217-003 Risling Ct & Sutter Hospital Dwy  
 Date : 3/16/2017

### Unshifted Count = All Vehicles & Uturns

START TIME	Risling Ct Southbound					Sutter Hospital Dwy Westbound					Risling Ct Northbound					Sutter Hospital Dwy Eastbound					Total	Uturns Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL		
7:00	0	1	0	0	1	1	0	0	0	1	0	13	5	0	18	0	0	0	0	0	20	0
7:15	0	6	0	0	6	3	0	0	0	3	0	15	5	0	20	0	0	0	0	0	29	0
7:30	0	4	0	0	4	2	0	0	0	2	0	11	11	0	22	0	0	0	0	0	28	0
7:45	0	7	0	0	7	3	0	0	0	3	0	28	10	0	38	0	0	0	0	0	48	0
<b>Total</b>	<b>0</b>	<b>18</b>	<b>0</b>	<b>0</b>	<b>18</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>67</b>	<b>31</b>	<b>0</b>	<b>98</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>125</b>	<b>0</b>
8:00	0	5	0	0	5	1	0	0	0	1	0	20	8	0	28	0	0	0	0	0	34	0
8:15	0	8	0	0	8	5	0	1	0	6	0	26	9	0	35	0	0	0	0	0	49	0
8:30	0	13	0	0	13	2	0	1	0	3	0	19	4	0	23	0	0	0	0	0	39	0
8:45	0	13	0	0	13	2	0	1	0	3	0	24	14	0	38	0	0	0	0	0	54	0
<b>Total</b>	<b>0</b>	<b>39</b>	<b>0</b>	<b>0</b>	<b>39</b>	<b>10</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>13</b>	<b>0</b>	<b>89</b>	<b>35</b>	<b>0</b>	<b>124</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>176</b>	<b>0</b>
16:00	0	22	0	0	22	3	0	0	0	3	0	2	6	0	8	0	0	0	0	0	33	0
16:15	0	15	0	0	15	8	0	0	0	8	0	5	3	0	8	0	0	0	0	0	31	0
16:30	0	28	0	0	28	10	0	0	0	10	0	7	4	0	11	0	0	0	0	0	49	0
16:45	1	15	0	0	16	9	0	0	0	9	0	7	4	0	11	0	0	0	0	0	36	0
<b>Total</b>	<b>1</b>	<b>80</b>	<b>0</b>	<b>0</b>	<b>81</b>	<b>30</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>30</b>	<b>0</b>	<b>21</b>	<b>17</b>	<b>0</b>	<b>38</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>149</b>	<b>0</b>
17:00	1	19	0	0	20	4	0	0	0	4	0	2	7	0	9	0	0	0	0	0	33	0
17:15	1	18	0	0	19	6	0	0	0	6	0	4	5	0	9	0	0	0	0	0	34	0
17:30	1	8	0	0	9	5	0	0	0	5	0	5	4	0	9	0	0	0	0	0	23	0
17:45	0	12	0	0	12	5	0	0	0	5	0	10	4	0	14	0	0	0	0	0	31	0
<b>Total</b>	<b>3</b>	<b>57</b>	<b>0</b>	<b>0</b>	<b>60</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>20</b>	<b>0</b>	<b>21</b>	<b>20</b>	<b>0</b>	<b>41</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>121</b>	<b>0</b>
<b>Grand Total</b>	<b>4</b>	<b>194</b>	<b>0</b>	<b>0</b>	<b>198</b>	<b>69</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>72</b>	<b>0</b>	<b>198</b>	<b>103</b>	<b>0</b>	<b>301</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>571</b>	<b>0</b>
Apprch %	2.0%	98.0%	0.0%	0.0%		95.8%	0.0%	4.2%	0.0%		0.0%	65.8%	34.2%	0.0%		0.0%	0.0%	0.0%	0.0%	0.0%		
Total %	0.7%	34.0%	0.0%	0.0%	34.7%	12.1%	0.0%	0.5%	0.0%	12.6%	0.0%	34.7%	18.0%	0.0%	52.7%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	

AM PEAK HOUR	Risling Ct Southbound					Sutter Hospital Dwy Westbound					Risling Ct Northbound					Sutter Hospital Dwy Eastbound					Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 08:00 to 09:00																					
Peak Hour For Entire Intersection Begins at 08:00																					
8:00	0	5	0	0	5	1	0	0	0	1	0	20	8	0	28	0	0	0	0	0	34
8:15	0	8	0	0	8	5	0	1	0	6	0	26	9	0	35	0	0	0	0	0	49
8:30	0	13	0	0	13	2	0	1	0	3	0	19	4	0	23	0	0	0	0	0	39
8:45	0	13	0	0	13	2	0	1	0	3	0	24	14	0	38	0	0	0	0	0	54
Total Volume	0	39	0	0	39	10	0	3	0	13	0	89	35	0	124	0	0	0	0	0	176
% App Total	0.0%	100.0%	0.0%	0.0%		76.9%	0.0%	23.1%	0.0%		0.0%	71.8%	28.2%	0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	
PHF	.000	.750	.000	.000	.750	.500	.000	.750	.000	.542	.000	.856	.625	.000	.816	.000	.000	.000	.000	.000	.815

PM PEAK HOUR	Risling Ct Southbound					Sutter Hospital Dwy Westbound					Risling Ct Northbound					Sutter Hospital Dwy Eastbound					Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 16:30 to 17:30																					
Peak Hour For Entire Intersection Begins at 16:30																					
16:30	0	28	0	0	28	10	0	0	0	10	0	7	4	0	11	0	0	0	0	0	49
16:45	1	15	0	0	16	9	0	0	0	9	0	7	4	0	11	0	0	0	0	0	36
17:00	1	19	0	0	20	4	0	0	0	4	0	2	7	0	9	0	0	0	0	0	33
17:15	1	18	0	0	19	6	0	0	0	6	0	4	5	0	9	0	0	0	0	0	34
Total Volume	3	80	0	0	83	29	0	0	0	29	0	20	20	0	40	0	0	0	0	0	152
% App Total	3.6%	96.4%	0.0%	0.0%		100.0%	0.0%	0.0%	0.0%		0.0%	50.0%	50.0%	0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	
PHF	.750	.714	.000	.000	.741	.725	.000	.000	.000	.725	.000	.714	.714	.000	.909	.000	.000	.000	.000	.000	.776

## National Data and Surveying Services

City of Davis  
 All Vehicles & Uturns On Unshifted  
 Bikes & Peds On Bank 1  
 Nothing On Bank 2

(323) 782-0090  
[info@ndsdata.com](mailto:info@ndsdata.com)

File Name : 17-7217-003 Risling Ct & Sutter Hospital Dwy  
 Date : 3/16/2017

### Bank 1 Count = Bikes & Peds

START TIME	Risling Ct Southbound					Sutter Hospital Dwy Westbound					Risling Ct Northbound					Sutter Hospital Dwy Eastbound					Total	Peds Total	
	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL			
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	0	0	0	4	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	6
<b>Total</b>	0	0	0	4	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	6
8:00	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1	0
8:15	0	0	0	0	0	0	0	0	6	0	0	2	0	2	0	0	0	0	0	0	0	2	6
8:30	0	1	0	0	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2	0
8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	0	1	0	0	1	0	0	0	6	0	0	4	0	4	0	0	0	0	0	0	0	5	6
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	4
<b>Total</b>	0	0	0	2	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	5
17:00	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
<b>Grand Total</b>	0	1	0	8	1	0	0	0	10	0	0	4	0	4	0	0	0	0	0	0	0	5	19
Apprch %	0.0%	100.0%	0.0%			0.0%	0.0%	0.0%			0.0%	100.0%	0.0%			0.0%	0.0%	0.0%					
Total %	0.0%	20.0%	0.0%		20.0%	0.0%	0.0%	0.0%		0.0%	0.0%	80.0%	0.0%	80.0%	0.0%	0.0%	0.0%	0.0%		0.0%		100.0%	

AM PEAK HOUR	Risling Ct Southbound					Sutter Hospital Dwy Westbound					Risling Ct Northbound					Sutter Hospital Dwy Eastbound					Total	
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total	
Peak Hour Analysis From 08:00 to 09:00																						
Peak Hour For Entire Intersection Begins at 08:00																						
8:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1
8:15	0	0	0	0	0	0	0	0	6	0	0	2	0	0	2	0	0	0	0	0	0	2
8:30	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2
8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	0	0	1	0	0	0	6	0	0	4	0	0	4	0	0	0	0	0	0	5
% App Total	0.0%	100.0%	0.0%			0.0%	0.0%	0.0%			0.0%	100.0%	0.0%			0.0%	0.0%	0.0%				
PHF	.000	.250	.000		.250	.000	.000	.000		.000	.500	.000		.500	.000	.000	.000	.000		.000	.625	

PM PEAK HOUR	Risling Ct Southbound					Sutter Hospital Dwy Westbound					Risling Ct Northbound					Sutter Hospital Dwy Eastbound					Total	
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total	
Peak Hour Analysis From 16:30 to 17:30																						
Peak Hour For Entire Intersection Begins at 16:30																						
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	4	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
% App Total	0.0%	0.0%	0.0%			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%				
PHF	.000	.000	.000		.000	.000	.000	.000		.000	.000	.000		.000	.000	.000	.000	.000		.000	.000	

## National Data and Surveying Services

City of Davis  
 All Vehicles & Uturns On Unshifted  
 Bikes & Peds On Bank 1  
 Nothing On Bank 2

(323) 782-0090  
[info@ndsdata.com](mailto:info@ndsdata.com)

File Name : 17-7217-004 Risling Ct/Shasta Dr & W Covell Blvd  
 Date : 3/16/2017

### Unshifted Count = All Vehicles & Uturns

START TIME	Risling Ct/Shasta Dr Southbound					W Covell Blvd Westbound					Risling Ct/Shasta Dr Northbound					W Covell Blvd Eastbound					Total	Uturns Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL		
7:00	1	1	1	0	3	11	59	15	0	85	3	0	21	0	24	2	72	1	0	75	187	0
7:15	5	1	1	0	7	21	59	10	0	90	3	1	51	0	55	3	101	2	0	106	258	0
7:30	3	2	1	0	6	18	81	22	0	121	2	1	70	0	73	6	162	2	0	170	370	0
7:45	8	0	0	0	8	29	107	28	0	164	0	3	47	0	50	11	138	3	0	152	374	0
<b>Total</b>	<b>17</b>	<b>4</b>	<b>3</b>	<b>0</b>	<b>24</b>	<b>79</b>	<b>306</b>	<b>75</b>	<b>0</b>	<b>460</b>	<b>8</b>	<b>5</b>	<b>189</b>	<b>0</b>	<b>202</b>	<b>22</b>	<b>473</b>	<b>8</b>	<b>0</b>	<b>503</b>	<b>1189</b>	<b>0</b>
8:00	4	2	1	0	7	25	94	16	1	136	5	2	74	0	81	6	151	6	0	163	387	1
8:15	6	2	4	0	12	44	123	20	1	188	3	4	85	0	92	11	154	0	0	165	457	1
8:30	10	0	5	0	15	29	102	16	2	149	2	3	67	0	72	9	156	5	0	170	406	2
8:45	11	2	4	0	17	25	90	28	0	143	1	5	50	0	56	7	133	2	0	142	358	0
<b>Total</b>	<b>31</b>	<b>6</b>	<b>14</b>	<b>0</b>	<b>51</b>	<b>123</b>	<b>409</b>	<b>80</b>	<b>4</b>	<b>616</b>	<b>11</b>	<b>14</b>	<b>276</b>	<b>0</b>	<b>301</b>	<b>33</b>	<b>594</b>	<b>13</b>	<b>0</b>	<b>640</b>	<b>1608</b>	<b>4</b>
16:00	16	0	9	0	25	49	141	3	0	193	3	1	36	0	40	5	138	4	0	147	405	0
16:15	15	4	7	0	26	45	161	5	2	213	4	1	34	0	39	1	112	3	0	116	394	2
16:30	26	1	11	0	38	35	140	8	0	183	3	0	51	0	54	6	134	6	0	146	421	0
16:45	10	1	10	0	21	36	137	6	0	179	3	1	44	0	48	2	139	3	0	144	392	0
<b>Total</b>	<b>67</b>	<b>6</b>	<b>37</b>	<b>0</b>	<b>110</b>	<b>165</b>	<b>579</b>	<b>22</b>	<b>2</b>	<b>768</b>	<b>13</b>	<b>3</b>	<b>165</b>	<b>0</b>	<b>181</b>	<b>14</b>	<b>523</b>	<b>16</b>	<b>0</b>	<b>553</b>	<b>1612</b>	<b>2</b>
17:00	16	2	10	0	28	45	152	4	0	201	1	1	56	0	58	3	141	3	0	147	434	0
17:15	10	1	9	0	20	59	142	5	2	208	3	1	44	0	48	3	124	2	0	129	405	2
17:30	11	1	7	0	19	44	153	9	1	207	4	1	40	0	45	0	114	6	0	120	391	1
17:45	15	0	2	0	17	45	142	6	1	194	3	0	44	0	47	4	127	4	0	135	393	1
<b>Total</b>	<b>52</b>	<b>4</b>	<b>28</b>	<b>0</b>	<b>84</b>	<b>193</b>	<b>589</b>	<b>24</b>	<b>4</b>	<b>810</b>	<b>11</b>	<b>3</b>	<b>184</b>	<b>0</b>	<b>198</b>	<b>10</b>	<b>506</b>	<b>15</b>	<b>0</b>	<b>531</b>	<b>1623</b>	<b>4</b>
<b>Grand Total</b>	<b>167</b>	<b>20</b>	<b>82</b>	<b>0</b>	<b>269</b>	<b>560</b>	<b>1883</b>	<b>201</b>	<b>10</b>	<b>2654</b>	<b>43</b>	<b>25</b>	<b>814</b>	<b>0</b>	<b>882</b>	<b>79</b>	<b>2096</b>	<b>52</b>	<b>0</b>	<b>2227</b>	<b>6032</b>	<b>10</b>
Apprch %	62.1%	7.4%	30.5%	0.0%		21.1%	70.9%	7.6%	0.4%		4.9%	2.8%	92.3%	0.0%		3.5%	94.1%	2.3%	0.0%			
Total %	2.8%	0.3%	1.4%	0.0%	4.5%	9.3%	31.2%	3.3%	0.2%	44.0%	0.7%	0.4%	13.5%	0.0%	14.6%	1.3%	34.7%	0.9%	0.0%	36.9%	100.0%	

AM PEAK HOUR	Risling Ct/Shasta Dr Southbound					W Covell Blvd Westbound					Risling Ct/Shasta Dr Northbound					W Covell Blvd Eastbound					Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 07:45 to 08:45																					
Peak Hour For Entire Intersection Begins at 07:45																					
7:45	8	0	0	0	8	29	107	28	0	164	0	3	47	0	50	11	138	3	0	152	374
8:00	4	2	1	0	7	25	94	16	1	136	5	2	74	0	81	6	151	6	0	163	387
8:15	6	2	4	0	12	44	123	20	1	188	3	4	85	0	92	11	154	0	0	165	457
8:30	10	0	5	0	15	29	102	16	2	149	2	3	67	0	72	9	156	5	0	170	406
Total Volume	28	4	10	0	42	127	426	80	4	637	10	12	273	0	295	37	599	14	0	650	1624
% App Total	66.7%	9.5%	23.8%	0.0%		19.9%	66.9%	12.6%	0.6%		3.4%	4.1%	92.5%	0.0%		5.7%	92.2%	2.2%	0.0%		
PHF	.700	.500	.500	.000	.700	.722	.866	.714	.500	.847	.500	.750	.803	.000	.802	.841	.960	.583	.000	.956	.888

PM PEAK HOUR	Risling Ct/Shasta Dr Southbound					W Covell Blvd Westbound					Risling Ct/Shasta Dr Northbound					W Covell Blvd Eastbound					Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 16:30 to 17:30																					
Peak Hour For Entire Intersection Begins at 16:30																					
16:30	26	1	11	0	38	35	140	8	0	183	3	0	51	0	54	6	134	6	0	146	421
16:45	10	1	10	0	21	36	137	6	0	179	3	1	44	0	48	2	139	3	0	144	392
17:00	16	2	10	0	28	45	152	4	0	201	1	1	56	0	58	3	141	3	0	147	434
17:15	10	1	9	0	20	59	142	5	2	208	3	1	44	0	48	3	124	2	0	129	405
Total Volume	62	5	40	0	107	175	571	23	2	771	10	3	195	0	208	14	538	14	0	566	1652
% App Total	57.9%	4.7%	37.4%	0.0%		22.7%	74.1%	3.0%	0.3%		4.8%	1.4%	93.8%	0.0%		2.5%	95.1%	2.5%	0.0%		
PHF	.596	.625	.909	.000	.704	.742	.939	.719	.250	.927	.833	.750	.871	.000	.897	.583	.954	.583	.000	.963	.952

## National Data and Surveying Services

City of Davis  
 All Vehicles & Uturns On Unshifted  
 Bikes & Peds On Bank 1  
 Nothing On Bank 2

(323) 782-0090  
[info@ndsdata.com](mailto:info@ndsdata.com)

File Name : 17-7217-004 Risling Ct/Shasta Dr & W Covell Blvd  
 Date : 3/16/2017

### Bank 1 Count = Bikes & Peds

START TIME	Risling Ct/Shasta Dr Southbound					W Covell Blvd Westbound					Risling Ct/Shasta Dr Northbound					W Covell Blvd Eastbound					Total	Peds Total	
	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL			
7:00	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1	0	1	1	1	1	3
7:15	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	0	1	0	4	1	3	4	
7:30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	4	1	1	5	
7:45	0	0	0	2	0	0	1	0	1	1	0	0	1	0	1	1	2	0	11	3	4	15	
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>3</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>5</b>	<b>0</b>	<b>20</b>	<b>6</b>	<b>9</b>	<b>27</b>	
8:00	0	0	0	1	0	0	0	0	3	0	0	0	0	3	0	0	3	0	7	3	3	14	
8:15	0	0	0	1	0	0	1	0	1	1	0	1	0	1	1	0	0	0	3	0	2	6	
8:30	0	0	1	0	1	0	0	1	1	1	0	0	0	2	0	0	1	1	12	2	4	15	
8:45	0	0	0	0	0	0	1	0	0	1	0	0	0	1	0	0	1	0	4	1	2	5	
<b>Total</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>5</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>7</b>	<b>1</b>	<b>0</b>	<b>5</b>	<b>1</b>	<b>26</b>	<b>6</b>	<b>11</b>	<b>40</b>	
16:00	0	0	0	0	0	0	1	0	0	1	0	0	0	2	0	0	1	0	2	1	2	4	
16:15	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	1	0	5	1	2	6	
16:30	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	1	0	10	1	2	11	
16:45	0	0	0	2	0	1	1	0	0	2	0	0	0	0	0	0	1	0	4	1	3	6	
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>2</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>21</b>	<b>4</b>	<b>9</b>	<b>27</b>	
17:00	0	0	0	0	0	0	2	0	1	2	0	0	0	0	0	0	0	1	2	1	3	3	
17:15	0	0	0	2	0	1	1	0	0	2	0	0	0	2	0	0	2	0	2	2	4	6	
17:30	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	9	
17:45	0	0	0	0	0	0	3	0	0	3	0	0	0	4	0	0	0	1	1	1	4	5	
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>6</b>	<b>0</b>	<b>1</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>13</b>	<b>4</b>	<b>11</b>	<b>23</b>	
<b>Grand Total</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>12</b>	<b>1</b>	<b>3</b>	<b>13</b>	<b>1</b>	<b>9</b>	<b>17</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>16</b>	<b>2</b>	<b>1</b>	<b>16</b>	<b>3</b>	<b>80</b>	<b>20</b>	<b>40</b>	<b>117</b>	
Apprch %	0.0%	0.0%	100.0%			17.6%	76.5%	5.9%			0.0%	50.0%	50.0%			5.0%	80.0%	15.0%					
Total %	0.0%	0.0%	2.5%		2.5%	7.5%	32.5%	2.5%		42.5%	0.0%	2.5%	2.5%		5.0%	2.5%	40.0%	7.5%		50.0%	100.0%		

AM PEAK HOUR	Risling Ct/Shasta Dr Southbound					W Covell Blvd Westbound					Risling Ct/Shasta Dr Northbound					W Covell Blvd Eastbound					Total
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 07:45 to 08:45																					
Peak Hour For Entire Intersection Begins at 07:45																					
7:45	0	0	0	2	0	0	1	0	1	1	0	0	0	1	0	1	2	0	11	3	4
8:00	0	0	0	1	0	0	0	0	3	0	0	0	0	3	0	0	3	0	7	3	3
8:15	0	0	0	1	0	0	1	0	1	1	0	1	0	1	1	0	0	0	3	0	2
8:30	0	0	1	0	1	0	0	1	1	1	0	0	0	2	0	0	1	1	12	2	4
Total Volume	0	0	1	4	1	0	2	1	6	3	0	1	0	7	1	1	6	1	33	8	13
% App Total	0.0%	0.0%	100.0%			0.0%	66.7%	33.3%			0.0%	100.0%	0.0%			12.5%	75.0%	12.5%			
PHF	.000	.000	.250		.250	.000	.500	.250		.750	.000	.250	.000		.250	.250	.500	.250		.667	.813

PM PEAK HOUR	Risling Ct/Shasta Dr Southbound					W Covell Blvd Westbound					Risling Ct/Shasta Dr Northbound					W Covell Blvd Eastbound					Total
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 16:30 to 17:30																					
Peak Hour For Entire Intersection Begins at 16:30																					
16:30	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	1	0	10	1	2
16:45	0	0	0	2	0	1	1	0	0	2	0	0	0	0	0	0	1	0	4	1	3
17:00	0	0	0	0	0	0	2	0	1	2	0	0	0	0	0	0	0	1	2	1	3
17:15	0	0	0	2	0	1	1	0	0	2	0	0	0	2	0	0	2	0	2	2	4
Total Volume	0	0	0	5	0	3	4	0	1	7	0	0	0	2	0	0	4	1	18	5	12
% App Total	0.0%	0.0%	0.0%			42.9%	57.1%	0.0%			0.0%	0.0%	0.0%			0.0%	80.0%	20.0%			
PHF	.000	.000	.000		.000	.750	.500	.000		.875	.000	.000	.000		.000	.000	.500	.250		.625	.750

## National Data and Surveying Services

City of Davis  
 All Vehicles & Uturns On Unshifted  
 Bikes & Peds On Bank 1  
 Nothing On Bank 2

(323) 782-0090  
[info@ndsdata.com](mailto:info@ndsdata.com)

File Name : 17-7217-005 John Jones Rd & W Covell Blvd  
 Date : 3/16/2017

### Unshifted Count = All Vehicles & Uturns

START TIME	John Jones Rd Southbound					W Covell Blvd Westbound					John Jones Rd Northbound					W Covell Blvd Eastbound					Total	Uturns Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL		
7:00	28	0	11	0	39	0	69	44	0	113	0	0	0	0	0	9	89	0	0	98	250	0
7:15	39	0	13	0	52	0	85	50	0	135	0	0	0	0	0	9	147	0	0	156	343	0
7:30	44	0	16	0	60	0	96	74	0	170	0	0	0	0	0	26	204	0	0	230	460	0
7:45	46	0	15	0	61	0	156	79	0	235	0	0	0	0	0	16	186	0	0	202	498	0
<b>Total</b>	<b>157</b>	<b>0</b>	<b>55</b>	<b>0</b>	<b>212</b>	<b>0</b>	<b>406</b>	<b>247</b>	<b>0</b>	<b>653</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>60</b>	<b>626</b>	<b>0</b>	<b>0</b>	<b>686</b>	<b>1551</b>	<b>0</b>
8:00	45	0	17	0	62	0	125	63	0	188	0	0	0	0	0	23	203	0	0	226	476	0
8:15	46	0	12	0	58	0	179	78	0	257	0	0	0	0	0	17	240	0	0	257	572	0
8:30	48	0	14	0	62	0	141	79	0	220	0	0	0	0	0	18	220	0	0	238	520	0
8:45	53	0	15	0	68	0	136	59	0	195	0	0	0	0	0	24	174	0	0	198	461	0
<b>Total</b>	<b>192</b>	<b>0</b>	<b>58</b>	<b>0</b>	<b>250</b>	<b>0</b>	<b>581</b>	<b>279</b>	<b>0</b>	<b>860</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>82</b>	<b>837</b>	<b>0</b>	<b>0</b>	<b>919</b>	<b>2029</b>	<b>0</b>
16:00	65	0	18	0	83	0	179	50	0	229	0	0	0	0	0	16	179	0	0	195	507	0
16:15	65	0	20	0	85	0	195	50	0	245	0	0	0	0	0	10	153	0	0	163	493	0
16:30	49	0	10	0	59	0	164	41	0	205	0	0	0	0	0	13	206	0	0	219	483	0
16:45	57	0	16	0	73	0	166	44	0	210	0	0	0	0	0	6	180	0	0	186	469	0
<b>Total</b>	<b>236</b>	<b>0</b>	<b>64</b>	<b>0</b>	<b>300</b>	<b>0</b>	<b>704</b>	<b>185</b>	<b>0</b>	<b>889</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>45</b>	<b>718</b>	<b>0</b>	<b>0</b>	<b>763</b>	<b>1952</b>	<b>0</b>
17:00	73	0	16	0	89	0	180	51	0	231	0	0	0	0	0	14	202	0	0	216	536	0
17:15	37	0	12	0	49	0	190	37	0	227	0	0	0	0	0	4	174	0	0	178	454	0
17:30	64	0	12	0	76	0	197	34	0	231	0	0	0	0	0	11	157	0	0	168	475	0
17:45	57	0	16	0	73	0	178	53	0	231	0	0	0	0	0	4	178	0	0	182	486	0
<b>Total</b>	<b>231</b>	<b>0</b>	<b>56</b>	<b>0</b>	<b>287</b>	<b>0</b>	<b>745</b>	<b>175</b>	<b>0</b>	<b>920</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>33</b>	<b>711</b>	<b>0</b>	<b>0</b>	<b>744</b>	<b>1951</b>	<b>0</b>
<b>Grand Total</b>	<b>816</b>	<b>0</b>	<b>233</b>	<b>0</b>	<b>1049</b>	<b>0</b>	<b>2436</b>	<b>886</b>	<b>0</b>	<b>3322</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>220</b>	<b>2892</b>	<b>0</b>	<b>0</b>	<b>3112</b>	<b>7483</b>	<b>0</b>
Apprch %	77.8%	0.0%	22.2%	0.0%		0.0%	73.3%	26.7%	0.0%		0.0%	0.0%	0.0%	0.0%		7.1%	92.9%	0.0%	0.0%			
Total %	10.9%	0.0%	3.1%	0.0%	14.0%	0.0%	32.6%	11.8%	0.0%	44.4%	0.0%	0.0%	0.0%	0.0%		2.9%	38.6%	0.0%	0.0%	41.6%	100.0%	

AM PEAK HOUR	John Jones Rd Southbound					W Covell Blvd Westbound					John Jones Rd Northbound					W Covell Blvd Eastbound					Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 07:45 to 08:45																					
Peak Hour For Entire Intersection Begins at 07:45																					
7:45	46	0	15	0	61	0	156	79	0	235	0	0	0	0	0	16	186	0	0	202	498
8:00	45	0	17	0	62	0	125	63	0	188	0	0	0	0	0	23	203	0	0	226	476
8:15	46	0	12	0	58	0	179	78	0	257	0	0	0	0	0	17	240	0	0	257	572
8:30	48	0	14	0	62	0	141	79	0	220	0	0	0	0	0	18	220	0	0	238	520
Total Volume	185	0	58	0	243	0	601	299	0	900	0	0	0	0	0	74	849	0	0	923	2066
% App Total	76.1%	0.0%	23.9%	0.0%		0.0%	66.8%	33.2%	0.0%		0.0%	0.0%	0.0%	0.0%		8.0%	92.0%	0.0%	0.0%		
PHF	.964	.000	.853	.000	.980	.000	.839	.946	.000	.875	.000	.000	.000	.000	.000	.804	.884	.000	.000	.898	.903

PM PEAK HOUR	John Jones Rd Southbound					W Covell Blvd Westbound					John Jones Rd Northbound					W Covell Blvd Eastbound					Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 16:15 to 17:15																					
Peak Hour For Entire Intersection Begins at 16:15																					
16:15	65	0	20	0	85	0	195	50	0	245	0	0	0	0	0	10	153	0	0	163	493
16:30	49	0	10	0	59	0	164	41	0	205	0	0	0	0	0	13	206	0	0	219	483
16:45	57	0	16	0	73	0	166	44	0	210	0	0	0	0	0	6	180	0	0	186	469
17:00	73	0	16	0	89	0	180	51	0	231	0	0	0	0	0	14	202	0	0	216	536
Total Volume	244	0	62	0	306	0	705	186	0	891	0	0	0	0	0	43	741	0	0	784	1981
% App Total	79.7%	0.0%	20.3%	0.0%		0.0%	79.1%	20.9%	0.0%		0.0%	0.0%	0.0%	0.0%		5.5%	94.5%	0.0%	0.0%		
PHF	.836	.000	.775	.000	.860	.000	.904	.912	.000	.909	.000	.000	.000	.000	.000	.768	.899	.000	.000	.895	.924

## National Data and Surveying Services

City of Davis  
 All Vehicles & Uturns On Unshifted  
 Bikes & Peds On Bank 1  
 Nothing On Bank 2

(323) 782-0090  
[info@ndsdata.com](mailto:info@ndsdata.com)

File Name : 17-7217-005 John Jones Rd & W Covell Blvd  
 Date : 3/16/2017

### Bank 1 Count = Bikes & Peds

START TIME	John Jones Rd Southbound					W Covell Blvd Westbound					John Jones Rd Northbound					W Covell Blvd Eastbound					Total	Peds Total	
	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL			
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	1	0	0	1	1	0	1	1	0	2	0	0	0	0	0	1	2	0	0	3	6	1	
7:30	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	2	1	2	3	
7:45	2	0	0	1	2	0	1	1	0	2	0	0	0	0	0	0	3	0	2	3	7	3	
<b>Total</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>4</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>6</b>	<b>0</b>	<b>4</b>	<b>7</b>	<b>15</b>	<b>7</b>	
8:00	3	0	0	2	3	0	0	1	0	1	0	0	0	0	0	0	2	0	7	2	6	9	
8:15	1	0	0	3	1	0	2	2	0	4	0	0	0	0	0	0	0	0	2	0	5	5	
8:30	1	0	0	0	1	0	1	2	0	3	0	0	0	0	0	0	0	0	8	0	4	8	
8:45	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2	3	2	
<b>Total</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>6</b>	<b>0</b>	<b>3</b>	<b>5</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>19</b>	<b>4</b>	<b>18</b>	<b>24</b>	
16:00	0	0	0	0	0	0	2	0	1	2	0	0	0	0	0	0	0	0	1	0	2	2	
16:15	0	0	0	1	0	0	1	1	0	2	0	0	0	0	0	1	0	0	1	1	3	2	
16:30	1	0	0	1	1	0	2	1	0	3	0	0	0	0	0	0	2	0	0	2	6	1	
16:45	2	0	0	1	2	0	1	1	0	2	0	0	0	0	0	0	1	0	1	1	5	2	
<b>Total</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>6</b>	<b>3</b>	<b>1</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>4</b>	<b>16</b>	<b>7</b>	
17:00	2	0	0	2	2	0	2	2	0	4	0	0	0	0	0	0	0	0	1	0	6	3	
17:15	1	0	0	4	1	0	2	2	0	4	0	0	0	0	0	0	2	0	1	2	7	5	
17:30	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0	
17:45	1	0	0	2	1	0	2	1	0	3	0	0	0	0	0	0	0	0	2	0	4	4	
<b>Total</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>4</b>	<b>0</b>	<b>6</b>	<b>6</b>	<b>0</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>4</b>	<b>2</b>	<b>18</b>	<b>12</b>	
<b>Grand Total</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>19</b>	<b>17</b>	<b>0</b>	<b>17</b>	<b>16</b>	<b>1</b>	<b>33</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>15</b>	<b>0</b>	<b>30</b>	<b>17</b>	<b>67</b>	<b>50</b>	
Apprch %	100.0%	0.0%	0.0%			0.0%	51.5%	48.5%			0.0%	0.0%	0.0%			11.8%	88.2%	0.0%					
Total %	25.4%	0.0%	0.0%		25.4%	0.0%	25.4%	23.9%		49.3%	0.0%	0.0%	0.0%		0.0%	3.0%	22.4%	0.0%		25.4%	100.0%		

AM PEAK HOUR	John Jones Rd Southbound					W Covell Blvd Westbound					John Jones Rd Northbound					W Covell Blvd Eastbound					Total
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 07:45 to 08:45																					
Peak Hour For Entire Intersection Begins at 07:45																					
7:45	2	0	0	1	2	0	1	1	0	2	0	0	0	0	0	0	3	0	2	3	7
8:00	3	0	0	2	3	0	0	1	0	1	0	0	0	0	0	0	2	0	7	2	6
8:15	1	0	0	3	1	0	2	2	0	4	0	0	0	0	0	0	0	0	2	0	5
8:30	1	0	0	0	1	0	1	2	0	3	0	0	0	0	0	0	0	0	8	0	4
Total Volume	7	0	0	6	7	0	4	6	0	10	0	0	0	0	0	0	5	0	19	5	22
% App Total	100.0%	0.0%	0.0%			0.0%	40.0%	60.0%			0.0%	0.0%	0.0%			0.0%	100.0%	0.0%			
PHF	.583	.000	.000		.583	.000	.500	.750		.625	.000	.000	.000		.000	.000	.417	.000		.417	.786

PM PEAK HOUR	John Jones Rd Southbound					W Covell Blvd Westbound					John Jones Rd Northbound					W Covell Blvd Eastbound					Total
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 16:15 to 17:15																					
Peak Hour For Entire Intersection Begins at 16:15																					
16:15	0	0	0	1	0	0	1	1	0	2	0	0	0	0	0	1	0	0	1	1	3
16:30	1	0	0	1	1	0	2	1	0	3	0	0	0	0	0	0	2	0	0	2	6
16:45	2	0	0	1	2	0	1	1	0	2	0	0	0	0	0	0	1	0	1	1	5
17:00	2	0	0	2	2	0	2	2	0	4	0	0	0	0	0	0	0	0	1	0	6
Total Volume	5	0	0	5	5	0	6	5	0	11	0	0	0	0	0	1	3	0	3	4	20
% App Total	100.0%	0.0%	0.0%			0.0%	54.5%	45.5%			0.0%	0.0%	0.0%			25.0%	75.0%	0.0%			
PHF	.625	.000	.000		.625	.000	.750	.625		.688	.000	.000	.000		.000	.250	.375	.000		.500	.833



## National Data and Surveying Services

City of Davis  
 All Vehicles & Uturns On Unshifted  
 Bikes & Peds On Bank 1  
 Nothing On Bank 2

(323) 782-0090  
[info@ndsdata.com](mailto:info@ndsdata.com)

File Name : 17-7217-006 SR-113 SB Ramps & W Covell Blvd  
 Date : 3/16/2017

### Unshifted Count = All Vehicles & Uturns

START TIME	SR-113 SB Ramps Southbound					W Covell Blvd Westbound					SR-113 SB Ramps Northbound					W Covell Blvd Eastbound					Total	Uturns Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL		
7:00	22	0	26	0	48	69	87	0	1	157	0	0	0	0	0	0	53	59	0	112	317	1
7:15	27	0	22	0	49	81	116	0	0	197	0	0	0	0	0	0	91	91	0	182	428	0
7:30	49	0	19	0	68	117	148	0	0	265	0	0	0	0	0	0	147	94	0	241	574	0
7:45	32	0	33	0	65	136	211	0	0	347	0	0	0	0	0	0	132	103	0	235	647	0
<b>Total</b>	130	0	100	0	230	403	562	0	1	966	0	0	0	0	0	0	423	347	0	770	1966	1
8:00	40	1	27	0	68	106	165	0	0	271	0	0	0	0	0	0	140	101	0	241	580	0
8:15	53	0	35	0	88	105	229	0	0	334	0	0	0	0	0	0	193	99	0	292	714	0
8:30	33	0	36	0	69	107	176	0	0	283	0	0	0	0	0	0	133	127	0	260	612	0
8:45	24	1	31	0	56	121	159	0	3	283	0	0	0	0	0	0	134	102	0	236	575	3
<b>Total</b>	150	2	129	0	281	439	729	0	3	1171	0	0	0	0	0	0	600	429	0	1029	2481	3
16:00	19	0	20	0	39	51	205	0	2	258	0	0	0	0	0	0	156	76	0	232	529	2
16:15	30	0	20	0	50	65	216	0	1	282	0	0	0	0	0	0	148	65	0	213	545	1
16:30	36	0	27	0	63	54	185	0	2	241	0	0	0	0	0	0	189	59	0	248	552	2
16:45	20	0	16	0	36	44	192	0	0	236	0	0	0	0	0	0	185	65	0	250	522	0
<b>Total</b>	105	0	83	0	188	214	798	0	5	1017	0	0	0	0	0	0	678	265	0	943	2148	5
17:00	33	0	24	0	57	57	214	0	1	272	0	0	0	0	0	0	213	61	0	274	603	1
17:15	38	0	18	0	56	50	211	0	2	263	0	0	0	0	0	0	162	62	0	224	543	2
17:30	19	0	19	0	38	60	215	0	1	276	0	0	0	0	0	0	159	63	0	222	536	1
17:45	35	1	20	0	56	67	210	0	2	279	0	0	0	0	0	0	180	59	0	239	574	2
<b>Total</b>	125	1	81	0	207	234	850	0	6	1090	0	0	0	0	0	0	714	245	0	959	2256	6
<b>Grand Total</b>	510	3	393	0	906	1290	2939	0	15	4244	0	0	0	0	0	0	2415	1286	0	3701	8851	15
Apprch %	56.3%	0.3%	43.4%	0.0%		30.4%	69.3%	0.0%	0.4%		0.0%	0.0%	0.0%	0.0%		0.0%	65.3%	34.7%	0.0%			
Total %	5.8%	0.0%	4.4%	0.0%	10.2%	14.6%	33.2%	0.0%	0.2%	47.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	27.3%	14.5%	0.0%	41.8%	100.0%	

AM PEAK HOUR	SR-113 SB Ramps Southbound					W Covell Blvd Westbound					SR-113 SB Ramps Northbound					W Covell Blvd Eastbound					Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 07:45 to 08:45																					
Peak Hour For Entire Intersection Begins at 07:45																					
7:45	32	0	33	0	65	136	211	0	0	347	0	0	0	0	0	0	132	103	0	235	647
8:00	40	1	27	0	68	106	165	0	0	271	0	0	0	0	0	0	140	101	0	241	580
8:15	53	0	35	0	88	105	229	0	0	334	0	0	0	0	0	0	193	99	0	292	714
8:30	33	0	36	0	69	107	176	0	0	283	0	0	0	0	0	0	133	127	0	260	612
Total Volume	158	1	131	0	290	454	781	0	0	1235	0	0	0	0	0	0	598	430	0	1028	2553
% App Total	54.5%	0.3%	45.2%	0.0%		36.8%	63.2%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	58.2%	41.8%	0.0%		
PHF	.745	.250	.910	.000	.824	.835	.853	.000	.000	.890	.000	.000	.000	.000	.000	.000	.775	.846	.000	.880	.894

PM PEAK HOUR	SR-113 SB Ramps Southbound					W Covell Blvd Westbound					SR-113 SB Ramps Northbound					W Covell Blvd Eastbound					Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	33	0	24	0	57	57	214	0	1	272	0	0	0	0	0	0	213	61	0	274	603
17:15	38	0	18	0	56	50	211	0	2	263	0	0	0	0	0	0	162	62	0	224	543
17:30	19	0	19	0	38	60	215	0	1	276	0	0	0	0	0	0	159	63	0	222	536
17:45	35	1	20	0	56	67	210	0	2	279	0	0	0	0	0	0	180	59	0	239	574
Total Volume	125	1	81	0	207	234	850	0	6	1090	0	0	0	0	0	0	714	245	0	959	2256
% App Total	60.4%	0.5%	39.1%	0.0%		21.5%	78.0%	0.0%	0.6%		0.0%	0.0%	0.0%	0.0%		0.0%	74.5%	25.5%	0.0%		
PHF	.822	.250	.844	.000	.908	.873	.988	.000	.750	.977	.000	.000	.000	.000	.000	.000	.838	.972	.000	.875	.935

## National Data and Surveying Services

City of Davis  
 All Vehicles & Uturns On Unshifted  
 Bikes & Peds On Bank 1  
 Nothing On Bank 2

(323) 782-0090  
[info@ndsdata.com](mailto:info@ndsdata.com)

File Name : 17-7217-006 SR-113 SB Ramps & W Covell Blvd  
 Date : 3/16/2017

### Bank 1 Count = Bikes & Peds

START TIME	SR-113 SB Ramps Southbound					W Covell Blvd Westbound					SR-113 SB Ramps Northbound					W Covell Blvd Eastbound					Total	Peds Total
	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL		
7:00	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2	0
7:15	0	0	0	0	0	0	1	0	0	1	0	0	0	1	0	0	2	0	0	2	3	1
7:30	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	6	6	1
7:45	0	0	0	4	0	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	4	4
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</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>12</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>15</b>	<b>6</b>
8:00	0	0	0	0	0	0	1	0	0	1	0	0	0	1	0	0	2	0	1	2	3	2
8:15	0	0	0	2	0	0	4	0	0	4	0	0	0	0	0	0	1	0	1	1	5	3
8:30	0	0	0	0	0	0	1	0	0	1	1	0	0	2	1	0	1	0	0	1	3	2
8:45	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	4	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>2</b>	<b>7</b>	<b>15</b>	<b>7</b>
16:00	0	0	0	1	0	0	3	0	0	3	0	0	0	1	0	0	1	0	0	1	4	2
16:15	0	0	0	6	0	0	1	0	0	1	0	0	0	0	0	0	1	0	4	1	2	10
16:30	0	0	0	4	0	0	3	0	0	3	0	0	0	2	0	0	1	0	1	1	4	7
16:45	0	0	0	2	0	0	4	0	1	4	0	0	0	0	0	0	3	0	1	3	7	4
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>13</b>	<b>0</b>	<b>0</b>	<b>11</b>	<b>0</b>	<b>1</b>	<b>11</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>6</b>	<b>6</b>	<b>17</b>	<b>23</b>
17:00	0	0	0	2	0	0	3	0	0	3	0	0	0	0	0	0	4	0	1	4	7	3
17:15	0	0	0	7	0	0	3	0	0	3	0	0	0	3	0	0	2	0	2	2	5	12
17:30	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	1	2
17:45	0	0	0	2	0	0	3	0	0	3	0	0	0	0	0	0	0	0	1	0	3	3
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>5</b>	<b>6</b>	<b>16</b>	<b>20</b>
<b>Grand Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>32</b>	<b>0</b>	<b>0</b>	<b>31</b>	<b>0</b>	<b>1</b>	<b>31</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>1</b>	<b>0</b>	<b>31</b>	<b>0</b>	<b>13</b>	<b>31</b>	<b>63</b>	<b>56</b>
Apprch %	0.0%	0.0%	0.0%			0.0%	100.0%	0.0%			100.0%	0.0%	0.0%			0.0%	100.0%	0.0%				
Total %	0.0%	0.0%	0.0%		0.0%	0.0%	49.2%	0.0%		49.2%	1.6%	0.0%	0.0%		1.6%	0.0%	49.2%	0.0%		49.2%	100.0%	

AM PEAK HOUR	SR-113 SB Ramps Southbound					W Covell Blvd Westbound					SR-113 SB Ramps Northbound					W Covell Blvd Eastbound					Total
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 07:45 to 08:45																					
Peak Hour For Entire Intersection Begins at 07:45																					
7:45	0	0	0	4	0	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	4
8:00	0	0	0	0	0	0	1	0	0	1	0	0	0	1	0	0	2	0	1	2	3
8:15	0	0	0	2	0	0	4	0	0	4	0	0	0	0	0	0	1	0	1	1	5
8:30	0	0	0	0	0	0	1	0	0	1	1	0	0	2	1	0	1	0	0	1	3
Total Volume	0	0	0	6	0	0	7	0	0	7	1	0	0	3	1	0	7	0	2	7	15
% App Total	0.0%	0.0%	0.0%			0.0%	100.0%	0.0%			100.0%	0.0%	0.0%			0.0%	100.0%	0.0%			
PHF	.000	.000	.000		.000	.000	.438	.000		.438	.250	.000	.000		.250	.000	.583	.000		.583	.750

PM PEAK HOUR	SR-113 SB Ramps Southbound					W Covell Blvd Westbound					SR-113 SB Ramps Northbound					W Covell Blvd Eastbound					Total
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	0	0	0	2	0	0	3	0	0	3	0	0	0	0	0	0	4	0	1	4	7
17:15	0	0	0	7	0	0	3	0	0	3	0	0	0	3	0	0	2	0	2	2	5
17:30	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	1
17:45	0	0	0	2	0	0	3	0	0	3	0	0	0	0	0	0	0	0	1	0	3
Total Volume	0	0	0	12	0	0	10	0	0	10	0	0	0	3	0	0	6	0	5	6	16
% App Total	0.0%	0.0%	0.0%			0.0%	100.0%	0.0%			0.0%	0.0%	0.0%			0.0%	100.0%	0.0%			
PHF	.000	.000	.000		.000	.000	.833	.000		.833	.000	.000	.000		.000	.000	.375	.000		.375	.571



## National Data and Surveying Services

City of Davis  
 All Vehicles & Uturns On Unshifted  
 Bikes & Peds On Bank 1  
 Nothing On Bank 2

(323) 782-0090  
[info@ndsdata.com](mailto:info@ndsdata.com)

File Name : 17-7217-007 SR-113 NB Ramps & W Covell Blvd  
 Date : 3/16/2017

### Unshifted Count = All Vehicles & Uturns

START TIME	SR-113 NB Ramps Southbound					W Covell Blvd Westbound					SR-113 NB Ramps Northbound					W Covell Blvd Eastbound					Total	Uturns Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL		
7:00	0	0	0	0	0	0	108	16	0	124	42	0	38	0	80	5	68	0	0	73	277	0
7:15	0	0	0	0	0	0	158	16	0	174	47	0	49	0	96	12	107	0	0	119	389	0
7:30	0	0	0	0	0	0	176	33	0	209	95	0	60	0	155	17	184	0	0	201	565	0
7:45	0	0	0	0	0	0	248	39	0	287	96	0	76	0	172	14	153	0	1	168	627	1
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>690</b>	<b>104</b>	<b>0</b>	<b>794</b>	<b>280</b>	<b>0</b>	<b>223</b>	<b>0</b>	<b>503</b>	<b>48</b>	<b>512</b>	<b>0</b>	<b>1</b>	<b>561</b>	<b>1858</b>	<b>1</b>
8:00	0	0	0	0	0	0	204	21	0	225	71	0	63	0	134	16	162	0	0	178	537	0
8:15	0	0	0	0	0	0	253	47	0	300	76	1	85	0	162	18	224	0	0	242	704	0
8:30	0	0	0	0	0	0	225	33	0	258	60	0	65	0	125	27	138	0	0	165	548	0
8:45	0	0	0	0	0	0	204	20	0	224	73	0	59	0	132	13	142	0	0	155	511	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>886</b>	<b>121</b>	<b>0</b>	<b>1007</b>	<b>280</b>	<b>1</b>	<b>272</b>	<b>0</b>	<b>553</b>	<b>74</b>	<b>666</b>	<b>0</b>	<b>0</b>	<b>740</b>	<b>2300</b>	<b>0</b>
16:00	0	0	0	0	0	0	178	36	0	214	73	0	97	0	170	33	145	0	0	178	562	0
16:15	0	0	0	0	0	0	193	46	0	239	92	0	117	0	209	24	157	0	0	181	629	0
16:30	0	0	0	0	0	0	168	27	0	195	71	0	115	0	186	26	196	0	1	223	604	1
16:45	0	0	0	0	0	0	169	36	0	205	74	0	140	0	214	39	172	0	0	211	630	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>708</b>	<b>145</b>	<b>0</b>	<b>853</b>	<b>310</b>	<b>0</b>	<b>469</b>	<b>0</b>	<b>779</b>	<b>122</b>	<b>670</b>	<b>0</b>	<b>1</b>	<b>793</b>	<b>2425</b>	<b>1</b>
17:00	0	0	0	0	0	0	182	48	0	230	93	0	135	0	228	34	209	0	2	245	703	2
17:15	0	0	0	0	0	0	170	40	0	210	98	0	139	0	237	23	178	0	0	201	648	0
17:30	0	0	0	0	0	0	199	34	0	233	77	0	119	0	196	14	169	0	0	183	612	0
17:45	0	0	0	0	0	0	190	30	0	220	80	0	139	0	219	25	185	0	0	210	649	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>741</b>	<b>152</b>	<b>0</b>	<b>893</b>	<b>348</b>	<b>0</b>	<b>532</b>	<b>0</b>	<b>880</b>	<b>96</b>	<b>741</b>	<b>0</b>	<b>2</b>	<b>839</b>	<b>2612</b>	<b>2</b>
<b>Grand Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3025</b>	<b>522</b>	<b>0</b>	<b>3547</b>	<b>1218</b>	<b>1</b>	<b>1496</b>	<b>0</b>	<b>2715</b>	<b>340</b>	<b>2589</b>	<b>0</b>	<b>4</b>	<b>2933</b>	<b>9195</b>	<b>4</b>
Apprch %	0.0%	0.0%	0.0%	0.0%		0.0%	85.3%	14.7%	0.0%		44.9%	0.0%	55.1%	0.0%		11.6%	88.3%	0.0%	0.1%			
Total %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	32.9%	5.7%	0.0%	38.6%	13.2%	0.0%	16.3%	0.0%	29.5%	3.7%	28.2%	0.0%	0.0%	31.9%	100.0%	

AM PEAK HOUR	SR-113 NB Ramps Southbound					W Covell Blvd Westbound					SR-113 NB Ramps Northbound					W Covell Blvd Eastbound					Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
7:30	0	0	0	0	0	0	176	33	0	209	95	0	60	0	155	17	184	0	0	201	565
7:45	0	0	0	0	0	0	248	39	0	287	96	0	76	0	172	14	153	0	1	168	627
8:00	0	0	0	0	0	0	204	21	0	225	71	0	63	0	134	16	162	0	0	178	537
8:15	0	0	0	0	0	0	253	47	0	300	76	1	85	0	162	18	224	0	0	242	704
Total Volume	0	0	0	0	0	0	881	140	0	1021	338	1	284	0	623	65	723	0	1	789	2433
% App Total	0.0%	0.0%	0.0%	0.0%		0.0%	86.3%	13.7%	0.0%		54.3%	0.2%	45.6%	0.0%		8.2%	91.6%	0.0%	0.1%		
PHF	.000	.000	.000	.000	.000	.000	.871	.745	.000	.851	.880	.250	.835	.000	.906	.903	.807	.000	.250	.815	.864

PM PEAK HOUR	SR-113 NB Ramps Southbound					W Covell Blvd Westbound					SR-113 NB Ramps Northbound					W Covell Blvd Eastbound					Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	0	0	0	0	0	0	182	48	0	230	93	0	135	0	228	34	209	0	2	245	703
17:15	0	0	0	0	0	0	170	40	0	210	98	0	139	0	237	23	178	0	0	201	648
17:30	0	0	0	0	0	0	199	34	0	233	77	0	119	0	196	14	169	0	0	183	612
17:45	0	0	0	0	0	0	190	30	0	220	80	0	139	0	219	25	185	0	0	210	649
Total Volume	0	0	0	0	0	0	741	152	0	893	348	0	532	0	880	96	741	0	2	839	2612
% App Total	0.0%	0.0%	0.0%	0.0%		0.0%	83.0%	17.0%	0.0%		39.5%	0.0%	60.5%	0.0%		11.4%	88.3%	0.0%	0.2%		
PHF	.000	.000	.000	.000	.000	.000	.931	.792	.000	.958	.888	.000	.957	.000	.928	.706	.886	.000	.250	.856	.929

## National Data and Surveying Services

City of Davis  
 All Vehicles & Uturns On Unshifted  
 Bikes & Peds On Bank 1  
 Nothing On Bank 2

(323) 782-0090  
[info@ndsdata.com](mailto:info@ndsdata.com)

File Name : 17-7217-007 SR-113 NB Ramps & W Covell Blvd  
 Date : 3/16/2017

### Bank 1 Count = Bikes & Peds

START TIME	SR-113 NB Ramps Southbound					W Covell Blvd Westbound					SR-113 NB Ramps Northbound					W Covell Blvd Eastbound					Total	Peds Total
	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL		
7:00	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	3	0
7:15	0	0	0	0	0	0	1	0	0	1	0	0	0	1	0	0	2	0	0	2	3	1
7:30	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	5	2
7:45	0	0	0	3	0	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	4	3
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</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>12</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>15</b>	<b>6</b>
8:00	0	0	0	2	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	3	2
8:15	0	0	0	2	0	0	4	0	0	4	0	0	0	1	0	0	1	0	0	1	5	3
8:30	0	0	0	0	0	0	1	0	0	1	0	0	0	1	0	0	0	0	0	0	1	1
8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	3	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>12</b>	<b>6</b>
16:00	0	0	0	2	0	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	4	2
16:15	0	0	0	7	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	3	7
16:30	0	0	0	4	0	0	3	0	0	3	0	0	0	1	0	0	1	0	0	1	4	5
16:45	0	0	0	3	0	0	3	0	0	3	0	0	0	2	0	0	3	0	0	3	6	5
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>11</b>	<b>0</b>	<b>0</b>	<b>11</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>17</b>	<b>19</b>
17:00	0	0	0	6	0	0	2	0	0	2	0	0	0	1	0	0	3	0	0	3	5	7
17:15	0	0	0	5	0	0	3	0	0	3	0	0	0	1	0	0	3	0	0	3	6	6
17:30	0	0	0	2	0	0	2	0	0	2	0	0	0	1	0	0	0	0	0	0	2	3
17:45	0	0	0	2	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	2	2
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>15</b>	<b>18</b>
<b>Grand Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>40</b>	<b>0</b>	<b>0</b>	<b>29</b>	<b>0</b>	<b>0</b>	<b>29</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>30</b>	<b>0</b>	<b>0</b>	<b>30</b>	<b>59</b>	<b>49</b>
Apprch %	0.0%	0.0%	0.0%			0.0%	100.0%	0.0%		49.2%	0.0%	0.0%	0.0%		0.0%	0.0%	100.0%	0.0%		50.8%	100.0%	
Total %	0.0%	0.0%	0.0%		0.0%	0.0%	49.2%	0.0%		49.2%	0.0%	0.0%	0.0%		0.0%	0.0%	50.8%	0.0%		50.8%	100.0%	

AM PEAK HOUR	SR-113 NB Ramps Southbound					W Covell Blvd Westbound					SR-113 NB Ramps Northbound					W Covell Blvd Eastbound					Total
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
7:30	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	5
7:45	0	0	0	3	0	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	4
8:00	0	0	0	2	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	3
8:15	0	0	0	2	0	0	4	0	0	4	0	0	0	1	0	0	1	0	0	1	5
Total Volume	0	0	0	9	0	0	6	0	0	6	0	0	0	1	0	0	11	0	0	11	17
% App Total	0.0%	0.0%	0.0%			0.0%	100.0%	0.0%		.375	0.0%	0.0%	0.0%		.000	0.0%	100.0%	0.0%		.550	.850
PHF	.000	.000	.000		.000	.000	.375	.000		.375	.000	.000	.000		.000	.000	.550	.000		.550	.850

PM PEAK HOUR	SR-113 NB Ramps Southbound					W Covell Blvd Westbound					SR-113 NB Ramps Northbound					W Covell Blvd Eastbound					Total
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	0	0	0	6	0	0	2	0	0	2	0	0	0	1	0	0	3	0	0	3	5
17:15	0	0	0	5	0	0	3	0	0	3	0	0	0	1	0	0	3	0	0	3	6
17:30	0	0	0	2	0	0	2	0	0	2	0	0	0	1	0	0	0	0	0	0	2
17:45	0	0	0	2	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	2
Total Volume	0	0	0	15	0	0	9	0	0	9	0	0	0	3	0	0	6	0	0	6	15
% App Total	0.0%	0.0%	0.0%			0.0%	100.0%	0.0%		.750	0.0%	0.0%	0.0%		.000	0.0%	100.0%	0.0%		.500	.625
PHF	.000	.000	.000		.000	.000	.750	.000		.750	.000	.000	.000		.000	.000	.500	.000		.500	.625

## National Data and Surveying Services

City of Davis  
 All Vehicles & Uturns On Unshifted  
 Bikes & Peds On Bank 1  
 Nothing On Bank 2

(323) 782-0090  
[info@ndsdata.com](mailto:info@ndsdata.com)

File Name : 17-7217-008 Sycamore Ln & W Covell Blvd  
 Date : 3/16/2017

### Unshifted Count = All Vehicles & Uturns

START TIME	Sycamore Ln Southbound					W Covell Blvd Westbound					Sycamore Ln Northbound					W Covell Blvd Eastbound					Total	Uturns Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL		
7:00	9	6	32	0	47	0	70	5	0	75	16	2	3	0	21	10	49	11	0	70	213	0
7:15	11	8	31	0	50	1	91	7	0	99	27	2	1	0	30	13	101	20	0	134	313	0
7:30	15	11	47	0	73	4	128	4	0	136	42	8	4	0	54	19	138	50	0	207	470	0
7:45	18	11	65	0	94	9	147	12	0	168	40	10	5	0	55	33	121	32	0	186	503	0
<b>Total</b>	<b>53</b>	<b>36</b>	<b>175</b>	<b>0</b>	<b>264</b>	<b>14</b>	<b>436</b>	<b>28</b>	<b>0</b>	<b>478</b>	<b>125</b>	<b>22</b>	<b>13</b>	<b>0</b>	<b>160</b>	<b>75</b>	<b>409</b>	<b>113</b>	<b>0</b>	<b>597</b>	<b>1499</b>	<b>0</b>
8:00	22	23	57	0	102	5	153	21	0	179	35	6	9	0	50	35	141	34	0	210	541	0
8:15	16	13	46	0	75	12	148	13	0	173	66	9	17	0	92	25	166	81	0	272	612	0
8:30	22	14	43	0	79	4	153	14	0	171	52	9	4	0	65	23	123	24	0	170	485	0
8:45	11	7	50	0	68	4	127	8	0	139	38	12	7	0	57	35	132	26	0	193	457	0
<b>Total</b>	<b>71</b>	<b>57</b>	<b>196</b>	<b>0</b>	<b>324</b>	<b>25</b>	<b>581</b>	<b>56</b>	<b>0</b>	<b>662</b>	<b>191</b>	<b>36</b>	<b>37</b>	<b>0</b>	<b>264</b>	<b>118</b>	<b>562</b>	<b>165</b>	<b>0</b>	<b>845</b>	<b>2095</b>	<b>0</b>
16:00	27	12	19	0	58	5	122	28	0	155	26	16	18	0	60	20	148	25	0	193	466	0
16:15	33	14	31	0	78	5	164	20	0	189	27	15	12	0	54	33	173	26	0	232	553	0
16:30	31	11	15	0	57	7	113	20	0	140	42	13	20	0	75	37	202	28	0	267	539	0
16:45	32	14	18	0	64	6	137	24	0	167	39	18	10	0	67	34	177	38	0	249	547	0
<b>Total</b>	<b>123</b>	<b>51</b>	<b>83</b>	<b>0</b>	<b>257</b>	<b>23</b>	<b>536</b>	<b>92</b>	<b>0</b>	<b>651</b>	<b>134</b>	<b>62</b>	<b>60</b>	<b>0</b>	<b>256</b>	<b>124</b>	<b>700</b>	<b>117</b>	<b>0</b>	<b>941</b>	<b>2105</b>	<b>0</b>
17:00	33	21	26	0	80	3	142	22	0	167	31	12	11	0	54	27	195	40	0	262	563	0
17:15	37	16	23	0	76	5	149	27	0	181	32	17	12	0	61	33	203	30	0	266	584	0
17:30	39	20	22	0	81	6	160	20	0	186	21	15	9	0	45	36	185	32	0	253	565	0
17:45	40	20	28	0	88	11	150	27	0	188	33	16	13	0	62	44	199	25	0	268	606	0
<b>Total</b>	<b>149</b>	<b>77</b>	<b>99</b>	<b>0</b>	<b>325</b>	<b>25</b>	<b>601</b>	<b>96</b>	<b>0</b>	<b>722</b>	<b>117</b>	<b>60</b>	<b>45</b>	<b>0</b>	<b>222</b>	<b>140</b>	<b>782</b>	<b>127</b>	<b>0</b>	<b>1049</b>	<b>2318</b>	<b>0</b>
<b>Grand Total</b>	<b>396</b>	<b>221</b>	<b>553</b>	<b>0</b>	<b>1170</b>	<b>87</b>	<b>2154</b>	<b>272</b>	<b>0</b>	<b>2513</b>	<b>567</b>	<b>180</b>	<b>155</b>	<b>0</b>	<b>902</b>	<b>457</b>	<b>2453</b>	<b>522</b>	<b>0</b>	<b>3432</b>	<b>8017</b>	<b>0</b>
Apprch %	33.8%	18.9%	47.3%	0.0%		3.5%	85.7%	10.8%	0.0%		62.9%	20.0%	17.2%	0.0%		13.3%	71.5%	15.2%	0.0%			
Total %	4.9%	2.8%	6.9%	0.0%	14.6%	1.1%	26.9%	3.4%	0.0%	31.3%	7.1%	2.2%	1.9%	0.0%	11.3%	5.7%	30.6%	6.5%	0.0%	42.8%	100.0%	

AM PEAK HOUR	Sycamore Ln Southbound					W Covell Blvd Westbound					Sycamore Ln Northbound					W Covell Blvd Eastbound					Total	
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL		
Peak Hour Analysis From 07:45 to 08:45																						
Peak Hour For Entire Intersection Begins at 07:45																						
7:45	18	11	65	0	94	9	147	12	0	168	40	10	5	0	55	33	121	32	0	186	503	
8:00	22	23	57	0	102	5	153	21	0	179	35	6	9	0	50	35	141	34	0	210	541	
8:15	16	13	46	0	75	12	148	13	0	173	66	9	17	0	92	25	166	81	0	272	612	
8:30	22	14	43	0	79	4	153	14	0	171	52	9	4	0	65	23	123	24	0	170	485	
Total Volume	78	61	211	0	350	30	601	60	0	691	193	34	35	0	262	116	551	171	0	838	2141	
% App Total	22.3%	17.4%	60.3%	0.0%		4.3%	87.0%	8.7%	0.0%		73.7%	13.0%	13.4%	0.0%		13.8%	65.8%	20.4%	0.0%			
PHF	.886	.663	.812	.000	.858	.625	.982	.714	.000	.965	.731	.850	.515	.000	.712	.829	.830	.528	.000	.770	.875	

PM PEAK HOUR	Sycamore Ln Southbound					W Covell Blvd Westbound					Sycamore Ln Northbound					W Covell Blvd Eastbound					Total	
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL		
Peak Hour Analysis From 17:00 to 18:00																						
Peak Hour For Entire Intersection Begins at 17:00																						
17:00	33	21	26	0	80	3	142	22	0	167	31	12	11	0	54	27	195	40	0	262	563	
17:15	37	16	23	0	76	5	149	27	0	181	32	17	12	0	61	33	203	30	0	266	584	
17:30	39	20	22	0	81	6	160	20	0	186	21	15	9	0	45	36	185	32	0	253	565	
17:45	40	20	28	0	88	11	150	27	0	188	33	16	13	0	62	44	199	25	0	268	606	
Total Volume	149	77	99	0	325	25	601	96	0	722	117	60	45	0	222	140	782	127	0	1049	2318	
% App Total	45.8%	23.7%	30.5%	0.0%		3.5%	83.2%	13.3%	0.0%		52.7%	27.0%	20.3%	0.0%		13.3%	74.5%	12.1%	0.0%			
PHF	.931	.917	.884	.000	.923	.568	.939	.889	.000	.960	.886	.882	.865	.000	.895	.795	.963	.794	.000	.979	.956	

## National Data and Surveying Services

City of Davis  
 All Vehicles & Uturns On Unshifted  
 Bikes & Peds On Bank 1  
 Nothing On Bank 2

(323) 782-0090  
[info@ndsdata.com](mailto:info@ndsdata.com)

File Name : 17-7217-008 Sycamore Ln & W Covell Blvd  
 Date : 3/16/2017

### Bank 1 Count = Bikes & Peds

START TIME	Sycamore Ln Southbound					W Covell Blvd Westbound					Sycamore Ln Northbound					W Covell Blvd Eastbound					Total	Peds Total
	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL		
7:00	0	5	0	0	5	0	0	0	1	0	1	0	0	1	1	0	2	0	0	2	8	2
7:15	0	7	0	0	7	0	0	0	0	0	1	2	0	0	3	0	1	0	1	1	11	1
7:30	0	10	0	1	10	1	0	1	0	2	1	2	0	0	3	1	1	0	4	2	17	5
7:45	0	8	0	0	8	0	1	0	0	1	1	4	0	0	5	0	1	0	3	1	15	3
<b>Total</b>	<b>0</b>	<b>30</b>	<b>0</b>	<b>1</b>	<b>30</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>4</b>	<b>8</b>	<b>0</b>	<b>1</b>	<b>12</b>	<b>1</b>	<b>5</b>	<b>0</b>	<b>8</b>	<b>6</b>	<b>51</b>	<b>11</b>
8:00	0	21	0	1	21	0	1	0	2	1	0	1	0	1	1	2	0	4	3	26	8	
8:15	0	22	2	0	24	1	1	0	0	2	0	3	0	0	3	0	1	0	4	1	30	4
8:30	1	14	2	0	17	3	0	0	1	3	1	0	0	2	1	0	1	0	6	1	22	9
8:45	1	11	0	0	12	3	0	0	0	3	0	1	0	0	1	1	2	0	4	3	19	4
<b>Total</b>	<b>2</b>	<b>68</b>	<b>4</b>	<b>1</b>	<b>74</b>	<b>7</b>	<b>2</b>	<b>0</b>	<b>3</b>	<b>9</b>	<b>1</b>	<b>5</b>	<b>0</b>	<b>3</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>0</b>	<b>18</b>	<b>8</b>	<b>97</b>	<b>25</b>
16:00	0	5	1	3	6	0	1	1	5	2	0	8	1	0	9	0	1	0	8	1	18	16
16:15	0	7	0	0	7	0	4	0	0	4	0	6	0	1	6	0	2	0	4	2	19	5
16:30	0	3	0	4	3	0	4	0	2	4	0	8	0	0	8	0	0	0	11	0	15	17
16:45	1	7	1	2	9	0	0	0	0	0	2	3	1	1	6	0	3	0	11	3	18	14
<b>Total</b>	<b>1</b>	<b>22</b>	<b>2</b>	<b>9</b>	<b>25</b>	<b>0</b>	<b>9</b>	<b>1</b>	<b>7</b>	<b>10</b>	<b>2</b>	<b>25</b>	<b>2</b>	<b>2</b>	<b>29</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>34</b>	<b>6</b>	<b>70</b>	<b>52</b>
17:00	0	2	0	2	2	0	1	0	2	1	2	11	0	0	13	1	0	1	7	2	18	11
17:15	0	7	1	1	8	1	3	0	1	4	1	10	0	0	11	0	2	0	7	2	25	9
17:30	1	2	0	2	3	0	2	0	1	2	2	14	0	0	16	0	2	2	2	4	25	5
17:45	0	6	0	2	6	0	0	0	2	0	0	9	1	0	10	0	0	2	4	2	18	8
<b>Total</b>	<b>1</b>	<b>17</b>	<b>1</b>	<b>7</b>	<b>19</b>	<b>1</b>	<b>6</b>	<b>0</b>	<b>6</b>	<b>7</b>	<b>5</b>	<b>44</b>	<b>1</b>	<b>0</b>	<b>50</b>	<b>1</b>	<b>4</b>	<b>5</b>	<b>20</b>	<b>10</b>	<b>86</b>	<b>33</b>
<b>Grand Total</b>	<b>4</b>	<b>137</b>	<b>7</b>	<b>18</b>	<b>148</b>	<b>9</b>	<b>18</b>	<b>2</b>	<b>17</b>	<b>29</b>	<b>12</b>	<b>82</b>	<b>3</b>	<b>6</b>	<b>97</b>	<b>4</b>	<b>21</b>	<b>5</b>	<b>80</b>	<b>30</b>	<b>304</b>	<b>121</b>
Apprch %	2.7%	92.6%	4.7%			31.0%	62.1%	6.9%			12.4%	84.5%	3.1%			13.3%	70.0%	16.7%				
Total %	1.3%	45.1%	2.3%		48.7%	3.0%	5.9%	0.7%		9.5%	3.9%	27.0%	1.0%		31.9%	1.3%	6.9%	1.6%		9.9%	100.0%	

AM PEAK HOUR	Sycamore Ln Southbound					W Covell Blvd Westbound					Sycamore Ln Northbound					W Covell Blvd Eastbound					Total
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 07:45 to 08:45																					
Peak Hour For Entire Intersection Begins at 07:45																					
7:45	0	8	0	0	8	0	1	0	0	1	1	4	0	0	5	0	1	0	3	1	15
8:00	0	21	0	1	21	0	1	0	2	1	0	1	0	1	1	1	2	0	4	3	26
8:15	0	22	2	0	24	1	1	0	0	2	0	3	0	0	3	0	1	0	4	1	30
8:30	1	14	2	0	17	3	0	0	1	3	1	0	0	2	1	0	1	0	6	1	22
Total Volume	1	65	4	1	70	4	3	0	3	7	2	8	0	3	10	1	5	0	17	6	93
% App Total	1.4%	92.9%	5.7%			57.1%	42.9%	0.0%			20.0%	80.0%	0.0%			16.7%	83.3%	0.0%			
PHF	.250	.739	.500		.729	.333	.750	.000		.583	.500	.500	.000		.500	.250	.625	.000		.500	.775

PM PEAK HOUR	Sycamore Ln Southbound					W Covell Blvd Westbound					Sycamore Ln Northbound					W Covell Blvd Eastbound					Total
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	0	2	0	2	2	0	1	0	2	1	2	11	0	0	13	1	0	1	7	2	18
17:15	0	7	1	1	8	1	3	0	1	4	1	10	0	0	11	0	2	0	7	2	25
17:30	1	2	0	2	3	0	2	0	1	2	2	14	0	0	16	0	2	2	2	4	25
17:45	0	6	0	2	6	0	0	0	2	0	0	9	1	0	10	0	0	2	4	2	18
Total Volume	1	17	1	7	19	1	6	0	6	7	5	44	1	0	50	1	4	5	20	10	86
% App Total	5.3%	89.5%	5.3%			14.3%	85.7%	0.0%			10.0%	88.0%	2.0%			10.0%	40.0%	50.0%			
PHF	.250	.607	.250		.594	.250	.500	.000		.438	.625	.786	.250		.781	.250	.500	.625		.625	.860

## National Data and Surveying Services

City of Davis  
 All Vehicles & Uturns On Unshifted  
 Bikes & Peds On Bank 1  
 Nothing On Bank 2

(323) 782-0090  
[info@ndsdata.com](mailto:info@ndsdata.com)

File Name : 17-7217-009 Anderson Rd & W Covell Blvd  
 Date : 3/16/2017

### Unshifted Count = All Vehicles & Uturns

START TIME	Anderson Rd Southbound					W Covell Blvd Westbound					Anderson Rd Northbound					W Covell Blvd Eastbound					Total	Uturns Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL		
7:00	4	5	17	0	26	8	44	4	0	56	19	6	0	0	25	5	36	11	2	54	161	2
7:15	7	20	13	0	40	13	51	3	0	67	22	5	7	0	34	4	82	40	1	127	268	1
7:30	9	46	12	0	67	27	108	11	0	146	42	7	12	0	61	6	110	57	1	174	448	1
7:45	8	26	22	0	56	32	104	10	0	146	43	9	7	0	59	3	84	36	1	124	385	1
<b>Total</b>	<b>28</b>	<b>97</b>	<b>64</b>	<b>0</b>	<b>189</b>	<b>80</b>	<b>307</b>	<b>28</b>	<b>0</b>	<b>415</b>	<b>126</b>	<b>27</b>	<b>26</b>	<b>0</b>	<b>179</b>	<b>18</b>	<b>312</b>	<b>144</b>	<b>5</b>	<b>479</b>	<b>1262</b>	<b>5</b>
8:00	11	40	32	0	83	32	85	8	0	125	45	9	8	0	62	8	114	35	0	157	427	0
8:15	11	43	27	0	81	48	114	8	0	170	46	14	24	0	84	6	146	55	1	208	543	1
8:30	15	30	15	0	60	30	116	11	0	157	42	21	21	0	84	6	116	42	1	165	466	1
8:45	14	38	26	0	78	26	92	10	0	128	30	14	16	0	60	9	117	25	1	152	418	1
<b>Total</b>	<b>51</b>	<b>151</b>	<b>100</b>	<b>0</b>	<b>302</b>	<b>136</b>	<b>407</b>	<b>37</b>	<b>0</b>	<b>580</b>	<b>163</b>	<b>58</b>	<b>69</b>	<b>0</b>	<b>290</b>	<b>29</b>	<b>493</b>	<b>157</b>	<b>3</b>	<b>682</b>	<b>1854</b>	<b>3</b>
16:00	18	24	12	0	54	23	88	12	0	123	52	22	24	0	98	12	157	33	0	202	477	0
16:15	6	20	16	0	42	15	116	13	0	144	51	24	33	0	108	23	178	32	1	234	528	1
16:30	18	25	3	0	46	23	83	16	1	123	48	20	32	1	101	19	173	28	0	220	490	2
16:45	16	23	9	0	48	17	104	12	0	133	60	29	47	0	136	6	204	36	0	246	563	0
<b>Total</b>	<b>58</b>	<b>92</b>	<b>40</b>	<b>0</b>	<b>190</b>	<b>78</b>	<b>391</b>	<b>53</b>	<b>1</b>	<b>523</b>	<b>211</b>	<b>95</b>	<b>136</b>	<b>1</b>	<b>443</b>	<b>60</b>	<b>712</b>	<b>129</b>	<b>1</b>	<b>902</b>	<b>2058</b>	<b>3</b>
17:00	17	22	17	0	56	17	86	12	1	116	55	39	45	1	140	14	171	27	1	213	525	3
17:15	21	18	16	0	55	21	124	18	0	163	66	39	42	0	147	9	221	25	0	255	620	0
17:30	22	49	10	0	81	24	114	16	1	155	49	38	30	0	117	15	175	30	0	220	573	1
17:45	19	22	14	0	55	23	124	16	0	163	53	30	19	0	102	20	179	53	3	255	575	3
<b>Total</b>	<b>79</b>	<b>111</b>	<b>57</b>	<b>0</b>	<b>247</b>	<b>85</b>	<b>448</b>	<b>62</b>	<b>2</b>	<b>597</b>	<b>223</b>	<b>146</b>	<b>136</b>	<b>1</b>	<b>506</b>	<b>58</b>	<b>746</b>	<b>135</b>	<b>4</b>	<b>943</b>	<b>2293</b>	<b>7</b>
<b>Grand Total</b>	<b>216</b>	<b>451</b>	<b>261</b>	<b>0</b>	<b>928</b>	<b>379</b>	<b>1553</b>	<b>180</b>	<b>3</b>	<b>2115</b>	<b>723</b>	<b>326</b>	<b>367</b>	<b>2</b>	<b>1418</b>	<b>165</b>	<b>2263</b>	<b>565</b>	<b>13</b>	<b>3006</b>	<b>7467</b>	<b>18</b>
Apprch %	23.3%	48.6%	28.1%	0.0%		17.9%	73.4%	8.5%	0.1%		51.0%	23.0%	25.9%	0.1%		5.5%	75.3%	18.8%	0.4%			
Total %	2.9%	6.0%	3.5%	0.0%	12.4%	5.1%	20.8%	2.4%	0.0%	28.3%	9.7%	4.4%	4.9%	0.0%	19.0%	2.2%	30.3%	7.6%	0.2%	40.3%	100.0%	

AM PEAK HOUR	Anderson Rd Southbound					W Covell Blvd Westbound					Anderson Rd Northbound					W Covell Blvd Eastbound					Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 08:00 to 09:00																					
Peak Hour For Entire Intersection Begins at 08:00																					
8:00	11	40	32	0	83	32	85	8	0	125	45	9	8	0	62	8	114	35	0	157	427
8:15	11	43	27	0	81	48	114	8	0	170	46	14	24	0	84	6	146	55	1	208	543
8:30	15	30	15	0	60	30	116	11	0	157	42	21	21	0	84	6	116	42	1	165	466
8:45	14	38	26	0	78	26	92	10	0	128	30	14	16	0	60	9	117	25	1	152	418
Total Volume	51	151	100	0	302	136	407	37	0	580	163	58	69	0	290	29	493	157	3	682	1854
% App Total	16.9%	50.0%	33.1%	0.0%		23.4%	70.2%	6.4%	0.0%		56.2%	20.0%	23.8%	0.0%		4.3%	72.3%	23.0%	0.4%		
PHF	.850	.878	.781	.000	.910	.708	.877	.841	.000	.853	.886	.690	.719	.000	.863	.806	.844	.714	.750	.820	.854

PM PEAK HOUR	Anderson Rd Southbound					W Covell Blvd Westbound					Anderson Rd Northbound					W Covell Blvd Eastbound					Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	17	22	17	0	56	17	86	12	1	116	55	39	45	1	140	14	171	27	1	213	525
17:15	21	18	16	0	55	21	124	18	0	163	66	39	42	0	147	9	221	25	0	255	620
17:30	22	49	10	0	81	24	114	16	1	155	49	38	30	0	117	15	175	30	0	220	573
17:45	19	22	14	0	55	23	124	16	0	163	53	30	19	0	102	20	179	53	3	255	575
Total Volume	79	111	57	0	247	85	448	62	2	597	223	146	136	1	506	58	746	135	4	943	2293
% App Total	32.0%	44.9%	23.1%	0.0%		14.2%	75.0%	10.4%	0.3%		44.1%	28.9%	26.9%	0.2%		6.2%	79.1%	14.3%	0.4%		
PHF	.898	.566	.838	.000	.762	.885	.903	.861	.500	.916	.845	.936	.756	.250	.861	.725	.844	.637	.333	.925	.925



## National Data and Surveying Services

City of Davis  
 All Vehicles & Uturns On Unshifted  
 Bikes & Peds On Bank 1  
 Nothing On Bank 2

(323) 782-0090  
[info@ndsdata.com](mailto:info@ndsdata.com)

File Name : 17-7217-009 Anderson Rd & W Covell Blvd  
 Date : 3/16/2017

### Bank 1 Count = Bikes & Peds

START TIME	Anderson Rd Southbound					W Covell Blvd Westbound					Anderson Rd Northbound					W Covell Blvd Eastbound					Total	Peds Total	
	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL			
7:00	1	3	0	1	4	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	5	1
7:15	1	2	0	0	3	0	2	0	1	2	0	0	0	1	0	0	1	0	0	1	1	6	2
7:30	0	0	0	0	0	0	1	0	5	1	1	0	0	1	1	0	4	0	0	0	4	6	6
7:45	1	9	0	1	10	0	1	0	2	1	0	0	0	0	0	0	0	0	1	0	11	4	
<b>Total</b>	<b>3</b>	<b>14</b>	<b>0</b>	<b>2</b>	<b>17</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>8</b>	<b>4</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>1</b>	<b>6</b>	<b>28</b>	<b>13</b>	
8:00	1	2	0	0	3	1	1	0	4	2	0	0	0	0	0	0	1	0	0	1	6	4	
8:15	2	2	0	0	4	0	0	0	0	0	0	1	0	0	1	0	2	0	0	2	7	0	
8:30	0	3	0	2	3	0	1	0	3	1	0	1	0	1	0	2	0	0	5	2	7	12	
8:45	1	6	0	1	7	0	0	0	2	0	0	0	0	2	0	0	1	2	1	3	10	6	
<b>Total</b>	<b>4</b>	<b>13</b>	<b>0</b>	<b>3</b>	<b>17</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>9</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>4</b>	<b>2</b>	<b>0</b>	<b>6</b>	<b>2</b>	<b>6</b>	<b>8</b>	<b>30</b>	<b>22</b>	
16:00	0	0	0	1	0	0	2	1	2	3	1	15	0	0	16	0	0	1	5	1	20	8	
16:15	1	3	0	3	4	0	1	1	3	2	2	13	0	3	15	0	0	0	4	0	21	13	
16:30	0	8	1	4	9	0	1	1	11	2	3	15	0	2	18	0	2	0	1	2	31	18	
16:45	1	6	0	0	7	0	0	0	5	0	2	5	0	3	7	0	3	1	2	4	18	10	
<b>Total</b>	<b>2</b>	<b>17</b>	<b>1</b>	<b>8</b>	<b>20</b>	<b>0</b>	<b>4</b>	<b>3</b>	<b>21</b>	<b>7</b>	<b>8</b>	<b>48</b>	<b>0</b>	<b>8</b>	<b>56</b>	<b>0</b>	<b>5</b>	<b>2</b>	<b>12</b>	<b>7</b>	<b>90</b>	<b>49</b>	
17:00	0	1	0	5	1	0	1	1	8	2	0	14	0	1	14	0	0	0	2	0	17	16	
17:15	1	3	0	3	4	0	1	2	12	3	1	17	0	3	18	0	1	0	2	1	26	20	
17:30	0	2	0	1	2	0	0	1	7	1	0	15	0	1	15	0	0	0	4	0	18	13	
17:45	0	5	1	0	6	0	1	0	10	1	1	13	0	5	14	0	0	0	7	0	21	22	
<b>Total</b>	<b>1</b>	<b>11</b>	<b>1</b>	<b>9</b>	<b>13</b>	<b>0</b>	<b>3</b>	<b>4</b>	<b>37</b>	<b>7</b>	<b>2</b>	<b>59</b>	<b>0</b>	<b>10</b>	<b>61</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>15</b>	<b>1</b>	<b>82</b>	<b>71</b>	
<b>Grand Total</b>	<b>10</b>	<b>55</b>	<b>2</b>	<b>22</b>	<b>67</b>	<b>1</b>	<b>13</b>	<b>7</b>	<b>75</b>	<b>21</b>	<b>11</b>	<b>109</b>	<b>0</b>	<b>24</b>	<b>120</b>	<b>0</b>	<b>18</b>	<b>4</b>	<b>34</b>	<b>22</b>	<b>230</b>	<b>155</b>	
Apprch %	14.9%	82.1%	3.0%			4.8%	61.9%	33.3%			9.2%	90.8%	0.0%			0.0%	81.8%	18.2%					
Total %	4.3%	23.9%	0.9%		29.1%	0.4%	5.7%	3.0%		9.1%	4.8%	47.4%	0.0%		52.2%	0.0%	7.8%	1.7%		9.6%	100.0%		

AM PEAK HOUR	Anderson Rd Southbound					W Covell Blvd Westbound					Anderson Rd Northbound					W Covell Blvd Eastbound					Total	
	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL		
Peak Hour Analysis From 08:00 to 09:00																						
Peak Hour For Entire Intersection Begins at 08:00																						
8:00	1	2	0	0	3	1	1	0	4	2	0	0	0	0	0	0	1	0	0	1	6	
8:15	2	2	0	0	4	0	0	0	0	0	0	1	0	0	1	0	2	0	0	2	7	
8:30	0	3	0	2	3	0	1	0	3	1	0	1	0	2	1	0	2	0	5	2	7	
8:45	1	6	0	1	7	0	0	0	2	0	0	0	0	2	0	0	1	2	1	3	10	
Total Volume	4	13	0	3	17	1	2	0	9	3	0	2	0	4	2	0	6	2	6	8	30	
% App Total	23.5%	76.5%	0.0%			33.3%	66.7%	0.0%			0.0%	100.0%	0.0%			0.0%	75.0%	25.0%				
PHF	.500	.542	.000		.607	.250	.500	.000		.375	.000	.500	.000		.500	.000	.750	.250		.667	.750	

PM PEAK HOUR	Anderson Rd Southbound					W Covell Blvd Westbound					Anderson Rd Northbound					W Covell Blvd Eastbound					Total	
	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL		
Peak Hour Analysis From 17:00 to 18:00																						
Peak Hour For Entire Intersection Begins at 17:00																						
17:00	0	1	0	5	1	0	1	1	8	2	0	14	0	1	14	0	0	0	2	0	17	
17:15	1	3	0	3	4	0	1	2	12	3	1	17	0	3	18	0	1	0	2	1	26	
17:30	0	2	0	1	2	0	0	1	7	1	0	15	0	1	15	0	0	0	4	0	18	
17:45	0	5	1	0	6	0	1	0	10	1	1	13	0	5	14	0	0	0	7	0	21	
Total Volume	1	11	1	9	13	0	3	4	37	7	2	59	0	10	61	0	1	0	15	1	82	
% App Total	7.7%	84.6%	7.7%			0.0%	42.9%	57.1%			3.3%	96.7%	0.0%			0.0%	100.0%	0.0%				
PHF	.250	.550	.250		.542	.000	.750	.500		.583	.500	.868	.000		.847	.000	.250	.000		.250	.788	

## National Data and Surveying Services

City of Davis  
 All Vehicles & Uturns On Unshifted  
 Bikes & Peds On Bank 1  
 Nothing On Bank 2

(323) 782-0090  
[info@ndsdata.com](mailto:info@ndsdata.com)

File Name : 17-7217-010 Oak Ave & W Covell Blvd  
 Date : 3/16/2017

### Unshifted Count = All Vehicles & Uturns

START TIME	Oak Ave Southbound					W Covell Blvd Westbound					Oak Ave Northbound					W Covell Blvd Eastbound					Total	Uturns Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL		
7:00	0	0	0	0	0	8	43	0	0	51	8	0	10	0	18	0	42	19	0	61	130	0
7:15	0	0	0	0	0	38	71	0	0	109	9	0	19	0	28	0	38	27	0	65	202	0
7:30	0	0	0	0	0	64	102	0	0	166	44	0	68	0	112	0	57	62	0	119	397	0
7:45	0	0	0	0	0	25	155	0	0	180	26	0	40	0	66	0	95	23	0	118	364	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>135</b>	<b>371</b>	<b>0</b>	<b>0</b>	<b>506</b>	<b>87</b>	<b>0</b>	<b>137</b>	<b>0</b>	<b>224</b>	<b>0</b>	<b>232</b>	<b>131</b>	<b>0</b>	<b>363</b>	<b>1093</b>	<b>0</b>
8:00	0	0	0	0	0	22	131	0	0	153	12	0	24	0	36	0	114	26	0	140	329	0
8:15	0	0	0	0	0	34	159	0	0	193	21	0	38	0	59	0	140	36	0	176	428	0
8:30	0	0	0	0	0	35	128	0	0	163	24	0	36	0	60	0	110	36	0	146	369	0
8:45	0	0	0	0	0	30	108	0	0	138	22	0	25	0	47	0	108	28	0	136	321	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>121</b>	<b>526</b>	<b>0</b>	<b>0</b>	<b>647</b>	<b>79</b>	<b>0</b>	<b>123</b>	<b>0</b>	<b>202</b>	<b>0</b>	<b>472</b>	<b>126</b>	<b>0</b>	<b>598</b>	<b>1447</b>	<b>0</b>
16:00	0	0	0	0	0	23	106	0	0	129	26	0	30	0	56	0	175	29	0	204	389	0
16:15	0	0	0	0	0	19	122	0	0	141	27	0	22	0	49	0	188	15	0	203	393	0
16:30	0	0	0	0	0	11	116	0	0	127	27	0	32	0	59	0	211	36	0	247	433	0
16:45	0	0	0	0	0	11	120	0	0	131	27	0	26	0	53	0	231	28	0	259	443	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>64</b>	<b>464</b>	<b>0</b>	<b>0</b>	<b>528</b>	<b>107</b>	<b>0</b>	<b>110</b>	<b>0</b>	<b>217</b>	<b>0</b>	<b>805</b>	<b>108</b>	<b>0</b>	<b>913</b>	<b>1658</b>	<b>0</b>
17:00	0	0	0	0	0	12	120	0	0	132	28	0	31	0	59	0	238	18	0	256	447	0
17:15	0	0	0	0	0	24	140	0	0	164	23	0	38	0	61	0	235	25	0	260	485	0
17:30	0	0	0	0	0	19	148	0	0	167	28	0	32	0	60	0	236	28	0	264	491	0
17:45	0	0	0	0	0	24	147	0	0	171	30	0	29	0	59	0	174	28	0	202	432	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>79</b>	<b>555</b>	<b>0</b>	<b>0</b>	<b>634</b>	<b>109</b>	<b>0</b>	<b>130</b>	<b>0</b>	<b>239</b>	<b>0</b>	<b>883</b>	<b>99</b>	<b>0</b>	<b>982</b>	<b>1855</b>	<b>0</b>
<b>Grand Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>399</b>	<b>1916</b>	<b>0</b>	<b>0</b>	<b>2315</b>	<b>382</b>	<b>0</b>	<b>500</b>	<b>0</b>	<b>882</b>	<b>0</b>	<b>2392</b>	<b>464</b>	<b>0</b>	<b>2856</b>	<b>6053</b>	<b>0</b>
Apprch %	0.0%	0.0%	0.0%	0.0%		17.2%	82.8%	0.0%	0.0%		43.3%	0.0%	56.7%	0.0%		0.0%	83.8%	16.2%	0.0%			
Total %	0.0%	0.0%	0.0%	0.0%	0.0%	6.6%	31.7%	0.0%	0.0%	38.2%	6.3%	0.0%	8.3%	0.0%	14.6%	0.0%	39.5%	7.7%	0.0%	47.2%	100.0%	

AM PEAK HOUR	Oak Ave Southbound					W Covell Blvd Westbound					Oak Ave Northbound					W Covell Blvd Eastbound					Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
7:30	0	0	0	0	0	64	102	0	0	166	44	0	68	0	112	0	57	62	0	119	397
7:45	0	0	0	0	0	25	155	0	0	180	26	0	40	0	66	0	95	23	0	118	364
8:00	0	0	0	0	0	22	131	0	0	153	12	0	24	0	36	0	114	26	0	140	329
8:15	0	0	0	0	0	34	159	0	0	193	21	0	38	0	59	0	140	36	0	176	428
Total Volume	0	0	0	0	0	145	547	0	0	692	103	0	170	0	273	0	406	147	0	553	1518
% App Total	0.0%	0.0%	0.0%	0.0%		21.0%	79.0%	0.0%	0.0%		37.7%	0.0%	62.3%	0.0%		0.0%	73.4%	26.6%	0.0%		
PHF	.000	.000	.000	.000	.000	.566	.860	.000	.000	.896	.585	.000	.625	.000	.609	.000	.725	.593	.000	.786	.887

PM PEAK HOUR	Oak Ave Southbound					W Covell Blvd Westbound					Oak Ave Northbound					W Covell Blvd Eastbound					Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 16:45 to 17:45																					
Peak Hour For Entire Intersection Begins at 16:45																					
16:45	0	0	0	0	0	11	120	0	0	131	27	0	26	0	53	0	231	28	0	259	443
17:00	0	0	0	0	0	12	120	0	0	132	28	0	31	0	59	0	238	18	0	256	447
17:15	0	0	0	0	0	24	140	0	0	164	23	0	38	0	61	0	235	25	0	260	485
17:30	0	0	0	0	0	19	148	0	0	167	28	0	32	0	60	0	236	28	0	264	491
Total Volume	0	0	0	0	0	66	528	0	0	594	106	0	127	0	233	0	940	99	0	1039	1866
% App Total	0.0%	0.0%	0.0%	0.0%		11.1%	88.9%	0.0%	0.0%		45.5%	0.0%	54.5%	0.0%		0.0%	90.5%	9.5%	0.0%		
PHF	.000	.000	.000	.000	.000	.688	.892	.000	.000	.889	.946	.000	.836	.000	.955	.000	.987	.884	.000	.984	.950

## National Data and Surveying Services

City of Davis  
 All Vehicles & Uturns On Unshifted  
 Bikes & Peds On Bank 1  
 Nothing On Bank 2

(323) 782-0090  
[info@ndsdata.com](mailto:info@ndsdata.com)

File Name : 17-7217-010 Oak Ave & W Covell Blvd  
 Date : 3/16/2017

### Bank 1 Count = Bikes & Peds

START TIME	Oak Ave Southbound					W Covell Blvd Westbound					Oak Ave Northbound					W Covell Blvd Eastbound					Total	Peds Total
	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL		
7:00	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1
7:15	0	0	0	0	0	2	0	0	3	2	1	0	0	1	1	0	1	4	2	5	8	6
7:30	0	0	0	0	0	5	3	0	3	8	0	0	0	0	0	0	1	8	2	9	17	5
7:45	0	0	0	0	0	3	3	0	0	6	0	0	0	0	0	0	2	3	1	5	11	1
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11</b>	<b>6</b>	<b>0</b>	<b>7</b>	<b>17</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>4</b>	<b>15</b>	<b>5</b>	<b>19</b>	<b>37</b>	<b>13</b>
8:00	0	0	0	0	0	4	0	0	0	4	2	0	0	0	2	0	2	4	0	6	12	0
8:15	0	0	0	0	0	6	1	0	0	7	0	0	0	0	0	0	2	7	1	9	16	1
8:30	0	0	0	0	0	7	1	0	1	8	1	0	0	0	1	0	1	6	2	7	16	3
8:45	0	0	0	0	0	13	4	0	0	17	1	0	1	1	2	0	0	6	0	6	25	1
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>30</b>	<b>6</b>	<b>0</b>	<b>1</b>	<b>36</b>	<b>4</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>5</b>	<b>0</b>	<b>5</b>	<b>23</b>	<b>3</b>	<b>28</b>	<b>69</b>	<b>5</b>
16:00	0	0	0	0	0	2	2	0	0	4	1	0	1	0	2	0	1	0	0	1	7	0
16:15	0	0	0	0	0	0	3	0	1	3	3	0	3	0	6	0	1	3	0	4	13	1
16:30	0	0	0	0	0	1	3	0	1	4	2	0	4	0	6	0	2	0	1	2	12	2
16:45	0	0	0	0	0	1	1	0	0	2	2	0	2	0	4	0	1	4	2	5	11	2
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>9</b>	<b>0</b>	<b>2</b>	<b>13</b>	<b>8</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>18</b>	<b>0</b>	<b>5</b>	<b>7</b>	<b>3</b>	<b>12</b>	<b>43</b>	<b>5</b>
17:00	0	0	0	0	0	0	1	0	1	1	7	0	3	1	10	0	0	1	0	1	12	2
17:15	0	0	0	0	0	0	1	0	0	1	4	0	2	0	6	0	3	1	0	4	11	0
17:30	0	0	0	0	0	1	0	0	1	1	6	0	1	2	7	0	3	2	1	5	13	4
17:45	0	0	0	0	0	0	2	0	1	2	2	0	2	0	4	0	0	6	0	6	12	1
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>4</b>	<b>0</b>	<b>3</b>	<b>5</b>	<b>19</b>	<b>0</b>	<b>8</b>	<b>3</b>	<b>27</b>	<b>0</b>	<b>6</b>	<b>10</b>	<b>1</b>	<b>16</b>	<b>48</b>	<b>7</b>
<b>Grand Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>46</b>	<b>25</b>	<b>0</b>	<b>13</b>	<b>71</b>	<b>32</b>	<b>0</b>	<b>19</b>	<b>5</b>	<b>51</b>	<b>0</b>	<b>20</b>	<b>55</b>	<b>12</b>	<b>75</b>	<b>197</b>	<b>30</b>
Apprch %	0.0%	0.0%	0.0%			64.8%	35.2%	0.0%			62.7%	0.0%	37.3%			0.0%	26.7%	73.3%				
Total %	0.0%	0.0%	0.0%		0.0%	23.4%	12.7%	0.0%		36.0%	16.2%	0.0%	9.6%		25.9%	0.0%	10.2%	27.9%		38.1%	100.0%	

AM PEAK HOUR	Oak Ave Southbound					W Covell Blvd Westbound					Oak Ave Northbound					W Covell Blvd Eastbound					Total
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
7:30	0	0	0	0	0	5	3	0	3	8	0	0	0	0	0	0	1	8	2	9	17
7:45	0	0	0	0	0	3	3	0	0	6	0	0	0	0	0	0	2	3	1	5	11
8:00	0	0	0	0	0	4	0	0	0	4	2	0	0	0	2	0	2	4	0	6	12
8:15	0	0	0	0	0	6	1	0	0	7	0	0	0	0	0	0	2	7	1	9	16
Total Volume	0	0	0	0	0	18	7	0	3	25	2	0	0	0	2	0	7	22	4	29	56
% App Total	0.0%	0.0%	0.0%			72.0%	28.0%	0.0%			100.0%	0.0%	0.0%			0.0%	24.1%	75.9%			
PHF	.000	.000	.000		.000	.750	.583	.000		.781	.250	.000	.000		.250	.000	.875	.688		.806	.824

PM PEAK HOUR	Oak Ave Southbound					W Covell Blvd Westbound					Oak Ave Northbound					W Covell Blvd Eastbound					Total
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 16:45 to 17:45																					
Peak Hour For Entire Intersection Begins at 16:45																					
16:45	0	0	0	0	0	1	1	0	0	2	2	0	2	0	4	0	1	4	2	5	11
17:00	0	0	0	0	0	0	1	0	1	1	7	0	3	1	10	0	0	1	0	1	12
17:15	0	0	0	0	0	0	1	0	0	1	4	0	2	0	6	0	3	1	0	4	11
17:30	0	0	0	0	0	1	0	0	1	1	6	0	1	2	7	0	3	2	1	5	13
Total Volume	0	0	0	0	0	2	3	0	2	5	19	0	8	3	27	0	7	8	3	15	47
% App Total	0.0%	0.0%	0.0%			40.0%	60.0%	0.0%			70.4%	0.0%	29.6%			0.0%	46.7%	53.3%			
PHF	.000	.000	.000		.000	.500	.750	.000		.625	.679	.000	.667		.675	.000	.583	.500		.750	.904



## National Data and Surveying Services

City of Davis  
 All Vehicles & Uturns On Unshifted  
 Bikes & Peds On Bank 1  
 Nothing On Bank 2

(323) 782-0090  
[info@ndsdata.com](mailto:info@ndsdata.com)

File Name : 17-7217-011 F St & E Covell Blvd  
 Date : 3/16/2017

### Unshifted Count = All Vehicles & Uturns

START TIME	F St Southbound					E Covell Blvd Westbound					F St Northbound					E Covell Blvd Eastbound					Total	Uturns Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL		
7:00	29	19	4	0	52	7	51	16	0	74	8	10	4	0	22	1	51	6	0	58	206	0
7:15	35	27	9	0	71	60	89	6	0	155	6	13	19	0	38	2	52	11	0	65	329	0
7:30	42	46	29	0	117	68	140	19	0	227	10	18	24	0	52	6	103	28	0	137	533	0
7:45	51	45	23	0	119	30	145	24	0	199	13	11	34	0	58	13	155	22	0	190	566	0
<b>Total</b>	<b>157</b>	<b>137</b>	<b>65</b>	<b>0</b>	<b>359</b>	<b>165</b>	<b>425</b>	<b>65</b>	<b>0</b>	<b>655</b>	<b>37</b>	<b>52</b>	<b>81</b>	<b>0</b>	<b>170</b>	<b>22</b>	<b>361</b>	<b>67</b>	<b>0</b>	<b>450</b>	<b>1634</b>	<b>0</b>
8:00	54	67	16	0	137	39	138	16	0	193	14	15	29	0	58	4	142	26	0	172	560	0
8:15	61	59	16	0	136	77	156	26	0	259	13	27	45	0	85	9	173	24	0	206	686	0
8:30	38	37	20	0	95	58	145	22	0	225	15	27	33	0	75	14	129	24	0	167	562	0
8:45	30	49	11	0	90	36	108	31	0	175	11	14	26	0	51	7	113	31	0	151	467	0
<b>Total</b>	<b>183</b>	<b>212</b>	<b>63</b>	<b>0</b>	<b>458</b>	<b>210</b>	<b>547</b>	<b>95</b>	<b>0</b>	<b>852</b>	<b>53</b>	<b>83</b>	<b>133</b>	<b>0</b>	<b>269</b>	<b>34</b>	<b>557</b>	<b>105</b>	<b>0</b>	<b>696</b>	<b>2275</b>	<b>0</b>
16:00	14	39	10	0	63	29	118	32	0	179	35	35	33	0	103	9	186	35	0	230	575	0
16:15	28	34	10	0	72	36	116	45	0	197	18	38	35	0	91	20	195	27	0	242	602	0
16:30	39	39	12	0	90	32	117	40	0	189	31	21	35	0	87	10	187	36	0	233	599	0
16:45	29	23	13	0	65	32	133	40	0	205	23	37	48	0	108	19	225	43	0	287	665	0
<b>Total</b>	<b>110</b>	<b>135</b>	<b>45</b>	<b>0</b>	<b>290</b>	<b>129</b>	<b>484</b>	<b>157</b>	<b>0</b>	<b>770</b>	<b>107</b>	<b>131</b>	<b>151</b>	<b>0</b>	<b>389</b>	<b>58</b>	<b>793</b>	<b>141</b>	<b>0</b>	<b>992</b>	<b>2441</b>	<b>0</b>
17:00	33	38	6	0	77	49	122	46	0	217	42	41	33	0	116	15	215	35	0	265	675	0
17:15	32	33	20	0	85	54	135	34	0	223	34	48	57	0	139	15	244	62	0	321	768	0
17:30	28	28	12	0	68	47	152	52	0	251	36	34	61	0	131	20	227	35	0	282	732	0
17:45	22	31	19	0	72	45	143	50	0	238	28	41	47	0	116	11	171	52	0	234	660	0
<b>Total</b>	<b>115</b>	<b>130</b>	<b>57</b>	<b>0</b>	<b>302</b>	<b>195</b>	<b>552</b>	<b>182</b>	<b>0</b>	<b>929</b>	<b>140</b>	<b>164</b>	<b>198</b>	<b>0</b>	<b>502</b>	<b>61</b>	<b>857</b>	<b>184</b>	<b>0</b>	<b>1102</b>	<b>2835</b>	<b>0</b>
<b>Grand Total</b>	<b>565</b>	<b>614</b>	<b>230</b>	<b>0</b>	<b>1409</b>	<b>699</b>	<b>2008</b>	<b>499</b>	<b>0</b>	<b>3206</b>	<b>337</b>	<b>430</b>	<b>563</b>	<b>0</b>	<b>1330</b>	<b>175</b>	<b>2568</b>	<b>497</b>	<b>0</b>	<b>3240</b>	<b>9185</b>	<b>0</b>
Apprch %	40.1%	43.6%	16.3%	0.0%		21.8%	62.6%	15.6%	0.0%		25.3%	32.3%	42.3%	0.0%		5.4%	79.3%	15.3%	0.0%			
Total %	6.2%	6.7%	2.5%	0.0%	15.3%	7.6%	21.9%	5.4%	0.0%	34.9%	3.7%	4.7%	6.1%	0.0%	14.5%	1.9%	28.0%	5.4%	0.0%	35.3%	100.0%	

AM PEAK HOUR	F St Southbound					E Covell Blvd Westbound					F St Northbound					E Covell Blvd Eastbound					Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 07:45 to 08:45																					
Peak Hour For Entire Intersection Begins at 07:45																					
7:45	51	45	23	0	119	30	145	24	0	199	13	11	34	0	58	13	155	22	0	190	566
8:00	54	67	16	0	137	39	138	16	0	193	14	15	29	0	58	4	142	26	0	172	560
8:15	61	59	16	0	136	77	156	26	0	259	13	27	45	0	85	9	173	24	0	206	686
8:30	38	37	20	0	95	58	145	22	0	225	15	27	33	0	75	14	129	24	0	167	562
Total Volume	204	208	75	0	487	204	584	88	0	876	55	80	141	0	276	40	599	96	0	735	2374
% App Total	41.9%	42.7%	15.4%	0.0%		23.3%	66.7%	10.0%	0.0%		19.9%	29.0%	51.1%	0.0%		5.4%	81.5%	13.1%	0.0%		
PHF	.836	.776	.815	.000	.889	.662	.936	.846	.000	.846	.917	.741	.783	.000	.812	.714	.866	.923	.000	.892	.865

PM PEAK HOUR	F St Southbound					E Covell Blvd Westbound					F St Northbound					E Covell Blvd Eastbound					Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 16:45 to 17:45																					
Peak Hour For Entire Intersection Begins at 16:45																					
16:45	29	23	13	0	65	32	133	40	0	205	23	37	48	0	108	19	225	43	0	287	665
17:00	33	38	6	0	77	49	122	46	0	217	42	41	33	0	116	15	215	35	0	265	675
17:15	32	33	20	0	85	54	135	34	0	223	34	48	57	0	139	15	244	62	0	321	768
17:30	28	28	12	0	68	47	152	52	0	251	36	34	61	0	131	20	227	35	0	282	732
Total Volume	122	122	51	0	295	182	542	172	0	896	135	160	199	0	494	69	911	175	0	1155	2840
% App Total	41.4%	41.4%	17.3%	0.0%		20.3%	60.5%	19.2%	0.0%		27.3%	32.4%	40.3%	0.0%		6.0%	78.9%	15.2%	0.0%		
PHF	.924	.803	.638	.000	.868	.843	.891	.827	.000	.892	.804	.833	.816	.000	.888	.863	.933	.706	.000	.900	.924

## National Data and Surveying Services

City of Davis  
 All Vehicles & Uturns On Unshifted  
 Bikes & Peds On Bank 1  
 Nothing On Bank 2

(323) 782-0090  
[info@ndsdata.com](mailto:info@ndsdata.com)

File Name : 17-7217-011 F St & E Covell Blvd  
 Date : 3/16/2017

### Bank 1 Count = Bikes & Peds

START TIME	F St Southbound					E Covell Blvd Westbound					F St Northbound					E Covell Blvd Eastbound					Total	Peds Total
	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL		
7:00	0	1	0	0	1	0	1	0	3	1	0	1	0	1	1	0	0	0	0	0	3	4
7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	0	3	0	1	3	6	4	0	2	10	1	0	0	1	1	0	2	2	2	4	18	6
7:45	0	0	0	4	0	0	0	1	4	1	0	0	0	2	0	0	1	3	2	4	5	12
<b>Total</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>5</b>	<b>4</b>	<b>6</b>	<b>5</b>	<b>1</b>	<b>9</b>	<b>12</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>4</b>	<b>2</b>	<b>0</b>	<b>3</b>	<b>5</b>	<b>4</b>	<b>8</b>	<b>26</b>	<b>22</b>
8:00	2	2	0	0	4	5	1	0	0	6	0	1	0	1	1	0	1	1	0	2	13	1
8:15	0	3	0	0	3	0	1	0	1	1	0	0	0	0	0	0	2	1	2	3	7	3
8:30	0	2	0	0	2	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	4	0
8:45	0	2	0	0	2	0	6	0	2	6	0	0	1	1	1	0	0	0	2	0	9	5
<b>Total</b>	<b>2</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>11</b>	<b>5</b>	<b>9</b>	<b>0</b>	<b>3</b>	<b>14</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>4</b>	<b>2</b>	<b>4</b>	<b>6</b>	<b>33</b>	<b>9</b>
16:00	0	0	0	0	0	0	1	0	1	1	0	1	0	0	1	0	1	0	1	1	3	2
16:15	0	4	3	0	7	0	2	0	0	2	0	1	0	0	1	0	2	0	1	2	12	1
16:30	1	1	0	0	2	0	0	1	3	1	1	1	0	0	2	0	3	0	0	3	8	3
16:45	0	0	0	4	0	0	1	0	2	1	0	1	1	0	2	0	3	2	0	5	8	6
<b>Total</b>	<b>1</b>	<b>5</b>	<b>3</b>	<b>4</b>	<b>9</b>	<b>0</b>	<b>4</b>	<b>1</b>	<b>6</b>	<b>5</b>	<b>1</b>	<b>4</b>	<b>1</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>9</b>	<b>2</b>	<b>2</b>	<b>11</b>	<b>31</b>	<b>12</b>
17:00	0	0	1	0	1	1	1	2	0	4	1	1	0	0	2	0	1	0	1	1	8	1
17:15	0	0	0	2	0	2	0	0	2	2	0	1	0	1	1	0	1	0	0	1	4	5
17:30	0	2	0	0	2	0	1	0	0	1	0	2	5	1	7	0	1	1	7	2	12	8
17:45	0	1	1	0	2	1	1	1	0	3	0	1	1	3	2	0	1	0	3	1	8	6
<b>Total</b>	<b>0</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>10</b>	<b>1</b>	<b>5</b>	<b>6</b>	<b>5</b>	<b>12</b>	<b>0</b>	<b>4</b>	<b>1</b>	<b>11</b>	<b>5</b>	<b>32</b>	<b>20</b>
<b>Grand Total</b>	<b>3</b>	<b>21</b>	<b>5</b>	<b>11</b>	<b>29</b>	<b>15</b>	<b>21</b>	<b>5</b>	<b>20</b>	<b>41</b>	<b>3</b>	<b>11</b>	<b>8</b>	<b>11</b>	<b>22</b>	<b>0</b>	<b>20</b>	<b>10</b>	<b>21</b>	<b>30</b>	<b>122</b>	<b>63</b>
Apprch %	10.3%	72.4%	17.2%			36.6%	51.2%	12.2%			13.6%	50.0%	36.4%			0.0%	66.7%	33.3%				
Total %	2.5%	17.2%	4.1%		23.8%	12.3%	17.2%	4.1%		33.6%	2.5%	9.0%	6.6%		18.0%	0.0%	16.4%	8.2%		24.6%	100.0%	

AM PEAK HOUR	F St Southbound					E Covell Blvd Westbound					F St Northbound					E Covell Blvd Eastbound					Total
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 07:45 to 08:45																					
Peak Hour For Entire Intersection Begins at 07:45																					
7:45	0	0	0	4	0	0	0	1	4	1	0	0	0	2	0	0	1	3	2	4	5
8:00	2	2	0	0	4	5	1	0	0	6	0	1	0	1	1	0	1	1	0	2	13
8:15	0	3	0	0	3	0	1	0	1	1	0	0	0	0	0	0	2	1	2	3	7
8:30	0	2	0	0	2	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	4
Total Volume	2	7	0	4	9	5	3	1	5	9	0	1	0	3	1	0	5	5	4	10	29
% App Total	22.2%	77.8%	0.0%			55.6%	33.3%	11.1%			0.0%	100.0%	0.0%			0.0%	50.0%	50.0%			
PHF	.250	.583	.000		.563	.250	.750	.250		.375	.000	.250	.000		.250	.000	.625	.417		.625	.558

PM PEAK HOUR	F St Southbound					E Covell Blvd Westbound					F St Northbound					E Covell Blvd Eastbound					Total
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 16:45 to 17:45																					
Peak Hour For Entire Intersection Begins at 16:45																					
16:45	0	0	0	4	0	0	1	0	2	1	0	1	1	0	2	0	3	2	0	5	8
17:00	0	0	1	0	1	1	1	2	0	4	1	1	0	0	2	0	1	0	1	1	8
17:15	0	0	0	2	0	2	0	0	2	2	0	1	0	1	1	0	1	0	0	1	4
17:30	0	2	0	0	2	0	1	0	0	1	0	2	5	1	7	0	1	1	7	2	12
Total Volume	0	2	1	6	3	3	3	2	4	8	1	5	6	2	12	0	6	3	8	9	32
% App Total	0.0%	66.7%	33.3%			37.5%	37.5%	25.0%			8.3%	41.7%	50.0%			0.0%	66.7%	33.3%			
PHF	.000	.250	.250		.375	.375	.750	.250		.500	.250	.625	.300		.429	.000	.500	.375		.450	.667

## National Data and Surveying Services

City of Davis  
 All Vehicles & Uturns On Unshifted  
 Bikes & Peds On Bank 1  
 Nothing On Bank 2

(323) 782-0090  
[info@ndsdata.com](mailto:info@ndsdata.com)

File Name : 17-7217-012 J St & E Covell Blvd  
 Date : 3/16/2017

### Unshifted Count = All Vehicles & Uturns

START TIME	J St Southbound					E Covell Blvd Westbound					J St Northbound					E Covell Blvd Eastbound					Total	Uturns Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL		
7:00	6	1	2	0	9	3	82	20	1	106	6	0	11	0	17	13	60	6	0	79	211	1
7:15	6	1	6	0	13	3	147	12	0	162	15	2	11	0	28	4	89	3	0	96	299	0
7:30	9	2	4	1	16	5	178	11	0	194	33	0	8	0	41	5	155	22	0	182	433	1
7:45	11	2	5	0	18	11	148	11	0	170	25	0	13	0	38	2	201	32	0	235	461	0
<b>Total</b>	<b>32</b>	<b>6</b>	<b>17</b>	<b>1</b>	<b>56</b>	<b>22</b>	<b>555</b>	<b>54</b>	<b>1</b>	<b>632</b>	<b>79</b>	<b>2</b>	<b>43</b>	<b>0</b>	<b>124</b>	<b>24</b>	<b>505</b>	<b>63</b>	<b>0</b>	<b>592</b>	<b>1404</b>	<b>2</b>
8:00	8	2	3	0	13	13	152	2	0	167	37	0	25	0	62	2	156	45	0	203	445	0
8:15	6	5	4	0	15	21	196	8	1	226	52	0	32	0	84	4	214	78	0	296	621	1
8:30	9	1	4	0	14	13	182	7	0	202	23	3	24	0	50	2	169	35	0	206	472	0
8:45	8	2	5	0	15	10	135	3	0	148	24	1	11	0	36	4	142	18	0	164	363	0
<b>Total</b>	<b>31</b>	<b>10</b>	<b>16</b>	<b>0</b>	<b>57</b>	<b>57</b>	<b>665</b>	<b>20</b>	<b>1</b>	<b>743</b>	<b>136</b>	<b>4</b>	<b>92</b>	<b>0</b>	<b>232</b>	<b>12</b>	<b>681</b>	<b>176</b>	<b>0</b>	<b>869</b>	<b>1901</b>	<b>1</b>
16:00	12	2	0	0	14	17	163	3	0	183	23	2	18	0	43	7	200	20	0	227	467	0
16:15	13	0	2	0	15	16	175	5	1	197	25	1	14	0	40	10	218	24	1	253	505	2
16:30	2	3	0	0	5	10	174	8	0	192	19	2	18	0	39	1	237	18	1	257	493	1
16:45	15	1	3	0	19	24	167	6	2	199	21	1	26	0	48	7	258	27	0	292	558	2
<b>Total</b>	<b>42</b>	<b>6</b>	<b>5</b>	<b>0</b>	<b>53</b>	<b>67</b>	<b>679</b>	<b>22</b>	<b>3</b>	<b>771</b>	<b>88</b>	<b>6</b>	<b>76</b>	<b>0</b>	<b>170</b>	<b>25</b>	<b>913</b>	<b>89</b>	<b>2</b>	<b>1029</b>	<b>2023</b>	<b>5</b>
17:00	9	4	7	0	20	15	171	8	1	195	29	2	28	0	59	6	249	18	0	273	547	1
17:15	9	2	3	0	14	14	214	10	1	239	17	5	23	0	45	9	314	35	0	358	656	1
17:30	8	2	3	0	13	20	199	11	0	230	24	2	22	0	48	8	270	20	0	298	589	0
17:45	9	4	2	0	15	22	198	6	0	226	34	4	13	0	51	4	215	22	0	241	533	0
<b>Total</b>	<b>35</b>	<b>12</b>	<b>15</b>	<b>0</b>	<b>62</b>	<b>71</b>	<b>782</b>	<b>35</b>	<b>2</b>	<b>890</b>	<b>104</b>	<b>13</b>	<b>86</b>	<b>0</b>	<b>203</b>	<b>27</b>	<b>1048</b>	<b>95</b>	<b>0</b>	<b>1170</b>	<b>2325</b>	<b>2</b>
<b>Grand Total</b>	<b>140</b>	<b>34</b>	<b>53</b>	<b>1</b>	<b>228</b>	<b>217</b>	<b>2681</b>	<b>131</b>	<b>7</b>	<b>3036</b>	<b>407</b>	<b>25</b>	<b>297</b>	<b>0</b>	<b>729</b>	<b>88</b>	<b>3147</b>	<b>423</b>	<b>2</b>	<b>3660</b>	<b>7653</b>	<b>10</b>
Apprch %	61.4%	14.9%	23.2%	0.4%		7.1%	88.3%	4.3%	0.2%		55.8%	3.4%	40.7%	0.0%		2.4%	86.0%	11.6%	0.1%			
Total %	1.8%	0.4%	0.7%	0.0%	3.0%	2.8%	35.0%	1.7%	0.1%	39.7%	5.3%	0.3%	3.9%	0.0%	9.5%	1.1%	41.1%	5.5%	0.0%	47.8%	100.0%	

AM PEAK HOUR	J St Southbound					E Covell Blvd Westbound					J St Northbound					E Covell Blvd Eastbound					Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 07:45 to 08:45																					
Peak Hour For Entire Intersection Begins at 07:45																					
7:45	11	2	5	0	18	11	148	11	0	170	25	0	13	0	38	2	201	32	0	235	461
8:00	8	2	3	0	13	13	152	2	0	167	37	0	25	0	62	2	156	45	0	203	445
8:15	6	5	4	0	15	21	196	8	1	226	52	0	32	0	84	4	214	78	0	296	621
8:30	9	1	4	0	14	13	182	7	0	202	23	3	24	0	50	2	169	35	0	206	472
Total Volume	34	10	16	0	60	58	678	28	1	765	137	3	94	0	234	10	740	190	0	940	1999
% App Total	56.7%	16.7%	26.7%	0.0%		7.6%	88.6%	3.7%	0.1%		58.5%	1.3%	40.2%	0.0%		1.1%	78.7%	20.2%	0.0%		
PHF	.773	.500	.800	.000	.833	.690	.865	.636	.250	.846	.659	.250	.734	.000	.696	.625	.864	.609	.000	.794	.805

PM PEAK HOUR	J St Southbound					E Covell Blvd Westbound					J St Northbound					E Covell Blvd Eastbound					Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 16:45 to 17:45																					
Peak Hour For Entire Intersection Begins at 16:45																					
16:45	15	1	3	0	19	24	167	6	2	199	21	1	26	0	48	7	258	27	0	292	558
17:00	9	4	7	0	20	15	171	8	1	195	29	2	28	0	59	6	249	18	0	273	547
17:15	9	2	3	0	14	14	214	10	1	239	17	5	23	0	45	9	314	35	0	358	656
17:30	8	2	3	0	13	20	199	11	0	230	24	2	22	0	48	8	270	20	0	298	589
Total Volume	41	9	16	0	66	73	751	35	4	863	91	10	99	0	200	30	1091	100	0	1221	2350
% App Total	62.1%	13.6%	24.2%	0.0%		8.5%	87.0%	4.1%	0.5%		45.5%	5.0%	49.5%	0.0%		2.5%	89.4%	8.2%	0.0%		
PHF	.683	.563	.571	.000	.825	.760	.877	.795	.500	.903	.784	.500	.884	.000	.847	.833	.869	.714	.000	.853	.896

## National Data and Surveying Services

City of Davis  
 All Vehicles & Uturns On Unshifted  
 Bikes & Peds On Bank 1  
 Nothing On Bank 2

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File Name : 17-7217-012 J St & E Covell Blvd  
 Date : 3/16/2017

### Bank 1 Count = Bikes & Peds

START TIME	J St Southbound					E Covell Blvd Westbound					J St Northbound					E Covell Blvd Eastbound					Total	Peds Total
	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL		
7:00	0	1	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	1	4
7:15	0	3	0	0	3	1	3	0	1	4	1	0	0	0	1	0	1	0	2	1	9	3
7:30	0	4	1	0	5	7	22	0	1	29	1	1	1	1	3	0	2	1	1	3	40	3
7:45	0	5	4	0	9	2	5	0	2	7	0	0	0	3	0	0	2	0	1	2	18	6
<b>Total</b>	<b>0</b>	<b>13</b>	<b>5</b>	<b>1</b>	<b>18</b>	<b>10</b>	<b>30</b>	<b>0</b>	<b>4</b>	<b>40</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>5</b>	<b>4</b>	<b>0</b>	<b>5</b>	<b>1</b>	<b>6</b>	<b>6</b>	<b>68</b>	<b>16</b>
8:00	0	2	3	0	5	5	8	0	3	13	0	1	1	4	2	0	2	0	6	2	22	13
8:15	0	2	0	1	2	1	4	0	0	5	0	0	0	2	0	0	2	0	6	2	9	9
8:30	0	2	0	0	2	1	3	0	0	4	1	0	0	0	1	0	2	0	0	2	9	0
8:45	0	0	0	0	0	1	5	0	1	6	1	1	0	1	2	0	1	0	0	1	9	2
<b>Total</b>	<b>0</b>	<b>6</b>	<b>3</b>	<b>1</b>	<b>9</b>	<b>8</b>	<b>20</b>	<b>0</b>	<b>4</b>	<b>28</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>7</b>	<b>5</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>12</b>	<b>7</b>	<b>49</b>	<b>24</b>
16:00	0	0	1	0	1	2	1	0	2	3	0	0	0	2	0	0	0	0	1	0	4	5
16:15	0	0	0	0	0	0	2	1	1	3	0	3	1	5	4	0	2	0	3	2	9	9
16:30	0	0	0	1	0	1	0	1	3	2	1	3	3	7	0	6	0	0	6	15	7	
16:45	0	2	1	0	3	1	1	1	0	3	1	1	0	6	2	0	5	0	2	5	13	8
<b>Total</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>3</b>	<b>6</b>	<b>11</b>	<b>2</b>	<b>7</b>	<b>4</b>	<b>16</b>	<b>13</b>	<b>0</b>	<b>13</b>	<b>0</b>	<b>6</b>	<b>13</b>	<b>41</b>	<b>29</b>
17:00	0	0	0	0	0	0	2	0	1	2	1	0	0	3	1	0	1	0	1	1	4	5
17:15	2	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	3	1
17:30	2	1	0	0	3	1	2	0	2	3	0	3	0	8	3	0	3	0	1	3	12	11
17:45	0	0	1	0	1	6	3	1	1	10	1	0	2	1	3	0	4	0	0	4	18	2
<b>Total</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>6</b>	<b>7</b>	<b>7</b>	<b>1</b>	<b>4</b>	<b>15</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>13</b>	<b>7</b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>2</b>	<b>9</b>	<b>37</b>	<b>19</b>
<b>Grand Total</b>	<b>4</b>	<b>22</b>	<b>11</b>	<b>3</b>	<b>37</b>	<b>29</b>	<b>61</b>	<b>4</b>	<b>18</b>	<b>94</b>	<b>8</b>	<b>13</b>	<b>8</b>	<b>41</b>	<b>29</b>	<b>0</b>	<b>34</b>	<b>1</b>	<b>26</b>	<b>35</b>	<b>195</b>	<b>88</b>
Apprch %	10.8%	59.5%	29.7%			30.9%	64.9%	4.3%			27.6%	44.8%	27.6%			0.0%	97.1%	2.9%				
Total %	2.1%	11.3%	5.6%		19.0%	14.9%	31.3%	2.1%		48.2%	4.1%	6.7%	4.1%		14.9%	0.0%	17.4%	0.5%		17.9%	100.0%	

AM PEAK HOUR	J St Southbound					E Covell Blvd Westbound					J St Northbound					E Covell Blvd Eastbound					Total
	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	
Peak Hour Analysis From 07:45 to 08:45																					
Peak Hour For Entire Intersection Begins at 07:45																					
7:45	0	5	4	0	9	2	5	0	2	7	0	0	0	3	0	0	2	0	1	2	18
8:00	0	2	3	0	5	5	8	0	3	13	0	1	1	4	2	0	2	0	6	2	22
8:15	0	2	0	1	2	1	4	0	0	5	0	0	0	2	0	0	2	0	6	2	9
8:30	0	2	0	0	2	1	3	0	0	4	1	0	0	0	1	0	2	0	0	2	9
Total Volume	0	11	7	1	18	9	20	0	5	29	1	1	1	9	3	0	8	0	13	8	58
% App Total	0.0%	61.1%	38.9%			31.0%	69.0%	0.0%			33.3%	33.3%	33.3%			0.0%	100.0%	0.0%			
PHF	.000	.550	.438		.500	.450	.625	.000		.558	.250	.250	.250		.375	.000	1.000	.000		1.000	.659

PM PEAK HOUR	J St Southbound					E Covell Blvd Westbound					J St Northbound					E Covell Blvd Eastbound					Total
	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	
Peak Hour Analysis From 16:45 to 17:45																					
Peak Hour For Entire Intersection Begins at 16:45																					
16:45	0	2	1	0	3	1	1	1	0	3	1	1	0	6	2	0	5	0	2	5	13
17:00	0	0	0	0	0	0	2	0	1	2	1	0	0	3	1	0	1	0	1	1	4
17:15	2	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	3
17:30	2	1	0	0	3	1	2	0	2	3	0	3	0	8	3	0	3	0	1	3	12
Total Volume	4	3	1	0	8	2	5	1	3	8	2	4	0	18	6	0	10	0	4	10	32
% App Total	50.0%	37.5%	12.5%			25.0%	62.5%	12.5%			33.3%	66.7%	0.0%			0.0%	100.0%	0.0%			
PHF	.500	.375	.250		.667	.500	.625	.250		.667	.500	.333	.000		.500	.000	.500	.000		.500	.615

# Existing Level of Service (LOS) Calculations

Intersection	
Intersection Delay, s/veh	15.4
Intersection LOS	C

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations		↵	↵			↵	↵			↵	↵	
Traffic Vol, veh/h	0	9	258	39	0	93	174	11	0	34	61	202
Future Vol, veh/h	0	9	258	39	0	93	174	11	0	34	61	202
Peak Hour Factor	0.92	0.93	0.93	0.93	0.92	0.76	0.76	0.76	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	10	277	42	0	122	229	14	0	37	66	220
Number of Lanes	0	1	1	0	0	1	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	2	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	2	1	2
HCM Control Delay	18.2	13.9	15.1
HCM LOS	C	B	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	100%	0%	100%	0%	100%	0%	36%
Vol Thru, %	0%	23%	0%	87%	0%	94%	54%
Vol Right, %	0%	77%	0%	13%	0%	6%	10%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	34	263	9	297	93	185	99
LT Vol	34	0	9	0	93	0	36
Through Vol	0	61	0	258	0	174	53
RT Vol	0	202	0	39	0	11	10
Lane Flow Rate	37	286	10	319	122	243	119
Geometry Grp	7	7	7	7	7	7	6
Degree of Util (X)	0.077	0.509	0.019	0.587	0.244	0.448	0.248
Departure Headway (Hd)	7.467	6.41	7.221	6.616	7.181	6.627	7.485
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	480	563	496	546	500	543	479
Service Time	5.205	4.146	4.959	4.354	4.919	4.366	5.533
HCM Lane V/C Ratio	0.077	0.508	0.02	0.584	0.244	0.448	0.248
HCM Control Delay	10.8	15.6	10.1	18.4	12.2	14.7	13
HCM Lane LOS	B	C	B	C	B	B	B
HCM 95th-tile Q	0.2	2.9	0.1	3.8	0.9	2.3	1

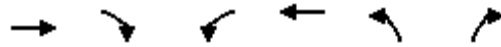
**Intersection**

Intersection Delay, s/veh  
 Intersection LOS

Movement	SBU	SBL	SBT	SBR
Lane Configurations			↕	
Traffic Vol, veh/h	0	36	53	10
Future Vol, veh/h	0	36	53	10
Peak Hour Factor	0.92	0.83	0.83	0.83
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	43	64	12
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	2
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	13
HCM LOS	B

HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 2: Denali Dr & Covell Blvd Existing Conditions - AM Peak Hour



Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations								
Traffic Volume (veh/h)	479	26	97	353	22	170		
Future Volume (veh/h)	479	26	97	353	22	170		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1900		
Adj Flow Rate, veh/h	532	0	104	380	26	0		
Adj No. of Lanes	1	0	1	1	0	0		
Peak Hour Factor	0.90	0.90	0.93	0.93	0.86	0.86		
Percent Heavy Veh, %	2	2	2	2	0	0		
Cap, veh/h	854	0	164	1248	57	0		
Arrive On Green	0.46	0.00	0.09	0.67	0.03	0.00		
Sat Flow, veh/h	1863	0	1774	1863	1711	0		
Grp Volume(v), veh/h	532	0	104	380	27	0		
Grp Sat Flow(s),veh/h/ln	1863	0	1774	1863	1777	0		
Q Serve(g_s), s	7.3	0.0	1.9	2.8	0.5	0.0		
Cycle Q Clear(g_c), s	7.3	0.0	1.9	2.8	0.5	0.0		
Prop In Lane		0.00	1.00		0.96	0.00		
Lane Grp Cap(c), veh/h	854	0	164	1248	59	0		
V/C Ratio(X)	0.62	0.00	0.63	0.30	0.46	0.00		
Avail Cap(c_a), veh/h	1937	0	1054	1937	1056	0		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh	6.9	0.0	14.7	2.3	16.0	0.0		
Incr Delay (d2), s/veh	0.7	0.0	4.0	0.1	11.4	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	3.9	0.0	1.1	1.4	0.4	0.0		
LnGrp Delay(d),s/veh	7.7	0.0	18.8	2.4	27.4	0.0		
LnGrp LOS	A		B	A	C			
Approach Vol, veh/h	532			484	27			
Approach Delay, s/veh	7.7			5.9	27.4			
Approach LOS	A			A	C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	7.1	21.4				28.6		5.1
Change Period (Y+Rc), s	4.0	6.0				6.0		4.0
Max Green Setting (Gmax), s	20.0	35.0				35.0		20.0
Max Q Clear Time (g_c+I1), s	3.9	9.3				4.8		2.5
Green Ext Time (p_c), s	0.2	6.2				6.4		0.1
<b>Intersection Summary</b>								
HCM 2010 Ctrl Delay			7.4					
HCM 2010 LOS			A					
<b>Notes</b>								



User approved volume balancing among the lanes for turning movement.

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Existing Conditions  
AM Peak Hour

Intersection 3                      Risling Ct/Sutter Hospital Dwy                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	98	96	97.4%	3.3	0.5	A
	Right Turn	31	32	103.9%	3.1	0.9	A
	Subtotal	129	128	99.0%	3.2	0.4	A
SB	Left Turn						
	Through	33	35	105.2%	0.0	0.0	A
	Right Turn						
	Subtotal	33	35	105.2%	0.0	0.0	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	11	10	92.7%	3.9	0.8	A
	Through						
	Right Turn	2	3	130.0%	1.8	1.6	A
	Subtotal	13	13	98.5%	3.7	0.7	A
Total		175	175	100.1%	2.6	0.5	A

Intersection 4                      Risling Ct-Shasta Dr/W Covell Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	10	9	86.0%	59.2	37.9	E
	Through	12	13	104.2%	37.2	15.6	D
	Right Turn	273	279	102.2%	5.3	0.8	A
	Subtotal	295	300	101.7%	8.5	1.7	A
SB	Left Turn	28	28	100.0%	42.6	9.5	D
	Through	6	7	120.0%	38.0	22.1	D
	Right Turn	10	11	106.0%	11.1	15.2	B
	Subtotal	44	46	104.1%	35.8	6.6	D
EB	Left Turn	37	32	86.5%	56.4	12.7	E
	Through	618	622	100.7%	15.7	1.6	B
	Right Turn	14	12	87.1%	6.6	3.1	A
	Subtotal	669	667	99.6%	17.6	1.6	B
WB	Left Turn	131	127	97.0%	50.2	6.3	D
	Through	460	462	100.3%	10.1	1.4	B
	Right Turn	80	82	102.9%	6.8	0.6	A
	Subtotal	671	671	100.0%	17.8	2.3	B
Total		1,679	1,683	100.3%	16.5	1.5	B

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Existing Conditions  
AM Peak Hour

Intersection 5                      John Jones Rd/W Covell Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	185	186	100.3%	28.6	4.2	C
	Through						
	Right Turn	58	55	94.8%	6.0	2.4	A
	Subtotal	243	241	99.0%	23.0	2.8	C
EB	Left Turn	74	75	101.1%	59.9	12.1	E
	Through	849	861	101.4%	26.0	10.6	C
	Right Turn						
	Subtotal	923	936	101.4%	28.9	10.0	C
WB	Left Turn						
	Through	613	617	100.7%	13.4	3.2	B
	Right Turn	299	302	100.9%	8.7	2.4	A
	Subtotal	912	919	100.8%	11.9	2.8	B
Total		2,078	2,095	100.8%	20.7	4.6	C

Intersection 6                      SR 113 SB Ramps/W Covell Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	158	153	96.9%	38.8	4.1	D
	Through	1	1	60.0%	4.0	10.0	A
	Right Turn	131	133	101.7%	38.8	5.2	D
	Subtotal	290	287	98.9%	38.8	4.1	D
EB	Left Turn						
	Through	604	606	100.4%	33.8	5.6	C
	Right Turn	430	438	101.9%	35.8	7.5	D
	Subtotal	1,034	1,045	101.0%	34.7	6.3	C
WB	Left Turn	454	452	99.4%	65.7	6.7	E
	Through	781	784	100.4%	11.8	2.3	B
	Right Turn						
	Subtotal	1,235	1,236	100.1%	30.8	3.6	C
Total		2,559	2,567	100.3%	33.3	3.1	C

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Existing Conditions  
AM Peak Hour






















Intersection 7 SR 113 NB Ramps/W Covell Blvd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	303	297	98.0%	43.7	15.6	D
	Through	1	1	140.0%	12.0	21.7	B
	Right Turn	289	294	101.7%	9.0	1.7	A
	Subtotal	593	592	99.9%	25.6	5.5	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	76	74	97.1%	48.2	10.4	D
	Through	686	687	100.2%	15.5	2.1	B
	Right Turn						
	Subtotal	762	761	99.9%	19.2	2.1	B
WB	Left Turn						
	Through	931	938	100.8%	26.5	22.5	C
	Right Turn	140	137	97.7%	14.1	12.5	B
	Subtotal	1,071	1,075	100.4%	24.9	21.3	C
Total		2,426	2,428	100.1%	23.6	11.7	C



















Intersection 8 Sycamore Ln/W Covell Blvd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	193	191	99.1%	47.7	15.0	D
	Through	34	35	103.2%	45.9	16.2	D
	Right Turn	35	35	99.1%	13.6	17.5	B
	Subtotal	262	261	99.7%	42.8	15.3	D
SB	Left Turn	78	77	98.2%	42.0	9.5	D
	Through	61	60	98.7%	43.0	10.9	D
	Right Turn	211	208	98.6%	17.2	9.4	B
	Subtotal	350	345	98.5%	26.4	9.5	C
EB	Left Turn	116	114	98.4%	49.2	3.1	D
	Through	551	566	102.8%	29.9	4.3	C
	Right Turn	171	173	101.4%	17.6	3.5	B
	Subtotal	838	854	101.9%	30.2	2.7	C
WB	Left Turn	30	29	95.3%	57.0	9.7	E
	Through	601	610	101.4%	27.1	5.3	C
	Right Turn	60	65	108.5%	18.4	3.7	B
	Subtotal	691	703	101.8%	27.6	5.1	C
Total		2,141	2,163	101.0%	30.5	5.1	C

HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 9: Anderson Rd & Covell Blvd Existing Conditions - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	493	157	136	407	37	163	58	69	51	151	100
Future Volume (veh/h)	29	493	157	136	407	37	163	58	69	51	151	100
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1854	1900	1863	1863	1727	1792	1814	1900	1863	1799	1900
Adj Flow Rate, veh/h	35	601	0	160	479	0	190	67	0	56	166	0
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	1	2	0
Peak Hour Factor	0.82	0.82	0.82	0.85	0.85	0.85	0.86	0.86	0.86	0.91	0.91	0.91
Percent Heavy Veh, %	7	2	2	2	2	10	6	8	8	2	8	8
Cap, veh/h	60	1259	0	207	1552	644	241	391	0	85	418	0
Arrive On Green	0.04	0.36	0.00	0.12	0.44	0.00	0.14	0.22	0.00	0.05	0.12	0.00
Sat Flow, veh/h	1691	3615	0	1774	3539	1468	1707	1814	0	1774	3508	0
Grp Volume(v), veh/h	35	601	0	160	479	0	190	67	0	56	166	0
Grp Sat Flow(s),veh/h/ln	1691	1761	0	1774	1770	1468	1707	1814	0	1774	1709	0
Q Serve(g_s), s	1.4	9.1	0.0	6.0	6.0	0.0	7.4	2.1	0.0	2.1	3.1	0.0
Cycle Q Clear(g_c), s	1.4	9.1	0.0	6.0	6.0	0.0	7.4	2.1	0.0	2.1	3.1	0.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	60	1259	0	207	1552	644	241	391	0	85	418	0
V/C Ratio(X)	0.58	0.48	0.00	0.77	0.31	0.00	0.79	0.17	0.00	0.66	0.40	0.00
Avail Cap(c_a), veh/h	987	2314	0	777	2325	964	997	1059	0	1036	1996	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	32.5	17.1	0.0	29.4	12.5	0.0	28.4	21.9	0.0	32.1	27.7	0.0
Incr Delay (d2), s/veh	8.7	0.3	0.0	6.0	0.4	0.0	5.7	0.2	0.0	8.4	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	4.4	0.0	3.3	3.0	0.0	3.9	1.0	0.0	1.2	1.5	0.0
LnGrp Delay(d),s/veh	41.2	17.3	0.0	35.4	12.9	0.0	34.2	22.1	0.0	40.5	28.3	0.0
LnGrp LOS	D	B		D	B		C	C		D	C	
Approach Vol, veh/h		636			639			257			222	
Approach Delay, s/veh		18.7			18.5			31.0			31.4	
Approach LOS		B			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.0	29.5	13.7	12.4	7.4	35.0	7.3	18.8				
Change Period (Y+Rc), s	5.0	5.0	4.0	4.0	5.0	5.0	4.0	4.0				
Max Green Setting (Gmax), s	30.0	45.0	40.0	40.0	40.0	45.0	40.0	40.0				
Max Q Clear Time (g_c+I1), s	8.0	11.1	9.4	5.1	3.4	8.0	4.1	4.1				
Green Ext Time (p_c), s	0.4	13.4	0.5	1.5	0.1	13.9	0.1	1.5				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				22.0								
HCM 2010 LOS				C								

HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 10: Oak Ave & Covell Blvd Existing Conditions - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	406	147	145	547	0	103	0	170	0	0	0
Future Volume (veh/h)	0	406	147	145	547	0	103	0	170	0	0	0
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	0	1863	0	1863	1900	1863	1900
Adj Flow Rate, veh/h	0	534	0	177	667	0	184	0	0	0	0	0
Adj No. of Lanes	0	2	0	1	2	0	1	0	1	0	1	0
Peak Hour Factor	0.92	0.76	0.76	0.82	0.82	0.92	0.56	0.92	0.56	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0	2	0	2	2	2	2
Cap, veh/h	0	1381	0	235	2218	0	248	0	0	0	5	0
Arrive On Green	0.00	0.39	0.00	0.13	0.63	0.00	0.14	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	0	3725	0	1774	3632	0	1774	184		0	-93137	0
Grp Volume(v), veh/h	0	534	0	177	667	0	184	20.3		0	0	0
Grp Sat Flow(s),veh/h/ln	0	1770	0	1774	1770	0	1774	C		0	1863	0
Q Serve(g_s), s	0.0	4.2	0.0	3.7	3.3	0.0	3.8			0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	4.2	0.0	3.7	3.3	0.0	3.8			0.0	0.0	0.0
Prop In Lane	0.00		0.00	1.00		0.00	1.00			0.00		0.00
Lane Grp Cap(c), veh/h	0	1381	0	235	2218	0	248			0	5	0
V/C Ratio(X)	0.00	0.39	0.00	0.75	0.30	0.00	0.74			0.00	0.00	0.00
Avail Cap(c_a), veh/h	0	2849	0	691	2941	0	921			0	725	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00	1.00			0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	8.4	0.0	16.1	3.3	0.0	15.9			0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	4.8	0.1	0.0	4.4			0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.0	0.0	2.1	1.6	0.0	2.1			0.0	0.0	0.0
LnGrp Delay(d),s/veh	0.0	8.6	0.0	20.9	3.4	0.0	20.3			0.0	0.0	0.0
LnGrp LOS		A		C	A		C					
Approach Vol, veh/h		534			844							0
Approach Delay, s/veh		8.6			7.1							0.0
Approach LOS		A			A							
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4	5	6						
Phs Duration (G+Y+Rc), s		29.1	9.4	0.0	9.1	20.0						
Change Period (Y+Rc), s		5.0	4.0	5.0	4.0	5.0						
Max Green Setting (Gmax), s		32.0	20.0	15.0	15.0	31.0						
Max Q Clear Time (g_c+I1), s		5.3	5.8	0.0	5.7	6.2						
Green Ext Time (p_c), s		9.1	0.4	0.0	0.3	8.9						
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				9.1								
HCM 2010 LOS				A								
<b>Notes</b>												

User approved pedestrian interval to be less than phase max green.
























HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 11: F St & Covell Blvd Existing Conditions - AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	599	96	204	584	88	55	80	141	204	208	75
Future Volume (veh/h)	40	599	96	204	584	88	55	80	141	204	208	75
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1845	1863	1900	1845	1851	1900	1863	1844	1900
Adj Flow Rate, veh/h	53	799	0	265	758	0	71	103	0	246	251	0
Adj No. of Lanes	1	2	1	2	2	0	1	1	0	1	1	0
Peak Hour Factor	0.75	0.75	0.75	0.77	0.77	0.77	0.78	0.78	0.78	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	3	2	2	3	2	2	2	2	2
Cap, veh/h	81	1200	537	371	1425	0	93	264	0	305	483	0
Arrive On Green	0.05	0.34	0.00	0.11	0.40	0.00	0.05	0.14	0.00	0.17	0.26	0.00
Sat Flow, veh/h	1774	3539	1583	3408	3632	0	1757	1851	0	1774	1844	0
Grp Volume(v), veh/h	53	799	0	265	758	0	71	103	0	246	251	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1704	1770	0	1757	1851	0	1774	1844	0
Q Serve(g_s), s	2.1	13.8	0.0	5.4	11.7	0.0	2.9	3.6	0.0	9.6	8.3	0.0
Cycle Q Clear(g_c), s	2.1	13.8	0.0	5.4	11.7	0.0	2.9	3.6	0.0	9.6	8.3	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	81	1200	537	371	1425	0	93	264	0	305	483	0
V/C Ratio(X)	0.66	0.67	0.00	0.71	0.53	0.00	0.76	0.39	0.00	0.81	0.52	0.00
Avail Cap(c_a), veh/h	742	2221	994	1426	2221	0	735	774	0	742	771	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.7	20.2	0.0	30.9	16.3	0.0	33.5	27.9	0.0	28.5	22.6	0.0
Incr Delay (d2), s/veh	3.4	0.2	0.0	1.0	0.1	0.0	12.1	0.9	0.0	6.0	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	6.7	0.0	2.6	5.7	0.0	1.7	1.9	0.0	5.2	4.4	0.0
LnGrp Delay(d),s/veh	37.0	20.5	0.0	31.8	16.4	0.0	45.6	28.8	0.0	34.5	23.7	0.0
LnGrp LOS	D	C		C	B		D	C		C	C	
Approach Vol, veh/h		852			1023			174			497	
Approach Delay, s/veh		21.5			20.4			35.7			29.0	
Approach LOS		C			C			D			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.3	33.9	7.8	22.8	11.8	29.3	16.3	14.2				
Change Period (Y+Rc), s	4.0	5.0	4.0	4.0	4.0	5.0	4.0	4.0				
Max Green Setting (Gmax), s	30.0	45.0	30.0	30.0	30.0	45.0	30.0	30.0				
Max Q Clear Time (g_c+I1), s	4.1	13.7	4.9	10.3	7.4	15.8	11.6	5.6				
Green Ext Time (p_c), s	0.1	8.6	0.2	2.3	0.5	8.4	0.9	2.5				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			23.5									
HCM 2010 LOS			C									
<b>Notes</b>												



User approved pedestrian interval to be less than phase max green.

HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 12: J St/Cannery Ave & Covell Blvd Existing Conditions - AM Peak Hour

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (veh/h)	10	744	190	58	723	28	137	3	94	34	10	16	
Future Volume (veh/h)	10	744	190	58	723	28	137	3	94	34	10	16	
Number	3	8	18	7	4	14	1	6	16	5	2	12	
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0	
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.96	1.00		1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Adj Sat Flow, veh/h/ln	1863	1863	1810	1743	1863	1900	1863	1863	1900	1863	1863	1900	
Adj Flow Rate, veh/h	13	942	168	78	977	37	171	4	1	37	11	0	
Adj No. of Lanes	1	2	1	1	2	0	1	1	0	1	1	0	
Peak Hour Factor	0.79	0.79	0.79	0.74	0.74	0.74	0.80	0.80	0.80	0.92	0.92	0.92	
Percent Heavy Veh, %	2	2	5	9	2	2	2	2	2	2	2	2	
Cap, veh/h	29	1589	684	101	1716	65	224	190	48	68	85	0	
Arrive On Green	0.02	0.45	0.45	0.06	0.49	0.49	0.13	0.13	0.13	0.04	0.05	0.00	
Sat Flow, veh/h	1774	3539	1523	1660	3476	132	1774	1425	356	1774	1863	0	
Grp Volume(v), veh/h	13	942	168	78	497	517	171	0	5	37	11	0	
Grp Sat Flow(s),veh/h/ln	1774	1770	1523	1660	1770	1838	1774	0	1781	1774	1863	0	
Q Serve(g_s), s	0.4	11.9	4.1	2.8	11.8	11.8	5.6	0.0	0.1	1.2	0.3	0.0	
Cycle Q Clear(g_c), s	0.4	11.9	4.1	2.8	11.8	11.8	5.6	0.0	0.1	1.2	0.3	0.0	
Prop In Lane	1.00		1.00	1.00		0.07	1.00		0.20	1.00		0.00	
Lane Grp Cap(c), veh/h	29	1589	684	101	873	907	224	0	238	68	85	0	
V/C Ratio(X)	0.45	0.59	0.25	0.77	0.57	0.57	0.76	0.00	0.02	0.54	0.13	0.00	
Avail Cap(c_a), veh/h	594	1778	765	556	889	924	594	0	1193	594	1248	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	
Uniform Delay (d), s/veh	29.1	12.4	10.2	27.6	10.7	10.7	25.2	0.0	22.5	28.2	27.4	0.0	
Incr Delay (d2), s/veh	12.7	0.5	0.2	13.9	0.9	0.9	6.4	0.0	0.0	12.0	1.3	0.0	
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(50%),veh/ln	0.3	5.9	1.7	1.6	5.9	6.1	3.1	0.0	0.1	0.8	0.2	0.0	
LnGrp Delay(d),s/veh	41.8	12.9	10.4	41.6	11.6	11.6	31.6	0.0	22.5	40.2	28.6	0.0	
LnGrp LOS	D	B	B	D	B	B	C		C	D	C		
Approach Vol, veh/h		1123			1092			176				48	
Approach Delay, s/veh		12.8			13.7			31.3				37.5	
Approach LOS		B			B			C				D	
Timer	1	2	3	4	5	6	7	8					
Assigned Phs	1	2	3	4	5	6	7	8					
Phs Duration (G+Y+Rc), s	12.0	8.2	5.5	34.0	6.8	13.5	8.1	31.3					
Change Period (Y+Rc), s	4.5	5.5	4.5	4.5	4.5	5.5	4.5	4.5					
Max Green Setting (Gmax), s	20.0	40.0	20.0	30.0	20.0	40.0	20.0	30.0					
Max Q Clear Time (g_c+I1), s	7.6	2.3	2.4	13.8	3.2	2.1	4.8	13.9					
Green Ext Time (p_c), s	0.4	0.1	0.0	12.7	0.1	0.1	0.2	12.6					
<b>Intersection Summary</b>													
HCM 2010 Ctrl Delay			15.0										
HCM 2010 LOS			B										

Intersection	
Intersection Delay, s/veh	16.9
Intersection LOS	C

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	22	227	37	0	210	267	34	0	38	46	186
Future Vol, veh/h	0	22	227	37	0	210	267	34	0	38	46	186
Peak Hour Factor	0.92	0.83	0.83	0.83	0.92	0.91	0.91	0.91	0.92	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	27	273	45	0	231	293	37	0	43	52	211
Number of Lanes	0	1	1	0	0	1	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	2	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	2	1	2
HCM Control Delay	18.6	17.4	15.4
HCM LOS	C	C	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	100%	0%	100%	0%	100%	0%	26%
Vol Thru, %	0%	20%	0%	86%	0%	89%	61%
Vol Right, %	0%	80%	0%	14%	0%	11%	13%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	38	232	22	264	210	301	82
LT Vol	38	0	22	0	210	0	21
Through Vol	0	46	0	227	0	267	50
RT Vol	0	186	0	37	0	34	11
Lane Flow Rate	43	264	27	318	231	331	88
Geometry Grp	7	7	7	7	7	7	6
Degree of Util (X)	0.094	0.495	0.055	0.601	0.456	0.599	0.194
Departure Headway (Hd)	7.847	6.763	7.417	6.805	7.106	6.514	7.911
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	457	533	483	531	508	556	453
Service Time	5.585	4.5	5.157	4.545	4.843	4.251	5.962
HCM Lane V/C Ratio	0.094	0.495	0.056	0.599	0.455	0.595	0.194
HCM Control Delay	11.4	16	10.6	19.3	15.7	18.6	12.9
HCM Lane LOS	B	C	B	C	C	C	B
HCM 95th-tile Q	0.3	2.7	0.2	3.9	2.4	3.9	0.7

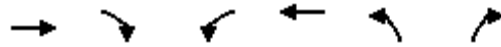
**Intersection**

Intersection Delay, s/veh  
 Intersection LOS

Movement	SBU	SBL	SBT	SBR
Lane Configurations			↕	
Traffic Vol, veh/h	0	21	50	11
Future Vol, veh/h	0	21	50	11
Peak Hour Factor	0.92	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	23	54	12
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	2
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	12.9
HCM LOS	B

HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 2: Denali Dr & Covell Blvd Existing Conditions - PM Peak Hour



Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations								
Traffic Volume (veh/h)	466	27	136	505	21	99		
Future Volume (veh/h)	466	27	136	505	21	99		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1900		
Adj Flow Rate, veh/h	524	0	142	526	25	0		
Adj No. of Lanes	1	0	1	1	0	0		
Peak Hour Factor	0.89	0.89	0.96	0.96	0.83	0.83		
Percent Heavy Veh, %	2	2	2	2	0	0		
Cap, veh/h	874	0	190	1283	54	0		
Arrive On Green	0.47	0.00	0.11	0.69	0.03	0.00		
Sat Flow, veh/h	1863	0	1774	1863	1709	0		
Grp Volume(v), veh/h	524	0	142	526	26	0		
Grp Sat Flow(s),veh/h/ln	1863	0	1774	1863	1777	0		
Q Serve(g_s), s	7.4	0.0	2.8	4.4	0.5	0.0		
Cycle Q Clear(g_c), s	7.4	0.0	2.8	4.4	0.5	0.0		
Prop In Lane		0.00	1.00		0.96	0.00		
Lane Grp Cap(c), veh/h	874	0	190	1283	57	0		
V/C Ratio(X)	0.60	0.00	0.75	0.41	0.46	0.00		
Avail Cap(c_a), veh/h	1823	0	992	1823	994	0		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh	7.0	0.0	15.5	2.4	17.0	0.0		
Incr Delay (d2), s/veh	0.7	0.0	5.7	0.2	11.9	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	3.9	0.0	1.6	2.3	0.4	0.0		
LnGrp Delay(d),s/veh	7.7	0.0	21.2	2.6	28.9	0.0		
LnGrp LOS	A		C	A	C			
Approach Vol, veh/h	524			668	26			
Approach Delay, s/veh	7.7			6.6	28.9			
Approach LOS	A			A	C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	7.8	22.8				30.6		5.1
Change Period (Y+Rc), s	4.0	6.0				6.0		4.0
Max Green Setting (Gmax), s	20.0	35.0				35.0		20.0
Max Q Clear Time (g_c+I1), s	4.8	9.4				6.4		2.5
Green Ext Time (p_c), s	0.3	7.4				7.6		0.1
<b>Intersection Summary</b>								
HCM 2010 Ctrl Delay			7.5					
HCM 2010 LOS			A					
<b>Notes</b>								

User approved volume balancing among the lanes for turning movement.

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Existing Conditions  
PM Peak Hour

Intersection 3                      Risling Ct/Sutter Hospital Dwy                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	21	25	116.7%	2.6	0.6	A
	Right Turn	20	22	111.0%	2.5	0.6	A
	Subtotal	41	47	113.9%	2.6	0.4	A
SB	Left Turn	3	3	100.0%	1.1	1.3	A
	Through	64	64	100.6%	0.1	0.2	A
	Right Turn						
	Subtotal	67	67	100.6%	0.2	0.2	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	20	20	100.0%	3.7	0.3	A
	Through						
	Right Turn						
	Subtotal	20	20	100.0%	3.7	0.3	A
Total		128	134	104.8%	1.7	0.4	A

Intersection 4                      Risling Ct-Shasta Dr/W Covell Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	11	11	101.8%	53.1	22.4	D
	Through	7	8	120.0%	57.4	11.6	E
	Right Turn	184	181	98.2%	2.9	0.4	A
	Subtotal	202	200	99.1%	7.8	1.2	A
SB	Left Turn	52	53	101.5%	38.8	7.4	D
	Through	4	5	117.5%	19.8	24.9	B
	Right Turn	28	28	100.4%	8.3	3.3	A
	Subtotal	84	86	101.9%	27.5	5.6	C
EB	Left Turn	10	12	121.0%	48.3	13.0	D
	Through	521	528	101.4%	13.1	2.0	B
	Right Turn	15	13	88.7%	3.6	1.4	A
	Subtotal	546	554	101.4%	13.9	1.5	B
WB	Left Turn	197	200	101.6%	48.8	5.3	D
	Through	592	592	100.0%	7.5	2.1	A
	Right Turn	24	26	107.5%	5.7	3.3	A
	Subtotal	813	818	100.6%	17.7	2.3	B
Total		1,645	1,657	100.8%	15.7	1.4	B

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Existing Conditions  
PM Peak Hour

Intersection 5                      John Jones Rd/W Covell Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	231	230	99.5%	36.6	5.1	D
	Through						
	Right Turn	56	61	108.2%	5.7	0.8	A
	Subtotal	287	290	101.2%	29.8	4.5	C
EB	Left Turn	33	32	98.2%	44.1	12.3	D
	Through	728	730	100.3%	9.8	1.6	A
	Right Turn						
	Subtotal	761	763	100.2%	11.6	2.0	B
WB	Left Turn						
	Through	757	761	100.5%	9.1	2.6	A
	Right Turn	175	179	102.1%	5.9	1.8	A
	Subtotal	932	939	100.8%	8.5	2.4	A
Total		1,980	1,992	100.6%	12.9	2.0	B

Intersection 6                      SR 113 SB Ramps/W Covell Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	125	118	94.6%	36.7	8.7	D
	Through	1	1	80.0%	0.3	1.0	A
	Right Turn	81	86	106.2%	37.9	6.2	D
	Subtotal	207	205	99.1%	37.5	6.5	D
EB	Left Turn						
	Through	714	707	99.0%	19.2	2.5	B
	Right Turn	245	252	102.7%	14.9	2.6	B
	Subtotal	959	959	100.0%	18.0	2.1	B
WB	Left Turn	240	237	98.6%	48.5	5.2	D
	Through	851	854	100.3%	6.0	1.0	A
	Right Turn						
	Subtotal	1,091	1,090	99.9%	15.0	1.9	B
Total		2,257	2,254	99.9%	18.3	1.6	B



SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Existing Conditions  
PM Peak Hour






















**Intersection 7**                      **SR 113 NB Ramps/W Covell Blvd**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	348	350	100.5%	38.1	5.4	D
	Through						
	Right Turn	532	547	102.8%	25.3	4.8	C
	Subtotal	880	897	101.9%	30.6	4.1	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	98	99	100.5%	68.9	11.6	E
	Through	747	738	98.8%	10.6	1.8	B
	Right Turn						
	Subtotal	845	836	99.0%	18.3	2.6	B
WB	Left Turn						
	Through	741	742	100.1%	14.6	1.7	B
	Right Turn	152	156	102.3%	6.7	0.8	A
	Subtotal	893	897	100.5%	13.2	1.4	B
Total		2,618	2,630	100.5%	20.8	2.3	C



















**Intersection 8**                      **Sycamore Ln/W Covell Blvd**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	117	113	96.8%	41.1	5.2	D
	Through	60	62	103.0%	40.6	8.8	D
	Right Turn	45	44	98.0%	7.8	3.2	A
	Subtotal	222	219	98.7%	34.1	4.1	C
SB	Left Turn	149	139	93.3%	45.4	10.1	D
	Through	77	82	106.4%	38.2	5.3	D
	Right Turn	99	98	99.4%	13.8	6.7	B
	Subtotal	325	319	98.2%	33.1	7.6	C
EB	Left Turn	140	139	98.9%	50.1	3.7	D
	Through	782	788	100.8%	18.6	2.6	B
	Right Turn	127	130	102.6%	11.5	2.9	B
	Subtotal	1,049	1,057	100.7%	22.0	2.4	C
WB	Left Turn	25	21	85.6%	50.2	16.6	D
	Through	601	609	101.3%	24.1	2.1	C
	Right Turn	96	98	101.6%	16.1	3.8	B
	Subtotal	722	728	100.8%	23.8	2.2	C
Total		2,318	2,323	100.2%	25.4	2.1	C

HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 9: Anderson Rd & Covell Blvd Existing Conditions - PM Peak Hour






















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	58	746	135	85	448	62	223	146	136	79	111	57
Future Volume (veh/h)	58	746	135	85	448	62	223	146	136	79	111	57
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1857	1900	1863	1863	1727	1792	1808	1900	1863	1793	1900
Adj Flow Rate, veh/h	63	811	0	93	492	0	259	170	0	104	146	0
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.91	0.91	0.91	0.86	0.86	0.86	0.76	0.76	0.76
Percent Heavy Veh, %	7	2	2	2	2	10	6	8	8	2	8	8
Cap, veh/h	81	1302	0	122	1379	572	304	509	0	136	615	0
Arrive On Green	0.05	0.37	0.00	0.07	0.39	0.00	0.18	0.28	0.00	0.08	0.18	0.00
Sat Flow, veh/h	1691	3621	0	1774	3539	1468	1707	1808	0	1774	3496	0
Grp Volume(v), veh/h	63	811	0	93	492	0	259	170	0	104	146	0
Grp Sat Flow(s),veh/h/ln	1691	1764	0	1774	1770	1468	1707	1808	0	1774	1703	0
Q Serve(g_s), s	3.3	16.6	0.0	4.6	8.7	0.0	13.0	6.6	0.0	5.1	3.2	0.0
Cycle Q Clear(g_c), s	3.3	16.6	0.0	4.6	8.7	0.0	13.0	6.6	0.0	5.1	3.2	0.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	81	1302	0	122	1379	572	304	509	0	136	615	0
V/C Ratio(X)	0.77	0.62	0.00	0.76	0.36	0.00	0.85	0.33	0.00	0.76	0.24	0.00
Avail Cap(c_a), veh/h	766	1797	0	602	1802	748	773	818	0	803	1542	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.6	22.8	0.0	40.4	19.1	0.0	35.2	25.2	0.0	40.0	31.0	0.0
Incr Delay (d2), s/veh	14.3	0.5	0.0	9.4	0.6	0.0	6.7	0.4	0.0	8.5	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	8.2	0.0	2.5	4.3	0.0	6.7	3.3	0.0	2.8	1.5	0.0
LnGrp Delay(d),s/veh	55.9	23.3	0.0	49.9	19.7	0.0	41.9	25.5	0.0	48.6	31.2	0.0
LnGrp LOS	E	C		D	B		D	C		D	C	
Approach Vol, veh/h		874			585			429			250	
Approach Delay, s/veh		25.7			24.5			35.4			38.4	
Approach LOS		C			C			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.1	37.6	19.7	20.0	9.3	39.4	10.8	28.9				
Change Period (Y+Rc), s	5.0	5.0	4.0	4.0	5.0	5.0	4.0	4.0				
Max Green Setting (Gmax), s	30.0	45.0	40.0	40.0	40.0	45.0	40.0	40.0				
Max Q Clear Time (g_c+I1), s	6.6	18.6	15.0	5.2	5.3	10.7	7.1	8.6				
Green Ext Time (p_c), s	0.2	14.0	0.8	2.1	0.1	16.0	0.3	2.0				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			28.8									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 10: Oak Ave & Covell Blvd Existing Conditions - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	940	99	66	528	0	106	0	127	0	0	0
Future Volume (veh/h)	0	940	99	66	528	0	106	0	127	0	0	0
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	0	1863	0	1863	1900	1863	1900
Adj Flow Rate, veh/h	0	959	0	74	593	0	112	0	0	0	0	0
Adj No. of Lanes	0	2	0	1	2	0	1	0	1	0	1	0
Peak Hour Factor	0.98	0.98	0.98	0.89	0.89	0.89	0.95	0.95	0.95	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0	2	0	2	2	2	2
Cap, veh/h	0	1820	0	125	2424	0	158	0	0	0	5	0
Arrive On Green	0.00	0.51	0.00	0.07	0.68	0.00	0.09	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	0	3725	0	1774	3632	0	1774	112		0	-93137	0
Grp Volume(v), veh/h	0	959	0	74	593	0	112	23.3		0	0	0
Grp Sat Flow(s),veh/h/ln	0	1770	0	1774	1770	0	1774	C		0	1863	0
Q Serve(g_s), s	0.0	7.2	0.0	1.6	2.5	0.0	2.4			0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	7.2	0.0	1.6	2.5	0.0	2.4			0.0	0.0	0.0
Prop In Lane	0.00		0.00	1.00		0.00	1.00			0.00		0.00
Lane Grp Cap(c), veh/h	0	1820	0	125	2424	0	158			0	5	0
V/C Ratio(X)	0.00	0.53	0.00	0.59	0.24	0.00	0.71			0.00	0.00	0.00
Avail Cap(c_a), veh/h	0	2755	0	668	2844	0	891			0	702	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00	1.00			0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	6.4	0.0	18.0	2.4	0.0	17.6			0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	4.5	0.1	0.0	5.7			0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.5	0.0	0.9	1.2	0.0	1.4			0.0	0.0	0.0
LnGrp Delay(d),s/veh	0.0	6.7	0.0	22.4	2.4	0.0	23.3			0.0	0.0	0.0
LnGrp LOS		A		C	A		C					
Approach Vol, veh/h		959			667							0
Approach Delay, s/veh		6.7			4.6							0.0
Approach LOS		A			A							
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4	5	6						
Phs Duration (G+Y+Rc), s		32.3	7.6	0.0	6.8	25.5						
Change Period (Y+Rc), s		5.0	4.0	5.0	4.0	5.0						
Max Green Setting (Gmax), s		32.0	20.0	15.0	15.0	31.0						
Max Q Clear Time (g_c+I1), s		4.5	4.4	0.0	3.6	9.2						
Green Ext Time (p_c), s		12.7	0.2	0.0	0.1	11.3						
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				7.0								
HCM 2010 LOS				A								
<b>Notes</b>												






















User approved pedestrian interval to be less than phase max green.

HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 11: F St & Covell Blvd Existing Conditions - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	69	911	175	182	542	172	135	160	199	122	122	51
Future Volume (veh/h)	69	911	175	182	542	172	135	160	199	122	122	51
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1845	1863	1900	1845	1853	1900	1863	1841	1900
Adj Flow Rate, veh/h	77	1012	0	204	609	0	152	180	0	140	140	0
Adj No. of Lanes	1	2	1	2	2	0	1	1	0	1	1	0
Peak Hour Factor	0.90	0.90	0.90	0.89	0.89	0.89	0.89	0.89	0.89	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	3	2	2	3	2	2	2	2	2
Cap, veh/h	100	1381	618	302	1495	0	196	341	0	185	325	0
Arrive On Green	0.06	0.39	0.00	0.09	0.42	0.00	0.11	0.18	0.00	0.10	0.18	0.00
Sat Flow, veh/h	1774	3539	1583	3408	3632	0	1757	1853	0	1774	1841	0
Grp Volume(v), veh/h	77	1012	0	204	609	0	152	180	0	140	140	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1704	1770	0	1757	1853	0	1774	1841	0
Q Serve(g_s), s	3.1	17.8	0.0	4.2	8.8	0.0	6.1	6.4	0.0	5.6	4.9	0.0
Cycle Q Clear(g_c), s	3.1	17.8	0.0	4.2	8.8	0.0	6.1	6.4	0.0	5.6	4.9	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	100	1381	618	302	1495	0	196	341	0	185	325	0
V/C Ratio(X)	0.77	0.73	0.00	0.67	0.41	0.00	0.78	0.53	0.00	0.76	0.43	0.00
Avail Cap(c_a), veh/h	730	2184	977	1402	2184	0	723	762	0	730	758	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.9	19.0	0.0	32.2	14.7	0.0	31.5	26.9	0.0	31.8	26.8	0.0
Incr Delay (d2), s/veh	4.6	0.3	0.0	1.0	0.1	0.0	6.4	1.3	0.0	7.4	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	8.6	0.0	2.0	4.2	0.0	3.3	3.4	0.0	3.1	2.6	0.0
LnGrp Delay(d),s/veh	38.6	19.3	0.0	33.2	14.8	0.0	37.9	28.2	0.0	39.2	27.9	0.0
LnGrp LOS	D	B		C	B		D	C		D	C	
Approach Vol, veh/h		1089			813			332			280	
Approach Delay, s/veh		20.6			19.4			32.6			33.5	
Approach LOS		C			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.1	35.8	12.1	16.9	10.5	33.4	11.6	17.4				
Change Period (Y+Rc), s	4.0	5.0	4.0	4.0	4.0	5.0	4.0	4.0				
Max Green Setting (Gmax), s	30.0	45.0	30.0	30.0	30.0	45.0	30.0	30.0				
Max Q Clear Time (g_c+I1), s	5.1	10.8	8.1	6.9	6.2	19.8	7.6	8.4				
Green Ext Time (p_c), s	0.1	9.4	0.4	2.1	0.3	8.6	0.5	2.0				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			23.3									
HCM 2010 LOS			C									
<b>Notes</b>												

User approved pedestrian interval to be less than phase max green.

HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 12: J St/Cannery Ave & Covell Blvd Existing Conditions - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	1102	100	73	789	35	91	10	99	41	9	16
Future Volume (veh/h)	30	1102	100	73	789	35	91	10	99	41	9	16
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1810	1743	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	33	1224	51	82	887	38	107	12	0	49	11	0
Adj No. of Lanes	1	2	1	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.90	0.90	0.90	0.89	0.89	0.89	0.85	0.85	0.85	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	5	9	2	2	2	2	2	2	2	2
Cap, veh/h	63	1694	706	105	1748	75	143	171	0	83	108	0
Arrive On Green	0.04	0.48	0.48	0.06	0.51	0.51	0.08	0.09	0.00	0.05	0.06	0.00
Sat Flow, veh/h	1774	3539	1475	1660	3451	148	1774	1863	0	1774	1863	0
Grp Volume(v), veh/h	33	1224	51	82	455	470	107	12	0	49	11	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1475	1660	1770	1830	1774	1863	0	1774	1863	0
Q Serve(g_s), s	1.1	16.4	1.1	2.9	10.1	10.1	3.5	0.4	0.0	1.6	0.3	0.0
Cycle Q Clear(g_c), s	1.1	16.4	1.1	2.9	10.1	10.1	3.5	0.4	0.0	1.6	0.3	0.0
Prop In Lane	1.00		1.00	1.00		0.08	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	63	1694	706	105	896	927	143	171	0	83	108	0
V/C Ratio(X)	0.53	0.72	0.07	0.78	0.51	0.51	0.75	0.07	0.00	0.59	0.10	0.00
Avail Cap(c_a), veh/h	597	1786	744	558	896	927	597	1253	0	597	1253	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	28.2	12.4	8.4	27.4	9.7	9.7	26.8	24.7	0.0	27.8	26.5	0.0
Incr Delay (d2), s/veh	8.0	1.5	0.1	13.9	0.6	0.5	9.1	0.2	0.0	11.9	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	8.3	0.5	1.7	5.1	5.2	2.1	0.2	0.0	1.1	0.2	0.0
LnGrp Delay(d),s/veh	36.2	13.8	8.4	41.3	10.3	10.3	35.9	24.9	0.0	39.7	27.3	0.0
LnGrp LOS	D	B	A	D	B	B	D	C		D	C	
Approach Vol, veh/h		1308			1007			119			60	
Approach Delay, s/veh		14.2			12.8			34.8			37.5	
Approach LOS		B			B			C			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.3	9.0	6.6	34.6	7.3	11.0	8.3	33.0				
Change Period (Y+Rc), s	4.5	5.5	4.5	4.5	4.5	5.5	4.5	4.5				
Max Green Setting (Gmax), s	20.0	40.0	20.0	30.0	20.0	40.0	20.0	30.0				
Max Q Clear Time (g_c+I1), s	5.5	2.3	3.1	12.1	3.6	2.4	4.9	18.4				
Green Ext Time (p_c), s	0.3	0.1	0.1	14.4	0.2	0.1	0.2	9.8				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			15.2									
HCM 2010 LOS			B									



Major Street **Covell Blvd**  
 Minor Street **Lake Blvd**

Project **West Davis AAC EIR**  
 Scenario **Existing Conditions**  
 Peak Hour **AM Peak Hour**

Turn Movement Volumes

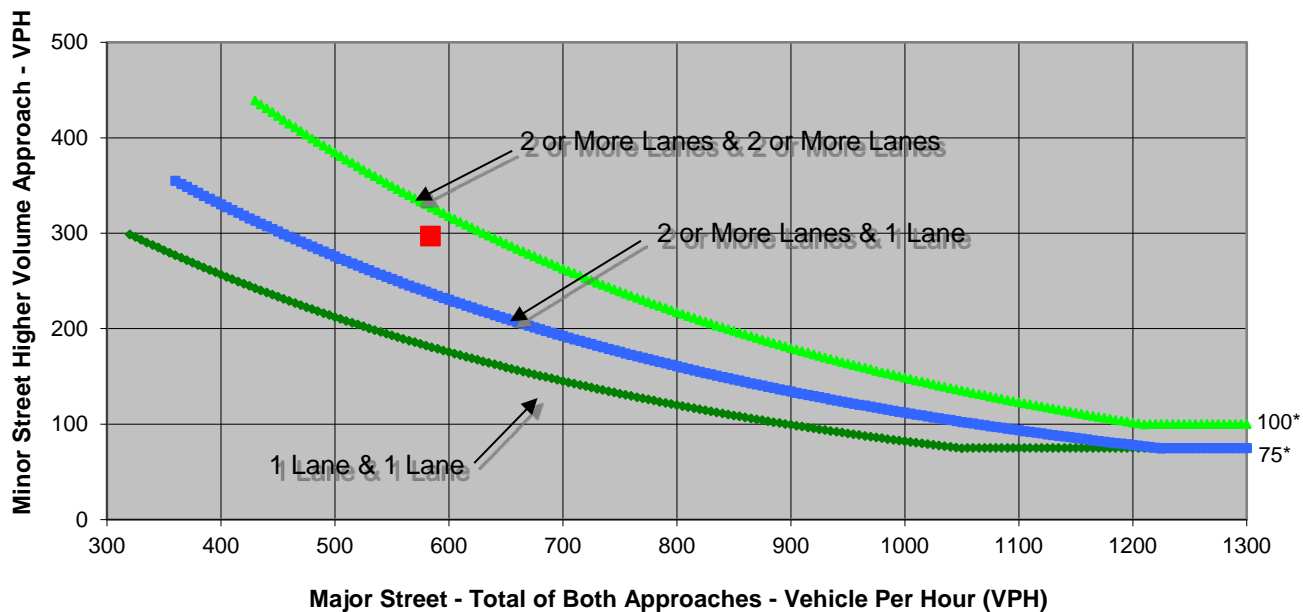
	NB	SB	EB	WB
Left	34	36	9	93
Through	61	53	258	174
Right	202	10	39	11
Total	297	99	306	278

Major Street Direction

**North/South**  
**x East/West**

**Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)**  
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



\* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Covell Blvd	Lake Blvd	
Number of Approach Lanes	<b>1</b>	<b>1</b>	<b><u>YES</u></b>
Traffic Volume (VPH) *	<b>584</b>	<b>297</b>	

\* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.  
 Traffic Volume for Minor Street is the Volume of High Volume Approach.





Major Street Covell Blvd  
 Minor Street Lake Blvd

Project West Davis AAC EIR  
 Scenario Existing Conditions  
 Peak Hour AM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	34	36	9	93
Through	61	53	258	174
Right	202	10	39	11
Total	297	99	306	278

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	4

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	15.6
Approach with Worst Case Delay	NB
Total Vehicles on Approach	297

<b>Warrant 3A, Peak Hour</b>			
	<b>Peak Hour Delay on Minor Approach (vehicle-hours)</b>	<b>Peak Hour Volume on Minor Approach (vph)</b>	<b>Peak Hour Entering Volume Serviced (vph)</b>
<b>Existing Conditions</b>	<b>1.3</b>	<b>297</b>	<b>980</b>
<b>Limiting Value</b>	<b>4</b>	<b>100</b>	<b>800</b>
<b>Condition Satisfied?</b>	<b>Not Met</b>	<b>Met</b>	<b>Met</b>
<b>Warrant Met</b>	<b><u>NO</u></b>		

Major Street Risling Ct  
 Minor Street Hospital Dwy

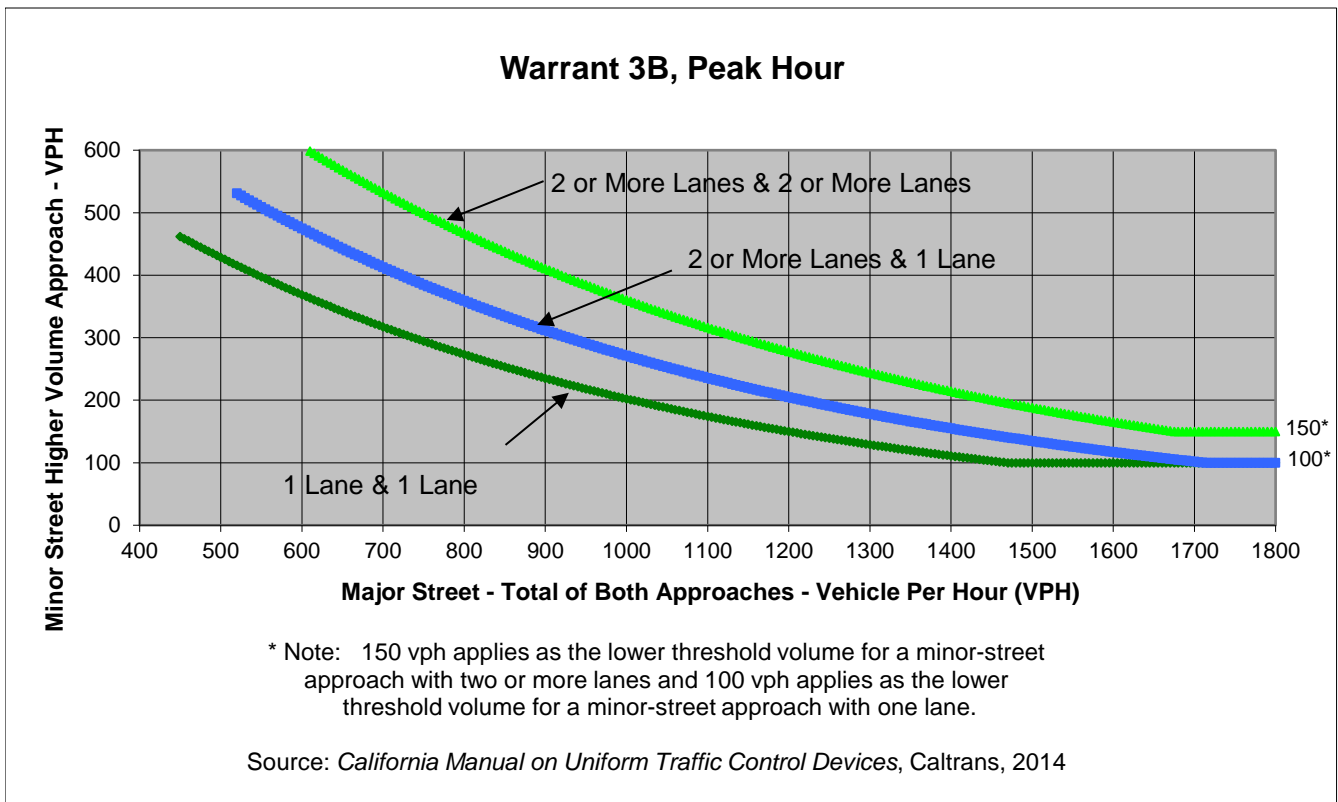
Project West Davis AAC EIR  
 Scenario Existing Conditions  
 Peak Hour AM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	0	0	2
Through	98	33	0	0
Right	31	0	0	11
Total	129	33	0	13

Major Street Direction

x	North/South
	East/West



	Major Street	Minor Street	Warrant Met
	Risling Ct	Hospital Dwy	
<b>Number of Approach Lanes</b>	<b>1</b>	<b>1</b>	<b><u>NO</u></b>
<b>Traffic Volume (VPH) *</b>	<b>162</b>	<b>13</b>	

\* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.  
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street Risling Ct  
 Minor Street Hospital Dwy

Project West Davis AAC EIR  
 Scenario Existing Conditions  
 Peak Hour AM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	0	0	2
Through	98	33	0	0
Right	31	0	0	11
Total	129	33	0	13

Major Street Direction

x	North/South
	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	9.5
Approach with Worst Case Delay	WB
Total Vehicles on Approach	13

<b>Warrant 3A, Peak Hour</b>			
	<b>Peak Hour Delay on Minor Approach (vehicle-hours)</b>	<b>Peak Hour Volume on Minor Approach (vph)</b>	<b>Peak Hour Entering Volume Served (vph)</b>
<b>Existing Conditions</b>	<b>0</b>	<b>13</b>	<b>175</b>
<b>Limiting Value</b>	<b>4</b>	<b>100</b>	<b>650</b>
<b>Condition Satisfied?</b>	<b>Not Met</b>	<b>Not Met</b>	<b>Not Met</b>
<b>Warrant Met</b>	<b><u>NO</u></b>		



Major Street **Covell Blvd**  
 Minor Street **Lake Blvd**

Project **West Davis AAC EIR**  
 Scenario **Existing Conditions**  
 Peak Hour **PM Peak Hour**

Turn Movement Volumes

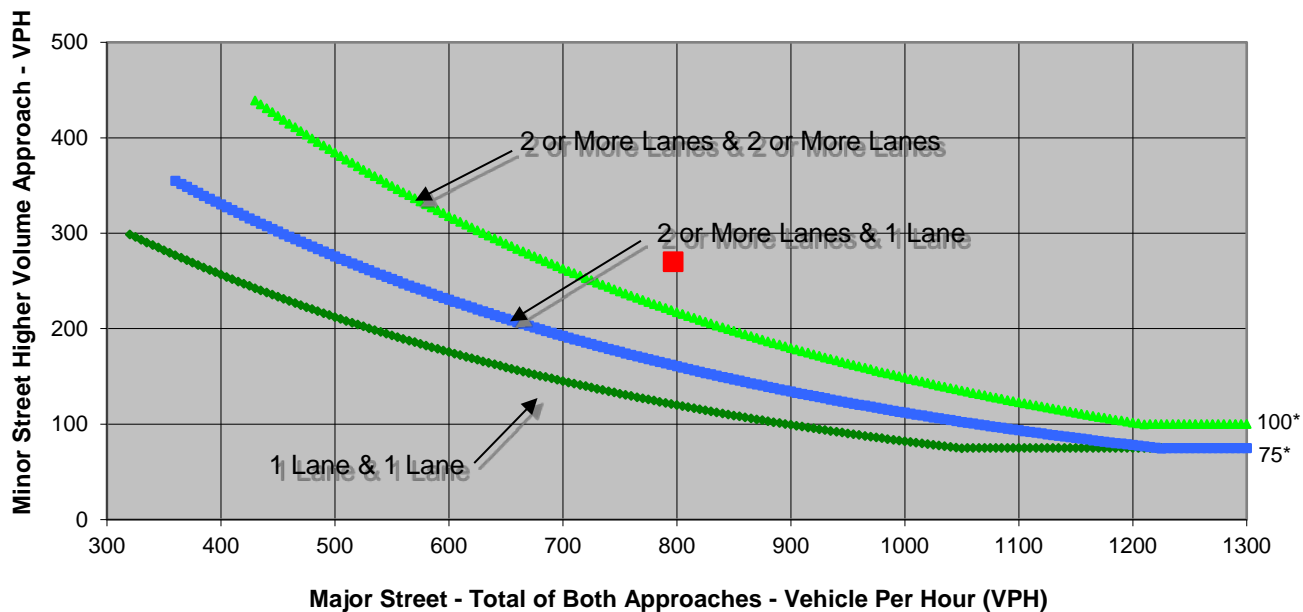
	NB	SB	EB	WB
Left	38	21	22	210
Through	46	50	227	267
Right	186	11	37	34
Total	270	82	286	511

Major Street Direction

North/South  
**x** East/West

**Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)**  
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



\* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Covell Blvd	Lake Blvd	
<b>Number of Approach Lanes</b>	<b>1</b>	<b>1</b>	<b><u>YES</u></b>
<b>Traffic Volume (VPH) *</b>	<b>797</b>	<b>270</b>	

\* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.  
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street Covell Blvd  
 Minor Street Lake Blvd

Project West Davis AAC EIR  
 Scenario Existing Conditions  
 Peak Hour PM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	38	21	22	210
Through	46	50	227	267
Right	186	11	37	34
Total	270	82	286	511

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	4

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	16
Approach with Worst Case Delay	NB
Total Vehicles on Approach	270

<b>Warrant 3A, Peak Hour</b>			
	<b>Peak Hour Delay on Minor Approach (vehicle-hours)</b>	<b>Peak Hour Volume on Minor Approach (vph)</b>	<b>Peak Hour Entering Volume Serviced (vph)</b>
<b>Existing Conditions</b>	<b>1.2</b>	<b>270</b>	<b>1,149</b>
<b>Limiting Value</b>	<b>4</b>	<b>100</b>	<b>800</b>
<b>Condition Satisfied?</b>	<b>Not Met</b>	<b>Met</b>	<b>Met</b>
<b>Warrant Met</b>	<b><u>NO</u></b>		



Major Street Risling Ct  
 Minor Street Hospital Dwy

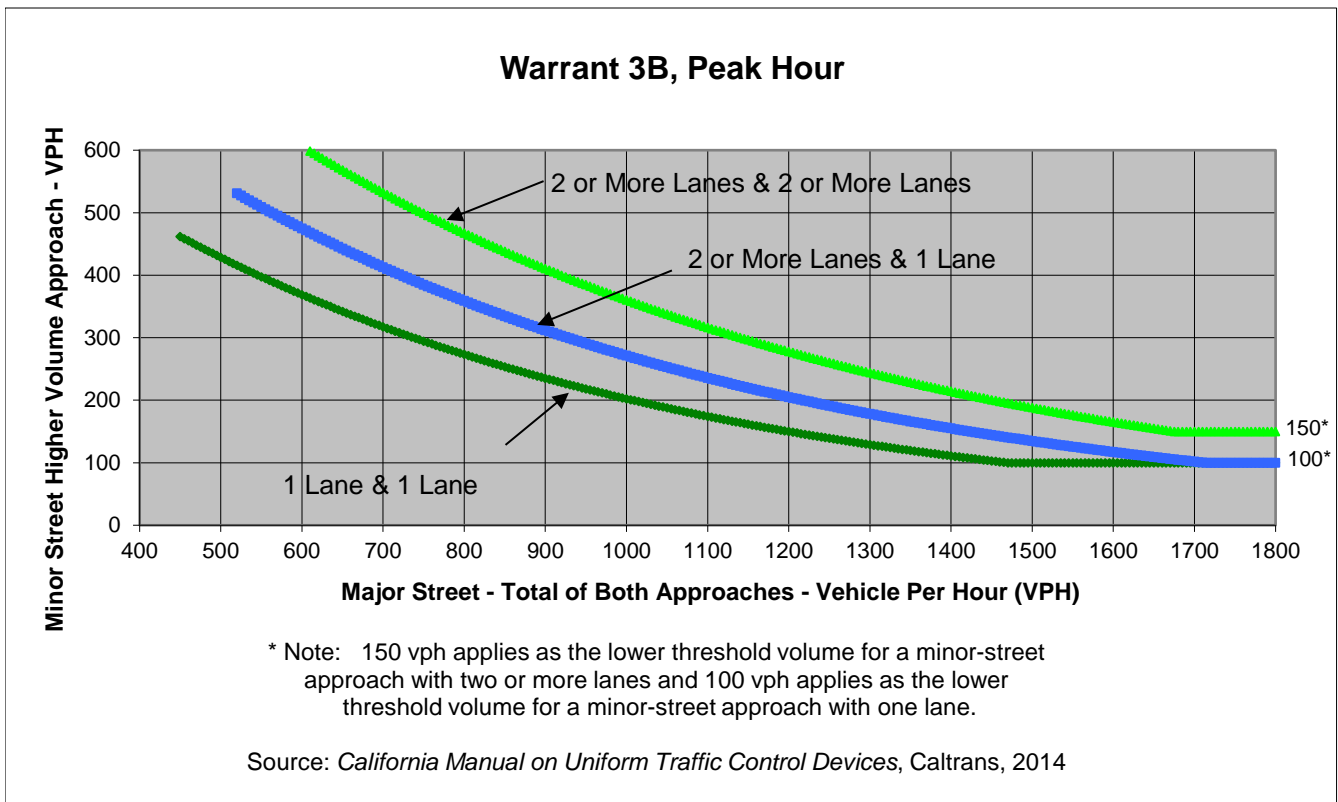
Project West Davis AAC EIR  
 Scenario Existing Conditions  
 Peak Hour PM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	3	0	20
Through	21	64	0	0
Right	20	0	0	0
Total	41	67	0	20

Major Street Direction

x	North/South
	East/West



	Major Street	Minor Street	Warrant Met
	Risling Ct	Hospital Dwy	
<b>Number of Approach Lanes</b>	<b>1</b>	<b>1</b>	<b><u>NO</u></b>
<b>Traffic Volume (VPH) *</b>	<b>108</b>	<b>20</b>	

\* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.  
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street Risling Ct  
 Minor Street Hospital Dwy

Project West Davis AAC EIR  
 Scenario Existing Conditions  
 Peak Hour PM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	3	0	20
Through	21	64	0	0
Right	20	0	0	0
Total	41	67	0	20

Major Street Direction

x North/South  
 East/West

Intersection Geometry

Number of Approach Lanes for Minor Street 1  
 Total Approaches 3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle) 9.2  
 Approach with Worst Case Delay WB  
 Total Vehicles on Approach 20

<b>Warrant 3A, Peak Hour</b>			
	<b>Peak Hour Delay on Minor Approach (vehicle-hours)</b>	<b>Peak Hour Volume on Minor Approach (vph)</b>	<b>Peak Hour Entering Volume Served (vph)</b>
<b>Existing Conditions</b>	<b>0.1</b>	<b>20</b>	<b>128</b>
<b>Limiting Value</b>	<b>4</b>	<b>100</b>	<b>650</b>
<b>Condition Satisfied?</b>	<b>Not Met</b>	<b>Not Met</b>	<b>Not Met</b>
<b>Warrant Met</b>	<b><u>NO</u></b>		

Arterial Level of Service  
Existing Conditions

AM Peak Hour

Arterial Level of Service: EB Route 1, Interval #0 7:30

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	-	-	0.1	-
	5	-	-	0.1	-
SR 113 SB Ramps	6	-	-	0.1	-
Route 2	7	-	-	0.1	-
Total		-	-	0.4	-

Arterial Level of Service: EB Route 1, Interval #1 7:45

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	13.5	19.9	0.1	16
	5	17.7	29.8	0.1	14
SR 113 SB Ramps	6	21.8	29.6	0.1	9
Route 2	7	15.5	25.4	0.1	15
Total		68.5	104.7	0.4	13

Arterial Level of Service: EB Route 1, Interval #2 8:00

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	14.6	21.0	0.1	15
	5	24.2	36.1	0.1	12
SR 113 SB Ramps	6	30.8	38.3	0.1	7
Route 2	7	15.0	25.1	0.1	15
Total		84.5	120.5	0.4	11

Arterial Level of Service: EB Route 1, Interval #3 8:15

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	13.4	19.7	0.1	16
	5	19.1	31.0	0.1	14
SR 113 SB Ramps	6	26.2	33.7	0.1	8
Route 2	7	15.6	25.7	0.1	14
Total		74.3	110.1	0.4	13



Arterial Level of Service  
Existing Conditions

AM Peak Hour

Arterial Level of Service: EB Route 1, Interval #4 8:30

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	13.0	19.4	0.1	16
	5	16.3	28.5	0.1	15
SR 113 SB Ramps	6	23.9	31.7	0.1	9
Route 2	7	13.0	23.1	0.1	16
Total		66.2	102.7	0.4	13

Arterial Level of Service: EB Route 1, Entire Run

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	14.0	20.6	0.1	15
	5	20.1	32.6	0.1	13
SR 113 SB Ramps	6	27.0	35.0	0.1	8
Route 2	7	15.4	25.9	0.1	14
Total		76.6	114.0	0.4	12

Arterial Level of Service: WB Route 1, Interval #0 7:30

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Covell Blvd	7	-	-	0.3	-
SR 113 SB Ramps	6	-	-	0.1	-
Route 3	5	-	-	0.1	-
Risling Ct	4	-	-	0.1	-
	301	-	-	0.1	-
Total		-	-	0.7	-

Arterial Level of Service: WB Route 1, Interval #1 7:45

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Covell Blvd	7	40.0	67.1	0.3	17
SR 113 SB Ramps	6	5.0	18.1	0.1	20
Route 3	5	13.1	20.6	0.1	13
Risling Ct	4	10.1	21.7	0.1	20
	301	2.1	9.8	0.1	32
Total		70.3	137.5	0.7	19

Arterial Level of Service  
Existing Conditions

AM Peak Hour

Arterial Level of Service: WB Route 1, Interval #2 8:00

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Covell Blvd	7	39.5	66.9	0.3	18
SR 113 SB Ramps	6	6.8	19.7	0.1	19
Route 3	5	14.8	22.4	0.1	12
Risling Ct	4	10.6	22.4	0.1	19
	301	2.1	9.8	0.1	32
Total		73.8	141.2	0.7	18

Arterial Level of Service: WB Route 1, Interval #3 8:15

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Covell Blvd	7	39.9	66.9	0.3	18
SR 113 SB Ramps	6	7.2	20.6	0.1	18
Route 3	5	12.2	19.8	0.1	14
Risling Ct	4	11.1	22.7	0.1	19
	301	2.1	9.8	0.1	32
Total		72.6	139.9	0.7	18

Arterial Level of Service: WB Route 1, Interval #4 8:30

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Covell Blvd	7	38.2	65.4	0.3	18
SR 113 SB Ramps	6	4.6	18.0	0.1	21
Route 3	5	12.9	20.5	0.1	13
Risling Ct	4	10.5	22.3	0.1	19
	301	2.0	9.8	0.1	32
Total		68.3	136.0	0.7	19

Arterial Level of Service: WB Route 1, Entire Run

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Covell Blvd	7	42.0	70.9	0.3	17
SR 113 SB Ramps	6	6.4	20.6	0.1	18
Route 3	5	13.4	21.1	0.1	13
Risling Ct	4	10.9	23.1	0.1	19
	301	2.1	9.9	0.1	32
Total		74.9	145.6	0.7	18

Arterial Level of Service  
Existing Conditions

AM Peak Hour

Arterial Level of Service: EB Route 2, Interval #0 7:30

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	-	-	0.1	-
	5	-	-	0.1	-
Route 4	6	-	-	0.1	-
Total		-	-	0.3	-

Arterial Level of Service: EB Route 2, Interval #1 7:45

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	13.5	19.9	0.1	16
	5	17.7	29.8	0.1	14
Route 4	6	23.3	35.2	0.1	8
Total		54.5	84.9	0.3	12

Arterial Level of Service: EB Route 2, Interval #2 8:00

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	14.6	21.0	0.1	15
	5	24.2	36.1	0.1	12
Route 4	6	34.2	45.8	0.1	6
Total		73.0	102.9	0.3	10

Arterial Level of Service: EB Route 2, Interval #3 8:15

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	13.4	19.7	0.1	16
	5	19.1	31.0	0.1	14
Route 4	6	27.9	39.5	0.1	7
Total		60.4	90.2	0.3	11

Arterial Level of Service: EB Route 2, Interval #4 8:30

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	13.0	19.4	0.1	16
	5	16.3	28.5	0.1	15
Route 4	6	25.1	36.9	0.1	7
Total		54.4	84.9	0.3	12

Arterial Level of Service  
Existing Conditions

AM Peak Hour

Arterial Level of Service: EB Route 2, Entire Run

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	14.0	20.6	0.1	15
	5	20.1	32.6	0.1	13
Route 4	6	29.2	41.5	0.1	7
Total		63.4	94.7	0.3	11

Arterial Level of Service: WB Route 2, Interval #0 7:30

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Route 3	5	-	-	0.1	-
Risling Ct	4	-	-	0.1	-
	301	-	-	0.1	-
Total		-	-	0.3	-

Arterial Level of Service: WB Route 2, Interval #1 7:45

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Route 3	5	-	-	0.1	-
Risling Ct	4	10.1	21.7	0.1	20
	301	2.1	9.8	0.1	32
Total		12.2	31.6	0.3	32

Arterial Level of Service: WB Route 2, Interval #2 8:00

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Route 3	5	-	-	0.1	-
Risling Ct	4	10.6	22.4	0.1	19
	301	2.1	9.8	0.1	32
Total		12.8	32.3	0.3	31

Arterial Level of Service: WB Route 2, Interval #3 8:15

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Route 3	5	-	-	0.1	-
Risling Ct	4	11.1	22.7	0.1	19
	301	2.1	9.8	0.1	32
Total		13.2	32.6	0.3	31

Arterial Level of Service  
Existing Conditions

AM Peak Hour

Arterial Level of Service: WB Route 2, Interval #4 8:30

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Route 3	5	-	-	0.1	-
Risling Ct	4	10.5	22.3	0.1	19
	301	2.0	9.8	0.1	32
Total		12.5	32.1	0.3	32

Arterial Level of Service: WB Route 2, Entire Run

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Route 3	5	-	-	0.1	-
Risling Ct	4	10.9	23.1	0.1	19
	301	2.1	9.9	0.1	32
Total		13.1	33.0	0.3	31

Arterial Level of Service  
Existing Conditions

PM Peak Hour

Arterial Level of Service: EB Route 1, Interval #0 4:45

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	-	-	0.1	-
	5	-	-	0.1	-
SR 113 SB Ramps	6	-	-	0.1	-
Route 2	7	-	-	0.1	-
Total		-	-	0.4	-

Arterial Level of Service: EB Route 1, Interval #1 5:00

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	9.9	16.3	0.1	19
	5	8.1	20.1	0.1	21
SR 113 SB Ramps	6	20.3	28.2	0.1	10
Route 2	7	7.7	18.2	0.1	20
Total		46.0	82.8	0.4	17

Arterial Level of Service: EB Route 1, Interval #2 5:15

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	12.4	18.8	0.1	17
	5	10.7	22.7	0.1	19
SR 113 SB Ramps	6	22.8	30.6	0.1	9
Route 2	7	9.2	19.7	0.1	19
Total		55.0	91.8	0.4	15

Arterial Level of Service: EB Route 1, Interval #3 5:30

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	11.0	17.5	0.1	18
	5	9.7	21.9	0.1	20
SR 113 SB Ramps	6	18.7	26.5	0.1	10
Route 2	7	7.6	18.0	0.1	21
Total		47.0	84.0	0.4	16

Arterial Level of Service  
Existing Conditions

PM Peak Hour

Arterial Level of Service: EB Route 1, Interval #4 5:45

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	10.9	17.5	0.1	18
	5	9.5	21.6	0.1	20
SR 113 SB Ramps	6	19.4	27.2	0.1	10
Route 2	7	8.1	18.5	0.1	20
Total		47.9	84.8	0.4	16

Arterial Level of Service: EB Route 1, Entire Run

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	11.2	17.8	0.1	18
	5	9.9	22.3	0.1	19
SR 113 SB Ramps	6	20.9	28.9	0.1	9
Route 2	7	8.3	18.9	0.1	20
Total		50.2	87.9	0.4	16

Arterial Level of Service: WB Route 1, Interval #0 4:45

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Covell Blvd	7	-	-	0.3	-
SR 113 SB Ramps	6	-	-	0.1	-
John Jones Rd	5	-	-	0.1	-
Risling Ct	4	-	-	0.1	-
	301	-	-	0.1	-
Total		-	-	0.7	-

Arterial Level of Service: WB Route 1, Interval #1 5:00

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Covell Blvd	7	37.3	65.0	0.3	18
SR 113 SB Ramps	6	5.5	19.4	0.1	19
John Jones Rd	5	9.4	17.0	0.1	16
Risling Ct	4	6.9	19.0	0.1	23
	301	1.4	9.2	0.1	34
Total		60.5	129.6	0.7	20

Arterial Level of Service: WB Route 1, Interval #2 5:15

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Covell Blvd	7	38.9	66.4	0.3	18
SR 113 SB Ramps	6	7.4	21.2	0.1	17
John Jones Rd	5	9.6	17.2	0.1	16
Risling Ct	4	7.9	19.8	0.1	22
	301	1.6	9.3	0.1	34
Total		65.3	134.0	0.7	19

Arterial Level of Service: WB Route 1, Interval #3 5:30

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Covell Blvd	7	37.1	64.9	0.3	18
SR 113 SB Ramps	6	6.2	20.2	0.1	18
John Jones Rd	5	8.6	16.2	0.1	17
Risling Ct	4	8.1	20.0	0.1	21
	301	1.5	9.3	0.1	34
Total		61.4	130.6	0.7	20

Arterial Level of Service: WB Route 1, Interval #4 5:45

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Covell Blvd	7	36.7	64.5	0.3	18
SR 113 SB Ramps	6	6.7	20.5	0.1	18
John Jones Rd	5	9.6	17.1	0.1	16
Risling Ct	4	7.9	19.9	0.1	22
	301	1.5	9.3	0.1	34
Total		62.5	131.3	0.7	19

Arterial Level of Service: WB Route 1, Entire Run

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Covell Blvd	7	39.3	68.4	0.3	17
SR 113 SB Ramps	6	6.6	20.8	0.1	18
John Jones Rd	5	9.3	17.0	0.1	16
Risling Ct	4	7.9	20.1	0.1	21
	301	1.5	9.4	0.1	33
Total		64.7	135.7	0.7	19



Arterial Level of Service  
Existing Conditions

PM Peak Hour

Arterial Level of Service: EB Route 2, Interval #0 4:45

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	-	-	0.1	-
	5	-	-	0.1	-
Route 4	6	-	-	0.1	-
Total		-	-	0.3	-

Arterial Level of Service: EB Route 2, Interval #1 5:00

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	9.9	16.3	0.1	19
	5	8.1	20.1	0.1	21
Route 4	6	15.7	27.5	0.1	10
Total		33.7	64.0	0.3	16

Arterial Level of Service: EB Route 2, Interval #2 5:15

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	12.4	18.8	0.1	17
	5	10.7	22.7	0.1	19
Route 4	6	17.5	29.2	0.1	9
Total		40.5	70.7	0.3	14

Arterial Level of Service: EB Route 2, Interval #3 5:30

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	11.0	17.5	0.1	18
	5	9.7	21.9	0.1	20
Route 4	6	15.2	26.9	0.1	10
Total		36.0	66.3	0.3	15

Arterial Level of Service: EB Route 2, Interval #4 5:45

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	10.9	17.5	0.1	18
	5	9.5	21.6	0.1	20
Route 4	6	16.6	28.3	0.1	10
Total		37.1	67.4	0.3	15

Arterial Level of Service: EB Route 2, Entire Run

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	11.2	17.8	0.1	18
	5	9.9	22.3	0.1	19
Route 4	6	16.8	28.9	0.1	9
Total		37.9	68.9	0.3	15

Arterial Level of Service: WB Route 2, Interval #0 4:45

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
John Jones Rd	5	-	-	0.1	-
Risling Ct	4	-	-	0.1	-
	301	-	-	0.1	-
Total		-	-	0.3	-

Arterial Level of Service: WB Route 2, Interval #1 5:00

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
John Jones Rd	5	-	-	0.1	-
Risling Ct	4	6.9	19.0	0.1	23
	301	1.4	9.2	0.1	34
Total		8.3	28.2	0.3	36

Arterial Level of Service: WB Route 2, Interval #2 5:15

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
John Jones Rd	5	-	-	0.1	-
Risling Ct	4	7.9	19.8	0.1	22
	301	1.6	9.3	0.1	34
Total		9.4	29.2	0.3	35

Arterial Level of Service: WB Route 2, Interval #3 5:30

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
John Jones Rd	5	-	-	0.1	-
Risling Ct	4	8.1	20.0	0.1	21
	301	1.5	9.3	0.1	34
Total		9.6	29.3	0.3	35

Arterial Level of Service  
Existing Conditions

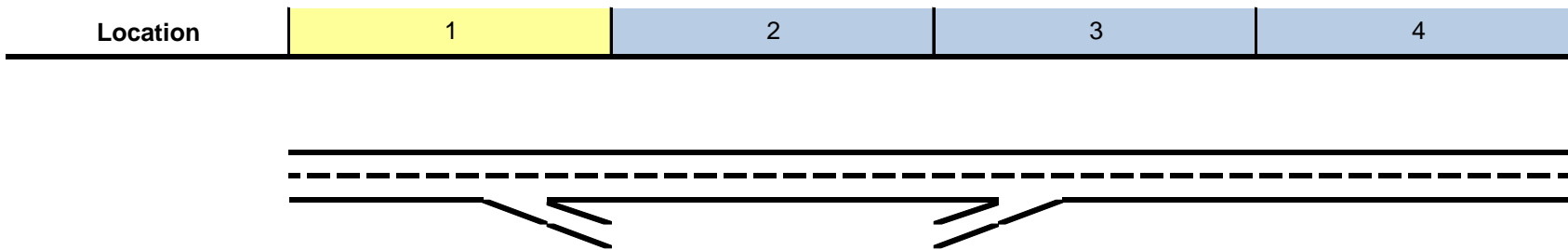
PM Peak Hour

Arterial Level of Service: WB Route 2, Interval #4 5:45

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
John Jones Rd	5	-	-	0.1	-
Risling Ct	4	7.9	19.9	0.1	22
	301	1.5	9.3	0.1	34
Total		9.5	29.2	0.3	35

Arterial Level of Service: WB Route 2, Entire Run

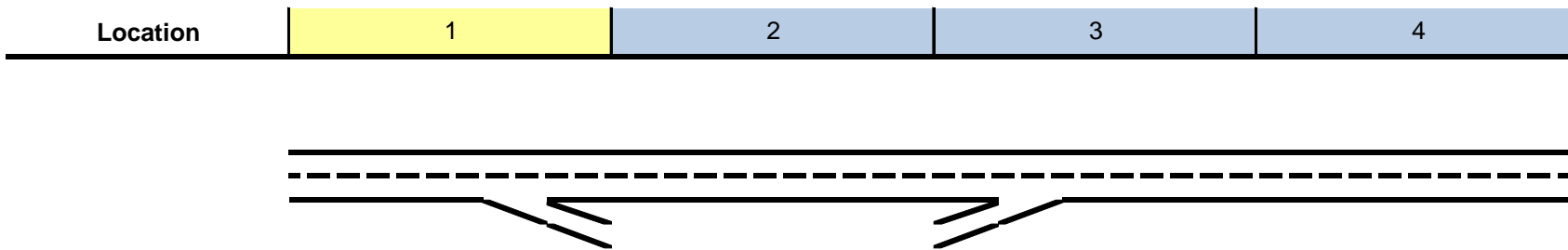
Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
John Jones Rd	5	-	-	0.1	-
Risling Ct	4	7.9	20.1	0.1	21
	301	1.5	9.4	0.1	33
Total		9.4	29.5	0.3	34



**Key**

<> Express Lane (HOV)

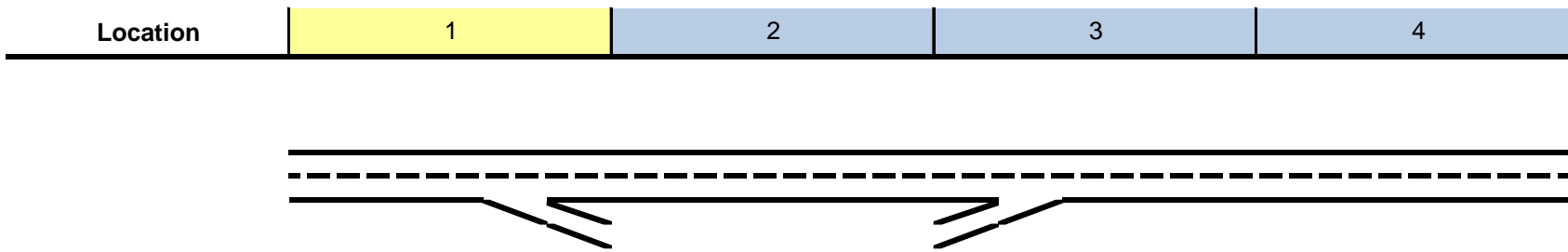
Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Freeway Segment</b>				
Type	Diverge	Basic	Merge	Basic
Length (ft)	1,500	2,560	1,500	5,980
Accel Length			370	
Decel Length	150			
Mainline Volume	1,022	429	429	645
On Ramp Volume			216	
Off Ramp Volume	593			
Express Lane Volume				
EL On Ramp Volume				
EL Off Ramp Volume				
<b>Flow Rate in Entering General Purpose Lanes (GP)</b>				
Volume (vph)	1,022	429	429	645
PHF	0.75	0.75	0.75	0.75
Lanes	2	2	2	2
Terrain	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00
Truck & Bus %	5.9%	5.9%	5.9%	5.9%
RV %	0.0%	0.0%	0.0%	0.0%
E <sub>T</sub>	1.5	1.5	1.5	1.5
E <sub>R</sub>	1.2	1.2	1.2	1.2
f <sub>HV</sub>	0.971	0.971	0.971	0.971
f <sub>P</sub>	1.00	1.00	1.00	1.00
Flow (pcph)	1,403	589	589	885
Flow (pcphpl)	701	294	294	443



**Key**

<> Express Lane (HOV)

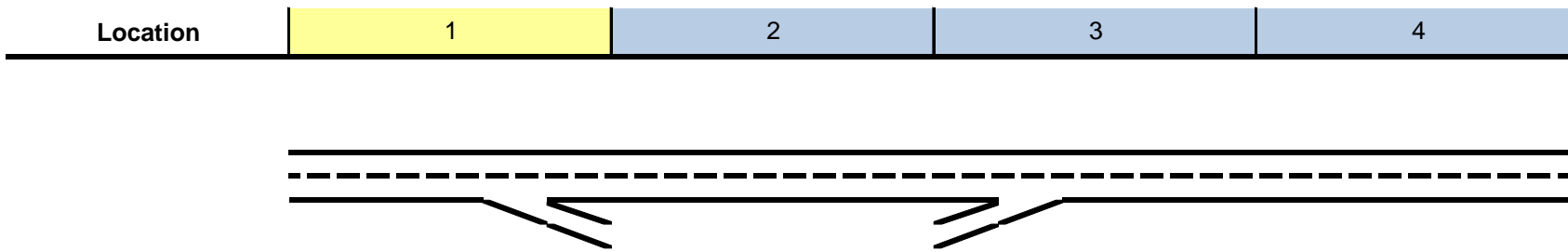
Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Free Flow Speed in Entering GP Lanes</b>				
Lane Width (ft)				
Shoulder Width				
TRD				
$f_{LW}$				
$f_{LC}$				
Calculated FFS				
Measured FFS				
FFS Curve	70	70	70	70
<b>Operations in Entering GP Lanes</b>				
Capacity (pcph)	4,800	4,800	4,800	4,800
v/c ratio	0.29	0.12	0.12	0.18
Speed (mph)	70.0	70.0	70.0	70.0
Density (pcphpl)	10.0	4.2	4.2	6.3
LOS	A	A	A	A
<b>Operations for Segment GP Lanes</b>				
Flow (pcph)			838	
Lanes			2	
Capacity (pcph)			4,800	
v/c ratio			0.17	
Flow Rate (pcphpl)			419	
Speed (mph)			70.0	
Density (pcphpl)			6.0	
LOS			A	
<b>Operations for Exiting GP Lanes</b>				
Flow (pcph)	719			
Lanes	2			
Capacity (pcph)	4,800			
v/c ratio	0.15			
Flow Rate (pcphpl)	359			
Speed (mph)	70.0			
Density (pcphpl)	5.1			
LOS	A			



**Key**

<> Express Lane (HOV)

Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Flow Rate in Express Lanes</b>				
<b>Operations in Express Lanes</b>				
<b>On Ramp Flow Rate</b>				
Volume (vph)			216	
PHF			0.88	
Lanes			1	
Terrain			Level	
Grade %			0.0%	
Grade Length (mi)			0.00	
Truck & Bus %			3.0%	
RV %			0.0%	
$E_T$			1.5	
$E_R$			1.2	
$f_{HV}$			0.985	
$f_P$			1.00	
Flow (pcph)			249	
Flow Rate (pcphpl)			249	
<b>On Ramp Roadway Operations</b>				
Ramp Type			Right	
Ramp Speed (mph)			45	
Ramp Capacity (pcph)			2,100	
Ramp v/c ratio			0.12	

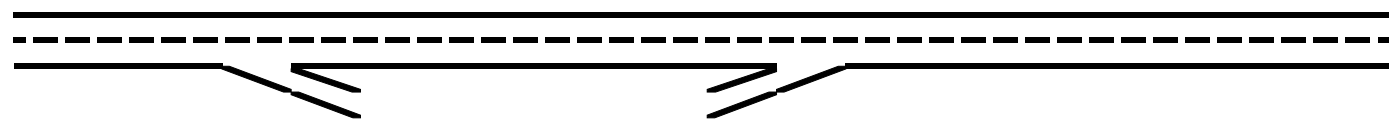


**Key**

<> Express Lane (HOV)

Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Off Ramp Flow Rate</b>				
Volume (vph)	593			
PHF	0.88			
Lanes	1			
Terrain	Level			
Grade %	0.0%			
Grade Length (mi)	0.00			
Truck & Bus %	3.0%			
RV %	0.0%			
$E_T$	1.5			
$E_R$	1.2			
$f_{HV}$	0.985			
$f_P$	1.00			
Flow (pcph)	684			
Flow Rate (pcphpl)	684			
<b>Off Ramp Roadway Operations</b>				
Ramp Type	Right			
Ramp Speed	45			
Ramp Capacity (pcph)	2,100			
Ramp v/c ratio	0.33			
<b>Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps</b>				

Location	1	2	3	4
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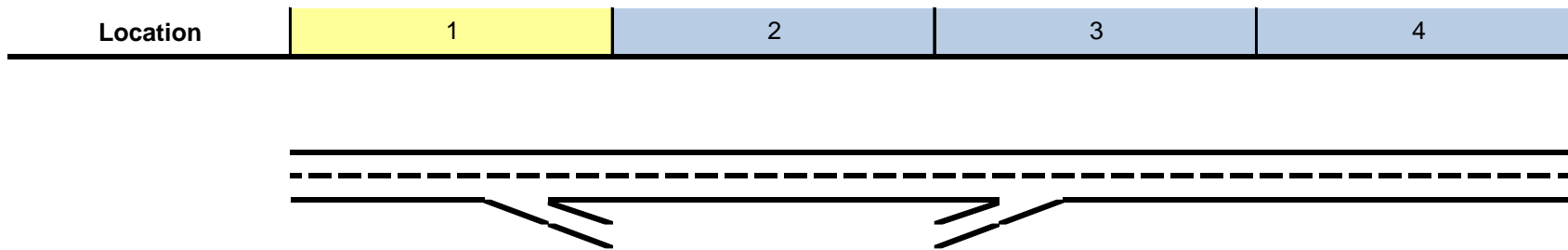


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<> Express Lane (HOV)

Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Merge Influence Area Operations</b>				
Effective $v_p$ (pcph)			589	
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FM}$ (Eqn 13-3)			0.588	
$P_{FM}$ (Eqn 13-4)				
$P_{FM}$ (Eqn 13-5)				
$P_{FM}$			1.000	
$v_{12}$ (pcph)			589	
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)			589	
$v_{R12a}$ (pcph)			838	
Speed Index			0.30	
Area Speed			61.7	
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed			61.7	
v/c ratio			0.18	
Density			9.6	
LOS			A	

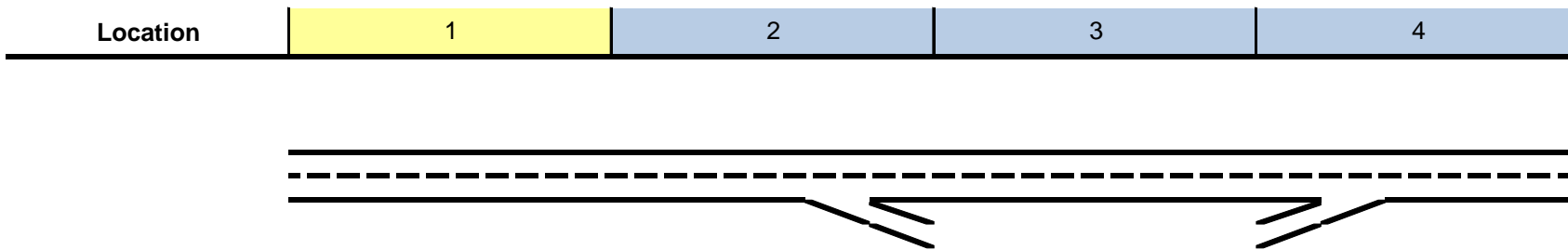




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<> Express Lane (HOV)

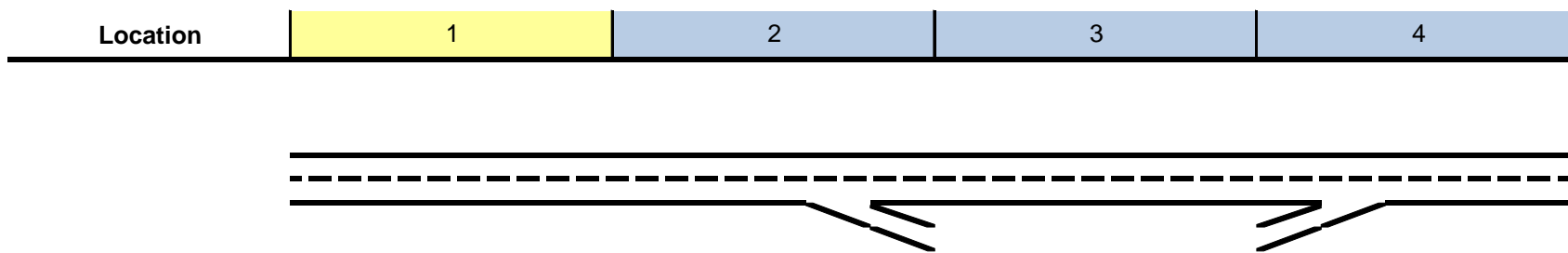
Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Diverge Influence Area Operations</b>				
Effective $v_p$ (pcph)	1,403			
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FD}$ (Eqn 13-9)	0.693			
$P_{FD}$ (Eqn 13-10)				
$P_{FD}$ (Eqn 13-11)				
$P_{FD}$	1.000			
$v_{12}$ (pcph)	1,403			
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)	1,403			
Speed Index	0.36			
Area Speed	59.9			
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed	59.9			
v/c ratio	0.32			
Density	15.0			
LOS	B			
<b>On Ramp to Off Ramp Flow Rate for Weave Segments</b>				
<b>On Ramp to Mainline Flow Rate for Weave Segments</b>				
<b>Mainline to Off Ramp Flow Rate for Weave Segments</b>				
<b>General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments</b>				
<b>Weave Segment Operations</b>				
<b>Summarize Segment Operations</b>				
Segment v/c ratio	0.32	0.12	0.18	0.18
Segment Density	15.0	4.2	9.6	6.3
Segment LOS	B	A	A	A
Over Capacity				



**Key**

<> Express Lane (HOV)

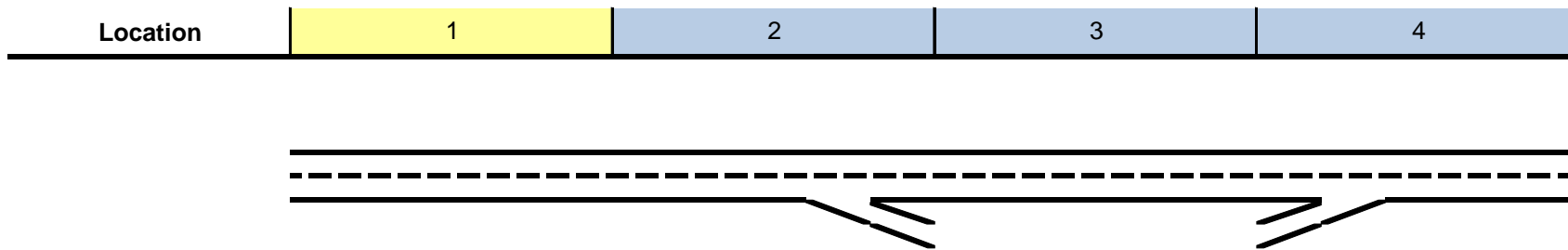
Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Freeway Segment</b>				
Type	Basic	Diverge	Basic	Merge
Length (ft)	4,920	1,500	2,850	1,550
Accel Length				330
Decel Length		170		
Mainline Volume	1,833	1,833	1,543	1,543
On Ramp Volume				885
Off Ramp Volume		290		
Express Lane Volume				
EL On Ramp Volume				
EL Off Ramp Volume				
<b>Flow Rate in Entering General Purpose Lanes (GP)</b>				
Volume (vph)	1,833	1,833	1,543	1,543
PHF	0.84	0.84	0.84	0.84
Lanes	2	2	2	2
Terrain	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00
Truck & Bus %	5.9%	5.9%	5.9%	5.9%
RV %	0.0%	0.0%	0.0%	0.0%
$E_T$	1.5	1.5	1.5	1.5
$E_R$	1.2	1.2	1.2	1.2
$f_{HV}$	0.971	0.971	0.971	0.971
$f_P$	1.00	1.00	1.00	1.00
Flow (pcph)	2,247	2,247	1,891	1,891
Flow (pcphpl)	1,123	1,123	946	946



**Key**

<> Express Lane (HOV)

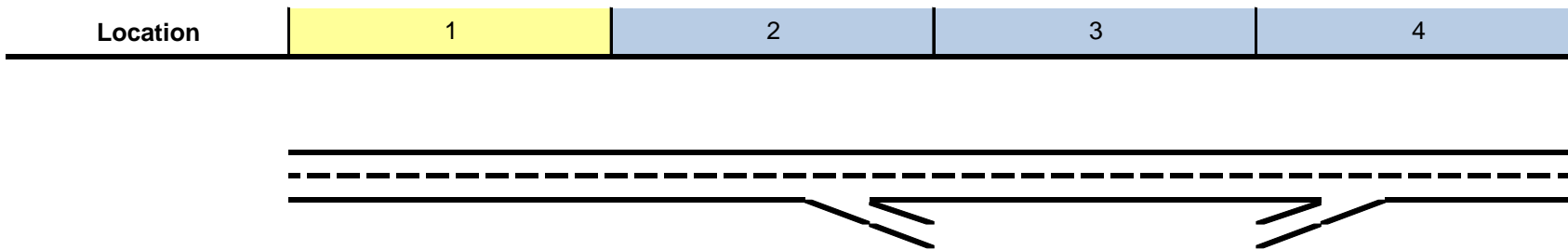
Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Free Flow Speed in Entering GP Lanes</b>				
Lane Width (ft)				
Shoulder Width				
TRD				
$f_{LW}$				
$f_{LC}$				
Calculated FFS				
Measured FFS				
FFS Curve	70	70	70	70
<b>Operations in Entering GP Lanes</b>				
Capacity (pcph)	4,800	4,800	4,800	4,800
v/c ratio	0.47	0.47	0.39	0.39
Speed (mph)	70.0	70.0	70.0	70.0
Density (pcphpl)	16.0	16.0	13.5	13.5
LOS	B	B	B	B
<b>Operations for Segment GP Lanes</b>				
Flow (pcph)				2,907
Lanes				2
Capacity (pcph)				4,800
v/c ratio				0.61
Flow Rate (pcphpl)				1,453
Speed (mph)				69.3
Density (pcphpl)				21.0
LOS				C



**Key**

<> Express Lane (HOV)

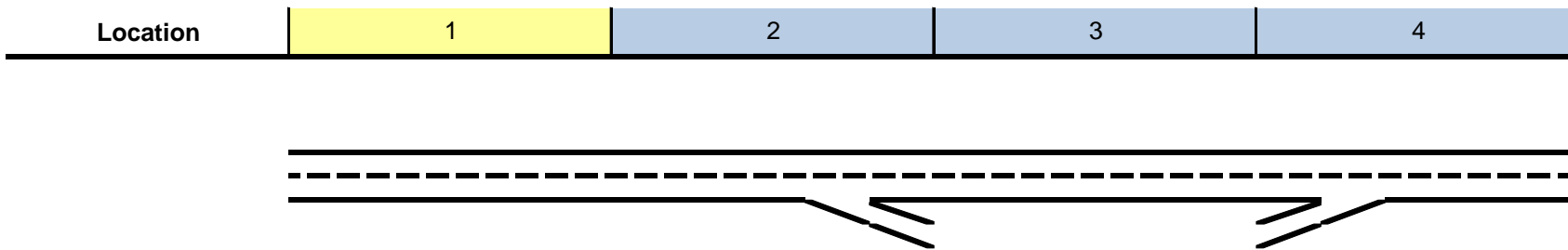
Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Operations for Exiting GP Lanes</b>				
Flow (pcph)		1,914		
Lanes		2		
Capacity (pcph)		4,800		
v/c ratio		0.40		
Flow Rate (pcphpl)		957		
Speed (mph)		70.0		
Density (pcphpl)		13.7		
LOS		B		
<b>Flow Rate in Express Lanes</b>				
<b>Operations in Express Lanes</b>				
FFS	65	65	65	65
Capacity (pcph)				
v/c ratio				
<b>On Ramp Flow Rate</b>				
<b>On Ramp Roadway Operations</b>				
Ramp Type				Right
Ramp Speed (mph)				45
Ramp Capacity (pcph)				2,100
Ramp v/c ratio				0.48



**Key**

<> Express Lane (HOV)

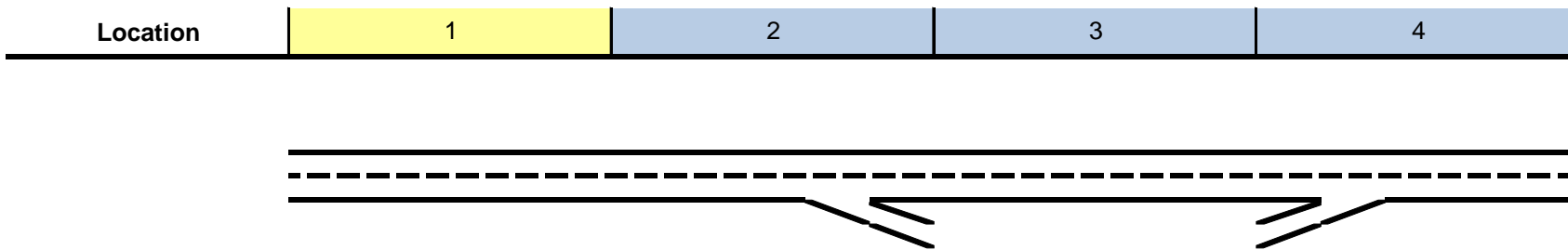
Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Off Ramp Flow Rate</b>				
Volume (vph)		290		
PHF		0.88		
Lanes		1		
Terrain		Level		
Grade %		0.0%		
Grade Length (mi)		0.00		
Truck & Bus %		2.0%		
RV %		0.0%		
$E_T$		1.5		
$E_R$		1.2		
$f_{HV}$		0.990		
$f_P$		1.00		
Flow (pcph)		333		
Flow Rate (pcphpl)		333		
<b>Off Ramp Roadway Operations</b>				
Ramp Type		Right		
Ramp Speed		45		
Ramp Capacity (pcph)		2,100		
Ramp v/c ratio		0.16		
<b>Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps</b>				



**Key**

<> Express Lane (HOV)

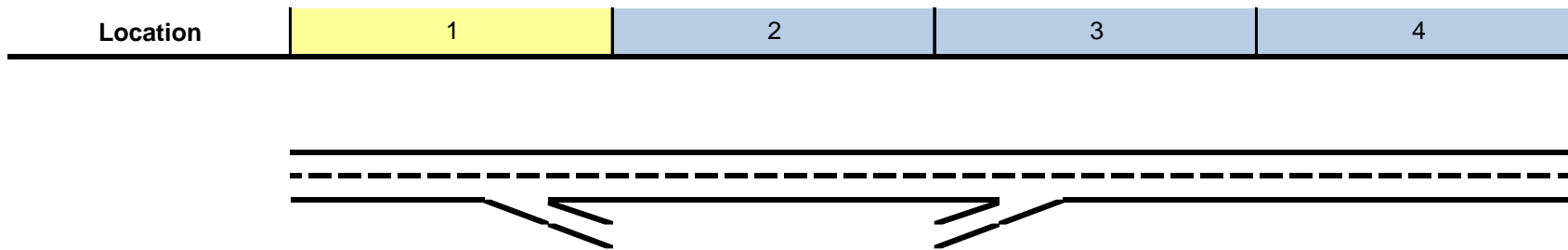
Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Merge Influence Area Operations</b>				
Effective $v_p$ (pcph)				1,891
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FM}$ (Eqn 13-3)				0.587
$P_{FM}$ (Eqn 13-4)				
$P_{FM}$ (Eqn 13-5)				
$P_{FM}$				1.000
$v_{12}$ (pcph)				1,891
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)				1,891
$v_{R12a}$ (pcph)				2,907
Speed Index				0.36
Area Speed				59.8
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed				59.8
v/c ratio				0.63
Density				25.6
LOS				C



**Key**

<> Express Lane (HOV)

Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Diverge Influence Area Operations</b>				
Effective $v_p$ (pcph)		2,247		
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FD}$ (Eqn 13-9)		0.689		
$P_{FD}$ (Eqn 13-10)				
$P_{FD}$ (Eqn 13-11)				
$P_{FD}$		1.000		
$v_{12}$ (pcph)		2,247		
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)		2,247		
Speed Index		0.33		
Area Speed		60.8		
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed		60.8		
v/c ratio		0.51		
Density		22.0		
LOS		C		
<b>On Ramp to Off Ramp Flow Rate for Weave Segments</b>				
<b>On Ramp to Mainline Flow Rate for Weave Segments</b>				
<b>Mainline to Off Ramp Flow Rate for Weave Segments</b>				
<b>General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments</b>				
<b>Weave Segment Operations</b>				
<b>Summarize Segment Operations</b>				
Segment v/c ratio	0.47	0.51	0.39	0.63
Segment Density	16.0	22.0	13.5	25.6
Segment LOS	B	C	B	C
Over Capacity				

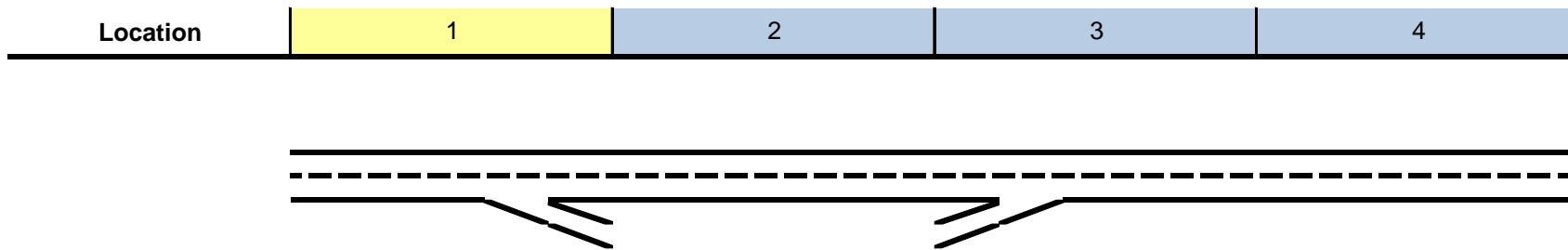


**Key**

<> Express Lane (HOV)

Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Freeway Segment</b>				
Type	Diverge	Basic	Merge	Basic
Length (ft)	1,500	2,560	1,500	5,980
Accel Length			370	
Decel Length	150			
Mainline Volume	1,875	995	995	1,243
On Ramp Volume			248	
Off Ramp Volume	880			
Express Lane Volume				
EL On Ramp Volume				
EL Off Ramp Volume				
<b>Flow Rate in Entering General Purpose Lanes (GP)</b>				
Volume (vph)	1,875	995	995	1,243
PHF	0.86	0.86	0.86	0.86
Lanes	2	2	2	2
Terrain	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00
Truck & Bus %	5.9%	5.9%	5.9%	5.9%
RV %	0.0%	0.0%	0.0%	0.0%
$E_T$	1.5	1.5	1.5	1.5
$E_R$	1.2	1.2	1.2	1.2
$f_{HV}$	0.971	0.971	0.971	0.971
$f_P$	1.00	1.00	1.00	1.00
Flow (pcph)	2,245	1,191	1,191	1,488
Flow (pcphpl)	1,122	596	596	744



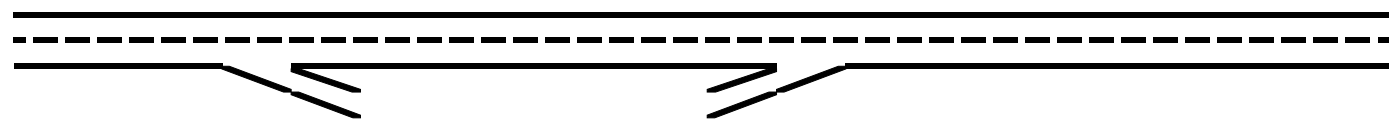


**Key**

<> Express Lane (HOV)

Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Free Flow Speed in Entering GP Lanes</b>				
Lane Width (ft)				
Shoulder Width				
TRD				
$f_{LW}$				
$f_{LC}$				
Calculated FFS				
Measured FFS				
FFS Curve	70	70	70	70
<b>Operations in Entering GP Lanes</b>				
Capacity (pcph)	4,800	4,800	4,800	4,800
v/c ratio	0.47	0.25	0.25	0.31
Speed (mph)	70.0	70.0	70.0	70.0
Density (pcphpl)	16.0	8.5	8.5	10.6
LOS	B	A	A	A
<b>Operations for Segment GP Lanes</b>				
Flow (pcph)			1,462	
Lanes			2	
Capacity (pcph)			4,800	
v/c ratio			0.30	
Flow Rate (pcphpl)			731	
Speed (mph)			70.0	
Density (pcphpl)			10.4	
LOS			A	
<b>Operations for Exiting GP Lanes</b>				
Flow (pcph)	1,284			
Lanes	2			
Capacity (pcph)	4,800			
v/c ratio	0.27			
Flow Rate (pcphpl)	642			
Speed (mph)	70.0			
Density (pcphpl)	9.2			
LOS	A			

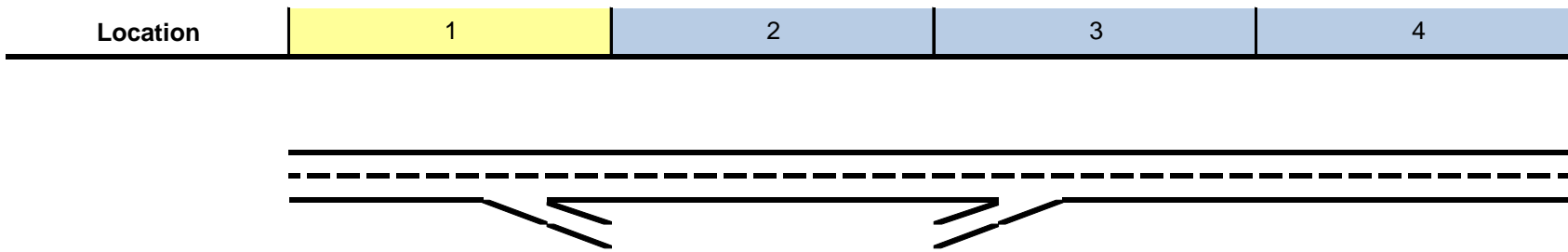
<b>Location</b>	1	2	3	4
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**Key**

<> Express Lane (HOV)

Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Flow Rate in Express Lanes</b>				
<b>Operations in Express Lanes</b>				
<b>On Ramp Flow Rate</b>				
Volume (vph)			248	
PHF			0.93	
Lanes			1	
Terrain			Level	
Grade %			0.0%	
Grade Length (mi)			0.00	
Truck & Bus %			3.0%	
RV %			0.0%	
$E_T$			1.5	
$E_R$			1.2	
$f_{HV}$			0.985	
$f_P$			1.00	
Flow (pcph)			271	
Flow Rate (pcphpl)			271	
<b>On Ramp Roadway Operations</b>				
Ramp Type			Right	
Ramp Speed (mph)			45	
Ramp Capacity (pcph)			2,100	
Ramp v/c ratio			0.13	

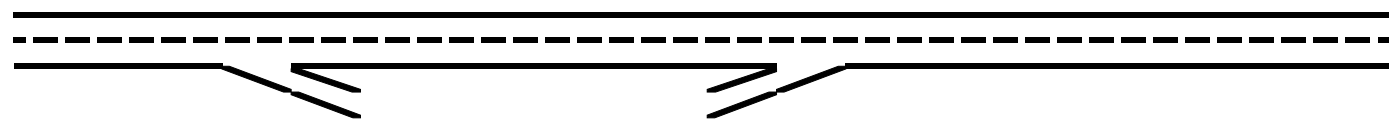


**Key**

<> Express Lane (HOV)

Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Off Ramp Flow Rate</b>				
Volume (vph)	880			
PHF	0.93			
Lanes	1			
Terrain	Level			
Grade %	0.0%			
Grade Length (mi)	0.00			
Truck & Bus %	3.0%			
RV %	0.0%			
$E_T$	1.5			
$E_R$	1.2			
$f_{HV}$	0.985			
$f_P$	1.00			
Flow (pcph)	960			
Flow Rate (pcphpl)	960			
<b>Off Ramp Roadway Operations</b>				
Ramp Type	Right			
Ramp Speed	45			
Ramp Capacity (pcph)	2,100			
Ramp v/c ratio	0.46			
<b>Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps</b>				

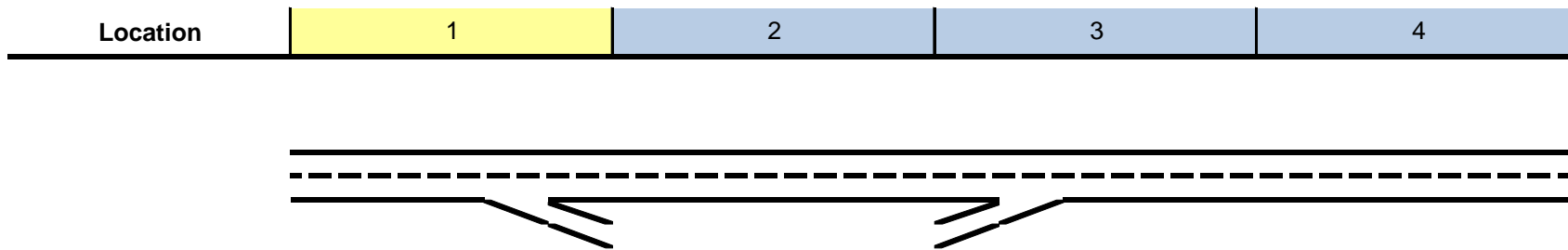
Location	1	2	3	4
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**Key**

<> Express Lane (HOV)

Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Merge Influence Area Operations</b>				
Effective $v_p$ (pcph)			1,191	
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FM}$ (Eqn 13-3)			0.588	
$P_{FM}$ (Eqn 13-4)				
$P_{FM}$ (Eqn 13-5)				
$P_{FM}$			1.000	
$v_{12}$ (pcph)			1,191	
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)			1,191	
$v_{R12a}$ (pcph)			1,462	
Speed Index			0.30	
Area Speed			61.5	
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed			61.5	
v/c ratio			0.32	
Density			14.4	
LOS			B	



**Key**

<> Express Lane (HOV)

Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Diverge Influence Area Operations</b>				
Effective $v_p$ (pcph)	2,245			
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FD}$ (Eqn 13-9)	0.660			
$P_{FD}$ (Eqn 13-10)				
$P_{FD}$ (Eqn 13-11)				
$P_{FD}$	1.000			
$v_{12}$ (pcph)	2,245			
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)	2,245			
Speed Index	0.38			
Area Speed	59.2			
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed	59.2			
v/c ratio	0.51			
Density	22.2			
LOS	C			
<b>On Ramp to Off Ramp Flow Rate for Weave Segments</b>				
<b>On Ramp to Mainline Flow Rate for Weave Segments</b>				
<b>Mainline to Off Ramp Flow Rate for Weave Segments</b>				
<b>General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments</b>				
<b>Weave Segment Operations</b>				
<b>Summarize Segment Operations</b>				
Segment v/c ratio	0.51	0.25	0.32	0.31
Segment Density	22.2	8.5	14.4	10.6
Segment LOS	C	A	B	A
Over Capacity				

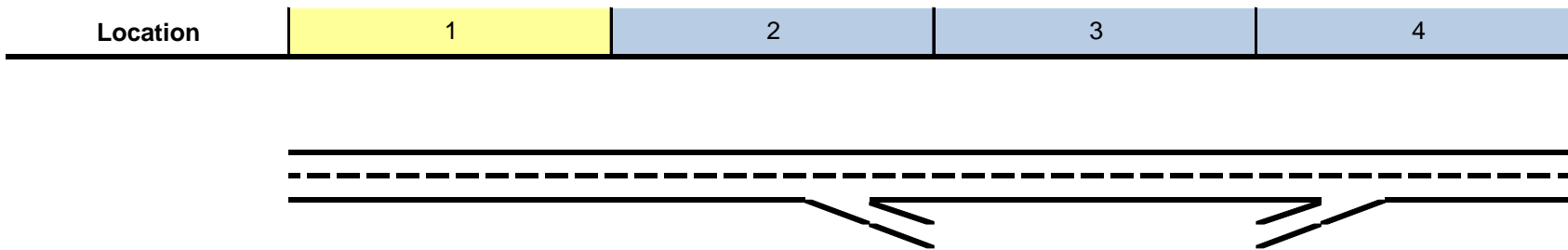
<b>Location</b>	1	2	3	4
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**Key**

<> Express Lane (HOV)

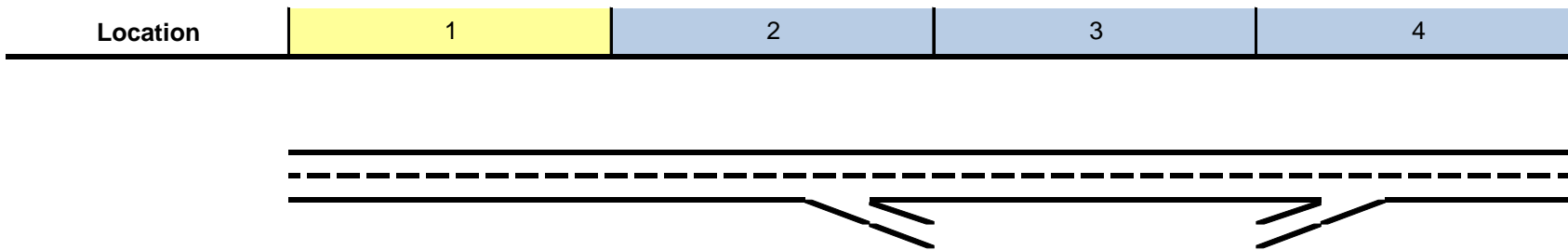
Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Freeway Segment</b>				
Type	Basic	Diverge	Basic	Merge
Length (ft)	4,920	1,500	2,850	1,550
Accel Length				330
Decel Length		170		
Mainline Volume	1,085	1,085	878	878
On Ramp Volume				480
Off Ramp Volume		207		
Express Lane Volume				
EL On Ramp Volume				
EL Off Ramp Volume				
<b>Flow Rate in Entering General Purpose Lanes (GP)</b>				
Volume (vph)	1,085	1,085	878	878
PHF	0.93	0.93	0.93	0.93
Lanes	2	2	2	2
Terrain	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00
Truck & Bus %	5.9%	5.9%	5.9%	5.9%
RV %	0.0%	0.0%	0.0%	0.0%
E <sub>T</sub>	1.5	1.5	1.5	1.5
E <sub>R</sub>	1.2	1.2	1.2	1.2
f <sub>HV</sub>	0.971	0.971	0.971	0.971
f <sub>P</sub>	1.00	1.00	1.00	1.00
Flow (pcph)	1,201	1,201	972	972
Flow (pcphpl)	601	601	486	486



**Key**

<> Express Lane (HOV)

Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Free Flow Speed in Entering GP Lanes</b>				
Lane Width (ft)				
Shoulder Width				
TRD				
$f_{LW}$				
$f_{LC}$				
Calculated FFS				
Measured FFS				
FFS Curve	70	70	70	70
<b>Operations in Entering GP Lanes</b>				
Capacity (pcph)	4,800	4,800	4,800	4,800
v/c ratio	0.25	0.25	0.20	0.20
Speed (mph)	70.0	70.0	70.0	70.0
Density (pcphpl)	8.6	8.6	6.9	6.9
LOS	A	A	A	A
<b>Operations for Segment GP Lanes</b>				
Flow (pcph)				1,493
Lanes				2
Capacity (pcph)				4,800
v/c ratio				0.31
Flow Rate (pcphpl)				747
Speed (mph)				70.0
Density (pcphpl)				10.7
LOS				A
<b>Operations for Exiting GP Lanes</b>				
Flow (pcph)		976		
Lanes		2		
Capacity (pcph)		4,800		
v/c ratio		0.20		
Flow Rate (pcphpl)		488		
Speed (mph)		70.0		
Density (pcphpl)		7.0		
LOS		A		

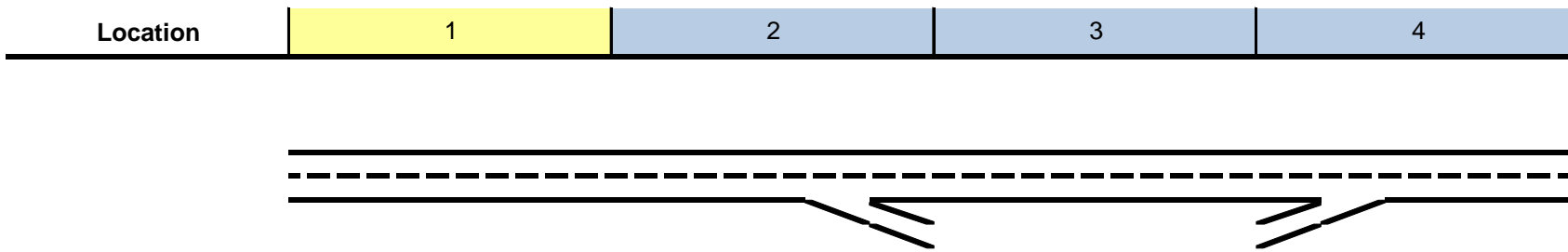


**Key**

<> Express Lane (HOV)

Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Flow Rate in Express Lanes</b>				
<b>Operations in Express Lanes</b>				
<b>On Ramp Flow Rate</b>				
Volume (vph)				480
PHF				0.93
Lanes				1
Terrain				Level
Grade %				0.0%
Grade Length (mi)				0.00
Truck & Bus %				2.0%
RV %				0.0%
$E_T$				1.5
$E_R$				1.2
$f_{HV}$				0.990
$f_P$				1.00
Flow (pcph)				521
Flow Rate (pcphpl)				521
<b>On Ramp Roadway Operations</b>				
Ramp Type				Right
Ramp Speed (mph)				45
Ramp Capacity (pcph)				2,100
Ramp v/c ratio				0.25

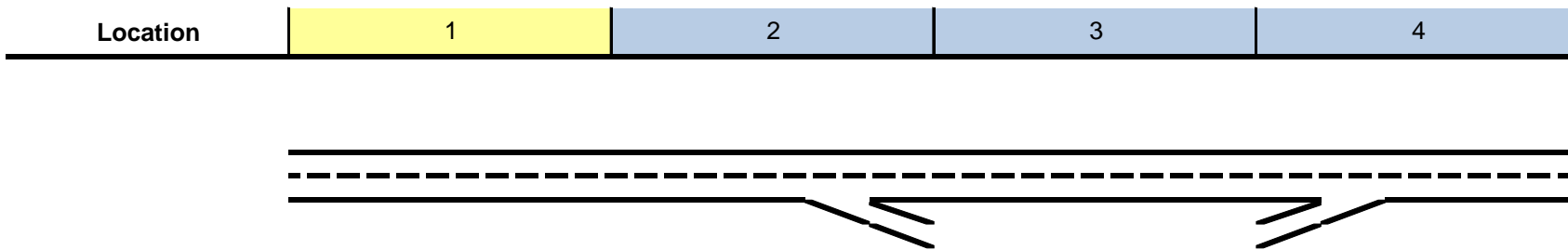




**Key**

<> Express Lane (HOV)

Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Off Ramp Flow Rate</b>				
Volume (vph)		207		
PHF		0.93		
Lanes		1		
Terrain		Level		
Grade %		0.0%		
Grade Length (mi)		0.00		
Truck & Bus %		2.0%		
RV %		0.0%		
$E_T$		1.5		
$E_R$		1.2		
$f_{HV}$		0.990		
$f_P$		1.00		
Flow (pcph)		225		
Flow Rate (pcphpl)		225		
<b>Off Ramp Roadway Operations</b>				
Ramp Type		Right		
Ramp Speed		45		
Ramp Capacity (pcph)		2,100		
Ramp v/c ratio		0.11		
<b>Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps</b>				

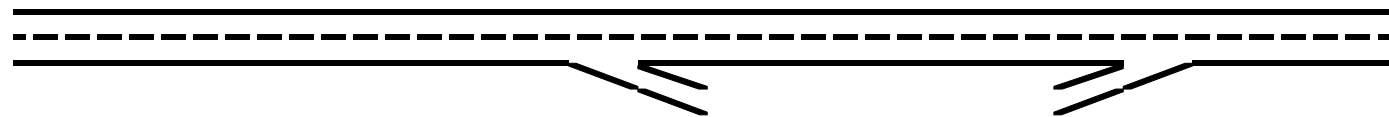


**Key**

<> Express Lane (HOV)

Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Merge Influence Area Operations</b>				
Effective $v_p$ (pcph)				972
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FM}$ (Eqn 13-3)				0.587
$P_{FM}$ (Eqn 13-4)				
$P_{FM}$ (Eqn 13-5)				
$P_{FM}$				1.000
$v_{12}$ (pcph)				972
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)				972
$v_{R12a}$ (pcph)				1,493
Speed Index				0.31
Area Speed				61.4
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed				61.4
v/c ratio				0.32
Density				14.8
LOS				B

Location	1	2	3	4
----------	---	---	---	---



**Key**

<> Express Lane (HOV)

Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Diverge Influence Area Operations</b>				
Effective $v_p$ (pcph)		1,201		
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FD}$ (Eqn 13-9)		0.720		
$P_{FD}$ (Eqn 13-10)				
$P_{FD}$ (Eqn 13-11)				
$P_{FD}$		1.000		
$v_{12}$ (pcph)		1,201		
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)		1,201		
Speed Index		0.32		
Area Speed		61.1		
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed		61.1		
v/c ratio		0.27		
Density		13.1		
LOS		B		
<b>On Ramp to Off Ramp Flow Rate for Weave Segments</b>				
<b>On Ramp to Mainline Flow Rate for Weave Segments</b>				
<b>Mainline to Off Ramp Flow Rate for Weave Segments</b>				
<b>General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments</b>				
<b>Weave Segment Operations</b>				
<b>Summarize Segment Operations</b>				
Segment v/c ratio	0.25	0.27	0.20	0.32
Segment Density	8.6	13.1	6.9	14.8
Segment LOS	A	B	A	B
Over Capacity				

# Trip Generation Counts

# VOLUME

N Diameter Dr S/O E 8th St

Day: Tuesday  
Date: 4/11/2017

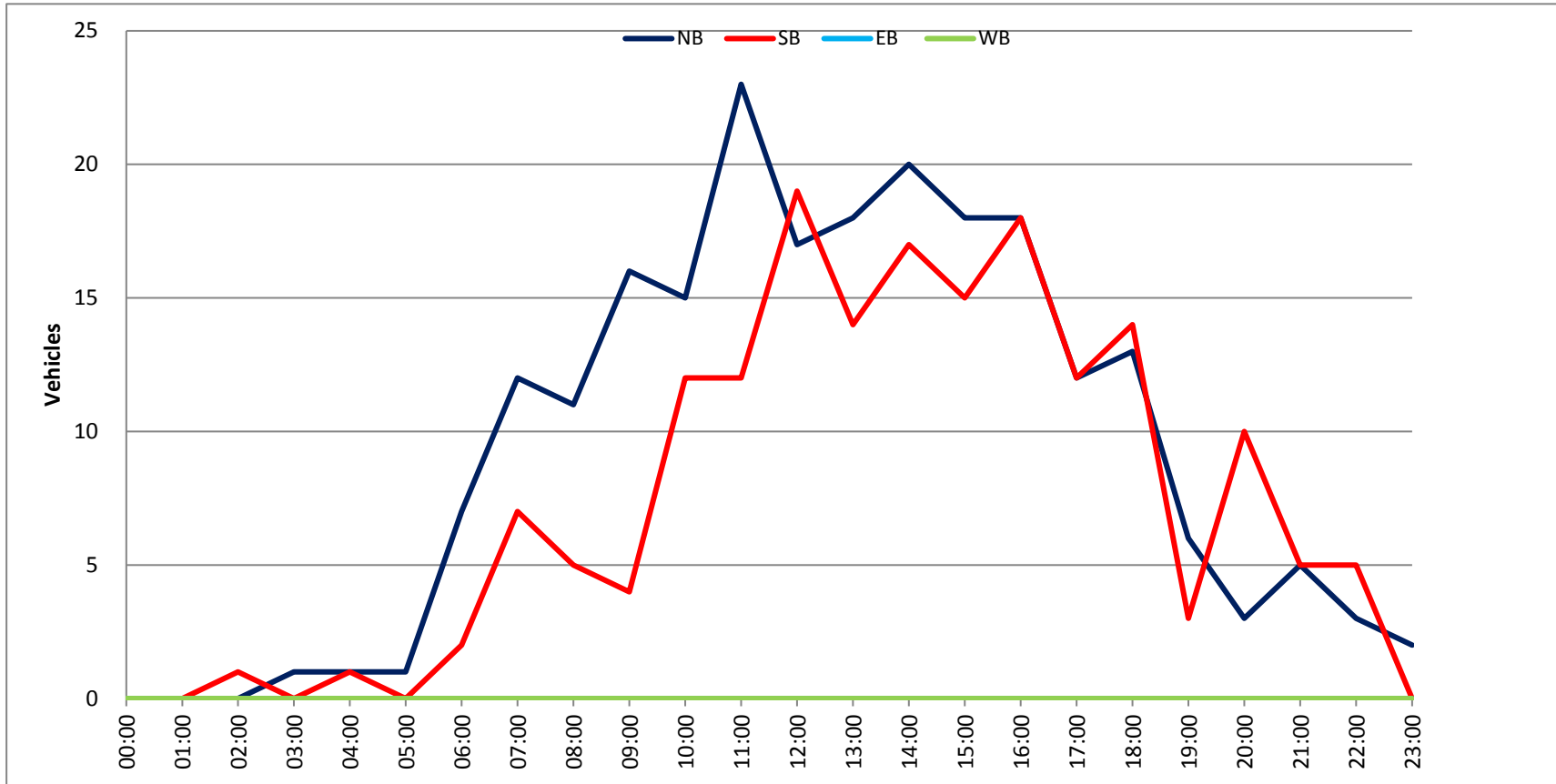
City: Davis  
Project #: CA17\_7291\_001

DAILY TOTALS	NB	SB	EB	WB	Total
	222	176	0	0	398

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	0	0			0	12:00	4	4			8
00:15	0	0			0	12:15	6	5			11
00:30	0	0			0	12:30	5	5			10
00:45	0	0			0	12:45	2	17	5	19	36
01:00	0	0			0	13:00	2	2			4
01:15	0	0			0	13:15	7	3			10
01:30	0	0			0	13:30	6	6			12
01:45	0	0			0	13:45	3	18	3	14	32
02:00	0	0			0	14:00	5	5			10
02:15	0	1			1	14:15	7	4			11
02:30	0	0			0	14:30	6	4			10
02:45	0	0	1		1	14:45	2	20	4	17	37
03:00	0	0			0	15:00	5	4			9
03:15	1	0			1	15:15	6	4			10
03:30	0	0			0	15:30	3	4			7
03:45	0	1	0		1	15:45	4	18	3	15	33
04:00	0	0			0	16:00	6	5			11
04:15	0	0			0	16:15	8	1			9
04:30	1	1			2	16:30	3	7			10
04:45	0	1	0	1	2	16:45	1	18	5	18	36
05:00	0	0			0	17:00	3	3			6
05:15	0	0			0	17:15	5	2			7
05:30	0	0			0	17:30	1	2			3
05:45	1	1	0		1	17:45	3	12	5	12	24
06:00	3	1			4	18:00	4	4			8
06:15	1	0			1	18:15	3	1			4
06:30	0	1			1	18:30	5	3			8
06:45	3	7	0	2	9	18:45	1	13	6	14	27
07:00	1	0			1	19:00	2	1			3
07:15	2	3			5	19:15	2	0			2
07:30	5	2			7	19:30	1	1			2
07:45	4	12	2	7	19	19:45	1	6	1	3	9
08:00	1	2			3	20:00	1	2			3
08:15	6	1			7	20:15	0	2			2
08:30	2	1			3	20:30	1	1			2
08:45	2	11	1	5	16	20:45	1	3	5	10	13
09:00	5	0			5	21:00	2	2			4
09:15	5	1			6	21:15	3	2			5
09:30	1	2			3	21:30	0	0			0
09:45	5	16	1	4	20	21:45	0	5	1	5	10
10:00	5	4			9	22:00	0	0			0
10:15	2	1			3	22:15	2	1			3
10:30	3	3			6	22:30	0	2			2
10:45	5	15	4	12	27	22:45	1	3	2	5	8
11:00	5	2			7	23:00	2	0			2
11:15	7	5			12	23:15	0	0			0
11:30	4	1			5	23:30	0	0			0
11:45	7	23	4	12	35	23:45	0	2	0		2
<b>TOTALS</b>	87	44			131	<b>TOTALS</b>	135	132			267
<b>SPLIT %</b>	66.4%	33.6%			32.9%	<b>SPLIT %</b>	50.6%	49.4%			67.1%

DAILY TOTALS	NB	SB	EB	WB	Total
	222	176	0	0	398

AM Peak Hour	11:00	11:45	11:45	PM Peak Hour	13:15	12:00	13:30				
AM Pk Volume	23	18	40	PM Pk Volume	21	19	39				
Pk Hr Factor	0.821	0.900	0.909	Pk Hr Factor	0.750	0.950	0.813				
7 - 9 Volume	23	12	0	0	35	4 - 6 Volume	30	30	0	0	60
7 - 9 Peak Hour	07:30	07:15	07:30	4 - 6 Peak Hour	16:00	16:00	16:00	16:00			16:00
7 - 9 Pk Volume	16	9	0	0	23	4 - 6 Pk Volume	18	18	0	0	36
Pk Hr Factor	0.667	0.750	0.000	0.000	0.821	Pk Hr Factor	0.563	0.643	0.000	0.000	0.818



## National Data and Surveying Services

City of Davis  
 All Vehicles & Uturns On Unshifted  
 Peds & Bikes On Bank 1  
 Nothing On Bank 2

(323) 782-0090  
[info@ndsdata.com](mailto:info@ndsdata.com)

File Name : 17-7290-001 N Diameter Dr & S/O E 8th St  
 Date : 4/11/2017

### Unshifted Count = All Vehicles & Uturns

START TIME	N Diameter Dr Southbound					S/O E 8th St Westbound					N Diameter Dr Northbound					S/O E 8th St Eastbound					Total	Uturns Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL		
7:00	0	0	0	0	0	0	15	0	0	15	1	0	0	0	1	0	2	0	0	2	18	0
7:15	0	0	0	0	0	1	29	0	0	30	1	0	1	0	2	0	10	2	0	12	44	0
7:30	0	0	0	0	0	0	34	0	0	34	3	0	2	0	5	0	14	2	0	16	55	0
7:45	0	0	0	0	0	0	24	0	0	24	1	0	3	0	4	0	22	2	1	25	53	1
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>102</b>	<b>0</b>	<b>0</b>	<b>103</b>	<b>6</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>12</b>	<b>0</b>	<b>48</b>	<b>6</b>	<b>1</b>	<b>55</b>	<b>170</b>	<b>1</b>
8:00	0	0	0	0	0	0	42	0	0	42	1	0	0	0	1	0	20	2	0	22	65	0
8:15	0	0	0	0	0	1	32	0	0	33	6	0	0	0	6	0	14	0	0	14	53	0
8:30	0	0	0	0	0	1	30	0	1	32	2	0	0	0	2	0	23	0	0	23	57	1
8:45	0	0	0	0	0	0	24	0	0	24	2	0	0	0	2	0	14	1	0	15	41	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>128</b>	<b>0</b>	<b>1</b>	<b>131</b>	<b>11</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11</b>	<b>0</b>	<b>71</b>	<b>3</b>	<b>0</b>	<b>74</b>	<b>216</b>	<b>1</b>
16:00	0	0	0	0	0	2	29	0	0	31	5	0	1	0	6	0	31	3	0	34	71	0
16:15	0	0	0	0	0	0	28	0	0	28	6	0	2	0	8	0	33	1	0	34	70	0
16:30	0	0	0	0	0	1	15	0	0	16	3	0	0	0	3	0	26	6	0	32	51	0
16:45	0	0	0	0	0	0	26	0	0	26	1	0	0	0	1	0	51	5	0	56	83	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>98</b>	<b>0</b>	<b>0</b>	<b>101</b>	<b>15</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>18</b>	<b>0</b>	<b>141</b>	<b>15</b>	<b>0</b>	<b>156</b>	<b>275</b>	<b>0</b>
17:00	0	0	0	0	0	0	25	0	0	25	2	0	1	0	3	0	38	3	1	42	70	1
17:15	0	0	0	0	0	1	37	0	0	38	4	0	1	0	5	0	64	1	2	67	110	2
17:30	0	0	0	0	0	1	35	0	0	36	1	0	0	0	1	0	38	1	0	39	76	0
17:45	0	0	0	0	0	1	25	0	0	26	3	0	0	0	3	0	35	4	0	39	68	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>122</b>	<b>0</b>	<b>0</b>	<b>125</b>	<b>10</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>12</b>	<b>0</b>	<b>175</b>	<b>9</b>	<b>3</b>	<b>187</b>	<b>324</b>	<b>3</b>
<b>Grand Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>450</b>	<b>0</b>	<b>1</b>	<b>460</b>	<b>42</b>	<b>0</b>	<b>11</b>	<b>0</b>	<b>53</b>	<b>0</b>	<b>435</b>	<b>33</b>	<b>4</b>	<b>472</b>	<b>985</b>	<b>5</b>
Apprch %	0.0%	0.0%	0.0%	0.0%		2.0%	97.8%	0.0%	0.2%		79.2%	0.0%	20.8%	0.0%		0.0%	92.2%	7.0%	0.8%			
Total %	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	45.7%	0.0%	0.1%	46.7%	4.3%	0.0%	1.1%	0.0%	5.4%	0.0%	44.2%	3.4%	0.4%	47.9%	100.0%	

AM PEAK HOUR	N Diameter Dr Southbound					S/O E 8th St Westbound					N Diameter Dr Northbound					S/O E 8th St Eastbound					Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 07:45 to 08:45																					
Peak Hour For Entire Intersection Begins at 07:45																					
7:45	0	0	0	0	0	0	24	0	0	24	1	0	3	0	4	0	22	2	1	25	53
8:00	0	0	0	0	0	0	42	0	0	42	1	0	0	0	1	0	20	2	0	22	65
8:15	0	0	0	0	0	1	32	0	0	33	6	0	0	0	6	0	14	0	0	14	53
8:30	0	0	0	0	0	1	30	0	1	32	2	0	0	0	2	0	23	0	0	23	57
Total Volume	0	0	0	0	0	2	128	0	1	131	10	0	3	0	13	0	79	4	1	84	228
% App Total	0.0%	0.0%	0.0%	0.0%		1.5%	97.7%	0.0%	0.8%		76.9%	0.0%	23.1%	0.0%		0.0%	94.0%	4.8%	1.2%		
PHF	.000	.000	.000	.000	.000	.500	.762	.000	.250	.780	.417	.000	.250	.000	.542	.000	.859	.500	.250	.840	.877

PM PEAK HOUR	N Diameter Dr Southbound					S/O E 8th St Westbound					N Diameter Dr Northbound					S/O E 8th St Eastbound					Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 16:45 to 17:45																					
Peak Hour For Entire Intersection Begins at 16:45																					
16:45	0	0	0	0	0	0	26	0	0	26	1	0	0	0	1	0	51	5	0	56	83
17:00	0	0	0	0	0	0	25	0	0	25	2	0	1	0	3	0	38	3	1	42	70
17:15	0	0	0	0	0	1	37	0	0	38	4	0	1	0	5	0	64	1	2	67	110
17:30	0	0	0	0	0	1	35	0	0	36	1	0	0	0	1	0	38	1	0	39	76
Total Volume	0	0	0	0	0	2	123	0	0	125	8	0	2	0	10	0	191	10	3	204	339
% App Total	0.0%	0.0%	0.0%	0.0%		1.6%	98.4%	0.0%	0.0%		80.0%	0.0%	20.0%	0.0%		0.0%	93.6%	4.9%	1.5%		
PHF	.000	.000	.000	.000	.000	.500	.831	.000	.000	.822	.500	.000	.500	.000	.500	.000	.746	.500	.375	.761	.770

## National Data and Surveying Services

City of Davis  
 All Vehicles & Uturns On Unshifted  
 Peds & Bikes On Bank 1  
 Nothing On Bank 2

(323) 782-0090  
[info@ndsdata.com](mailto:info@ndsdata.com)

File Name : 17-7290-001 N Diameter Dr & S/O E 8th St  
 Date : 4/11/2017

### Bank 1 Count = Peds & Bikes

START TIME	N Diameter Dr Southbound					S/O E 8th St Westbound					N Diameter Dr Northbound					S/O E 8th St Eastbound					Total	Peds Total
	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL		
7:00	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	3	0
7:15	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	1	0	0	1	7	0
7:30	0	0	0	0	0	0	7	0	0	7	0	0	0	2	0	0	2	0	0	2	9	2
7:45	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	2	0	0	2	6	0
<b>Total</b>	0	0	0	0	0	0	20	0	0	20	0	0	0	2	0	0	5	0	0	5	25	2
8:00	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	4	0	0	4	13	0
8:15	0	0	0	0	0	0	6	0	1	6	0	0	0	1	0	0	0	0	0	0	6	2
8:30	0	0	0	0	0	0	5	0	0	5	2	0	0	0	2	0	1	0	0	1	8	0
8:45	0	0	0	0	0	0	2	0	0	2	0	0	0	1	0	0	0	0	0	0	2	1
<b>Total</b>	0	0	0	0	0	0	22	0	1	22	2	0	0	2	2	0	5	0	0	5	29	3
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	5	0	0	5	5	2
16:15	0	0	0	0	0	0	2	0	0	2	0	0	0	3	0	0	6	0	0	6	8	3
16:30	0	0	0	0	0	0	2	0	0	2	1	0	0	0	1	0	4	0	0	4	7	0
16:45	0	0	0	0	0	0	3	0	0	3	0	0	0	1	0	0	2	1	0	3	6	1
<b>Total</b>	0	0	0	0	0	0	7	0	0	7	1	0	0	6	1	0	17	1	0	18	26	6
17:00	0	0	0	0	0	0	1	0	0	1	0	0	0	1	0	0	2	1	0	3	4	1
17:15	0	0	0	0	0	0	1	0	0	1	0	0	1	1	1	0	5	0	0	5	7	1
17:30	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	12	0	0	12	15	0
17:45	0	0	0	0	0	0	4	0	0	4	0	0	0	4	0	0	7	0	0	7	11	4
<b>Total</b>	0	0	0	0	0	0	9	0	0	9	0	0	1	6	1	0	26	1	0	27	37	6
<b>Grand Total</b>	0	0	0	0	0	0	58	0	1	58	3	0	1	16	4	0	53	2	0	55	117	17
Apprch %	0.0%	0.0%	0.0%			0.0%	100.0%	0.0%			75.0%	0.0%	25.0%			0.0%	96.4%	3.6%				
Total %	0.0%	0.0%	0.0%		0.0%	0.0%	49.6%	0.0%		49.6%	2.6%	0.0%	0.9%		3.4%	0.0%	45.3%	1.7%		47.0%	100.0%	

AM PEAK HOUR	N Diameter Dr Southbound					S/O E 8th St Westbound					N Diameter Dr Northbound					S/O E 8th St Eastbound					Total
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 07:45 to 08:45																					
Peak Hour For Entire Intersection Begins at 07:45																					
7:45	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	2	0	0	2	6
8:00	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	4	0	0	4	13
8:15	0	0	0	0	0	0	6	0	1	6	0	0	0	1	0	0	0	0	0	0	6
8:30	0	0	0	0	0	0	5	0	0	5	2	0	0	0	2	0	1	0	0	1	8
Total Volume	0	0	0	0	0	0	24	0	1	24	2	0	0	1	2	0	7	0	0	7	33
% App Total	0.0%	0.0%	0.0%			0.0%	100.0%	0.0%			100.0%	0.0%	0.0%			0.0%	100.0%	0.0%			
PHF	.000	.000	.000		.000	.000	.667	.000		.667	.250	.000	.000		.250	.000	.438	.000		.438	.635

PM PEAK HOUR	N Diameter Dr Southbound					S/O E 8th St Westbound					N Diameter Dr Northbound					S/O E 8th St Eastbound					Total
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 16:45 to 17:45																					
Peak Hour For Entire Intersection Begins at 16:45																					
16:45	0	0	0	0	0	0	3	0	0	3	0	0	0	1	0	0	2	1	0	3	6
17:00	0	0	0	0	0	0	1	0	0	1	0	0	0	1	0	0	2	1	0	3	4
17:15	0	0	0	0	0	0	1	0	0	1	0	0	1	1	1	0	5	0	0	5	7
17:30	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	12	0	0	12	15
Total Volume	0	0	0	0	0	0	8	0	0	8	0	0	1	3	1	0	21	2	0	23	32
% App Total	0.0%	0.0%	0.0%			0.0%	100.0%	0.0%			0.0%	0.0%	100.0%			0.0%	91.3%	8.7%			
PHF	.000	.000	.000		.000	.000	.667	.000		.667	.000	.000	.250		.250	.000	.438	.500		.479	.533



PROJECT#: 17-7290-001  
N/S Street: N Diameter Dr  
E/W Street: E 8th St  
DATE: 4/11/2017  
CITY: Davis

**A M**

*PEDESTRIANS*

T I M E	I N	O U T
7:00 AM	0	0
7:15 AM	0	0
7:30 AM	0	0
7:45 AM	0	0
8:00 AM	0	1
8:15 AM	0	1
8:30 AM	1	0
8:45 AM	0	0
<b>TOTALS</b>	<b>1</b>	<b>2</b>

**P M**

*PEDESTRIANS*

T I M E	I N	O U T
4:00 PM	0	0
4:15 PM	0	0
4:30 PM	0	0
4:45 PM	0	0
5:00 PM	3	3
5:15 PM	0	0
5:30 PM	0	0
5:45 PM	0	2
<b>TOTALS</b>	<b>3</b>	<b>5</b>

# VOLUME

S Diameter Dr E/O Pole Line Rd

Day: Tuesday  
Date: 4/11/2017

City: Davis  
Project #: CA17\_7291\_002

DAILY TOTALS					NB	SB	EB	WB	Total
					0	0	422	378	800

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL			
00:00			0	0	0	12:00			9	8	17			
00:15			0	0	0	12:15			12	6	18			
00:30			1	0	1	12:30			12	12	24			
00:45			0	1	0	12:45			4	37	7	33	11	70
01:00			0	0	0	13:00			10	12	22			
01:15			0	0	0	13:15			19	8	27			
01:30			0	0	0	13:30			6	8	14			
01:45			0	0	0	13:45			10	45	7	35	17	80
02:00			0	0	0	14:00			11	8	19			
02:15			0	0	0	14:15			8	6	14			
02:30			1	2	3	14:30			5	5	10			
02:45			0	1	0	14:45			8	32	7	26	15	58
03:00			0	0	0	15:00			7	6	13			
03:15			0	0	0	15:15			8	8	16			
03:30			0	0	0	15:30			10	5	15			
03:45			0	0	0	15:45			10	35	4	23	14	58
04:00			0	0	0	16:00			12	12	24			
04:15			0	0	0	16:15			12	5	17			
04:30			0	0	0	16:30			13	7	20			
04:45			0	0	0	16:45			9	46	5	29	14	75
05:00			0	0	0	17:00			7	5	12			
05:15			0	1	1	17:15			4	9	13			
05:30			0	0	0	17:30			13	2	15			
05:45			0	3	4	17:45			5	29	6	22	11	51
06:00			1	2	3	18:00			9	7	16			
06:15			0	2	2	18:15			7	8	15			
06:30			1	2	3	18:30			10	2	12			
06:45			4	6	2	18:45			11	37	7	24	18	61
07:00			1	3	4	19:00			5	1	6			
07:15			5	5	10	19:15			6	5	11			
07:30			3	4	7	19:30			4	4	8			
07:45			2	11	4	19:45			4	19	2	12	6	31
08:00			5	5	10	20:00			4	7	11			
08:15			5	7	12	20:15			3	1	4			
08:30			2	8	10	20:30			4	2	6			
08:45			4	16	6	20:45			1	12	2	12	3	24
09:00			6	5	11	21:00			4	2	6			
09:15			5	6	11	21:15			3	2	5			
09:30			7	6	13	21:30			3	1	4			
09:45			3	21	9	21:45			5	15	1	6	6	21
10:00			5	7	12	22:00			0	1	1			
10:15			9	13	22	22:15			2	0	2			
10:30			11	8	19	22:30			0	0	0			
10:45			5	30	7	22:45			1	3	2	3	3	6
11:00			3	12	15	23:00			1	1	2			
11:15			8	8	16	23:15			0	0	0			
11:30			7	9	16	23:30			0	1	1			
11:45			7	25	5	23:45			0	1	0	2	0	3
<b>TOTALS</b>			<b>111</b>	<b>151</b>	<b>262</b>	<b>TOTALS</b>			<b>311</b>	<b>227</b>	<b>538</b>			
<b>SPLIT %</b>			<b>42.4%</b>	<b>57.6%</b>	<b>32.8%</b>	<b>SPLIT %</b>			<b>57.8%</b>	<b>42.2%</b>	<b>67.3%</b>			

DAILY TOTALS					NB	SB	EB	WB	Total
					0	0	422	378	800

AM Peak Hour			11:45	10:15	11:45	PM Peak Hour			15:45	12:30	12:30
AM Pk Volume			40	40	71	PM Pk Volume			47	39	84
Pk Hr Factor			0.833	0.769	0.740	Pk Hr Factor			0.904	0.813	0.778
7 - 9 Volume	0	0	27	42	69	4 - 6 Volume	0	0	75	51	126
7 - 9 Peak Hour			08:00	08:00	08:00	4 - 6 Peak Hour			16:00	16:00	16:00
7 - 9 Pk Volume	0	0	16	26	42	4 - 6 Pk Volume	0	0	46	29	75
Pk Hr Factor	0.000	0.000	0.800	0.813	0.875	Pk Hr Factor	0.000	0.000	0.885	0.604	0.781

Prepared by NDS/ATD

Project #: CA17\_7291\_002

City: Davis

Location: S Diameter Dr E/O Pole Line Rd

Date: 4/11/2017



## National Data and Surveying Services

City of Davis  
 All Vehicles & Uturns On Unshifted  
 Peds & Bikes On Bank 1  
 Nothing On Bank 2

(323) 782-0090  
[info@ndsdata.com](mailto:info@ndsdata.com)

File Name : 17-7290-002 E/O Pole Line Rd & S Diameter Dr  
 Date : 4/11/2017

### Unshifted Count = All Vehicles & Uturns

START TIME	E/O Pole Line Rd Southbound					S Diameter Dr Westbound					E/O Pole Line Rd Northbound					S Diameter Dr Eastbound					Total	Uturns Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL		
7:00	0	53	0	0	53	2	0	1	0	3	0	28	1	0	29	0	0	0	0	0	85	0
7:15	3	82	0	0	85	3	0	2	0	5	0	59	2	0	61	0	0	0	0	0	151	0
7:30	2	90	0	0	92	3	0	1	0	4	0	60	1	0	61	0	0	0	0	0	157	0
7:45	1	141	0	0	142	4	0	0	0	4	0	60	1	0	61	0	0	0	0	0	207	0
<b>Total</b>	<b>6</b>	<b>366</b>	<b>0</b>	<b>0</b>	<b>372</b>	<b>12</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>16</b>	<b>0</b>	<b>207</b>	<b>5</b>	<b>0</b>	<b>212</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>600</b>	<b>0</b>
8:00	1	144	0	0	145	4	0	1	0	5	0	77	4	1	82	0	0	0	0	0	232	1
8:15	1	152	0	0	153	2	0	5	0	7	0	105	4	0	109	0	0	0	0	0	269	0
8:30	0	190	0	0	190	4	0	4	0	8	0	70	2	0	72	0	0	0	0	0	270	0
8:45	1	151	0	0	152	5	0	1	0	6	0	77	3	0	80	0	0	0	0	0	238	0
<b>Total</b>	<b>3</b>	<b>637</b>	<b>0</b>	<b>0</b>	<b>640</b>	<b>15</b>	<b>0</b>	<b>11</b>	<b>0</b>	<b>26</b>	<b>0</b>	<b>329</b>	<b>13</b>	<b>1</b>	<b>343</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1009</b>	<b>1</b>
16:00	3	145	0	0	148	9	0	3	0	12	0	124	9	0	133	0	0	0	0	0	293	0
16:15	8	133	0	0	141	1	0	4	0	5	0	140	4	0	144	0	0	0	0	0	290	0
16:30	3	129	0	0	132	5	0	2	0	7	0	139	10	0	149	0	0	0	0	0	288	0
16:45	3	140	0	0	143	4	0	1	0	5	0	165	6	0	171	0	0	0	0	0	319	0
<b>Total</b>	<b>17</b>	<b>547</b>	<b>0</b>	<b>0</b>	<b>564</b>	<b>19</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>29</b>	<b>0</b>	<b>568</b>	<b>29</b>	<b>0</b>	<b>597</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1190</b>	<b>0</b>
17:00	0	127	0	0	127	2	0	3	0	5	0	185	7	0	192	0	0	0	0	0	324	0
17:15	1	138	0	0	139	6	0	3	0	9	0	155	3	0	158	0	0	0	0	0	306	0
17:30	5	153	0	0	158	1	0	1	0	2	0	159	8	0	167	0	0	0	0	0	327	0
17:45	2	112	0	0	114	5	0	1	0	6	0	139	3	0	142	0	0	0	0	0	262	0
<b>Total</b>	<b>8</b>	<b>530</b>	<b>0</b>	<b>0</b>	<b>538</b>	<b>14</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>22</b>	<b>0</b>	<b>638</b>	<b>21</b>	<b>0</b>	<b>659</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1219</b>	<b>0</b>
<b>Grand Total</b>	<b>34</b>	<b>2080</b>	<b>0</b>	<b>0</b>	<b>2114</b>	<b>60</b>	<b>0</b>	<b>33</b>	<b>0</b>	<b>93</b>	<b>0</b>	<b>1742</b>	<b>68</b>	<b>1</b>	<b>1811</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4018</b>	<b>1</b>
Apprch %	1.6%	98.4%	0.0%	0.0%		64.5%	0.0%	35.5%	0.0%		0.0%	96.2%	3.8%	0.1%		0.0%	0.0%	0.0%	0.0%			
Total %	0.8%	51.8%	0.0%	0.0%	52.6%	1.5%	0.0%	0.8%	0.0%	2.3%	0.0%	43.4%	1.7%	0.0%	45.1%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	

AM PEAK HOUR	E/O Pole Line Rd Southbound					S Diameter Dr Westbound					E/O Pole Line Rd Northbound					S Diameter Dr Eastbound					Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 08:00 to 09:00																					
Peak Hour For Entire Intersection Begins at 08:00																					
8:00	1	144	0	0	145	4	0	1	0	5	0	77	4	1	82	0	0	0	0	0	232
8:15	1	152	0	0	153	2	0	5	0	7	0	105	4	0	109	0	0	0	0	0	269
8:30	0	190	0	0	190	4	0	4	0	8	0	70	2	0	72	0	0	0	0	0	270
8:45	1	151	0	0	152	5	0	1	0	6	0	77	3	0	80	0	0	0	0	0	238
Total Volume	3	637	0	0	640	15	0	11	0	26	0	329	13	1	343	0	0	0	0	0	1009
% App Total	0.5%	99.5%	0.0%	0.0%		57.7%	0.0%	42.3%	0.0%		0.0%	95.9%	3.8%	0.3%		0.0%	0.0%	0.0%	0.0%		
PHF	.750	.838	.000	.000	.842	.750	.000	.550	.000	.813	.000	.783	.813	.250	.787	.000	.000	.000	.000	.000	.934

PM PEAK HOUR	E/O Pole Line Rd Southbound					S Diameter Dr Westbound					E/O Pole Line Rd Northbound					S Diameter Dr Eastbound					Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 16:45 to 17:45																					
Peak Hour For Entire Intersection Begins at 16:45																					
16:45	3	140	0	0	143	4	0	1	0	5	0	165	6	0	171	0	0	0	0	0	319
17:00	0	127	0	0	127	2	0	3	0	5	0	185	7	0	192	0	0	0	0	0	324
17:15	1	138	0	0	139	6	0	3	0	9	0	155	3	0	158	0	0	0	0	0	306
17:30	5	153	0	0	158	1	0	1	0	2	0	159	8	0	167	0	0	0	0	0	327
Total Volume	9	558	0	0	567	13	0	8	0	21	0	664	24	0	688	0	0	0	0	0	1276
% App Total	1.6%	98.4%	0.0%	0.0%		61.9%	0.0%	38.1%	0.0%		0.0%	96.5%	3.5%	0.0%		0.0%	0.0%	0.0%	0.0%		
PHF	.450	.912	.000	.000	.897	.542	.000	.667	.000	.583	.000	.897	.750	.000	.896	.000	.000	.000	.000	.000	.976

## National Data and Surveying Services

City of Davis  
 All Vehicles & Uturns On Unshifted  
 Peds & Bikes On Bank 1  
 Nothing On Bank 2

(323) 782-0090  
[info@ndsdata.com](mailto:info@ndsdata.com)

File Name : 17-7290-002 E/O Pole Line Rd & S Diameter Dr  
 Date : 4/11/2017

### Bank 1 Count = Peds & Bikes

START TIME	E/O Pole Line Rd Southbound					S Diameter Dr Westbound					E/O Pole Line Rd Northbound					S Diameter Dr Eastbound					Total	Peds Total
	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL		
7:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0
7:15	0	0	0	1	0	1	0	0	0	1	0	2	0	0	2	0	0	0	0	0	3	1
7:30	0	2	0	0	2	0	0	0	0	0	0	4	0	1	4	0	0	0	0	0	6	1
7:45	0	3	0	0	3	0	0	0	2	0	0	1	0	0	1	0	0	0	0	0	4	2
<b>Total</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>1</b>	<b>5</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>1</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>4</b>
8:00	0	1	0	0	1	0	0	0	2	0	0	1	0	0	1	0	0	0	0	0	2	2
8:15	0	9	0	0	9	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	10	1
8:30	1	7	0	0	8	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	9	2
8:45	0	1	0	2	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	4
<b>Total</b>	<b>1</b>	<b>18</b>	<b>0</b>	<b>2</b>	<b>19</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>7</b>	<b>1</b>	<b>0</b>	<b>2</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>22</b>	<b>9</b>
16:00	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	0	0	0	0	1	2
16:15	0	4	0	0	4	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	6	0
16:30	0	5	0	0	5	0	0	0	1	0	0	4	0	0	4	0	0	0	0	0	9	1
16:45	0	3	0	0	3	0	0	0	3	0	0	3	0	0	3	0	0	0	0	0	6	3
<b>Total</b>	<b>0</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>1</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>22</b>	<b>6</b>
17:00	0	2	0	0	2	0	0	1	1	1	0	3	0	0	3	0	0	0	0	0	6	1
17:15	0	1	0	0	1	0	0	0	1	0	0	5	0	0	5	0	0	0	0	0	6	1
17:30	2	3	0	0	5	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	9	0
17:45	0	2	0	0	2	0	0	0	10	0	0	5	1	1	6	0	0	0	0	0	8	11
<b>Total</b>	<b>2</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>12</b>	<b>1</b>	<b>0</b>	<b>17</b>	<b>1</b>	<b>1</b>	<b>18</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>29</b>	<b>13</b>
<b>Grand Total</b>	<b>3</b>	<b>43</b>	<b>0</b>	<b>3</b>	<b>46</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>26</b>	<b>3</b>	<b>0</b>	<b>37</b>	<b>1</b>	<b>3</b>	<b>38</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>87</b>	<b>32</b>
Apprch %	6.5%	93.5%	0.0%			33.3%	0.0%	66.7%			0.0%	97.4%	2.6%			0.0%	0.0%	0.0%				
Total %	3.4%	49.4%	0.0%		52.9%	1.1%	0.0%	2.3%		3.4%	0.0%	42.5%	1.1%		43.7%	0.0%	0.0%	0.0%		0.0%	100.0%	

AM PEAK HOUR	E/O Pole Line Rd Southbound					S Diameter Dr Westbound					E/O Pole Line Rd Northbound					S Diameter Dr Eastbound					Total
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 08:00 to 09:00																					
Peak Hour For Entire Intersection Begins at 08:00																					
8:00	0	1	0	0	1	0	0	0	2	0	0	1	0	0	1	0	0	0	0	0	2
8:15	0	9	0	0	9	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	10
8:30	1	7	0	0	8	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	9
8:45	0	1	0	2	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1
<b>Total Volume</b>	<b>1</b>	<b>18</b>	<b>0</b>	<b>2</b>	<b>19</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>7</b>	<b>1</b>	<b>0</b>	<b>2</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>22</b>
% App Total	5.3%	94.7%	0.0%			0.0%	0.0%	100.0%			0.0%	100.0%	0.0%			0.0%	0.0%	0.0%			
PHF	.250	.500	.000		.528	.000	.000	.250		.250	.000	.500	.000		.500	.000	.000	.000		.000	.550

PM PEAK HOUR	E/O Pole Line Rd Southbound					S Diameter Dr Westbound					E/O Pole Line Rd Northbound					S Diameter Dr Eastbound					Total
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 16:45 to 17:45																					
Peak Hour For Entire Intersection Begins at 16:45																					
16:45	0	3	0	0	3	0	0	0	3	0	0	3	0	0	3	0	0	0	0	0	6
17:00	0	2	0	0	2	0	0	1	1	1	0	3	0	0	3	0	0	0	0	0	6
17:15	0	1	0	0	1	0	0	0	1	0	0	5	0	0	5	0	0	0	0	0	6
17:30	2	3	0	0	5	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	9
<b>Total Volume</b>	<b>2</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>11</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>5</b>	<b>1</b>	<b>0</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>27</b>
% App Total	18.2%	81.8%	0.0%			0.0%	0.0%	100.0%			0.0%	100.0%	0.0%			0.0%	0.0%	0.0%			
PHF	.250	.750	.000		.550	.000	.000	.250		.250	.000	.750	.000		.750	.000	.000	.000		.000	.750

PROJECT#: 17-7290-002  
N/S Street: Pole Line Rd  
E/W Street: South Diameter Dr  
DATE: 4/11/2017  
CITY: Davis

**A M**

*PEDESTRIANS*

T I M E	I N	O U T
7:00 AM	0	0
7:15 AM	0	0
7:30 AM	0	1
7:45 AM	0	0
8:00 AM	0	0
8:15 AM	0	0
8:30 AM	0	0
8:45 AM	0	0
<b>TOTALS</b>	<b>0</b>	<b>1</b>

**P M**

*PEDESTRIANS*

T I M E	I N	O U T
4:00 PM	0	0
4:15 PM	0	0
4:30 PM	0	0
4:45 PM	0	0
5:00 PM	0	0
5:15 PM	1	0
5:30 PM	2	0
5:45 PM	1	0
<b>TOTALS</b>	<b>4</b>	<b>0</b>

# VOLUME

N Diameter Dr S/O E 8th St

Day: Wednesday  
Date: 4/19/2017

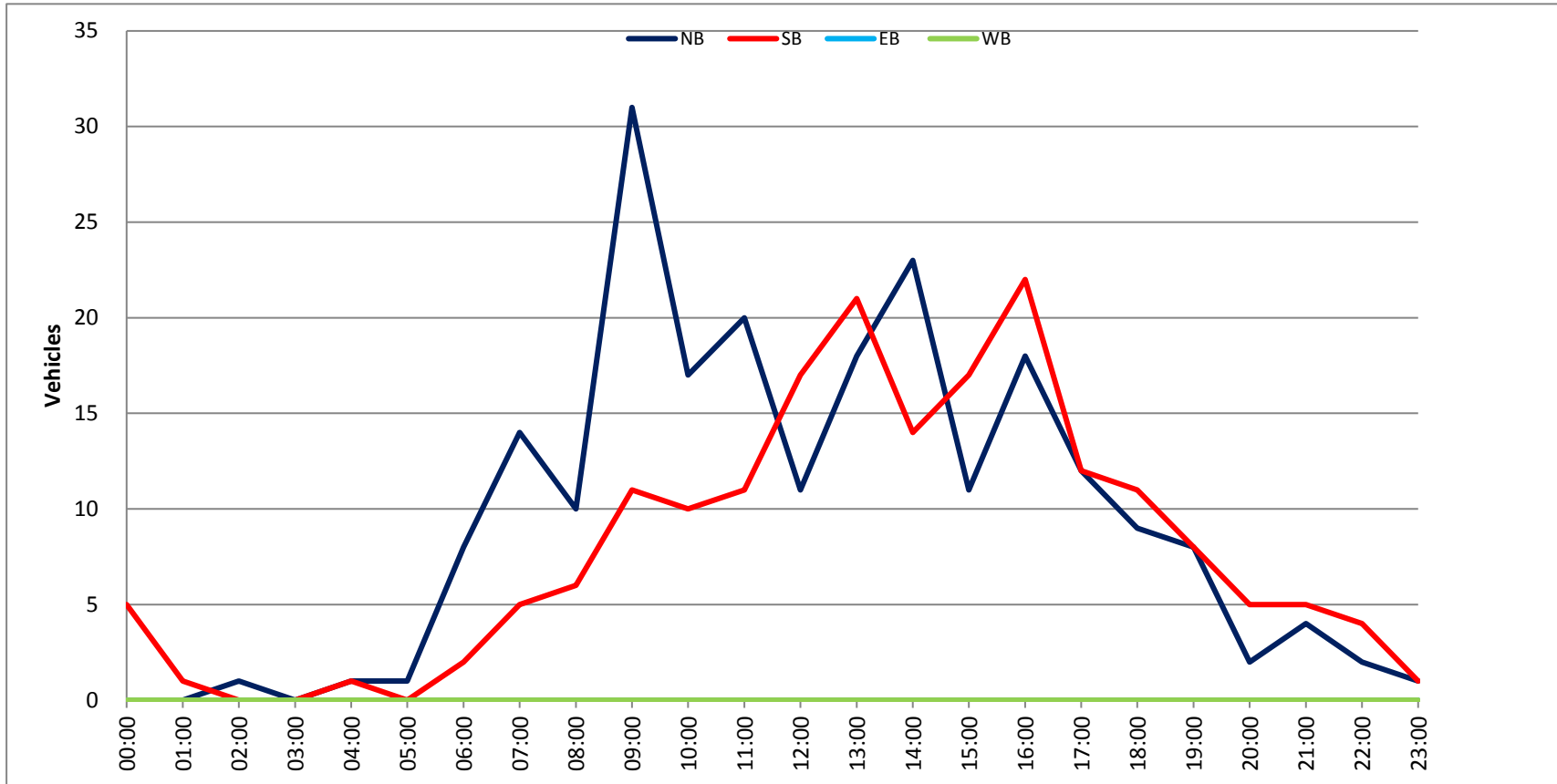
City: Davis  
Project #: CA17\_7291\_001

DAILY TOTALS	NB	SB	EB	WB	Total
		222	189	0	0

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	0	3			3	12:00	0	10			10
00:15	0	1			1	12:15	2	3			5
00:30	0	1			1	12:30	5	0			5
00:45	0	0	5		5	12:45	4	11	4	17	28
01:00	0	1			1	13:00	4	7			11
01:15	0	0			0	13:15	9	5			14
01:30	0	0			0	13:30	3	6			9
01:45	0	0	1		1	13:45	2	18	3	21	39
02:00	0	0			0	14:00	6	5			11
02:15	0	0			0	14:15	8	4			12
02:30	0	0			0	14:30	4	2			6
02:45	1	1	0		2	14:45	5	23	3	14	37
03:00	0	0			0	15:00	2	7			9
03:15	0	0			0	15:15	2	5			7
03:30	0	0			0	15:30	6	2			8
03:45	0	0			0	15:45	1	11	3	17	28
04:00	0	0			0	16:00	2	7			9
04:15	0	0			0	16:15	10	6			16
04:30	1	1			2	16:30	4	6			10
04:45	0	1	0	1	2	16:45	2	18	3	22	40
05:00	0	0			0	17:00	2	2			4
05:15	1	0			1	17:15	6	3			9
05:30	0	0			0	17:30	2	2			4
05:45	0	1	0		1	17:45	2	12	5	12	24
06:00	1	0			1	18:00	1	3			4
06:15	6	1			7	18:15	0	2			2
06:30	0	0			0	18:30	5	3			8
06:45	1	8	1	2	10	18:45	3	9	3	11	20
07:00	3	0			3	19:00	4	4			8
07:15	0	2			2	19:15	2	2			4
07:30	4	1			5	19:30	1	0			1
07:45	7	14	2	5	19	19:45	1	8	2	8	16
08:00	4	2			6	20:00	0	1			1
08:15	3	0			3	20:15	0	1			1
08:30	2	2			4	20:30	0	3			3
08:45	1	10	2	6	16	20:45	2	2	0	5	7
09:00	10	1			11	21:00	1	2			3
09:15	8	5			13	21:15	1	2			3
09:30	3	2			5	21:30	1	0			1
09:45	10	31	3	11	42	21:45	1	4	1	5	9
10:00	3	2			5	22:00	1	2			3
10:15	7	4			11	22:15	0	0			0
10:30	2	2			4	22:30	1	2			3
10:45	5	17	2	10	27	22:45	0	2	0	4	6
11:00	3	7			10	23:00	0	0			0
11:15	8	0			8	23:15	1	1			2
11:30	6	1			7	23:30	0	0			0
11:45	3	20	3	11	31	23:45	0	1	0	1	2
<b>TOTALS</b>	<b>103</b>	<b>52</b>			<b>155</b>	<b>TOTALS</b>	<b>119</b>	<b>137</b>			<b>256</b>
<b>SPLIT %</b>	<b>66.5%</b>	<b>33.5%</b>			<b>37.7%</b>	<b>SPLIT %</b>	<b>46.5%</b>	<b>53.5%</b>			<b>62.3%</b>

DAILY TOTALS	NB	SB	EB	WB	Total
		222	189	0	0

AM Peak Hour	09:00	11:30	09:00	PM Peak Hour	14:00	12:45	12:45				
AM Pk Volume	31	17	42	PM Pk Volume	23	22	42				
Pk Hr Factor	0.775	0.425	0.808	Pk Hr Factor	0.719	0.786	0.750				
7 - 9 Volume	24	11	0	0	35	4 - 6 Volume	30	34	0	0	64
7 - 9 Peak Hour	07:30	07:15	07:30	4 - 6 Peak Hour	16:00	16:00	16:00				
7 - 9 Pk Volume	18	7	0	0	23	4 - 6 Pk Volume	18	22	0	0	40
Pk Hr Factor	0.643	0.875	0.000	0.000	0.639	Pk Hr Factor	0.450	0.786	0.000	0.000	0.625





## National Data and Surveying Services

City of Davis  
 All Vehicles & Uturns On Unshifted  
 Peds & Bikes On Bank 1  
 Nothing On Bank 2

(323) 782-0090  
[info@ndsdata.com](mailto:info@ndsdata.com)

File Name : 17-7290-001 N Diameter Dr & S/O E 8th St  
 Date : 4/19/2017

### Unshifted Count = All Vehicles & Uturns

START TIME	N Diameter Dr Southbound					S/O E 8th St Westbound					N Diameter Dr Northbound					S/O E 8th St Eastbound					Total	Uturns Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL		
7:00	0	0	0	0	0	0	11	0	0	11	3	0	0	0	3	0	3	0	0	3	17	0
7:15	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	10	2	0	12	21	0
7:30	0	0	0	0	0	0	20	0	0	20	2	0	2	0	4	0	5	1	0	6	30	0
7:45	0	0	0	0	0	1	22	0	0	23	6	0	1	0	7	1	14	1	1	17	47	1
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>62</b>	<b>0</b>	<b>0</b>	<b>63</b>	<b>11</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>14</b>	<b>1</b>	<b>32</b>	<b>4</b>	<b>1</b>	<b>38</b>	<b>115</b>	<b>1</b>
8:00	0	0	0	0	0	1	33	0	0	34	3	0	1	0	4	0	14	1	0	15	53	0
8:15	0	0	0	0	0	0	42	0	0	42	2	0	1	0	3	0	17	0	0	17	62	0
8:30	0	0	0	0	0	1	38	0	0	39	1	0	1	0	2	0	20	1	0	21	62	0
8:45	0	0	0	0	0	1	28	0	0	29	1	0	0	0	1	0	27	1	0	28	58	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>141</b>	<b>0</b>	<b>0</b>	<b>144</b>	<b>7</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>78</b>	<b>3</b>	<b>0</b>	<b>81</b>	<b>235</b>	<b>0</b>
16:00	0	0	0	0	0	0	32	0	0	32	2	0	0	0	2	0	39	7	1	47	81	1
16:15	0	0	0	0	0	0	35	0	0	35	8	0	2	0	10	0	32	6	0	38	83	0
16:30	0	0	0	0	0	2	29	0	0	31	3	0	1	0	4	0	36	4	0	40	75	0
16:45	0	0	0	0	0	0	28	0	0	28	2	0	0	0	2	0	38	3	0	41	71	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>124</b>	<b>0</b>	<b>0</b>	<b>126</b>	<b>15</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>18</b>	<b>0</b>	<b>145</b>	<b>20</b>	<b>1</b>	<b>166</b>	<b>310</b>	<b>1</b>
17:00	0	0	0	0	0	1	27	0	0	28	2	0	0	0	2	0	48	1	1	50	80	1
17:15	0	0	0	0	0	1	33	0	0	34	4	0	2	0	6	0	41	2	0	43	83	0
17:30	0	0	0	0	0	0	17	0	0	17	2	0	0	0	2	0	42	2	0	44	63	0
17:45	0	0	0	0	0	2	25	0	0	27	2	0	0	0	2	0	35	3	0	38	67	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>102</b>	<b>0</b>	<b>0</b>	<b>106</b>	<b>10</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>12</b>	<b>0</b>	<b>166</b>	<b>8</b>	<b>1</b>	<b>175</b>	<b>293</b>	<b>1</b>
<b>Grand Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>429</b>	<b>0</b>	<b>0</b>	<b>439</b>	<b>43</b>	<b>0</b>	<b>11</b>	<b>0</b>	<b>54</b>	<b>1</b>	<b>421</b>	<b>35</b>	<b>3</b>	<b>460</b>	<b>953</b>	<b>3</b>
Apprch %	0.0%	0.0%	0.0%	0.0%		2.3%	97.7%	0.0%	0.0%		79.6%	0.0%	20.4%	0.0%		0.2%	91.5%	7.6%	0.7%			
Total %	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	45.0%	0.0%	0.0%	46.1%	4.5%	0.0%	1.2%	0.0%	5.7%	0.1%	44.2%	3.7%	0.3%	48.3%	100.0%	

AM PEAK HOUR	N Diameter Dr Southbound					S/O E 8th St Westbound					N Diameter Dr Northbound					S/O E 8th St Eastbound					Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 08:00 to 09:00																					
Peak Hour For Entire Intersection Begins at 08:00																					
8:00	0	0	0	0	0	1	33	0	0	34	3	0	1	0	4	0	14	1	0	15	53
8:15	0	0	0	0	0	0	42	0	0	42	2	0	1	0	3	0	17	0	0	17	62
8:30	0	0	0	0	0	1	38	0	0	39	1	0	1	0	2	0	20	1	0	21	62
8:45	0	0	0	0	0	1	28	0	0	29	1	0	0	0	1	0	27	1	0	28	58
Total Volume	0	0	0	0	0	3	141	0	0	144	7	0	3	0	10	0	78	3	0	81	235
% App Total	0.0%	0.0%	0.0%	0.0%		2.1%	97.9%	0.0%	0.0%		70.0%	0.0%	30.0%	0.0%		0.0%	96.3%	3.7%	0.0%		
PHF	.000	.000	.000	.000	.000	.750	.839	.000	.000	.857	.583	.000	.750	.000	.625	.000	.722	.750	.000	.723	.948

PM PEAK HOUR	N Diameter Dr Southbound					S/O E 8th St Westbound					N Diameter Dr Northbound					S/O E 8th St Eastbound					Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 16:00 to 17:00																					
Peak Hour For Entire Intersection Begins at 16:00																					
16:00	0	0	0	0	0	0	32	0	0	32	2	0	0	0	2	0	39	7	1	47	81
16:15	0	0	0	0	0	0	35	0	0	35	8	0	2	0	10	0	32	6	0	38	83
16:30	0	0	0	0	0	2	29	0	0	31	3	0	1	0	4	0	36	4	0	40	75
16:45	0	0	0	0	0	0	28	0	0	28	2	0	0	0	2	0	38	3	0	41	71
Total Volume	0	0	0	0	0	2	124	0	0	126	15	0	3	0	18	0	145	20	1	166	310
% App Total	0.0%	0.0%	0.0%	0.0%		1.6%	98.4%	0.0%	0.0%		83.3%	0.0%	16.7%	0.0%		0.0%	87.3%	12.0%	0.6%		
PHF	.000	.000	.000	.000	.000	.250	.886	.000	.000	.900	.469	.000	.375	.000	.450	.000	.929	.714	.250	.883	.934

## National Data and Surveying Services

City of Davis  
 All Vehicles & Uturns On Unshifted  
 Peds & Bikes On Bank 1  
 Nothing On Bank 2

(323) 782-0090  
[info@ndsdata.com](mailto:info@ndsdata.com)

File Name : 17-7290-001 N Diameter Dr & S/O E 8th St  
 Date : 4/19/2017

### Bank 1 Count = Peds & Bikes

START TIME	N Diameter Dr Southbound					S/O E 8th St Westbound					N Diameter Dr Northbound					S/O E 8th St Eastbound					Total	Peds Total
	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL		
7:00	0	0	0	0	0	0	3	0	0	3	0	0	0	2	0	0	0	0	0	0	3	2
7:15	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2	0
7:30	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	0	0	0	0	9	0
7:45	0	0	0	0	0	0	8	0	1	8	0	0	0	0	0	0	2	0	0	2	10	1
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>21</b>	<b>0</b>	<b>1</b>	<b>21</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>24</b>	<b>3</b>	
8:00	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	3	0	0	3	12	0
8:15	0	0	0	0	0	0	9	0	0	9	0	0	0	1	0	0	2	0	0	2	11	1
8:30	0	0	0	0	0	0	9	0	0	9	3	0	0	0	3	0	0	0	0	0	12	0
8:45	0	0	0	0	0	0	11	0	0	11	0	0	0	3	0	0	1	0	0	1	12	3
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>38</b>	<b>0</b>	<b>0</b>	<b>38</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>3</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>47</b>	<b>4</b>
16:00	0	0	0	0	0	0	2	0	0	2	0	0	0	2	0	0	5	0	0	5	7	2
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	3	1	0	4	4	2
16:30	0	0	0	0	0	0	1	0	0	1	0	0	0	5	0	0	2	0	0	2	3	5
16:45	0	0	0	0	0	0	7	0	0	7	0	0	0	2	0	0	6	0	0	6	13	2
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11</b>	<b>0</b>	<b>0</b>	<b>16</b>	<b>1</b>	<b>0</b>	<b>17</b>	<b>27</b>	<b>11</b>
17:00	0	0	0	0	0	0	3	0	0	3	0	0	0	2	0	0	4	0	0	4	7	2
17:15	0	0	0	0	0	0	3	0	0	3	1	0	0	2	1	0	4	0	0	4	8	2
17:30	0	0	0	0	0	0	2	0	0	2	0	0	0	4	0	0	8	0	0	8	10	4
17:45	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	7	1	0	8	11	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11</b>	<b>0</b>	<b>0</b>	<b>11</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>1</b>	<b>0</b>	<b>23</b>	<b>1</b>	<b>0</b>	<b>24</b>	<b>36</b>	<b>8</b>
<b>Grand Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>80</b>	<b>0</b>	<b>1</b>	<b>80</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>25</b>	<b>4</b>	<b>0</b>	<b>48</b>	<b>2</b>	<b>0</b>	<b>50</b>	<b>134</b>	<b>26</b>
Apprch %	0.0%	0.0%	0.0%			0.0%	100.0%	0.0%		59.7%	100.0%	0.0%	0.0%		3.0%	96.0%	4.0%					
Total %	0.0%	0.0%	0.0%		0.0%	0.0%	59.7%	0.0%		59.7%	3.0%	0.0%	0.0%		3.0%	35.8%	1.5%			37.3%	100.0%	

AM PEAK HOUR	N Diameter Dr Southbound					S/O E 8th St Westbound					N Diameter Dr Northbound					S/O E 8th St Eastbound					Total
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 08:00 to 09:00																					
Peak Hour For Entire Intersection Begins at 08:00																					
8:00	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	3	0	0	3	12
8:15	0	0	0	0	0	0	9	0	0	9	0	0	0	1	0	0	2	0	0	2	11
8:30	0	0	0	0	0	0	9	0	0	9	3	0	0	0	3	0	0	0	0	0	12
8:45	0	0	0	0	0	0	11	0	0	11	0	0	0	3	0	0	1	0	0	1	12
Total Volume	0	0	0	0	0	0	38	0	0	38	3	0	0	4	3	0	6	0	0	6	47
% App Total	0.0%	0.0%	0.0%			0.0%	100.0%	0.0%		100.0%	0.0%	0.0%	0.0%		0.0%	100.0%	0.0%				
PHF	.000	.000	.000		.000	.000	.864	.000		.864	.250	.000	.000		.250	.000	.500	.000		.500	.979

PM PEAK HOUR	N Diameter Dr Southbound					S/O E 8th St Westbound					N Diameter Dr Northbound					S/O E 8th St Eastbound					Total
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 16:00 to 17:00																					
Peak Hour For Entire Intersection Begins at 16:00																					
16:00	0	0	0	0	0	0	2	0	0	2	0	0	0	2	0	0	5	0	0	5	7
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	3	1	0	4	4
16:30	0	0	0	0	0	0	1	0	0	1	0	0	0	5	0	0	2	0	0	2	3
16:45	0	0	0	0	0	0	7	0	0	7	0	0	0	2	0	0	6	0	0	6	13
Total Volume	0	0	0	0	0	0	10	0	0	10	0	0	0	11	0	0	16	1	0	17	27
% App Total	0.0%	0.0%	0.0%			0.0%	100.0%	0.0%		100.0%	0.0%	0.0%	0.0%		0.0%	94.1%	5.9%				
PHF	.000	.000	.000		.000	.000	.357	.000		.357	.000	.000	.000		.000	.667	.250			.708	.519

PROJECT#: 17-7290-001  
N/S Street: N Diameter Dr  
E/W Street: E 8th St  
DATE: 4/19/2017  
CITY: Davis

**A M**

*PEDESTRIANS*

T I M E	I N	O U T
7:00 AM	0	0
7:15 AM	0	0
7:30 AM	0	0
7:45 AM	0	0
8:00 AM	0	0
8:15 AM	1	0
8:30 AM	0	0
8:45 AM	0	0
<b>TOTALS</b>	<b>1</b>	<b>0</b>

**P M**

*PEDESTRIANS*

T I M E	I N	O U T
4:00 PM	0	0
4:15 PM	0	0
4:30 PM	0	0
4:45 PM	0	0
5:00 PM	0	0
5:15 PM	0	0
5:30 PM	1	0
5:45 PM	0	0
<b>TOTALS</b>	<b>1</b>	<b>0</b>

# VOLUME

S Diameter Dr E/O Pole Line Rd

Day: Wednesday  
Date: 4/19/2017

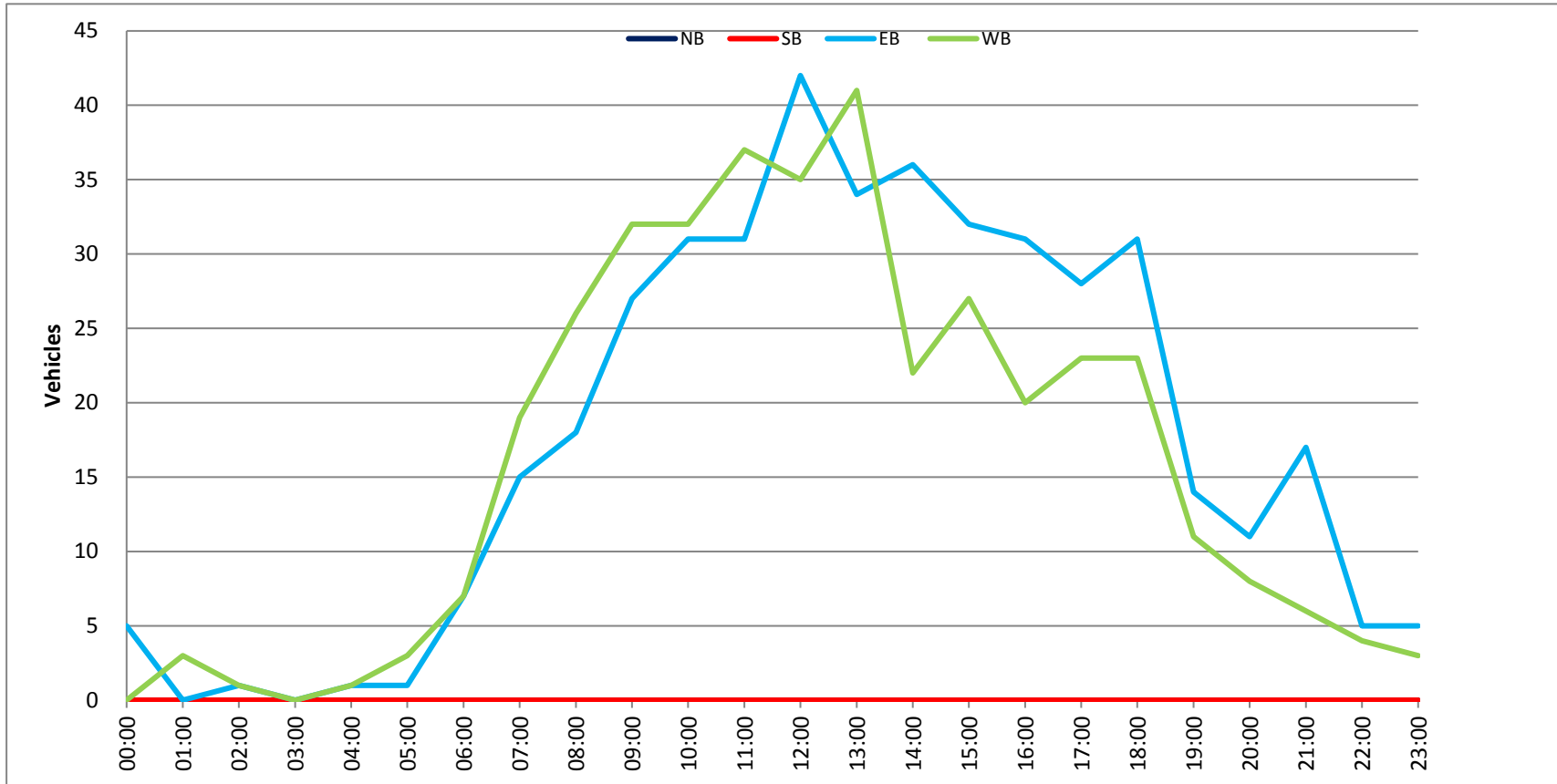
City: Davis  
Project #: CA17\_7291\_002

DAILY TOTALS					NB	SB	EB	WB	Total
					0	0	423	384	807

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL			
00:00			3	0	3	12:00			11	4	15			
00:15			2	0	2	12:15			6	14	20			
00:30			0	0	0	12:30			13	7	20			
00:45			0	5	0	12:45			12	42	10	35	22	77
01:00			0	2	2	13:00			8	9	17			
01:15			0	1	1	13:15			6	9	15			
01:30			0	0	0	13:30			11	13	24			
01:45			0	0	0	13:45			9	34	10	41	19	75
02:00			0	0	0	14:00			8	6	14			
02:15			1	0	1	14:15			7	6	13			
02:30			0	1	1	14:30			13	8	21			
02:45			0	1	0	14:45			8	36	2	22	10	58
03:00			0	0	0	15:00			7	7	14			
03:15			0	0	0	15:15			8	8	16			
03:30			0	0	0	15:30			10	7	17			
03:45			0	0	0	15:45			7	32	5	27	12	59
04:00			0	0	0	16:00			7	8	15			
04:15			0	0	0	16:15			5	6	11			
04:30			0	0	0	16:30			11	4	15			
04:45			1	1	1	16:45			8	31	2	20	10	51
05:00			0	0	0	17:00			9	5	14			
05:15			1	0	1	17:15			8	5	13			
05:30			0	2	2	17:30			3	5	8			
05:45			0	1	1	17:45			8	28	8	23	16	51
06:00			0	3	3	18:00			10	10	20			
06:15			0	1	1	18:15			3	1	4			
06:30			4	2	6	18:30			11	7	18			
06:45			3	7	1	18:45			7	31	5	23	12	54
07:00			1	5	6	19:00			3	4	7			
07:15			9	6	15	19:15			6	3	9			
07:30			1	3	4	19:30			1	2	3			
07:45			4	15	5	19:45			4	14	2	11	6	25
08:00			3	6	9	20:00			4	1	5			
08:15			5	5	10	20:15			2	3	5			
08:30			4	8	12	20:30			2	1	3			
08:45			6	18	7	20:45			3	11	3	8	6	19
09:00			8	14	22	21:00			6	0	6			
09:15			8	3	11	21:15			4	1	5			
09:30			5	7	12	21:30			6	4	10			
09:45			6	27	8	21:45			1	17	1	6	2	23
10:00			14	10	24	22:00			1	2	3			
10:15			7	9	16	22:15			2	2	4			
10:30			7	3	10	22:30			2	0	2			
10:45			3	31	10	22:45			0	5	0	4	0	9
11:00			9	11	20	23:00			0	0	0			
11:15			6	7	13	23:15			3	0	3			
11:30			9	13	22	23:30			1	3	4			
11:45			7	31	6	23:45			1	5	0	3	1	8
<b>TOTALS</b>			<b>137</b>	<b>161</b>	<b>298</b>	<b>TOTALS</b>			<b>286</b>	<b>223</b>	<b>509</b>			
<b>SPLIT %</b>			<b>46.0%</b>	<b>54.0%</b>	<b>36.9%</b>	<b>SPLIT %</b>			<b>56.2%</b>	<b>43.8%</b>	<b>63.1%</b>			

DAILY TOTALS					NB	SB	EB	WB	Total
					0	0	423	384	807

AM Peak Hour			11:45	10:45	11:30	PM Peak Hour			12:00	12:45	12:15
AM Pk Volume			37	41	70	PM Pk Volume			42	41	79
Pk Hr Factor			0.712	0.788	0.795	Pk Hr Factor			0.808	0.788	0.898
7 - 9 Volume	0	0	33	45	78	4 - 6 Volume	0	0	59	43	102
7 - 9 Peak Hour			08:00	08:00	08:00	4 - 6 Peak Hour			16:30	17:00	16:30
7 - 9 Pk Volume	0	0	18	26	44	4 - 6 Pk Volume	0	0	36	23	52
Pk Hr Factor	0.000	0.000	0.750	0.813	0.846	Pk Hr Factor	0.000	0.000	0.818	0.719	0.867



## National Data and Surveying Services

City of Davis  
All Vehicles & Uturns On Unshifted  
Peds & Bikes On Bank 1  
Nothing On Bank 2

(323) 782-0090  
[info@ndsdata.com](mailto:info@ndsdata.com)

File Name : 17-7290-002 E/O Pole Line Rd & S Diameter Dr  
Date : 4/19/2017

### Unshifted Count = All Vehicles & Uturns

START TIME	E/O Pole Line Rd Southbound					S Diameter Dr Westbound					E/O Pole Line Rd Northbound					S Diameter Dr Eastbound					Total	Uturns Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL		
7:00	0	78	0	0	78	4	0	1	0	5	0	34	1	0	35	0	0	0	0	0	118	0
7:15	4	85	0	0	89	4	0	2	0	6	0	38	5	0	43	0	0	0	0	0	138	0
7:30	1	86	0	0	87	2	0	1	0	3	0	40	0	0	40	0	0	0	0	0	130	0
7:45	2	108	0	0	110	4	0	1	0	5	0	58	2	0	60	0	0	0	0	0	175	0
<b>Total</b>	<b>7</b>	<b>357</b>	<b>0</b>	<b>0</b>	<b>364</b>	<b>14</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>19</b>	<b>0</b>	<b>170</b>	<b>8</b>	<b>0</b>	<b>178</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>561</b>	<b>0</b>
8:00	1	134	0	0	135	4	0	2	0	6	0	75	2	0	77	0	0	0	0	0	218	0
8:15	4	158	0	0	162	1	0	4	0	5	0	97	1	0	98	0	0	0	0	0	265	0
8:30	1	159	0	0	160	5	0	3	0	8	0	117	3	0	120	0	0	0	0	0	288	0
8:45	4	166	0	0	170	4	0	3	0	7	0	83	2	1	86	0	0	0	0	0	263	1
<b>Total</b>	<b>10</b>	<b>617</b>	<b>0</b>	<b>0</b>	<b>627</b>	<b>14</b>	<b>0</b>	<b>12</b>	<b>0</b>	<b>26</b>	<b>0</b>	<b>372</b>	<b>8</b>	<b>1</b>	<b>381</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1034</b>	<b>1</b>
16:00	5	127	0	0	132	7	0	1	0	8	0	148	2	0	150	0	0	0	0	0	290	0
16:15	3	125	0	0	128	4	0	2	0	6	0	131	2	0	133	0	0	0	0	0	267	0
16:30	4	113	0	0	117	3	0	1	0	4	0	169	7	0	176	0	0	0	0	0	297	0
16:45	3	122	0	0	125	2	0	0	0	2	0	131	5	0	136	0	0	0	0	0	263	0
<b>Total</b>	<b>15</b>	<b>487</b>	<b>0</b>	<b>0</b>	<b>502</b>	<b>16</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>20</b>	<b>0</b>	<b>579</b>	<b>16</b>	<b>0</b>	<b>595</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1117</b>	<b>0</b>
17:00	2	141	0	0	143	3	0	2	0	5	0	150	7	0	157	0	0	0	0	0	305	0
17:15	3	144	0	0	147	2	0	3	0	5	0	151	5	0	156	0	0	0	0	0	308	0
17:30	3	156	0	1	160	3	0	2	0	5	0	142	0	0	142	0	0	0	0	0	307	1
17:45	4	131	0	0	135	5	0	3	0	8	0	112	4	0	116	0	0	0	0	0	259	0
<b>Total</b>	<b>12</b>	<b>572</b>	<b>0</b>	<b>1</b>	<b>585</b>	<b>13</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>23</b>	<b>0</b>	<b>555</b>	<b>16</b>	<b>0</b>	<b>571</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1179</b>	<b>1</b>
<b>Grand Total</b>	<b>44</b>	<b>2033</b>	<b>0</b>	<b>1</b>	<b>2078</b>	<b>57</b>	<b>0</b>	<b>31</b>	<b>0</b>	<b>88</b>	<b>0</b>	<b>1676</b>	<b>48</b>	<b>1</b>	<b>1725</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3891</b>	<b>2</b>
Apprch %	2.1%	97.8%	0.0%	0.0%		64.8%	0.0%	35.2%	0.0%		0.0%	97.2%	2.8%	0.1%		0.0%	0.0%	0.0%	0.0%	0.0%		
Total %	1.1%	52.2%	0.0%	0.0%	53.4%	1.5%	0.0%	0.8%	0.0%	2.3%	0.0%	43.1%	1.2%	0.0%	44.3%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	

AM PEAK HOUR	E/O Pole Line Rd Southbound					S Diameter Dr Westbound					E/O Pole Line Rd Northbound					S Diameter Dr Eastbound					Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 08:00 to 09:00																					
Peak Hour For Entire Intersection Begins at 08:00																					
8:00	1	134	0	0	135	4	0	2	0	6	0	75	2	0	77	0	0	0	0	0	218
8:15	4	158	0	0	162	1	0	4	0	5	0	97	1	0	98	0	0	0	0	0	265
8:30	1	159	0	0	160	5	0	3	0	8	0	117	3	0	120	0	0	0	0	0	288
8:45	4	166	0	0	170	4	0	3	0	7	0	83	2	1	86	0	0	0	0	0	263
Total Volume	10	617	0	0	627	14	0	12	0	26	0	372	8	1	381	0	0	0	0	0	1034
% App Total	1.6%	98.4%	0.0%	0.0%		53.8%	0.0%	46.2%	0.0%		0.0%	97.6%	2.1%	0.3%		0.0%	0.0%	0.0%	0.0%	0.0%	
PHF	.625	.929	.000	.000	.922	.700	.000	.750	.000	.813	.000	.795	.667	.250	.794	.000	.000	.000	.000	.000	.898

PM PEAK HOUR	E/O Pole Line Rd Southbound					S Diameter Dr Westbound					E/O Pole Line Rd Northbound					S Diameter Dr Eastbound					Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 16:45 to 17:45																					
Peak Hour For Entire Intersection Begins at 16:45																					
16:45	3	122	0	0	125	2	0	0	0	2	0	131	5	0	136	0	0	0	0	0	263
17:00	2	141	0	0	143	3	0	2	0	5	0	150	7	0	157	0	0	0	0	0	305
17:15	3	144	0	0	147	2	0	3	0	5	0	151	5	0	156	0	0	0	0	0	308
17:30	3	156	0	1	160	3	0	2	0	5	0	142	0	0	142	0	0	0	0	0	307
Total Volume	11	563	0	1	575	10	0	7	0	17	0	574	17	0	591	0	0	0	0	0	1183
% App Total	1.9%	97.9%	0.0%	0.2%		58.8%	0.0%	41.2%	0.0%		0.0%	97.1%	2.9%	0.0%		0.0%	0.0%	0.0%	0.0%	0.0%	
PHF	.917	.902	.000	.250	.898	.833	.000	.583	.000	.850	.000	.950	.607	.000	.941	.000	.000	.000	.000	.000	.960

## National Data and Surveying Services

City of Davis  
 All Vehicles & Uturns On Unshifted  
 Peds & Bikes On Bank 1  
 Nothing On Bank 2

(323) 782-0090  
[info@ndsdata.com](mailto:info@ndsdata.com)

File Name : 17-7290-002 E/O Pole Line Rd & S Diameter Dr  
 Date : 4/19/2017

### Bank 1 Count = Peds & Bikes

START TIME	E/O Pole Line Rd Southbound					S Diameter Dr Westbound					E/O Pole Line Rd Northbound					S Diameter Dr Eastbound					Total	Peds Total
	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL		
7:00	0	1	0	0	1	0	0	0	1	0	0	3	0	0	3	0	0	0	0	0	4	1
7:15	0	7	0	0	7	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	7	1
7:30	0	2	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	2
7:45	0	3	0	3	3	0	0	0	2	0	0	2	0	0	2	0	0	0	0	0	5	5
<b>Total</b>	0	13	0	3	13	0	0	0	6	0	0	5	0	0	5	0	0	0	0	0	18	9
8:00	0	8	0	0	8	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	13	0
8:15	0	5	0	0	5	1	0	0	0	1	0	2	0	0	2	0	0	0	0	0	8	0
8:30	0	6	0	0	6	0	0	0	3	0	0	3	0	0	3	0	0	0	0	0	9	3
8:45	0	5	0	0	5	0	0	0	1	0	0	4	0	0	4	0	0	0	0	0	9	1
<b>Total</b>	0	24	0	0	24	1	0	0	4	1	0	14	0	0	14	0	0	0	0	0	39	4
16:00	0	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
16:15	0	1	0	0	1	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	4	0
16:30	0	1	0	1	1	0	0	0	1	0	0	4	0	0	4	0	0	0	0	0	5	2
16:45	0	0	0	0	0	0	0	0	4	0	0	3	0	0	3	0	0	0	0	0	3	4
<b>Total</b>	0	3	0	1	3	0	0	0	6	0	0	9	1	0	10	0	0	0	0	0	13	7
17:00	0	2	0	0	2	0	0	0	2	0	0	4	0	0	4	0	0	0	0	0	6	2
17:15	0	3	0	0	3	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	7	0
17:30	0	2	0	0	2	0	0	0	3	0	0	6	0	0	6	0	0	0	0	0	8	3
17:45	0	3	0	0	3	0	0	0	1	0	0	6	0	0	6	0	0	0	0	0	9	1
<b>Total</b>	0	10	0	0	10	0	0	0	6	0	0	20	0	0	20	0	0	0	0	0	30	6
<b>Grand Total</b>	0	50	0	4	50	1	0	0	22	1	0	48	1	0	49	0	0	0	0	0	100	26
Apprch %	0.0%	100.0%	0.0%			100.0%	0.0%	0.0%			0.0%	98.0%	2.0%			0.0%	0.0%	0.0%				
Total %	0.0%	50.0%	0.0%		50.0%	1.0%	0.0%	0.0%		1.0%	0.0%	48.0%	1.0%		49.0%	0.0%	0.0%	0.0%		0.0%	100.0%	

AM PEAK HOUR	E/O Pole Line Rd Southbound					S Diameter Dr Westbound					E/O Pole Line Rd Northbound					S Diameter Dr Eastbound					Total
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 08:00 to 09:00																					
Peak Hour For Entire Intersection Begins at 08:00																					
8:00	0	8	0	0	8	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	13
8:15	0	5	0	0	5	1	0	0	0	1	0	2	0	0	2	0	0	0	0	0	8
8:30	0	6	0	0	6	0	0	0	3	0	0	3	0	0	3	0	0	0	0	0	9
8:45	0	5	0	0	5	0	0	0	1	0	0	4	0	0	4	0	0	0	0	0	9
<b>Total Volume</b>	0	24	0	0	24	1	0	0	4	1	0	14	0	0	14	0	0	0	0	0	39
% App Total	0.0%	100.0%	0.0%			100.0%	0.0%	0.0%			0.0%	100.0%	0.0%			0.0%	0.0%	0.0%			
PHF	.000	.750	.000		.750	.250	.000	.000		.250	.000	.700	.000		.700	.000	.000	.000		.000	.750

PM PEAK HOUR	E/O Pole Line Rd Southbound					S Diameter Dr Westbound					E/O Pole Line Rd Northbound					S Diameter Dr Eastbound					Total
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 16:45 to 17:45																					
Peak Hour For Entire Intersection Begins at 16:45																					
16:45	0	0	0	0	0	0	0	0	4	0	0	3	0	0	3	0	0	0	0	0	3
17:00	0	2	0	0	2	0	0	0	2	0	0	4	0	0	4	0	0	0	0	0	6
17:15	0	3	0	0	3	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	7
17:30	0	2	0	0	2	0	0	0	3	0	0	6	0	0	6	0	0	0	0	0	8
<b>Total Volume</b>	0	7	0	0	7	0	0	0	9	0	0	17	0	0	17	0	0	0	0	0	24
% App Total	0.0%	100.0%	0.0%			0.0%	0.0%	0.0%			0.0%	100.0%	0.0%			0.0%	0.0%	0.0%			
PHF	.000	.583	.000		.583	.000	.000	.000		.000	.000	.708	.000		.708	.000	.000	.000		.000	.750

PROJECT#: 17-7290-002  
N/S Street: Pole Line Rd  
E/W Street: South Diameter Dr  
DATE: 4/19/2017  
CITY: Davis

**A M**

*PEDESTRIANS*

T I M E	I N	O U T
7:00 AM	0	0
7:15 AM	0	0
7:30 AM	0	0
7:45 AM	5	0
8:00 AM	0	2
8:15 AM	0	0
8:30 AM	0	0
8:45 AM	1	0
<b>TOTALS</b>	<b>6</b>	<b>2</b>

**P M**

*PEDESTRIANS*

T I M E	I N	O U T
4:00 PM	0	0
4:15 PM	0	0
4:30 PM	1	2
4:45 PM	1	1
5:00 PM	0	0
5:15 PM	1	0
5:30 PM	0	0
5:45 PM	0	0
<b>TOTALS</b>	<b>3</b>	<b>3</b>



# VOLUME

N Diameter Dr S/O E 8th St

Day: Thursday  
Date: 4/20/2017

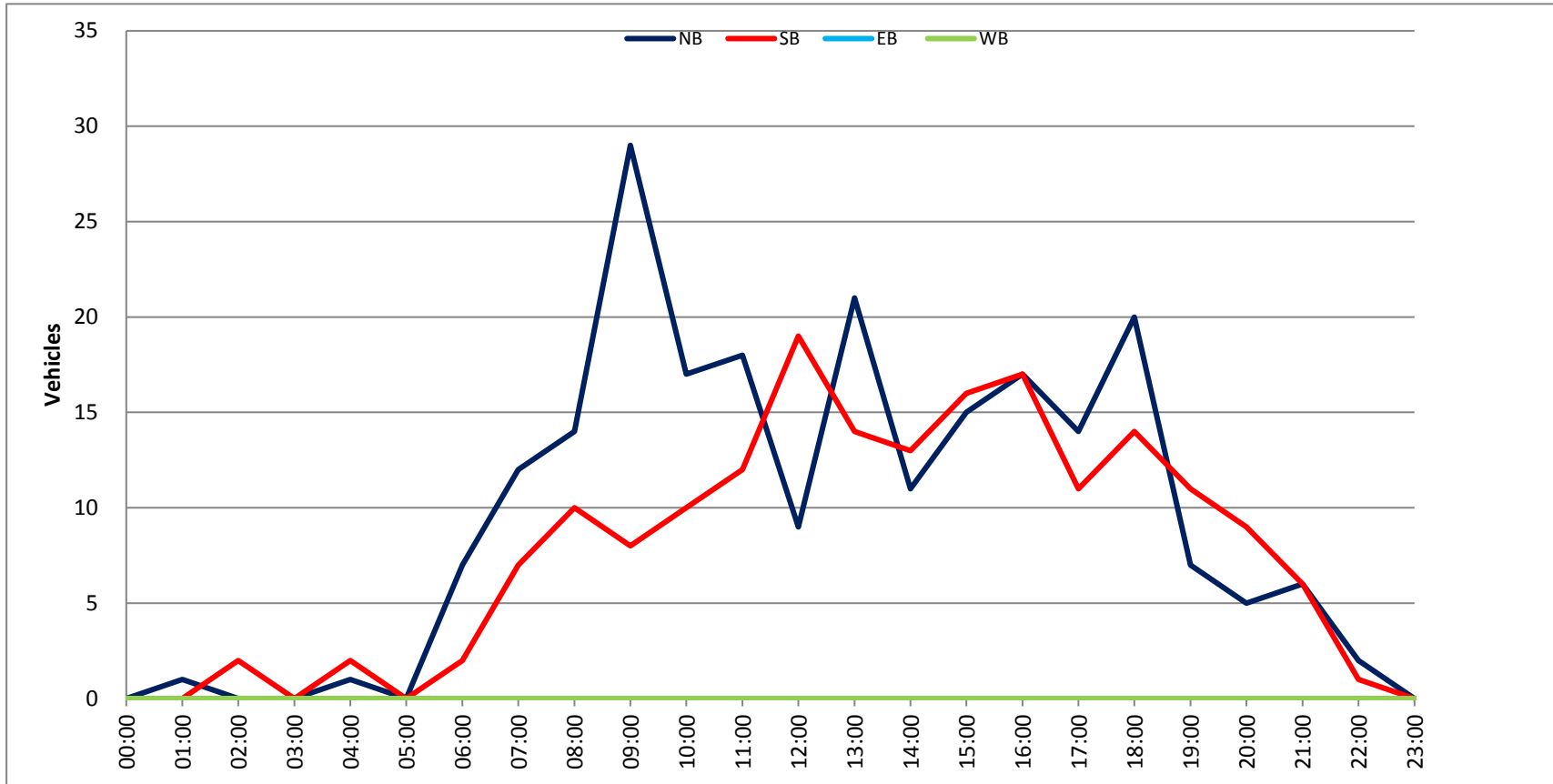
City: Davis  
Project #: CA17\_7291\_001

DAILY TOTALS	NB	SB	EB	WB	Total
	226	184	0	0	410

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	0	0			0	12:00	2	5			7
00:15	0	0			0	12:15	0	8			8
00:30	0	0			0	12:30	3	3			6
00:45	0	0			0	12:45	4	9	3	19	7 28
01:00	0	0			0	13:00	8	3			11
01:15	0	0			0	13:15	5	0			5
01:30	1	0			1	13:30	4	3			7
01:45	0	1	0		0 1	13:45	4	21	8	14	12 35
02:00	0	0			0	14:00	5	4			9
02:15	0	0			0	14:15	3	1			4
02:30	0	2			2	14:30	0	3			3
02:45	0	0	2		0 2	14:45	3	11	5	13	8 24
03:00	0	0			0	15:00	4	5			9
03:15	0	0			0	15:15	4	7			11
03:30	0	0			0	15:30	5	3			8
03:45	0	0			0	15:45	2	15	1	16	3 31
04:00	0	0			0	16:00	5	6			11
04:15	0	0			0	16:15	7	3			10
04:30	1	2			3	16:30	4	7			11
04:45	0	1	0	2	0 3	16:45	1	17	1	17	2 34
05:00	0	0			0	17:00	2	5			7
05:15	0	0			0	17:15	4	3			7
05:30	0	0			0	17:30	6	1			7
05:45	0	0			0	17:45	2	14	2	11	4 25
06:00	2	0			2	18:00	5	4			9
06:15	3	1			4	18:15	6	1			7
06:30	0	0			0	18:30	4	6			10
06:45	2	7	1	2	3 9	18:45	5	20	3	14	8 34
07:00	2	1			3	19:00	3	1			4
07:15	1	3			4	19:15	2	2			4
07:30	4	2			6	19:30	2	4			6
07:45	5	12	1	7	6 19	19:45	0	7	4	11	4 18
08:00	5	0			5	20:00	1	2			3
08:15	3	3			6	20:15	1	4			5
08:30	3	7			10	20:30	2	2			4
08:45	3	14	0	10	3 24	20:45	1	5	1	9	2 14
09:00	6	1			7	21:00	1	3			4
09:15	8	1			9	21:15	1	2			3
09:30	6	2			8	21:30	2	0			2
09:45	9	29	4	8	13 37	21:45	2	6	1	6	3 12
10:00	5	3			8	22:00	1	1			2
10:15	3	3			6	22:15	0	0			0
10:30	2	2			4	22:30	0	0			0
10:45	7	17	2	10	9 27	22:45	1	2	0	1	1 3
11:00	3	2			5	23:00	0	0			0
11:15	6	0			6	23:15	0	0			0
11:30	3	4			7	23:30	0	0			0
11:45	6	18	6	12	12 30	23:45	0	0			0
<b>TOTALS</b>	99	53			152	<b>TOTALS</b>	127	131			258
<b>SPLIT %</b>	65.1%	34.9%			37.1%	<b>SPLIT %</b>	49.2%	50.8%			62.9%

DAILY TOTALS	NB	SB	EB	WB	Total
	226	184	0	0	410

AM Peak Hour	09:00	11:30	09:15	PM Peak Hour	12:45	14:30	14:45				
AM Pk Volume	29	23	38	PM Pk Volume	21	20	36				
Pk Hr Factor	0.806	0.719	0.731	Pk Hr Factor	0.656	0.714	0.818				
7 - 9 Volume	26	17	0	0	43	4 - 6 Volume	31	28	0	0	59
7 - 9 Peak Hour	07:30	07:45	07:45	4 - 6 Peak Hour	16:00	16:00	16:00	16:00			16:00
7 - 9 Pk Volume	17	11	0	0	27	4 - 6 Pk Volume	17	17	0	0	34
Pk Hr Factor	0.850	0.393	0.000	0.000	0.675	Pk Hr Factor	0.607	0.607	0.000	0.000	0.773



## National Data and Surveying Services

City of Davis  
 All Vehicles & Uturns On Unshifted  
 Peds & Bikes On Bank 1  
 Nothing On Bank 2

(323) 782-0090  
[info@ndsdata.com](mailto:info@ndsdata.com)

File Name : 17-7290-001 N Diameter Dr & S/O E 8th St  
 Date : 4/20/2017

### Unshifted Count = All Vehicles & Uturns

START TIME	N Diameter Dr Southbound					S/O E 8th St Westbound					N Diameter Dr Northbound					S/O E 8th St Eastbound					Total	Uturns Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL		
7:00	0	0	0	0	0	0	10	0	0	10	2	0	0	0	2	0	6	1	0	7	19	0
7:15	0	0	0	0	0	1	8	0	0	9	1	0	0	0	1	0	5	2	0	7	17	0
7:30	0	0	0	0	0	0	28	0	0	28	2	0	2	0	4	0	7	2	0	9	41	0
7:45	0	0	0	0	0	1	24	0	0	25	4	0	1	0	5	0	15	0	0	15	45	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>70</b>	<b>0</b>	<b>0</b>	<b>72</b>	<b>9</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>12</b>	<b>0</b>	<b>33</b>	<b>5</b>	<b>0</b>	<b>38</b>	<b>122</b>	<b>0</b>
8:00	0	0	0	0	0	0	30	0	0	30	4	0	1	0	5	0	19	0	0	19	54	0
8:15	0	0	0	0	0	0	35	0	0	35	2	0	1	0	3	0	23	3	0	26	64	0
8:30	0	0	0	0	0	2	50	0	0	52	2	0	1	0	3	0	24	5	0	29	84	0
8:45	0	0	0	0	0	0	48	0	0	48	3	0	0	0	3	0	17	0	0	17	68	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>163</b>	<b>0</b>	<b>0</b>	<b>165</b>	<b>11</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>14</b>	<b>0</b>	<b>83</b>	<b>8</b>	<b>0</b>	<b>91</b>	<b>270</b>	<b>0</b>
16:00	0	0	0	0	0	1	16	0	0	17	4	0	1	0	5	0	27	5	0	32	54	0
16:15	0	0	0	0	0	1	18	0	0	19	4	0	3	0	7	0	29	2	0	31	57	0
16:30	0	0	0	0	0	2	20	0	0	22	1	0	3	0	4	0	47	5	1	53	79	1
16:45	0	0	0	0	0	0	32	0	1	33	1	0	0	0	1	0	41	1	1	43	77	2
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>86</b>	<b>0</b>	<b>1</b>	<b>91</b>	<b>10</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>17</b>	<b>0</b>	<b>144</b>	<b>13</b>	<b>2</b>	<b>159</b>	<b>267</b>	<b>3</b>
17:00	0	0	0	0	0	1	27	0	0	28	1	0	1	0	2	0	39	3	1	43	73	1
17:15	0	0	0	0	0	2	28	0	0	30	3	0	1	0	4	0	49	2	1	52	86	1
17:30	0	0	0	0	0	0	25	0	0	25	6	0	0	0	6	0	31	1	1	33	64	1
17:45	0	0	0	0	0	0	22	0	0	22	2	0	0	0	2	0	31	2	0	33	57	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>102</b>	<b>0</b>	<b>0</b>	<b>105</b>	<b>12</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>14</b>	<b>0</b>	<b>150</b>	<b>8</b>	<b>3</b>	<b>161</b>	<b>280</b>	<b>3</b>
<b>Grand Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11</b>	<b>421</b>	<b>0</b>	<b>1</b>	<b>433</b>	<b>42</b>	<b>0</b>	<b>15</b>	<b>0</b>	<b>57</b>	<b>0</b>	<b>410</b>	<b>34</b>	<b>5</b>	<b>449</b>	<b>939</b>	<b>6</b>
Apprch %	0.0%	0.0%	0.0%	0.0%		2.5%	97.2%	0.0%	0.2%		73.7%	0.0%	26.3%	0.0%		0.0%	91.3%	7.6%	1.1%			
Total %	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	44.8%	0.0%	0.1%	46.1%	4.5%	0.0%	1.6%	0.0%	6.1%	0.0%	43.7%	3.6%	0.5%	47.8%	100.0%	

AM PEAK HOUR	N Diameter Dr Southbound					S/O E 8th St Westbound					N Diameter Dr Northbound					S/O E 8th St Eastbound					Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 08:00 to 09:00																					
Peak Hour For Entire Intersection Begins at 08:00																					
8:00	0	0	0	0	0	0	30	0	0	30	4	0	1	0	5	0	19	0	0	19	54
8:15	0	0	0	0	0	0	35	0	0	35	2	0	1	0	3	0	23	3	0	26	64
8:30	0	0	0	0	0	2	50	0	0	52	2	0	1	0	3	0	24	5	0	29	84
8:45	0	0	0	0	0	0	48	0	0	48	3	0	0	0	3	0	17	0	0	17	68
Total Volume	0	0	0	0	0	2	163	0	0	165	11	0	3	0	14	0	83	8	0	91	270
% App Total	0.0%	0.0%	0.0%	0.0%		1.2%	98.8%	0.0%	0.0%		78.6%	0.0%	21.4%	0.0%		0.0%	91.2%	8.8%	0.0%		
PHF	.000	.000	.000	.000	.000	.250	.815	.000	.000	.793	.688	.000	.750	.000	.700	.000	.865	.400	.000	.784	.804

PM PEAK HOUR	N Diameter Dr Southbound					S/O E 8th St Westbound					N Diameter Dr Northbound					S/O E 8th St Eastbound					Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 16:30 to 17:30																					
Peak Hour For Entire Intersection Begins at 16:30																					
16:30	0	0	0	0	0	2	20	0	0	22	1	0	3	0	4	0	47	5	1	53	79
16:45	0	0	0	0	0	0	32	0	1	33	1	0	0	0	1	0	41	1	1	43	77
17:00	0	0	0	0	0	1	27	0	0	28	1	0	1	0	2	0	39	3	1	43	73
17:15	0	0	0	0	0	2	28	0	0	30	3	0	1	0	4	0	49	2	1	52	86
Total Volume	0	0	0	0	0	5	107	0	1	113	6	0	5	0	11	0	176	11	4	191	315
% App Total	0.0%	0.0%	0.0%	0.0%		4.4%	94.7%	0.0%	0.9%		54.5%	0.0%	45.5%	0.0%		0.0%	92.1%	5.8%	2.1%		
PHF	.000	.000	.000	.000	.000	.625	.836	.000	.250	.856	.500	.000	.417	.000	.688	.000	.898	.550	1.000	.901	.916

## National Data and Surveying Services

City of Davis  
 All Vehicles & Uturns On Unshifted  
 Peds & Bikes On Bank 1  
 Nothing On Bank 2

(323) 782-0090  
[info@ndsdata.com](mailto:info@ndsdata.com)

File Name : 17-7290-001 N Diameter Dr & S/O E 8th St  
 Date : 4/20/2017

### Bank 1 Count = Peds & Bikes

START TIME	N Diameter Dr Southbound					S/O E 8th St Westbound					N Diameter Dr Northbound					S/O E 8th St Eastbound					Total	Peds Total
	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL		
7:00	0	0	0	1	0	0	1	0	0	1	1	0	0	1	1	0	0	0	0	0	2	2
7:15	0	0	0	2	0	0	2	0	0	2	0	0	0	1	0	0	0	0	0	0	2	3
7:30	0	0	0	1	0	0	8	0	0	8	0	0	0	1	0	0	0	0	0	0	8	2
7:45	0	0	0	0	0	0	7	0	0	7	0	0	0	1	0	0	2	0	0	2	9	1
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>18</b>	<b>0</b>	<b>0</b>	<b>18</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>21</b>	<b>8</b>
8:00	0	0	0	0	0	0	8	0	0	8	1	0	0	3	1	0	2	0	0	2	11	3
8:15	0	0	0	3	0	0	9	0	1	9	0	0	1	1	1	0	1	0	0	1	11	5
8:30	0	0	0	1	0	0	12	0	0	12	2	0	0	1	2	0	0	0	0	0	14	2
8:45	0	0	0	0	0	0	8	0	0	8	1	0	0	0	1	0	2	1	0	3	12	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>37</b>	<b>0</b>	<b>1</b>	<b>37</b>	<b>4</b>	<b>0</b>	<b>1</b>	<b>5</b>	<b>5</b>	<b>0</b>	<b>5</b>	<b>1</b>	<b>0</b>	<b>6</b>	<b>48</b>	<b>10</b>
16:00	0	0	0	0	0	0	6	0	0	6	0	0	0	5	0	0	7	0	0	7	13	5
16:15	0	0	0	2	0	0	3	0	0	3	0	0	0	0	0	0	8	0	0	8	11	2
16:30	0	0	0	3	0	0	2	0	0	2	0	0	0	2	0	0	7	0	0	7	9	5
16:45	0	0	0	1	0	0	6	0	0	6	1	0	0	2	1	0	7	1	0	8	15	3
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>17</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>1</b>	<b>0</b>	<b>29</b>	<b>1</b>	<b>0</b>	<b>30</b>	<b>48</b>	<b>15</b>
17:00	0	0	0	2	0	0	2	0	0	2	0	0	0	0	0	0	8	0	0	8	10	2
17:15	0	0	0	0	0	0	3	0	0	3	0	0	0	1	0	0	4	0	0	4	7	1
17:30	0	0	0	0	0	0	4	0	0	4	0	0	0	2	0	0	12	0	0	12	16	2
17:45	0	0	0	0	0	0	5	0	0	5	0	0	0	6	0	0	7	0	0	7	12	6
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>31</b>	<b>0</b>	<b>0</b>	<b>31</b>	<b>45</b>	<b>11</b>
<b>Grand Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>86</b>	<b>0</b>	<b>1</b>	<b>86</b>	<b>6</b>	<b>0</b>	<b>1</b>	<b>27</b>	<b>7</b>	<b>0</b>	<b>67</b>	<b>2</b>	<b>0</b>	<b>69</b>	<b>162</b>	<b>44</b>
Apprch %	0.0%	0.0%	0.0%			0.0%	100.0%	0.0%			85.7%	0.0%	14.3%			0.0%	97.1%	2.9%				
Total %	0.0%	0.0%	0.0%		0.0%	0.0%	53.1%	0.0%		53.1%	3.7%	0.0%	0.6%		4.3%	0.0%	41.4%	1.2%		42.6%	100.0%	

AM PEAK HOUR	N Diameter Dr Southbound					S/O E 8th St Westbound					N Diameter Dr Northbound					S/O E 8th St Eastbound					Total
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 08:00 to 09:00																					
Peak Hour For Entire Intersection Begins at 08:00																					
8:00	0	0	0	0	0	0	8	0	0	8	1	0	0	3	1	0	2	0	0	2	11
8:15	0	0	0	3	0	0	9	0	1	9	0	0	1	1	1	0	1	0	0	1	11
8:30	0	0	0	1	0	0	12	0	0	12	2	0	0	1	2	0	0	0	0	0	14
8:45	0	0	0	0	0	0	8	0	0	8	1	0	0	0	1	0	2	1	0	3	12
<b>Total Volume</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>37</b>	<b>0</b>	<b>1</b>	<b>37</b>	<b>4</b>	<b>0</b>	<b>1</b>	<b>5</b>	<b>5</b>	<b>0</b>	<b>5</b>	<b>1</b>	<b>0</b>	<b>6</b>	<b>48</b>
% App Total	0.0%	0.0%	0.0%			0.0%	100.0%	0.0%			80.0%	0.0%	20.0%			0.0%	83.3%	16.7%			
PHF	.000	.000	.000		.000	.000	.771	.000		.771	.500	.000	.250		.625	.000	.625	.250		.500	.857

PM PEAK HOUR	N Diameter Dr Southbound					S/O E 8th St Westbound					N Diameter Dr Northbound					S/O E 8th St Eastbound					Total
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 16:30 to 17:30																					
Peak Hour For Entire Intersection Begins at 16:30																					
16:30	0	0	0	3	0	0	2	0	0	2	0	0	0	2	0	0	7	0	0	7	9
16:45	0	0	0	1	0	0	6	0	0	6	1	0	0	2	1	0	7	1	0	8	15
17:00	0	0	0	2	0	0	2	0	0	2	0	0	0	0	0	0	8	0	0	8	10
17:15	0	0	0	0	0	0	3	0	0	3	0	0	0	1	0	0	4	0	0	4	7
<b>Total Volume</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>13</b>	<b>0</b>	<b>0</b>	<b>13</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>1</b>	<b>0</b>	<b>26</b>	<b>1</b>	<b>0</b>	<b>27</b>	<b>41</b>
% App Total	0.0%	0.0%	0.0%			0.0%	100.0%	0.0%			100.0%	0.0%	0.0%			0.0%	96.3%	3.7%			
PHF	.000	.000	.000		.000	.000	.542	.000		.542	.250	.000	.000		.250	.000	.813	.250		.844	.683

PROJECT#: 17-7290-001  
N/S Street: N Diameter Dr  
E/W Street: E 8th St  
DATE: 4/20/2017  
CITY: Davis

**A M**

*PEDESTRIANS*

T I M E	I N	O U T
7:00 AM	0	0
7:15 AM	0	0
7:30 AM	0	0
7:45 AM	1	0
8:00 AM	0	0
8:15 AM	0	1
8:30 AM	1	0
8:45 AM	0	0
<b>TOTALS</b>	<b>2</b>	<b>1</b>

**P M**

*PEDESTRIANS*

T I M E	I N	O U T
4:00 PM	1	0
4:15 PM	0	0
4:30 PM	0	1
4:45 PM	1	0
5:00 PM	0	1
5:15 PM	0	0
5:30 PM	1	0
5:45 PM	0	0
<b>TOTALS</b>	<b>3</b>	<b>2</b>

# VOLUME

S Diameter Dr E/O Pole Line Rd

Day: Thursday  
Date: 4/20/2017

City: Davis  
Project #: CA17\_7291\_002

DAILY TOTALS					NB	SB	EB	WB	Total
					0	0	415	374	789

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL			
00:00			1	0	1	12:00			12	4	16			
00:15			0	0	0	12:15			13	13	26			
00:30			0	0	0	12:30			10	9	19			
00:45			4	5	1	1	12:45		8	43	10	36	18	79
01:00			0	0	0	13:00			9	11	20			
01:15			0	0	0	13:15			12	9	21			
01:30			1	2	3	13:30			4	5	9			
01:45			0	1	0	2	13:45		14	39	7	32	21	71
02:00			0	0	0	14:00			9	9	18			
02:15			0	0	0	14:15			7	7	14			
02:30			0	1	1	14:30			8	4	12			
02:45			0	0	1	14:45			8	32	2	22	10	54
03:00			0	0	0	15:00			6	4	10			
03:15			0	0	0	15:15			7	5	12			
03:30			0	0	0	15:30			9	6	15			
03:45			0	0	0	15:45			11	33	5	20	16	53
04:00			0	0	0	16:00			5	3	8			
04:15			1	0	1	16:15			5	4	9			
04:30			0	0	0	16:30			9	9	18			
04:45			0	1	3	3	16:45		7	26	4	20	11	46
05:00			0	0	0	17:00			6	3	9			
05:15			0	0	0	17:15			11	2	13			
05:30			1	0	1	17:30			5	5	10			
05:45			0	1	1	1	17:45		4	26	5	15	9	41
06:00			0	2	2	18:00			9	9	18			
06:15			0	2	2	18:15			11	7	18			
06:30			4	1	5	18:30			7	5	12			
06:45			2	6	4	9	18:45		7	34	5	26	12	60
07:00			2	6	8	19:00			1	5	6			
07:15			5	2	7	19:15			5	1	6			
07:30			4	8	12	19:30			2	2	4			
07:45			3	14	6	22	19:45		4	12	2	10	6	22
08:00			3	7	10	20:00			4	1	5			
08:15			3	2	5	20:15			5	5	10			
08:30			3	8	11	20:30			3	1	4			
08:45			6	15	7	24	20:45		3	15	4	11	7	26
09:00			2	4	6	21:00			4	2	6			
09:15			5	6	11	21:15			4	1	5			
09:30			7	7	14	21:30			5	2	7			
09:45			12	26	9	26	21:45		2	15	0	5	2	20
10:00			11	8	19	22:00			2	0	2			
10:15			5	9	14	22:15			1	2	3			
10:30			7	10	17	22:30			1	0	1			
10:45			9	32	16	43	22:45		1	5	0	2	1	7
11:00			3	15	18	23:00			2	1	3			
11:15			7	7	14	23:15			2	1	3			
11:30			9	12	21	23:30			1	0	1			
11:45			9	28	7	41	23:45		1	6	0	2	1	8
<b>TOTALS</b>			129	173	302	<b>TOTALS</b>			286	201	487			
<b>SPLIT %</b>			42.7%	57.3%	38.3%	<b>SPLIT %</b>			58.7%	41.3%	61.7%			

DAILY TOTALS					NB	SB	EB	WB	Total
					0	0	415	374	789

AM Peak Hour			11:45	10:15	11:30	PM Peak Hour			12:00	12:15	12:15
AM Pk Volume			44	50	79	PM Pk Volume			43	43	83
Pk Hr Factor			0.846	0.781	0.760	Pk Hr Factor			0.827	0.827	0.798
7 - 9 Volume	0	0	29	46	75	4 - 6 Volume	0	0	52	35	87
7 - 9 Peak Hour			07:15	08:00	08:00	4 - 6 Peak Hour			16:30	16:00	16:30
7 - 9 Pk Volume	0	0	15	24	39	4 - 6 Pk Volume	0	0	33	20	51
Pk Hr Factor	0.000	0.000	0.750	0.750	0.750	Pk Hr Factor	0.000	0.000	0.750	0.556	0.708



## National Data and Surveying Services

City of Davis  
 All Vehicles & Uturns On Unshifted  
 Peds & Bikes On Bank 1  
 Nothing On Bank 2

(323) 782-0090  
[info@ndsdata.com](mailto:info@ndsdata.com)

File Name : 17-7290-002 E/O Pole Line Rd & S Diameter Dr  
 Date : 4/20/2017

### Unshifted Count = All Vehicles & Uturns

START TIME	E/O Pole Line Rd Southbound					S Diameter Dr Westbound					E/O Pole Line Rd Northbound					S Diameter Dr Eastbound					Total	Uturns Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL		
7:00	1	60	0	0	61	5	0	1	0	6	0	18	1	0	19	0	0	0	0	0	86	0
7:15	3	68	0	0	71	1	0	1	0	2	0	29	2	0	31	0	0	0	0	0	104	0
7:30	2	103	0	0	105	7	0	1	0	8	0	42	2	0	44	0	0	0	0	0	157	0
7:45	0	139	0	0	139	5	0	1	0	6	0	53	3	1	57	0	0	0	0	0	202	1
<b>Total</b>	<b>6</b>	<b>370</b>	<b>0</b>	<b>0</b>	<b>376</b>	<b>18</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>22</b>	<b>0</b>	<b>142</b>	<b>8</b>	<b>1</b>	<b>151</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>549</b>	<b>1</b>
8:00	1	122	0	0	123	4	0	3	0	7	0	85	2	0	87	0	0	0	0	0	217	0
8:15	1	170	0	0	171	0	0	2	0	2	0	117	2	0	119	0	0	0	0	0	292	0
8:30	0	173	0	0	173	5	0	3	0	8	0	107	3	0	110	0	0	0	0	0	291	0
8:45	4	178	0	0	182	5	0	2	0	7	0	84	2	0	86	0	0	0	0	0	275	0
<b>Total</b>	<b>6</b>	<b>643</b>	<b>0</b>	<b>0</b>	<b>649</b>	<b>14</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>24</b>	<b>0</b>	<b>393</b>	<b>9</b>	<b>0</b>	<b>402</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1075</b>	<b>0</b>
16:00	3	101	0	0	104	2	0	1	0	3	0	125	2	0	127	0	0	0	0	0	234	0
16:15	2	112	0	0	114	3	0	1	0	4	0	133	3	0	136	0	0	0	0	0	254	0
16:30	6	132	0	0	138	5	0	4	0	9	0	146	3	0	149	0	0	0	0	0	296	0
16:45	2	145	0	0	147	4	0	0	0	4	0	130	5	0	135	0	0	0	0	0	286	0
<b>Total</b>	<b>13</b>	<b>490</b>	<b>0</b>	<b>0</b>	<b>503</b>	<b>14</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>20</b>	<b>0</b>	<b>534</b>	<b>13</b>	<b>0</b>	<b>547</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1070</b>	<b>0</b>
17:00	1	131	0	0	132	3	0	0	0	3	0	167	5	0	172	0	0	0	0	0	307	0
17:15	6	144	0	0	150	0	0	2	0	2	0	172	5	0	177	0	0	0	0	0	329	0
17:30	2	142	0	0	144	2	0	3	0	5	0	141	3	0	144	0	0	0	0	0	293	0
17:45	2	150	0	0	152	3	0	2	0	5	0	123	2	0	125	0	0	0	0	0	282	0
<b>Total</b>	<b>11</b>	<b>567</b>	<b>0</b>	<b>0</b>	<b>578</b>	<b>8</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>15</b>	<b>0</b>	<b>603</b>	<b>15</b>	<b>0</b>	<b>618</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1211</b>	<b>0</b>
<b>Grand Total</b>	<b>36</b>	<b>2070</b>	<b>0</b>	<b>0</b>	<b>2106</b>	<b>54</b>	<b>0</b>	<b>27</b>	<b>0</b>	<b>81</b>	<b>0</b>	<b>1672</b>	<b>45</b>	<b>1</b>	<b>1718</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3905</b>	<b>1</b>
Apprch %	1.7%	98.3%	0.0%	0.0%		66.7%	0.0%	33.3%	0.0%		0.0%	97.3%	2.6%	0.1%		0.0%	0.0%	0.0%	0.0%			
Total %	0.9%	53.0%	0.0%	0.0%	53.9%	1.4%	0.0%	0.7%	0.0%	2.1%	0.0%	42.8%	1.2%	0.0%	44.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	

AM PEAK HOUR	E/O Pole Line Rd Southbound					S Diameter Dr Westbound					E/O Pole Line Rd Northbound					S Diameter Dr Eastbound					Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 08:00 to 09:00																					
Peak Hour For Entire Intersection Begins at 08:00																					
8:00	1	122	0	0	123	4	0	3	0	7	0	85	2	0	87	0	0	0	0	0	217
8:15	1	170	0	0	171	0	0	2	0	2	0	117	2	0	119	0	0	0	0	0	292
8:30	0	173	0	0	173	5	0	3	0	8	0	107	3	0	110	0	0	0	0	0	291
8:45	4	178	0	0	182	5	0	2	0	7	0	84	2	0	86	0	0	0	0	0	275
Total Volume	6	643	0	0	649	14	0	10	0	24	0	393	9	0	402	0	0	0	0	0	1075
% App Total	0.9%	99.1%	0.0%	0.0%		58.3%	0.0%	41.7%	0.0%		0.0%	97.8%	2.2%	0.0%		0.0%	0.0%	0.0%	0.0%		
PHF	.375	.903	.000	.000	.891	.700	.000	.833	.000	.750	.000	.840	.750	.000	.845	.000	.000	.000	.000	.000	.920

PM PEAK HOUR	E/O Pole Line Rd Southbound					S Diameter Dr Westbound					E/O Pole Line Rd Northbound					S Diameter Dr Eastbound					Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 16:30 to 17:30																					
Peak Hour For Entire Intersection Begins at 16:30																					
16:30	6	132	0	0	138	5	0	4	0	9	0	146	3	0	149	0	0	0	0	0	296
16:45	2	145	0	0	147	4	0	0	0	4	0	130	5	0	135	0	0	0	0	0	286
17:00	1	131	0	0	132	3	0	0	0	3	0	167	5	0	172	0	0	0	0	0	307
17:15	6	144	0	0	150	0	0	2	0	2	0	172	5	0	177	0	0	0	0	0	329
Total Volume	15	552	0	0	567	12	0	6	0	18	0	615	18	0	633	0	0	0	0	0	1218
% App Total	2.6%	97.4%	0.0%	0.0%		66.7%	0.0%	33.3%	0.0%		0.0%	97.2%	2.8%	0.0%		0.0%	0.0%	0.0%	0.0%		
PHF	.625	.952	.000	.000	.945	.600	.000	.375	.000	.500	.000	.894	.900	.000	.894	.000	.000	.000	.000	.000	.926



## National Data and Surveying Services

City of Davis  
 All Vehicles & Uturns On Unshifted  
 Peds & Bikes On Bank 1  
 Nothing On Bank 2

(323) 782-0090  
[info@ndsdata.com](mailto:info@ndsdata.com)

File Name : 17-7290-002 E/O Pole Line Rd & S Diameter Dr  
 Date : 4/20/2017

### Bank 1 Count = Peds & Bikes

START TIME	E/O Pole Line Rd Southbound					S Diameter Dr Westbound					E/O Pole Line Rd Northbound					S Diameter Dr Eastbound					Total	Peds Total
	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL		
7:00	0	1	0	0	1	0	0	0	1	0	0	2	0	0	2	0	0	0	0	0	3	1
7:15	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2	0
7:30	0	2	0	2	2	0	0	0	6	0	0	0	0	1	0	0	0	0	0	0	2	9
7:45	0	4	0	0	4	0	0	0	2	0	0	1	0	2	1	0	0	0	0	0	5	4
<b>Total</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>2</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>3</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>14</b>
8:00	0	3	0	0	3	1	0	0	6	1	0	3	0	1	3	0	0	0	0	0	7	7
8:15	0	4	0	0	4	0	0	0	1	0	1	4	0	0	5	0	0	1	0	1	10	1
8:30	0	6	0	0	6	0	0	0	3	0	0	6	0	0	6	0	0	1	0	1	13	3
8:45	0	4	0	0	4	0	0	0	2	0	0	3	0	0	3	0	0	0	0	0	7	2
<b>Total</b>	<b>0</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>17</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>1</b>	<b>1</b>	<b>16</b>	<b>0</b>	<b>1</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>37</b>	<b>13</b>
16:00	0	1	0	0	1	0	0	0	1	0	0	2	0	0	2	0	0	0	0	0	3	1
16:15	0	3	0	0	3	0	0	0	1	0	0	3	0	0	3	0	0	0	0	0	6	1
16:30	0	2	0	0	2	2	0	0	0	2	0	2	0	0	2	0	0	0	0	0	6	0
16:45	0	4	0	0	4	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	8	0
<b>Total</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>11</b>	<b>0</b>	<b>0</b>	<b>11</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>23</b>	<b>2</b>
17:00	0	3	0	0	3	0	0	0	3	0	0	10	0	0	10	0	0	0	0	0	13	3
17:15	0	2	0	0	2	0	0	0	2	0	0	7	0	0	7	0	0	0	0	0	9	2
17:30	1	3	0	0	4	s	0	0	1	0	0	5	0	0	5	0	0	0	0	0	9	1
17:45	0	4	0	0	4	0	0	0	5	0	0	7	0	0	7	0	0	0	0	0	11	5
<b>Total</b>	<b>1</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>13</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11</b>	<b>0</b>	<b>0</b>	<b>29</b>	<b>0</b>	<b>0</b>	<b>29</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>42</b>	<b>11</b>
<b>Grand Total</b>	<b>1</b>	<b>47</b>	<b>0</b>	<b>2</b>	<b>48</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>34</b>	<b>3</b>	<b>1</b>	<b>60</b>	<b>0</b>	<b>4</b>	<b>61</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>114</b>	<b>40</b>
Apprch %	2.1%	97.9%	0.0%			100.0%	0.0%	0.0%			1.6%	98.4%	0.0%			0.0%	0.0%	100.0%				
Total %	0.9%	41.2%	0.0%		42.1%	2.6%	0.0%	0.0%		2.6%	0.9%	52.6%	0.0%		53.5%	0.0%	0.0%	1.8%		1.8%	100.0%	

AM PEAK HOUR	E/O Pole Line Rd Southbound					S Diameter Dr Westbound					E/O Pole Line Rd Northbound					S Diameter Dr Eastbound					Total
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 08:00 to 09:00																					
Peak Hour For Entire Intersection Begins at 08:00																					
8:00	0	3	0	0	3	1	0	0	6	1	0	3	0	1	3	0	0	0	0	0	7
8:15	0	4	0	0	4	0	0	0	1	0	1	4	0	0	5	0	0	1	0	1	10
8:30	0	6	0	0	6	0	0	0	3	0	0	6	0	0	6	0	0	1	0	1	13
8:45	0	4	0	0	4	0	0	0	2	0	0	3	0	0	3	0	0	0	0	0	7
<b>Total Volume</b>	<b>0</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>17</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>1</b>	<b>1</b>	<b>16</b>	<b>0</b>	<b>1</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>37</b>
% App Total	0.0%	100.0%	0.0%			100.0%	0.0%	0.0%			5.9%	94.1%	0.0%			0.0%	0.0%	100.0%			
PHF	.000	.708	.000		.708	.250	.000	.000		.250	.250	.667	.000		.708	.000	.000	.500		.500	.712

PM PEAK HOUR	E/O Pole Line Rd Southbound					S Diameter Dr Westbound					E/O Pole Line Rd Northbound					S Diameter Dr Eastbound					Total
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 16:30 to 17:30																					
Peak Hour For Entire Intersection Begins at 16:30																					
16:30	0	2	0	0	2	2	0	0	0	2	0	2	0	0	2	0	0	0	0	0	6
16:45	0	4	0	0	4	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	8
17:00	0	3	0	0	3	0	0	0	3	0	0	10	0	0	10	0	0	0	0	0	13
17:15	0	2	0	0	2	0	0	0	2	0	0	7	0	0	7	0	0	0	0	0	9
<b>Total Volume</b>	<b>0</b>	<b>11</b>	<b>0</b>	<b>0</b>	<b>11</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>2</b>	<b>0</b>	<b>23</b>	<b>0</b>	<b>0</b>	<b>23</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>36</b>
% App Total	0.0%	100.0%	0.0%			100.0%	0.0%	0.0%			0.0%	100.0%	0.0%			0.0%	0.0%	0.0%			
PHF	.000	.688	.000		.688	.250	.000	.000		.250	.000	.575	.000		.575	.000	.000	.000		.000	.692

# MXD+ Output

Land Use	Units1	ITE Code	Quantity	Daily	In	Out	Total	In	Out	Total
Net New Uses										
(932) - High-Turnover Restaurant (Adj Streets, 7-9A, 4-6P)	1000 sq ft gross floor area	9322	5	636	30	24	54	29	20	49
(492) - Health/Fitness Club (Adj Streets, 7-9A, 4-6P)	1000 sq ft gross floor area	4923	8	263	6	6	11	17	13	30
Custom (SF age restricted detached)	Custom	0004	129	593	11	19	30	26	20	46
(252) - Senior Adult Housing - Attached (Adj Streets, 7-9A, 4-6P)	Dwelling Units	2525	324	1,115	22	43	65	44	37	81
Custom (SF non age restricted detached)	Custom	0006	77	987	12	66	78	56	24	80
Custom (Age restricted detached units)	Custom	0007	30	138	3	4	7	6	5	11
Net Raw Project Trips (Excluding Life Long Classes)				3,732	84	162	245	178	119	297
Reductions										
Internal Capture				-200	-8	-14	-22	-19	-13	-32

OUTPUT FROM MAINSTREET SHOWING INTERNALIZATION

# Existing Plus Project Level of Service (LOS) Calculations

Intersection	
Intersection Delay, s/veh	16.1
Intersection LOS	C

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations		↵	↵			↵	↵			↵	↵	
Traffic Vol, veh/h	0	9	262	39	0	106	179	11	0	34	61	214
Future Vol, veh/h	0	9	262	39	0	106	179	11	0	34	61	214
Peak Hour Factor	0.92	0.93	0.93	0.93	0.92	0.76	0.76	0.76	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	10	282	42	0	139	236	14	0	37	66	233
Number of Lanes	0	1	1	0	0	1	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	2	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	2	1	2
HCM Control Delay	19.1	14.4	16.1
HCM LOS	C	B	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	100%	0%	100%	0%	100%	0%	36%
Vol Thru, %	0%	22%	0%	87%	0%	94%	54%
Vol Right, %	0%	78%	0%	13%	0%	6%	10%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	34	275	9	301	106	190	99
LT Vol	34	0	9	0	106	0	36
Through Vol	0	61	0	262	0	179	53
RT Vol	0	214	0	39	0	11	10
Lane Flow Rate	37	299	10	324	139	250	119
Geometry Grp	7	7	7	7	7	7	6
Degree of Util (X)	0.078	0.54	0.02	0.606	0.282	0.467	0.253
Departure Headway (Hd)	7.573	6.507	7.344	6.74	7.277	6.724	7.642
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	473	553	488	537	494	535	470
Service Time	5.314	4.248	5.086	4.482	5.02	4.467	5.697
HCM Lane V/C Ratio	0.078	0.541	0.02	0.603	0.281	0.467	0.253
HCM Control Delay	11	16.7	10.2	19.4	12.9	15.3	13.3
HCM Lane LOS	B	C	B	C	B	C	B
HCM 95th-tile Q	0.3	3.2	0.1	4	1.1	2.5	1

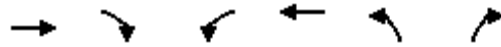
**Intersection**

Intersection Delay, s/veh  
 Intersection LOS

Movement	SBU	SBL	SBT	SBR
Lane Configurations			↕	
Traffic Vol, veh/h	0	36	53	10
Future Vol, veh/h	0	36	53	10
Peak Hour Factor	0.92	0.83	0.83	0.83
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	43	64	12
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	2
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	13.3
HCM LOS	B

HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 2: Denali Dr & Covell Blvd Existing Plus Project Conditions - AM Peak Hour



Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations								
Traffic Volume (veh/h)	497	26	102	375	22	179		
Future Volume (veh/h)	497	26	102	375	22	179		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1900		
Adj Flow Rate, veh/h	552	0	110	403	26	0		
Adj No. of Lanes	1	0	1	1	0	0		
Peak Hour Factor	0.90	0.90	0.93	0.93	0.86	0.86		
Percent Heavy Veh, %	2	2	2	2	0	0		
Cap, veh/h	873	0	167	1264	57	0		
Arrive On Green	0.47	0.00	0.09	0.68	0.03	0.00		
Sat Flow, veh/h	1863	0	1774	1863	1711	0		
Grp Volume(v), veh/h	552	0	110	403	27	0		
Grp Sat Flow(s),veh/h/ln	1863	0	1774	1863	1777	0		
Q Serve(g_s), s	7.8	0.0	2.1	3.1	0.5	0.0		
Cycle Q Clear(g_c), s	7.8	0.0	2.1	3.1	0.5	0.0		
Prop In Lane		0.00	1.00		0.96	0.00		
Lane Grp Cap(c), veh/h	873	0	167	1264	59	0		
V/C Ratio(X)	0.63	0.00	0.66	0.32	0.46	0.00		
Avail Cap(c_a), veh/h	1881	0	1023	1881	1025	0		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh	6.9	0.0	15.2	2.3	16.5	0.0		
Incr Delay (d2), s/veh	0.8	0.0	4.4	0.1	11.5	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	4.0	0.0	1.2	1.6	0.4	0.0		
LnGrp Delay(d),s/veh	7.7	0.0	19.5	2.4	28.0	0.0		
LnGrp LOS	A		B	A	C			
Approach Vol, veh/h	552			513	27			
Approach Delay, s/veh	7.7			6.1	28.0			
Approach LOS	A			A	C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	7.3	22.3				29.5		5.1
Change Period (Y+Rc), s	4.0	6.0				6.0		4.0
Max Green Setting (Gmax), s	20.0	35.0				35.0		20.0
Max Q Clear Time (g_c+I1), s	4.1	9.8				5.1		2.5
Green Ext Time (p_c), s	0.2	6.5				6.8		0.1
<b>Intersection Summary</b>								
HCM 2010 Ctrl Delay			7.5					
HCM 2010 LOS			A					
<b>Notes</b>								

User approved volume balancing among the lanes for turning movement.



**Intersection 3**                      **Risling Ct/Sutter Hospital Dwy**                      **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	57	54	94.2%	5.2	0.9	A
	Through	106	113	106.5%	4.2	0.6	A
	Right Turn	31	31	99.7%	3.9	1.3	A
	Subtotal	194	198	101.8%	4.5	0.4	A
SB	Left Turn	1	1	60.0%	0.4	0.8	A
	Through	101	107	105.6%	1.2	2.8	A
	Right Turn						
	Subtotal	102	107	105.2%	1.2	2.8	A
EB	Left Turn						
	Through	4	4	100.0%	4.7	5.3	A
	Right Turn	57	59	103.7%	3.9	1.9	A
	Subtotal	61	63	103.4%	4.2	2.1	A
WB	Left Turn	11	10	94.5%	6.9	5.4	A
	Through	3	4	120.0%	2.4	2.7	A
	Right Turn	2	2	110.0%	1.3	1.8	A
	Subtotal	16	16	101.3%	7.0	4.8	A
Total		373	384	103.0%	3.7	1.3	A

**Intersection 4**                      **Risling Ct-Shasta Dr/W Covell Blvd**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	12	11	92.5%	80.1	28.6	F
	Through	19	21	108.4%	46.2	19.1	D
	Right Turn	273	271	99.3%	5.5	1.4	A
	Subtotal	304	303	99.6%	11.2	2.5	B
SB	Left Turn	136	143	104.8%	82.0	40.2	F
	Through	12	14	117.5%	55.4	23.6	E
	Right Turn	21	21	100.5%	36.2	32.9	D
	Subtotal	169	178	105.1%	73.9	36.5	E
EB	Left Turn	64	64	100.5%	86.4	32.8	F
	Through	618	630	101.9%	17.3	2.5	B
	Right Turn	14	15	104.3%	8.9	6.4	A
	Subtotal	696	709	101.9%	23.5	2.8	C
WB	Left Turn	131	138	105.6%	54.9	8.1	D
	Through	485	490	100.9%	13.2	2.2	B
	Right Turn	116	118	101.3%	5.2	0.6	A
	Subtotal	732	746	101.8%	19.4	2.2	B
Total		1,901	1,935	101.8%	24.3	2.7	C

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Existing Plus Project Conditions  
AM Peak Hour

Intersection 5                      John Jones Rd/W Covell Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	185	186	100.6%	30.2	4.3	C
	Through						
	Right Turn	59	61	102.5%	6.4	0.9	A
	Subtotal	244	247	101.1%	24.1	3.2	C
EB	Left Turn	76	79	104.1%	62.3	8.8	E
	Through	955	969	101.4%	26.9	8.3	C
	Right Turn						
	Subtotal	1,031	1,048	101.6%	29.7	7.6	C
WB	Left Turn						
	Through	673	684	101.7%	13.0	2.7	B
	Right Turn	299	280	93.6%	9.7	2.4	A
	Subtotal	972	964	99.2%	12.0	2.6	B
Total		2,247	2,258	100.5%	21.6	3.9	C

Intersection 6                      SR 113 SB Ramps/W Covell Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	158	158	100.3%	37.4	4.9	D
	Through	1	1	90.0%	9.0	19.1	A
	Right Turn	140	138	98.8%	36.7	4.5	D
	Subtotal	299	298	99.5%	37.2	3.5	D
EB	Left Turn						
	Through	667	673	101.0%	34.3	4.0	C
	Right Turn	473	480	101.4%	37.1	4.1	D
	Subtotal	1,140	1,153	101.2%	35.5	4.0	D
WB	Left Turn	454	453	99.7%	70.6	5.1	E
	Through	832	828	99.5%	13.0	2.2	B
	Right Turn						
	Subtotal	1,286	1,281	99.6%	33.2	2.7	C
Total		2,725	2,732	100.2%	34.6	1.8	C

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Existing Plus Project Conditions  
AM Peak Hour























Intersection 7 SR 113 NB Ramps/W Covell Blvd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	327	330	100.8%	45.6	15.2	D
	Through	1	1	110.0%	9.7	15.8	A
	Right Turn	289	282	97.4%	11.5	2.0	B
	Subtotal	617	612	99.2%	29.5	9.5	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	90	89	98.9%	55.2	12.2	E
	Through	735	741	100.8%	17.0	3.2	B
	Right Turn						
	Subtotal	825	830	100.6%	21.0	3.8	C
WB	Left Turn						
	Through	958	951	99.3%	25.4	6.0	C
	Right Turn	140	143	101.8%	13.0	3.7	B
	Subtotal	1,098	1,094	99.6%	23.7	5.7	C
Total		2,540	2,536	99.9%	24.3	5.5	C



















Intersection 8 Sycamore Ln/W Covell Blvd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	197	195	98.8%	45.1	7.5	D
	Through	34	34	98.5%	42.4	8.4	D
	Right Turn	35	32	91.1%	13.9	5.8	B
	Subtotal	266	260	97.7%	41.2	6.5	D
SB	Left Turn	78	80	102.9%	44.0	13.2	D
	Through	61	61	99.2%	37.0	7.8	D
	Right Turn	213	216	101.4%	12.6	3.8	B
	Subtotal	352	357	101.3%	24.1	5.4	C
EB	Left Turn	117	113	96.4%	51.1	8.8	D
	Through	585	592	101.2%	31.0	2.7	C
	Right Turn	177	179	101.2%	21.9	4.0	C
	Subtotal	879	884	100.6%	31.9	2.7	C
WB	Left Turn	30	30	99.3%	48.4	8.7	D
	Through	618	615	99.4%	24.4	2.6	C
	Right Turn	60	60	100.2%	17.8	4.3	B
	Subtotal	708	705	99.5%	24.8	2.5	C
Total		2,205	2,205	100.0%	29.5	1.5	C

HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 9: Anderson Rd & Covell Blvd Existing Plus Project Conditions - AM Peak Hour
























												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	518	164	136	419	37	167	58	69	51	151	101
Future Volume (veh/h)	31	518	164	136	419	37	167	58	69	51	151	101
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1854	1900	1863	1863	1727	1792	1814	1900	1863	1799	1900
Adj Flow Rate, veh/h	38	632	0	160	493	0	194	67	0	56	166	0
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	1	2	0
Peak Hour Factor	0.82	0.82	0.82	0.85	0.85	0.85	0.86	0.86	0.86	0.91	0.91	0.91
Percent Heavy Veh, %	7	2	2	2	2	10	6	8	8	2	8	8
Cap, veh/h	63	1283	0	206	1569	651	244	393	0	84	414	0
Arrive On Green	0.04	0.36	0.00	0.12	0.44	0.00	0.14	0.22	0.00	0.05	0.12	0.00
Sat Flow, veh/h	1691	3615	0	1774	3539	1468	1707	1814	0	1774	3509	0
Grp Volume(v), veh/h	38	632	0	160	493	0	194	67	0	56	166	0
Grp Sat Flow(s),veh/h/ln	1691	1761	0	1774	1770	1468	1707	1814	0	1774	1709	0
Q Serve(g_s), s	1.6	9.8	0.0	6.2	6.4	0.0	7.7	2.1	0.0	2.2	3.2	0.0
Cycle Q Clear(g_c), s	1.6	9.8	0.0	6.2	6.4	0.0	7.7	2.1	0.0	2.2	3.2	0.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	63	1283	0	206	1569	651	244	393	0	84	414	0
V/C Ratio(X)	0.60	0.49	0.00	0.78	0.31	0.00	0.80	0.17	0.00	0.67	0.40	0.00
Avail Cap(c_a), veh/h	960	2248	0	755	2259	937	969	1029	0	1007	1940	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.4	17.4	0.0	30.3	12.7	0.0	29.2	22.5	0.0	33.0	28.6	0.0
Incr Delay (d2), s/veh	9.0	0.3	0.0	6.1	0.4	0.0	5.8	0.2	0.0	8.8	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	4.8	0.0	3.4	3.2	0.0	4.1	1.1	0.0	1.3	1.5	0.0
LnGrp Delay(d),s/veh	42.4	17.7	0.0	36.4	13.1	0.0	35.0	22.7	0.0	41.9	29.2	0.0
LnGrp LOS	D	B		D	B		D	C		D	C	
Approach Vol, veh/h		670			653			261			222	
Approach Delay, s/veh		19.1			18.8			31.9			32.4	
Approach LOS		B			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.2	30.7	14.1	12.5	7.6	36.3	7.3	19.3				
Change Period (Y+Rc), s	5.0	5.0	4.0	4.0	5.0	5.0	4.0	4.0				
Max Green Setting (Gmax), s	30.0	45.0	40.0	40.0	40.0	45.0	40.0	40.0				
Max Q Clear Time (g_c+I1), s	8.2	11.8	9.7	5.2	3.6	8.4	4.2	4.1				
Green Ext Time (p_c), s	0.4	13.9	0.6	1.5	0.1	14.5	0.1	1.5				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				22.5								
HCM 2010 LOS				C								

HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 10: Oak Ave & Covell Blvd Existing Plus Project Conditions - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	424	152	145	556	0	105	0	170	0	0	0
Future Volume (veh/h)	0	424	152	145	556	0	105	0	170	0	0	0
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	0	1863	0	1863	1900	1863	1900
Adj Flow Rate, veh/h	0	558	0	177	678	0	188	0	0	0	0	0
Adj No. of Lanes	0	2	0	1	2	0	1	0	1	0	1	0
Peak Hour Factor	0.92	0.76	0.76	0.82	0.82	0.92	0.56	0.92	0.56	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0	2	0	2	2	2	2
Cap, veh/h	0	1400	0	235	2227	0	253	0	0	0	5	0
Arrive On Green	0.00	0.40	0.00	0.13	0.63	0.00	0.14	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	0	3725	0	1774	3632	0	1774	188		0	-93137	0
Grp Volume(v), veh/h	0	558	0	177	678	0	188	20.5		0	0	0
Grp Sat Flow(s),veh/h/ln	0	1770	0	1774	1770	0	1774	C		0	1863	0
Q Serve(g_s), s	0.0	4.5	0.0	3.8	3.5	0.0	4.0			0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	4.5	0.0	3.8	3.5	0.0	4.0			0.0	0.0	0.0
Prop In Lane	0.00		0.00	1.00		0.00	1.00			0.00		0.00
Lane Grp Cap(c), veh/h	0	1400	0	235	2227	0	253			0	5	0
V/C Ratio(X)	0.00	0.40	0.00	0.75	0.30	0.00	0.74			0.00	0.00	0.00
Avail Cap(c_a), veh/h	0	2784	0	675	2873	0	900			0	709	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00	1.00			0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	8.6	0.0	16.5	3.4	0.0	16.2			0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	4.9	0.1	0.0	4.3			0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.2	0.0	2.1	1.6	0.0	2.2			0.0	0.0	0.0
LnGrp Delay(d),s/veh	0.0	8.7	0.0	21.4	3.4	0.0	20.5			0.0	0.0	0.0
LnGrp LOS		A		C	A		C					
Approach Vol, veh/h		558			855							0
Approach Delay, s/veh		8.7			7.1							0.0
Approach LOS		A			A							
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4	5	6						
Phs Duration (G+Y+Rc), s		29.8	9.6	0.0	9.2	20.6						
Change Period (Y+Rc), s		5.0	4.0	5.0	4.0	5.0						
Max Green Setting (Gmax), s		32.0	20.0	15.0	15.0	31.0						
Max Q Clear Time (g_c+I1), s		5.5	6.0	0.0	5.8	6.5						
Green Ext Time (p_c), s		9.4	0.4	0.0	0.3	9.1						
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				9.3								
HCM 2010 LOS				A								
<b>Notes</b>												

User approved pedestrian interval to be less than phase max green.






















HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 11: F St & Covell Blvd Existing Plus Project Conditions - AM Peak Hour

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (veh/h)	40	610	102	204	589	88	59	80	141	204	208	75	
Future Volume (veh/h)	40	610	102	204	589	88	59	80	141	204	208	75	
Number	1	6	16	5	2	12	3	8	18	7	4	14	
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0	
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Adj Sat Flow, veh/h/ln	1863	1863	1863	1845	1863	1900	1845	1851	1900	1863	1844	1900	
Adj Flow Rate, veh/h	53	813	0	265	765	0	76	103	0	246	251	0	
Adj No. of Lanes	1	2	1	2	2	0	1	1	0	1	1	0	
Peak Hour Factor	0.75	0.75	0.75	0.77	0.77	0.77	0.78	0.78	0.78	0.83	0.83	0.83	
Percent Heavy Veh, %	2	2	2	3	2	2	3	2	2	2	2	2	
Cap, veh/h	80	1212	542	370	1436	0	100	263	0	305	474	0	
Arrive On Green	0.05	0.34	0.00	0.11	0.41	0.00	0.06	0.14	0.00	0.17	0.26	0.00	
Sat Flow, veh/h	1774	3539	1583	3408	3632	0	1757	1851	0	1774	1844	0	
Grp Volume(v), veh/h	53	813	0	265	765	0	76	103	0	246	251	0	
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1704	1770	0	1757	1851	0	1774	1844	0	
Q Serve(g_s), s	2.1	14.2	0.0	5.4	11.9	0.0	3.1	3.7	0.0	9.6	8.5	0.0	
Cycle Q Clear(g_c), s	2.1	14.2	0.0	5.4	11.9	0.0	3.1	3.7	0.0	9.6	8.5	0.0	
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.00	1.00		0.00	
Lane Grp Cap(c), veh/h	80	1212	542	370	1436	0	100	263	0	305	474	0	
V/C Ratio(X)	0.66	0.67	0.00	0.72	0.53	0.00	0.76	0.39	0.00	0.81	0.53	0.00	
Avail Cap(c_a), veh/h	735	2201	984	1413	2201	0	728	767	0	735	764	0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	
Uniform Delay (d), s/veh	34.0	20.3	0.0	31.2	16.3	0.0	33.6	28.2	0.0	28.8	23.1	0.0	
Incr Delay (d2), s/veh	3.4	0.2	0.0	1.0	0.1	0.0	11.2	0.9	0.0	6.0	1.1	0.0	
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(50%),veh/ln	1.1	6.9	0.0	2.6	5.8	0.0	1.8	1.9	0.0	5.2	4.5	0.0	
LnGrp Delay(d),s/veh	37.4	20.5	0.0	32.2	16.4	0.0	44.8	29.1	0.0	34.8	24.2	0.0	
LnGrp LOS	D	C		C	B		D	C		C	C		
Approach Vol, veh/h		866			1030			179				497	
Approach Delay, s/veh		21.6			20.5			35.8				29.5	
Approach LOS		C			C			D				C	
Timer	1	2	3	4	5	6	7	8					
Assigned Phs	1	2	3	4	5	6	7	8					
Phs Duration (G+Y+Rc), s	7.3	34.4	8.1	22.6	11.9	29.8	16.4	14.3					
Change Period (Y+Rc), s	4.0	5.0	4.0	4.0	4.0	5.0	4.0	4.0					
Max Green Setting (Gmax), s	30.0	45.0	30.0	30.0	30.0	45.0	30.0	30.0					
Max Q Clear Time (g_c+I1), s	4.1	13.9	5.1	10.5	7.4	16.2	11.6	5.7					
Green Ext Time (p_c), s	0.1	8.7	0.2	2.3	0.5	8.6	0.9	2.5					
<b>Intersection Summary</b>													
HCM 2010 Ctrl Delay			23.6										
HCM 2010 LOS			C										
<b>Notes</b>													

User approved pedestrian interval to be less than phase max green.



HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 12: J St/Cannery Ave & Covell Blvd Existing Plus Project Conditions - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	752	192	58	727	28	138	3	94	34	10	16
Future Volume (veh/h)	11	752	192	58	727	28	138	3	94	34	10	16
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.96	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1810	1743	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	14	952	170	78	982	37	172	4	1	37	11	0
Adj No. of Lanes	1	2	1	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.79	0.79	0.79	0.74	0.74	0.74	0.80	0.80	0.80	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	5	9	2	2	2	2	2	2	2	2
Cap, veh/h	31	1591	685	101	1714	65	225	191	48	68	85	0
Arrive On Green	0.02	0.45	0.45	0.06	0.49	0.49	0.13	0.13	0.13	0.04	0.05	0.00
Sat Flow, veh/h	1774	3539	1523	1660	3477	131	1774	1425	356	1774	1863	0
Grp Volume(v), veh/h	14	952	170	78	500	519	172	0	5	37	11	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1523	1660	1770	1838	1774	0	1781	1774	1863	0
Q Serve(g_s), s	0.5	12.1	4.1	2.8	12.0	12.0	5.6	0.0	0.1	1.2	0.3	0.0
Cycle Q Clear(g_c), s	0.5	12.1	4.1	2.8	12.0	12.0	5.6	0.0	0.1	1.2	0.3	0.0
Prop In Lane	1.00		1.00	1.00		0.07	1.00		0.20	1.00		0.00
Lane Grp Cap(c), veh/h	31	1591	685	101	872	906	225	0	239	68	85	0
V/C Ratio(X)	0.45	0.60	0.25	0.77	0.57	0.57	0.76	0.00	0.02	0.54	0.13	0.00
Avail Cap(c_a), veh/h	592	1772	762	554	886	920	592	0	1189	592	1244	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	29.2	12.4	10.2	27.7	10.7	10.7	25.3	0.0	22.5	28.3	27.4	0.0
Incr Delay (d2), s/veh	12.1	0.5	0.2	14.1	1.0	0.9	6.4	0.0	0.0	12.0	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	5.9	1.8	1.7	5.9	6.2	3.1	0.0	0.1	0.8	0.2	0.0
LnGrp Delay(d),s/veh	41.3	12.9	10.4	41.8	11.7	11.7	31.6	0.0	22.6	40.3	28.7	0.0
LnGrp LOS	D	B	B	D	B	B	C		C	D	C	
Approach Vol, veh/h		1136			1097			177			48	
Approach Delay, s/veh		12.9			13.8			31.4			37.6	
Approach LOS		B			B			C			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.1	8.2	5.5	34.0	6.8	13.5	8.1	31.4				
Change Period (Y+Rc), s	4.5	5.5	4.5	4.5	4.5	5.5	4.5	4.5				
Max Green Setting (Gmax), s	20.0	40.0	20.0	30.0	20.0	40.0	20.0	30.0				
Max Q Clear Time (g_c+I1), s	7.6	2.3	2.5	14.0	3.2	2.1	4.8	14.1				
Green Ext Time (p_c), s	0.5	0.1	0.0	12.7	0.1	0.1	0.2	12.6				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			15.1									
HCM 2010 LOS			B									

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Existing Plus Project Conditions  
AM Peak Hour

Intersection 13

Project Dwy/Covell Blvd

Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn						
	Through						
	Right Turn	16	15	95.6%	3.9	1.5	A
	Subtotal	16	15	95.6%	3.9	1.5	A
EB	Left Turn						
	Through	696	707	101.6%	1.2	0.2	A
	Right Turn						
	Subtotal	696	707	101.6%	1.2	0.2	A
WB	Left Turn						
	Through	491	495	100.8%	2.6	0.5	A
	Right Turn	32	32	99.4%	2.1	0.8	A
	Subtotal	523	527	100.7%	2.5	0.5	A
Total		1,235	1,249	101.1%	1.8	0.2	A

Intersection	
Intersection Delay, s/veh	18
Intersection LOS	C

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations		↶	↷			↶	↷			↶	↷	
Traffic Vol, veh/h	0	22	233	37	0	224	271	34	0	38	46	201
Future Vol, veh/h	0	22	233	37	0	224	271	34	0	38	46	201
Peak Hour Factor	0.92	0.83	0.83	0.83	0.92	0.91	0.91	0.91	0.92	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	27	281	45	0	246	298	37	0	43	52	228
Number of Lanes	0	1	1	0	0	1	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	2	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	2	1	2
HCM Control Delay	19.9	18.4	16.4
HCM LOS	C	C	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	100%	0%	100%	0%	100%	0%	26%
Vol Thru, %	0%	19%	0%	86%	0%	89%	61%
Vol Right, %	0%	81%	0%	14%	0%	11%	13%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	38	247	22	270	224	305	82
LT Vol	38	0	22	0	224	0	21
Through Vol	0	46	0	233	0	271	50
RT Vol	0	201	0	37	0	34	11
Lane Flow Rate	43	281	27	325	246	335	88
Geometry Grp	7	7	7	7	7	7	6
Degree of Util (X)	0.095	0.534	0.056	0.627	0.494	0.617	0.198
Departure Headway (Hd)	7.942	6.848	7.55	6.939	7.223	6.632	8.08
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	452	528	474	520	500	543	444
Service Time	5.683	4.588	5.293	4.682	4.965	4.374	6.137
HCM Lane V/C Ratio	0.095	0.532	0.057	0.625	0.492	0.617	0.198
HCM Control Delay	11.5	17.2	10.7	20.7	16.8	19.5	13.1
HCM Lane LOS	B	C	B	C	C	C	B
HCM 95th-tile Q	0.3	3.1	0.2	4.3	2.7	4.2	0.7

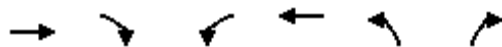
**Intersection**

Intersection Delay, s/veh  
 Intersection LOS

Movement	SBU	SBL	SBT	SBR
Lane Configurations			↕	
Traffic Vol, veh/h	0	21	50	11
Future Vol, veh/h	0	21	50	11
Peak Hour Factor	0.92	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	23	54	12
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	2
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	13.1
HCM LOS	B

HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 2: Denali Dr & Covell Blvd Existing Plus Project Conditions - PM Peak Hour



Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations								
Traffic Volume (veh/h)	490	27	144	526	21	107		
Future Volume (veh/h)	490	27	144	526	21	107		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1900		
Adj Flow Rate, veh/h	551	0	150	548	25	0		
Adj No. of Lanes	1	0	1	1	0	0		
Peak Hour Factor	0.89	0.89	0.96	0.96	0.83	0.83		
Percent Heavy Veh, %	2	2	2	2	0	0		
Cap, veh/h	894	0	201	1305	54	0		
Arrive On Green	0.48	0.00	0.11	0.70	0.03	0.00		
Sat Flow, veh/h	1863	0	1774	1863	1709	0		
Grp Volume(v), veh/h	551	0	150	548	26	0		
Grp Sat Flow(s),veh/h/ln	1863	0	1774	1863	1777	0		
Q Serve(g_s), s	8.2	0.0	3.1	4.7	0.5	0.0		
Cycle Q Clear(g_c), s	8.2	0.0	3.1	4.7	0.5	0.0		
Prop In Lane		0.00	1.00		0.96	0.00		
Lane Grp Cap(c), veh/h	894	0	201	1305	56	0		
V/C Ratio(X)	0.62	0.00	0.74	0.42	0.46	0.00		
Avail Cap(c_a), veh/h	1746	0	950	1746	952	0		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh	7.2	0.0	16.0	2.4	17.8	0.0		
Incr Delay (d2), s/veh	0.7	0.0	5.4	0.2	12.1	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	4.3	0.0	1.8	2.4	0.4	0.0		
LnGrp Delay(d),s/veh	7.9	0.0	21.4	2.6	29.9	0.0		
LnGrp LOS	A		C	A	C			
Approach Vol, veh/h	551			698	26			
Approach Delay, s/veh	7.9			6.6	29.9			
Approach LOS	A			A	C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	8.2	23.9				32.2		5.2
Change Period (Y+Rc), s	4.0	6.0				6.0		4.0
Max Green Setting (Gmax), s	20.0	35.0				35.0		20.0
Max Q Clear Time (g_c+I1), s	5.1	10.2				6.7		2.5
Green Ext Time (p_c), s	0.3	7.8				8.1		0.1
<b>Intersection Summary</b>								
HCM 2010 Ctrl Delay			7.6					
HCM 2010 LOS			A					
<b>Notes</b>								

User approved volume balancing among the lanes for turning movement.

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Existing Plus Project Conditions  
PM Peak Hour

Intersection 3                      Risling Ct/Sutter Hospital Dwy                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	47	41	88.1%	4.6	0.6	A
	Through	44	46	104.3%	3.6	0.6	A
	Right Turn	20	20	102.0%	3.4	0.9	A
	Subtotal	111	108	97.0%	4.0	0.4	A
SB	Left Turn	3	3	96.7%	1.2	1.3	A
	Through	107	105	97.9%	0.3	0.2	A
	Right Turn	1	1	90.0%	0.0	0.0	A
	Subtotal	111	109	97.7%	0.3	0.2	A
EB	Left Turn						
	Through	3	3	96.7%	4.3	5.2	A
	Right Turn	63	62	98.9%	3.3	0.6	A
	Subtotal	66	65	98.8%	3.4	0.7	A
WB	Left Turn	20	18	90.5%	4.6	1.4	A
	Through	4	4	100.0%	1.8	2.6	A
	Right Turn						
	Subtotal	24	22	92.1%	4.7	1.4	A
Total		312	304	97.3%	2.7	0.2	A

Intersection 4                      Risling Ct-Shasta Dr/W Covell Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	13	12	94.6%	58.0	16.3	E
	Through	13	12	88.5%	44.2	18.1	D
	Right Turn	184	185	100.8%	3.4	0.8	A
	Subtotal	210	209	99.6%	8.0	1.9	A
SB	Left Turn	139	135	97.4%	38.8	6.6	D
	Through	13	14	105.4%	29.1	11.8	C
	Right Turn	38	37	97.4%	14.0	6.6	B
	Subtotal	190	186	97.9%	33.0	5.6	C
EB	Left Turn	42	41	97.9%	58.8	17.0	E
	Through	521	514	98.6%	13.8	2.2	B
	Right Turn	15	15	98.7%	5.6	5.0	A
	Subtotal	578	570	98.6%	17.5	3.5	B
WB	Left Turn	197	205	103.8%	50.0	7.2	D
	Through	664	673	101.4%	11.3	3.3	B
	Right Turn	68	67	98.8%	5.5	1.5	A
	Subtotal	929	945	101.7%	19.0	2.2	B
Total		1,907	1,910	100.2%	18.7	1.5	B

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Existing Plus Project Conditions  
PM Peak Hour

Intersection 5                      John Jones Rd/W Covell Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	231	241	104.4%	33.5	3.5	C
	Through						
	Right Turn	58	60	104.0%	8.3	2.7	A
	Subtotal	289	302	104.3%	28.2	2.7	C
EB	Left Turn	35	32	90.9%	50.4	9.3	D
	Through	813	808	99.4%	10.8	1.3	B
	Right Turn						
	Subtotal	848	840	99.1%	12.3	1.4	B
WB	Left Turn						
	Through	871	885	101.6%	11.5	1.7	B
	Right Turn	175	174	99.1%	8.8	2.0	A
	Subtotal	1,046	1,059	101.2%	11.0	1.7	B
Total		2,183	2,200	100.8%	13.9	1.2	B

Intersection 6                      SR 113 SB Ramps/W Covell Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	125	126	100.6%	36.0	3.9	D
	Through	1	2	160.0%	7.4	12.9	A
	Right Turn	96	97	101.4%	35.4	6.8	D
	Subtotal	222	225	101.2%	35.5	3.5	D
EB	Left Turn						
	Through	770	770	100.0%	21.2	3.9	C
	Right Turn	274	278	101.4%	17.3	2.8	B
	Subtotal	1,044	1,048	100.4%	20.2	3.6	C
WB	Left Turn	240	232	96.7%	48.9	4.0	D
	Through	950	960	101.0%	7.2	1.3	A
	Right Turn						
	Subtotal	1,190	1,192	100.2%	14.8	1.6	B
Total		2,456	2,465	100.3%	19.0	1.7	B



SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Existing Plus Project Conditions  
PM Peak Hour






















**Intersection 7**                      **SR 113 NB Ramps/W Covell Blvd**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	392	396	100.9%	35.1	5.3	D
	Through						
	Right Turn	532	542	101.8%	28.4	12.9	C
	Subtotal	924	937	101.4%	31.3	8.2	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	110	108	98.3%	66.7	8.9	E
	Through	791	790	99.8%	11.9	1.7	B
	Right Turn						
	Subtotal	901	898	99.6%	18.4	2.1	B
WB	Left Turn						
	Through	796	795	99.9%	15.6	1.5	B
	Right Turn	152	157	103.0%	7.1	0.6	A
	Subtotal	948	951	100.4%	14.2	1.3	B
Total		2,773	2,786	100.5%	21.4	2.7	C



















**Intersection 8**                      **Sycamore Ln/W Covell Blvd**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	123	119	96.8%	41.3	5.8	D
	Through	60	58	97.3%	32.4	7.5	C
	Right Turn	45	46	102.2%	7.5	6.0	A
	Subtotal	228	224	98.0%	32.2	4.9	C
SB	Left Turn	149	146	97.7%	42.4	5.2	D
	Through	77	81	105.1%	38.8	4.2	D
	Right Turn	100	99	99.4%	13.1	5.4	B
	Subtotal	326	326	99.9%	31.6	4.3	C
EB	Left Turn	142	140	98.5%	56.4	9.8	E
	Through	812	830	102.3%	20.4	3.5	C
	Right Turn	132	130	98.2%	12.1	1.9	B
	Subtotal	1,086	1,100	101.3%	24.0	2.9	C
WB	Left Turn	25	23	90.8%	55.5	15.9	E
	Through	638	645	101.1%	23.9	3.2	C
	Right Turn	96	93	96.7%	18.4	5.8	B
	Subtotal	759	760	100.2%	24.1	3.5	C
Total		2,399	2,409	100.4%	26.0	2.3	C

HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 9: Anderson Rd & Covell Blvd Existing Plus Project Conditions - PM Peak Hour






















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	767	141	85	477	62	230	146	136	79	111	58
Future Volume (veh/h)	61	767	141	85	477	62	230	146	136	79	111	58
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1857	1900	1863	1863	1727	1792	1808	1900	1863	1793	1900
Adj Flow Rate, veh/h	66	834	0	93	524	0	267	170	0	104	146	0
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.91	0.91	0.91	0.86	0.86	0.86	0.76	0.76	0.76
Percent Heavy Veh, %	7	2	2	2	2	10	6	8	8	2	8	8
Cap, veh/h	85	1323	0	122	1391	577	311	507	0	136	596	0
Arrive On Green	0.05	0.37	0.00	0.07	0.39	0.00	0.18	0.28	0.00	0.08	0.17	0.00
Sat Flow, veh/h	1691	3621	0	1774	3539	1468	1707	1808	0	1774	3497	0
Grp Volume(v), veh/h	66	834	0	93	524	0	267	170	0	104	146	0
Grp Sat Flow(s),veh/h/ln	1691	1764	0	1774	1770	1468	1707	1808	0	1774	1704	0
Q Serve(g_s), s	3.5	17.5	0.0	4.7	9.5	0.0	13.7	6.7	0.0	5.2	3.3	0.0
Cycle Q Clear(g_c), s	3.5	17.5	0.0	4.7	9.5	0.0	13.7	6.7	0.0	5.2	3.3	0.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	85	1323	0	122	1391	577	311	507	0	136	596	0
V/C Ratio(X)	0.77	0.63	0.00	0.76	0.38	0.00	0.86	0.34	0.00	0.77	0.24	0.00
Avail Cap(c_a), veh/h	749	1758	0	589	1763	732	756	801	0	786	1509	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	42.4	23.1	0.0	41.3	19.5	0.0	35.8	25.8	0.0	40.9	32.1	0.0
Incr Delay (d2), s/veh	13.6	0.5	0.0	9.5	0.6	0.0	6.8	0.4	0.0	8.6	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	8.5	0.0	2.6	4.8	0.0	7.0	3.4	0.0	2.9	1.6	0.0
LnGrp Delay(d),s/veh	56.0	23.6	0.0	50.8	20.1	0.0	42.7	26.2	0.0	49.5	32.3	0.0
LnGrp LOS	E	C		D	C		D	C		D	C	
Approach Vol, veh/h		900			617			437			250	
Approach Delay, s/veh		26.0			24.8			36.2			39.5	
Approach LOS		C			C			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.2	38.9	20.5	19.8	9.6	40.5	10.9	29.3				
Change Period (Y+Rc), s	5.0	5.0	4.0	4.0	5.0	5.0	4.0	4.0				
Max Green Setting (Gmax), s	30.0	45.0	40.0	40.0	40.0	45.0	40.0	40.0				
Max Q Clear Time (g_c+I1), s	6.7	19.5	15.7	5.3	5.5	11.5	7.2	8.7				
Green Ext Time (p_c), s	0.2	14.4	0.8	2.1	0.2	16.8	0.3	2.0				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			29.2									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 10: Oak Ave & Covell Blvd Existing Plus Project Conditions - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	956	102	66	547	0	111	0	127	0	0	0
Future Volume (veh/h)	0	956	102	66	547	0	111	0	127	0	0	0
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	0	1863	0	1863	1900	1863	1900
Adj Flow Rate, veh/h	0	976	0	74	615	0	117	0	0	0	0	0
Adj No. of Lanes	0	2	0	1	2	0	1	0	1	0	1	0
Peak Hour Factor	0.98	0.98	0.98	0.89	0.89	0.89	0.95	0.95	0.95	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0	2	0	2	2	2	2
Cap, veh/h	0	1834	0	124	2431	0	160	0	0	0	5	0
Arrive On Green	0.00	0.52	0.00	0.07	0.69	0.00	0.09	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	0	3725	0	1774	3632	0	1774	117		0	-93137	0
Grp Volume(v), veh/h	0	976	0	74	615	0	117	24.1		0	0	0
Grp Sat Flow(s),veh/h/ln	0	1770	0	1774	1770	0	1774	C		0	1863	0
Q Serve(g_s), s	0.0	7.4	0.0	1.6	2.7	0.0	2.6			0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	7.4	0.0	1.6	2.7	0.0	2.6			0.0	0.0	0.0
Prop In Lane	0.00		0.00	1.00		0.00	1.00			0.00		0.00
Lane Grp Cap(c), veh/h	0	1834	0	124	2431	0	160			0	5	0
V/C Ratio(X)	0.00	0.53	0.00	0.60	0.25	0.00	0.73			0.00	0.00	0.00
Avail Cap(c_a), veh/h	0	2715	0	658	2802	0	878			0	691	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00	1.00			0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	6.5	0.0	18.2	2.4	0.0	17.9			0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	4.5	0.1	0.0	6.2			0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.6	0.0	1.0	1.3	0.0	1.5			0.0	0.0	0.0
LnGrp Delay(d),s/veh	0.0	6.7	0.0	22.8	2.5	0.0	24.1			0.0	0.0	0.0
LnGrp LOS		A		C	A		C					
Approach Vol, veh/h		976			689							0
Approach Delay, s/veh		6.7			4.6							0.0
Approach LOS		A			A							
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4	5	6						
Phs Duration (G+Y+Rc), s		32.8	7.7	0.0	6.8	25.9						
Change Period (Y+Rc), s		5.0	4.0	5.0	4.0	5.0						
Max Green Setting (Gmax), s		32.0	20.0	15.0	15.0	31.0						
Max Q Clear Time (g_c+I1), s		4.7	4.6	0.0	3.6	9.4						
Green Ext Time (p_c), s		13.1	0.2	0.0	0.1	11.5						
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				7.1								
HCM 2010 LOS				A								
<b>Notes</b>												






















User approved pedestrian interval to be less than phase max green.

HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 11: F St & Covell Blvd Existing Plus Project Conditions - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	69	921	180	182	553	172	142	160	199	122	122	51
Future Volume (veh/h)	69	921	180	182	553	172	142	160	199	122	122	51
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1845	1863	1900	1845	1853	1900	1863	1841	1900
Adj Flow Rate, veh/h	77	1023	0	204	621	0	160	180	0	140	140	0
Adj No. of Lanes	1	2	1	2	2	0	1	1	0	1	1	0
Peak Hour Factor	0.90	0.90	0.90	0.89	0.89	0.89	0.89	0.89	0.89	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	3	2	2	3	2	2	2	2	2
Cap, veh/h	100	1391	622	302	1505	0	205	340	0	185	314	0
Arrive On Green	0.06	0.39	0.00	0.09	0.43	0.00	0.12	0.18	0.00	0.10	0.17	0.00
Sat Flow, veh/h	1774	3539	1583	3408	3632	0	1757	1853	0	1774	1841	0
Grp Volume(v), veh/h	77	1023	0	204	621	0	160	180	0	140	140	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1704	1770	0	1757	1853	0	1774	1841	0
Q Serve(g_s), s	3.1	18.2	0.0	4.3	9.0	0.0	6.5	6.5	0.0	5.6	5.0	0.0
Cycle Q Clear(g_c), s	3.1	18.2	0.0	4.3	9.0	0.0	6.5	6.5	0.0	5.6	5.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	100	1391	622	302	1505	0	205	340	0	185	314	0
V/C Ratio(X)	0.77	0.74	0.00	0.68	0.41	0.00	0.78	0.53	0.00	0.76	0.45	0.00
Avail Cap(c_a), veh/h	723	2165	969	1390	2165	0	716	756	0	723	751	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	34.2	19.1	0.0	32.5	14.7	0.0	31.6	27.2	0.0	32.1	27.4	0.0
Incr Delay (d2), s/veh	4.6	0.3	0.0	1.0	0.1	0.0	6.3	1.3	0.0	7.5	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	8.9	0.0	2.1	4.4	0.0	3.5	3.4	0.0	3.1	2.7	0.0
LnGrp Delay(d),s/veh	38.9	19.3	0.0	33.5	14.8	0.0	37.9	28.5	0.0	39.5	28.6	0.0
LnGrp LOS	D	B		C	B		D	C		D	C	
Approach Vol, veh/h		1100			825			340			280	
Approach Delay, s/veh		20.7			19.4			32.9			34.1	
Approach LOS		C			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.1	36.3	12.6	16.5	10.5	33.9	11.7	17.5				
Change Period (Y+Rc), s	4.0	5.0	4.0	4.0	4.0	5.0	4.0	4.0				
Max Green Setting (Gmax), s	30.0	45.0	30.0	30.0	30.0	45.0	30.0	30.0				
Max Q Clear Time (g_c+I1), s	5.1	11.0	8.5	7.0	6.3	20.2	7.6	8.5				
Green Ext Time (p_c), s	0.1	9.6	0.4	2.1	0.3	8.8	0.5	2.0				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			23.4									
HCM 2010 LOS			C									
<b>Notes</b>												

User approved pedestrian interval to be less than phase max green.

HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 12: J St/Cannery Ave & Covell Blvd Existing Plus Project Conditions - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	1109	102	73	797	35	93	10	99	41	9	17
Future Volume (veh/h)	31	1109	102	73	797	35	93	10	99	41	9	17
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1810	1743	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	34	1232	52	82	896	37	109	12	0	49	11	0
Adj No. of Lanes	1	2	1	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.90	0.90	0.90	0.89	0.89	0.89	0.85	0.85	0.85	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	5	9	2	2	2	2	2	2	2	2
Cap, veh/h	64	1695	707	105	1750	72	145	171	0	83	105	0
Arrive On Green	0.04	0.48	0.48	0.06	0.51	0.51	0.08	0.09	0.00	0.05	0.06	0.00
Sat Flow, veh/h	1774	3539	1476	1660	3458	143	1774	1863	0	1774	1863	0
Grp Volume(v), veh/h	34	1232	52	82	459	474	109	12	0	49	11	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1476	1660	1770	1831	1774	1863	0	1774	1863	0
Q Serve(g_s), s	1.1	16.6	1.1	2.9	10.3	10.3	3.6	0.4	0.0	1.6	0.3	0.0
Cycle Q Clear(g_c), s	1.1	16.6	1.1	2.9	10.3	10.3	3.6	0.4	0.0	1.6	0.3	0.0
Prop In Lane	1.00		1.00	1.00		0.08	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	64	1695	707	105	896	927	145	171	0	83	105	0
V/C Ratio(X)	0.53	0.73	0.07	0.78	0.51	0.51	0.75	0.07	0.00	0.59	0.10	0.00
Avail Cap(c_a), veh/h	596	1784	744	558	896	927	596	1252	0	596	1252	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	28.2	12.4	8.4	27.5	9.8	9.8	26.7	24.7	0.0	27.8	26.7	0.0
Incr Delay (d2), s/veh	8.0	1.5	0.1	13.9	0.6	0.6	8.9	0.2	0.0	12.0	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	8.4	0.5	1.7	5.1	5.3	2.1	0.2	0.0	1.1	0.2	0.0
LnGrp Delay(d),s/veh	36.2	13.9	8.4	41.3	10.4	10.4	35.7	24.9	0.0	39.8	27.5	0.0
LnGrp LOS	D	B	A	D	B	B	D	C		D	C	
Approach Vol, veh/h		1318			1015			121			60	
Approach Delay, s/veh		14.3			12.9			34.6			37.5	
Approach LOS		B			B			C			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.4	8.9	6.7	34.6	7.3	11.0	8.3	33.0				
Change Period (Y+Rc), s	4.5	5.5	4.5	4.5	4.5	5.5	4.5	4.5				
Max Green Setting (Gmax), s	20.0	40.0	20.0	30.0	20.0	40.0	20.0	30.0				
Max Q Clear Time (g_c+I1), s	5.6	2.3	3.1	12.3	3.6	2.4	4.9	18.6				
Green Ext Time (p_c), s	0.3	0.1	0.1	14.4	0.2	0.1	0.2	9.7				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			15.2									
HCM 2010 LOS			B									

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Existing Plus Project Conditions  
PM Peak Hour

Intersection 13

Project Dwy/Covell Blvd

Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn						
	Through						
	Right Turn	19	18	95.8%	3.9	1.4	A
	Subtotal	19	18	95.8%	3.9	1.4	A
EB	Left Turn						
	Through	578	568	98.2%	0.9	0.2	A
	Right Turn						
	Subtotal	578	568	98.2%	0.9	0.2	A
WB	Left Turn						
	Through	641	649	101.3%	2.8	0.5	A
	Right Turn	86	87	100.7%	2.0	0.7	A
	Subtotal	727	736	101.2%	2.7	0.5	A
Total		1,324	1,322	99.8%	1.9	0.3	A





Major Street **Covell Blvd**  
 Minor Street **Lake Blvd**

Project **West Davis AAC EIR**  
 Scenario **Existing Plus Project Conditions**  
 Peak Hour **AM Peak Hour**

Turn Movement Volumes

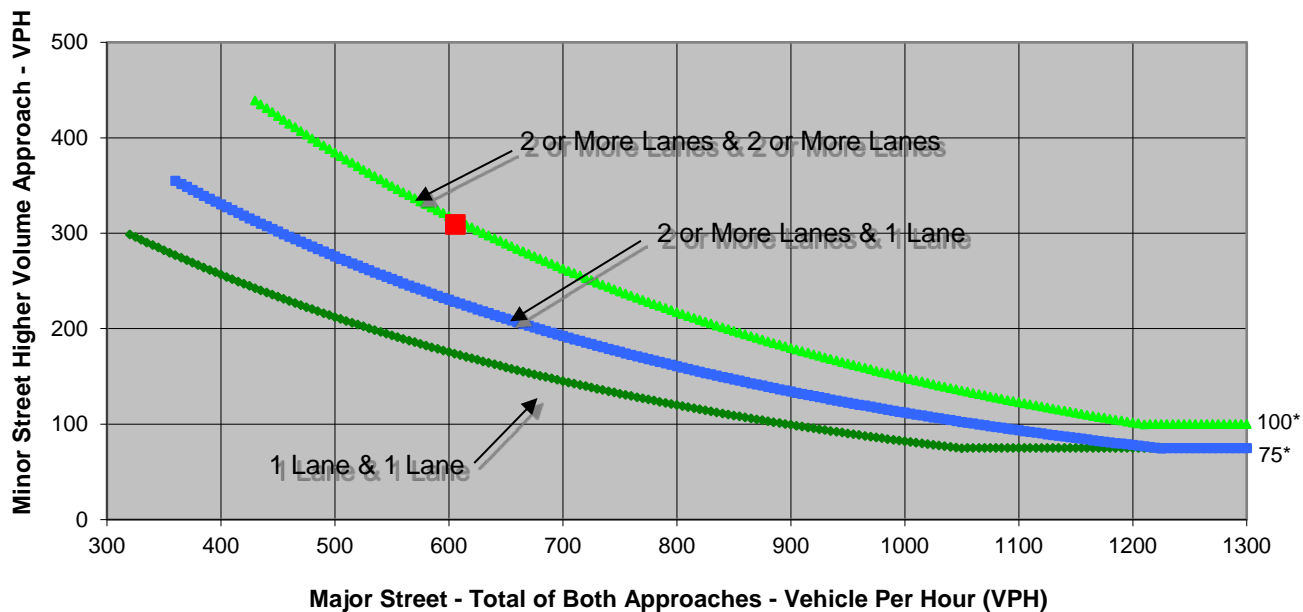
	NB	SB	EB	WB
Left	34	36	9	106
Through	61	53	262	179
Right	214	10	39	11
Total	309	99	310	296

Major Street Direction

North/South  
**x** East/West

**Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)**  
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



\* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Covell Blvd	Lake Blvd	
Number of Approach Lanes	<b>1</b>	<b>1</b>	<b><u>YES</u></b>
Traffic Volume (VPH) *	<b>606</b>	<b>309</b>	

\* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.  
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street Covell Blvd  
 Minor Street Lake Blvd

Project West Davis AAC EIR  
 Scenario Existing Plus Project Conditions  
 Peak Hour AM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	34	36	9	106
Through	61	53	262	179
Right	214	10	39	11
Total	309	99	310	296

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	4

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	16.7
Approach with Worst Case Delay	NB
Total Vehicles on Approach	309

<b>Warrant 3A, Peak Hour</b>			
	<b>Peak Hour Delay on Minor Approach (vehicle-hours)</b>	<b>Peak Hour Volume on Minor Approach (vph)</b>	<b>Peak Hour Entering Volume Served (vph)</b>
<b>Existing Plus Project Conditions</b>	<b>1.4</b>	<b>309</b>	<b>1,014</b>
<b>Limiting Value</b>	<b>4</b>	<b>100</b>	<b>800</b>
<b>Condition Satisfied?</b>	<b>Not Met</b>	<b>Met</b>	<b>Met</b>
<b>Warrant Met</b>	<b><u>NO</u></b>		



Major Street Risling Ct  
 Minor Street Hospital Dwy

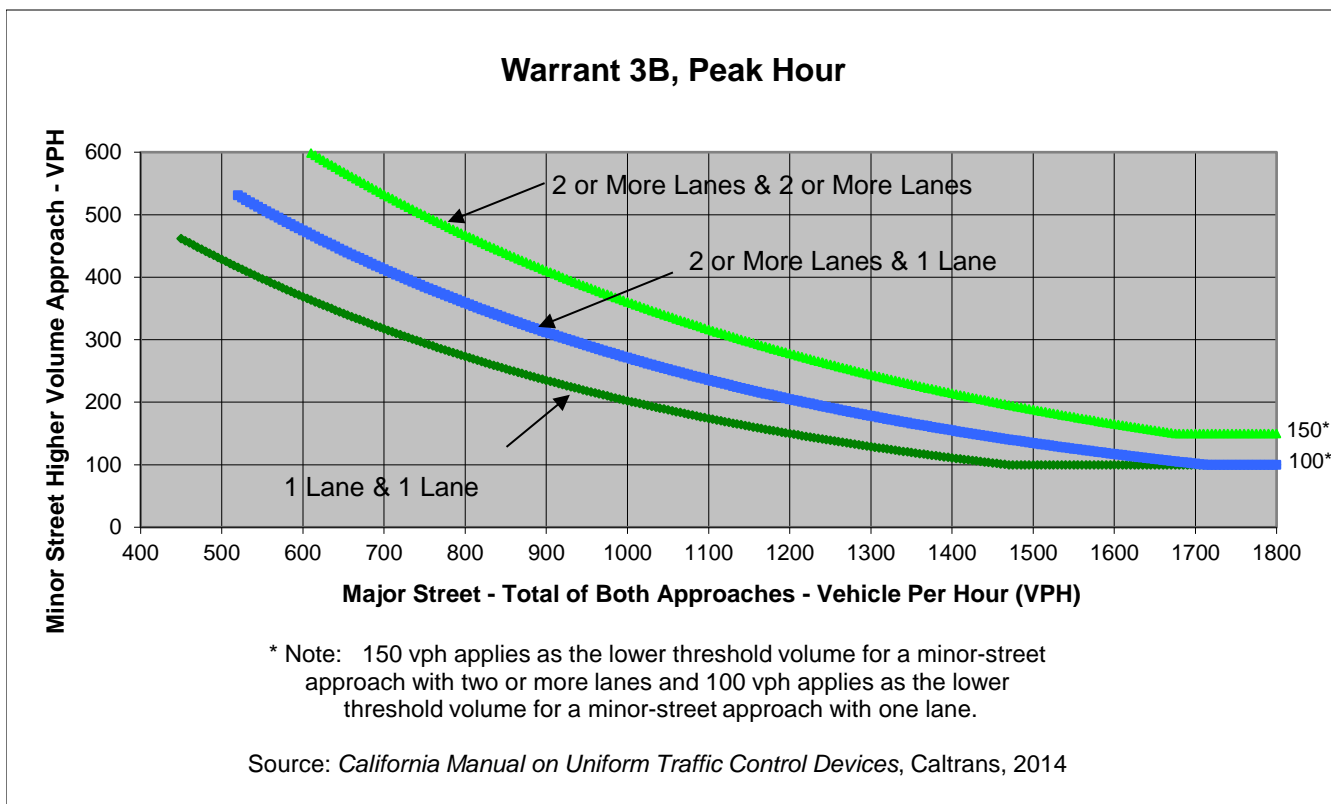
Project West Davis AAC EIR  
 Scenario Existing Plus Project Conditions  
 Peak Hour AM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	57	1	0	11
Through	106	101	4	3
Right	31	0	57	2
Total	194	102	61	16

Major Street Direction

x	North/South
	East/West



	Major Street	Minor Street	Warrant Met
	Risling Ct	Hospital Dwy	
<b>Number of Approach Lanes</b>	<b>1</b>	<b>1</b>	<b><u>NO</u></b>
<b>Traffic Volume (VPH) *</b>	<b>296</b>	<b>61</b>	

\* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.  
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street Risling Ct  
 Minor Street Hospital Dwy

Project West Davis AAC EIR  
 Scenario Existing Plus Project Conditions  
 Peak Hour AM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	57	1	0	11
Through	106	101	4	3
Right	31	0	57	2
Total	194	102	61	16

Major Street Direction

x	North/South
	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	4

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	12.3
Approach with Worst Case Delay	WB
Total Vehicles on Approach	16

<b>Warrant 3A, Peak Hour</b>			
	<b>Peak Hour Delay on Minor Approach (vehicle-hours)</b>	<b>Peak Hour Volume on Minor Approach (vph)</b>	<b>Peak Hour Entering Volume Served (vph)</b>
<b>Existing Plus Project Conditions</b>	<b>0.1</b>	<b>61</b>	<b>373</b>
<b>Limiting Value</b>	<b>4</b>	<b>100</b>	<b>800</b>
<b>Condition Satisfied?</b>	<b>Not Met</b>	<b>Not Met</b>	<b>Not Met</b>
<b>Warrant Met</b>	<b><u>NO</u></b>		



Major Street Covell Blvd  
 Minor Street Lake Blvd

Project West Davis AAC EIR  
 Scenario Existing Plus Project Conditions  
 Peak Hour PM Peak Hour

Turn Movement Volumes

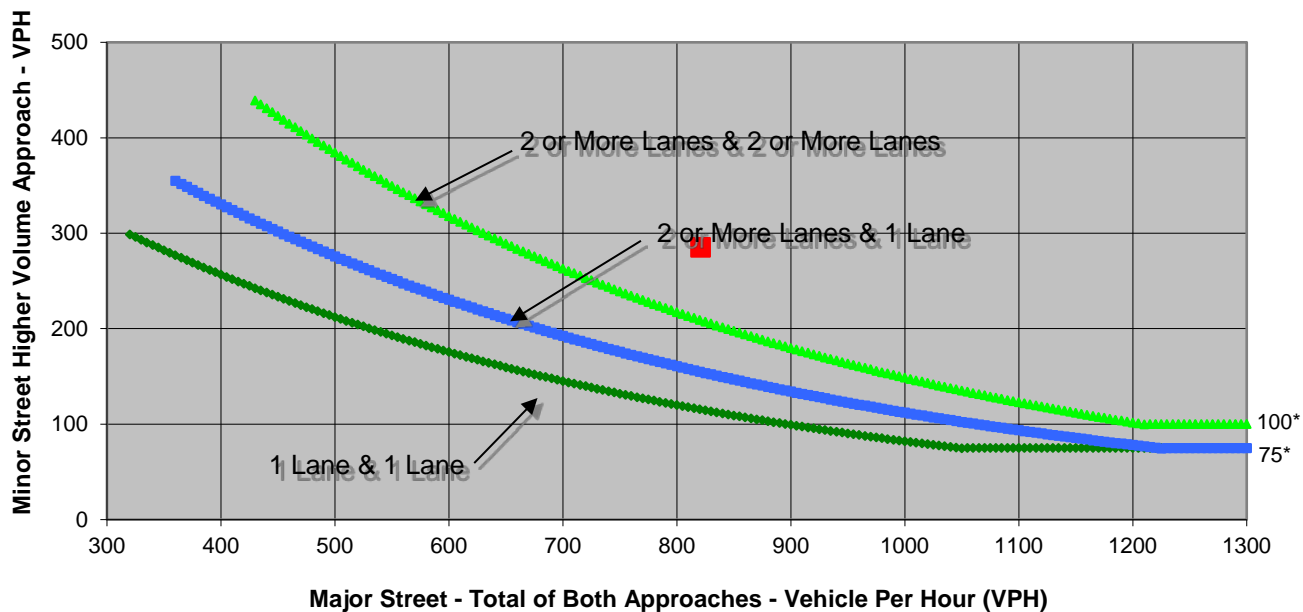
	NB	SB	EB	WB
Left	38	21	22	224
Through	46	50	233	271
Right	201	11	37	34
Total	285	82	292	529

Major Street Direction

         North/South  
  x   East/West

**Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)**  
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



\* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Covell Blvd	Lake Blvd	
Number of Approach Lanes	<b>1</b>	<b>1</b>	<b><u>YES</u></b>
Traffic Volume (VPH) *	<b>821</b>	<b>285</b>	

\* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.  
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street Covell Blvd  
 Minor Street Lake Blvd

Project West Davis AAC EIR  
 Scenario Existing Plus Project Conditions  
 Peak Hour PM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	38	21	22	224
Through	46	50	233	271
Right	201	11	37	34
Total	285	82	292	529

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	4

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	17.2
Approach with Worst Case Delay	NB
Total Vehicles on Approach	285

<b>Warrant 3A, Peak Hour</b>			
	<b>Peak Hour Delay on Minor Approach (vehicle-hours)</b>	<b>Peak Hour Volume on Minor Approach (vph)</b>	<b>Peak Hour Entering Volume Served (vph)</b>
<b>Existing Plus Project Conditions</b>	<b>1.4</b>	<b>285</b>	<b>1,188</b>
<b>Limiting Value</b>	<b>4</b>	<b>100</b>	<b>800</b>
<b>Condition Satisfied?</b>	<b>Not Met</b>	<b>Met</b>	<b>Met</b>
<b>Warrant Met</b>	<b><u>NO</u></b>		



Major Street Risling Ct  
 Minor Street Hospital Dwy

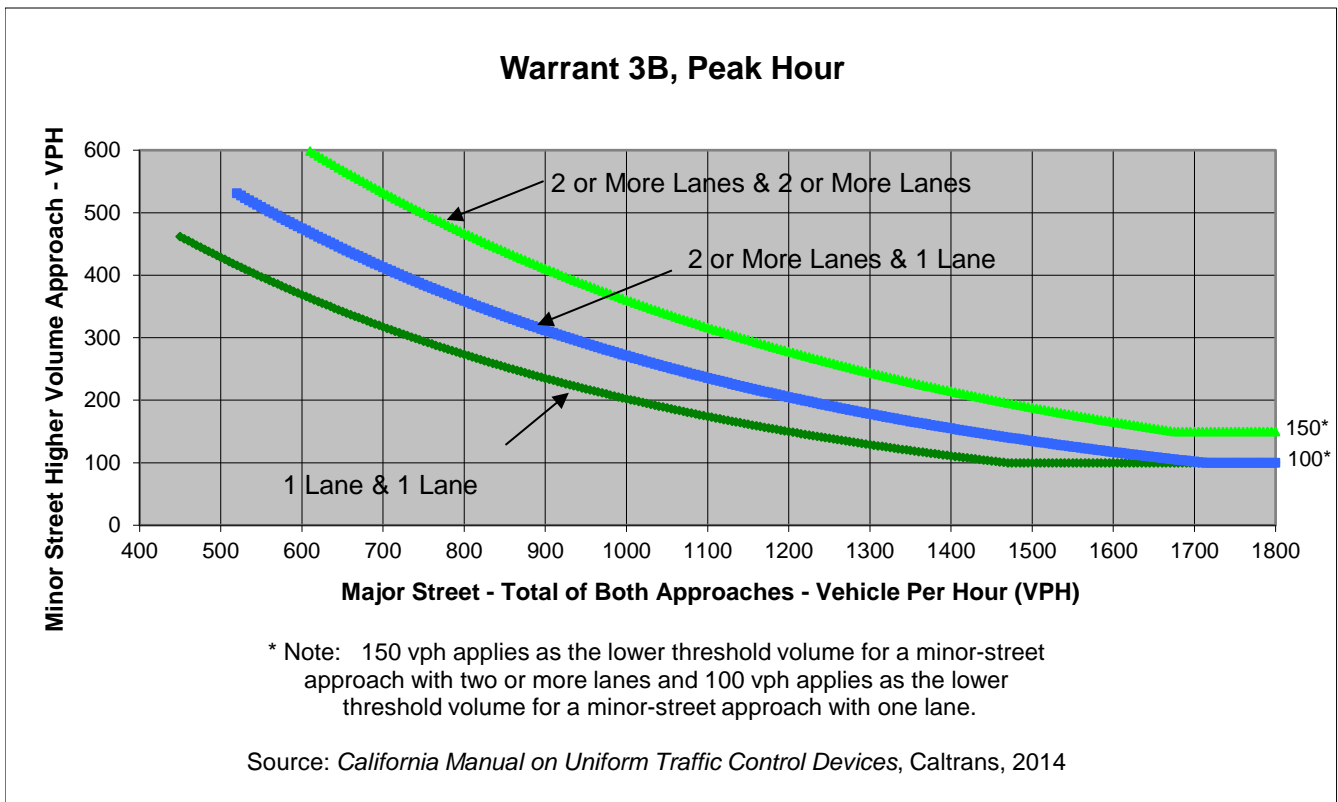
Project West Davis AAC EIR  
 Scenario Existing Plus Project Conditions  
 Peak Hour PM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	47	3	0	20
Through	44	107	3	4
Right	20	1	63	0
Total	111	111	66	24

Major Street Direction

x	North/South
	East/West



	Major Street	Minor Street	Warrant Met
	Risling Ct	Hospital Dwy	
<b>Number of Approach Lanes</b>	<b>1</b>	<b>1</b>	<b><u>NO</u></b>
<b>Traffic Volume (VPH) *</b>	<b>222</b>	<b>66</b>	

\* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.  
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street Risling Ct  
 Minor Street Hospital Dwy

Project West Davis AAC EIR  
 Scenario Existing Plus Project Conditions  
 Peak Hour PM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	47	3	0	20
Through	44	107	3	4
Right	20	1	63	0
Total	111	111	66	24

Major Street Direction

x	North/South
	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	4

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	11.5
Approach with Worst Case Delay	WB
Total Vehicles on Approach	24

<b>Warrant 3A, Peak Hour</b>			
	<b>Peak Hour Delay on Minor Approach (vehicle-hours)</b>	<b>Peak Hour Volume on Minor Approach (vph)</b>	<b>Peak Hour Entering Volume Served (vph)</b>
<b>Existing Plus Project Conditions</b>	<b>0.1</b>	<b>66</b>	<b>312</b>
<b>Limiting Value</b>	<b>4</b>	<b>100</b>	<b>800</b>
<b>Condition Satisfied?</b>	<b>Not Met</b>	<b>Not Met</b>	<b>Not Met</b>
<b>Warrant Met</b>	<b><u>NO</u></b>		



**Intersection 3**

**Risling Ct/Sutter Hospital Dwy**

**Side-street Stop**

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Shared	900	50	3	75	5	75	15	0%	0%
NB	Shared	350	25	3	50	9	50	13	0%	0%
SB	Shared	2,000	25	1	25	10	25	26	0%	0%
WB	Shared	950	25	3	50	4	50	12	0%	0%

**Intersection 4**

**Risling Ct-Shasta Dr/W Covell Blvd**

**Signal**

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	U/Left Turns	225	75	9	150	24	175	39	0%	0%
	Through	400	125	9	225	21	275	40	1%	0%
	Through/Right	400	125	12	225	15	250	24	0%	0%
NB	Left Turn	125	25	5	50	18	75	41	0%	0%
	Through	1,725	100	15	175	56	250	94	6%	0%
	Right Turn	75	75	1	75	4	75	3	3%	0%
SB	Left Turn	350	175	24	275	54	325	50	36%	1%
	Through/Right	125	50	10	125	17	150	0	0%	0%
WB	U/Left Turns	325	100	9	150	12	150	17	0%	0%
	Left Turn	325	50	9	125	15	150	32	0%	0%
	Through	575	125	12	200	21	225	27	3%	0%
	Right Turn	150	25	13	100	48	175	54	0%	0%

Intersection 5

John Jones Rd/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	150	100	12	150	16	175	3	1%	0%
	Through	575	200	20	400	54	500	103	9%	0%
SB	Left Turn	250	125	10	200	19	225	25	0%	0%
	Through/Right	1,600	50	8	75	41	125	100	0%	0%
WB	Through	350	150	14	275	20	325	54	26%	0%
	Right Turn	75	75	4	100	3	100	0	4%	0%
NB	Shared	25	25	0	25	0	25	0	0%	0%

Intersection 6

SR 113 SB Ramps/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	350	250	15	400	13	350	8	0%	4%
	Through/Right	350	300	18	425	14	375	3	0%	7%
SB	Left/Through	1,425	125	11	175	15	200	23	0%	0%
	Right Turn	1,425	100	7	175	15	225	28	0%	0%
WB	Left Turn	225	225	4	250	7	225	0	43%	0%
	Through	500	375	24	600	64	525	86	15%	4%
O										

Intersection 7

SR 113 NB Ramps/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	U/Left Turns	175	100	11	200	24	200	0	1%	0%
	Through	500	175	18	275	41	325	70	4%	0%
NB	Left/Through	1,675	225	33	350	89	425	130	0%	0%
	Right Turn	1,675	100	9	150	19	175	35	0%	0%
WB	Through	825	200	27	375	55	425	67	7%	0%
	Right Turn	150	75	8	150	19	175	0	0%	0%
0										

Intersection 8

Sycamore Ln/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	175	100	8	200	12	200	0	1%	0%
	Through	400	175	11	275	20	325	34	9%	0%
	Through/Right	400	200	11	325	21	350	35	0%	0%
NB	Left Turn	125	125	3	175	5	150	0	19%	0%
	Through/Right	1,125	100	16	250	36	325	56	1%	0%
SB	Left Turn	125	75	9	150	13	150	1	2%	0%
	Through/Right	1,775	125	17	275	33	325	28	12%	0%
WB	Left Turn	125	50	6	125	12	150	0	0%	0%
	Through	5,800	150	11	250	20	275	40	12%	0%
	Through/Right	5,800	175	13	275	24	300	46	0%	0%

Intersection 13

Project Dwy/Covell Blvd

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
SB	Right Turn	925	25	3	50	4	50	8	0%	0%
EB	Through	1,400	25	0	25	0	25	0	0%	0%
WB	Through	475	25	0	25	0	25	0	0%	0%
	Through/Right	475	25	0	25	0	25	0	0%	0%
0										

Intersection 3

Risling Ct/Sutter Hospital Dwy

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Shared	900	50	2	75	5	75	8	0%	0%
NB	Shared	350	25	3	25	11	50	14	0%	0%
SB	Shared	2,000	25	0	25	5	25	16	0%	0%
WB	Shared	950	25	2	50	2	50	11	0%	0%

Intersection 4

Risling Ct-Shasta Dr/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	U/Left Turns	225	50	5	100	10	100	26	0%	0%
	Through	400	100	9	175	14	200	26	0%	0%
	Through/Right	400	75	8	150	12	200	26	0%	0%
NB	Left Turn	125	25	3	50	5	75	14	0%	0%
	Through	350	50	5	100	13	100	46	1%	0%
	Right Turn	75	75	1	75	5	75	3	2%	0%
SB	Left Turn	350	125	17	200	31	250	62	15%	0%
	Through/Right	125	50	9	125	22	125	1	0%	0%
WB	U/Left Turns	325	100	8	175	17	200	32	0%	0%
	Left Turn	325	75	6	150	20	225	78	0%	0%
	Through	575	100	12	250	28	300	77	4%	0%
	Right Turn	150	25	8	100	26	175	0	0%	0%

Intersection 5

John Jones Rd/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	150	50	5	100	18	125	40	0%	0%
	Through	575	100	11	200	23	250	68	3%	0%
SB	Left Turn	250	175	6	250	14	275	7	2%	0%
	Through/Right	1,600	50	9	125	50	250	116	0%	0%
WB	Through	350	150	11	275	25	325	41	18%	0%
	Right Turn	75	50	5	100	6	100	0	1%	0%
NB	Shared	25	25	0	25	0	25	0	0%	0%

Intersection 6

SR 113 SB Ramps/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	350	175	23	325	27	350	19	0%	0%
	Through/Right	350	200	28	325	30	350	31	0%	1%
SB	Left/Through	1,425	100	9	175	13	200	23	0%	0%
	Right Turn	1,425	75	5	125	13	150	22	0%	0%
WB	U/Left Turns	225	175	9	225	11	225	5	5%	0%
	Through	500	125	21	275	47	350	75	3%	0%
O										

Intersection 7

SR 113 NB Ramps/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	U/Left Turns	175	100	11	175	19	175	13	3%	0%
	Through	500	125	11	200	24	250	51	2%	0%
NB	Left/Through	1,675	225	16	350	39	400	58	0%	0%
	Right Turn	1,675	225	55	400	168	475	238	0%	0%
WB	Through	425	125	8	200	15	225	32	3%	0%
	Right Turn	150	50	4	100	13	175	3	0%	0%
0										

Intersection 8

Sycamore Ln/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	175	125	8	200	11	200	0	4%	0%
	Through	400	175	15	275	26	300	29	6%	0%
	Through/Right	400	200	15	300	25	325	34	0%	0%
NB	Left Turn	125	100	3	150	6	150	0	7%	0%
	Through/Right	1,125	75	7	175	21	250	43	2%	0%
SB	Left Turn	125	125	6	175	5	150	0	12%	0%
	Through/Right	1,775	125	23	275	49	325	67	8%	0%
WB	Left Turn	125	50	8	100	21	150	37	0%	0%
	Through	5,800	150	17	250	30	275	40	12%	0%
	Through/Right	5,800	175	21	275	29	325	39	0%	0%

Intersection 13

Project Dwy/Covell Blvd

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
SB	Right Turn	925	25	1	50	2	50	10	0%	0%
EB	Through	1,400	25	0	25	0	25	0	0%	0%
WB	Through	475	25	0	25	0	25	0	0%	0%
	Through/Right	475	25	0	25	0	25	0	0%	0%
0										



Arterial Level of Service  
Existing Plus Project Conditions

AM Peak Hour

Arterial Level of Service: EB Route 1, Interval #0 7:30

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	-	-	0.1	-
	5	-	-	0.1	-
SR 113 SB Ramps	6	-	-	0.1	-
Route 2	7	-	-	0.1	-
Total		-	-	0.4	-

Arterial Level of Service: EB Route 1, Interval #1 7:45

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	16.2	22.8	0.1	14
	5	19.9	32.0	0.1	13
SR 113 SB Ramps	6	22.9	30.6	0.1	9
Route 2	7	15.5	25.6	0.1	14
Total		74.6	111.0	0.4	12

Arterial Level of Service: EB Route 1, Interval #2 8:00

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	16.3	22.8	0.1	14
	5	26.1	37.6	0.1	11
SR 113 SB Ramps	6	30.9	38.4	0.1	7
Route 2	7	17.5	27.6	0.1	13
Total		90.9	126.4	0.4	11

Arterial Level of Service: EB Route 1, Interval #3 8:15

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	14.5	20.9	0.1	15
	5	21.1	33.0	0.1	13
SR 113 SB Ramps	6	29.3	36.9	0.1	7
Route 2	7	16.5	26.6	0.1	14
Total		81.4	117.4	0.4	12

Arterial Level of Service  
Existing Plus Project Conditions

AM Peak Hour

Arterial Level of Service: EB Route 1, Interval #4 8:30

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	14.8	21.2	0.1	15
	5	17.5	29.7	0.1	14
SR 113 SB Ramps	6	21.9	29.6	0.1	9
Route 2	7	15.7	25.9	0.1	14
Total		69.9	106.3	0.4	13

Arterial Level of Service: EB Route 1, Entire Run

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	15.9	22.6	0.1	14
	5	22.3	34.8	0.1	12
SR 113 SB Ramps	6	27.8	35.7	0.1	8
Route 2	7	17.1	27.6	0.1	13
Total		83.1	120.7	0.4	11

Arterial Level of Service: WB Route 1, Interval #0 7:30

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Covell Blvd	7	-	-	0.3	-
SR 113 SB Ramps	6	-	-	0.1	-
John Jones Rd	5	-	-	0.1	-
Risling Ct	4	-	-	0.1	-
	13	-	-	0.1	-
Total		-	-	0.7	-

Arterial Level of Service: WB Route 1, Interval #1 7:45

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Covell Blvd	7	39.0	65.9	0.3	18
SR 113 SB Ramps	6	4.2	17.7	0.1	21
John Jones Rd	5	13.9	21.5	0.1	13
Risling Ct	4	13.3	24.9	0.1	17
	13	2.6	10.2	0.1	31
Total		72.9	140.2	0.7	18

Arterial Level of Service  
Existing Plus Project Conditions

AM Peak Hour

Arterial Level of Service: WB Route 1, Interval #2 8:00

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Covell Blvd	7	47.3	75.0	0.3	16
SR 113 SB Ramps	6	7.4	20.6	0.1	18
John Jones Rd	5	14.9	22.5	0.1	12
Risling Ct	4	13.4	25.1	0.1	17
	13	2.6	10.2	0.1	31
Total		85.6	153.2	0.7	17

Arterial Level of Service: WB Route 1, Interval #3 8:15

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Covell Blvd	7	44.8	71.4	0.3	16
SR 113 SB Ramps	6	8.2	21.7	0.1	17
John Jones Rd	5	12.3	19.9	0.1	14
Risling Ct	4	13.3	25.0	0.1	17
	13	2.4	10.0	0.1	31
Total		81.0	148.0	0.7	17

Arterial Level of Service: WB Route 1, Interval #4 8:30

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Covell Blvd	7	38.1	65.1	0.3	18
SR 113 SB Ramps	6	4.7	18.0	0.1	20
John Jones Rd	5	14.0	21.5	0.1	13
Risling Ct	4	11.9	23.2	0.1	18
	13	2.6	10.3	0.1	30
Total		71.3	138.2	0.7	18

Arterial Level of Service: WB Route 1, Entire Run

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Covell Blvd	7	45.4	74.2	0.3	16
SR 113 SB Ramps	6	6.6	20.7	0.1	18
John Jones Rd	5	13.9	21.6	0.1	13
Risling Ct	4	13.5	25.6	0.1	17
	13	2.6	10.3	0.1	31
Total		82.0	152.5	0.7	17

Arterial Level of Service  
Existing Plus Project Conditions

AM Peak Hour

Arterial Level of Service: EB Route 2, Interval #0 7:30

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	-	-	0.1	-
	5	-	-	0.1	-
Route 4	6	-	-	0.1	-
Total		-	-	0.3	-

Arterial Level of Service: EB Route 2, Interval #1 7:45

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	16.2	22.8	0.1	14
	5	19.9	32.0	0.1	13
Route 4	6	24.9	36.6	0.1	7
Total		61.1	91.4	0.3	11

Arterial Level of Service: EB Route 2, Interval #2 8:00

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	16.3	22.8	0.1	14
	5	26.1	37.6	0.1	11
Route 4	6	35.2	46.9	0.1	6
Total		77.5	107.3	0.3	9

Arterial Level of Service: EB Route 2, Interval #3 8:15

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	14.5	20.9	0.1	15
	5	21.1	33.0	0.1	13
Route 4	6	32.1	43.9	0.1	6
Total		67.7	97.8	0.3	10

Arterial Level of Service: EB Route 2, Interval #4 8:30

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	14.8	21.2	0.1	15
	5	17.5	29.7	0.1	14
Route 4	6	23.4	35.1	0.1	8
Total		55.6	86.0	0.3	12

Arterial Level of Service  
Existing Plus Project Conditions

AM Peak Hour

Arterial Level of Service: EB Route 2, Entire Run

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	15.9	22.6	0.1	14
	5	22.3	34.8	0.1	12
Route 4	6	30.5	42.8	0.1	6
Total		68.8	100.2	0.3	10

Arterial Level of Service: WB Route 2, Interval #0 7:30

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
John Jones Rd	5	-	-	0.1	-
Risling Ct	4	-	-	0.1	-
	13	-	-	0.1	-
Total		-	-	0.3	-

Arterial Level of Service: WB Route 2, Interval #1 7:45

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
John Jones Rd	5	-	-	0.1	-
Risling Ct	4	13.3	24.9	0.1	17
	13	2.6	10.2	0.1	31
Total		15.8	35.1	0.3	29

Arterial Level of Service: WB Route 2, Interval #2 8:00

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
John Jones Rd	5	-	-	0.1	-
Risling Ct	4	13.4	25.1	0.1	17
	13	2.6	10.2	0.1	31
Total		16.0	35.2	0.3	29

Arterial Level of Service: WB Route 2, Interval #3 8:15

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
John Jones Rd	5	-	-	0.1	-
Risling Ct	4	13.3	25.0	0.1	17
	13	2.4	10.0	0.1	31
Total		15.7	35.0	0.3	29

Arterial Level of Service  
Existing Plus Project Conditions

AM Peak Hour

Arterial Level of Service: WB Route 2, Interval #4 8:30

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
John Jones Rd	5	-	-	0.1	-
Risling Ct	4	11.9	23.2	0.1	18
	13	2.6	10.3	0.1	30
Total		14.5	33.5	0.3	30

Arterial Level of Service: WB Route 2, Entire Run

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
John Jones Rd	5	-	-	0.1	-
Risling Ct	4	13.5	25.6	0.1	17
	13	2.6	10.3	0.1	31
Total		16.1	35.9	0.3	28

Arterial Level of Service: EB Route 1, Interval #0 4:45

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	-	-	0.1	-
	5	-	-	0.1	-
SR 113 SB Ramps	6	-	-	0.1	-
Route 2	7	-	-	0.1	-
Total		-	-	0.4	-

Arterial Level of Service: EB Route 1, Interval #1 5:00

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	12.4	19.0	0.1	16
	5	10.1	22.2	0.1	19
SR 113 SB Ramps	6	19.2	27.0	0.1	10
Route 2	7	9.4	19.7	0.1	19
Total		51.0	87.9	0.4	16

Arterial Level of Service: EB Route 1, Interval #2 5:15

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	12.3	19.0	0.1	17
	5	11.6	23.7	0.1	18
SR 113 SB Ramps	6	24.5	32.2	0.1	8
Route 2	7	9.7	20.1	0.1	18
Total		58.1	94.9	0.4	15

Arterial Level of Service: EB Route 1, Interval #3 5:30

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	14.4	20.9	0.1	15
	5	11.4	23.5	0.1	18
SR 113 SB Ramps	6	22.0	29.6	0.1	9
Route 2	7	10.0	20.5	0.1	18
Total		57.8	94.5	0.4	15

Arterial Level of Service: EB Route 1, Interval #4 5:45

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	13.2	19.8	0.1	16
	5	9.2	21.2	0.1	20
SR 113 SB Ramps	6	19.8	27.6	0.1	10
Route 2	7	9.2	19.6	0.1	19
Total		51.5	88.2	0.4	16

Arterial Level of Service: EB Route 1, Entire Run

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	13.3	20.1	0.1	16
	5	10.9	23.3	0.1	18
SR 113 SB Ramps	6	22.3	30.3	0.1	9
Route 2	7	9.8	20.4	0.1	18
Total		56.4	94.2	0.4	15

Arterial Level of Service: WB Route 1, Interval #0 4:45

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Covell Blvd	7	-	-	0.3	-
SR 113 SB Ramps	6	-	-	0.1	-
John Jones Rd	5	-	-	0.1	-
Risling Ct	4	-	-	0.1	-
	13	-	-	0.1	-
Total		-	-	0.7	-

Arterial Level of Service: WB Route 1, Interval #1 5:00

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Covell Blvd	7	37.8	65.7	0.3	18
SR 113 SB Ramps	6	6.2	19.8	0.1	19
John Jones Rd	5	9.2	16.7	0.1	16
Risling Ct	4	10.6	22.6	0.1	19
	13	2.6	10.2	0.1	31
Total		66.3	135.0	0.7	19



Arterial Level of Service: WB Route 1, Interval #2 5:15

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Covell Blvd	7	36.1	64.3	0.3	18
SR 113 SB Ramps	6	6.7	20.6	0.1	18
John Jones Rd	5	12.4	19.9	0.1	14
Risling Ct	4	11.0	22.8	0.1	19
	13	2.8	10.4	0.1	30
Total		69.0	138.1	0.7	19

Arterial Level of Service: WB Route 1, Interval #3 5:30

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Covell Blvd	7	35.2	63.4	0.3	19
SR 113 SB Ramps	6	7.6	21.6	0.1	17
John Jones Rd	5	10.5	18.1	0.1	15
Risling Ct	4	9.6	21.3	0.1	20
	13	2.9	10.5	0.1	30
Total		65.8	134.9	0.7	19

Arterial Level of Service: WB Route 1, Interval #4 5:45

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Covell Blvd	7	34.3	62.4	0.3	19
SR 113 SB Ramps	6	7.3	21.1	0.1	18
John Jones Rd	5	10.2	17.8	0.1	15
Risling Ct	4	9.6	21.5	0.1	20
	13	2.8	10.4	0.1	30
Total		64.1	133.2	0.7	19

Arterial Level of Service: WB Route 1, Entire Run

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Covell Blvd	7	37.2	66.4	0.3	18
SR 113 SB Ramps	6	7.1	21.3	0.1	17
John Jones Rd	5	10.7	18.4	0.1	15
Risling Ct	4	10.5	22.7	0.1	19
	13	2.8	10.6	0.1	30
Total		68.3	139.3	0.7	18

Arterial Level of Service  
Existing Plus Project Conditions

PM Peak Hour

Arterial Level of Service: EB Route 2, Interval #0 4:45

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	-	-	0.1	-
	5	-	-	0.1	-
Route 4	6	-	-	0.1	-
Total		-	-	0.3	-

Arterial Level of Service: EB Route 2, Interval #1 5:00

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	12.8	19.4	0.1	16
	5	10.7	22.7	0.1	19
Route 4	6	16.7	28.5	0.1	10
Total		40.2	70.6	0.3	14

Arterial Level of Service: EB Route 2, Interval #2 5:15

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	12.9	19.5	0.1	16
	5	11.4	23.5	0.1	18
Route 4	6	20.3	32.1	0.1	8
Total		44.5	75.1	0.3	13

Arterial Level of Service: EB Route 2, Interval #3 5:30

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	13.6	20.3	0.1	15
	5	10.8	22.9	0.1	19
Route 4	6	18.0	29.6	0.1	9
Total		42.4	72.7	0.3	14

Arterial Level of Service: EB Route 2, Interval #4 5:45

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	12.1	18.7	0.1	17
	5	8.6	20.6	0.1	21
Route 4	6	15.1	26.9	0.1	10
Total		35.8	66.3	0.3	15

Arterial Level of Service  
Existing Plus Project Conditions

PM Peak Hour

Arterial Level of Service: EB Route 2, Entire Run

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	13.1	19.8	0.1	16
	5	10.7	23.1	0.1	19
Route 4	6	18.1	30.2	0.1	9
Total		41.8	73.1	0.3	14

Arterial Level of Service: WB Route 2, Interval #0 4:45

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
John Jones Rd	5	-	-	0.1	-
Risling Ct	4	-	-	0.1	-
	13	-	-	0.1	-
Total		-	-	0.3	-

Arterial Level of Service: WB Route 2, Interval #1 5:00

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
John Jones Rd	5	-	-	0.1	-
Risling Ct	4	10.1	22.1	0.1	19
	13	2.6	10.2	0.1	31
Total		12.7	32.2	0.3	31

Arterial Level of Service: WB Route 2, Interval #2 5:15

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
John Jones Rd	5	-	-	0.1	-
Risling Ct	4	10.4	22.4	0.1	19
	13	2.7	10.3	0.1	30
Total		13.2	32.7	0.3	31

Arterial Level of Service: WB Route 2, Interval #3 5:30

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
John Jones Rd	5	-	-	0.1	-
Risling Ct	4	10.1	22.0	0.1	19
	13	2.9	10.5	0.1	30
Total		12.9	32.5	0.3	31

Arterial Level of Service  
Existing Plus Project Conditions

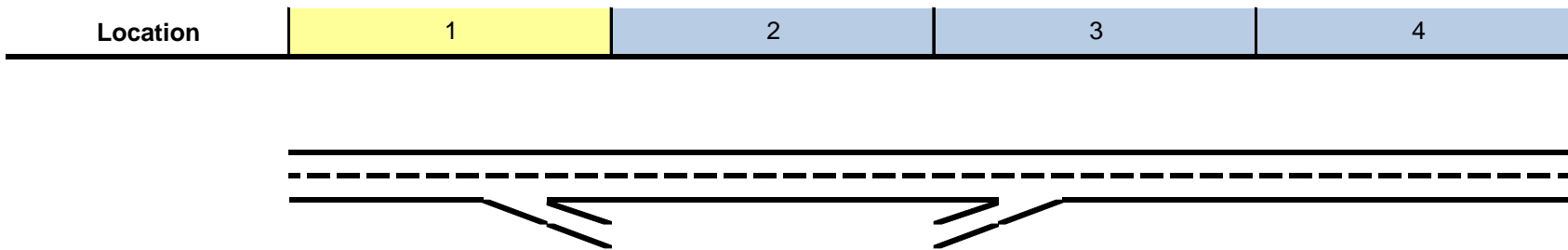
PM Peak Hour

Arterial Level of Service: WB Route 2, Interval #4 5:45

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
John Jones Rd	5	-	-	0.1	-
Risling Ct	4	9.2	21.2	0.1	20
	13	2.6	10.3	0.1	30
Total		11.9	31.5	0.3	32

Arterial Level of Service: WB Route 2, Entire Run

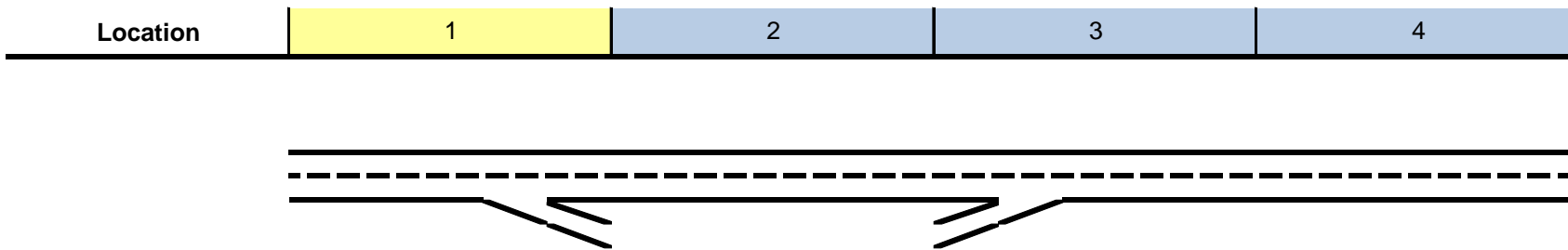
Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
John Jones Rd	5	-	-	0.1	-
Risling Ct	4	10.2	22.4	0.1	19
	13	2.8	10.5	0.1	30
Total		13.0	32.9	0.3	31



**Key**

<> Express Lane (HOV)

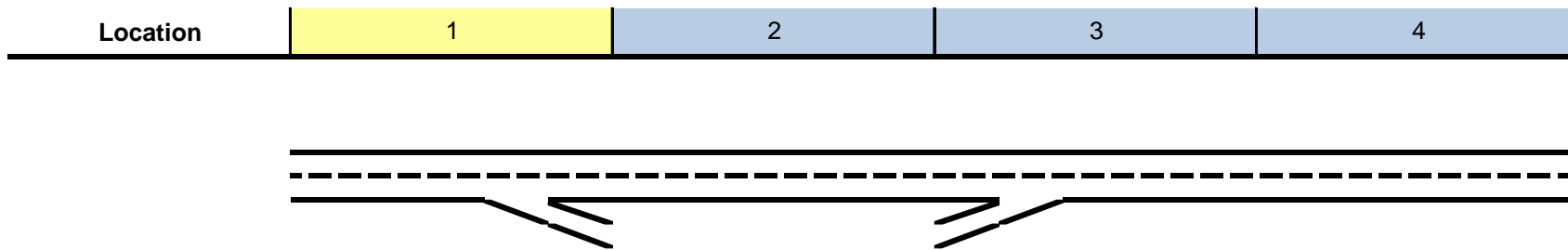
Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Freeway Segment</b>				
Type	Diverge	Basic	Merge	Basic
Length (ft)	1,500	2,560	1,500	5,980
Accel Length			370	
Decel Length	150			
Mainline Volume	1,046	429	429	659
On Ramp Volume			230	
Off Ramp Volume	617			
Express Lane Volume				
EL On Ramp Volume				
EL Off Ramp Volume				
<b>Flow Rate in Entering General Purpose Lanes (GP)</b>				
Volume (vph)	1,046	429	429	659
PHF	0.75	0.75	0.75	0.75
Lanes	2	2	2	2
Terrain	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00
Truck & Bus %	5.9%	5.9%	5.9%	5.9%
RV %	0.0%	0.0%	0.0%	0.0%
$E_T$	1.5	1.5	1.5	1.5
$E_R$	1.2	1.2	1.2	1.2
$f_{HV}$	0.971	0.971	0.971	0.971
$f_P$	1.00	1.00	1.00	1.00
Flow (pcph)	1,436	589	589	905
Flow (pcphpl)	718	294	294	452



**Key**

<> Express Lane (HOV)

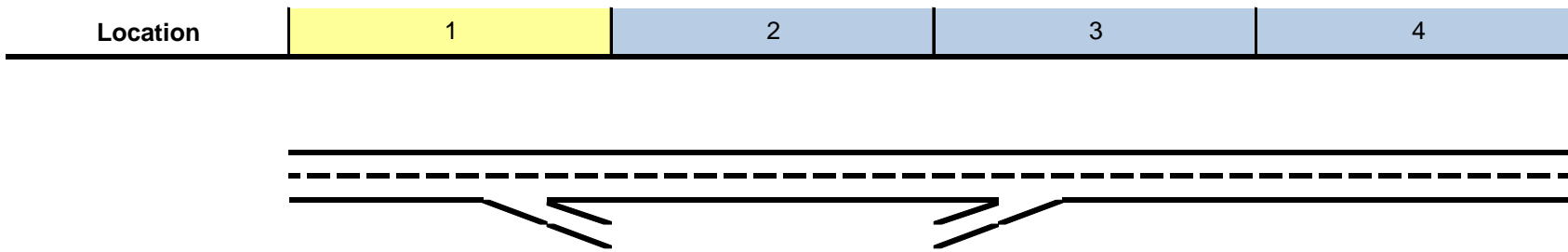
Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Free Flow Speed in Entering GP Lanes</b>				
Lane Width (ft)				
Shoulder Width				
TRD				
$f_{LW}$				
$f_{LC}$				
Calculated FFS				
Measured FFS				
FFS Curve	70	70	70	70
<b>Operations in Entering GP Lanes</b>				
Capacity (pcph)	4,800	4,800	4,800	4,800
v/c ratio	0.30	0.12	0.12	0.19
Speed (mph)	70.0	70.0	70.0	70.0
Density (pcphpl)	10.3	4.2	4.2	6.5
LOS	A	A	A	A
<b>Operations for Segment GP Lanes</b>				
Flow (pcph)			854	
Lanes			2	
Capacity (pcph)			4,800	
v/c ratio			0.18	
Flow Rate (pcphpl)			427	
Speed (mph)			70.0	
Density (pcphpl)			6.1	
LOS			A	
<b>Operations for Exiting GP Lanes</b>				
Flow (pcph)	724			
Lanes	2			
Capacity (pcph)	4,800			
v/c ratio	0.15			
Flow Rate (pcphpl)	362			
Speed (mph)	70.0			
Density (pcphpl)	5.2			
LOS	A			



**Key**

<> Express Lane (HOV)

Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Flow Rate in Express Lanes</b>				
<b>Operations in Express Lanes</b>				
<b>On Ramp Flow Rate</b>				
Volume (vph)			230	
PHF			0.88	
Lanes			1	
Terrain			Level	
Grade %			0.0%	
Grade Length (mi)			0.00	
Truck & Bus %			3.0%	
RV %			0.0%	
$E_T$			1.5	
$E_R$			1.2	
$f_{HV}$			0.985	
$f_P$			1.00	
Flow (pcph)			265	
Flow Rate (pcphpl)			265	
<b>On Ramp Roadway Operations</b>				
Ramp Type			Right	
Ramp Speed (mph)			45	
Ramp Capacity (pcph)			2,100	
Ramp v/c ratio			0.13	

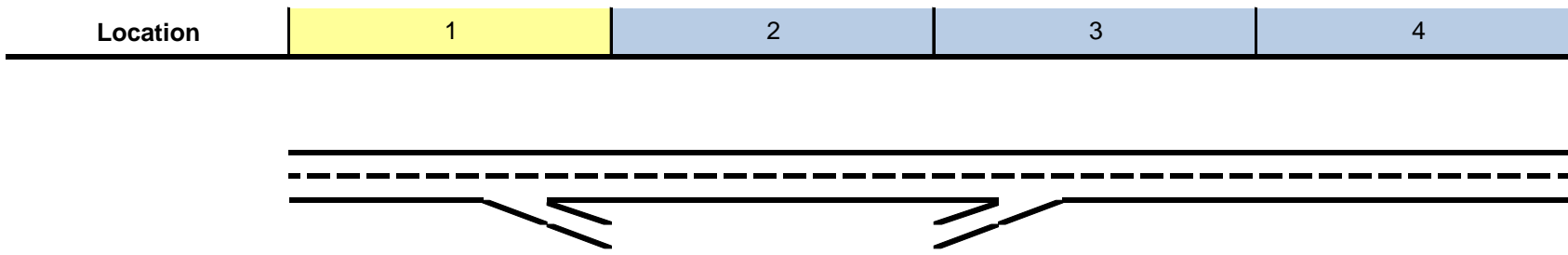


**Key**

<> Express Lane (HOV)

Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Off Ramp Flow Rate</b>				
Volume (vph)	617			
PHF	0.88			
Lanes	1			
Terrain	Level			
Grade %	0.0%			
Grade Length (mi)	0.00			
Truck & Bus %	3.0%			
RV %	0.0%			
$E_T$	1.5			
$E_R$	1.2			
$f_{HV}$	0.985			
$f_P$	1.00			
Flow (pcph)	712			
Flow Rate (pcphpl)	712			
<b>Off Ramp Roadway Operations</b>				
Ramp Type	Right			
Ramp Speed	45			
Ramp Capacity (pcph)	2,100			
Ramp v/c ratio	0.34			
<b>Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps</b>				

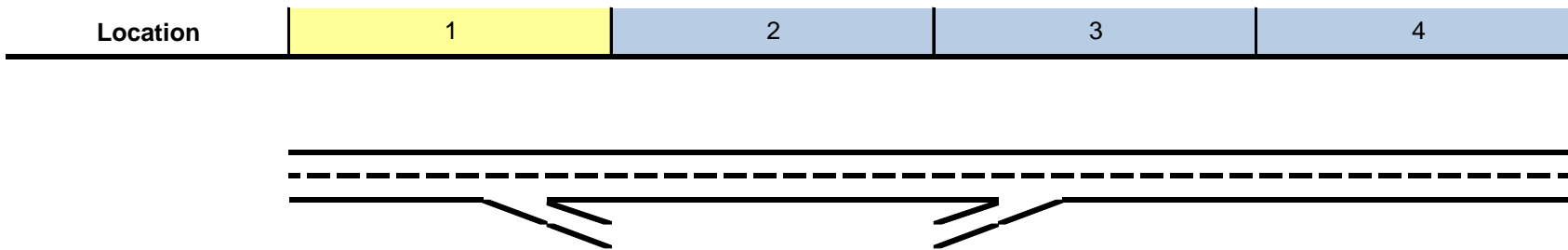




**Key**

<> Express Lane (HOV)

Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Merge Influence Area Operations</b>				
Effective $v_p$ (pcph)			589	
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FM}$ (Eqn 13-3)			0.588	
$P_{FM}$ (Eqn 13-4)				
$P_{FM}$ (Eqn 13-5)				
$P_{FM}$			1.000	
$v_{12}$ (pcph)			589	
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)			589	
$v_{R12a}$ (pcph)			854	
Speed Index			0.30	
Area Speed			61.7	
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed			61.7	
v/c ratio			0.19	
Density			9.7	
LOS			A	

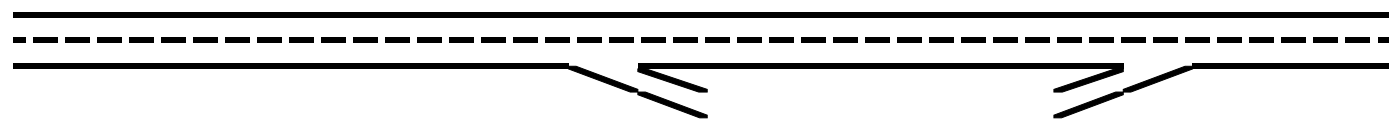


**Key**

<> Express Lane (HOV)

Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Diverge Influence Area Operations</b>				
Effective $v_p$ (pcph)	1,436			
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FD}$ (Eqn 13-9)	0.691			
$P_{FD}$ (Eqn 13-10)				
$P_{FD}$ (Eqn 13-11)				
$P_{FD}$	1.000			
$v_{12}$ (pcph)	1,436			
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)	1,436			
Speed Index	0.36			
Area Speed	59.9			
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed	59.9			
v/c ratio	0.33			
Density	15.2			
LOS	B			
<b>On Ramp to Off Ramp Flow Rate for Weave Segments</b>				
<b>On Ramp to Mainline Flow Rate for Weave Segments</b>				
<b>Mainline to Off Ramp Flow Rate for Weave Segments</b>				
<b>General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments</b>				
<b>Weave Segment Operations</b>				
<b>Summarize Segment Operations</b>				
Segment v/c ratio	0.33	0.12	0.19	0.19
Segment Density	15.2	4.2	9.7	6.5
Segment LOS	B	A	A	A
Over Capacity				

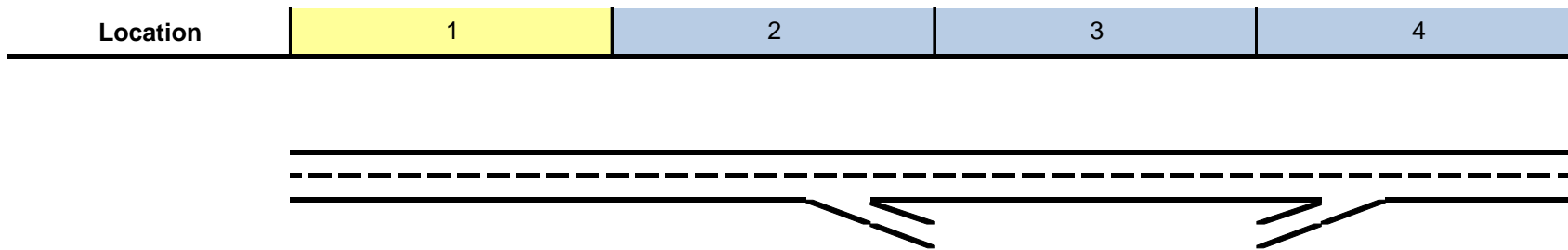
<b>Location</b>	1	2	3	4
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**Key**

<> Express Lane (HOV)

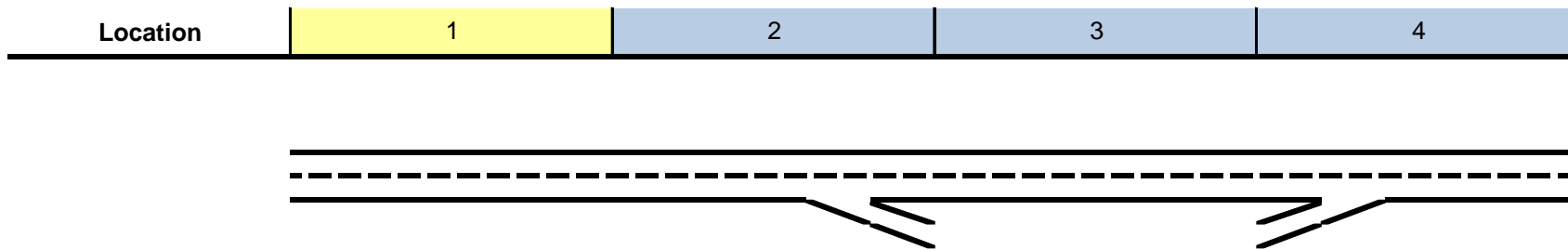
Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Freeway Segment</b>				
Type	Basic	Diverge	Basic	Merge
Length (ft)	4,920	1,500	2,850	1,550
Accel Length				330
Decel Length		170		
Mainline Volume	1,842	1,842	1,543	1,543
On Ramp Volume				928
Off Ramp Volume		299		
Express Lane Volume				
EL On Ramp Volume				
EL Off Ramp Volume				
<b>Flow Rate in Entering General Purpose Lanes (GP)</b>				
Volume (vph)	1,842	1,842	1,543	1,543
PHF	0.84	0.84	0.84	0.84
Lanes	2	2	2	2
Terrain	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00
Truck & Bus %	5.9%	5.9%	5.9%	5.9%
RV %	0.0%	0.0%	0.0%	0.0%
E <sub>T</sub>	1.5	1.5	1.5	1.5
E <sub>R</sub>	1.2	1.2	1.2	1.2
f <sub>HV</sub>	0.971	0.971	0.971	0.971
f <sub>P</sub>	1.00	1.00	1.00	1.00
Flow (pcph)	2,258	2,258	1,891	1,891
Flow (pcphpl)	1,129	1,129	946	946



**Key**

<> Express Lane (HOV)

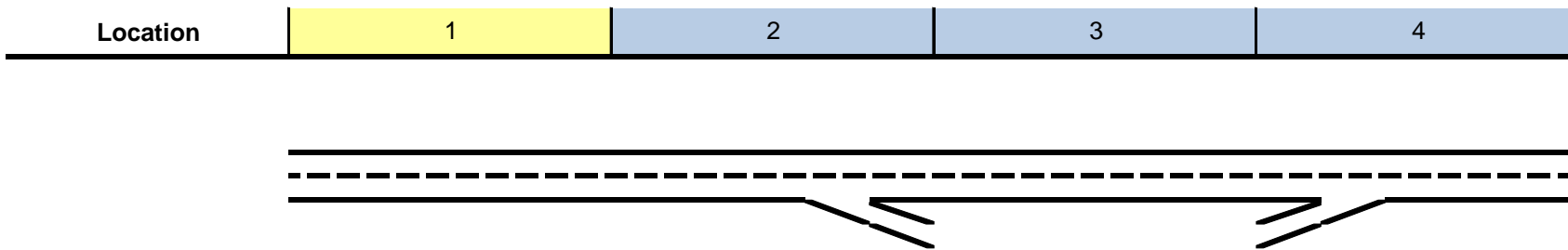
Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Free Flow Speed in Entering GP Lanes</b>				
Lane Width (ft)				
Shoulder Width				
TRD				
$f_{LW}$				
$f_{LC}$				
Calculated FFS				
Measured FFS				
FFS Curve	70	70	70	70
<b>Operations in Entering GP Lanes</b>				
Capacity (pcph)	4,800	4,800	4,800	4,800
v/c ratio	0.47	0.47	0.39	0.39
Speed (mph)	70.0	70.0	70.0	70.0
Density (pcphpl)	16.1	16.1	13.5	13.5
LOS	B	B	B	B
<b>Operations for Segment GP Lanes</b>				
Flow (pcph)				2,956
Lanes				2
Capacity (pcph)				4,800
v/c ratio				0.62
Flow Rate (pcphpl)				1,478
Speed (mph)				69.1
Density (pcphpl)				21.4
LOS				C
<b>Operations for Exiting GP Lanes</b>				
Flow (pcph)		1,914		
Lanes		2		
Capacity (pcph)		4,800		
v/c ratio		0.40		
Flow Rate (pcphpl)		957		
Speed (mph)		70.0		
Density (pcphpl)		13.7		
LOS		B		



**Key**

<> Express Lane (HOV)

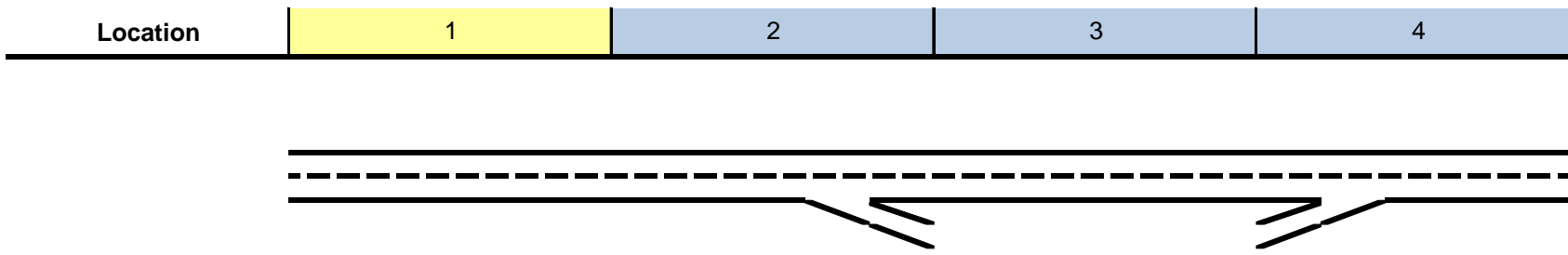
Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Flow Rate in Express Lanes</b>				
<b>Operations in Express Lanes</b>				
<b>On Ramp Flow Rate</b>				
Volume (vph)				928
PHF				0.88
Lanes				1
Terrain				Level
Grade %				0.0%
Grade Length (mi)				0.00
Truck & Bus %				2.0%
RV %				0.0%
$E_T$				1.5
$E_R$				1.2
$f_{HV}$				0.990
$f_P$				1.00
Flow (pcph)				1,065
Flow Rate (pcphpl)				1,065
<b>On Ramp Roadway Operations</b>				
Ramp Type				Right
Ramp Speed (mph)				45
Ramp Capacity (pcph)				2,100
Ramp v/c ratio				0.51



**Key**

<> Express Lane (HOV)

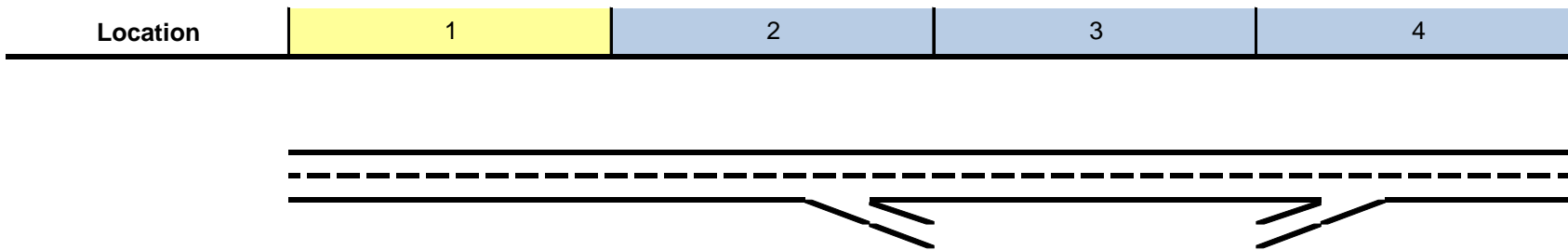
Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Off Ramp Flow Rate</b>				
Volume (vph)		299		
PHF		0.88		
Lanes		1		
Terrain		Level		
Grade %		0.0%		
Grade Length (mi)		0.00		
Truck & Bus %		2.0%		
RV %		0.0%		
$E_T$		1.5		
$E_R$		1.2		
$f_{HV}$		0.990		
$f_P$		1.00		
Flow (pcph)		343		
Flow Rate (pcphpl)		343		
<b>Off Ramp Roadway Operations</b>				
Ramp Type		Right		
Ramp Speed		45		
Ramp Capacity (pcph)		2,100		
Ramp v/c ratio		0.16		
<b>Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps</b>				



**Key**

<> Express Lane (HOV)

Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Merge Influence Area Operations</b>				
Effective $v_p$ (pcph)				1,891
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FM}$ (Eqn 13-3)				0.587
$P_{FM}$ (Eqn 13-4)				
$P_{FM}$ (Eqn 13-5)				
$P_{FM}$				1.000
$v_{12}$ (pcph)				1,891
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)				1,891
$v_{R12a}$ (pcph)				2,956
Speed Index				0.37
Area Speed				59.7
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed				59.7
v/c ratio				0.64
Density				26.0
LOS				C

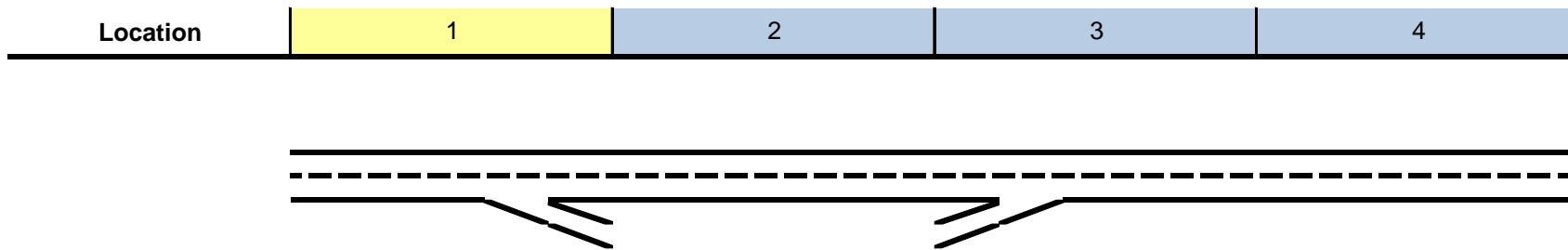


**Key**

<> Express Lane (HOV)

Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Diverge Influence Area Operations</b>				
Effective $v_p$ (pcph)		2,258		
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FD}$ (Eqn 13-9)		0.688		
$P_{FD}$ (Eqn 13-10)				
$P_{FD}$ (Eqn 13-11)				
$P_{FD}$		1.000		
$v_{12}$ (pcph)		2,258		
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)		2,258		
Speed Index		0.33		
Area Speed		60.8		
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed		60.8		
v/c ratio		0.51		
Density		22.1		
LOS		C		
<b>On Ramp to Off Ramp Flow Rate for Weave Segments</b>				
<b>On Ramp to Mainline Flow Rate for Weave Segments</b>				
<b>Mainline to Off Ramp Flow Rate for Weave Segments</b>				
<b>General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments</b>				
<b>Weave Segment Operations</b>				
<b>Summarize Segment Operations</b>				
Segment v/c ratio	0.47	0.51	0.39	0.64
Segment Density	16.1	22.1	13.5	26.0
Segment LOS	B	C	B	C
Over Capacity				



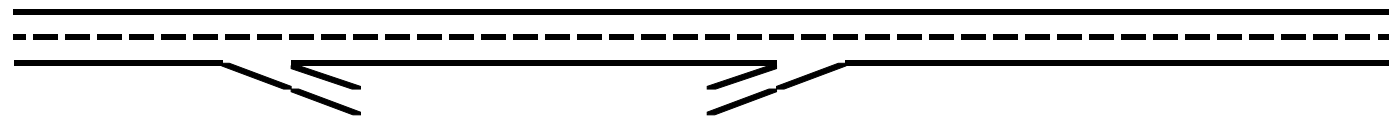


**Key**

<> Express Lane (HOV)

Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Freeway Segment</b>				
Type	Diverge	Basic	Merge	Basic
Length (ft)	1,500	2,560	1,500	5,980
Accel Length			370	
Decel Length	150			
Mainline Volume	1,919	995	995	1,255
On Ramp Volume			260	
Off Ramp Volume	924			
Express Lane Volume				
EL On Ramp Volume				
EL Off Ramp Volume				
<b>Flow Rate in Entering General Purpose Lanes (GP)</b>				
Volume (vph)	1,919	995	995	1,255
PHF	0.86	0.86	0.86	0.86
Lanes	2	2	2	2
Terrain	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00
Truck & Bus %	5.9%	5.9%	5.9%	5.9%
RV %	0.0%	0.0%	0.0%	0.0%
$E_T$	1.5	1.5	1.5	1.5
$E_R$	1.2	1.2	1.2	1.2
$f_{HV}$	0.971	0.971	0.971	0.971
$f_P$	1.00	1.00	1.00	1.00
Flow (pcph)	2,297	1,191	1,191	1,502
Flow (pcphpl)	1,149	596	596	751

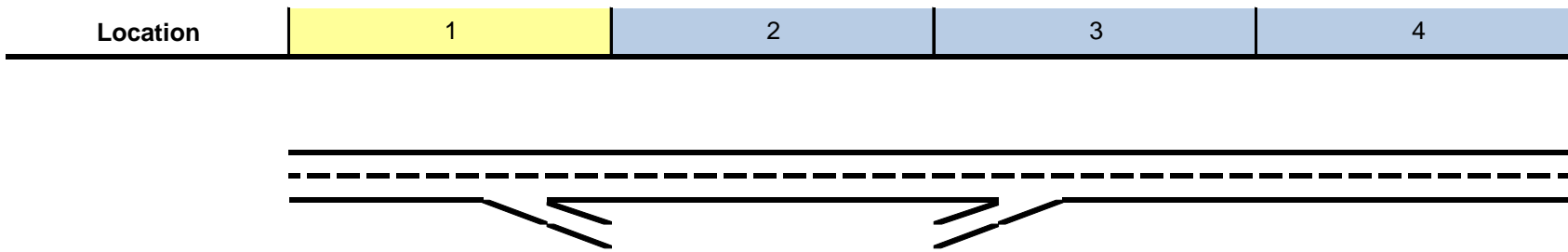
Location	1	2	3	4
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**Key**

<> Express Lane (HOV)

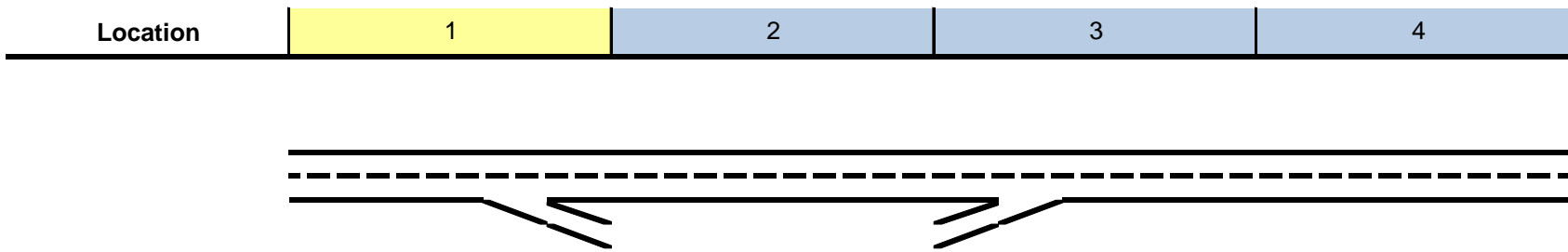
Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Free Flow Speed in Entering GP Lanes</b>				
Lane Width (ft)				
Shoulder Width				
TRD				
$f_{LW}$				
$f_{LC}$				
Calculated FFS				
Measured FFS				
FFS Curve	70	70	70	70
<b>Operations in Entering GP Lanes</b>				
Capacity (pcph)	4,800	4,800	4,800	4,800
v/c ratio	0.48	0.25	0.25	0.31
Speed (mph)	70.0	70.0	70.0	70.0
Density (pcphpl)	16.4	8.5	8.5	10.7
LOS	B	A	A	A
<b>Operations for Segment GP Lanes</b>				
Flow (pcph)			1,475	
Lanes			2	
Capacity (pcph)			4,800	
v/c ratio			0.31	
Flow Rate (pcphpl)			737	
Speed (mph)			70.0	
Density (pcphpl)			10.5	
LOS			A	
<b>Operations for Exiting GP Lanes</b>				
Flow (pcph)	1,289			
Lanes	2			
Capacity (pcph)	4,800			
v/c ratio	0.27			
Flow Rate (pcphpl)	644			
Speed (mph)	70.0			
Density (pcphpl)	9.2			
LOS	A			



**Key**

<> Express Lane (HOV)

Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Flow Rate in Express Lanes</b>				
<b>Operations in Express Lanes</b>				
<b>On Ramp Flow Rate</b>				
Volume (vph)			260	
PHF			0.93	
Lanes			1	
Terrain			Level	
Grade %			0.0%	
Grade Length (mi)			0.00	
Truck & Bus %			3.0%	
RV %			0.0%	
$E_T$			1.5	
$E_R$			1.2	
$f_{HV}$			0.985	
$f_P$			1.00	
Flow (pcph)			284	
Flow Rate (pcphpl)			284	
<b>On Ramp Roadway Operations</b>				
Ramp Type			Right	
Ramp Speed (mph)			45	
Ramp Capacity (pcph)			2,100	
Ramp v/c ratio			0.14	

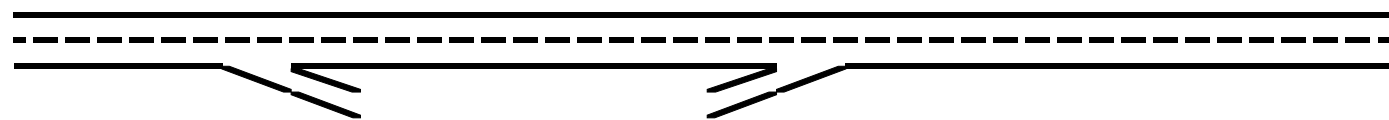


**Key**

<> Express Lane (HOV)

Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Off Ramp Flow Rate</b>				
Volume (vph)	924			
PHF	0.93			
Lanes	1			
Terrain	Level			
Grade %	0.0%			
Grade Length (mi)	0.00			
Truck & Bus %	3.0%			
RV %	0.0%			
$E_T$	1.5			
$E_R$	1.2			
$f_{HV}$	0.985			
$f_P$	1.00			
Flow (pcph)	1,008			
Flow Rate (pcphpl)	1,008			
<b>Off Ramp Roadway Operations</b>				
Ramp Type	Right			
Ramp Speed	45			
Ramp Capacity (pcph)	2,100			
Ramp v/c ratio	0.48			
<b>Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps</b>				

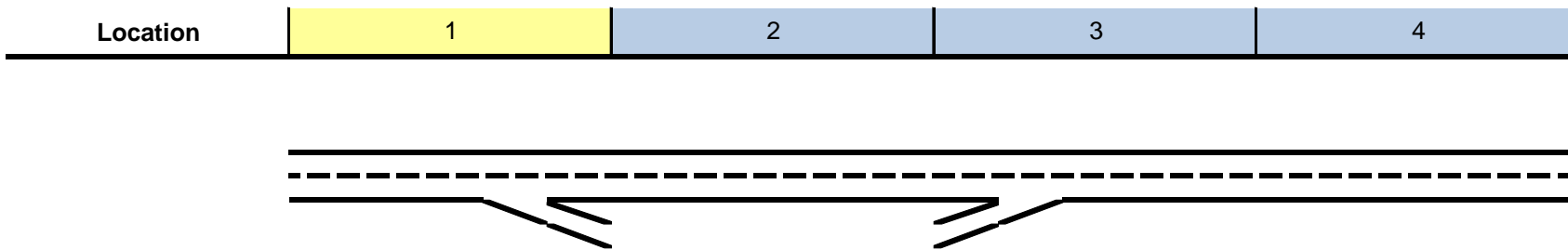
Location	1	2	3	4
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**Key**

<> Express Lane (HOV)

Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Merge Influence Area Operations</b>				
Effective $v_p$ (pcph)			1,191	
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FM}$ (Eqn 13-3)			0.588	
$P_{FM}$ (Eqn 13-4)				
$P_{FM}$ (Eqn 13-5)				
$P_{FM}$			1.000	
$v_{12}$ (pcph)			1,191	
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)			1,191	
$v_{R12a}$ (pcph)			1,475	
Speed Index			0.30	
Area Speed			61.5	
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed			61.5	
v/c ratio			0.32	
Density			14.5	
LOS			B	

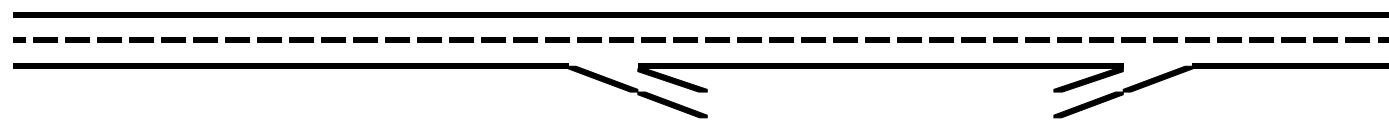


**Key**

<> Express Lane (HOV)

Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Diverge Influence Area Operations</b>				
Effective $v_p$ (pcph)	2,297			
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FD}$ (Eqn 13-9)	0.656			
$P_{FD}$ (Eqn 13-10)				
$P_{FD}$ (Eqn 13-11)				
$P_{FD}$	1.000			
$v_{12}$ (pcph)	2,297			
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)	2,297			
Speed Index	0.39			
Area Speed	59.1			
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed	59.1			
v/c ratio	0.52			
Density	22.7			
LOS	C			
<b>On Ramp to Off Ramp Flow Rate for Weave Segments</b>				
<b>On Ramp to Mainline Flow Rate for Weave Segments</b>				
<b>Mainline to Off Ramp Flow Rate for Weave Segments</b>				
<b>General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments</b>				
<b>Weave Segment Operations</b>				
<b>Summarize Segment Operations</b>				
Segment v/c ratio	0.52	0.25	0.32	0.31
Segment Density	22.7	8.5	14.5	10.7
Segment LOS	C	A	B	A
Over Capacity				

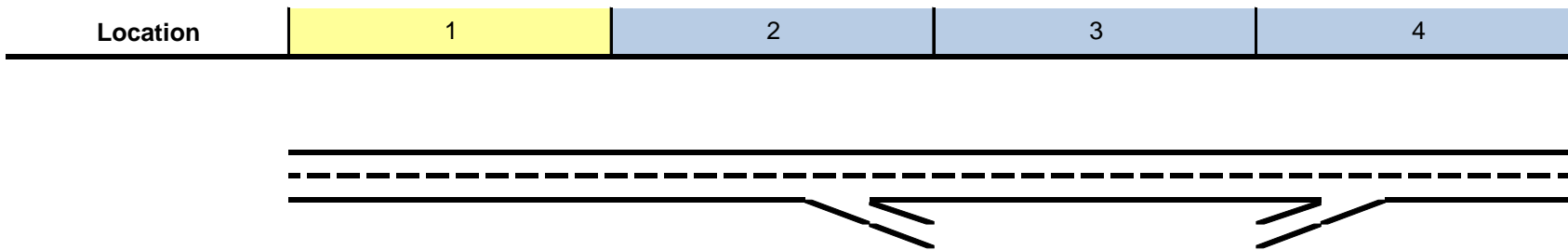
Location	1	2	3	4
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**Key**

<> Express Lane (HOV)

Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Freeway Segment</b>				
Type	Basic	Diverge	Basic	Merge
Length (ft)	4,920	1,500	2,850	1,550
Accel Length				330
Decel Length		170		
Mainline Volume	1,100	1,100	878	878
On Ramp Volume				508
Off Ramp Volume		222		
Express Lane Volume				
EL On Ramp Volume				
EL Off Ramp Volume				
<b>Flow Rate in Entering General Purpose Lanes (GP)</b>				
Volume (vph)	1,100	1,100	878	878
PHF	0.93	0.93	0.93	0.93
Lanes	2	2	2	2
Terrain	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00
Truck & Bus %	5.9%	5.9%	5.9%	5.9%
RV %	0.0%	0.0%	0.0%	0.0%
E <sub>T</sub>	1.5	1.5	1.5	1.5
E <sub>R</sub>	1.2	1.2	1.2	1.2
f <sub>HV</sub>	0.971	0.971	0.971	0.971
f <sub>P</sub>	1.00	1.00	1.00	1.00
Flow (pcph)	1,218	1,218	972	972
Flow (pcphpl)	609	609	486	486

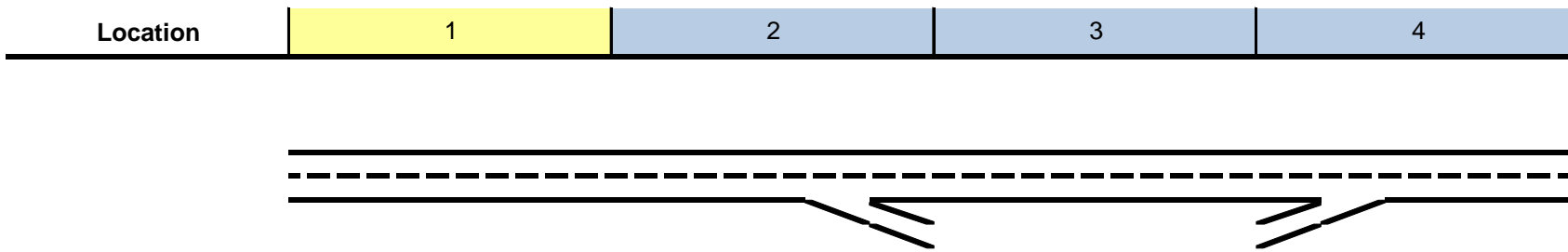


**Key**

<> Express Lane (HOV)

Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Free Flow Speed in Entering GP Lanes</b>				
Lane Width (ft)				
Shoulder Width				
TRD				
$f_{LW}$				
$f_{LC}$				
Calculated FFS				
Measured FFS				
FFS Curve	70	70	70	70
<b>Operations in Entering GP Lanes</b>				
Capacity (pcph)	4,800	4,800	4,800	4,800
v/c ratio	0.25	0.25	0.20	0.20
Speed (mph)	70.0	70.0	70.0	70.0
Density (pcphpl)	8.7	8.7	6.9	6.9
LOS	A	A	A	A
<b>Operations for Segment GP Lanes</b>				
Flow (pcph)				1,524
Lanes				2
Capacity (pcph)				4,800
v/c ratio				0.32
Flow Rate (pcphpl)				762
Speed (mph)				70.0
Density (pcphpl)				10.9
LOS				A
<b>Operations for Exiting GP Lanes</b>				
Flow (pcph)		977		
Lanes		2		
Capacity (pcph)		4,800		
v/c ratio		0.20		
Flow Rate (pcphpl)		488		
Speed (mph)		70.0		
Density (pcphpl)		7.0		
LOS		A		

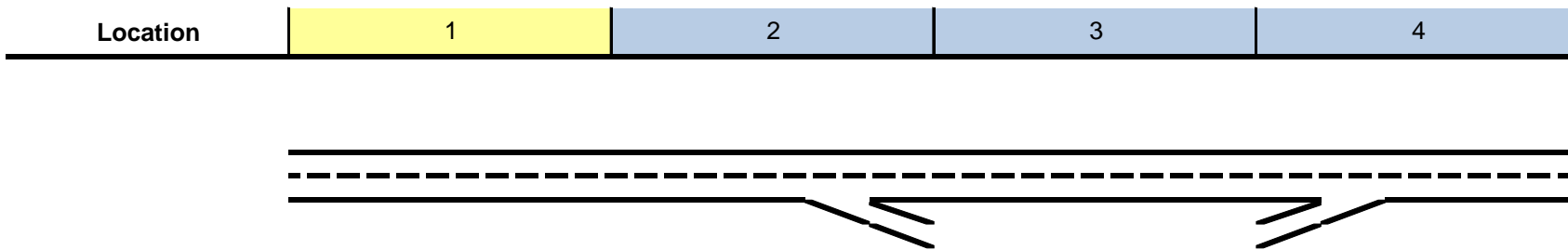




**Key**

<> Express Lane (HOV)

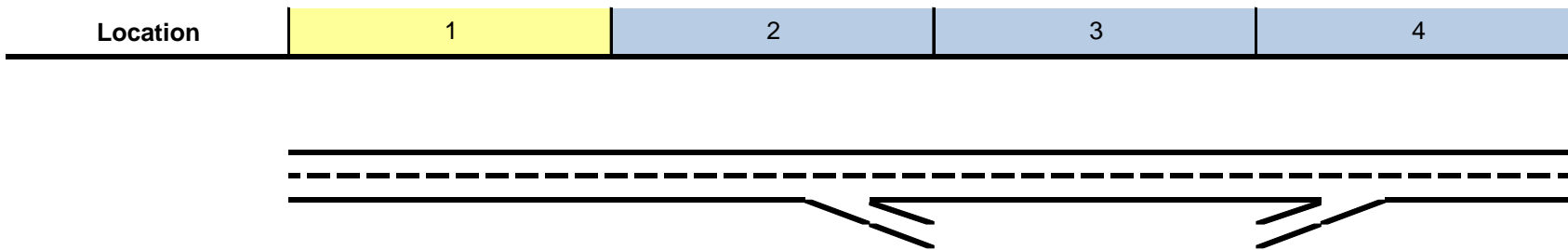
Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Flow Rate in Express Lanes</b>				
<b>Operations in Express Lanes</b>				
<b>On Ramp Flow Rate</b>				
Volume (vph)				508
PHF				0.93
Lanes				1
Terrain				Level
Grade %				0.0%
Grade Length (mi)				0.00
Truck & Bus %				2.0%
RV %				0.0%
$E_T$				1.5
$E_R$				1.2
$f_{HV}$				0.990
$f_P$				1.00
Flow (pcph)				552
Flow Rate (pcphpl)				552
<b>On Ramp Roadway Operations</b>				
Ramp Type				Right
Ramp Speed (mph)				45
Ramp Capacity (pcph)				2,100
Ramp v/c ratio				0.26



**Key**

<> Express Lane (HOV)

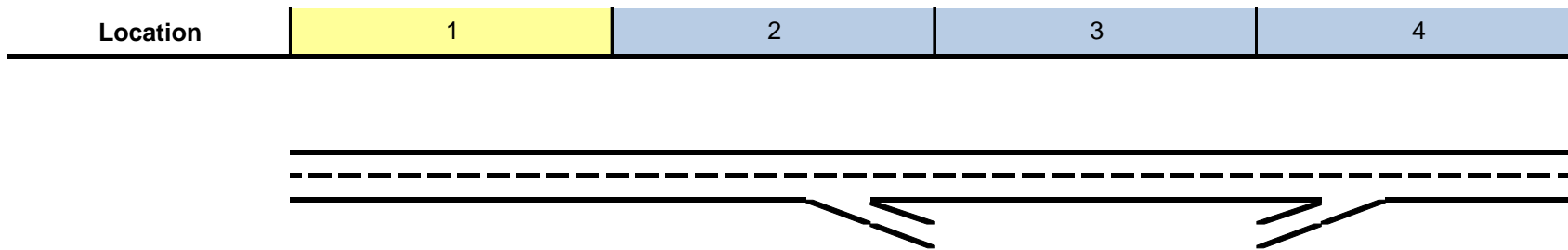
Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Off Ramp Flow Rate</b>				
Volume (vph)		222		
PHF		0.93		
Lanes		1		
Terrain		Level		
Grade %		0.0%		
Grade Length (mi)		0.00		
Truck & Bus %		2.0%		
RV %		0.0%		
E <sub>T</sub>		1.5		
E <sub>R</sub>		1.2		
f <sub>HV</sub>		0.990		
f <sub>P</sub>		1.00		
Flow (pcph)		241		
Flow Rate (pcphpl)		241		
<b>Off Ramp Roadway Operations</b>				
Ramp Type		Right		
Ramp Speed		45		
Ramp Capacity (pcph)		2,100		
Ramp v/c ratio		0.11		
<b>Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps</b>				



**Key**

<> Express Lane (HOV)

Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Merge Influence Area Operations</b>				
Effective $v_p$ (pcph)				972
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FM}$ (Eqn 13-3)				0.587
$P_{FM}$ (Eqn 13-4)				
$P_{FM}$ (Eqn 13-5)				
$P_{FM}$				1.000
$v_{12}$ (pcph)				972
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)				972
$v_{R12a}$ (pcph)				1,524
Speed Index				0.31
Area Speed				61.3
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed				61.3
v/c ratio				0.33
Density				15.0
LOS				B



**Key**

<> Express Lane (HOV)

Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Diverge Influence Area Operations</b>				
Effective $v_p$ (pcph)		1,218		
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FD}$ (Eqn 13-9)		0.718		
$P_{FD}$ (Eqn 13-10)				
$P_{FD}$ (Eqn 13-11)				
$P_{FD}$		1.000		
$v_{12}$ (pcph)		1,218		
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)		1,218		
Speed Index		0.32		
Area Speed		61.0		
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed		61.0		
v/c ratio		0.28		
Density		13.2		
LOS		B		
<b>On Ramp to Off Ramp Flow Rate for Weave Segments</b>				
<b>On Ramp to Mainline Flow Rate for Weave Segments</b>				
<b>Mainline to Off Ramp Flow Rate for Weave Segments</b>				
<b>General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments</b>				
<b>Weave Segment Operations</b>				
<b>Summarize Segment Operations</b>				
Segment v/c ratio	0.25	0.28	0.20	0.33
Segment Density	8.7	13.2	6.9	15.0
Segment LOS	A	B	A	B
Over Capacity				

# Existing Plus Approved Projects Level of Service (LOS) Calculations

Intersection	
Intersection Delay, s/veh	15.4
Intersection LOS	C

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations		↵	↵			↵	↵			↵	↵	
Traffic Vol, veh/h	0	9	263	39	0	100	174	11	0	40	62	192
Future Vol, veh/h	0	9	263	39	0	100	174	11	0	40	62	192
Peak Hour Factor	0.92	0.93	0.93	0.93	0.92	0.76	0.76	0.76	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	10	283	42	0	132	229	14	0	43	67	209
Number of Lanes	0	1	1	0	0	1	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	2	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	2	1	2
HCM Control Delay	18.5	13.9	14.8
HCM LOS	C	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	100%	0%	100%	0%	100%	0%	36%
Vol Thru, %	0%	24%	0%	87%	0%	94%	54%
Vol Right, %	0%	76%	0%	13%	0%	6%	10%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	40	254	9	302	100	185	99
LT Vol	40	0	9	0	100	0	36
Through Vol	0	62	0	263	0	174	53
RT Vol	0	192	0	39	0	11	10
Lane Flow Rate	43	276	10	325	132	243	119
Geometry Grp	7	7	7	7	7	7	6
Degree of Util (X)	0.091	0.495	0.019	0.598	0.263	0.449	0.249
Departure Headway (Hd)	7.511	6.461	7.232	6.629	7.187	6.633	7.521
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	477	558	495	546	500	543	477
Service Time	5.248	4.198	4.969	4.365	4.923	4.369	5.569
HCM Lane V/C Ratio	0.09	0.495	0.02	0.595	0.264	0.448	0.249
HCM Control Delay	11	15.4	10.1	18.8	12.5	14.7	13.1
HCM Lane LOS	B	C	B	C	B	B	B
HCM 95th-tile Q	0.3	2.7	0.1	3.9	1	2.3	1

**Intersection**












Intersection Delay, s/veh  
 Intersection LOS

Movement	SBU	SBL	SBT	SBR
Lane Configurations			↕	
Traffic Vol, veh/h	0	36	53	10
Future Vol, veh/h	0	36	53	10
Peak Hour Factor	0.92	0.83	0.83	0.83
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	43	64	12
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	2
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	13.1
HCM LOS	B

HCM 2010 Signalized Intersection Summary  
2: Denali Dr & Covell Blvd

West Davis Active Adult Community Project EIR  
Existing Plus Approved Projects No Project Conditions - AM Peak Hour

								
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations								
Traffic Volume (veh/h)	474	26	98	362	22	167		
Future Volume (veh/h)	474	26	98	362	22	167		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1900		
Adj Flow Rate, veh/h	527	0	105	389	26	0		
Adj No. of Lanes	1	0	1	1	0	0		
Peak Hour Factor	0.90	0.90	0.93	0.93	0.86	0.86		
Percent Heavy Veh, %	2	2	2	2	0	0		
Cap, veh/h	852	0	165	1247	57	0		
Arrive On Green	0.46	0.00	0.09	0.67	0.03	0.00		
Sat Flow, veh/h	1863	0	1774	1863	1711	0		
Grp Volume(v), veh/h	527	0	105	389	27	0		
Grp Sat Flow(s),veh/h/ln	1863	0	1774	1863	1777	0		
Q Serve(g_s), s	7.2	0.0	1.9	2.9	0.5	0.0		
Cycle Q Clear(g_c), s	7.2	0.0	1.9	2.9	0.5	0.0		
Prop In Lane		0.00	1.00		0.96	0.00		
Lane Grp Cap(c), veh/h	852	0	165	1247	59	0		
V/C Ratio(X)	0.62	0.00	0.64	0.31	0.46	0.00		
Avail Cap(c_a), veh/h	1939	0	1055	1939	1057	0		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh	6.9	0.0	14.7	2.3	16.0	0.0		
Incr Delay (d2), s/veh	0.7	0.0	4.0	0.1	11.4	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	3.8	0.0	1.1	1.5	0.4	0.0		
LnGrp Delay(d),s/veh	7.6	0.0	18.7	2.5	27.4	0.0		
LnGrp LOS	A		B	A	C			
Approach Vol, veh/h	527			494	27			
Approach Delay, s/veh	7.6			5.9	27.4			
Approach LOS	A			A	C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	7.1	21.4				28.5		5.1
Change Period (Y+Rc), s	4.0	6.0				6.0		4.0
Max Green Setting (Gmax), s	20.0	35.0				35.0		20.0
Max Q Clear Time (g_c+I1), s	3.9	9.2				4.9		2.5
Green Ext Time (p_c), s	0.2	6.2				6.4		0.1
<b>Intersection Summary</b>								
HCM 2010 Ctrl Delay			7.3					
HCM 2010 LOS			A					
<b>Notes</b>								



User approved volume balancing among the lanes for turning movement.

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Existing Plus Approved Projects No Project Conditions  
AM Peak Hour

Intersection 3                      Risling Ct/Sutter Hospital Dwy                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	98	96	98.2%	3.1	0.4	A
	Right Turn	31	34	110.6%	2.9	0.8	A
	Subtotal	129	131	101.2%	3.0	0.5	A
SB	Left Turn						
	Through	33	31	92.7%	0.0	0.1	A
	Right Turn						
	Subtotal	33	31	92.7%	0.0	0.1	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	11	11	101.8%	4.1	1.7	A
	Through						
	Right Turn	2	3	145.0%	1.0	1.3	A
	Subtotal	13	14	108.5%	3.9	1.7	A
Total		175	175	100.1%	2.6	0.5	A

Intersection 4                      Risling Ct-Shasta Dr/W Covell Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	10	11	114.0%	73.4	37.2	E
	Through	12	13	106.7%	36.0	22.9	D
	Right Turn	269	264	98.1%	4.6	1.1	A
	Subtotal	291	288	99.0%	8.9	2.2	A
SB	Left Turn	28	25	87.5%	56.6	17.1	E
	Through	6	7	108.3%	39.5	42.6	D
	Right Turn	10	11	114.0%	6.8	6.8	A
	Subtotal	44	42	96.4%	41.3	10.9	D
EB	Left Turn	37	35	94.3%	61.7	13.8	E
	Through	616	619	100.5%	15.3	3.5	B
	Right Turn	14	14	101.4%	6.6	3.1	A
	Subtotal	667	668	100.2%	17.7	3.7	B
WB	Left Turn	131	127	96.9%	64.8	12.1	E
	Through	471	464	98.4%	11.2	2.6	B
	Right Turn	80	83	103.6%	6.4	1.6	A
	Subtotal	682	674	98.8%	20.9	3.0	C
Total		1,684	1,672	99.3%	18.0	2.2	B

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Existing Plus Approved Projects No Project Conditions  
AM Peak Hour

Intersection 5                      John Jones Rd/W Covell Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	185	187	101.1%	30.4	7.0	C
	Through						
	Right Turn	58	60	103.1%	5.7	1.0	A
	Subtotal	243	247	101.6%	24.1	5.1	C
EB	Left Turn	74	69	93.5%	60.4	19.3	E
	Through	843	843	100.0%	23.5	8.9	C
	Right Turn						
	Subtotal	917	912	99.5%	26.2	9.8	C
WB	Left Turn						
	Through	624	615	98.6%	12.3	2.6	B
	Right Turn	301	304	101.1%	8.8	2.0	A
	Subtotal	925	920	99.4%	11.2	2.4	B
Total		2,085	2,079	99.7%	19.4	4.7	B

Intersection 6                      SR 113 SB Ramps/W Covell Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	158	154	97.4%	39.3	4.6	D
	Through	1	1	140.0%	2.9	7.3	A
	Right Turn	131	126	96.0%	36.0	5.2	D
	Subtotal	290	281	96.9%	37.9	3.6	D
EB	Left Turn						
	Through	594	593	99.8%	32.1	8.2	C
	Right Turn	434	437	100.6%	33.4	6.9	C
	Subtotal	1,028	1,030	100.2%	32.7	7.5	C
WB	Left Turn	478	461	96.5%	70.5	6.3	E
	Through	794	796	100.3%	12.1	2.1	B
	Right Turn						
	Subtotal	1,272	1,257	98.9%	32.9	3.6	C
Total		2,590	2,568	99.2%	33.3	4.5	C

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Existing Plus Approved Projects No Project Conditions  
AM Peak Hour

Intersection 7 SR 113 NB Ramps/W Covell Blvd Signal






















Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	307	306	99.8%	38.2	3.9	D
	Through	1	1	120.0%	2.0	4.3	A
	Right Turn	315	312	98.9%	11.3	2.0	B
	Subtotal	623	619	99.4%	24.4	2.2	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	76	69	91.1%	48.6	7.1	D
	Through	676	676	100.0%	16.0	2.3	B
	Right Turn						
	Subtotal	752	745	99.1%	19.4	2.3	B
WB	Left Turn						
	Through	964	954	99.0%	24.7	5.7	C
	Right Turn	151	152	100.8%	11.8	2.8	B
	Subtotal	1,115	1,106	99.2%	22.9	5.1	C
Total		2,490	2,470	99.2%	22.2	3.0	C

Intersection 8 Sycamore Ln/W Covell Blvd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	193	190	98.3%	45.2	9.0	D
	Through	35	31	88.6%	48.6	19.7	D
	Right Turn	39	40	102.6%	12.2	5.8	B
	Subtotal	267	261	97.7%	40.1	10.4	D
SB	Left Turn	71	70	97.9%	41.8	8.8	D
	Through	81	84	103.8%	41.9	12.4	D
	Right Turn	214	209	97.8%	20.9	11.8	C
	Subtotal	366	363	99.2%	29.6	10.8	C
EB	Left Turn	117	110	93.8%	51.4	5.4	D
	Through	540	548	101.4%	30.5	4.1	C
	Right Turn	162	157	96.6%	18.4	3.6	B
	Subtotal	819	814	99.4%	31.1	3.7	C
WB	Left Turn	30	28	92.3%	57.0	13.7	E
	Through	640	640	100.0%	27.3	2.9	C
	Right Turn	58	61	104.8%	20.8	6.0	C
	Subtotal	728	729	100.1%	28.1	3.0	C
Total		2,180	2,166	99.4%	31.0	3.2	C



















HCM 2010 Signalized Intersection Summary  
9: Anderson Rd & Covell Blvd

West Davis Active Adult Community Project EIR  
Existing Plus Approved Projects No Project Conditions - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	486	141	189	439	37	162	57	71	52	158	106
Future Volume (veh/h)	28	486	141	189	439	37	162	57	71	52	158	106
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1855	1900	1863	1863	1727	1792	1815	1900	1863	1799	1900
Adj Flow Rate, veh/h	34	593	0	222	516	0	188	66	0	57	174	0
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	1	2	0
Peak Hour Factor	0.82	0.82	0.82	0.85	0.85	0.85	0.86	0.86	0.86	0.91	0.91	0.91
Percent Heavy Veh, %	7	2	2	2	2	10	6	8	8	2	8	8
Cap, veh/h	57	1218	0	273	1648	684	235	387	0	82	416	0
Arrive On Green	0.03	0.35	0.00	0.15	0.47	0.00	0.14	0.21	0.00	0.05	0.12	0.00
Sat Flow, veh/h	1691	3616	0	1774	3539	1468	1707	1815	0	1774	3509	0
Grp Volume(v), veh/h	34	593	0	222	516	0	188	66	0	57	174	0
Grp Sat Flow(s),veh/h/ln	1691	1762	0	1774	1770	1468	1707	1815	0	1774	1709	0
Q Serve(g_s), s	1.5	9.9	0.0	9.0	6.8	0.0	8.0	2.2	0.0	2.4	3.5	0.0
Cycle Q Clear(g_c), s	1.5	9.9	0.0	9.0	6.8	0.0	8.0	2.2	0.0	2.4	3.5	0.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	57	1218	0	273	1648	684	235	387	0	82	416	0
V/C Ratio(X)	0.59	0.49	0.00	0.81	0.31	0.00	0.80	0.17	0.00	0.69	0.42	0.00
Avail Cap(c_a), veh/h	905	2122	0	712	2132	884	914	972	0	950	1830	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.6	19.2	0.0	30.6	12.5	0.0	31.2	24.0	0.0	35.1	30.4	0.0
Incr Delay (d2), s/veh	9.4	0.3	0.0	5.8	0.4	0.0	6.1	0.2	0.0	9.9	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	4.8	0.0	4.9	3.4	0.0	4.2	1.1	0.0	1.4	1.7	0.0
LnGrp Delay(d),s/veh	45.0	19.5	0.0	36.4	12.9	0.0	37.4	24.2	0.0	45.0	31.0	0.0
LnGrp LOS	D	B		D	B		D	C		D	C	
Approach Vol, veh/h		627			738			254			231	
Approach Delay, s/veh		20.9			19.9			33.9			34.5	
Approach LOS		C			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.5	30.8	14.3	13.1	7.5	39.8	7.5	19.9				
Change Period (Y+Rc), s	5.0	5.0	4.0	4.0	5.0	5.0	4.0	4.0				
Max Green Setting (Gmax), s	30.0	45.0	40.0	40.0	40.0	45.0	40.0	40.0				
Max Q Clear Time (g_c+I1), s	11.0	11.9	10.0	5.5	3.5	8.8	4.4	4.2				
Green Ext Time (p_c), s	0.6	13.9	0.5	1.6	0.1	14.5	0.1	1.6				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			24.0									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary  
10: Oak Ave & Covell Blvd























West Davis Active Adult Community Project EIR  
Existing Plus Approved Projects No Project Conditions - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	479	79	100	641	0	101	0	183	0	0	0
Future Volume (veh/h)	0	479	79	100	641	0	101	0	183	0	0	0
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	0	1863	0	1863	1900	1863	1900
Adj Flow Rate, veh/h	0	630	0	122	782	0	180	0	0	0	0	0
Adj No. of Lanes	0	2	0	1	2	0	1	0	1	0	1	0
Peak Hour Factor	0.92	0.76	0.76	0.82	0.82	0.92	0.56	0.92	0.56	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0	2	0	2	2	2	2
Cap, veh/h	0	1561	0	166	2250	0	242	0	0	0	5	0
Arrive On Green	0.00	0.44	0.00	0.09	0.64	0.00	0.14	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	0	3725	0	1774	3632	0	1774	180		0	-93137	0
Grp Volume(v), veh/h	0	630	0	122	782	0	180	20.9		0	0	0
Grp Sat Flow(s),veh/h/ln	0	1770	0	1774	1770	0	1774	C		0	1863	0
Q Serve(g_s), s	0.0	4.8	0.0	2.6	4.1	0.0	3.9			0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	4.8	0.0	2.6	4.1	0.0	3.9			0.0	0.0	0.0
Prop In Lane	0.00		0.00	1.00		0.00	1.00			0.00		0.00
Lane Grp Cap(c), veh/h	0	1561	0	166	2250	0	242			0	5	0
V/C Ratio(X)	0.00	0.40	0.00	0.74	0.35	0.00	0.74			0.00	0.00	0.00
Avail Cap(c_a), veh/h	0	2778	0	674	2867	0	898			0	707	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00	1.00			0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	7.5	0.0	17.4	3.4	0.0	16.4			0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	6.2	0.1	0.0	4.5			0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.3	0.0	1.6	2.0	0.0	2.2			0.0	0.0	0.0
LnGrp Delay(d),s/veh	0.0	7.7	0.0	23.7	3.5	0.0	20.9			0.0	0.0	0.0
LnGrp LOS		A		C	A		C					
Approach Vol, veh/h		630			904							0
Approach Delay, s/veh		7.7			6.2							0.0
Approach LOS		A			A							
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4	5	6						
Phs Duration (G+Y+Rc), s		30.1	9.4	0.0	7.7	22.4						
Change Period (Y+Rc), s		5.0	4.0	5.0	4.0	5.0						
Max Green Setting (Gmax), s		32.0	20.0	15.0	15.0	31.0						
Max Q Clear Time (g_c+I1), s		6.1	5.9	0.0	4.6	6.8						
Green Ext Time (p_c), s		11.0	0.4	0.0	0.2	10.6						
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			8.3									
HCM 2010 LOS			A									
<b>Notes</b>												

User approved pedestrian interval to be less than phase max green.

HCM 2010 Signalized Intersection Summary  
11: F St & Covell Blvd

West Davis Active Adult Community Project EIR  
Existing Plus Approved Projects No Project Conditions - AM Peak Hour






















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	703	88	238	629	96	55	77	146	201	218	69
Future Volume (veh/h)	38	703	88	238	629	96	55	77	146	201	218	69
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1845	1863	1900	1845	1851	1900	1863	1845	1900
Adj Flow Rate, veh/h	51	937	0	309	817	0	71	99	0	242	263	0
Adj No. of Lanes	1	2	1	2	2	0	1	1	0	1	1	0
Peak Hour Factor	0.75	0.75	0.75	0.77	0.77	0.77	0.78	0.78	0.78	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	3	2	2	3	2	2	2	2	2
Cap, veh/h	75	1307	585	406	1579	0	93	249	0	295	457	0
Arrive On Green	0.04	0.37	0.00	0.12	0.45	0.00	0.05	0.13	0.00	0.17	0.25	0.00
Sat Flow, veh/h	1774	3539	1583	3408	3632	0	1757	1851	0	1774	1845	0
Grp Volume(v), veh/h	51	937	0	309	817	0	71	99	0	242	263	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1704	1770	0	1757	1851	0	1774	1845	0
Q Serve(g_s), s	2.3	18.3	0.0	7.1	13.4	0.0	3.2	3.9	0.0	10.6	10.1	0.0
Cycle Q Clear(g_c), s	2.3	18.3	0.0	7.1	13.4	0.0	3.2	3.9	0.0	10.6	10.1	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	75	1307	585	406	1579	0	93	249	0	295	457	0
V/C Ratio(X)	0.68	0.72	0.00	0.76	0.52	0.00	0.76	0.40	0.00	0.82	0.58	0.00
Avail Cap(c_a), veh/h	660	1976	884	1269	1976	0	654	689	0	660	687	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	38.1	21.8	0.0	34.4	16.1	0.0	37.7	31.9	0.0	32.4	26.6	0.0
Incr Delay (d2), s/veh	4.0	0.3	0.0	1.1	0.1	0.0	12.0	1.0	0.0	6.7	1.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	8.9	0.0	3.4	6.5	0.0	1.9	2.1	0.0	5.7	5.3	0.0
LnGrp Delay(d),s/veh	42.1	22.1	0.0	35.5	16.2	0.0	49.6	32.9	0.0	39.2	28.0	0.0
LnGrp LOS	D	C		D	B		D	C		D	C	
Approach Vol, veh/h		988			1126			170			505	
Approach Delay, s/veh		23.1			21.5			39.9			33.3	
Approach LOS		C			C			D			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.4	41.0	8.3	24.0	13.6	34.8	17.4	14.8				
Change Period (Y+Rc), s	4.0	5.0	4.0	4.0	4.0	5.0	4.0	4.0				
Max Green Setting (Gmax), s	30.0	45.0	30.0	30.0	30.0	45.0	30.0	30.0				
Max Q Clear Time (g_c+I1), s	4.3	15.4	5.2	12.1	9.1	20.3	12.6	5.9				
Green Ext Time (p_c), s	0.0	10.0	0.2	2.3	0.5	9.5	0.8	2.6				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			25.3									
HCM 2010 LOS			C									
<b>Notes</b>												



User approved pedestrian interval to be less than phase max green.

HCM 2010 Signalized Intersection Summary  
 12: J St/Cannery Ave & Covell Blvd

West Davis Active Adult Community Project EIR  
 Existing Plus Approved Projects No Project Conditions - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	157	672	221	49	737	128	153	45	72	196	121	60
Future Volume (veh/h)	157	672	221	49	737	128	153	45	72	196	121	60
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.96	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1810	1743	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	199	851	179	66	996	159	191	56	21	213	132	47
Adj No. of Lanes	1	2	1	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.79	0.79	0.79	0.74	0.74	0.74	0.80	0.80	0.80	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	5	9	2	2	2	2	2	2	2	2
Cap, veh/h	242	1536	660	84	1062	169	234	182	68	262	205	73
Arrive On Green	0.14	0.43	0.43	0.05	0.35	0.35	0.13	0.14	0.14	0.15	0.16	0.16
Sat Flow, veh/h	1774	3539	1522	1660	3052	487	1774	1276	479	1774	1295	461
Grp Volume(v), veh/h	199	851	179	66	577	578	191	0	77	213	0	179
Grp Sat Flow(s),veh/h/ln	1774	1770	1522	1660	1770	1769	1774	0	1755	1774	0	1755
Q Serve(g_s), s	9.2	15.1	6.4	3.3	26.6	26.7	8.8	0.0	3.3	9.8	0.0	8.1
Cycle Q Clear(g_c), s	9.2	15.1	6.4	3.3	26.6	26.7	8.8	0.0	3.3	9.8	0.0	8.1
Prop In Lane	1.00		1.00	1.00		0.28	1.00		0.27	1.00		0.26
Lane Grp Cap(c), veh/h	242	1536	660	84	616	616	234	0	250	262	0	277
V/C Ratio(X)	0.82	0.55	0.27	0.78	0.94	0.94	0.82	0.00	0.31	0.81	0.00	0.65
Avail Cap(c_a), veh/h	421	1536	660	394	629	629	421	0	832	421	0	832
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.4	17.8	15.3	39.6	26.6	26.6	35.6	0.0	32.4	34.8	0.0	33.3
Incr Delay (d2), s/veh	8.1	0.5	0.3	17.0	21.6	21.9	8.1	0.0	0.8	10.9	0.0	4.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	7.4	2.7	1.9	16.7	16.8	4.9	0.0	1.7	5.6	0.0	4.3
LnGrp Delay(d),s/veh	43.5	18.3	15.6	56.6	48.2	48.6	43.7	0.0	33.3	45.7	0.0	37.9
LnGrp LOS	D	B	B	E	D	D	D		C	D		D
Approach Vol, veh/h		1229			1221			268			392	
Approach Delay, s/veh		22.0			48.8			40.7			42.1	
Approach LOS		C			D			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.6	18.8	16.0	33.9	17.0	17.5	8.8	41.1				
Change Period (Y+Rc), s	4.5	5.5	4.5	4.5	4.5	5.5	4.5	4.5				
Max Green Setting (Gmax), s	20.0	40.0	20.0	30.0	20.0	40.0	20.0	30.0				
Max Q Clear Time (g_c+I1), s	10.8	10.1	11.2	28.7	11.8	5.3	5.3	17.1				
Green Ext Time (p_c), s	0.4	2.5	0.4	0.7	0.7	2.6	0.1	10.7				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			36.7									
HCM 2010 LOS			D									

Intersection	
Intersection Delay, s/veh	17
Intersection LOS	C

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Traffic Vol, veh/h	0	22	231	38	0	221	272	34	0	38	46	171
Future Vol, veh/h	0	22	231	38	0	221	272	34	0	38	46	171
Peak Hour Factor	0.92	0.83	0.83	0.83	0.92	0.91	0.91	0.91	0.92	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	27	278	46	0	243	299	37	0	43	52	194
Number of Lanes	0	1	1	0	0	1	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	2	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	2	1	2
HCM Control Delay	18.8	17.6	14.8
HCM LOS	C	C	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	100%	0%	100%	0%	100%	0%	26%
Vol Thru, %	0%	21%	0%	86%	0%	89%	61%
Vol Right, %	0%	79%	0%	14%	0%	11%	13%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	38	217	22	269	221	306	82
LT Vol	38	0	22	0	221	0	21
Through Vol	0	46	0	231	0	272	50
RT Vol	0	171	0	38	0	34	11
Lane Flow Rate	43	247	27	324	243	336	88
Geometry Grp	7	7	7	7	7	7	6
Degree of Util (X)	0.095	0.466	0.054	0.609	0.478	0.607	0.194
Departure Headway (Hd)	7.884	6.808	7.379	6.767	7.09	6.5	7.901
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	455	530	485	535	512	558	454
Service Time	5.624	4.548	5.123	4.51	4.79	4.2	5.954
HCM Lane V/C Ratio	0.095	0.466	0.056	0.606	0.475	0.602	0.194
HCM Control Delay	11.5	15.4	10.5	19.5	16.1	18.7	12.9
HCM Lane LOS	B	C	B	C	C	C	B
HCM 95th-tile Q	0.3	2.4	0.2	4	2.6	4	0.7

**Intersection**

Intersection Delay, s/veh  
 Intersection LOS

Movement	SBU	SBL	SBT	SBR
Lane Configurations			↕	
Traffic Vol, veh/h	0	21	50	11
Future Vol, veh/h	0	21	50	11
Peak Hour Factor	0.92	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	23	54	12
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	2
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	12.9
HCM LOS	B

HCM 2010 Signalized Intersection Summary  
2: Denali Dr & Covell Blvd

West Davis Active Adult Community Project EIR  
Existing Plus Approved Projects No Project Conditions - PM Peak Hour

	→	↘	↙	←	↖	↗		
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↗		↖	↗	↖	↗		
Traffic Volume (veh/h)	456	27	142	521	21	97		
Future Volume (veh/h)	456	27	142	521	21	97		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1900		
Adj Flow Rate, veh/h	512	0	148	543	25	0		
Adj No. of Lanes	1	0	1	1	0	0		
Peak Hour Factor	0.89	0.89	0.96	0.96	0.83	0.83		
Percent Heavy Veh, %	2	2	2	2	0	0		
Cap, veh/h	867	0	199	1284	54	0		
Arrive On Green	0.47	0.00	0.11	0.69	0.03	0.00		
Sat Flow, veh/h	1863	0	1774	1863	1709	0		
Grp Volume(v), veh/h	512	0	148	543	26	0		
Grp Sat Flow(s),veh/h/ln	1863	0	1774	1863	1777	0		
Q Serve(g_s), s	7.3	0.0	2.9	4.6	0.5	0.0		
Cycle Q Clear(g_c), s	7.3	0.0	2.9	4.6	0.5	0.0		
Prop In Lane		0.00	1.00		0.96	0.00		
Lane Grp Cap(c), veh/h	867	0	199	1284	57	0		
V/C Ratio(X)	0.59	0.00	0.74	0.42	0.46	0.00		
Avail Cap(c_a), veh/h	1819	0	990	1819	992	0		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh	7.1	0.0	15.4	2.4	17.0	0.0		
Incr Delay (d2), s/veh	0.6	0.0	5.4	0.2	11.9	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	3.9	0.0	1.7	2.3	0.4	0.0		
LnGrp Delay(d),s/veh	7.7	0.0	20.9	2.7	29.0	0.0		
LnGrp LOS	A		C	A	C			
Approach Vol, veh/h	512			691	26			
Approach Delay, s/veh	7.7			6.6	29.0			
Approach LOS	A			A	C			
<b>Timer</b>	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	8.0	22.7				30.7		5.1
Change Period (Y+Rc), s	4.0	6.0				6.0		4.0
Max Green Setting (Gmax), s	20.0	35.0				35.0		20.0
Max Q Clear Time (g_c+I1), s	4.9	9.3				6.6		2.5
Green Ext Time (p_c), s	0.3	7.4				7.6		0.1
<b>Intersection Summary</b>								
HCM 2010 Ctrl Delay			7.5					
HCM 2010 LOS			A					
<b>Notes</b>								

User approved volume balancing among the lanes for turning movement.

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Existing Plus Approved Projects Conditions  
PM Peak Hour

Intersection 3                      Risling Ct/Sutter Hospital Dwy                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	21	21	99.5%	3.1	0.8	A
	Right Turn	19	19	102.1%	3.1	0.5	A
	Subtotal	40	40	100.8%	3.1	0.3	A
SB	Left Turn	3	3	90.0%	0.8	0.9	A
	Through	64	63	97.7%	0.1	0.2	A
	Right Turn						
	Subtotal	67	65	97.3%	0.2	0.2	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	20	21	103.0%	3.3	0.7	A
	Through						
	Right Turn						
	Subtotal	20	21	103.0%	3.3	0.7	A
Total		127	126	99.3%	1.8	0.3	A

Intersection 4                      Risling Ct-Shasta Dr/W Covell Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	12	13	108.3%	41.5	20.5	D
	Through	7	8	112.9%	42.5	25.5	D
	Right Turn	185	192	103.7%	3.0	0.6	A
	Subtotal	204	213	104.3%	7.2	3.1	A
SB	Left Turn	52	52	99.8%	42.4	10.0	D
	Through	4	5	120.0%	25.1	19.6	C
	Right Turn	28	28	101.1%	7.0	2.4	A
	Subtotal	84	85	101.2%	27.9	5.6	C
EB	Left Turn	9	9	103.3%	61.3	36.5	E
	Through	515	520	101.0%	11.3	2.2	B
	Right Turn	15	18	117.3%	3.4	1.4	A
	Subtotal	539	547	101.5%	11.9	2.1	B
WB	Left Turn	201	200	99.7%	48.3	6.0	D
	Through	614	620	100.9%	7.1	2.0	A
	Right Turn	24	23	97.5%	6.3	3.3	A
	Subtotal	839	844	100.5%	17.3	3.1	B
Total		1,666	1,688	101.3%	14.9	2.2	B

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Existing Plus Approved Projects Conditions  
PM Peak Hour

Intersection 5                      John Jones Rd/W Covell Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	233	236	101.4%	35.8	3.4	D
	Through						
	Right Turn	56	62	110.0%	7.8	2.3	A
	Subtotal	289	298	103.0%	30.3	2.5	C
EB	Left Turn	34	32	93.2%	43.6	13.0	D
	Through	722	732	101.4%	9.7	1.7	A
	Right Turn						
	Subtotal	756	764	101.0%	11.0	2.1	B
WB	Left Turn						
	Through	783	786	100.3%	10.7	1.9	B
	Right Turn	175	174	99.6%	6.9	2.3	A
	Subtotal	958	960	100.2%	10.0	1.8	B
Total		2,003	2,021	100.9%	13.5	0.9	B

Intersection 6                      SR 113 SB Ramps/W Covell Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	130	124	95.6%	36.3	6.0	D
	Through	1	1	80.0%	4.3	13.7	A
	Right Turn	81	87	107.8%	32.4	4.2	C
	Subtotal	212	212	100.2%	34.8	4.2	C
EB	Left Turn						
	Through	712	725	101.8%	17.0	3.1	B
	Right Turn	243	242	99.5%	14.1	2.7	B
	Subtotal	955	967	101.2%	16.3	2.8	B
WB	Left Turn	245	233	95.0%	51.7	5.1	D
	Through	877	871	99.4%	7.0	1.2	A
	Right Turn						
	Subtotal	1,122	1,104	98.4%	16.5	2.4	B
Total		2,289	2,283	99.7%	18.2	2.1	B



SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Existing Plus Approved Projects Conditions  
PM Peak Hour

Intersection 7 SR 113 NB Ramps/W Covell Blvd Signal






















Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	350	348	99.4%	33.4	3.7	C
	Through						
	Right Turn	592	590	99.6%	29.1	6.2	C
	Subtotal	942	938	99.5%	30.8	3.7	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	98	98	100.2%	59.0	10.8	E
	Through	750	752	100.2%	11.5	1.9	B
	Right Turn						
	Subtotal	848	850	100.2%	17.2	3.0	B
WB	Left Turn						
	Through	770	756	98.1%	15.5	1.3	B
	Right Turn	170	173	101.5%	7.0	0.7	A
	Subtotal	940	928	98.7%	13.9	1.1	B
Total		2,730	2,716	99.5%	20.9	2.1	C

Intersection 8 Sycamore Ln/W Covell Blvd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	117	115	98.0%	40.0	8.4	D
	Through	51	50	97.5%	40.6	8.6	D
	Right Turn	46	43	93.5%	10.6	9.0	B
	Subtotal	214	207	96.9%	33.7	7.8	C
SB	Left Turn	153	150	97.9%	46.9	8.2	D
	Through	77	79	103.0%	36.4	10.4	D
	Right Turn	124	126	101.3%	13.8	5.1	B
	Subtotal	354	355	100.2%	33.4	4.5	C
EB	Left Turn	168	171	101.7%	57.0	16.5	E
	Through	809	804	99.4%	18.0	3.4	B
	Right Turn	127	128	100.4%	11.2	3.3	B
	Subtotal	1,104	1,103	99.9%	23.0	4.4	C
WB	Left Turn	27	25	93.3%	48.6	15.7	D
	Through	625	619	99.1%	22.6	3.1	C
	Right Turn	102	100	97.8%	15.9	2.9	B
	Subtotal	754	744	98.7%	22.8	2.4	C
Total		2,426	2,409	99.3%	25.5	2.7	C



















HCM 2010 Signalized Intersection Summary  
9: Anderson Rd & Covell Blvd

West Davis Active Adult Community Project EIR  
Existing Plus Approved Projects No Project Conditions - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	793	136	92	476	74	250	134	126	70	119	44
Future Volume (veh/h)	42	793	136	92	476	74	250	134	126	70	119	44
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1857	1900	1863	1863	1727	1792	1808	1900	1863	1786	1900
Adj Flow Rate, veh/h	46	862	0	101	523	0	291	156	0	92	157	0
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.91	0.91	0.91	0.86	0.86	0.86	0.76	0.76	0.76
Percent Heavy Veh, %	7	2	2	2	2	10	6	8	8	2	8	8
Cap, veh/h	62	1300	0	131	1434	595	333	548	0	120	598	0
Arrive On Green	0.04	0.37	0.00	0.07	0.41	0.00	0.19	0.30	0.00	0.07	0.18	0.00
Sat Flow, veh/h	1691	3622	0	1774	3539	1468	1707	1808	0	1774	3483	0
Grp Volume(v), veh/h	46	862	0	101	523	0	291	156	0	92	157	0
Grp Sat Flow(s),veh/h/ln	1691	1765	0	1774	1770	1468	1707	1808	0	1774	1697	0
Q Serve(g_s), s	2.6	19.7	0.0	5.4	9.9	0.0	15.9	6.3	0.0	4.9	3.9	0.0
Cycle Q Clear(g_c), s	2.6	19.7	0.0	5.4	9.9	0.0	15.9	6.3	0.0	4.9	3.9	0.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	62	1300	0	131	1434	595	333	548	0	120	598	0
V/C Ratio(X)	0.74	0.66	0.00	0.77	0.36	0.00	0.87	0.28	0.00	0.76	0.26	0.00
Avail Cap(c_a), veh/h	702	1648	0	552	1653	686	709	751	0	736	1409	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	46.0	25.4	0.0	43.8	20.0	0.0	37.6	25.6	0.0	44.1	34.3	0.0
Incr Delay (d2), s/veh	15.7	0.7	0.0	9.2	0.6	0.0	7.2	0.3	0.0	9.6	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	9.7	0.0	3.0	5.0	0.0	8.2	3.2	0.0	2.7	1.8	0.0
LnGrp Delay(d),s/veh	61.7	26.1	0.0	53.1	20.6	0.0	44.9	25.9	0.0	53.7	34.5	0.0
LnGrp LOS	E	C		D	C		D	C		D	C	
Approach Vol, veh/h		908			624			447			249	
Approach Delay, s/veh		27.9			25.8			38.2			41.6	
Approach LOS		C			C			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.1	40.5	22.8	21.0	8.5	44.0	10.5	33.2				
Change Period (Y+Rc), s	5.0	5.0	4.0	4.0	5.0	5.0	4.0	4.0				
Max Green Setting (Gmax), s	30.0	45.0	40.0	40.0	40.0	45.0	40.0	40.0				
Max Q Clear Time (g_c+I1), s	7.4	21.7	17.9	5.9	4.6	11.9	6.9	8.3				
Green Ext Time (p_c), s	0.2	13.8	0.8	2.0	0.1	16.9	0.2	2.0				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			30.9									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary  
 10: Oak Ave & Covell Blvd






















West Davis Active Adult Community Project EIR  
 Existing Plus Approved Projects No Project Conditions - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	986	79	77	556	0	135	0	166	0	0	0
Future Volume (veh/h)	0	986	79	77	556	0	135	0	166	0	0	0
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	0	1863	0	1863	1900	1863	1900
Adj Flow Rate, veh/h	0	1006	0	87	625	0	142	0	0	0	0	0
Adj No. of Lanes	0	2	0	1	2	0	1	0	1	0	1	0
Peak Hour Factor	0.98	0.98	0.98	0.89	0.89	0.89	0.95	0.95	0.95	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0	2	0	2	2	2	2
Cap, veh/h	0	1813	0	134	2412	0	190	0	0	0	4	0
Arrive On Green	0.00	0.51	0.00	0.08	0.68	0.00	0.11	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	0	3725	0	1774	3632	0	1774	142		0	-93137	0
Grp Volume(v), veh/h	0	1006	0	87	625	0	142	24.2		0	0	0
Grp Sat Flow(s),veh/h/ln	0	1770	0	1774	1770	0	1774	C		0	1863	0
Q Serve(g_s), s	0.0	8.3	0.0	2.0	2.9	0.0	3.3			0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	8.3	0.0	2.0	2.9	0.0	3.3			0.0	0.0	0.0
Prop In Lane	0.00		0.00	1.00		0.00	1.00			0.00		0.00
Lane Grp Cap(c), veh/h	0	1813	0	134	2412	0	190			0	4	0
V/C Ratio(X)	0.00	0.55	0.00	0.65	0.26	0.00	0.75			0.00	0.00	0.00
Avail Cap(c_a), veh/h	0	2575	0	625	2658	0	833			0	656	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00	1.00			0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	7.1	0.0	19.1	2.6	0.0	18.5			0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	5.2	0.1	0.0	5.7			0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.0	0.0	1.2	1.4	0.0	1.9			0.0	0.0	0.0
LnGrp Delay(d),s/veh	0.0	7.3	0.0	24.4	2.7	0.0	24.2			0.0	0.0	0.0
LnGrp LOS		A		C	A		C					
Approach Vol, veh/h		1006			712							0
Approach Delay, s/veh		7.3			5.3							0.0
Approach LOS		A			A							
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4	5	6						
Phs Duration (G+Y+Rc), s		34.0	8.6	0.0	7.2	26.8						
Change Period (Y+Rc), s		5.0	4.0	5.0	4.0	5.0						
Max Green Setting (Gmax), s		32.0	20.0	15.0	15.0	31.0						
Max Q Clear Time (g_c+I1), s		4.9	5.3	0.0	4.0	10.3						
Green Ext Time (p_c), s		13.4	0.3	0.0	0.1	11.6						
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				7.9								
HCM 2010 LOS				A								
<b>Notes</b>												

User approved pedestrian interval to be less than phase max green.

HCM 2010 Signalized Intersection Summary  
11: F St & Covell Blvd






















West Davis Active Adult Community Project EIR  
Existing Plus Approved Projects No Project Conditions - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	915	252	188	609	185	115	151	224	120	131	49
Future Volume (veh/h)	68	915	252	188	609	185	115	151	224	120	131	49
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1845	1863	1900	1845	1852	1900	1863	1843	1900
Adj Flow Rate, veh/h	76	1017	0	211	684	0	129	170	0	138	151	0
Adj No. of Lanes	1	2	1	2	2	0	1	1	0	1	1	0
Peak Hour Factor	0.90	0.90	0.90	0.89	0.89	0.89	0.89	0.89	0.89	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	3	2	2	3	2	2	2	2	2
Cap, veh/h	99	1400	626	310	1525	0	168	333	0	182	343	0
Arrive On Green	0.06	0.40	0.00	0.09	0.43	0.00	0.10	0.18	0.00	0.10	0.19	0.00
Sat Flow, veh/h	1774	3539	1583	3408	3632	0	1757	1852	0	1774	1843	0
Grp Volume(v), veh/h	76	1017	0	211	684	0	129	170	0	138	151	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1704	1770	0	1757	1852	0	1774	1843	0
Q Serve(g_s), s	3.1	17.9	0.0	4.4	10.0	0.0	5.3	6.1	0.0	5.6	5.3	0.0
Cycle Q Clear(g_c), s	3.1	17.9	0.0	4.4	10.0	0.0	5.3	6.1	0.0	5.6	5.3	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	99	1400	626	310	1525	0	168	333	0	182	343	0
V/C Ratio(X)	0.77	0.73	0.00	0.68	0.45	0.00	0.77	0.51	0.00	0.76	0.44	0.00
Avail Cap(c_a), veh/h	724	2167	969	1391	2167	0	717	756	0	724	752	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	34.2	18.8	0.0	32.4	14.8	0.0	32.4	27.2	0.0	32.1	26.5	0.0
Incr Delay (d2), s/veh	4.7	0.3	0.0	1.0	0.1	0.0	7.1	1.2	0.0	7.5	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	8.8	0.0	2.1	4.9	0.0	2.9	3.2	0.0	3.1	2.8	0.0
LnGrp Delay(d),s/veh	38.9	19.1	0.0	33.4	14.8	0.0	39.5	28.5	0.0	39.6	27.6	0.0
LnGrp LOS	D	B		C	B		D	C		D	C	
Approach Vol, veh/h		1093			895			299			289	
Approach Delay, s/veh		20.5			19.2			33.2			33.3	
Approach LOS		C			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.1	36.7	11.0	17.7	10.7	34.1	11.5	17.2				
Change Period (Y+Rc), s	4.0	5.0	4.0	4.0	4.0	5.0	4.0	4.0				
Max Green Setting (Gmax), s	30.0	45.0	30.0	30.0	30.0	45.0	30.0	30.0				
Max Q Clear Time (g_c+I1), s	5.1	12.0	7.3	7.3	6.4	19.9	7.6	8.1				
Green Ext Time (p_c), s	0.1	9.9	0.3	2.1	0.4	9.2	0.5	2.1				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			23.0									
HCM 2010 LOS			C									
<b>Notes</b>												

User approved pedestrian interval to be less than phase max green.

HCM 2010 Signalized Intersection Summary  
12: J St/Cannery Ave & Covell Blvd

West Davis Active Adult Community Project EIR  
Existing Plus Approved Projects No Project Conditions - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	1016	79	74	773	169	130	90	55	218	101	89
Future Volume (veh/h)	164	1016	79	74	773	169	130	90	55	218	101	89
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1810	1743	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	182	1129	27	83	869	175	153	106	40	263	122	73
Adj No. of Lanes	1	2	1	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.90	0.90	0.90	0.89	0.89	0.89	0.85	0.85	0.85	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	5	9	2	2	2	2	2	2	2	2
Cap, veh/h	224	1386	575	107	958	193	193	184	70	312	229	137
Arrive On Green	0.13	0.39	0.39	0.06	0.33	0.33	0.11	0.14	0.14	0.18	0.21	0.21
Sat Flow, veh/h	1774	3539	1468	1660	2908	585	1774	1278	482	1774	1085	649
Grp Volume(v), veh/h	182	1129	27	83	529	515	153	0	146	263	0	195
Grp Sat Flow(s),veh/h/ln	1774	1770	1468	1660	1770	1724	1774	0	1761	1774	0	1734
Q Serve(g_s), s	8.5	24.1	1.0	4.2	24.2	24.2	7.1	0.0	6.6	12.2	0.0	8.5
Cycle Q Clear(g_c), s	8.5	24.1	1.0	4.2	24.2	24.2	7.1	0.0	6.6	12.2	0.0	8.5
Prop In Lane	1.00		1.00	1.00		0.34	1.00		0.27	1.00		0.37
Lane Grp Cap(c), veh/h	224	1386	575	107	583	568	193	0	254	312	0	366
V/C Ratio(X)	0.81	0.81	0.05	0.78	0.91	0.91	0.79	0.00	0.57	0.84	0.00	0.53
Avail Cap(c_a), veh/h	419	1386	575	392	627	610	419	0	831	419	0	819
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	36.0	23.0	16.0	39.0	27.2	27.2	36.8	0.0	33.8	33.8	0.0	29.7
Incr Delay (d2), s/veh	8.2	4.0	0.0	13.5	16.6	17.0	8.5	0.0	2.5	14.4	0.0	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	12.5	0.4	2.3	14.4	14.1	3.9	0.0	3.4	7.2	0.0	4.3
LnGrp Delay(d),s/veh	44.2	27.0	16.0	52.6	43.8	44.2	45.3	0.0	36.3	48.2	0.0	31.9
LnGrp LOS	D	C	B	D	D	D	D		D	D		C
Approach Vol, veh/h		1338			1127			299				458
Approach Delay, s/veh		29.1			44.6			40.9				41.3
Approach LOS		C			D			D				D
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.7	23.4	15.2	32.4	19.4	17.7	9.9	37.7				
Change Period (Y+Rc), s	4.5	5.5	4.5	4.5	4.5	5.5	4.5	4.5				
Max Green Setting (Gmax), s	20.0	40.0	20.0	30.0	20.0	40.0	20.0	30.0				
Max Q Clear Time (g_c+I1), s	9.1	10.5	10.5	26.2	14.2	8.6	6.2	26.1				
Green Ext Time (p_c), s	0.4	3.3	0.4	1.7	0.8	3.3	0.2	3.5				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			37.4									
HCM 2010 LOS			D									



Major Street **Covell Blvd**  
 Minor Street **Lake Blvd**

Project **West Davis AAC EIR**  
 Scenario **Existing Plus Approved Projects Conditions**  
 Peak Hour **AM Peak Hour**

Turn Movement Volumes

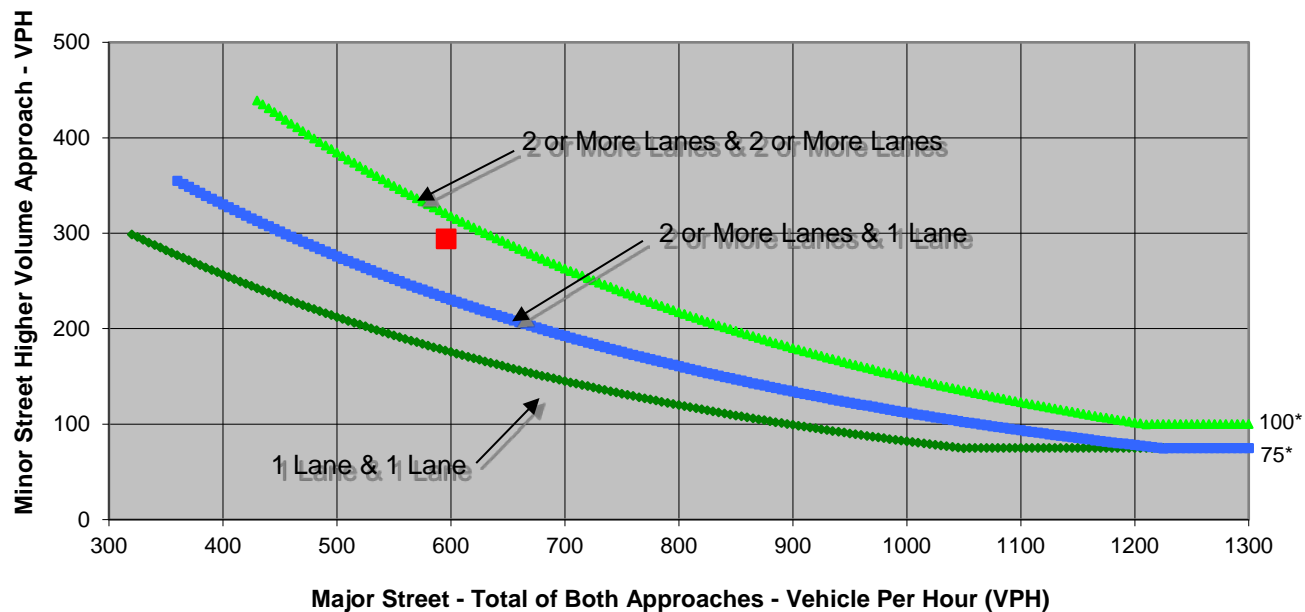
	NB	SB	EB	WB
Left	40	36	9	100
Through	62	53	263	174
Right	192	10	39	11
Total	294	99	311	285

Major Street Direction

**North/South**  
**x East/West**

**Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)**  
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



\* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street Covell Blvd	Minor Street Lake Blvd	Warrant Met
<b>Number of Approach Lanes</b>	<b>1</b>	<b>1</b>	
<b>Traffic Volume (VPH) *</b>	<b>596</b>	<b>294</b>	

\* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.  
 Traffic Volume for Minor Street is the Volume of High Volume Approach.





Major Street Covell Blvd  
 Minor Street Lake Blvd

Project West Davis AAC EIR  
 Scenario Existing Plus Approved Projects Conditions  
 Peak Hour AM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	40	36	9	100
Through	62	53	263	174
Right	192	10	39	11
Total	294	99	311	285

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	4

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	15.4
Approach with Worst Case Delay	NB
Total Vehicles on Approach	294

<b>Warrant 3A, Peak Hour</b>			
	<b>Peak Hour Delay on Minor Approach (vehicle-hours)</b>	<b>Peak Hour Volume on Minor Approach (vph)</b>	<b>Peak Hour Entering Volume Served (vph)</b>
<b>Existing Plus Approved Project Conditions</b>	<b>1.3</b>	<b>294</b>	<b>989</b>
<b>Limiting Value</b>	<b>4</b>	<b>100</b>	<b>800</b>
<b>Condition Satisfied?</b>	<b>Not Met</b>	<b>Met</b>	<b>Met</b>
<b>Warrant Met</b>	<b><u>NO</u></b>		

Major Street **Risling Ct**  
 Minor Street **Hospital Dwy**

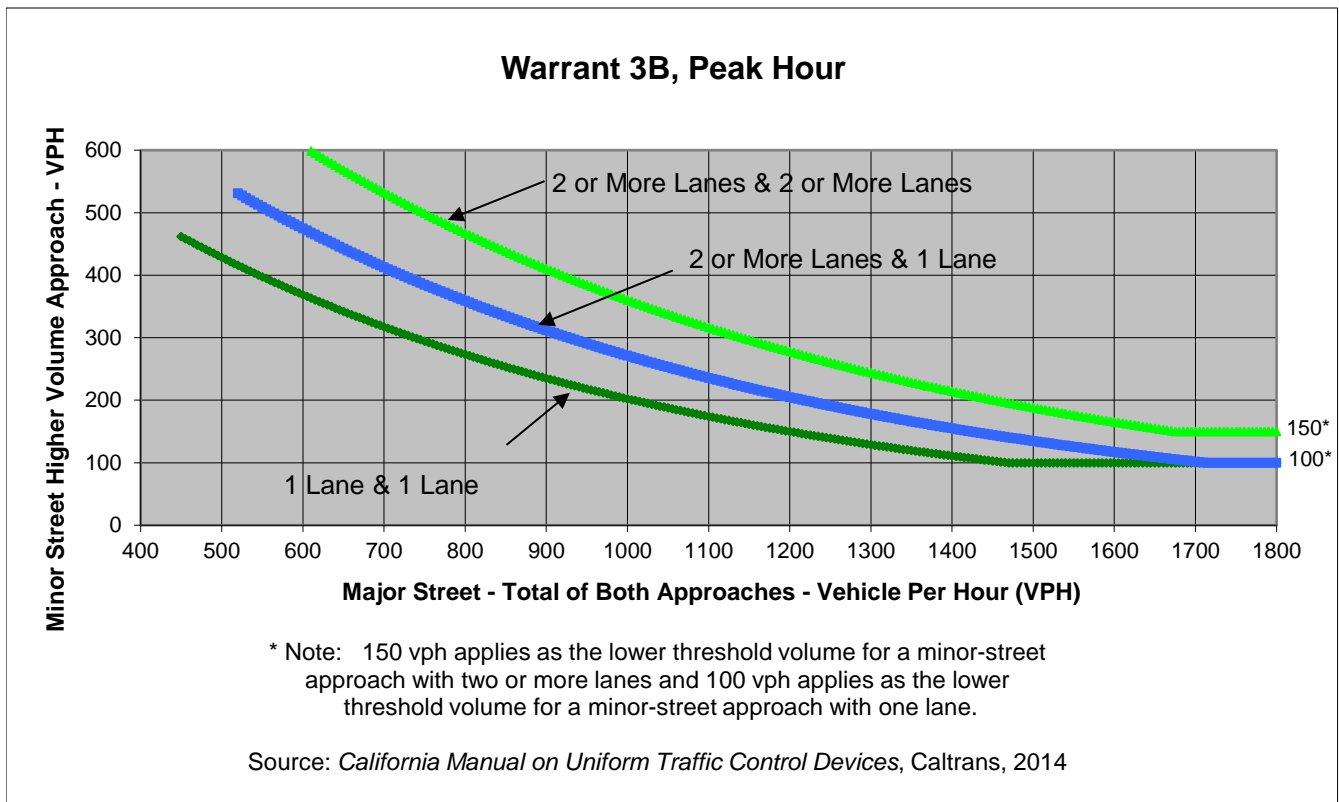
Project **West Davis AAC EIR**  
 Scenario **Existing Plus Approved Projects Conditions**  
 Peak Hour **AM Peak Hour**

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	0	0	11
Through	98	33	0	0
Right	31	0	0	2
Total	129	33	0	13

Major Street Direction

x	North/South
	East/West



	Major Street	Minor Street	Warrant Met
	Risling Ct	Hospital Dwy	
<b>Number of Approach Lanes</b>	<b>1</b>	<b>1</b>	<b><u>NO</u></b>
<b>Traffic Volume (VPH) *</b>	<b>162</b>	<b>13</b>	

\* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.  
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street Risling Ct  
 Minor Street Hospital Dwy

Project West Davis AAC EIR  
 Scenario Existing Plus Approved Projects Conditions  
 Peak Hour AM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	0	0	11
Through	98	33	0	0
Right	31	0	0	2
Total	129	33	0	13

Major Street Direction

x	North/South
	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	9.5
Approach with Worst Case Delay	WB
Total Vehicles on Approach	13

<b>Warrant 3A, Peak Hour</b>			
	<b>Peak Hour Delay on Minor Approach (vehicle-hours)</b>	<b>Peak Hour Volume on Minor Approach (vph)</b>	<b>Peak Hour Entering Volume Served (vph)</b>
<b>Existing Plus Approved Projects Conditions</b>	<b>0</b>	<b>13</b>	<b>175</b>
<b>Limiting Value</b>	<b>4</b>	<b>100</b>	<b>650</b>
<b>Condition Satisfied?</b>	<b>Not Met</b>	<b>Not Met</b>	<b>Not Met</b>
<b>Warrant Met</b>	<b><u>NO</u></b>		



Major Street **Covell Blvd**  
 Minor Street **Lake Blvd**

Project **West Davis AAC EIR**  
 Scenario **Existing Plus Approved Projects Conditions**  
 Peak Hour **PM Peak Hour**

Turn Movement Volumes

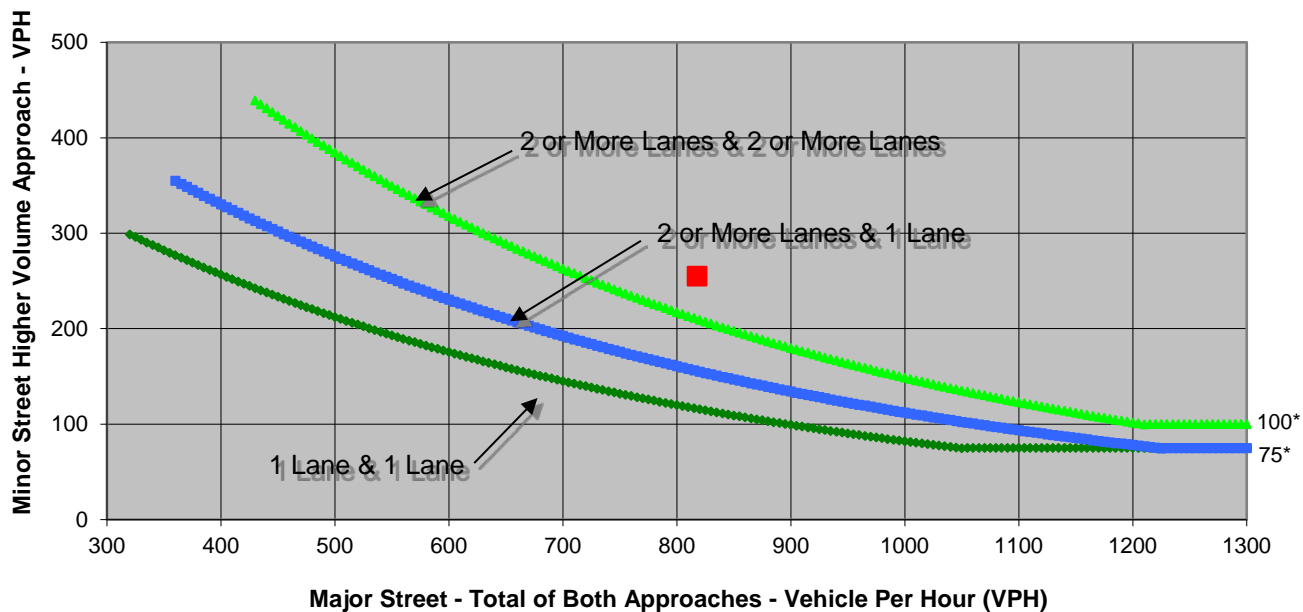
	NB	SB	EB	WB
Left	38	21	22	221
Through	46	50	231	272
Right	171	11	38	34
Total	255	82	291	527

Major Street Direction

North/South  
**x** East/West

**Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)**  
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



\* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Covell Blvd	Lake Blvd	
Number of Approach Lanes	<b>1</b>	<b>1</b>	<b><u>YES</u></b>
Traffic Volume (VPH) *	<b>818</b>	<b>255</b>	

\* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.  
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street Covell Blvd  
 Minor Street Lake Blvd

Project West Davis AAC EIR  
 Scenario Existing Plus Approved Projects Conditions  
 Peak Hour PM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	38	21	22	221
Through	46	50	231	272
Right	171	11	38	34
Total	255	82	291	527

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	4

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	15.4
Approach with Worst Case Delay	NB
Total Vehicles on Approach	255

<b>Warrant 3A, Peak Hour</b>			
	<b>Peak Hour Delay on Minor Approach (vehicle-hours)</b>	<b>Peak Hour Volume on Minor Approach (vph)</b>	<b>Peak Hour Entering Volume Served (vph)</b>
<b>Existing Plus Approved Project Conditions</b>	<b>1.1</b>	<b>255</b>	<b>1,155</b>
<b>Limiting Value</b>	<b>4</b>	<b>100</b>	<b>800</b>
<b>Condition Satisfied?</b>	<b>Not Met</b>	<b>Met</b>	<b>Met</b>
<b>Warrant Met</b>	<b><u>NO</u></b>		



Major Street Risling Ct  
 Minor Street Hospital Dwy

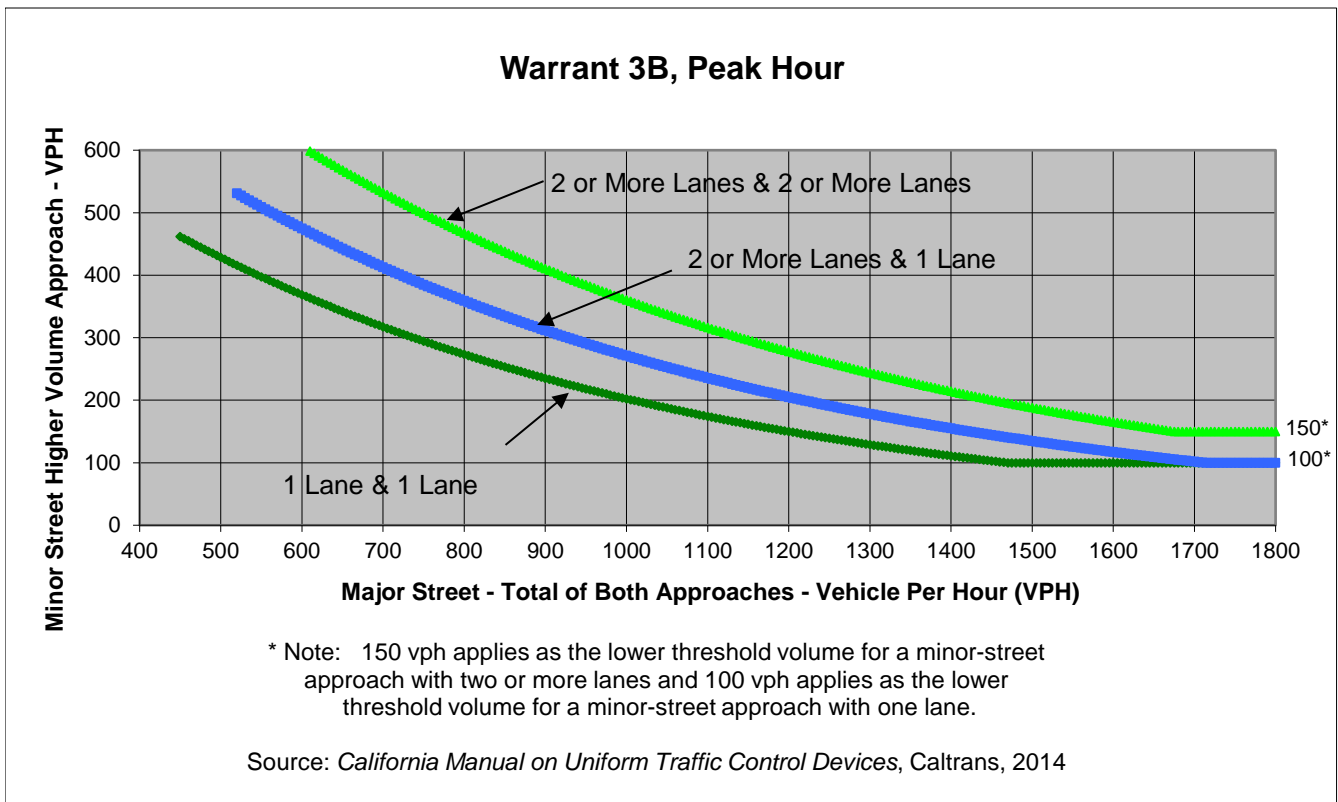
Project West Davis AAC EIR  
 Scenario Existing Plus Approved Projects Conditions  
 Peak Hour PM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	3	0	20
Through	21	64	0	0
Right	19	0	0	0
Total	40	67	0	20

Major Street Direction

x	North/South
	East/West



	Major Street	Minor Street	Warrant Met
	Risling Ct	Hospital Dwy	
<b>Number of Approach Lanes</b>	<b>1</b>	<b>1</b>	<b><u>NO</u></b>
<b>Traffic Volume (VPH) *</b>	<b>107</b>	<b>20</b>	

\* Note: Traffic Volume for Major Street is Total Volume of Both Approches.  
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street Risling Ct  
 Minor Street Hospital Dwy

Project West Davis AAC EIR  
 Scenario Existing Plus Approved Projects Conditions  
 Peak Hour PM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	3	0	20
Through	21	64	0	0
Right	19	0	0	0
Total	40	67	0	20

Major Street Direction

x	North/South
	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	9.2
Approach with Worst Case Delay	WB
Total Vehicles on Approach	20

<b>Warrant 3A, Peak Hour</b>			
	<b>Peak Hour Delay on Minor Approach (vehicle-hours)</b>	<b>Peak Hour Volume on Minor Approach (vph)</b>	<b>Peak Hour Entering Volume Served (vph)</b>
<b>Existing Plus Approved Projects Conditions</b>	<b>0.1</b>	<b>20</b>	<b>127</b>
<b>Limiting Value</b>	<b>4</b>	<b>100</b>	<b>650</b>
<b>Condition Satisfied?</b>	<b>Not Met</b>	<b>Not Met</b>	<b>Not Met</b>
<b>Warrant Met</b>	<b><u>NO</u></b>		

Intersection 3

Risling Ct/Sutter Hospital Dwy

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
WB	Shared	925	25	4	50	6	50	12	0%	0%
NB	Through/Right	25	25	0	25	0	25	0	0%	0%
SB	Left/Through	1,025	25	0	25	0	25	0	0%	0%
0										

Intersection 4

Risling Ct-Shasta Dr/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	225	50	8	100	20	125	58	0%	0%
	Through	400	125	13	200	18	225	32	15%	0%
	Right Turn	100	25	5	50	30	75	50	0%	0%
NB	Left Turn	125	25	4	50	8	75	11	0%	0%
	Through	350	50	5	100	10	150	34	1%	0%
	Right Turn	75	75	1	75	4	75	1	3%	0%
SB	Left Turn	125	50	7	75	11	100	16	0%	0%
	Through/Right	350	25	2	50	4	75	17	0%	0%
WB	U/Left Turns	325	75	5	150	14	175	21	0%	0%
	Left Turn	325	50	6	100	17	150	29	0%	0%
	Through	575	75	12	175	19	200	22	0%	0%
	Through/Right	575	100	13	200	17	225	27	0%	0%



Intersection 5

John Jones Rd/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	150	75	11	150	18	175	0	1%	0%
	Through	575	175	17	325	39	375	78	7%	0%
SB	Left Turn	250	125	9	200	15	250	23	0%	0%
	Through/Right	1,600	25	5	75	39	125	121	0%	0%
WB	Through	350	125	10	250	21	300	41	22%	0%
	Right Turn	75	75	4	100	3	100	0	5%	0%
NB	Shared	25	25	0	25	0	25	0	0%	0%

Intersection 6

SR 113 SB Ramps/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	350	250	20	375	26	350	6	0%	2%
	Through/Right	350	275	21	400	10	350	7	0%	5%
SB	Left/Through	1,425	125	8	175	18	225	42	0%	0%
	Right Turn	1,425	100	9	175	19	200	28	0%	0%
WB	U/Left Turns	225	225	5	250	10	225	0	45%	0%
	Through	500	350	34	625	63	525	56	14%	5%
O										

Intersection 7

SR 113 NB Ramps/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	U/Left Turns	175	100	12	175	16	200	0	0%	0%
	Through	500	150	13	250	20	300	43	4%	0%
NB	Left/Through	1,675	200	18	325	35	400	72	0%	0%
	Right Turn	1,675	100	7	150	22	175	43	0%	0%
WB	Through	425	200	21	375	41	425	54	7%	1%
	Right Turn	150	75	8	150	11	175	0	0%	0%
0										

Intersection 8

Sycamore Ln/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	175	100	9	175	18	200	0	1%	0%
	Through	400	150	9	250	17	275	22	5%	0%
	Through/Right	400	175	9	275	20	325	27	0%	0%
NB	Left Turn	125	125	7	175	5	150	1	19%	0%
	Through/Right	1,125	100	20	250	48	300	59	0%	0%
SB	Left Turn	125	75	5	150	11	150	0	2%	0%
	Through/Right	1,775	150	18	325	45	400	68	16%	0%
WB	Left Turn	125	50	6	125	20	150	15	0%	0%
	Through	5,800	150	9	250	17	275	34	14%	0%
	Through/Right	5,800	175	11	275	23	300	42	0%	0%

Intersection 3

Risling Ct/Sutter Hospital Dwy

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
WB	Shared	925	25	3	50	3	50	7	0%	0%
NB	Through/Right	25	25	0	25	0	25	0	0%	0%
SB	Left/Through	1,025	25	0	25	0	25	0	0%	0%
0										

Intersection 4

Risling Ct-Shasta Dr/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	225	25	2	50	6	50	14	0%	0%
	Through	400	75	9	150	16	175	30	7%	0%
	Right Turn	100	25	3	25	21	75	52	0%	0%
NB	Left Turn	125	25	4	50	7	75	7	0%	0%
	Through	350	50	5	100	12	125	44	1%	0%
	Right Turn	75	75	1	75	2	75	2	2%	0%
SB	Left Turn	125	50	5	100	7	125	11	1%	0%
	Through/Right	350	25	5	75	10	100	35	0%	0%
WB	U/Left Turns	325	100	7	175	11	175	15	0%	0%
	Left Turn	325	75	7	150	12	175	24	0%	0%
	Through	575	50	12	150	27	200	39	0%	0%
	Through/Right	575	75	13	175	24	225	29	0%	0%

Intersection 5

John Jones Rd/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	150	50	5	75	11	125	38	0%	0%
	Through	575	100	12	200	25	250	47	2%	0%
SB	Left Turn	250	150	10	250	14	250	14	2%	0%
	Through/Right	1,600	50	16	100	67	200	135	0%	0%
WB	Through	350	125	15	250	30	300	47	16%	0%
	Right Turn	75	50	3	100	4	100	0	1%	0%
NB	Shared	25	25	0	25	0	25	0	0%	0%

Intersection 6

SR 113 SB Ramps/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	350	150	15	275	23	325	31	0%	0%
	Through/Right	350	175	18	300	25	325	29	0%	0%
SB	Left/Through	1,425	100	7	150	16	200	33	0%	0%
	Right Turn	1,425	75	4	125	7	150	13	0%	0%
WB	U/Left Turns	225	175	8	225	13	225	1	6%	0%
	Through	500	125	19	250	29	350	71	2%	0%
O										

Intersection 7

SR 113 NB Ramps/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	U/Left Turns	175	100	9	150	13	175	19	2%	0%
	Through	500	100	12	175	22	225	30	2%	0%
NB	Left/Through	1,675	200	15	300	29	375	58	0%	0%
	Right Turn	1,675	225	10	400	25	475	82	0%	0%
WB	Through	425	125	12	200	27	250	56	2%	0%
	Right Turn	150	50	7	100	19	150	24	0%	0%
0										

Intersection 8

Sycamore Ln/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	175	150	9	200	13	200	1	8%	0%
	Through	400	175	21	275	27	325	29	4%	0%
	Through/Right	400	175	19	275	26	300	45	0%	0%
NB	Left Turn	125	100	9	150	9	150	1	6%	0%
	Through/Right	1,125	75	12	175	27	225	37	2%	0%
SB	Left Turn	125	125	7	175	5	150	1	12%	0%
	Through/Right	1,775	150	24	275	57	325	72	8%	0%
WB	Left Turn	125	50	4	100	11	150	0	0%	0%
	Through	5,800	150	10	250	20	275	25	12%	0%
	Through/Right	5,800	175	7	275	14	300	24	0%	0%

Arterial Level of Service  
Existing Plus Approved Projects No Project Conditions

AM Peak Hour

Arterial Level of Service: EB Route 1

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	13.5	20.1	0.1	16
	5	18.7	31.2	0.1	14
SR 113 SB Ramps	6	26.5	34.5	0.1	8
Route 1	7	16.0	26.6	0.1	14
Total		74.8	112.3	0.4	12

Arterial Level of Service: WB Route 1

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Covell Blvd	7	40.4	69.3	0.3	17
SR 113 SB Ramps	6	6.6	20.8	0.1	18
John Jones Rd	5	13.1	20.8	0.1	13
Risling Ct	4	11.0	23.2	0.1	18
	301	2.1	10.0	0.1	32
Total		73.2	144.0	0.7	18

Arterial Level of Service  
 Existing Plus Approved Projects No Project Conditions

AM Peak Hour

Arterial Level of Service: EB Route 2

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	13.3	19.9	0.1	16
	5	18.5	30.9	0.1	14
Route 2	6	30.0	42.3	0.1	6
Total		61.9	93.1	0.3	11

Arterial Level of Service: WB Route 2

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
John Jones Rd	5	-	-	0.1	-
Risling Ct	4	11.4	23.6	0.1	18
	301	2.1	10.0	0.1	31
Total		13.5	33.5	0.3	30

Arterial Level of Service  
Existing Plus Approved Projects No Project Conditions

PM Peak Hour

Arterial Level of Service: EB Route 1

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	10.5	17.1	0.1	18
	5	9.6	21.9	0.1	20
SR 113 SB Ramps	6	20.5	28.5	0.1	10
Route 1	7	9.3	20.0	0.1	19
Total		49.9	87.5	0.4	16

Arterial Level of Service: WB Route 1

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Covell Blvd	7	34.7	63.9	0.3	18
SR 113 SB Ramps	6	7.7	21.9	0.1	17
John Jones Rd	5	10.3	18.0	0.1	15
Risling Ct	4	6.7	19.0	0.1	23
	301	1.4	9.3	0.1	34
Total		60.8	132.0	0.7	19



Arterial Level of Service  
 Existing Plus Approved Projects No Project Conditions

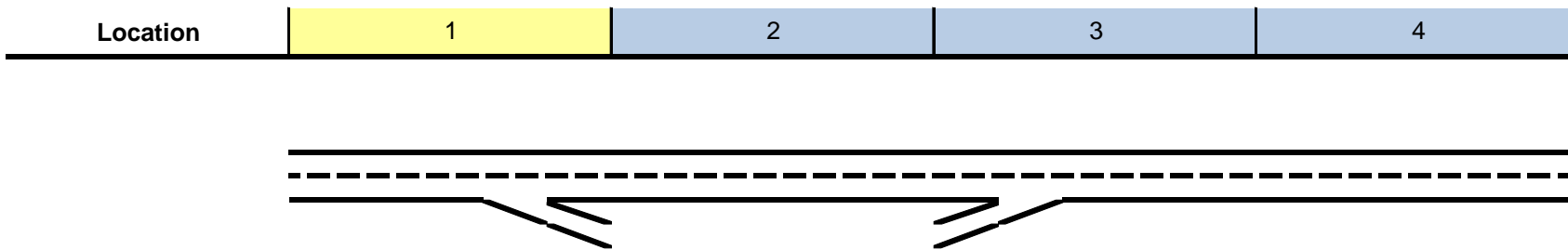
PM Peak Hour

Arterial Level of Service: EB Route 2

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	10.5	17.1	0.1	18
	5	9.6	21.9	0.1	20
Route 2	6	15.6	27.7	0.1	10
Total		35.7	66.8	0.3	15

Arterial Level of Service: WB Route 2

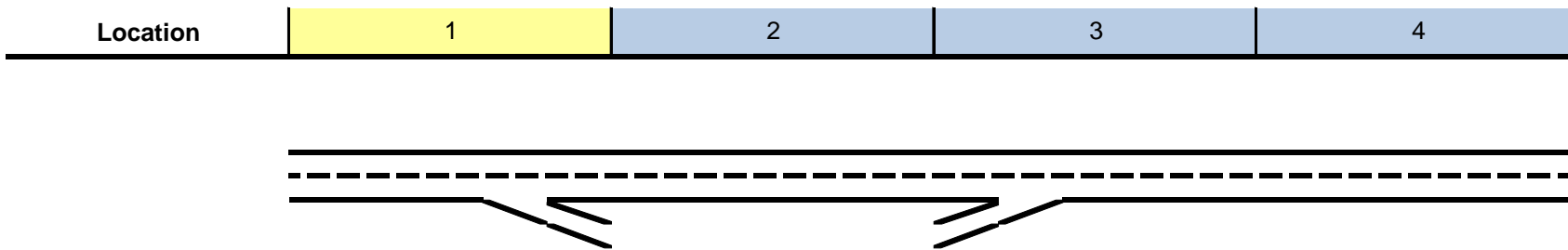
Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
John Jones Rd	5	-	-	0.1	-
Risling Ct	4	6.7	19.0	0.1	23
	301	1.4	9.3	0.1	34
Total		8.1	28.2	0.3	36



**Key**

<> Express Lane (HOV)

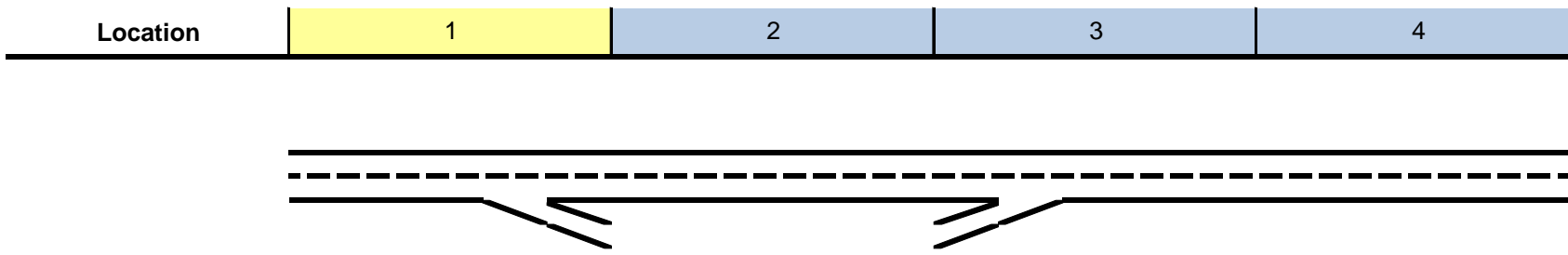
Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Freeway Segment</b>				
Type	Diverge	Basic	Merge	Basic
Length (ft)	1,500	2,560	1,500	5,980
Accel Length			370	
Decel Length	150			
Mainline Volume	1,052	430	430	656
On Ramp Volume			226	
Off Ramp Volume	622			
Express Lane Volume				
EL On Ramp Volume				
EL Off Ramp Volume				
<b>Flow Rate in Entering General Purpose Lanes (GP)</b>				
Volume (vph)	1,052	430	430	656
PHF	0.75	0.75	0.75	0.75
Lanes	2	2	2	2
Terrain	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00
Truck & Bus %	5.9%	5.9%	5.9%	5.9%
RV %	0.0%	0.0%	0.0%	0.0%
E <sub>T</sub>	1.5	1.5	1.5	1.5
E <sub>R</sub>	1.2	1.2	1.2	1.2
f <sub>HV</sub>	0.971	0.971	0.971	0.971
f <sub>P</sub>	1.00	1.00	1.00	1.00
Flow (pcph)	1,444	590	590	900
Flow (pcphpl)	722	295	295	450



**Key**

<> Express Lane (HOV)

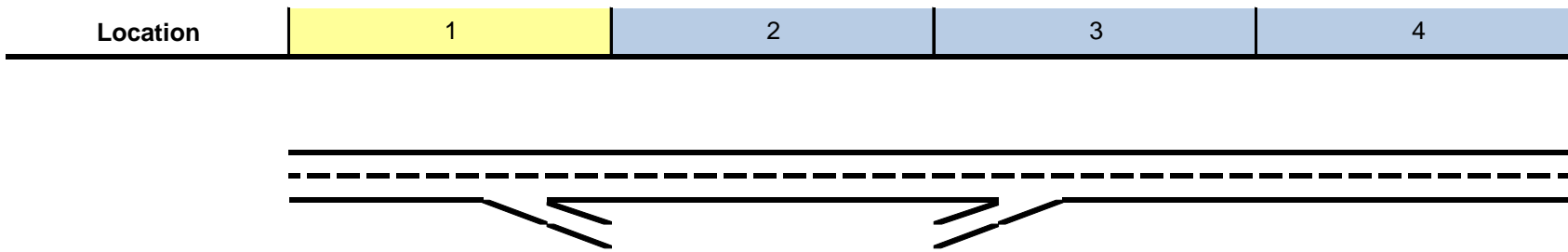
Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Free Flow Speed in Entering GP Lanes</b>				
Lane Width (ft)				
Shoulder Width				
TRD				
$f_{LW}$				
$f_{LC}$				
Calculated FFS				
Measured FFS				
FFS Curve	70	70	70	70
<b>Operations in Entering GP Lanes</b>				
Capacity (pcph)	4,800	4,800	4,800	4,800
v/c ratio	0.30	0.12	0.12	0.19
Speed (mph)	70.0	70.0	70.0	70.0
Density (pcphpl)	10.3	4.2	4.2	6.4
LOS	A	A	A	A
<b>Operations for Segment GP Lanes</b>				
Flow (pcph)			851	
Lanes			2	
Capacity (pcph)			4,800	
v/c ratio			0.18	
Flow Rate (pcphpl)			425	
Speed (mph)			70.0	
Density (pcphpl)			6.1	
LOS			A	
<b>Operations for Exiting GP Lanes</b>				
Flow (pcph)	727			
Lanes	2			
Capacity (pcph)	4,800			
v/c ratio	0.15			
Flow Rate (pcphpl)	363			
Speed (mph)	70.0			
Density (pcphpl)	5.2			
LOS	A			



**Key**

<> Express Lane (HOV)

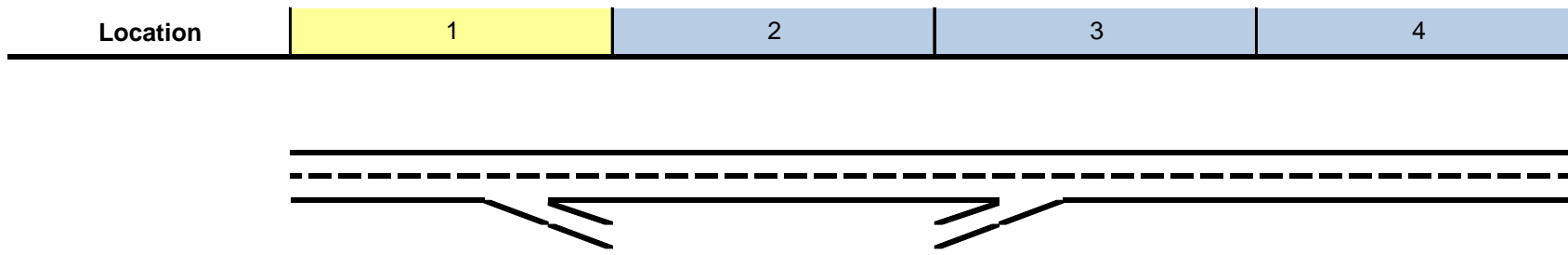
Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Flow Rate in Express Lanes</b>				
<b>Operations in Express Lanes</b>				
<b>On Ramp Flow Rate</b>				
Volume (vph)			226	
PHF			0.88	
Lanes			1	
Terrain			Level	
Grade %			0.0%	
Grade Length (mi)			0.00	
Truck & Bus %			3.0%	
RV %			0.0%	
$E_T$			1.5	
$E_R$			1.2	
$f_{HV}$			0.985	
$f_P$			1.00	
Flow (pcph)			261	
Flow Rate (pcphpl)			261	
<b>On Ramp Roadway Operations</b>				
Ramp Type			Right	
Ramp Speed (mph)			45	
Ramp Capacity (pcph)			2,100	
Ramp v/c ratio			0.12	



**Key**

<> Express Lane (HOV)

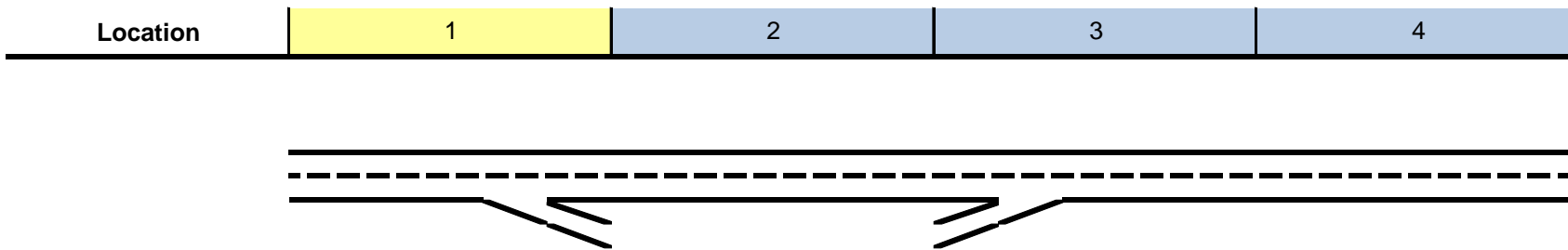
Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Off Ramp Flow Rate</b>				
Volume (vph)	622			
PHF	0.88			
Lanes	1			
Terrain	Level			
Grade %	0.0%			
Grade Length (mi)	0.00			
Truck & Bus %	3.0%			
RV %	0.0%			
E <sub>T</sub>	1.5			
E <sub>R</sub>	1.2			
f <sub>HV</sub>	0.985			
f <sub>P</sub>	1.00			
Flow (pcph)	717			
Flow Rate (pcphpl)	717			
<b>Off Ramp Roadway Operations</b>				
Ramp Type	Right			
Ramp Speed	45			
Ramp Capacity (pcph)	2,100			
Ramp v/c ratio	0.34			
<b>Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps</b>				



**Key**

<> Express Lane (HOV)

Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Merge Influence Area Operations</b>				
Effective $v_p$ (pcph)			590	
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FM}$ (Eqn 13-3)			0.588	
$P_{FM}$ (Eqn 13-4)				
$P_{FM}$ (Eqn 13-5)				
$P_{FM}$			1.000	
$v_{12}$ (pcph)			590	
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)			590	
$v_{R12a}$ (pcph)			851	
Speed Index			0.30	
Area Speed			61.7	
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed			61.7	
v/c ratio			0.18	
Density			9.7	
LOS			A	

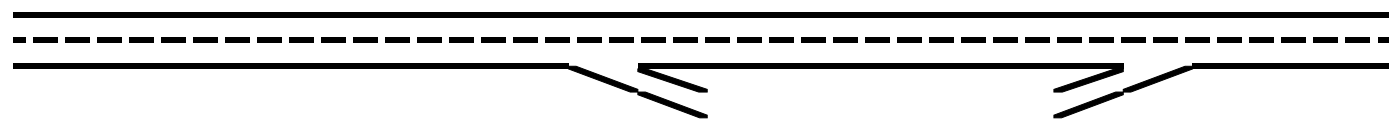


**Key**

<> Express Lane (HOV)

Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Diverge Influence Area Operations</b>				
Effective $v_p$ (pcph)	1,444			
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FD}$ (Eqn 13-9)	0.691			
$P_{FD}$ (Eqn 13-10)				
$P_{FD}$ (Eqn 13-11)				
$P_{FD}$	1.000			
$v_{12}$ (pcph)	1,444			
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)	1,444			
Speed Index	0.36			
Area Speed	59.8			
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed	59.8			
v/c ratio	0.33			
Density	15.3			
LOS	B			
<b>On Ramp to Off Ramp Flow Rate for Weave Segments</b>				
<b>On Ramp to Mainline Flow Rate for Weave Segments</b>				
<b>Mainline to Off Ramp Flow Rate for Weave Segments</b>				
<b>General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments</b>				
<b>Weave Segment Operations</b>				
<b>Summarize Segment Operations</b>				
Segment v/c ratio	0.33	0.12	0.18	0.19
Segment Density	15.3	4.2	9.7	6.4
Segment LOS	B	A	A	A
Over Capacity				

Location	1	2	3	4
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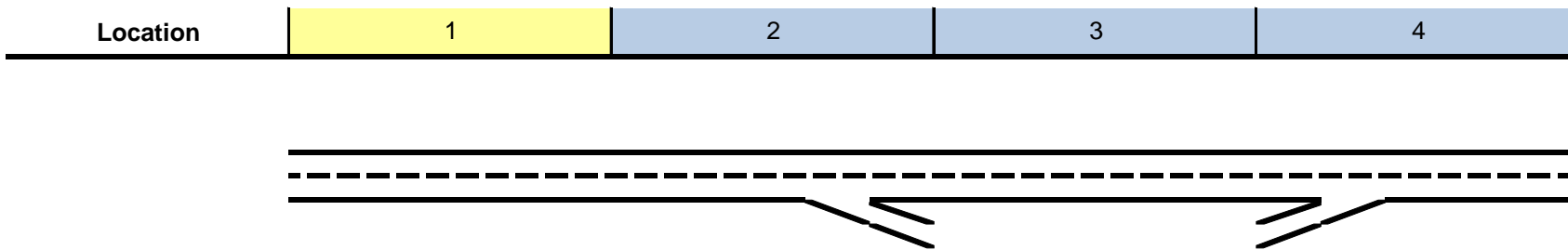


**Key**

<=> Express Lane (HOV)

Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Freeway Segment</b>				
Type	Basic	Diverge	Basic	Merge
Length (ft)	4,920	1,500	2,850	1,550
Accel Length				330
Decel Length		170		
Mainline Volume	1,864	1,864	1,574	1,574
On Ramp Volume				912
Off Ramp Volume		290		
Express Lane Volume				
EL On Ramp Volume				
EL Off Ramp Volume				
<b>Flow Rate in Entering General Purpose Lanes (GP)</b>				
Volume (vph)	1,864	1,864	1,574	1,574
PHF	0.84	0.84	0.84	0.84
Lanes	2	2	2	2
Terrain	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00
Truck & Bus %	5.9%	5.9%	5.9%	5.9%
RV %	0.0%	0.0%	0.0%	0.0%
E <sub>T</sub>	1.5	1.5	1.5	1.5
E <sub>R</sub>	1.2	1.2	1.2	1.2
f <sub>HV</sub>	0.971	0.971	0.971	0.971
f <sub>P</sub>	1.00	1.00	1.00	1.00
Flow (pcph)	2,285	2,285	1,929	1,929
Flow (pcphpl)	1,142	1,142	965	965

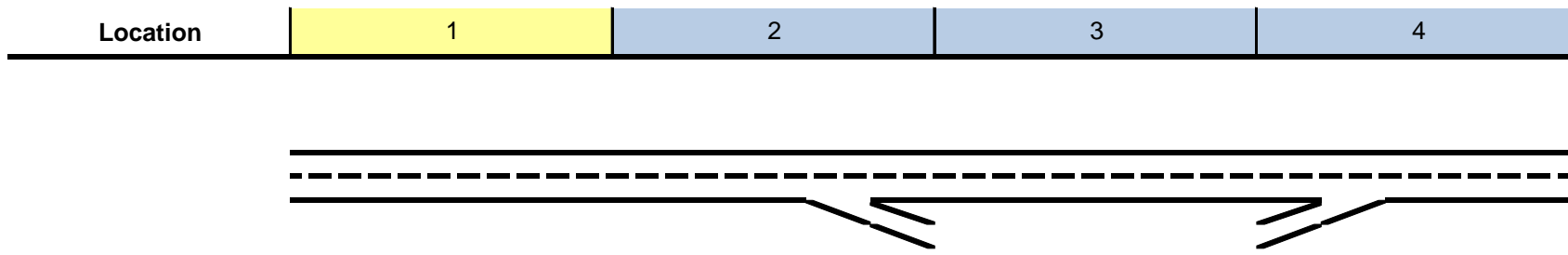




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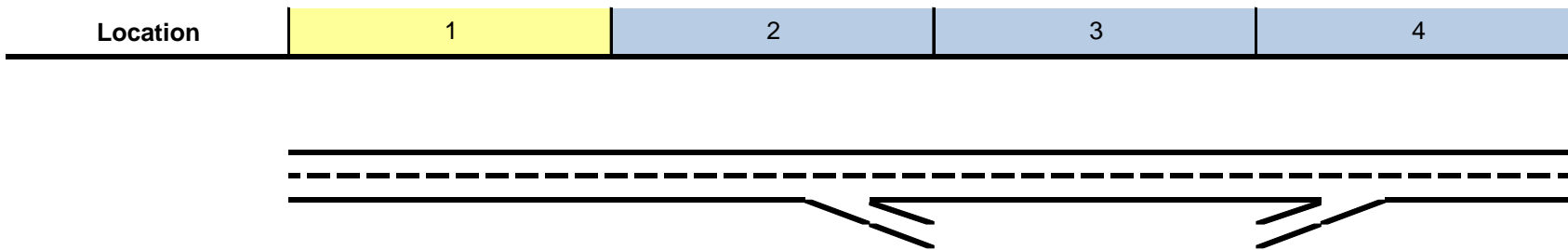
Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Free Flow Speed in Entering GP Lanes</b>				
Lane Width (ft)				
Shoulder Width				
TRD				
$f_{LW}$				
$f_{LC}$				
Calculated FFS				
Measured FFS				
FFS Curve	70	70	70	70
<b>Operations in Entering GP Lanes</b>				
Capacity (pcph)	4,800	4,800	4,800	4,800
v/c ratio	0.48	0.48	0.40	0.40
Speed (mph)	70.0	70.0	70.0	70.0
Density (pcphpl)	16.3	16.3	13.8	13.8
LOS	B	B	B	B
<b>Operations for Segment GP Lanes</b>				
Flow (pcph)				2,976
Lanes				2
Capacity (pcph)				4,800
v/c ratio				0.62
Flow Rate (pcphpl)				1,488
Speed (mph)				69.0
Density (pcphpl)				21.6
LOS				C



**Key**

<> Express Lane (HOV)

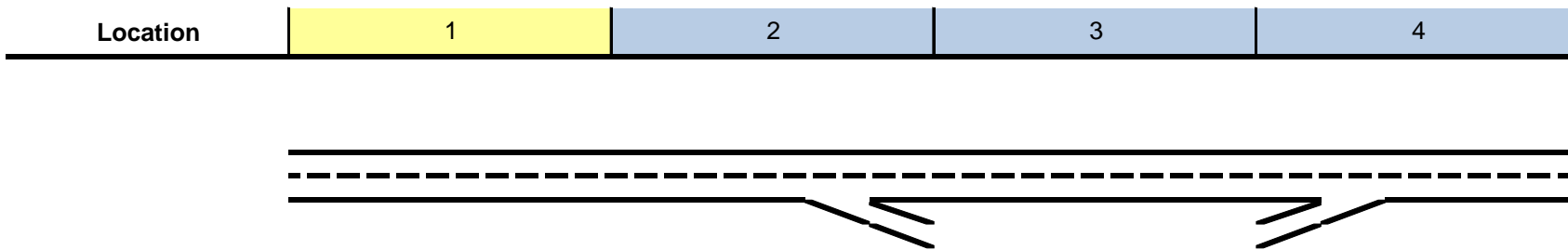
Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Operations for Exiting GP Lanes</b>				
Flow (pcph)		1,952		
Lanes		2		
Capacity (pcph)		4,800		
v/c ratio		0.41		
Flow Rate (pcphpl)		976		
Speed (mph)		70.0		
Density (pcphpl)		13.9		
LOS		B		



**Key**

<> Express Lane (HOV)

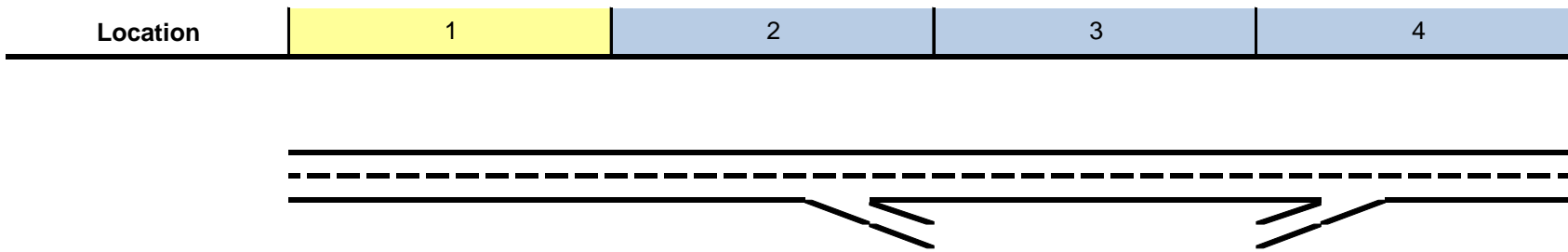
Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Flow Rate in Express Lanes</b>				
<b>Operations in Express Lanes</b>				
<b>On Ramp Flow Rate</b>				
Volume (vph)				912
PHF				0.88
Lanes				1
Terrain				Level
Grade %				0.0%
Grade Length (mi)				0.00
Truck & Bus %				2.0%
RV %				0.0%
$E_T$				1.5
$E_R$				1.2
$f_{HV}$				0.990
$f_P$				1.00
Flow (pcph)				1,047
Flow Rate (pcphpl)				1,047
<b>On Ramp Roadway Operations</b>				
Ramp Type				Right
Ramp Speed (mph)				45
Ramp Capacity (pcph)				2,100
Ramp v/c ratio				0.50



**Key**

<> Express Lane (HOV)

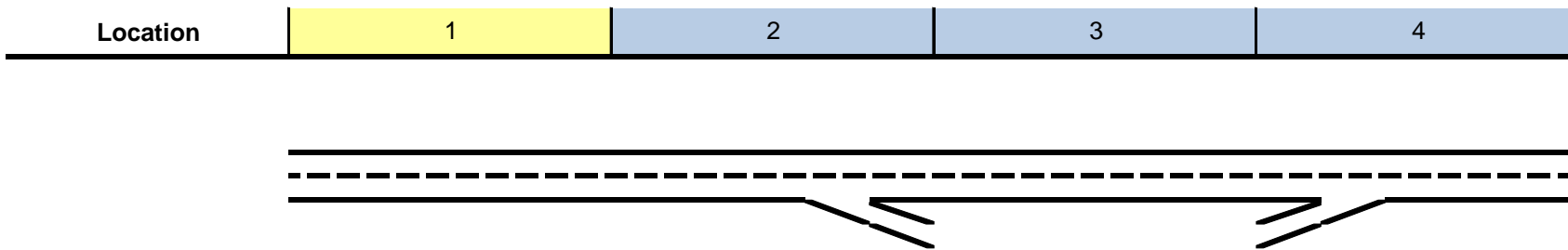
Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Off Ramp Flow Rate</b>				
Volume (vph)		290		
PHF		0.88		
Lanes		1		
Terrain		Level		
Grade %		0.0%		
Grade Length (mi)		0.00		
Truck & Bus %		2.0%		
RV %		0.0%		
$E_T$		1.5		
$E_R$		1.2		
$f_{HV}$		0.990		
$f_P$		1.00		
Flow (pcph)		333		
Flow Rate (pcphpl)		333		
<b>Off Ramp Roadway Operations</b>				
Ramp Type		Right		
Ramp Speed		45		
Ramp Capacity (pcph)		2,100		
Ramp v/c ratio		0.16		
<b>Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps</b>				



**Key**

<> Express Lane (HOV)

Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Merge Influence Area Operations</b>				
Effective $v_p$ (pcph)				1,929
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FM}$ (Eqn 13-3)				0.587
$P_{FM}$ (Eqn 13-4)				
$P_{FM}$ (Eqn 13-5)				
$P_{FM}$				1.000
$v_{12}$ (pcph)				1,929
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)				1,929
$v_{R12a}$ (pcph)				2,976
Speed Index				0.37
Area Speed				59.7
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed				59.7
v/c ratio				0.65
Density				26.1
LOS				C

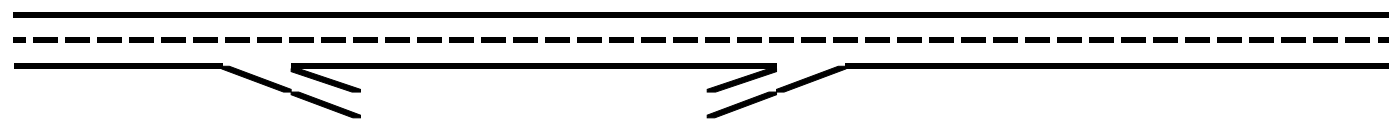


**Key**

<> Express Lane (HOV)

Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Diverge Influence Area Operations</b>				
Effective $v_p$ (pcph)		2,285		
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FD}$ (Eqn 13-9)		0.688		
$P_{FD}$ (Eqn 13-10)				
$P_{FD}$ (Eqn 13-11)				
$P_{FD}$		1.000		
$v_{12}$ (pcph)		2,285		
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)		2,285		
Speed Index		0.33		
Area Speed		60.8		
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed		60.8		
v/c ratio		0.52		
Density		22.4		
LOS		C		
<b>On Ramp to Off Ramp Flow Rate for Weave Segments</b>				
<b>On Ramp to Mainline Flow Rate for Weave Segments</b>				
<b>Mainline to Off Ramp Flow Rate for Weave Segments</b>				
<b>General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments</b>				
<b>Weave Segment Operations</b>				
<b>Summarize Segment Operations</b>				
Segment v/c ratio	0.48	0.52	0.40	0.65
Segment Density	16.3	22.4	13.8	26.1
Segment LOS	B	C	B	C
Over Capacity				

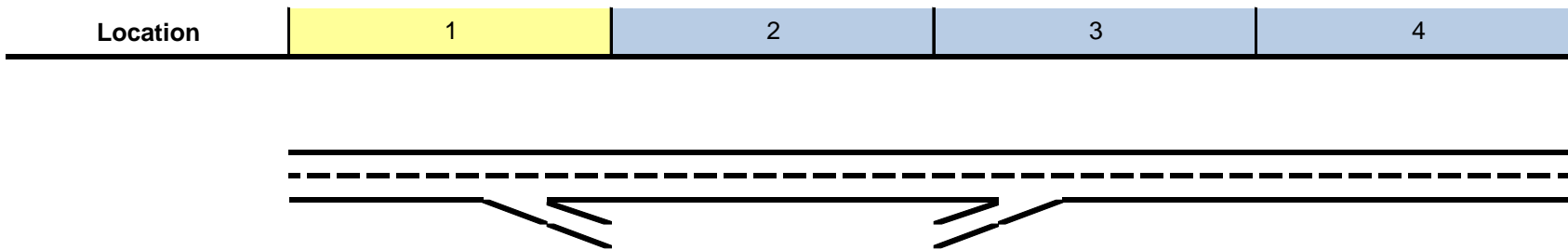
Location	1	2	3	4
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**Key**

<> Express Lane (HOV)

Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Freeway Segment</b>				
Type	Diverge	Basic	Merge	Basic
Length (ft)	1,500	2,560	1,500	5,980
Accel Length			370	
Decel Length	150			
Mainline Volume	1,920	978	978	1,244
On Ramp Volume			266	
Off Ramp Volume	942			
Express Lane Volume				
EL On Ramp Volume				
EL Off Ramp Volume				
<b>Flow Rate in Entering General Purpose Lanes (GP)</b>				
Volume (vph)	1,920	978	978	1,244
PHF	0.86	0.86	0.86	0.86
Lanes	2	2	2	2
Terrain	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00
Truck & Bus %	5.9%	5.9%	5.9%	5.9%
RV %	0.0%	0.0%	0.0%	0.0%
E <sub>T</sub>	1.5	1.5	1.5	1.5
E <sub>R</sub>	1.2	1.2	1.2	1.2
f <sub>HV</sub>	0.971	0.971	0.971	0.971
f <sub>P</sub>	1.00	1.00	1.00	1.00
Flow (pcph)	2,298	1,171	1,171	1,489
Flow (pcphpl)	1,149	585	585	745

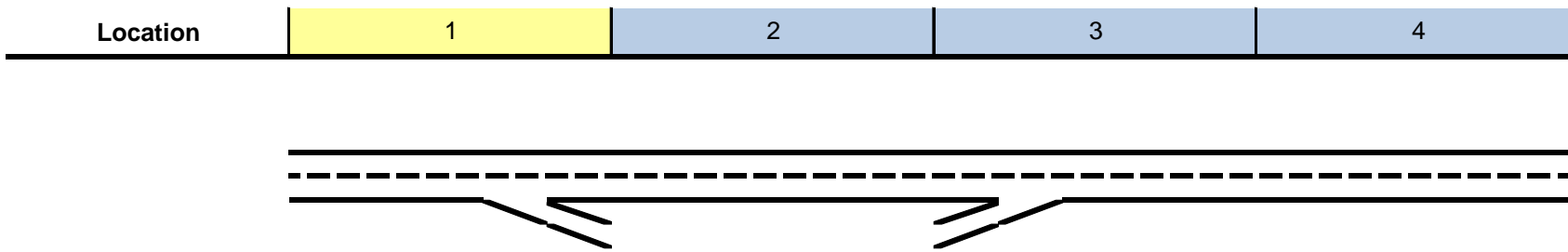


**Key**

<> Express Lane (HOV)

Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Free Flow Speed in Entering GP Lanes</b>				
Lane Width (ft)				
Shoulder Width				
TRD				
$f_{LW}$				
$f_{LC}$				
Calculated FFS				
Measured FFS				
FFS Curve	70	70	70	70
<b>Operations in Entering GP Lanes</b>				
Capacity (pcph)	4,800	4,800	4,800	4,800
v/c ratio	0.48	0.24	0.24	0.31
Speed (mph)	70.0	70.0	70.0	70.0
Density (pcphpl)	16.4	8.4	8.4	10.6
LOS	B	A	A	A
<b>Operations for Segment GP Lanes</b>				
Flow (pcph)			1,461	
Lanes			2	
Capacity (pcph)			4,800	
v/c ratio			0.30	
Flow Rate (pcphpl)			731	
Speed (mph)			70.0	
Density (pcphpl)			10.4	
LOS			A	
<b>Operations for Exiting GP Lanes</b>				
Flow (pcph)	1,270			
Lanes	2			
Capacity (pcph)	4,800			
v/c ratio	0.26			
Flow Rate (pcphpl)	635			
Speed (mph)	70.0			
Density (pcphpl)	9.1			
LOS	A			

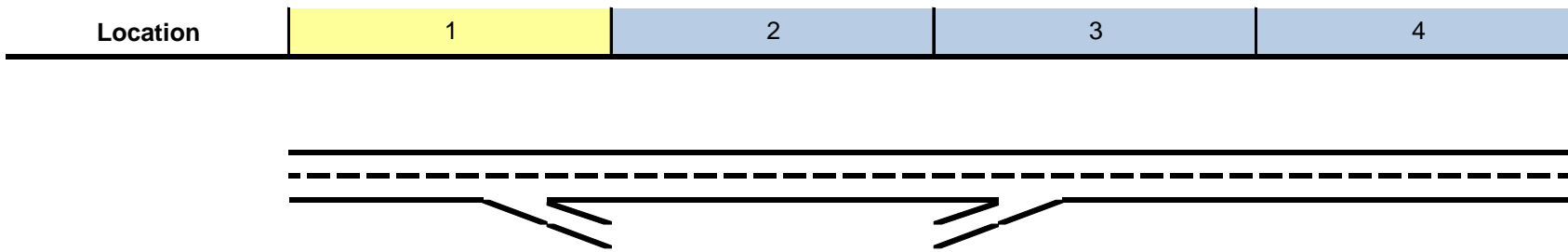




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<> Express Lane (HOV)

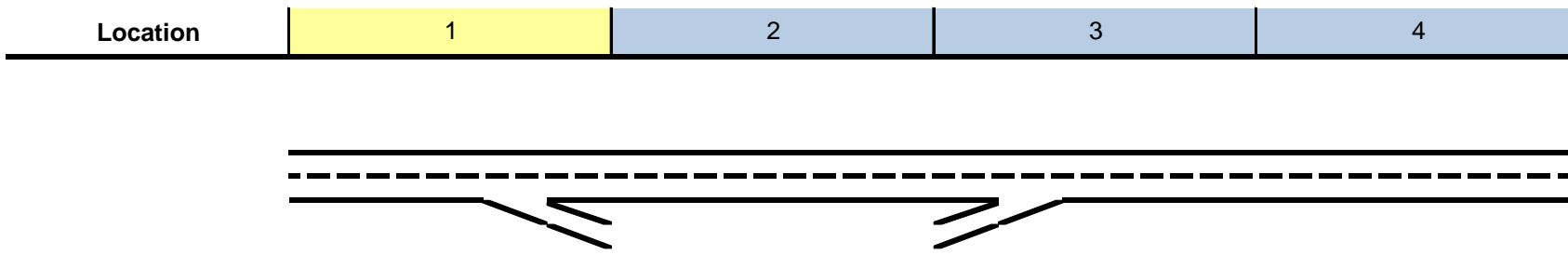
Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Flow Rate in Express Lanes</b>				
<b>Operations in Express Lanes</b>				
<b>On Ramp Flow Rate</b>				
Volume (vph)			266	
PHF			0.93	
Lanes			1	
Terrain			Level	
Grade %			0.0%	
Grade Length (mi)			0.00	
Truck & Bus %			3.0%	
RV %			0.0%	
$E_T$			1.5	
$E_R$			1.2	
$f_{HV}$			0.985	
$f_P$			1.00	
Flow (pcph)			290	
Flow Rate (pcphpl)			290	
<b>On Ramp Roadway Operations</b>				
Ramp Type			Right	
Ramp Speed (mph)			45	
Ramp Capacity (pcph)			2,100	
Ramp v/c ratio			0.14	



**Key**

<> Express Lane (HOV)

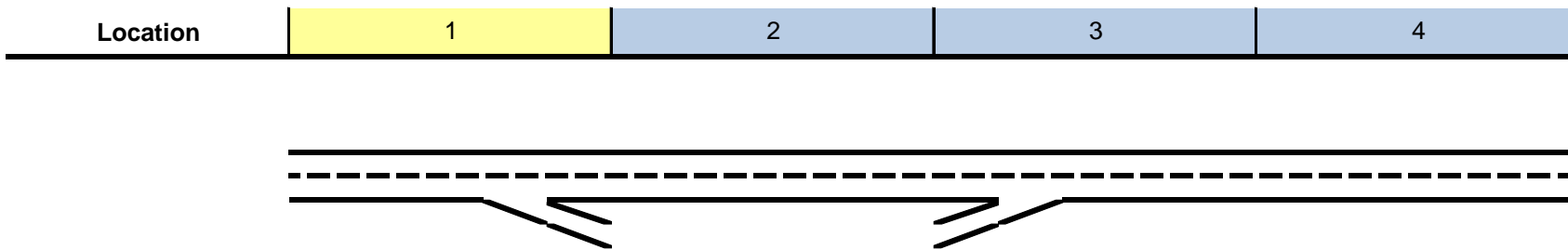
Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Off Ramp Flow Rate</b>				
Volume (vph)	942			
PHF	0.93			
Lanes	1			
Terrain	Level			
Grade %	0.0%			
Grade Length (mi)	0.00			
Truck & Bus %	3.0%			
RV %	0.0%			
$E_T$	1.5			
$E_R$	1.2			
$f_{HV}$	0.985			
$f_P$	1.00			
Flow (pcph)	1,028			
Flow Rate (pcphpl)	1,028			
<b>Off Ramp Roadway Operations</b>				
Ramp Type	Right			
Ramp Speed	45			
Ramp Capacity (pcph)	2,100			
Ramp v/c ratio	0.49			
<b>Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps</b>				



**Key**

<> Express Lane (HOV)

Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Merge Influence Area Operations</b>				
Effective $v_p$ (pcph)			1,171	
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FM}$ (Eqn 13-3)			0.588	
$P_{FM}$ (Eqn 13-4)				
$P_{FM}$ (Eqn 13-5)				
$P_{FM}$			1.000	
$v_{12}$ (pcph)			1,171	
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)			1,171	
$v_{R12a}$ (pcph)			1,461	
Speed Index			0.30	
Area Speed			61.5	
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed			61.5	
v/c ratio			0.32	
Density			14.4	
LOS			B	

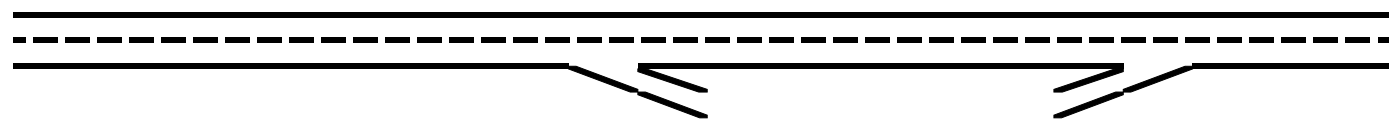


**Key**

<> Express Lane (HOV)

Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Diverge Influence Area Operations</b>				
Effective $v_p$ (pcph)	2,298			
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FD}$ (Eqn 13-9)	0.655			
$P_{FD}$ (Eqn 13-10)				
$P_{FD}$ (Eqn 13-11)				
$P_{FD}$	1.000			
$v_{12}$ (pcph)	2,298			
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)	2,298			
Speed Index	0.39			
Area Speed	59.1			
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed	59.1			
v/c ratio	0.52			
Density	22.7			
LOS	C			
<b>On Ramp to Off Ramp Flow Rate for Weave Segments</b>				
<b>On Ramp to Mainline Flow Rate for Weave Segments</b>				
<b>Mainline to Off Ramp Flow Rate for Weave Segments</b>				
<b>General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments</b>				
<b>Weave Segment Operations</b>				
<b>Summarize Segment Operations</b>				
Segment v/c ratio	0.52	0.24	0.32	0.31
Segment Density	22.7	8.4	14.4	10.6
Segment LOS	C	A	B	A
Over Capacity				

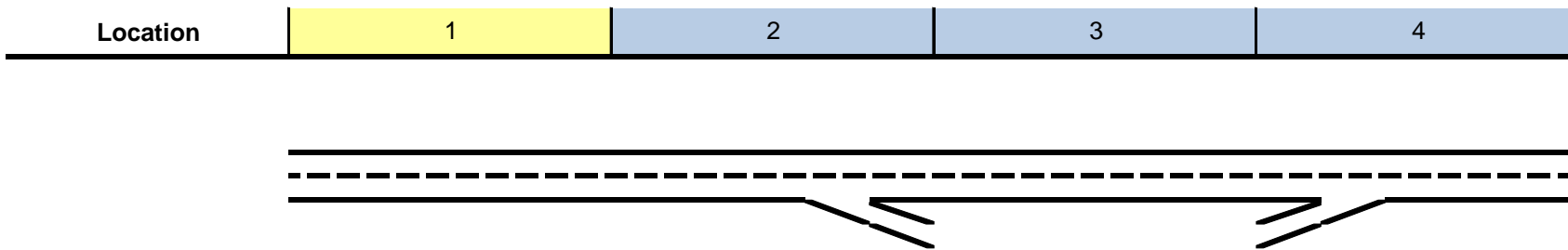
Location	1	2	3	4
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**Key**

<> Express Lane (HOV)

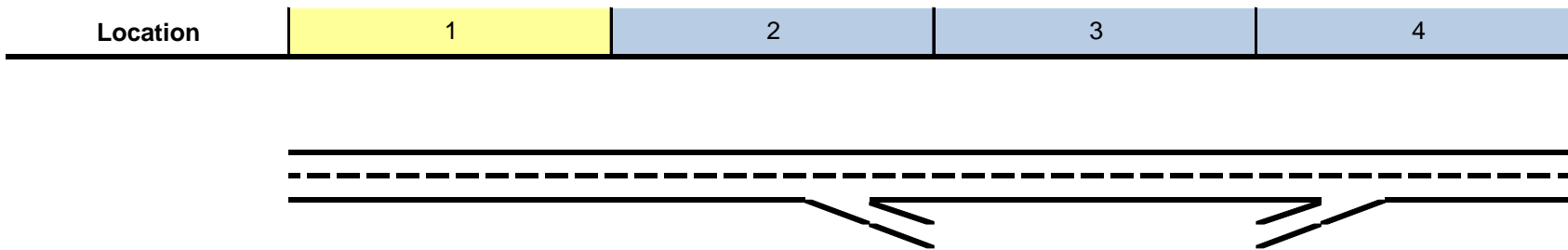
Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Freeway Segment</b>				
Type	Basic	Diverge	Basic	Merge
Length (ft)	4,920	1,500	2,850	1,550
Accel Length				330
Decel Length		170		
Mainline Volume	1,085	1,085	878	878
On Ramp Volume				480
Off Ramp Volume		207		
Express Lane Volume				
EL On Ramp Volume				
EL Off Ramp Volume				
<b>Flow Rate in Entering General Purpose Lanes (GP)</b>				
Volume (vph)	1,085	1,085	878	878
PHF	0.93	0.93	0.93	0.93
Lanes	2	2	2	2
Terrain	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00
Truck & Bus %	5.9%	5.9%	5.9%	5.9%
RV %	0.0%	0.0%	0.0%	0.0%
E <sub>T</sub>	1.5	1.5	1.5	1.5
E <sub>R</sub>	1.2	1.2	1.2	1.2
f <sub>HV</sub>	0.971	0.971	0.971	0.971
f <sub>P</sub>	1.00	1.00	1.00	1.00
Flow (pcph)	1,201	1,201	972	972
Flow (pcphpl)	601	601	486	486



**Key**

<> Express Lane (HOV)

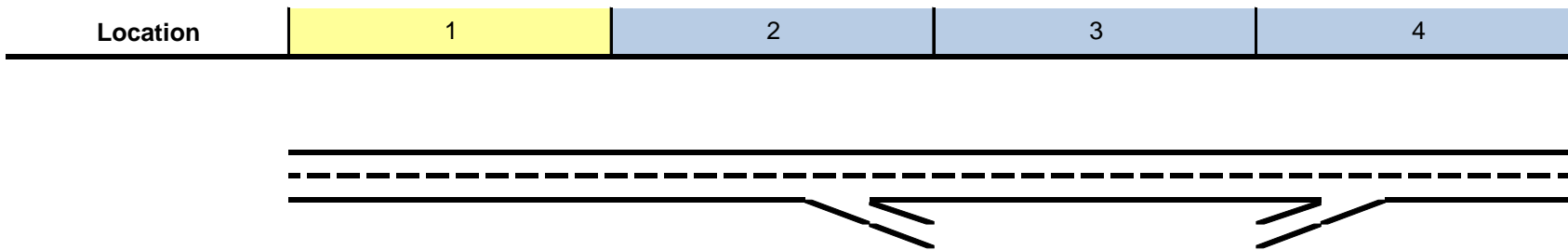
Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Free Flow Speed in Entering GP Lanes</b>				
Lane Width (ft)				
Shoulder Width				
TRD				
$f_{LW}$				
$f_{LC}$				
Calculated FFS				
Measured FFS				
FFS Curve	70	70	70	70
<b>Operations in Entering GP Lanes</b>				
Capacity (pcph)	4,800	4,800	4,800	4,800
v/c ratio	0.25	0.25	0.20	0.20
Speed (mph)	70.0	70.0	70.0	70.0
Density (pcphpl)	8.6	8.6	6.9	6.9
LOS	A	A	A	A
<b>Operations for Segment GP Lanes</b>				
Flow (pcph)				1,493
Lanes				2
Capacity (pcph)				4,800
v/c ratio				0.31
Flow Rate (pcphpl)				747
Speed (mph)				70.0
Density (pcphpl)				10.7
LOS				A
<b>Operations for Exiting GP Lanes</b>				
Flow (pcph)		976		
Lanes		2		
Capacity (pcph)		4,800		
v/c ratio		0.20		
Flow Rate (pcphpl)		488		
Speed (mph)		70.0		
Density (pcphpl)		7.0		
LOS		A		



**Key**

<> Express Lane (HOV)

Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Flow Rate in Express Lanes</b>				
<b>Operations in Express Lanes</b>				
FFS	65	65	65	65
Capacity (pcph)				
v/c ratio				
<b>On Ramp Flow Rate</b>				
Volume (vph)				480
PHF				0.93
Lanes				1
Terrain				Level
Grade %				0.0%
Grade Length (mi)				0.00
Truck & Bus %				2.0%
RV %				0.0%
$E_T$				1.5
$E_R$				1.2
$f_{HV}$				0.990
$f_P$				1.00
Flow (pcph)				521
Flow Rate (pcphpl)				521
<b>On Ramp Roadway Operations</b>				
Ramp Type				Right
Ramp Speed (mph)				45
Ramp Capacity (pcph)				2,100
Ramp v/c ratio				0.25

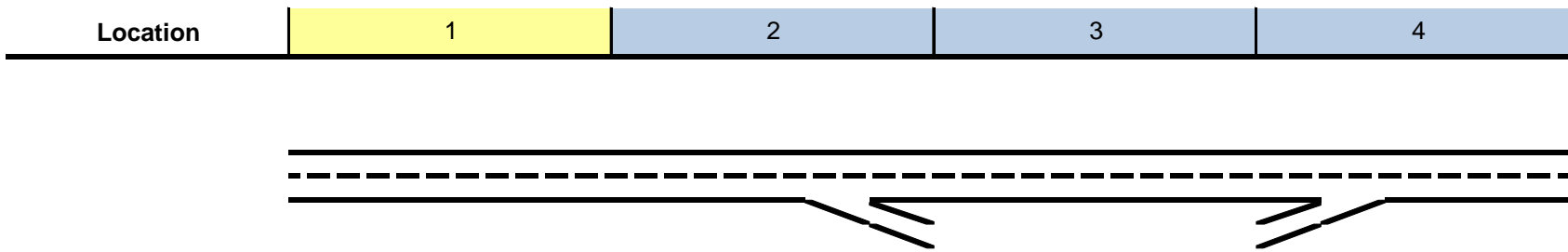


**Key**

<> Express Lane (HOV)

Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Off Ramp Flow Rate</b>				
Volume (vph)		207		
PHF		0.93		
Lanes		1		
Terrain		Level		
Grade %		0.0%		
Grade Length (mi)		0.00		
Truck & Bus %		2.0%		
RV %		0.0%		
$E_T$		1.5		
$E_R$		1.2		
$f_{HV}$		0.990		
$f_P$		1.00		
Flow (pcph)		225		
Flow Rate (pcphpl)		225		
<b>Off Ramp Roadway Operations</b>				
Ramp Type		Right		
Ramp Speed		45		
Ramp Capacity (pcph)		2,100		
Ramp v/c ratio		0.11		
<b>Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps</b>				

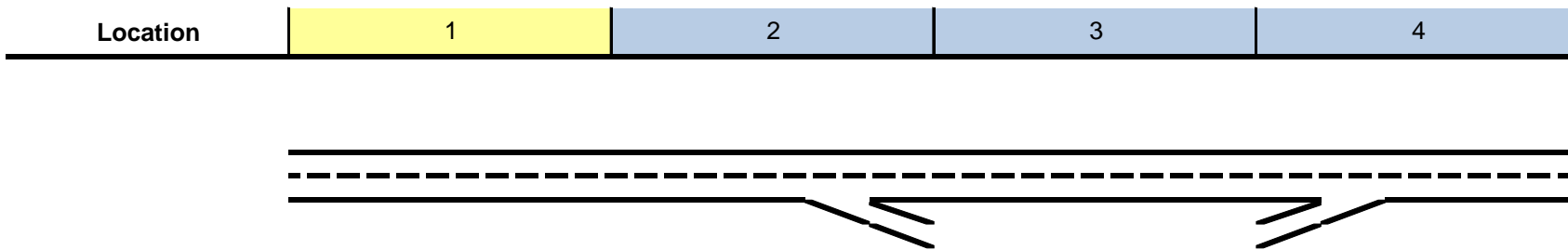




**Key**

<> Express Lane (HOV)

Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Merge Influence Area Operations</b>				
Effective $v_p$ (pcph)				972
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FM}$ (Eqn 13-3)				0.587
$P_{FM}$ (Eqn 13-4)				
$P_{FM}$ (Eqn 13-5)				
$P_{FM}$				1.000
$v_{12}$ (pcph)				972
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)				972
$v_{R12a}$ (pcph)				1,493
Speed Index				0.31
Area Speed				61.4
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed				61.4
v/c ratio				0.32
Density				14.8
LOS				B



**Key**

<> Express Lane (HOV)

Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Diverge Influence Area Operations</b>				
Effective $v_p$ (pcph)		1,201		
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FD}$ (Eqn 13-9)		0.720		
$P_{FD}$ (Eqn 13-10)				
$P_{FD}$ (Eqn 13-11)				
$P_{FD}$		1.000		
$v_{12}$ (pcph)		1,201		
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)		1,201		
Speed Index		0.32		
Area Speed		61.1		
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed		61.1		
v/c ratio		0.27		
Density		13.1		
LOS		B		
<b>On Ramp to Off Ramp Flow Rate for Weave Segments</b>				
<b>On Ramp to Mainline Flow Rate for Weave Segments</b>				
<b>Mainline to Off Ramp Flow Rate for Weave Segments</b>				
<b>General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments</b>				
<b>Weave Segment Operations</b>				
<b>Summarize Segment Operations</b>				
Segment v/c ratio	0.25	0.27	0.20	0.32
Segment Density	8.6	13.1	6.9	14.8
Segment LOS	A	B	A	B
Over Capacity				

# **Existing Plus Approved Projects Plus Project Level of Service (LOS) Calculations**

Intersection	
Intersection Delay, s/veh	16.1
Intersection LOS	C

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations		↶	↷			↶	↷			↶	↷	
Traffic Vol, veh/h	0	9	267	39	0	113	179	11	0	40	62	204
Future Vol, veh/h	0	9	267	39	0	113	179	11	0	40	62	204
Peak Hour Factor	0.92	0.93	0.93	0.93	0.92	0.76	0.76	0.76	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	10	287	42	0	149	236	14	0	43	67	222
Number of Lanes	0	1	1	0	0	1	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	2	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	2	1	2
HCM Control Delay	19.5	14.5	15.7
HCM LOS	C	B	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	100%	0%	100%	0%	100%	0%	36%
Vol Thru, %	0%	23%	0%	87%	0%	94%	54%
Vol Right, %	0%	77%	0%	13%	0%	6%	10%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	40	266	9	306	113	190	99
LT Vol	40	0	9	0	113	0	36
Through Vol	0	62	0	267	0	179	53
RT Vol	0	204	0	39	0	11	10
Lane Flow Rate	43	289	10	329	149	250	119
Geometry Grp	7	7	7	7	7	7	6
Degree of Util (X)	0.092	0.526	0.02	0.617	0.301	0.467	0.254
Departure Headway (Hd)	7.614	6.555	7.352	6.749	7.279	6.727	7.676
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	471	549	487	536	494	535	468
Service Time	5.355	4.296	5.094	4.491	5.023	4.47	5.731
HCM Lane V/C Ratio	0.091	0.526	0.021	0.614	0.302	0.467	0.254
HCM Control Delay	11.1	16.4	10.2	19.8	13.1	15.3	13.3
HCM Lane LOS	B	C	B	C	B	C	B
HCM 95th-tile Q	0.3	3	0.1	4.2	1.3	2.5	1

**Intersection**












Intersection Delay, s/veh  
 Intersection LOS

Movement	SBU	SBL	SBT	SBR
Lane Configurations			↕	
Traffic Vol, veh/h	0	36	53	10
Future Vol, veh/h	0	36	53	10
Peak Hour Factor	0.92	0.83	0.83	0.83
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	43	64	12
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	2
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	13.3
HCM LOS	B

HCM 2010 Signalized Intersection Summary  
2: Denali Dr & Covell Blvd

West Davis Active Adult Community Project EIR  
Existing Plus Approved Projects Plus Project Conditions - AM Peak Hour

								
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations								
Traffic Volume (veh/h)	492	26	103	384	22	176		
Future Volume (veh/h)	492	26	103	384	22	176		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1900		
Adj Flow Rate, veh/h	547	0	111	413	26	0		
Adj No. of Lanes	1	0	1	1	0	0		
Peak Hour Factor	0.90	0.90	0.93	0.93	0.86	0.86		
Percent Heavy Veh, %	2	2	2	2	0	0		
Cap, veh/h	872	0	168	1263	57	0		
Arrive On Green	0.47	0.00	0.09	0.68	0.03	0.00		
Sat Flow, veh/h	1863	0	1774	1863	1711	0		
Grp Volume(v), veh/h	547	0	111	413	27	0		
Grp Sat Flow(s),veh/h/ln	1863	0	1774	1863	1777	0		
Q Serve(g_s), s	7.7	0.0	2.1	3.2	0.5	0.0		
Cycle Q Clear(g_c), s	7.7	0.0	2.1	3.2	0.5	0.0		
Prop In Lane		0.00	1.00		0.96	0.00		
Lane Grp Cap(c), veh/h	872	0	168	1263	59	0		
V/C Ratio(X)	0.63	0.00	0.66	0.33	0.46	0.00		
Avail Cap(c_a), veh/h	1883	0	1025	1883	1026	0		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh	6.9	0.0	15.1	2.3	16.4	0.0		
Incr Delay (d2), s/veh	0.7	0.0	4.4	0.1	11.5	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	4.0	0.0	1.2	1.7	0.4	0.0		
LnGrp Delay(d),s/veh	7.7	0.0	19.5	2.5	28.0	0.0		
LnGrp LOS	A		B	A	C			
Approach Vol, veh/h	547			524	27			
Approach Delay, s/veh	7.7			6.1	28.0			
Approach LOS	A			A	C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	7.3	22.2				29.5		5.1
Change Period (Y+Rc), s	4.0	6.0				6.0		4.0
Max Green Setting (Gmax), s	20.0	35.0				35.0		20.0
Max Q Clear Time (g_c+I1), s	4.1	9.7				5.2		2.5
Green Ext Time (p_c), s	0.2	6.5				6.8		0.1
<b>Intersection Summary</b>								
HCM 2010 Ctrl Delay			7.4					
HCM 2010 LOS			A					
<b>Notes</b>								

User approved volume balancing among the lanes for turning movement.

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Existing Plus Approved Projects Plus Project Conditions  
AM Peak Hour

Intersection 3                      Risling Ct/Sutter Hospital Dwy                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	57	59	102.8%	5.4	1.2	A
	Through	106	113	106.6%	4.8	0.8	A
	Right Turn	31	31	100.0%	3.3	1.0	A
	Subtotal	194	203	104.4%	4.8	0.6	A
SB	Left Turn	1	0	40.0%	0.2	0.5	A
	Through	101	103	101.7%	1.6	2.9	A
	Right Turn						
	Subtotal	102	103	101.1%	1.6	2.9	A
EB	Left Turn						
	Through	4	5	115.0%	3.8	4.3	A
	Right Turn	57	57	100.7%	9.2	13.4	A
	Subtotal	61	62	101.6%	9.1	12.6	A
WB	Left Turn	11	10	94.5%	5.4	3.7	A
	Through	3	3	103.3%	3.0	3.1	A
	Right Turn	2	2	105.0%	1.4	2.1	A
	Subtotal	16	16	97.5%	5.6	2.8	A
Total		373	383	102.8%	4.5	2.4	A

Intersection 4                      Risling Ct-Shasta Dr/W Covell Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	12	10	83.3%	61.7	36.8	E
	Through	19	22	115.8%	48.7	15.1	D
	Right Turn	269	269	99.8%	5.8	4.9	A
	Subtotal	300	301	100.2%	11.3	6.7	B
SB	Left Turn	136	134	98.8%	88.3	48.4	F
	Through	12	11	94.2%	58.4	36.6	E
	Right Turn	21	24	112.4%	48.3	52.0	D
	Subtotal	169	169	100.1%	79.9	47.1	E
EB	Left Turn	64	65	102.2%	71.6	22.1	E
	Through	616	614	99.7%	18.6	4.4	B
	Right Turn	14	13	95.0%	11.7	6.0	B
	Subtotal	694	693	99.9%	24.0	4.8	C
WB	Left Turn	131	129	98.6%	57.1	9.9	E
	Through	496	497	100.3%	12.6	0.9	B
	Right Turn	116	121	104.1%	5.5	0.8	A
	Subtotal	743	747	100.6%	19.6	2.7	B
Total		1,906	1,910	100.2%	25.4	6.1	C



SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Existing Plus Approved Projects Plus Project Conditions  
AM Peak Hour

Intersection 5                      John Jones Rd/W Covell Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	185	189	102.3%	30.1	4.0	C
	Through						
	Right Turn	59	60	102.0%	6.3	1.7	A
	Subtotal	244	250	102.3%	24.2	3.3	C
EB	Left Turn	76	76	99.7%	62.2	12.2	E
	Through	949	946	99.6%	31.9	14.7	C
	Right Turn						
	Subtotal	1,025	1,021	99.6%	34.3	14.0	C
WB	Left Turn						
	Through	684	686	100.3%	13.1	2.1	B
	Right Turn	301	298	98.9%	9.2	1.4	A
	Subtotal	985	984	99.8%	11.9	1.8	B
Total		2,254	2,254	100.0%	23.4	5.8	C

Intersection 6                      SR 113 SB Ramps/W Covell Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	158	169	107.0%	42.8	4.1	D
	Through	1	1	100.0%	6.7	14.4	A
	Right Turn	140	139	99.4%	43.2	6.6	D
	Subtotal	299	309	103.4%	42.9	4.4	D
EB	Left Turn						
	Through	657	651	99.0%	33.7	6.9	C
	Right Turn	477	483	101.2%	37.7	7.5	D
	Subtotal	1,134	1,133	99.9%	35.5	7.2	D
WB	Left Turn	478	471	98.5%	75.7	7.5	E
	Through	845	843	99.8%	13.2	1.2	B
	Right Turn						
	Subtotal	1,323	1,314	99.3%	35.9	5.0	D
Total		2,756	2,756	100.0%	36.4	4.4	D

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Existing Plus Approved Projects Plus Project Conditions  
AM Peak Hour






















Intersection 7 SR 113 NB Ramps/W Covell Blvd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	331	330	99.8%	41.0	6.2	D
	Through	1	0	40.0%	21.8	47.9	C
	Right Turn	315	316	100.3%	12.0	1.4	B
	Subtotal	647	647	100.0%	27.0	4.2	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	90	81	89.9%	54.5	15.7	D
	Through	725	738	101.8%	17.6	1.8	B
	Right Turn						
	Subtotal	815	819	100.5%	21.5	1.2	C
WB	Left Turn						
	Through	991	987	99.6%	32.7	11.3	C
	Right Turn	151	159	105.2%	18.2	7.2	B
	Subtotal	1,142	1,146	100.4%	30.6	10.7	C
Total		2,604	2,612	100.3%	26.8	5.0	C



















Intersection 8 Sycamore Ln/W Covell Blvd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	197	202	102.3%	45.1	5.9	D
	Through	35	37	104.6%	35.3	8.9	D
	Right Turn	39	40	102.1%	11.7	7.8	B
	Subtotal	271	278	102.5%	39.0	5.2	D
SB	Left Turn	71	72	101.3%	47.3	10.9	D
	Through	81	78	96.3%	40.8	7.9	D
	Right Turn	216	216	100.0%	18.6	6.5	B
	Subtotal	368	366	99.4%	29.2	6.9	C
EB	Left Turn	118	121	102.2%	52.5	7.6	D
	Through	574	572	99.7%	32.3	3.4	C
	Right Turn	168	175	104.2%	19.7	2.3	B
	Subtotal	860	868	100.9%	32.5	2.8	C
WB	Left Turn	30	30	98.7%	55.5	10.2	E
	Through	657	655	99.6%	27.5	3.8	C
	Right Turn	58	57	98.3%	18.7	4.6	B
	Subtotal	745	741	99.5%	27.9	3.6	C
Total		2,244	2,253	100.4%	31.3	2.5	C

HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 9: Anderson Rd & Covell Blvd Existing Plus Approved Projects Plus Project Conditions - AM Peak Hour






















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	511	148	189	451	37	166	57	71	52	158	107
Future Volume (veh/h)	30	511	148	189	451	37	166	57	71	52	158	107
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1855	1900	1863	1863	1727	1792	1815	1900	1863	1800	1900
Adj Flow Rate, veh/h	37	623	0	222	531	0	193	66	0	57	174	0
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	1	2	0
Peak Hour Factor	0.82	0.82	0.82	0.85	0.85	0.85	0.86	0.86	0.86	0.91	0.91	0.91
Percent Heavy Veh, %	7	2	2	2	2	10	6	8	8	2	8	8
Cap, veh/h	60	1241	0	272	1662	690	240	391	0	81	412	0
Arrive On Green	0.04	0.35	0.00	0.15	0.47	0.00	0.14	0.22	0.00	0.05	0.12	0.00
Sat Flow, veh/h	1691	3616	0	1774	3539	1468	1707	1815	0	1774	3509	0
Grp Volume(v), veh/h	37	623	0	222	531	0	193	66	0	57	174	0
Grp Sat Flow(s),veh/h/ln	1691	1762	0	1774	1770	1468	1707	1815	0	1774	1710	0
Q Serve(g_s), s	1.7	10.7	0.0	9.3	7.2	0.0	8.4	2.3	0.0	2.4	3.6	0.0
Cycle Q Clear(g_c), s	1.7	10.7	0.0	9.3	7.2	0.0	8.4	2.3	0.0	2.4	3.6	0.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	60	1241	0	272	1662	690	240	391	0	81	412	0
V/C Ratio(X)	0.62	0.50	0.00	0.82	0.32	0.00	0.80	0.17	0.00	0.70	0.42	0.00
Avail Cap(c_a), veh/h	879	2060	0	692	2069	858	887	944	0	922	1777	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	36.6	19.6	0.0	31.5	12.7	0.0	32.1	24.6	0.0	36.2	31.4	0.0
Incr Delay (d2), s/veh	9.8	0.3	0.0	6.0	0.4	0.0	6.2	0.2	0.0	10.5	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	5.2	0.0	5.0	3.6	0.0	4.4	1.2	0.0	1.4	1.8	0.0
LnGrp Delay(d),s/veh	46.4	19.9	0.0	37.5	13.1	0.0	38.3	24.8	0.0	46.7	32.1	0.0
LnGrp LOS	D	B		D	B		D	C		D	C	
Approach Vol, veh/h		660			753			259			231	
Approach Delay, s/veh		21.4			20.3			34.9			35.7	
Approach LOS		C			C			C			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.8	32.1	14.8	13.3	7.7	41.1	7.5	20.6				
Change Period (Y+Rc), s	5.0	5.0	4.0	4.0	5.0	5.0	4.0	4.0				
Max Green Setting (Gmax), s	30.0	45.0	40.0	40.0	40.0	45.0	40.0	40.0				
Max Q Clear Time (g_c+I1), s	11.3	12.7	10.4	5.6	3.7	9.2	4.4	4.3				
Green Ext Time (p_c), s	0.6	14.4	0.6	1.6	0.1	15.1	0.1	1.6				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				24.5								
HCM 2010 LOS				C								

HCM 2010 Signalized Intersection Summary **West Davis Active Adult Community Project EIR**  
 10: Oak Ave & Covell Blvd Existing Plus Approved Projects Plus Project Conditions - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	497	84	100	650	0	103	0	183	0	0	0
Future Volume (veh/h)	0	497	84	100	650	0	103	0	183	0	0	0
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	0	1863	0	1863	1900	1863	1900
Adj Flow Rate, veh/h	0	654	0	122	793	0	184	0	0	0	0	0
Adj No. of Lanes	0	2	0	1	2	0	1	0	1	0	1	0
Peak Hour Factor	0.92	0.76	0.76	0.82	0.82	0.92	0.56	0.92	0.56	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0	2	0	2	2	2	2
Cap, veh/h	0	1577	0	164	2255	0	247	0	0	0	5	0
Arrive On Green	0.00	0.45	0.00	0.09	0.64	0.00	0.14	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	0	3725	0	1774	3632	0	1774	184		0	-93137	0
Grp Volume(v), veh/h	0	654	0	122	793	0	184	21.1		0	0	0
Grp Sat Flow(s),veh/h/ln	0	1770	0	1774	1770	0	1774	C		0	1863	0
Q Serve(g_s), s	0.0	5.1	0.0	2.7	4.2	0.0	4.0			0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	5.1	0.0	2.7	4.2	0.0	4.0			0.0	0.0	0.0
Prop In Lane	0.00		0.00	1.00		0.00	1.00			0.00		0.00
Lane Grp Cap(c), veh/h	0	1577	0	164	2255	0	247			0	5	0
V/C Ratio(X)	0.00	0.41	0.00	0.74	0.35	0.00	0.74			0.00	0.00	0.00
Avail Cap(c_a), veh/h	0	2724	0	661	2812	0	881			0	694	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00	1.00			0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	7.6	0.0	17.8	3.4	0.0	16.6			0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	6.5	0.1	0.0	4.4			0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.5	0.0	1.6	2.0	0.0	2.2			0.0	0.0	0.0
LnGrp Delay(d),s/veh	0.0	7.8	0.0	24.3	3.5	0.0	21.1			0.0	0.0	0.0
LnGrp LOS		A		C	A		C					
Approach Vol, veh/h		654			915							0
Approach Delay, s/veh		7.8			6.3							0.0
Approach LOS		A			A							
<b>Timer</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>				
Assigned Phs		2	3	4	5	6						
Phs Duration (G+Y+Rc), s		30.7	9.6	0.0	7.7	22.9						
Change Period (Y+Rc), s		5.0	4.0	5.0	4.0	5.0						
Max Green Setting (Gmax), s		32.0	20.0	15.0	15.0	31.0						
Max Q Clear Time (g_c+I1), s		6.2	6.0	0.0	4.7	7.1						
Green Ext Time (p_c), s		11.3	0.4	0.0	0.2	10.9						
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				8.4								
HCM 2010 LOS				A								
<b>Notes</b>												






















User approved pedestrian interval to be less than phase max green.

HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 11: F St & Covell Blvd Existing Plus Approved Projects Plus Project Conditions - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	714	94	238	634	96	59	77	146	201	218	69
Future Volume (veh/h)	38	714	94	238	634	96	59	77	146	201	218	69
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1845	1863	1900	1845	1851	1900	1863	1845	1900
Adj Flow Rate, veh/h	51	952	0	309	823	0	76	99	0	242	263	0
Adj No. of Lanes	1	2	1	2	2	0	1	1	0	1	1	0
Peak Hour Factor	0.75	0.75	0.75	0.77	0.77	0.77	0.78	0.78	0.78	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	3	2	2	3	2	2	2	2	2
Cap, veh/h	75	1318	590	405	1591	0	100	248	0	294	448	0
Arrive On Green	0.04	0.37	0.00	0.12	0.45	0.00	0.06	0.13	0.00	0.17	0.24	0.00
Sat Flow, veh/h	1774	3539	1583	3408	3632	0	1757	1851	0	1774	1845	0
Grp Volume(v), veh/h	51	952	0	309	823	0	76	99	0	242	263	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1704	1770	0	1757	1851	0	1774	1845	0
Q Serve(g_s), s	2.3	18.8	0.0	7.2	13.6	0.0	3.5	4.0	0.0	10.7	10.2	0.0
Cycle Q Clear(g_c), s	2.3	18.8	0.0	7.2	13.6	0.0	3.5	4.0	0.0	10.7	10.2	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	75	1318	590	405	1591	0	100	248	0	294	448	0
V/C Ratio(X)	0.68	0.72	0.00	0.76	0.52	0.00	0.76	0.40	0.00	0.82	0.59	0.00
Avail Cap(c_a), veh/h	654	1956	875	1256	1956	0	647	682	0	654	680	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	38.5	21.9	0.0	34.7	16.1	0.0	37.8	32.3	0.0	32.8	27.2	0.0
Incr Delay (d2), s/veh	4.1	0.3	0.0	1.1	0.1	0.0	11.2	1.0	0.0	6.8	1.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	9.2	0.0	3.4	6.7	0.0	2.0	2.1	0.0	5.8	5.4	0.0
LnGrp Delay(d),s/veh	42.5	22.2	0.0	35.9	16.2	0.0	49.0	33.3	0.0	39.6	28.7	0.0
LnGrp LOS	D	C		D	B		D	C		D	C	
Approach Vol, veh/h		1003			1132			175			505	
Approach Delay, s/veh		23.2			21.6			40.1			33.9	
Approach LOS		C			C			D			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.4	41.6	8.6	23.8	13.7	35.3	17.5	14.9				
Change Period (Y+Rc), s	4.0	5.0	4.0	4.0	4.0	5.0	4.0	4.0				
Max Green Setting (Gmax), s	30.0	45.0	30.0	30.0	30.0	45.0	30.0	30.0				
Max Q Clear Time (g_c+I1), s	4.3	15.6	5.5	12.2	9.2	20.8	12.7	6.0				
Green Ext Time (p_c), s	0.0	10.2	0.2	2.3	0.5	9.5	0.8	2.6				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			25.5									
HCM 2010 LOS			C									
<b>Notes</b>												

User approved pedestrian interval to be less than phase max green.

HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 12: J St/Cannery Ave & Covell Blvd Existing Plus Approved Projects Plus Project Conditions - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	158	680	223	49	741	128	154	45	72	196	121	60
Future Volume (veh/h)	158	680	223	49	741	128	154	45	72	196	121	60
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.96	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1810	1743	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	200	861	182	66	1001	159	192	56	21	213	132	47
Adj No. of Lanes	1	2	1	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.79	0.79	0.79	0.74	0.74	0.74	0.80	0.80	0.80	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	5	9	2	2	2	2	2	2	2	2
Cap, veh/h	243	1538	661	84	1064	169	235	182	68	262	204	73
Arrive On Green	0.14	0.43	0.43	0.05	0.35	0.35	0.13	0.14	0.14	0.15	0.16	0.16
Sat Flow, veh/h	1774	3539	1522	1660	3055	485	1774	1276	479	1774	1295	461
Grp Volume(v), veh/h	200	861	182	66	579	581	192	0	77	213	0	179
Grp Sat Flow(s),veh/h/ln	1774	1770	1522	1660	1770	1770	1774	0	1755	1774	0	1755
Q Serve(g_s), s	9.3	15.4	6.5	3.3	26.9	27.0	8.9	0.0	3.3	9.9	0.0	8.1
Cycle Q Clear(g_c), s	9.3	15.4	6.5	3.3	26.9	27.0	8.9	0.0	3.3	9.9	0.0	8.1
Prop In Lane	1.00		1.00	1.00		0.27	1.00		0.27	1.00		0.26
Lane Grp Cap(c), veh/h	243	1538	661	84	616	616	235	0	250	262	0	277
V/C Ratio(X)	0.82	0.56	0.28	0.78	0.94	0.94	0.82	0.00	0.31	0.81	0.00	0.65
Avail Cap(c_a), veh/h	419	1538	661	392	627	627	419	0	829	419	0	829
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.5	17.9	15.4	39.7	26.8	26.8	35.7	0.0	32.6	35.0	0.0	33.5
Incr Delay (d2), s/veh	8.1	0.5	0.3	17.0	22.4	22.7	8.1	0.0	0.8	11.0	0.0	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	7.5	2.8	1.9	16.9	16.9	4.9	0.0	1.7	5.6	0.0	4.3
LnGrp Delay(d),s/veh	43.6	18.4	15.7	56.8	49.1	49.5	43.8	0.0	33.4	45.9	0.0	38.1
LnGrp LOS	D	B	B	E	D	D	D		C	D		D
Approach Vol, veh/h		1243			1226			269			392	
Approach Delay, s/veh		22.1			49.7			40.8			42.4	
Approach LOS		C			D			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.7	18.9	16.1	34.0	17.0	17.6	8.8	41.3				
Change Period (Y+Rc), s	4.5	5.5	4.5	4.5	4.5	5.5	4.5	4.5				
Max Green Setting (Gmax), s	20.0	40.0	20.0	30.0	20.0	40.0	20.0	30.0				
Max Q Clear Time (g_c+I1), s	10.9	10.1	11.3	29.0	11.9	5.3	5.3	17.4				
Green Ext Time (p_c), s	0.4	2.5	0.4	0.5	0.7	2.6	0.1	10.5				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			37.0									
HCM 2010 LOS			D									



SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Existing Plus Approved Projects Plus Project Conditions  
AM Peak Hour

Intersection 13

Project Dwy/Covell Blvd

Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn						
	Through						
	Right Turn	16	14	90.0%	3.9	1.5	A
	Subtotal	16	14	90.0%	3.9	1.5	A
EB	Left Turn						
	Through	694	691	99.6%	1.2	0.2	A
	Right Turn						
	Subtotal	694	691	99.6%	1.2	0.2	A
WB	Left Turn						
	Through	502	504	100.4%	2.6	0.3	A
	Right Turn	32	34	105.3%	2.3	0.7	A
	Subtotal	534	538	100.7%	2.6	0.3	A
Total		1,244	1,243	99.9%	1.8	0.2	A

Intersection	
Intersection Delay, s/veh	18
Intersection LOS	C

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations		↶	↷			↶	↷			↶	↷	
Traffic Vol, veh/h	0	22	237	38	0	235	276	34	0	38	46	186
Future Vol, veh/h	0	22	237	38	0	235	276	34	0	38	46	186
Peak Hour Factor	0.92	0.83	0.83	0.83	0.92	0.91	0.91	0.91	0.92	0.88	0.88	0.88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	27	286	46	0	258	303	37	0	43	52	211
Number of Lanes	0	1	1	0	0	1	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	SB
Opposing Lanes	2	2	1
Conflicting Approach Left	SB	NB	EB
Conflicting Lanes Left	1	2	2
Conflicting Approach Right	NB	SB	WB
Conflicting Lanes Right	2	1	2
HCM Control Delay	20.1	18.6	15.8
HCM LOS	C	C	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1
Vol Left, %	100%	0%	100%	0%	100%	0%	26%
Vol Thru, %	0%	20%	0%	86%	0%	89%	61%
Vol Right, %	0%	80%	0%	14%	0%	11%	13%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	38	232	22	275	235	310	82
LT Vol	38	0	22	0	235	0	21
Through Vol	0	46	0	237	0	276	50
RT Vol	0	186	0	38	0	34	11
Lane Flow Rate	43	264	27	331	258	341	88
Geometry Grp	7	7	7	7	7	7	6
Degree of Util (X)	0.096	0.504	0.055	0.635	0.514	0.623	0.198
Departure Headway (Hd)	7.976	6.889	7.51	6.899	7.169	6.579	8.064
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	450	525	477	523	504	548	444
Service Time	5.716	4.63	5.253	4.642	4.909	4.32	6.121
HCM Lane V/C Ratio	0.096	0.503	0.057	0.633	0.512	0.622	0.198
HCM Control Delay	11.6	16.5	10.7	20.9	17.3	19.6	13.1
HCM Lane LOS	B	C	B	C	C	C	B
HCM 95th-tile Q	0.3	2.8	0.2	4.4	2.9	4.3	0.7

**Intersection**












Intersection Delay, s/veh  
 Intersection LOS

Movement	SBU	SBL	SBT	SBR
Lane Configurations			↕	
Traffic Vol, veh/h	0	21	50	11
Future Vol, veh/h	0	21	50	11
Peak Hour Factor	0.92	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2
Mvmt Flow	0	23	54	12
Number of Lanes	0	0	1	0

Approach	SB
Opposing Approach	NB
Opposing Lanes	2
Conflicting Approach Left	WB
Conflicting Lanes Left	2
Conflicting Approach Right	EB
Conflicting Lanes Right	2
HCM Control Delay	13.1
HCM LOS	B

HCM 2010 Signalized Intersection Summary  
2: Denali Dr & Covell Blvd

West Davis Active Adult Community Project EIR  
Existing Plus Approved Project Plus Project Conditions - PM Peak Hour

								
Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations								
Traffic Volume (veh/h)	480	27	150	542	21	105		
Future Volume (veh/h)	480	27	150	542	21	105		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1900		
Adj Flow Rate, veh/h	539	0	156	565	25	0		
Adj No. of Lanes	1	0	1	1	0	0		
Peak Hour Factor	0.89	0.89	0.96	0.96	0.83	0.83		
Percent Heavy Veh, %	2	2	2	2	0	0		
Cap, veh/h	887	0	210	1306	54	0		
Arrive On Green	0.48	0.00	0.12	0.70	0.03	0.00		
Sat Flow, veh/h	1863	0	1774	1863	1709	0		
Grp Volume(v), veh/h	539	0	156	565	26	0		
Grp Sat Flow(s),veh/h/ln	1863	0	1774	1863	1777	0		
Q Serve(g_s), s	8.0	0.0	3.2	4.9	0.5	0.0		
Cycle Q Clear(g_c), s	8.0	0.0	3.2	4.9	0.5	0.0		
Prop In Lane		0.00	1.00		0.96	0.00		
Lane Grp Cap(c), veh/h	887	0	210	1306	56	0		
V/C Ratio(X)	0.61	0.00	0.74	0.43	0.46	0.00		
Avail Cap(c_a), veh/h	1743	0	948	1743	950	0		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh	7.2	0.0	15.9	2.4	17.8	0.0		
Incr Delay (d2), s/veh	0.7	0.0	5.2	0.2	12.1	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	4.2	0.0	1.9	2.4	0.4	0.0		
LnGrp Delay(d),s/veh	7.9	0.0	21.1	2.6	29.9	0.0		
LnGrp LOS	A		C	A	C			
Approach Vol, veh/h	539			721	26			
Approach Delay, s/veh	7.9			6.6	29.9			
Approach LOS	A			A	C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	8.4	23.8				32.2		5.2
Change Period (Y+Rc), s	4.0	6.0				6.0		4.0
Max Green Setting (Gmax), s	20.0	35.0				35.0		20.0
Max Q Clear Time (g_c+I1), s	5.2	10.0				6.9		2.5
Green Ext Time (p_c), s	0.3	7.8				8.1		0.1
<b>Intersection Summary</b>								
HCM 2010 Ctrl Delay			7.6					
HCM 2010 LOS			A					
<b>Notes</b>								

User approved volume balancing among the lanes for turning movement.

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Existing Plus Approved Projects Plus Project Conditions  
PM Peak Hour

Intersection 3 Risling Ct/Sutter Hospital Dwy Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	44	46	105.0%	4.8	0.7	A
	Through	44	45	102.5%	3.8	1.0	A
	Right Turn	19	19	100.5%	2.9	0.9	A
	Subtotal	107	110	103.2%	4.2	0.5	A
SB	Left Turn	3	3	86.7%	0.9	0.8	A
	Through	107	105	97.7%	0.2	0.2	A
	Right Turn	1	2	200.0%	0.0	0.0	A
	Subtotal	111	109	98.3%	0.2	0.2	A
EB	Left Turn						
	Through	2	3	170.0%	2.4	3.3	A
	Right Turn	41	64	155.4%	3.0	0.6	A
	Subtotal	43	67	156.0%	3.1	0.6	A
WB	Left Turn	20	18	91.5%	4.1	0.6	A
	Through	4	5	130.0%	2.3	3.8	A
	Right Turn						
	Subtotal	24	24	97.9%	4.2	0.9	A
Total		285	310	108.8%	2.7	0.2	A

Intersection 4 Risling Ct-Shasta Dr/W Covell Blvd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	14	13	92.1%	39.1	23.8	D
	Through	12	13	108.3%	42.4	11.8	D
	Right Turn	185	185	99.7%	3.4	0.6	A
	Subtotal	211	210	99.7%	9.9	2.6	A
SB	Left Turn	125	135	107.7%	41.6	7.0	D
	Through	9	14	151.1%	45.0	28.0	D
	Right Turn	34	40	118.2%	14.3	7.5	B
	Subtotal	168	188	112.1%	35.2	6.4	D
EB	Left Turn	39	39	99.0%	56.4	18.2	E
	Through	515	529	102.7%	14.4	3.1	B
	Right Turn	15	16	107.3%	3.3	1.3	A
	Subtotal	569	584	102.5%	17.8	3.4	B
WB	Left Turn	201	207	102.9%	46.9	4.5	D
	Through	686	692	100.9%	10.2	3.8	B
	Right Turn	68	69	101.0%	5.8	2.2	A
	Subtotal	955	968	101.3%	18.1	2.4	B
Total		1,903	1,950	102.5%	18.7	1.6	B

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Existing Plus Approved Projects Plus Project Conditions  
PM Peak Hour

Intersection 5                      John Jones Rd/W Covell Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	233	231	99.2%	39.5	6.1	D
	Through						
	Right Turn	58	62	106.0%	6.5	1.2	A
	Subtotal	291	293	100.5%	32.4	4.2	C
EB	Left Turn	36	35	96.7%	52.7	7.2	D
	Through	793	815	102.8%	11.0	2.2	B
	Right Turn						
	Subtotal	829	850	102.6%	12.7	2.1	B
WB	Left Turn						
	Through	897	903	100.7%	10.7	2.6	B
	Right Turn	175	180	102.7%	8.4	2.0	A
	Subtotal	1,072	1,083	101.0%	10.3	2.5	B
Total		2,192	2,226	101.5%	14.2	1.7	B

Intersection 6                      SR 113 SB Ramps/W Covell Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	130	121	93.2%	37.1	4.9	D
	Through	1	1	90.0%	2.8	9.0	A
	Right Turn	96	100	104.6%	38.2	6.9	D
	Subtotal	227	223	98.0%	37.7	5.0	D
EB	Left Turn						
	Through	759	782	103.0%	21.6	3.7	C
	Right Turn	267	269	100.8%	17.6	2.9	B
	Subtotal	1,026	1,051	102.5%	20.6	3.4	C
WB	Left Turn	245	255	104.0%	48.9	7.1	D
	Through	976	984	100.8%	7.7	2.0	A
	Right Turn						
	Subtotal	1,221	1,239	101.5%	16.5	3.1	B
Total		2,474	2,513	101.6%	20.1	2.4	C

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Existing Plus Approved Projects Plus Project Conditions  
PM Peak Hour

Intersection 7 SR 113 NB Ramps/W Covell Blvd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	394	395	100.3%	36.9	4.0	D
	Through						
	Right Turn	592	605	102.2%	35.9	17.3	D
	Subtotal	986	1,001	101.5%	36.4	10.1	D
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	108	113	104.4%	70.3	17.8	E
	Through	787	792	100.6%	11.8	2.5	B
	Right Turn						
	Subtotal	895	905	101.1%	19.4	4.4	B
WB	Left Turn						
	Through	825	841	101.9%	16.6	2.9	B
	Right Turn	170	177	103.9%	7.8	1.5	A
	Subtotal	995	1,017	102.2%	15.0	2.6	B
Total		2,876	2,922	101.6%	23.7	3.4	C






















Intersection 8 Sycamore Ln/W Covell Blvd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	123	123	100.3%	41.3	13.7	D
	Through	51	47	92.7%	40.9	12.2	D
	Right Turn	46	47	102.6%	9.2	6.9	A
	Subtotal	220	218	99.0%	34.0	10.0	C
SB	Left Turn	153	152	99.1%	50.8	14.0	D
	Through	77	77	100.0%	44.0	10.4	D
	Right Turn	125	127	101.6%	20.2	8.9	C
	Subtotal	355	356	100.2%	39.0	10.0	D
EB	Left Turn	169	173	102.5%	52.7	13.3	D
	Through	835	846	101.3%	16.4	2.7	B
	Right Turn	131	132	100.6%	10.5	3.4	B
	Subtotal	1,135	1,151	101.4%	21.5	3.5	C
WB	Left Turn	27	23	85.6%	40.1	13.9	D
	Through	662	682	103.0%	24.7	3.5	C
	Right Turn	102	106	104.0%	18.9	6.8	B
	Subtotal	791	811	102.5%	24.3	4.0	C
Total		2,501	2,535	101.4%	26.0	2.8	C





















HCM 2010 Signalized Intersection Summary  
9: Anderson Rd & Covell Blvd

West Davis Active Adult Community Project EIR  
Existing Plus Approved Project Plus Project Conditions - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	814	142	92	505	74	257	134	126	70	119	45
Future Volume (veh/h)	45	814	142	92	505	74	257	134	126	70	119	45
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1857	1900	1863	1863	1727	1792	1808	1900	1863	1786	1900
Adj Flow Rate, veh/h	49	885	0	101	555	0	299	156	0	92	157	0
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.91	0.91	0.91	0.86	0.86	0.86	0.76	0.76	0.76
Percent Heavy Veh, %	7	2	2	2	2	10	6	8	8	2	8	8
Cap, veh/h	63	1310	0	130	1442	598	340	552	0	120	592	0
Arrive On Green	0.04	0.37	0.00	0.07	0.41	0.00	0.20	0.31	0.00	0.07	0.17	0.00
Sat Flow, veh/h	1691	3622	0	1774	3539	1468	1707	1808	0	1774	3483	0
Grp Volume(v), veh/h	49	885	0	101	555	0	299	156	0	92	157	0
Grp Sat Flow(s),veh/h/ln	1691	1764	0	1774	1770	1468	1707	1808	0	1774	1697	0
Q Serve(g_s), s	2.8	20.8	0.0	5.5	10.9	0.0	16.8	6.5	0.0	5.0	4.0	0.0
Cycle Q Clear(g_c), s	2.8	20.8	0.0	5.5	10.9	0.0	16.8	6.5	0.0	5.0	4.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	63	1310	0	130	1442	598	340	552	0	120	592	0
V/C Ratio(X)	0.78	0.68	0.00	0.77	0.38	0.00	0.88	0.28	0.00	0.77	0.27	0.00
Avail Cap(c_a), veh/h	683	1605	0	538	1609	668	690	731	0	717	1372	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	47.2	26.1	0.0	45.0	20.6	0.0	38.5	26.1	0.0	45.4	35.4	0.0
Incr Delay (d2), s/veh	18.0	0.8	0.0	9.3	0.6	0.0	7.4	0.3	0.0	9.7	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	10.2	0.0	3.1	5.4	0.0	8.6	3.3	0.0	2.8	1.9	0.0
LnGrp Delay(d),s/veh	65.2	27.0	0.0	54.4	21.2	0.0	45.9	26.4	0.0	55.0	35.6	0.0
LnGrp LOS	E	C		D	C		D	C		E	D	
Approach Vol, veh/h		934			656			455			249	
Approach Delay, s/veh		29.0			26.3			39.2			42.8	
Approach LOS		C			C			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.3	41.7	23.7	21.2	8.7	45.3	10.7	34.2				
Change Period (Y+Rc), s	5.0	5.0	4.0	4.0	5.0	5.0	4.0	4.0				
Max Green Setting (Gmax), s	30.0	45.0	40.0	40.0	40.0	45.0	40.0	40.0				
Max Q Clear Time (g_c+I1), s	7.5	22.8	18.8	6.0	4.8	12.9	7.0	8.5				
Green Ext Time (p_c), s	0.2	13.9	0.9	2.0	0.1	17.5	0.2	2.0				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				31.7								
HCM 2010 LOS				C								

HCM 2010 Signalized Intersection Summary  
10: Oak Ave & Covell Blvd






















West Davis Active Adult Community Project EIR  
Existing Plus Approved Project Plus Project Conditions - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1002	82	77	575	0	140	0	166	0	0	0
Future Volume (veh/h)	0	1002	82	77	575	0	140	0	166	0	0	0
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	0	1863	0	1863	1900	1863	1900
Adj Flow Rate, veh/h	0	1022	0	87	646	0	147	0	0	0	0	0
Adj No. of Lanes	0	2	0	1	2	0	1	0	1	0	1	0
Peak Hour Factor	0.98	0.98	0.98	0.89	0.89	0.89	0.95	0.95	0.95	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0	2	0	2	2	2	2
Cap, veh/h	0	1820	0	133	2411	0	197	0	0	0	4	0
Arrive On Green	0.00	0.51	0.00	0.07	0.68	0.00	0.11	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	0	3725	0	1774	3632	0	1774	147		0	-93137	0
Grp Volume(v), veh/h	0	1022	0	87	646	0	147	24.2		0	0	0
Grp Sat Flow(s),veh/h/ln	0	1770	0	1774	1770	0	1774	C		0	1863	0
Q Serve(g_s), s	0.0	8.5	0.0	2.1	3.1	0.0	3.5			0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	8.5	0.0	2.1	3.1	0.0	3.5			0.0	0.0	0.0
Prop In Lane	0.00		0.00	1.00		0.00	1.00			0.00		0.00
Lane Grp Cap(c), veh/h	0	1820	0	133	2411	0	197			0	4	0
V/C Ratio(X)	0.00	0.56	0.00	0.65	0.27	0.00	0.75			0.00	0.00	0.00
Avail Cap(c_a), veh/h	0	2532	0	614	2613	0	819			0	645	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00	1.00			0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	7.2	0.0	19.5	2.7	0.0	18.7			0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	5.4	0.1	0.0	5.5			0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.2	0.0	1.2	1.5	0.0	2.0			0.0	0.0	0.0
LnGrp Delay(d),s/veh	0.0	7.5	0.0	24.9	2.8	0.0	24.2			0.0	0.0	0.0
LnGrp LOS		A		C	A		C					
Approach Vol, veh/h		1022			733							0
Approach Delay, s/veh		7.5			5.4							0.0
Approach LOS		A			A							
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4	5	6						
Phs Duration (G+Y+Rc), s		34.5	8.8	0.0	7.2	27.3						
Change Period (Y+Rc), s		5.0	4.0	5.0	4.0	5.0						
Max Green Setting (Gmax), s		32.0	20.0	15.0	15.0	31.0						
Max Q Clear Time (g_c+I1), s		5.1	5.5	0.0	4.1	10.5						
Green Ext Time (p_c), s		13.7	0.3	0.0	0.1	11.7						
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			8.0									
HCM 2010 LOS			A									
<b>Notes</b>												

User approved pedestrian interval to be less than phase max green.

HCM 2010 Signalized Intersection Summary  
 11: F St & Covell Blvd






















West Davis Active Adult Community Project EIR  
 Existing Plus Approved Project Plus Project Conditions - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	925	257	188	620	185	122	151	224	120	131	49
Future Volume (veh/h)	68	925	257	188	620	185	122	151	224	120	131	49
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1845	1863	1900	1845	1852	1900	1863	1843	1900
Adj Flow Rate, veh/h	76	1028	0	211	697	0	137	170	0	138	151	0
Adj No. of Lanes	1	2	1	2	2	0	1	1	0	1	1	0
Peak Hour Factor	0.90	0.90	0.90	0.89	0.89	0.89	0.89	0.89	0.89	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	3	2	2	3	2	2	2	2	2
Cap, veh/h	99	1411	631	309	1534	0	178	331	0	182	332	0
Arrive On Green	0.06	0.40	0.00	0.09	0.43	0.00	0.10	0.18	0.00	0.10	0.18	0.00
Sat Flow, veh/h	1774	3539	1583	3408	3632	0	1757	1852	0	1774	1843	0
Grp Volume(v), veh/h	76	1028	0	211	697	0	137	170	0	138	151	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1704	1770	0	1757	1852	0	1774	1843	0
Q Serve(g_s), s	3.1	18.3	0.0	4.4	10.3	0.0	5.6	6.2	0.0	5.6	5.4	0.0
Cycle Q Clear(g_c), s	3.1	18.3	0.0	4.4	10.3	0.0	5.6	6.2	0.0	5.6	5.4	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	99	1411	631	309	1534	0	178	331	0	182	332	0
V/C Ratio(X)	0.77	0.73	0.00	0.68	0.45	0.00	0.77	0.51	0.00	0.76	0.45	0.00
Avail Cap(c_a), veh/h	718	2148	961	1379	2148	0	711	749	0	718	746	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	34.5	18.9	0.0	32.7	14.8	0.0	32.5	27.5	0.0	32.4	27.1	0.0
Incr Delay (d2), s/veh	4.7	0.3	0.0	1.0	0.1	0.0	6.9	1.2	0.0	7.6	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	8.9	0.0	2.1	5.1	0.0	3.1	3.2	0.0	3.1	2.9	0.0
LnGrp Delay(d),s/veh	39.2	19.2	0.0	33.7	14.9	0.0	39.3	28.7	0.0	40.0	28.3	0.0
LnGrp LOS	D	B		C	B		D	C		D	C	
Approach Vol, veh/h		1104			908			307			289	
Approach Delay, s/veh		20.6			19.3			33.5			33.9	
Approach LOS		C			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.1	37.1	11.5	17.4	10.7	34.5	11.6	17.3				
Change Period (Y+Rc), s	4.0	5.0	4.0	4.0	4.0	5.0	4.0	4.0				
Max Green Setting (Gmax), s	30.0	45.0	30.0	30.0	30.0	45.0	30.0	30.0				
Max Q Clear Time (g_c+I1), s	5.1	12.3	7.6	7.4	6.4	20.3	7.6	8.2				
Green Ext Time (p_c), s	0.1	10.1	0.4	2.1	0.4	9.3	0.5	2.1				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			23.1									
HCM 2010 LOS			C									
<b>Notes</b>												

User approved pedestrian interval to be less than phase max green.

HCM 2010 Signalized Intersection Summary  
 12: J St/Cannery Ave & Covell Blvd

West Davis Active Adult Community Project EIR  
 Existing Plus Approved Project Plus Project Conditions - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	165	1023	81	74	781	169	132	90	55	218	101	90
Future Volume (veh/h)	165	1023	81	74	781	169	132	90	55	218	101	90
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1810	1743	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	183	1137	27	83	878	175	155	106	40	263	122	74
Adj No. of Lanes	1	2	1	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.90	0.90	0.90	0.89	0.89	0.89	0.85	0.85	0.85	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	5	9	2	2	2	2	2	2	2	2
Cap, veh/h	225	1391	577	107	962	192	195	184	70	311	226	137
Arrive On Green	0.13	0.39	0.39	0.06	0.33	0.33	0.11	0.14	0.14	0.18	0.21	0.21
Sat Flow, veh/h	1774	3539	1469	1660	2914	581	1774	1278	482	1774	1078	654
Grp Volume(v), veh/h	183	1137	27	83	533	520	155	0	146	263	0	196
Grp Sat Flow(s),veh/h/ln	1774	1770	1469	1660	1770	1725	1774	0	1761	1774	0	1733
Q Serve(g_s), s	8.5	24.5	1.0	4.2	24.6	24.6	7.3	0.0	6.6	12.2	0.0	8.6
Cycle Q Clear(g_c), s	8.5	24.5	1.0	4.2	24.6	24.6	7.3	0.0	6.6	12.2	0.0	8.6
Prop In Lane	1.00		1.00	1.00		0.34	1.00		0.27	1.00		0.38
Lane Grp Cap(c), veh/h	225	1391	577	107	584	570	195	0	254	311	0	363
V/C Ratio(X)	0.81	0.82	0.05	0.78	0.91	0.91	0.79	0.00	0.58	0.84	0.00	0.54
Avail Cap(c_a), veh/h	417	1391	577	390	624	608	417	0	827	417	0	814
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	36.2	23.1	16.0	39.2	27.3	27.3	36.9	0.0	34.0	34.0	0.0	30.0
Incr Delay (d2), s/veh	8.2	4.0	0.0	13.5	17.4	17.8	8.5	0.0	2.5	14.6	0.0	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	12.6	0.4	2.3	14.8	14.5	4.0	0.0	3.4	7.3	0.0	4.3
LnGrp Delay(d),s/veh	44.4	27.1	16.0	52.8	44.8	45.2	45.4	0.0	36.5	48.6	0.0	32.3
LnGrp LOS	D	C	B	D	D	D	D		D	D		C
Approach Vol, veh/h		1347			1136			301			459	
Approach Delay, s/veh		29.3			45.5			41.1			41.6	
Approach LOS		C			D			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.9	23.3	15.3	32.6	19.4	17.8	10.0	38.0				
Change Period (Y+Rc), s	4.5	5.5	4.5	4.5	4.5	5.5	4.5	4.5				
Max Green Setting (Gmax), s	20.0	40.0	20.0	30.0	20.0	40.0	20.0	30.0				
Max Q Clear Time (g_c+I1), s	9.3	10.6	10.5	26.6	14.2	8.6	6.2	26.5				
Green Ext Time (p_c), s	0.4	3.3	0.4	1.5	0.8	3.3	0.2	3.3				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			37.8									
HCM 2010 LOS			D									



Major Street **Covell Blvd**  
 Minor Street **Lake Blvd**

Project **West Davis AAC EIR**  
 Scenario **Existing Plus Approved Projects Plus Project Conditions**  
 Peak Hour **AM Peak Hour**

Turn Movement Volumes

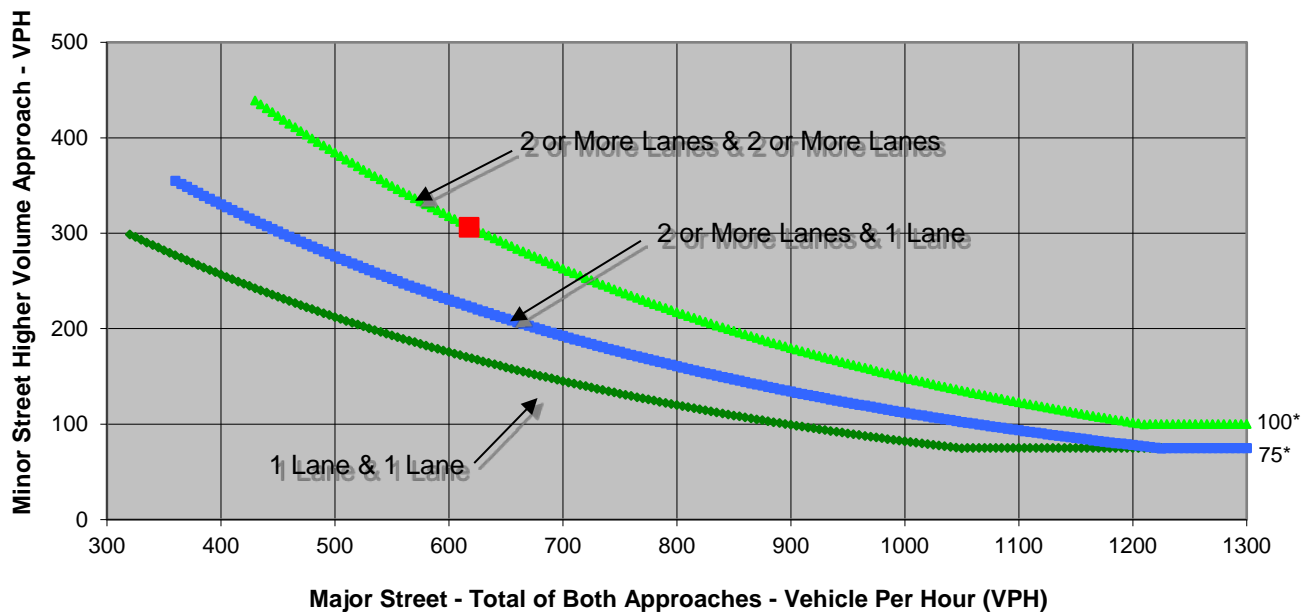
	NB	SB	EB	WB
Left	40	36	9	113
Through	62	53	267	179
Right	204	10	39	11
Total	306	99	315	303

Major Street Direction

North/South  
**x** East/West

**Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)**  
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



\* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Covell Blvd	Lake Blvd	
Number of Approach Lanes	<b>1</b>	<b>1</b>	<b><u>YES</u></b>
Traffic Volume (VPH) *	<b>618</b>	<b>306</b>	

\* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.  
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street Covell Blvd  
 Minor Street Lake Blvd

Project West Davis AAC EIR  
 Scenario Existing Plus Approved Projects Plus Project Conditions  
 Peak Hour AM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	40	36	9	113
Through	62	53	267	179
Right	204	10	39	11
<b>Total</b>	<b>306</b>	<b>99</b>	<b>315</b>	<b>303</b>

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	4

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	16.4
Approach with Worst Case Delay	NB
Total Vehicles on Approach	306

<b>Warrant 3A, Peak Hour</b>			
	<b>Peak Hour Delay on Minor Approach (vehicle-hours)</b>	<b>Peak Hour Volume on Minor Approach (vph)</b>	<b>Peak Hour Entering Volume Serviced (vph)</b>
<b>Existing Plus Approved Projects Plus Project Conditions</b>	<b>1.4</b>	<b>306</b>	<b>1,023</b>
<b>Limiting Value</b>	<b>4</b>	<b>100</b>	<b>800</b>
<b>Condition Satisfied?</b>	<b>Not Met</b>	<b>Met</b>	<b>Met</b>
<b>Warrant Met</b>	<b><u>NO</u></b>		





Major Street Risling Ct  
 Minor Street Hospital Dwy

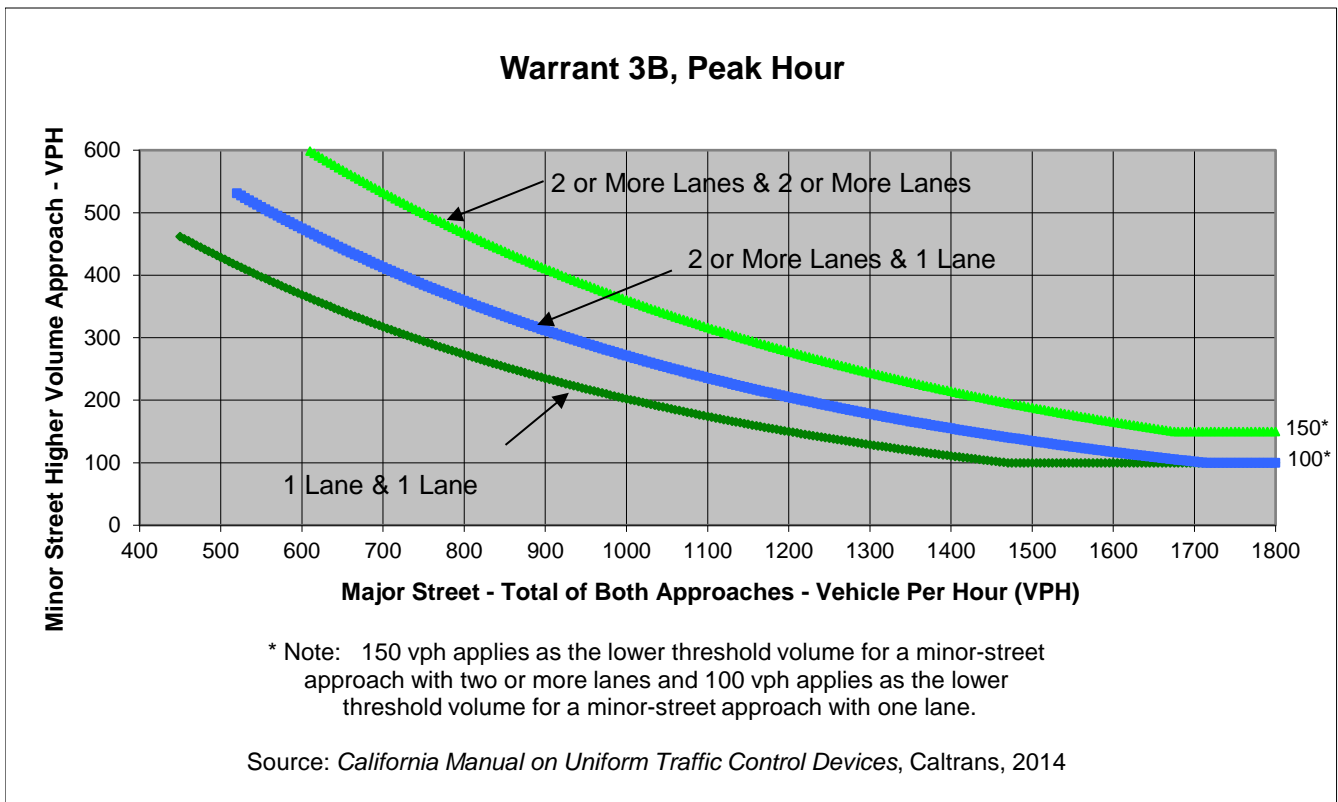
Project West Davis AAC EIR  
 Scenario Existing Plus Approved Projects Plus Project Conditions  
 Peak Hour AM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	57	1	0	11
Through	106	101	4	3
Right	31	0	57	2
Total	194	102	61	16

Major Street Direction

x	North/South
	East/West



	Major Street	Minor Street	Warrant Met
	Risling Ct	Hospital Dwy	
<b>Number of Approach Lanes</b>	<b>1</b>	<b>1</b>	<b><u>NO</u></b>
<b>Traffic Volume (VPH) *</b>	<b>296</b>	<b>61</b>	

\* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.  
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street Risling Ct  
 Minor Street Hospital Dwy

Project West Davis AAC EIR  
 Scenario Existing Plus Approved Projects Plus Project Conditions  
 Peak Hour AM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	57	1	0	11
Through	106	101	4	3
Right	31	0	57	2
Total	194	102	61	16

Major Street Direction

x	North/South
	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	4

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	12.3
Approach with Worst Case Delay	WB
Total Vehicles on Approach	16

<b>Warrant 3A, Peak Hour</b>			
	<b>Peak Hour Delay on Minor Approach (vehicle-hours)</b>	<b>Peak Hour Volume on Minor Approach (vph)</b>	<b>Peak Hour Entering Volume Served (vph)</b>
<b>us Approved Projects Plus Project</b>	<b>0.1</b>	<b>61</b>	<b>373</b>
<b>Limiting Value</b>	<b>4</b>	<b>100</b>	<b>800</b>
<b>Condition Satisfied?</b>	<b>Not Met</b>	<b>Not Met</b>	<b>Not Met</b>
<b>Warrant Met</b>	<b><u>NO</u></b>		



Major Street **Covell Blvd**  
 Minor Street **Lake Blvd**

Project **West Davis AAC EIR**  
 Scenario **Existing Plus Approved Projects Plus Project Conditions**  
 Peak Hour **PM Peak Hour**

Turn Movement Volumes

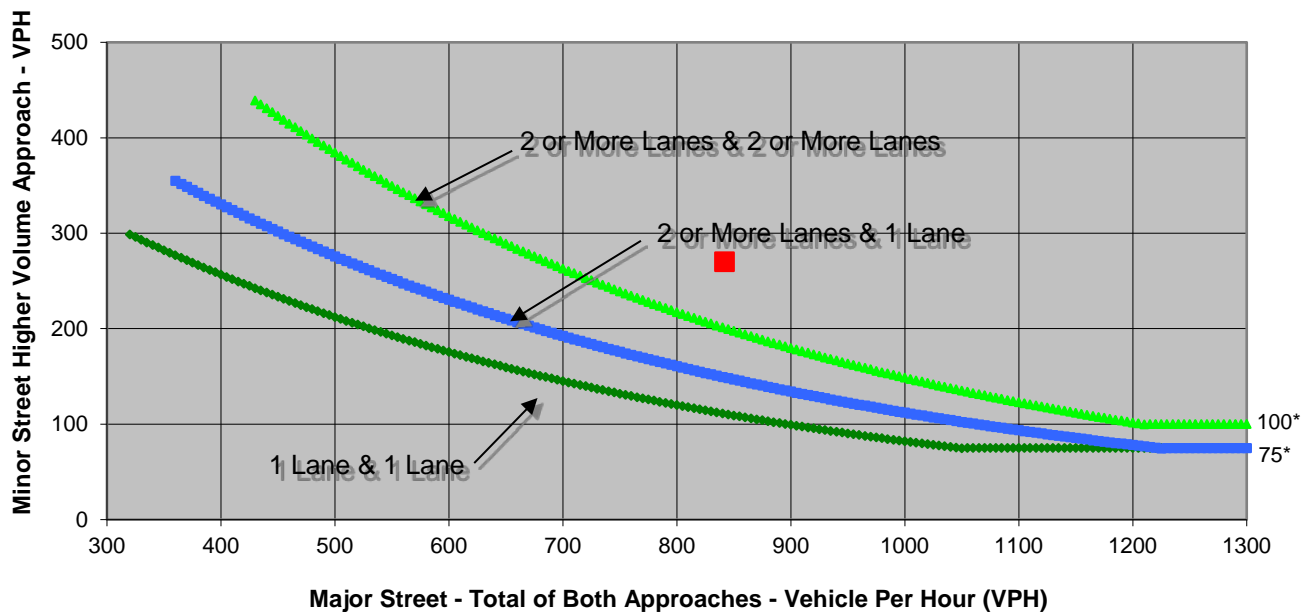
	NB	SB	EB	WB
Left	38	21	22	235
Through	46	50	237	276
Right	186	11	38	34
Total	270	82	297	545

Major Street Direction

North/South  
**x** East/West

**Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)**  
**(COMMUNITY LESS THAN 10,000 POPULATION OR**

**ABOVE 40 MPH ON MAJOR STREET**



\* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	<b>Major Street</b> Covell Blvd	<b>Minor Street</b> Lake Blvd	<b>Warrant Met</b>
<b>Number of Approach Lanes</b>	<b>1</b>	<b>1</b>	
<b>Traffic Volume (VPH) *</b>	<b>842</b>	<b>270</b>	

\* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.  
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street Covell Blvd  
 Minor Street Lake Blvd

Project West Davis AAC EIR  
 Scenario Existing Plus Approved Projects Plus Project Conditions  
 Peak Hour PM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	38	21	22	235
Through	46	50	237	276
Right	186	11	38	34
Total	270	82	297	545

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	4

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	16.5
Approach with Worst Case Delay	NB
Total Vehicles on Approach	270

<b>Warrant 3A, Peak Hour</b>			
	<b>Peak Hour Delay on Minor Approach (vehicle-hours)</b>	<b>Peak Hour Volume on Minor Approach (vph)</b>	<b>Peak Hour Entering Volume Serviced (vph)</b>
<b>Existing Plus Approved Projects Plus Project Conditions</b>	<b>1.2</b>	<b>270</b>	<b>1,194</b>
<b>Limiting Value</b>	<b>4</b>	<b>100</b>	<b>800</b>
<b>Condition Satisfied?</b>	<b>Not Met</b>	<b>Met</b>	<b>Met</b>
<b>Warrant Met</b>	<b><u>NO</u></b>		



Major Street **Risling Ct**  
 Minor Street **Hospital Dwy**

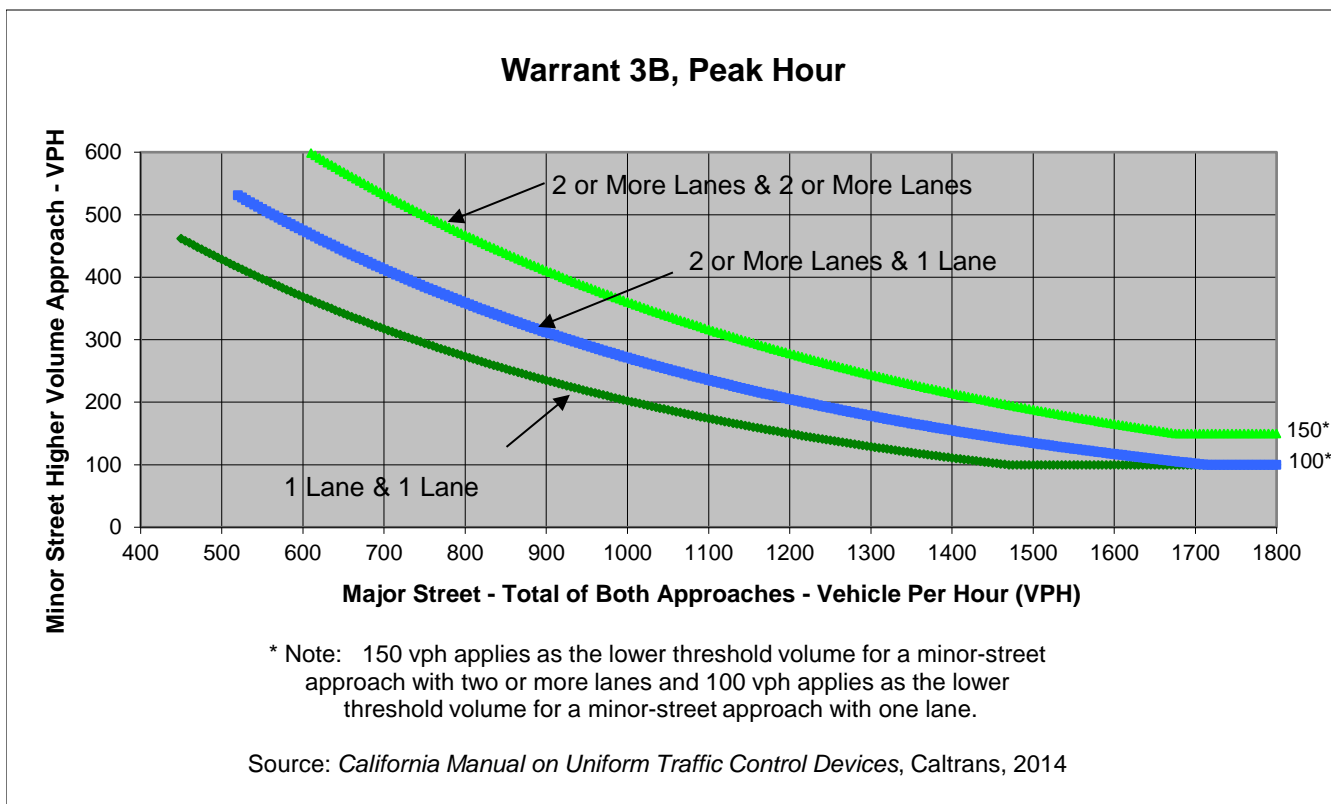
Project **West Davis AAC EIR**  
 Scenario **Existing Plus Approved Projects Plus Project Conditions**  
 Peak Hour **AM Peak Hour**

Turn Movement Volumes

	NB	SB	EB	WB
Left	47	3	0	20
Through	44	107	3	4
Right	19	1	63	0
Total	110	111	66	24

Major Street Direction

x	North/South
	East/West



	Major Street	Minor Street	Warrant Met
	Risling Ct	Hospital Dwy	
<b>Number of Approach Lanes</b>	<b>1</b>	<b>1</b>	<b><u>NO</u></b>
<b>Traffic Volume (VPH) *</b>	<b>221</b>	<b>66</b>	

\* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.  
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street Risling Ct  
 Minor Street Hospital Dwy

Project West Davis AAC EIR  
 Scenario Existing Plus Approved Projects Plus Project Conditions  
 Peak Hour AM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	47	3	0	20
Through	44	107	3	4
Right	19	1	63	0
Total	110	111	66	24

Major Street Direction

x	North/South
	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	4

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	11.5
Approach with Worst Case Delay	WB
Total Vehicles on Approach	24

<b>Warrant 3A, Peak Hour</b>			
	<b>Peak Hour Delay on Minor Approach (vehicle-hours)</b>	<b>Peak Hour Volume on Minor Approach (vph)</b>	<b>Peak Hour Entering Volume Serviced (vph)</b>
<b>us Approved Projects Plus Project</b>	<b>0.1</b>	<b>66</b>	<b>311</b>
<b>Limiting Value</b>	<b>4</b>	<b>100</b>	<b>800</b>
<b>Condition Satisfied?</b>	<b>Not Met</b>	<b>Not Met</b>	<b>Not Met</b>
<b>Warrant Met</b>	<b><u>NO</u></b>		

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Existing Plus Approved Projects Plus Project Conditions  
PM Peak Hour

Intersection 13

Project Dwy/Covell Blvd

Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn						
	Through						
	Right Turn	12	18	151.7%	4.0	1.4	A
	Subtotal	12	18	151.7%	4.0	1.4	A
EB	Left Turn						
	Through	569	584	102.6%	1.0	0.2	A
	Right Turn						
	Subtotal	569	584	102.6%	1.0	0.2	A
WB	Left Turn						
	Through	660	674	102.1%	2.6	0.5	A
	Right Turn	86	83	96.0%	2.3	0.7	A
	Subtotal	746	756	101.4%	2.6	0.5	A
Total		1,327	1,358	102.4%	1.9	0.3	A

Intersection 3

Risling Ct/Sutter Hospital Dwy

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Shared	900	50	4	75	7	75	17	0%	0%
NB	Shared	350	25	3	50	10	75	13	0%	0%
SB	Shared	2,000	25	2	25	12	25	25	0%	0%
WB	Shared	950	25	2	50	3	50	11	0%	0%

Intersection 4

Risling Ct-Shasta Dr/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	U/Left Turns	225	75	14	125	30	175	47	0%	0%
	Through	400	125	14	225	20	250	32	1%	0%
	Through/Right	400	125	10	225	17	250	36	0%	0%
NB	Left Turn	125	25	3	50	8	75	25	0%	0%
	Through	350	50	8	150	36	225	94	5%	0%
	Right Turn	75	75	1	75	3	75	2	3%	0%
SB	Left Turn	350	150	29	275	57	325	45	31%	2%
	Through/Right	125	50	9	125	16	125	0	0%	0%
WB	U/Left Turns	325	100	7	150	15	150	19	0%	0%
	Left Turn	325	50	7	100	12	125	16	0%	0%
	Through	575	125	12	200	20	250	42	3%	0%
	Right Turn	150	25	8	100	38	175	54	0%	0%



Intersection 5

John Jones Rd/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	150	100	9	150	16	175	1	1%	0%
	Through	575	225	50	450	109	500	112	10%	2%
SB	Left Turn	250	125	12	200	19	225	30	0%	0%
	Through/Right	1,600	25	6	75	30	125	95	0%	0%
WB	Through	350	175	14	300	25	325	57	27%	0%
	Right Turn	75	75	4	100	3	100	0	4%	0%
NB	Shared	25	25	0	25	0	25	0	0%	0%

Intersection 6

SR 113 SB Ramps/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	350	275	18	400	15	375	10	0%	5%
	Through/Right	350	300	13	425	10	375	6	0%	9%
SB	Left/Through	1,425	125	8	200	15	250	36	0%	0%
	Right Turn	1,425	100	8	175	16	225	28	0%	0%
WB	Left Turn	225	225	4	250	9	225	0	49%	0%
	Through	500	400	40	600	51	525	42	19%	6%
O										

Intersection 7

SR 113 NB Ramps/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	U/Left Turns	175	100	9	200	17	200	0	1%	0%
	Through	500	175	10	275	17	325	36	5%	0%
NB	Left/Through	1,675	225	12	325	38	400	61	0%	0%
	Right Turn	1,675	100	7	150	20	200	42	0%	0%
WB	Through	425	200	28	375	60	425	52	9%	1%
	Right Turn	150	75	9	175	19	175	0	0%	0%
0										

Intersection 8

Sycamore Ln/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	175	125	8	200	9	200	0	2%	0%
	Through	400	175	10	275	19	325	33	10%	0%
	Through/Right	400	200	9	300	13	350	34	0%	0%
NB	Left Turn	125	125	5	175	6	150	0	21%	0%
	Through/Right	1,125	125	15	275	23	350	58	1%	0%
SB	Left Turn	125	75	6	150	10	150	0	2%	0%
	Through/Right	1,775	150	24	325	39	375	61	18%	0%
WB	Left Turn	125	50	9	125	18	150	0	0%	0%
	Through	5,800	175	12	275	23	300	31	15%	0%
	Through/Right	5,800	200	14	300	25	325	35	0%	0%

Intersection 13

Project Dwy/Covell Blvd

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
SB	Right Turn	925	25	2	50	3	50	10	0%	0%
	Through	400	25	0	25	0	25	0	0%	0%
WB	Through/Right	400	25	1	25	9	25	26	0%	0%
	Through	1,400	25	0	25	0	25	0	0%	0%
EB	Through	1,400	25	0	25	0	25	0	0%	0%
0										

Intersection 3

Risling Ct/Sutter Hospital Dwy

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Shared	900	50	2	75	4	75	6	0%	0%
NB	Shared	350	25	1	25	3	50	11	0%	0%
SB	Shared	2,000	25	1	25	9	25	26	0%	0%
WB	Shared	950	25	3	50	4	50	12	0%	0%

Intersection 4

Risling Ct-Shasta Dr/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	U/Left Turns	225	50	7	75	15	125	32	0%	0%
	Through	400	100	11	175	24	200	35	8%	0%
	Right Turn	100	25	4	25	28	75	63	0%	0%
NB	Left Turn	125	25	2	50	4	75	7	0%	0%
	Through	350	50	4	100	10	100	36	2%	0%
	Right Turn	75	75	1	75	4	75	3	2%	0%
SB	Left Turn	350	125	11	200	29	250	52	16%	0%
	Through/Right	125	50	10	125	13	125	1	0%	0%
WB	U/Left Turns	325	100	6	175	15	200	31	0%	0%
	Left Turn	325	75	5	150	14	175	35	0%	0%
	Through	575	100	17	250	34	300	61	5%	0%
	Right Turn	150	25	11	100	31	175	0	0%	0%

Intersection 5

John Jones Rd/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	150	50	6	100	18	150	42	0%	0%
	Through	575	100	15	200	32	275	48	3%	0%
SB	Left Turn	250	150	7	250	8	275	8	2%	0%
	Through/Right	1,600	50	10	125	56	250	140	0%	0%
WB	Through	350	175	19	300	31	350	19	17%	0%
	Right Turn	75	50	7	100	7	100	0	1%	0%
NB	Shared	25	25	0	25	0	25	0	0%	0%

Intersection 6

SR 113 SB Ramps/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	350	200	10	325	21	350	7	0%	1%
	Through/Right	350	200	12	350	25	350	12	0%	1%
SB	Left/Through	1,425	100	9	175	14	200	22	0%	0%
	Right Turn	1,425	75	8	150	16	175	33	0%	0%
WB	U/Left Turns	225	175	11	250	16	250	3	7%	0%
	Through	500	150	22	300	34	325	34	4%	0%
O										

Intersection 7

SR 113 NB Ramps/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	U/Left Turns	175	125	12	175	17	200	7	5%	0%
	Through	500	125	15	225	38	300	51	3%	0%
NB	Left/Through	1,675	250	13	375	24	400	37	0%	0%
	Right Turn	1,675	275	43	475	122	550	177	0%	0%
WB	Through	425	125	13	200	24	250	44	5%	0%
	Right Turn	150	50	6	100	28	200	51	0%	0%
0										

Intersection 8

Sycamore Ln/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	175	150	13	225	15	200	4	8%	0%
	Through	400	175	14	275	37	325	53	4%	0%
	Through/Right	400	175	12	275	22	325	44	0%	0%
NB	Left Turn	125	100	4	150	7	150	3	7%	0%
	Through/Right	1,125	75	15	175	45	250	84	2%	0%
SB	Left Turn	125	125	6	175	5	150	1	15%	0%
	Through/Right	1,775	150	22	325	56	400	83	11%	0%
WB	Left Turn	125	50	6	100	16	175	30	0%	0%
	Through	5,800	175	11	275	27	325	54	15%	0%
	Through/Right	5,800	200	9	300	28	375	71	0%	0%

Intersection 13

Project Dwy/Covell Blvd

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
SB	Right Turn	925	25	2	50	3	50	9	0%	0%
EB	Through	1,400	25	0	25	0	25	0	0%	0%
WB	Through	475	25	0	25	0	25	0	0%	0%
	Through/Right	475	25	0	25	0	25	0	0%	0%
0										

Arterial Level of Service  
Existing Plus Approved Projects Plus Project Conditions

AM Peak Hour

Arterial Level of Service: EB Route 1

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	15.8	22.5	0.1	14
	5	26.5	39.0	0.1	11
SR 113 SB Ramps	6	29.6	37.6	0.1	7
Route 1	7	16.7	27.3	0.1	14
Total		88.6	126.3	0.4	11

Arterial Level of Service: WB Route 1

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Covell Blvd	7	41.2	70.1	0.3	17
SR 113 SB Ramps	6	8.6	22.6	0.1	16
John Jones Rd	5	14.3	22.0	0.1	12
Risling Ct	4	13.1	25.2	0.1	17
	13	2.7	10.5	0.1	30
Total		79.9	150.4	0.7	17



Arterial Level of Service  
Existing Plus Approved Projects Plus Project Conditions

AM Peak Hour

Arterial Level of Service: EB Route 2

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	15.7	22.4	0.1	14
	5	26.2	38.6	0.1	11
Route 2	6	34.1	46.4	0.1	6
Total		76.0	107.4	0.3	9

Arterial Level of Service: WB Route 2

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
John Jones Rd	5	-	-	0.1	-
Risling Ct	4	13.3	25.5	0.1	17
	13	2.8	10.5	0.1	30
Total		16.1	36.0	0.3	28

Arterial Level of Service  
Existing Plus Approved Projects Plus Project Conditions

PM Peak Hour

Arterial Level of Service: EB Route 1

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	13.1	19.9	0.1	16
	5	11.4	23.8	0.1	18
SR 113 SB Ramps	6	23.1	31.1	0.1	9
Route 1	7	10.5	21.1	0.1	18
Total		58.1	95.9	0.4	14

Arterial Level of Service: WB Route 1

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Covell Blvd	7	40.5	69.6	0.3	17
SR 113 SB Ramps	6	8.8	23.0	0.1	16
John Jones Rd	5	11.4	19.1	0.1	14
Risling Ct	4	10.3	22.5	0.1	19
	13	2.8	10.6	0.1	30
Total		73.9	144.8	0.7	18

Arterial Level of Service  
Existing Plus Approved Projects Plus Project Conditions

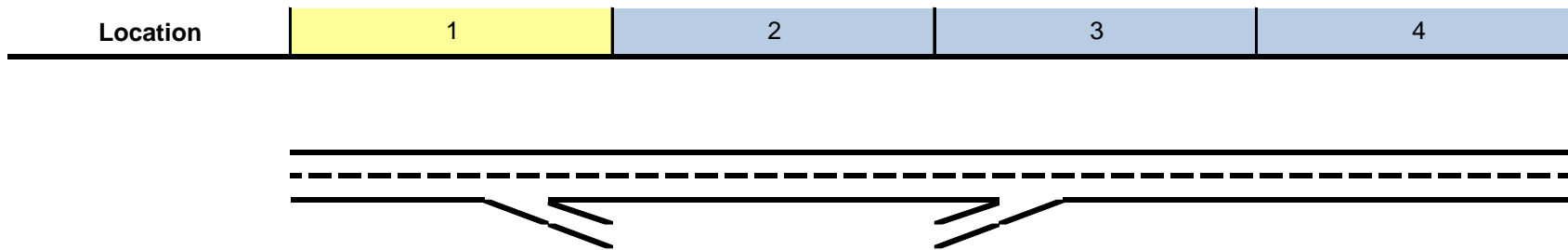
PM Peak Hour

Arterial Level of Service: EB Route 2

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	13.1	19.9	0.1	16
	5	11.4	23.8	0.1	18
Route 2	6	18.9	31.0	0.1	9
Total		43.4	74.7	0.3	14

Arterial Level of Service: WB Route 2

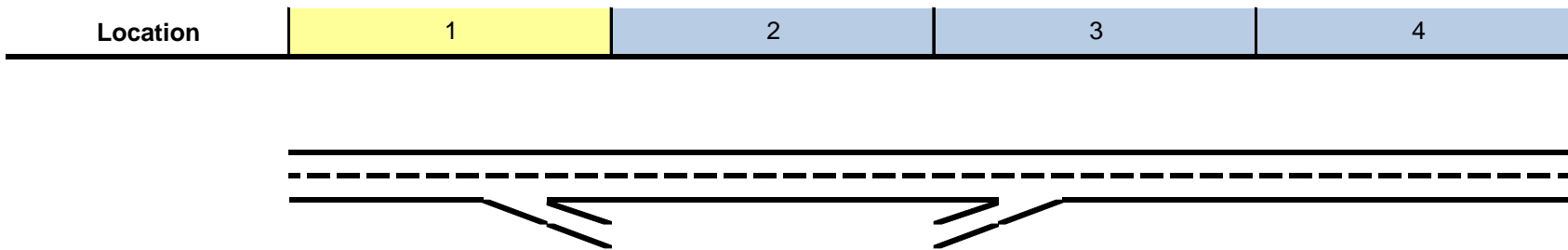
Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
John Jones Rd	5	-	-	0.1	-
Risling Ct	4	10.3	22.5	0.1	19
	13	2.8	10.6	0.1	30
Total		13.1	33.1	0.3	31



**Key**

<> Express Lane (HOV)

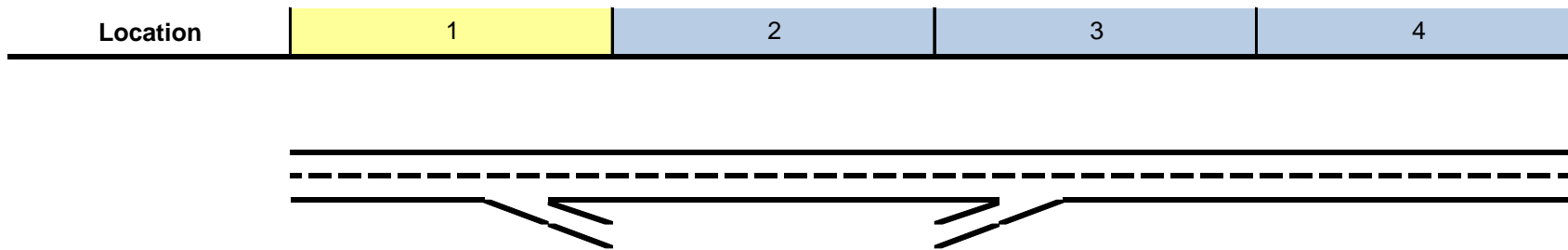
Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Freeway Segment</b>				
Type	Diverge	Basic	Merge	Basic
Length (ft)	1,500	2,560	1,500	5,980
Accel Length			370	
Decel Length	150			
Mainline Volume	1,077	430	430	671
On Ramp Volume			241	
Off Ramp Volume	647			
Express Lane Volume				
EL On Ramp Volume				
EL Off Ramp Volume				
<b>Flow Rate in Entering General Purpose Lanes (GP)</b>				
Volume (vph)	1,077	430	430	671
PHF	0.75	0.75	0.75	0.75
Lanes	2	2	2	2
Terrain	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00
Truck & Bus %	5.9%	5.9%	5.9%	5.9%
RV %	0.0%	0.0%	0.0%	0.0%
$E_T$	1.5	1.5	1.5	1.5
$E_R$	1.2	1.2	1.2	1.2
$f_{HV}$	0.971	0.971	0.971	0.971
$f_P$	1.00	1.00	1.00	1.00
Flow (pcph)	1,478	590	590	921
Flow (pcphpl)	739	295	295	461



**Key**

<> Express Lane (HOV)

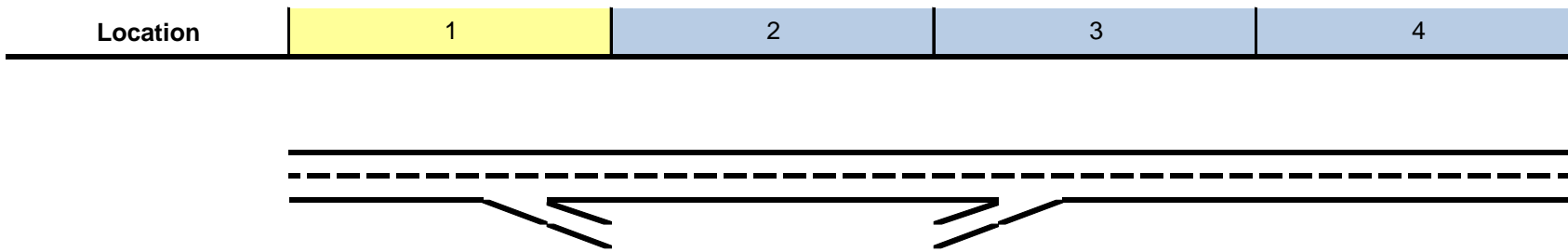
Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Free Flow Speed in Entering GP Lanes</b>				
Lane Width (ft)				
Shoulder Width				
TRD				
$f_{LW}$				
$f_{LC}$				
Calculated FFS				
Measured FFS				
FFS Curve	70	70	70	70
<b>Operations in Entering GP Lanes</b>				
Capacity (pcph)	4,800	4,800	4,800	4,800
v/c ratio	0.31	0.12	0.12	0.19
Speed (mph)	70.0	70.0	70.0	70.0
Density (pcphpl)	10.6	4.2	4.2	6.6
LOS	A	A	A	A
<b>Operations for Segment GP Lanes</b>				
Flow (pcph)			868	
Lanes			2	
Capacity (pcph)			4,800	
v/c ratio			0.18	
Flow Rate (pcphpl)			434	
Speed (mph)			70.0	
Density (pcphpl)			6.2	
LOS			A	
<b>Operations for Exiting GP Lanes</b>				
Flow (pcph)	732			
Lanes	2			
Capacity (pcph)	4,800			
v/c ratio	0.15			
Flow Rate (pcphpl)	366			
Speed (mph)	70.0			
Density (pcphpl)	5.2			
LOS	A			



**Key**

<> Express Lane (HOV)

Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Flow Rate in Express Lanes</b>				
<b>Operations in Express Lanes</b>				
<b>On Ramp Flow Rate</b>				
Volume (vph)			241	
PHF			0.88	
Lanes			1	
Terrain			Level	
Grade %			0.0%	
Grade Length (mi)			0.00	
Truck & Bus %			3.0%	
RV %			0.0%	
$E_T$			1.5	
$E_R$			1.2	
$f_{HV}$			0.985	
$f_P$			1.00	
Flow (pcph)			278	
Flow Rate (pcphpl)			278	
<b>On Ramp Roadway Operations</b>				
Ramp Type			Right	
Ramp Speed (mph)			45	
Ramp Capacity (pcph)			2,100	
Ramp v/c ratio			0.13	

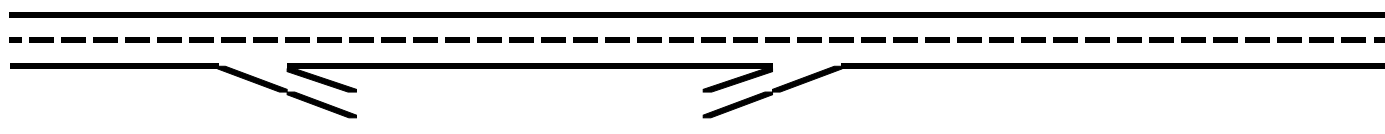


**Key**

<> Express Lane (HOV)

Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Off Ramp Flow Rate</b>				
Volume (vph)	647			
PHF	0.88			
Lanes	1			
Terrain	Level			
Grade %	0.0%			
Grade Length (mi)	0.00			
Truck & Bus %	3.0%			
RV %	0.0%			
$E_T$	1.5			
$E_R$	1.2			
$f_{HV}$	0.985			
$f_P$	1.00			
Flow (pcph)	746			
Flow Rate (pcphpl)	746			
<b>Off Ramp Roadway Operations</b>				
Ramp Type	Right			
Ramp Speed	45			
Ramp Capacity (pcph)	2,100			
Ramp v/c ratio	0.36			
<b>Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps</b>				

Location	1	2	3	4
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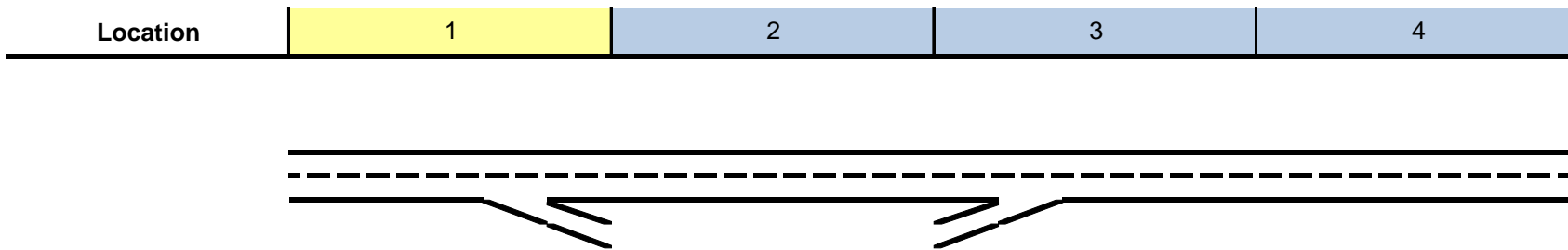


**Key**

<> Express Lane (HOV)

Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Merge Influence Area Operations</b>				
Effective $v_p$ (pcph)			590	
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FM}$ (Eqn 13-3)			0.588	
$P_{FM}$ (Eqn 13-4)				
$P_{FM}$ (Eqn 13-5)				
$P_{FM}$			1.000	
$v_{12}$ (pcph)			590	
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)			590	
$v_{R12a}$ (pcph)			868	
Speed Index			0.30	
Area Speed			61.7	
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed			61.7	
v/c ratio			0.19	
Density			9.8	
LOS			A	



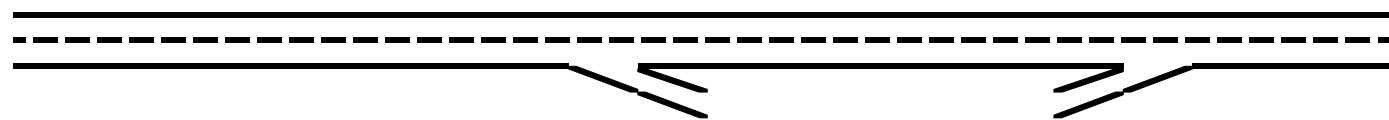


**Key**

<> Express Lane (HOV)

Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Diverge Influence Area Operations</b>				
Effective $v_p$ (pcph)	1,478			
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FD}$ (Eqn 13-9)	0.689			
$P_{FD}$ (Eqn 13-10)				
$P_{FD}$ (Eqn 13-11)				
$P_{FD}$	1.000			
$v_{12}$ (pcph)	1,478			
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)	1,478			
Speed Index	0.37			
Area Speed	59.8			
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed	59.8			
v/c ratio	0.34			
Density	15.6			
LOS	B			
<b>On Ramp to Off Ramp Flow Rate for Weave Segments</b>				
<b>On Ramp to Mainline Flow Rate for Weave Segments</b>				
<b>Mainline to Off Ramp Flow Rate for Weave Segments</b>				
<b>General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments</b>				
<b>Weave Segment Operations</b>				
<b>Summarize Segment Operations</b>				
Segment v/c ratio	0.34	0.12	0.19	0.19
Segment Density	15.6	4.2	9.8	6.6
Segment LOS	B	A	A	A
Over Capacity				

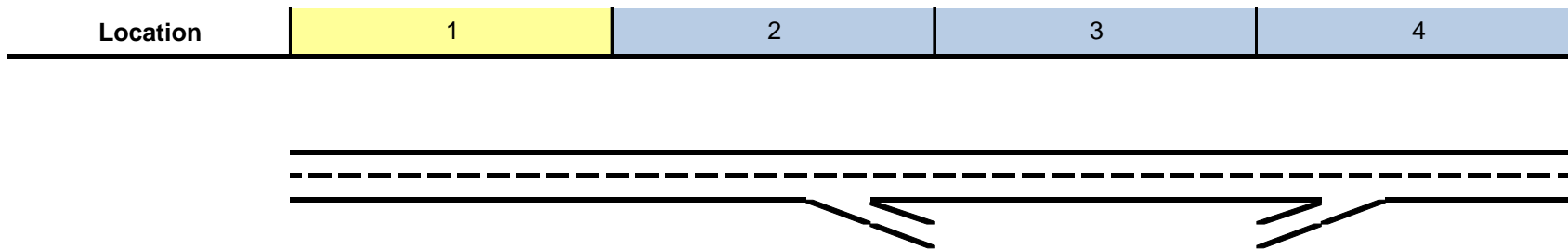
<b>Location</b>	1	2	3	4
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**Key**

<> Express Lane (HOV)

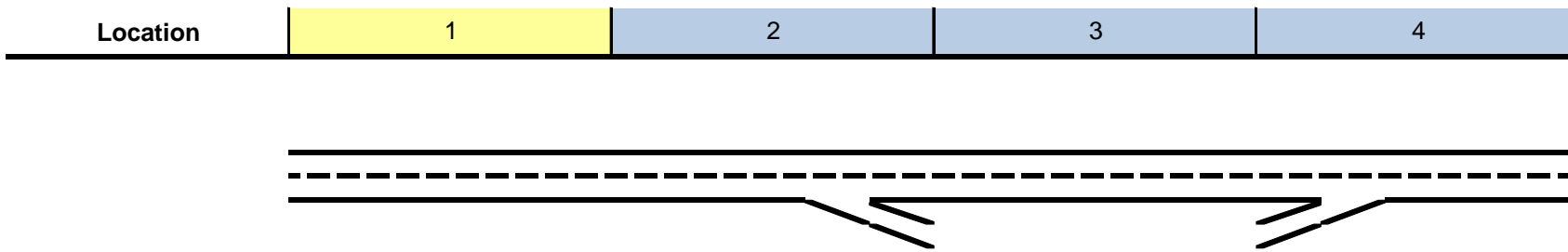
Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Freeway Segment</b>				
Type	Basic	Diverge	Basic	Merge
Length (ft)	4,920	1,500	2,850	1,550
Accel Length				330
Decel Length		170		
Mainline Volume	1,873	1,873	1,574	1,574
On Ramp Volume				956
Off Ramp Volume		299		
Express Lane Volume				
EL On Ramp Volume				
EL Off Ramp Volume				
<b>Flow Rate in Entering General Purpose Lanes (GP)</b>				
Volume (vph)	1,873	1,873	1,574	1,574
PHF	0.84	0.84	0.84	0.84
Lanes	2	2	2	2
Terrain	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00
Truck & Bus %	5.9%	5.9%	5.9%	5.9%
RV %	0.0%	0.0%	0.0%	0.0%
E <sub>T</sub>	1.5	1.5	1.5	1.5
E <sub>R</sub>	1.2	1.2	1.2	1.2
f <sub>HV</sub>	0.971	0.971	0.971	0.971
f <sub>P</sub>	1.00	1.00	1.00	1.00
Flow (pcph)	2,296	2,296	1,929	1,929
Flow (pcphpl)	1,148	1,148	965	965



**Key**

<> Express Lane (HOV)

Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Free Flow Speed in Entering GP Lanes</b>				
Lane Width (ft)				
Shoulder Width				
TRD				
$f_{LW}$				
$f_{LC}$				
Calculated FFS				
Measured FFS				
FFS Curve	70	70	70	70
<b>Operations in Entering GP Lanes</b>				
Capacity (pcph)	4,800	4,800	4,800	4,800
v/c ratio	0.48	0.48	0.40	0.40
Speed (mph)	70.0	70.0	70.0	70.0
Density (pcphpl)	16.4	16.4	13.8	13.8
LOS	B	B	B	B
<b>Operations for Segment GP Lanes</b>				
Flow (pcph)				3,026
Lanes				2
Capacity (pcph)				4,800
v/c ratio				0.63
Flow Rate (pcphpl)				1,513
Speed (mph)				68.9
Density (pcphpl)				22.0
LOS				C
<b>Operations for Exiting GP Lanes</b>				
Flow (pcph)		1,952		
Lanes		2		
Capacity (pcph)		4,800		
v/c ratio		0.41		
Flow Rate (pcphpl)		976		
Speed (mph)		70.0		
Density (pcphpl)		13.9		
LOS		B		

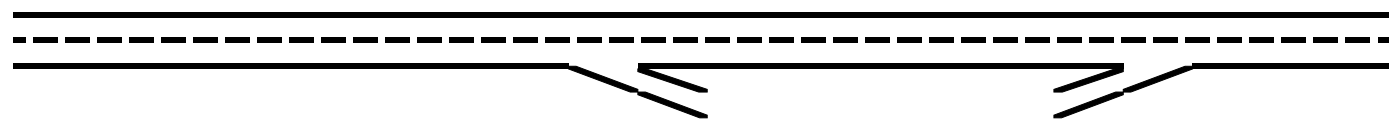


**Key**

<> Express Lane (HOV)

Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Flow Rate in Express Lanes</b>				
<b>Operations in Express Lanes</b>				
<b>On Ramp Flow Rate</b>				
Volume (vph)				956
PHF				0.88
Lanes				1
Terrain				Level
Grade %				0.0%
Grade Length (mi)				0.00
Truck & Bus %				2.0%
RV %				0.0%
$E_T$				1.5
$E_R$				1.2
$f_{HV}$				0.990
$f_P$				1.00
Flow (pcph)				1,097
Flow Rate (pcphpl)				1,097
<b>On Ramp Roadway Operations</b>				
Ramp Type				Right
Ramp Speed (mph)				45
Ramp Capacity (pcph)				2,100
Ramp v/c ratio				0.52

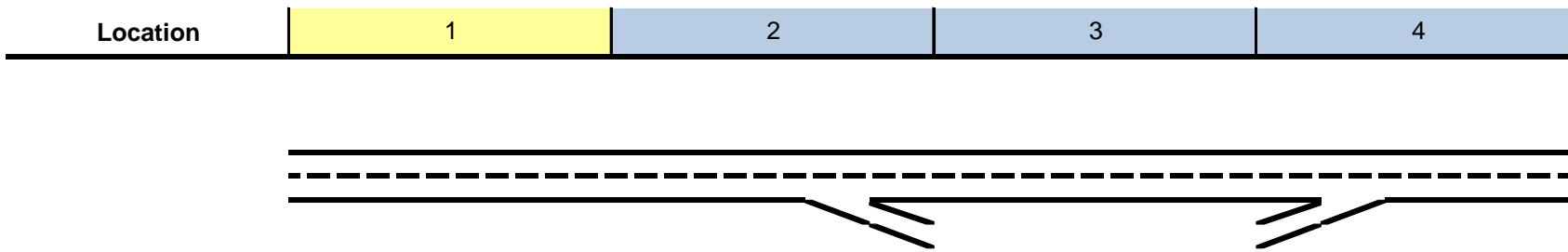
<b>Location</b>	1	2	3	4
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**Key**

<> Express Lane (HOV)

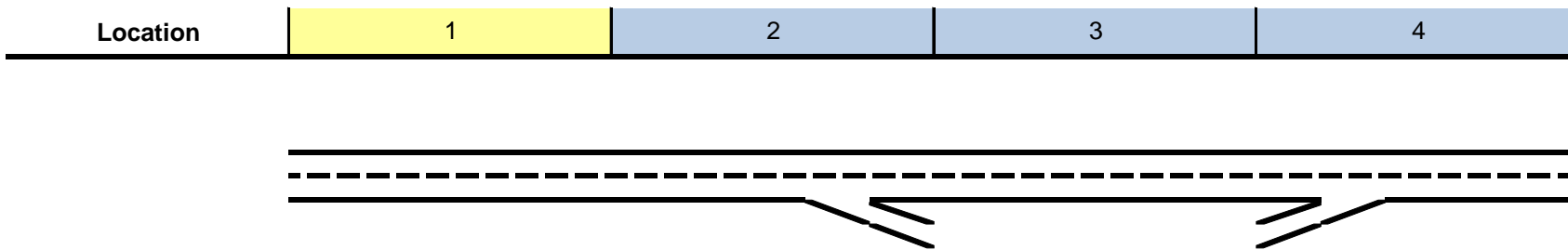
Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Off Ramp Flow Rate</b>				
Volume (vph)		299		
PHF		0.88		
Lanes		1		
Terrain		Level		
Grade %		0.0%		
Grade Length (mi)		0.00		
Truck & Bus %		2.0%		
RV %		0.0%		
$E_T$		1.5		
$E_R$		1.2		
$f_{HV}$		0.990		
$f_P$		1.00		
Flow (pcph)		343		
Flow Rate (pcphpl)		343		
<b>Off Ramp Roadway Operations</b>				
Ramp Type		Right		
Ramp Speed		45		
Ramp Capacity (pcph)		2,100		
Ramp v/c ratio		0.16		
<b>Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps</b>				



**Key**

<> Express Lane (HOV)

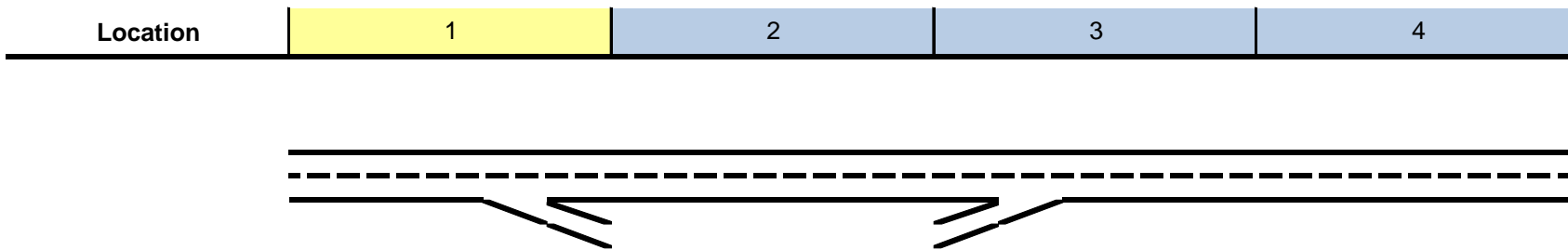
Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Merge Influence Area Operations</b>				
Effective $v_p$ (pcph)				1,929
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FM}$ (Eqn 13-3)				0.587
$P_{FM}$ (Eqn 13-4)				
$P_{FM}$ (Eqn 13-5)				
$P_{FM}$				1.000
$v_{12}$ (pcph)				1,929
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)				1,929
$v_{R12a}$ (pcph)				3,026
Speed Index				0.37
Area Speed				59.6
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed				59.6
v/c ratio				0.66
Density				26.5
LOS				C



**Key**

<> Express Lane (HOV)

Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Diverge Influence Area Operations</b>				
Effective $v_p$ (pcph)		2,296		
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FD}$ (Eqn 13-9)		0.687		
$P_{FD}$ (Eqn 13-10)				
$P_{FD}$ (Eqn 13-11)				
$P_{FD}$		1.000		
$v_{12}$ (pcph)		2,296		
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)		2,296		
Speed Index		0.33		
Area Speed		60.8		
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed		60.8		
v/c ratio		0.52		
Density		22.5		
LOS		C		
<b>On Ramp to Off Ramp Flow Rate for Weave Segments</b>				
<b>On Ramp to Mainline Flow Rate for Weave Segments</b>				
<b>Mainline to Off Ramp Flow Rate for Weave Segments</b>				
<b>General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments</b>				
<b>Weave Segment Operations</b>				
<b>Summarize Segment Operations</b>				
Segment v/c ratio	0.48	0.52	0.40	0.66
Segment Density	16.4	22.5	13.8	26.5
Segment LOS	B	C	B	C
Over Capacity				

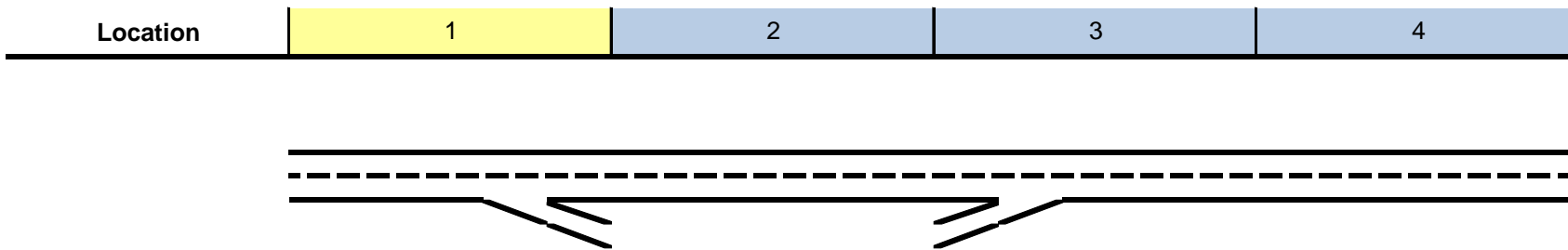


**Key**

<> Express Lane (HOV)

Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Freeway Segment</b>				
Type	Diverge	Basic	Merge	Basic
Length (ft)	1,500	2,560	1,500	5,980
Accel Length			370	
Decel Length	150			
Mainline Volume	1,964	978	978	1,256
On Ramp Volume			278	
Off Ramp Volume	986			
Express Lane Volume				
EL On Ramp Volume				
EL Off Ramp Volume				
<b>Flow Rate in Entering General Purpose Lanes (GP)</b>				
Volume (vph)	1,964	978	978	1,256
PHF	0.86	0.86	0.86	0.86
Lanes	2	2	2	2
Terrain	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00
Truck & Bus %	5.9%	5.9%	5.9%	5.9%
RV %	0.0%	0.0%	0.0%	0.0%
E <sub>T</sub>	1.5	1.5	1.5	1.5
E <sub>R</sub>	1.2	1.2	1.2	1.2
f <sub>HV</sub>	0.971	0.971	0.971	0.971
f <sub>P</sub>	1.00	1.00	1.00	1.00
Flow (pcph)	2,351	1,171	1,171	1,504
Flow (pcphpl)	1,176	585	585	752



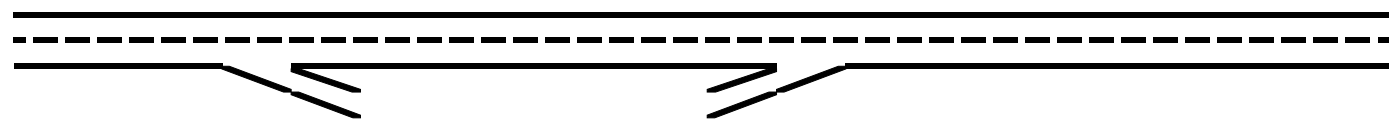


**Key**

<> Express Lane (HOV)

Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Free Flow Speed in Entering GP Lanes</b>				
Lane Width (ft)				
Shoulder Width				
TRD				
$f_{LW}$				
$f_{LC}$				
Calculated FFS				
Measured FFS				
FFS Curve	70	70	70	70
<b>Operations in Entering GP Lanes</b>				
Capacity (pcph)	4,800	4,800	4,800	4,800
v/c ratio	0.49	0.24	0.24	0.31
Speed (mph)	70.0	70.0	70.0	70.0
Density (pcphpl)	16.8	8.4	8.4	10.7
LOS	B	A	A	A
<b>Operations for Segment GP Lanes</b>				
Flow (pcph)			1,474	
Lanes			2	
Capacity (pcph)			4,800	
v/c ratio			0.31	
Flow Rate (pcphpl)			737	
Speed (mph)			70.0	
Density (pcphpl)			10.5	
LOS			A	
<b>Operations for Exiting GP Lanes</b>				
Flow (pcph)	1,275			
Lanes	2			
Capacity (pcph)	4,800			
v/c ratio	0.27			
Flow Rate (pcphpl)	637			
Speed (mph)	70.0			
Density (pcphpl)	9.1			
LOS	A			

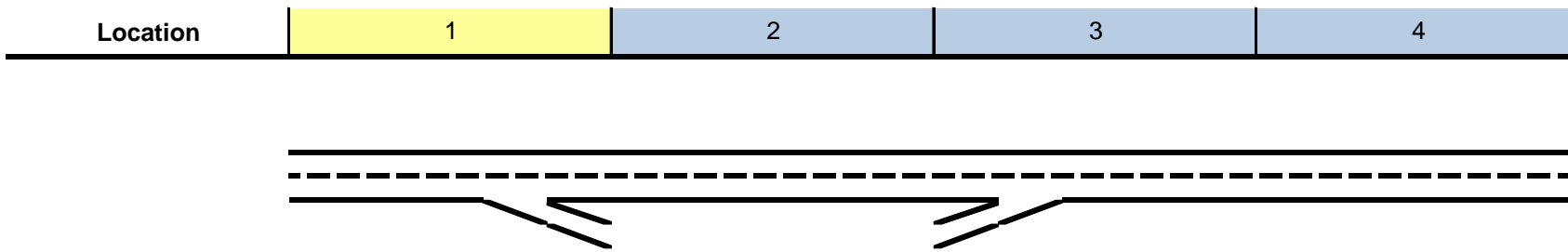
<b>Location</b>	1	2	3	4
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**Key**

<> Express Lane (HOV)

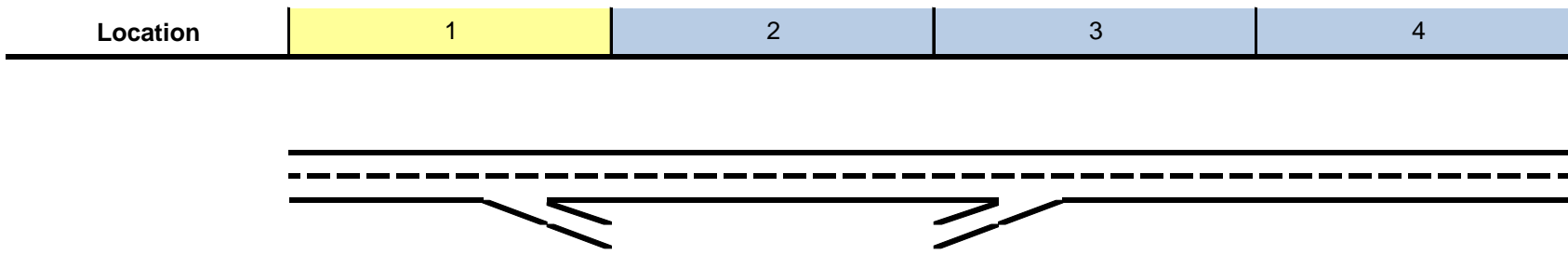
Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Flow Rate in Express Lanes</b>				
<b>Operations in Express Lanes</b>				
<b>On Ramp Flow Rate</b>				
Volume (vph)			278	
PHF			0.93	
Lanes			1	
Terrain			Level	
Grade %			0.0%	
Grade Length (mi)			0.00	
Truck & Bus %			3.0%	
RV %			0.0%	
$E_T$			1.5	
$E_R$			1.2	
$f_{HV}$			0.985	
$f_P$			1.00	
Flow (pcph)			303	
Flow Rate (pcphpl)			303	
<b>On Ramp Roadway Operations</b>				
Ramp Type			Right	
Ramp Speed (mph)			45	
Ramp Capacity (pcph)			2,100	
Ramp v/c ratio			0.14	



**Key**

<> Express Lane (HOV)

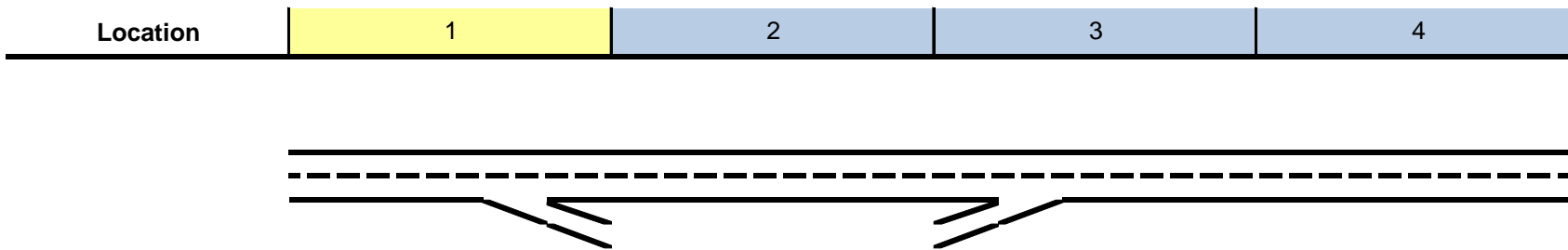
Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Off Ramp Flow Rate</b>				
Volume (vph)	986			
PHF	0.93			
Lanes	1			
Terrain	Level			
Grade %	0.0%			
Grade Length (mi)	0.00			
Truck & Bus %	3.0%			
RV %	0.0%			
$E_T$	1.5			
$E_R$	1.2			
$f_{HV}$	0.985			
$f_P$	1.00			
Flow (pcph)	1,076			
Flow Rate (pcphpl)	1,076			
<b>Off Ramp Roadway Operations</b>				
Ramp Type	Right			
Ramp Speed	45			
Ramp Capacity (pcph)	2,100			
Ramp v/c ratio	0.51			
<b>Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps</b>				



**Key**

<> Express Lane (HOV)

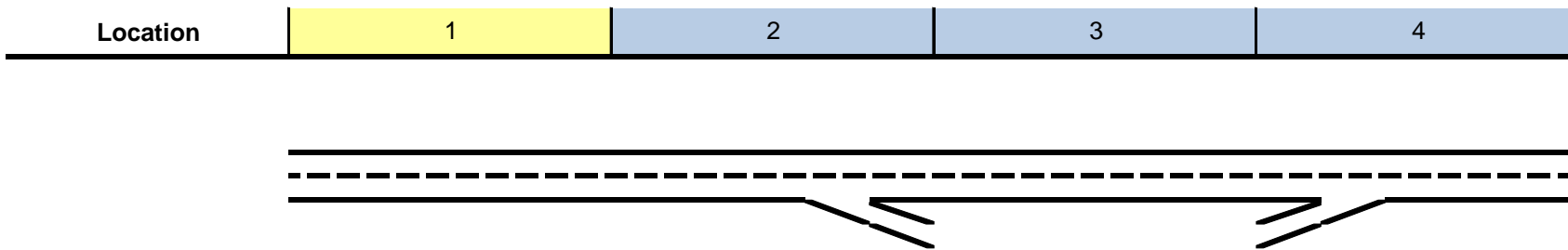
Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Merge Influence Area Operations</b>				
Effective $v_p$ (pcph)			1,171	
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FM}$ (Eqn 13-3)			0.588	
$P_{FM}$ (Eqn 13-4)				
$P_{FM}$ (Eqn 13-5)				
$P_{FM}$			1.000	
$v_{12}$ (pcph)			1,171	
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)			1,171	
$v_{R12a}$ (pcph)			1,474	
Speed Index			0.30	
Area Speed			61.5	
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed			61.5	
v/c ratio			0.32	
Density			14.5	
LOS			B	



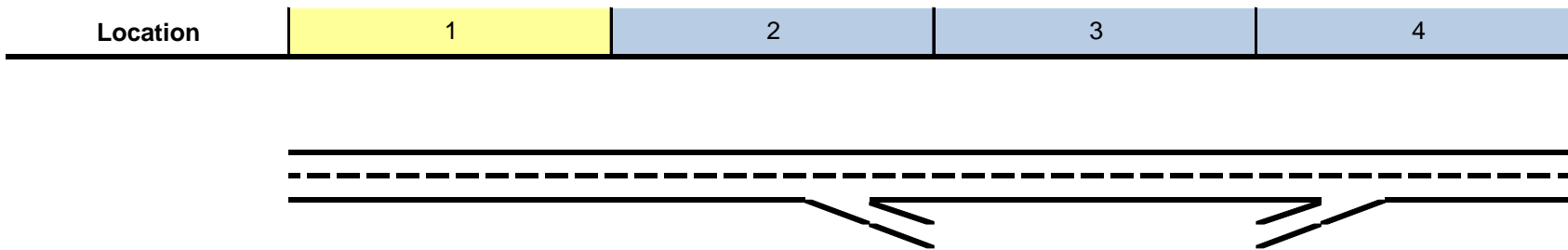
**Key**

<> Express Lane (HOV)

Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Diverge Influence Area Operations</b>				
Effective $v_p$ (pcph)	2,351			
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FD}$ (Eqn 13-9)	0.652			
$P_{FD}$ (Eqn 13-10)				
$P_{FD}$ (Eqn 13-11)				
$P_{FD}$	1.000			
$v_{12}$ (pcph)	2,351			
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)	2,351			
Speed Index	0.39			
Area Speed	58.9			
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed	58.9			
v/c ratio	0.53			
Density	23.1			
LOS	C			
<b>On Ramp to Off Ramp Flow Rate for Weave Segments</b>				
<b>On Ramp to Mainline Flow Rate for Weave Segments</b>				
<b>Mainline to Off Ramp Flow Rate for Weave Segments</b>				
<b>General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments</b>				
<b>Weave Segment Operations</b>				
<b>Summarize Segment Operations</b>				
Segment v/c ratio	0.53	0.24	0.32	0.31
Segment Density	23.1	8.4	14.5	10.7
Segment LOS	C	A	B	A
Over Capacity				



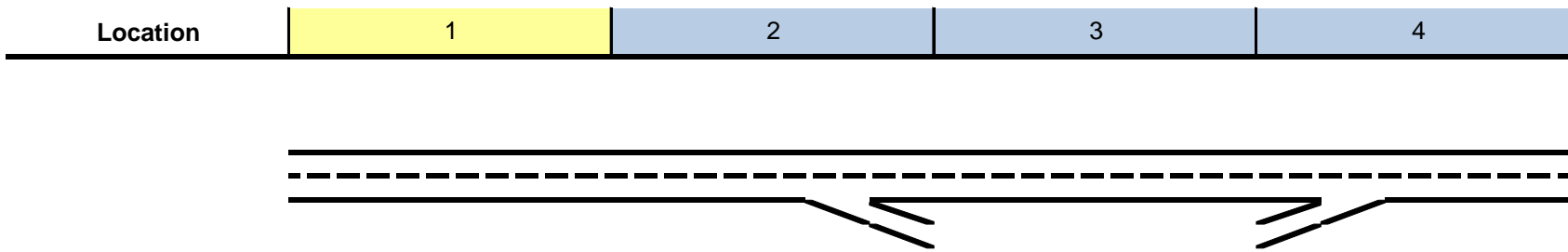
Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Freeway Segment</b>				
Type	Basic	Diverge	Basic	Merge
Length (ft)	4,920	1,500	2,850	1,550
Accel Length				330
Decel Length		170		
Mainline Volume	1,107	1,107	880	880
On Ramp Volume				511
Off Ramp Volume		227		
Express Lane Volume				
EL On Ramp Volume				
EL Off Ramp Volume				
<b>Flow Rate in Entering General Purpose Lanes (GP)</b>				
Volume (vph)	1,107	1,107	880	880
PHF	0.93	0.93	0.93	0.93
Lanes	2	2	2	2
Terrain	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00
Truck & Bus %	5.9%	5.9%	5.9%	5.9%
RV %	0.0%	0.0%	0.0%	0.0%
E <sub>T</sub>	1.5	1.5	1.5	1.5
E <sub>R</sub>	1.2	1.2	1.2	1.2
f <sub>HV</sub>	0.971	0.971	0.971	0.971
f <sub>P</sub>	1.00	1.00	1.00	1.00
Flow (pcph)	1,225	1,225	974	974
Flow (pcphpl)	613	613	487	487



**Key**

<> Express Lane (HOV)

Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Free Flow Speed in Entering GP Lanes</b>				
Lane Width (ft)				
Shoulder Width				
TRD				
$f_{LW}$				
$f_{LC}$				
Calculated FFS				
Measured FFS				
FFS Curve	70	70	70	70
<b>Operations in Entering GP Lanes</b>				
Capacity (pcph)	4,800	4,800	4,800	4,800
v/c ratio	0.26	0.26	0.20	0.20
Speed (mph)	70.0	70.0	70.0	70.0
Density (pcphpl)	8.8	8.8	7.0	7.0
LOS	A	A	A	A
<b>Operations for Segment GP Lanes</b>				
Flow (pcph)				1,529
Lanes				2
Capacity (pcph)				4,800
v/c ratio				0.32
Flow Rate (pcphpl)				765
Speed (mph)				70.0
Density (pcphpl)				10.9
LOS				A
<b>Operations for Exiting GP Lanes</b>				
Flow (pcph)		979		
Lanes		2		
Capacity (pcph)		4,800		
v/c ratio		0.20		
Flow Rate (pcphpl)		489		
Speed (mph)		70.0		
Density (pcphpl)		7.0		
LOS		A		

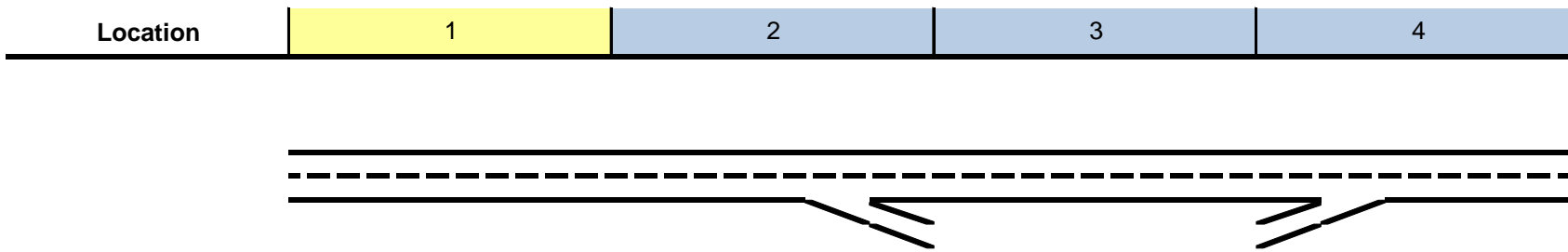


**Key**

<> Express Lane (HOV)

Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Flow Rate in Express Lanes</b>				
<b>Operations in Express Lanes</b>				
<b>On Ramp Flow Rate</b>				
Volume (vph)				511
PHF				0.93
Lanes				1
Terrain				Level
Grade %				0.0%
Grade Length (mi)				0.00
Truck & Bus %				2.0%
RV %				0.0%
$E_T$				1.5
$E_R$				1.2
$f_{HV}$				0.990
$f_P$				1.00
Flow (pcph)				555
Flow Rate (pcphpl)				555
<b>On Ramp Roadway Operations</b>				
Ramp Type				Right
Ramp Speed (mph)				45
Ramp Capacity (pcph)				2,100
Ramp v/c ratio				0.26



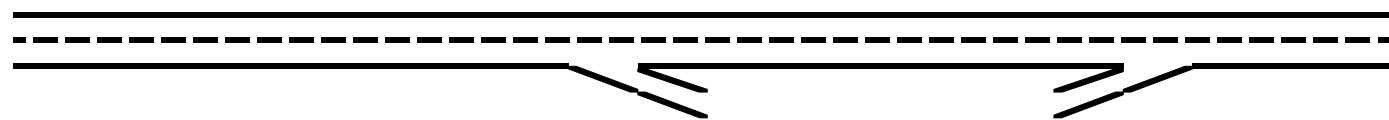


**Key**

<> Express Lane (HOV)

Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Off Ramp Flow Rate</b>				
Volume (vph)		227		
PHF		0.93		
Lanes		1		
Terrain		Level		
Grade %		0.0%		
Grade Length (mi)		0.00		
Truck & Bus %		2.0%		
RV %		0.0%		
E <sub>T</sub>		1.5		
E <sub>R</sub>		1.2		
f <sub>HV</sub>		0.990		
f <sub>P</sub>		1.00		
Flow (pcph)		247		
Flow Rate (pcphpl)		247		
<b>Off Ramp Roadway Operations</b>				
Ramp Type		Right		
Ramp Speed		45		
Ramp Capacity (pcph)		2,100		
Ramp v/c ratio		0.12		
<b>Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps</b>				

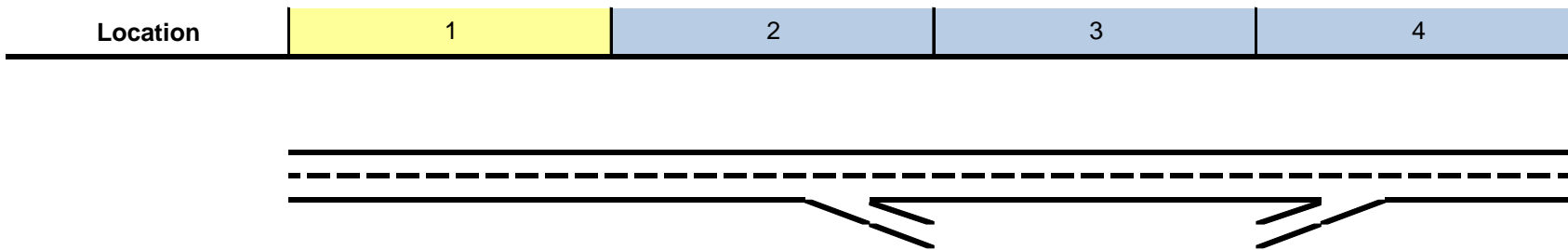
Location	1	2	3	4
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**Key**

<> Express Lane (HOV)

Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Merge Influence Area Operations</b>				
Effective $v_p$ (pcph)				974
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FM}$ (Eqn 13-3)				0.587
$P_{FM}$ (Eqn 13-4)				
$P_{FM}$ (Eqn 13-5)				
$P_{FM}$				1.000
$v_{12}$ (pcph)				974
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)				974
$v_{R12a}$ (pcph)				1,529
Speed Index				0.31
Area Speed				61.3
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed				61.3
v/c ratio				0.33
Density				15.1
LOS				B






















**Key**

<> Express Lane (HOV)

Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Diverge Influence Area Operations</b>				
Effective $v_p$ (pcph)		1,225		
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FD}$ (Eqn 13-9)		0.718		
$P_{FD}$ (Eqn 13-10)				
$P_{FD}$ (Eqn 13-11)				
$P_{FD}$		1.000		
$v_{12}$ (pcph)		1,225		
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)		1,225		
Speed Index		0.32		
Area Speed		61.0		
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed		61.0		
v/c ratio		0.28		
Density		13.3		
LOS		B		
<b>On Ramp to Off Ramp Flow Rate for Weave Segments</b>				
<b>On Ramp to Mainline Flow Rate for Weave Segments</b>				
<b>Mainline to Off Ramp Flow Rate for Weave Segments</b>				
<b>General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments</b>				
<b>Weave Segment Operations</b>				
<b>Summarize Segment Operations</b>				
Segment v/c ratio	0.26	0.28	0.20	0.33
Segment Density	8.8	13.3	7.0	15.1
Segment LOS	A	B	A	B
Over Capacity				

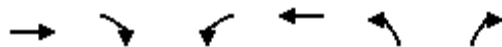
# Cumulative No Project Level of Service (LOS) Calculations

HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 1: Lake Blvd/CR 99 & Covell Blvd Cumulative No Project Conditions - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	300	50	160	220	10	40	60	340	40	60	10
Future Volume (veh/h)	10	300	50	160	220	10	40	60	340	40	60	10
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	11	323	0	174	239	10	43	65	0	43	65	7
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	0	1	0
Peak Hour Factor	0.93	0.93	0.93	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	25	425	0	278	658	28	141	148	0	62	94	10
Arrive On Green	0.01	0.23	0.00	0.16	0.37	0.37	0.08	0.08	0.00	0.09	0.09	0.09
Sat Flow, veh/h	1774	1863	0	1774	1775	74	1774	1863	0	677	1023	110
Grp Volume(v), veh/h	11	323	0	174	0	249	43	65	0	115	0	0
Grp Sat Flow(s),veh/h/ln	1774	1863	0	1774	0	1849	1774	1863	0	1809	0	0
Q Serve(g_s), s	0.3	7.7	0.0	4.4	0.0	4.7	1.1	1.6	0.0	2.9	0.0	0.0
Cycle Q Clear(g_c), s	0.3	7.7	0.0	4.4	0.0	4.7	1.1	1.6	0.0	2.9	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.04	1.00		0.00	0.37		0.06
Lane Grp Cap(c), veh/h	25	425	0	278	0	685	141	148	0	167	0	0
V/C Ratio(X)	0.44	0.76	0.00	0.63	0.00	0.36	0.30	0.44	0.00	0.69	0.00	0.00
Avail Cap(c_a), veh/h	245	724	0	1061	0	1570	920	966	0	636	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	23.4	17.2	0.0	18.9	0.0	10.9	20.8	21.0	0.0	21.0	0.0	0.0
Incr Delay (d2), s/veh	11.4	2.8	0.0	2.3	0.0	0.3	2.6	4.3	0.0	10.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	4.3	0.0	2.3	0.0	2.4	0.6	1.0	0.0	1.9	0.0	0.0
LnGrp Delay(d),s/veh	34.8	20.1	0.0	21.2	0.0	11.3	23.3	25.3	0.0	31.3	0.0	0.0
LnGrp LOS	C	C		C		B	C	C		C		
Approach Vol, veh/h		334			423			108			115	
Approach Delay, s/veh		20.5			15.3			24.5			31.3	
Approach LOS		C			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	12.9	16.3		9.6	6.1	23.1		9.0				
Change Period (Y+Rc), s	5.4	5.4		* 5.2	5.4	5.4		5.2				
Max Green Setting (Gmax), s	28.6	18.6		* 17	6.6	40.6		24.8				
Max Q Clear Time (g_c+I1), s	6.4	9.7		4.9	2.3	6.7		3.6				
Green Ext Time (p_c), s	1.9	1.2		0.7	0.0	2.1		0.8				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				20.0								
HCM 2010 LOS				C								
<b>Notes</b>												

\* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 2: Denali Dr & Covell Blvd Cumulative No Project Conditions - AM Peak Hour



Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑		↵	↑↑	↵			
Traffic Volume (veh/h)	660	30	100	490	40	200		
Future Volume (veh/h)	660	30	100	490	40	200		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1900		
Adj Flow Rate, veh/h	717	0	108	527	43	0		
Adj No. of Lanes	2	0	1	2	0	0		
Peak Hour Factor	0.92	0.92	0.93	0.93	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	0	0		
Cap, veh/h	1645	0	164	2369	86	0		
Arrive On Green	0.46	0.00	0.09	0.67	0.05	0.00		
Sat Flow, veh/h	3725	0	1774	3632	1736	0		
Grp Volume(v), veh/h	717	0	108	527	44	0		
Grp Sat Flow(s),veh/h/ln	1770	0	1774	1770	1776	0		
Q Serve(g_s), s	4.8	0.0	2.1	2.1	0.9	0.0		
Cycle Q Clear(g_c), s	4.8	0.0	2.1	2.1	0.9	0.0		
Prop In Lane		0.00	1.00		0.98	0.00		
Lane Grp Cap(c), veh/h	1645	0	164	2369	88	0		
V/C Ratio(X)	0.44	0.00	0.66	0.22	0.50	0.00		
Avail Cap(c_a), veh/h	3481	0	997	3481	998	0		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh	6.4	0.0	15.6	2.3	16.5	0.0		
Incr Delay (d2), s/veh	0.2	0.0	4.5	0.0	9.1	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	2.3	0.0	1.2	1.0	0.6	0.0		
LnGrp Delay(d),s/veh	6.6	0.0	20.1	2.3	25.6	0.0		
LnGrp LOS	A		C	A	C			
Approach Vol, veh/h	717			635	44			
Approach Delay, s/veh	6.6			5.4	25.6			
Approach LOS	A			A	C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	7.3	22.5				29.8		5.8
Change Period (Y+Rc), s	4.0	6.0				6.0		4.0
Max Green Setting (Gmax), s	20.0	35.0				35.0		20.0
Max Q Clear Time (g_c+I1), s	4.1	6.8				4.1		2.9
Green Ext Time (p_c), s	0.2	9.7				10.0		0.1
<b>Intersection Summary</b>								
HCM 2010 Ctrl Delay			6.6					
HCM 2010 LOS			A					
<b>Notes</b>								

User approved volume balancing among the lanes for turning movement.



SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Cumulative No Project Conditions  
AM Peak Hour

Intersection 3 Risling Ct/Sutter Hospital Dwy Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	100	99	99.1%	3.6	1.1	A
	Right Turn	90	91	101.0%	2.7	0.6	A
	Subtotal	190	190	100.0%	3.1	0.5	A
SB	Left Turn						
	Through	50	53	106.8%	0.1	0.2	A
	Right Turn						
	Subtotal	50	53	106.8%	0.1	0.2	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	40	38	95.8%	4.8	0.8	A
	Through						
	Right Turn	10	12	123.0%	3.7	1.8	A
	Subtotal	50	51	101.2%	4.6	0.8	A
Total		290	294	101.4%	2.8	0.4	A

Intersection 4 Risling Ct-Shasta Dr/W Covell Blvd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	20	21	102.5%	61.3	26.9	E
	Through	20	20	102.0%	36.2	16.4	D
	Right Turn	290	288	99.1%	5.5	2.7	A
	Subtotal	330	328	99.5%	11.8	4.3	B
SB	Left Turn	50	51	101.2%	47.3	16.9	D
	Through	10	9	90.0%	24.3	21.1	C
	Right Turn	30	32	107.0%	9.1	6.4	A
	Subtotal	90	92	101.9%	32.1	13.1	C
EB	Left Turn	110	108	98.2%	60.4	12.8	E
	Through	770	768	99.8%	19.3	2.3	B
	Right Turn	20	21	102.5%	10.6	14.5	B
	Subtotal	900	897	99.6%	24.3	2.4	C
WB	Left Turn	150	147	97.8%	61.5	18.1	E
	Through	630	638	101.3%	17.4	4.2	B
	Right Turn	60	62	103.5%	9.7	4.4	A
	Subtotal	840	847	100.8%	24.3	3.4	C
Total		2,160	2,164	100.2%	22.8	2.2	C

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Cumulative No Project Conditions  
AM Peak Hour

Intersection 5                      John Jones Rd/W Covell Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	200	203	101.3%	28.1	4.1	C
	Through						
	Right Turn	60	64	106.2%	5.1	1.6	A
	Subtotal	260	266	102.4%	22.9	2.9	C
EB	Left Turn	90	89	98.7%	54.0	12.3	D
	Through	1,020	1,017	99.7%	13.3	3.3	B
	Right Turn						
	Subtotal	1,110	1,105	99.6%	16.8	2.4	B
WB	Left Turn						
	Through	780	786	100.7%	13.5	1.7	B
	Right Turn	350	349	99.7%	10.4	1.8	B
	Subtotal	1,130	1,134	100.4%	12.5	1.4	B
Total		2,500	2,506	100.2%	15.6	1.5	B

Intersection 6                      SR 113 SB Ramps/W Covell Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	220	217	98.5%	31.4	3.9	C
	Through	10	12	118.0%	36.5	12.2	D
	Right Turn	140	147	105.3%	31.4	3.1	C
	Subtotal	370	376	101.6%	31.6	2.6	C
EB	Left Turn						
	Through	770	762	99.0%	21.7	4.0	C
	Right Turn	450	456	101.2%	26.1	5.2	C
	Subtotal	1,220	1,218	99.8%	23.4	4.2	C
WB	Left Turn	550	537	97.5%	47.0	7.8	D
	Through	990	987	99.7%	10.1	1.7	B
	Right Turn						
	Subtotal	1,540	1,523	98.9%	22.9	4.0	C
Total		3,130	3,117	99.6%	24.2	2.6	C

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Cumulative No Project Conditions  
AM Peak Hour

**Intersection 7**                      **SR 113 NB Ramps/W Covell Blvd**                      **Signal**






















Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	340	333	97.8%	29.5	3.1	C
	Through	10	11	113.0%	21.5	12.1	C
	Right Turn	570	570	100.0%	23.7	3.6	C
	Subtotal	920	914	99.4%	25.9	2.8	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	90	83	92.0%	60.2	9.2	E
	Through	900	896	99.5%	6.5	0.8	A
	Right Turn						
	Subtotal	990	979	98.8%	11.1	1.3	B
WB	Left Turn						
	Through	1,200	1,192	99.4%	41.7	14.3	D
	Right Turn	190	187	98.6%	28.8	13.7	C
	Subtotal	1,390	1,380	99.3%	40.0	14.2	D
Total		3,300	3,273	99.2%	27.7	6.5	C

**Intersection 8**                      **Sycamore Ln/W Covell Blvd**                      **Signal**



















Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	230	224	97.3%	67.1	26.1	E
	Through	80	81	101.5%	35.8	16.8	D
	Right Turn	70	72	102.1%	18.4	14.2	B
	Subtotal	380	376	99.1%	51.1	21.5	D
SB	Left Turn	50	51	102.2%	35.6	6.4	D
	Through	80	78	97.6%	40.3	8.3	D
	Right Turn	350	358	102.4%	14.6	6.6	B
	Subtotal	480	488	101.6%	21.4	6.6	C
EB	Left Turn	120	115	95.6%	56.5	12.7	E
	Through	830	829	99.9%	29.8	7.0	C
	Right Turn	350	352	100.7%	23.0	7.3	C
	Subtotal	1,300	1,297	99.7%	30.4	7.4	C
WB	Left Turn	40	41	101.5%	50.0	14.3	D
	Through	710	691	97.4%	26.2	4.4	C
	Right Turn	50	53	105.6%	18.7	5.4	B
	Subtotal	800	785	98.1%	27.0	4.1	C
Total		2,960	2,945	99.5%	30.8	4.0	C

HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 9: Anderson Rd & Covell Blvd

Cumulative No Project Conditions - AM Peak Hour






















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	560	330	220	540	20	170	70	120	110	210	70
Future Volume (veh/h)	40	560	330	220	540	20	170	70	120	110	210	70
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1849	1900	1863	1863	1727	1792	1823	1900	1863	1784	1900
Adj Flow Rate, veh/h	43	609	0	239	587	0	185	76	0	120	228	0
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	7	2	2	2	2	10	6	8	8	2	8	8
Cap, veh/h	64	1217	0	286	1663	690	229	338	0	157	473	0
Arrive On Green	0.04	0.35	0.00	0.16	0.47	0.00	0.13	0.19	0.00	0.09	0.14	0.00
Sat Flow, veh/h	1691	3606	0	1774	3539	1468	1707	1823	0	1774	3479	0
Grp Volume(v), veh/h	43	609	0	239	587	0	185	76	0	120	228	0
Grp Sat Flow(s),veh/h/ln	1691	1757	0	1774	1770	1468	1707	1823	0	1774	1695	0
Q Serve(g_s), s	2.1	11.3	0.0	10.8	8.7	0.0	8.7	2.9	0.0	5.4	5.1	0.0
Cycle Q Clear(g_c), s	2.1	11.3	0.0	10.8	8.7	0.0	8.7	2.9	0.0	5.4	5.1	0.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	64	1217	0	286	1663	690	229	338	0	157	473	0
V/C Ratio(X)	0.67	0.50	0.00	0.83	0.35	0.00	0.81	0.22	0.00	0.77	0.48	0.00
Avail Cap(c_a), veh/h	821	1920	0	646	1934	802	829	886	0	862	1646	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	39.1	21.3	0.0	33.5	13.9	0.0	34.6	28.5	0.0	36.7	32.7	0.0
Incr Delay (d2), s/veh	11.4	0.3	0.0	6.3	0.5	0.0	6.7	0.3	0.0	7.6	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	5.5	0.0	5.7	4.3	0.0	4.5	1.5	0.0	3.0	2.4	0.0
LnGrp Delay(d),s/veh	50.5	21.6	0.0	39.8	14.3	0.0	41.3	28.8	0.0	44.3	33.4	0.0
LnGrp LOS	D	C		D	B		D	C		D	C	
Approach Vol, veh/h		652			826			261			348	
Approach Delay, s/veh		23.5			21.7			37.7			37.2	
Approach LOS		C			C			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	18.3	33.5	15.0	15.5	8.1	43.7	11.3	19.3				
Change Period (Y+Rc), s	5.0	5.0	4.0	4.0	5.0	5.0	4.0	4.0				
Max Green Setting (Gmax), s	30.0	45.0	40.0	40.0	40.0	45.0	40.0	40.0				
Max Q Clear Time (g_c+I1), s	12.8	13.3	10.7	7.1	4.1	10.7	7.4	4.9				
Green Ext Time (p_c), s	0.6	15.2	0.5	2.0	0.1	15.8	0.3	2.0				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			26.8									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 10: Oak Ave & Covell Blvd Cumulative No Project Conditions - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	670	80	220	740	0	110	0	220	0	0	0
Future Volume (veh/h)	0	670	80	220	740	0	110	0	220	0	0	0
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	0	1863	0	1863	1900	1863	1900
Adj Flow Rate, veh/h	0	728	0	239	804	0	120	0	0	0	0	0
Adj No. of Lanes	0	2	0	1	2	0	1	0	1	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0	2	0	2	2	2	2
Cap, veh/h	0	1570	0	307	2502	0	160	0	0	0	4	0
Arrive On Green	0.00	0.44	0.00	0.17	0.71	0.00	0.09	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	0	3725	0	1774	3632	0	1774	120		0	-93137	0
Grp Volume(v), veh/h	0	728	0	239	804	0	120	26.6		0	0	0
Grp Sat Flow(s),veh/h/ln	0	1770	0	1774	1770	0	1774	C		0	1863	0
Q Serve(g_s), s	0.0	6.4	0.0	5.7	3.8	0.0	2.9			0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	6.4	0.0	5.7	3.8	0.0	2.9			0.0	0.0	0.0
Prop In Lane	0.00		0.00	1.00		0.00	1.00			0.00		0.00
Lane Grp Cap(c), veh/h	0	1570	0	307	2502	0	160			0	4	0
V/C Ratio(X)	0.00	0.46	0.00	0.78	0.32	0.00	0.75			0.00	0.00	0.00
Avail Cap(c_a), veh/h	0	2475	0	600	2555	0	800			0	630	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00	1.00			0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	8.6	0.0	17.5	2.5	0.0	19.7			0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	4.3	0.1	0.0	6.9			0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.1	0.0	3.2	1.8	0.0	1.7			0.0	0.0	0.0
LnGrp Delay(d),s/veh	0.0	8.9	0.0	21.8	2.5	0.0	26.6			0.0	0.0	0.0
LnGrp LOS		A		C	A		C					
Approach Vol, veh/h		728			1043							0
Approach Delay, s/veh		8.9			6.9							0.0
Approach LOS		A			A							
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4	5	6						
Phs Duration (G+Y+Rc), s		36.3	8.0	0.0	11.7	24.7						
Change Period (Y+Rc), s		5.0	4.0	5.0	4.0	5.0						
Max Green Setting (Gmax), s		32.0	20.0	15.0	15.0	31.0						
Max Q Clear Time (g_c+I1), s		5.8	4.9	0.0	7.7	8.4						
Green Ext Time (p_c), s		12.2	0.2	0.0	0.4	11.3						
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			8.9									
HCM 2010 LOS			A									
<b>Notes</b>												

User approved pedestrian interval to be less than phase max green.






















HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 11: F St & Covell Blvd Cumulative No Project Conditions - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	890	150	230	880	120	60	90	170	250	230	90
Future Volume (veh/h)	50	890	150	230	880	120	60	90	170	250	230	90
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1845	1863	1900	1845	1851	1900	1863	1842	1900
Adj Flow Rate, veh/h	54	967	0	250	957	0	65	98	0	272	250	0
Adj No. of Lanes	1	2	1	2	2	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	3	2	2	3	2	2	2	2	2
Cap, veh/h	76	1353	605	341	1555	0	85	242	0	324	489	0
Arrive On Green	0.04	0.38	0.00	0.10	0.44	0.00	0.05	0.13	0.00	0.18	0.27	0.00
Sat Flow, veh/h	1774	3539	1583	3408	3632	0	1757	1851	0	1774	1842	0
Grp Volume(v), veh/h	54	967	0	250	957	0	65	98	0	272	250	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1704	1770	0	1757	1851	0	1774	1842	0
Q Serve(g_s), s	2.5	19.3	0.0	5.9	17.3	0.0	3.0	4.0	0.0	12.3	9.6	0.0
Cycle Q Clear(g_c), s	2.5	19.3	0.0	5.9	17.3	0.0	3.0	4.0	0.0	12.3	9.6	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	76	1353	605	341	1555	0	85	242	0	324	489	0
V/C Ratio(X)	0.71	0.71	0.00	0.73	0.62	0.00	0.76	0.40	0.00	0.84	0.51	0.00
Avail Cap(c_a), veh/h	639	1912	856	1228	1912	0	633	667	0	639	664	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	39.3	21.9	0.0	36.4	17.9	0.0	39.2	33.2	0.0	32.8	26.0	0.0
Incr Delay (d2), s/veh	4.5	0.3	0.0	1.2	0.1	0.0	13.2	1.1	0.0	6.9	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	9.5	0.0	2.8	8.4	0.0	1.8	2.1	0.0	6.7	5.0	0.0
LnGrp Delay(d),s/veh	43.9	22.2	0.0	37.5	18.1	0.0	52.3	34.3	0.0	39.7	27.0	0.0
LnGrp LOS	D	C		D	B		D	C		D	C	
Approach Vol, veh/h		1021			1207			163			522	
Approach Delay, s/veh		23.3			22.1			41.5			33.6	
Approach LOS		C			C			D			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.6	41.6	8.0	26.1	12.3	36.8	19.2	14.9				
Change Period (Y+Rc), s	4.0	5.0	4.0	4.0	4.0	5.0	4.0	4.0				
Max Green Setting (Gmax), s	30.0	45.0	30.0	30.0	30.0	45.0	30.0	30.0				
Max Q Clear Time (g_c+I1), s	4.5	19.3	5.0	11.6	7.9	21.3	14.3	6.0				
Green Ext Time (p_c), s	0.1	10.9	0.1	2.2	0.4	10.5	0.9	2.5				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			25.7									
HCM 2010 LOS			C									
<b>Notes</b>												




















User approved pedestrian interval to be less than phase max green.



HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 12: J St/Cannery Ave & Covell Blvd Cumulative No Project Conditions - AM Peak Hour

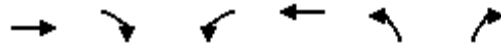
												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	940	220	110	1010	120	170	50	80	180	90	50
Future Volume (veh/h)	150	940	220	110	1010	120	170	50	80	180	90	50
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.94	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1810	1743	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	163	1022	132	120	1098	120	185	54	11	196	98	28
Adj No. of Lanes	1	2	1	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	5	9	2	2	2	2	2	2	2	2
Cap, veh/h	200	1468	630	149	1259	137	223	172	35	236	169	48
Arrive On Green	0.11	0.41	0.41	0.09	0.39	0.39	0.13	0.12	0.12	0.13	0.12	0.12
Sat Flow, veh/h	1774	3539	1520	1660	3214	351	1774	1485	302	1774	1370	392
Grp Volume(v), veh/h	163	1022	132	120	604	614	185	0	65	196	0	126
Grp Sat Flow(s),veh/h/ln	1774	1770	1520	1660	1770	1795	1774	0	1787	1774	0	1762
Q Serve(g_s), s	6.9	18.3	4.3	5.5	24.3	24.4	7.9	0.0	2.6	8.3	0.0	5.2
Cycle Q Clear(g_c), s	6.9	18.3	4.3	5.5	24.3	24.4	7.9	0.0	2.6	8.3	0.0	5.2
Prop In Lane	1.00		1.00	1.00		0.20	1.00		0.17	1.00		0.22
Lane Grp Cap(c), veh/h	200	1468	630	149	693	703	223	0	208	236	0	218
V/C Ratio(X)	0.82	0.70	0.21	0.81	0.87	0.87	0.83	0.00	0.31	0.83	0.00	0.58
Avail Cap(c_a), veh/h	218	1491	640	161	700	710	241	0	452	264	0	468
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	33.4	18.6	14.5	34.5	21.7	21.7	32.9	0.0	31.3	32.6	0.0	31.9
Incr Delay (d2), s/veh	20.1	1.5	0.2	24.6	11.6	11.7	20.2	0.0	1.0	20.3	0.0	4.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	9.2	1.8	3.5	14.0	14.2	5.1	0.0	1.3	5.4	0.0	2.8
LnGrp Delay(d),s/veh	53.6	20.0	14.7	59.1	33.3	33.4	53.1	0.0	32.3	52.9	0.0	36.4
LnGrp LOS	D	C	B	E	C	C	D		C	D		D
Approach Vol, veh/h		1317			1338			250			322	
Approach Delay, s/veh		23.7			35.6			47.7			46.4	
Approach LOS		C			D			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.2	15.0	13.2	34.7	14.8	14.5	11.4	36.5				
Change Period (Y+Rc), s	4.5	5.5	4.5	4.5	4.5	5.5	4.5	4.5				
Max Green Setting (Gmax), s	10.5	20.5	9.5	30.5	11.5	19.5	7.5	32.5				
Max Q Clear Time (g_c+I1), s	9.9	7.2	8.9	26.4	10.3	4.6	7.5	20.3				
Green Ext Time (p_c), s	0.0	1.2	0.0	3.8	0.1	1.3	0.0	10.6				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			32.8									
HCM 2010 LOS			C									

HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 1: Lake Blvd/CR 99 & Covell Blvd Cumulative No Project Conditions - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	270	40	420	310	40	50	70	260	30	50	20
Future Volume (veh/h)	30	270	40	420	310	40	50	70	260	30	50	20
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	33	293	0	457	337	43	54	76	0	32	54	22
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	61	363	0	560	770	98	136	143	0	45	76	31
Arrive On Green	0.03	0.19	0.00	0.32	0.48	0.48	0.08	0.08	0.00	0.09	0.09	0.09
Sat Flow, veh/h	1774	1863	0	1774	1619	207	1774	1863	0	525	886	361
Grp Volume(v), veh/h	33	293	0	457	0	380	54	76	0	108	0	0
Grp Sat Flow(s),veh/h/ln	1774	1863	0	1774	0	1825	1774	1863	0	1773	0	0
Q Serve(g_s), s	1.2	9.7	0.0	15.4	0.0	8.9	1.9	2.5	0.0	3.8	0.0	0.0
Cycle Q Clear(g_c), s	1.2	9.7	0.0	15.4	0.0	8.9	1.9	2.5	0.0	3.8	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.11	1.00		0.00	0.30		0.20
Lane Grp Cap(c), veh/h	61	363	0	560	0	869	136	143	0	151	0	0
V/C Ratio(X)	0.54	0.81	0.00	0.82	0.00	0.44	0.40	0.53	0.00	0.71	0.00	0.00
Avail Cap(c_a), veh/h	181	536	0	784	0	1145	680	714	0	460	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	30.7	24.9	0.0	20.4	0.0	11.2	28.5	28.8	0.0	28.8	0.0	0.0
Incr Delay (d2), s/veh	7.1	5.7	0.0	4.6	0.0	0.3	4.0	6.5	0.0	12.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	5.5	0.0	8.2	0.0	4.5	1.1	1.6	0.0	2.4	0.0	0.0
LnGrp Delay(d),s/veh	37.9	30.6	0.0	25.0	0.0	11.6	32.4	35.2	0.0	41.4	0.0	0.0
LnGrp LOS	D	C		C		B	C	D		D		
Approach Vol, veh/h		326			837			130			108	
Approach Delay, s/veh		31.3			18.9			34.1			41.4	
Approach LOS		C			B			C			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	25.8	18.0		10.7	7.6	36.2		10.2				
Change Period (Y+Rc), s	5.4	5.4		* 5.2	5.4	5.4		5.2				
Max Green Setting (Gmax), s	28.6	18.6		* 17	6.6	40.6		24.8				
Max Q Clear Time (g_c+I1), s	17.4	11.7		5.8	3.2	10.9		4.5				
Green Ext Time (p_c), s	3.1	0.9		0.6	0.0	4.2		0.9				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				24.9								
HCM 2010 LOS				C								
<b>Notes</b>												

\* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 2: Denali Dr & Covell Blvd Cumulative No Project Conditions - PM Peak Hour



Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑		↵	↑↑	↵			
Traffic Volume (veh/h)	610	40	260	750	30	110		
Future Volume (veh/h)	610	40	260	750	30	110		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1900		
Adj Flow Rate, veh/h	663	0	271	781	33	0		
Adj No. of Lanes	2	0	1	2	0	0		
Peak Hour Factor	0.92	0.92	0.96	0.96	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	0	0		
Cap, veh/h	1562	0	350	2586	67	0		
Arrive On Green	0.44	0.00	0.20	0.73	0.04	0.00		
Sat Flow, veh/h	3725	0	1774	3632	1724	0		
Grp Volume(v), veh/h	663	0	271	781	34	0		
Grp Sat Flow(s),veh/h/ln	1770	0	1774	1770	1777	0		
Q Serve(g_s), s	5.6	0.0	6.3	3.3	0.8	0.0		
Cycle Q Clear(g_c), s	5.6	0.0	6.3	3.3	0.8	0.0		
Prop In Lane		0.00	1.00		0.97	0.00		
Lane Grp Cap(c), veh/h	1562	0	350	2586	69	0		
V/C Ratio(X)	0.42	0.00	0.78	0.30	0.49	0.00		
Avail Cap(c_a), veh/h	2857	0	818	2857	820	0		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh	8.3	0.0	16.5	2.0	20.4	0.0		
Incr Delay (d2), s/veh	0.2	0.0	3.7	0.1	11.2	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	2.7	0.0	3.4	1.5	0.6	0.0		
LnGrp Delay(d),s/veh	8.5	0.0	20.2	2.1	31.7	0.0		
LnGrp LOS	A		C	A	C			
Approach Vol, veh/h	663			1052	34			
Approach Delay, s/veh	8.5			6.8	31.7			
Approach LOS	A			A	C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	12.5	25.1				37.7		5.7
Change Period (Y+Rc), s	4.0	6.0				6.0		4.0
Max Green Setting (Gmax), s	20.0	35.0				35.0		20.0
Max Q Clear Time (g_c+I1), s	8.3	7.6				5.3		2.8
Green Ext Time (p_c), s	0.6	11.5				11.9		0.1
<b>Intersection Summary</b>								
HCM 2010 Ctrl Delay			7.9					
HCM 2010 LOS			A					
<b>Notes</b>								

User approved volume balancing among the lanes for turning movement.

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Cumulative No Project Conditions  
PM Peak Hour

Intersection 3                      Risling Ct/Sutter Hospital Dwy                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	40	36	90.8%	2.8	0.4	A
	Right Turn	70	68	97.0%	2.5	0.7	A
	Subtotal	110	104	94.7%	2.6	0.4	A
SB	Left Turn	10	10	101.0%	2.0	0.9	A
	Through	110	111	101.0%	0.3	0.2	A
	Right Turn						
	Subtotal	120	121	101.0%	0.5	0.2	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	150	150	99.9%	5.0	0.6	A
	Through						
	Right Turn						
	Subtotal	150	150	99.9%	5.0	0.6	A
Total		380	375	98.7%	3.0	0.5	A

Intersection 4                      Risling Ct-Shasta Dr/W Covell Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	20	19	95.5%	69.3	21.2	E
	Through	10	10	102.0%	38.5	26.3	D
	Right Turn	200	201	100.5%	3.4	0.6	A
	Subtotal	230	230	100.1%	9.7	1.8	A
SB	Left Turn	150	149	99.0%	46.3	5.8	D
	Through	30	34	112.0%	41.7	6.5	D
	Right Turn	80	79	99.0%	15.7	5.0	B
	Subtotal	260	261	100.5%	37.4	3.4	D
EB	Left Turn	50	52	103.0%	62.0	13.2	E
	Through	630	623	99.0%	16.3	2.5	B
	Right Turn	30	31	102.7%	7.7	5.3	A
	Subtotal	710	706	99.4%	18.7	2.9	B
WB	Left Turn	180	165	91.5%	57.6	7.9	E
	Through	910	807	88.6%	11.2	2.8	B
	Right Turn	50	43	86.4%	5.7	3.3	A
	Subtotal	1,140	1,015	89.0%	18.5	2.5	B
Total		2,340	2,212	94.5%	20.0	2.0	C

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Cumulative No Project Conditions  
PM Peak Hour

Intersection 5                      John Jones Rd/W Covell Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	240	243	101.0%	42.8	5.8	D
	Through						
	Right Turn	60	62	103.7%	7.8	2.0	A
	Subtotal	300	305	101.6%	36.2	4.5	D
EB	Left Turn	50	51	101.2%	60.9	6.2	E
	Through	930	921	99.0%	10.0	1.5	B
	Right Turn						
	Subtotal	980	972	99.1%	12.8	1.3	B
WB	Left Turn						
	Through	1,080	952	88.2%	8.2	1.9	A
	Right Turn	210	184	87.8%	5.9	1.0	A
	Subtotal	1,290	1,137	88.1%	7.8	1.7	A
Total		2,570	2,413	93.9%	13.8	1.4	B

Intersection 6                      SR 113 SB Ramps/W Covell Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	190	191	100.6%	43.0	6.2	D
	Through	10	11	112.0%	52.6	37.8	D
	Right Turn	90	90	99.6%	41.4	6.9	D
	Subtotal	290	292	100.7%	42.9	5.7	D
EB	Left Turn						
	Through	880	869	98.7%	22.5	2.6	C
	Right Turn	290	293	101.1%	17.5	3.0	B
	Subtotal	1,170	1,162	99.3%	21.3	2.4	C
WB	Left Turn	530	448	84.5%	48.9	11.6	D
	Through	1,200	1,049	87.4%	10.1	1.5	B
	Right Turn						
	Subtotal	1,730	1,497	86.5%	22.0	4.1	C
Total		3,190	2,951	92.5%	23.9	2.7	C

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Cumulative No Project Conditions  
PM Peak Hour

**Intersection 7**                      **SR 113 NB Ramps/W Covell Blvd**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	460	440	95.7%	103.7	38.2	F
	Through						
	Right Turn	780	748	95.9%	150.3	37.7	F
	Subtotal	1,240	1,188	95.8%	132.8	37.2	F
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	90	88	97.4%	85.2	10.9	F
	Through	980	970	99.0%	24.6	5.7	C
	Right Turn						
	Subtotal	1,070	1,058	98.8%	29.1	5.2	C
WB	Left Turn						
	Through	1,270	1,057	83.2%	110.7	18.5	F
	Right Turn	310	262	84.5%	78.6	15.5	E
	Subtotal	1,580	1,319	83.5%	104.3	17.9	F
Total		3,890	3,564	91.6%	92.8	15.2	F
























**Intersection 8**                      **Sycamore Ln/W Covell Blvd**                      **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	280	277	98.9%	130.9	105.9	F
	Through	50	50	100.0%	127.6	93.2	F
	Right Turn	100	100	100.1%	92.8	106.0	F
	Subtotal	430	427	99.3%	121.0	104.3	F
SB	Left Turn	80	81	101.4%	40.3	9.1	D
	Through	140	140	100.1%	59.6	19.5	E
	Right Turn	230	225	97.8%	30.1	19.3	C
	Subtotal	450	446	99.1%	41.5	16.9	D
EB	Left Turn	300	282	94.1%	89.4	29.5	F
	Through	1,060	1,034	97.6%	53.2	20.0	D
	Right Turn	190	181	95.4%	42.8	19.2	D
	Subtotal	1,550	1,498	96.6%	58.7	21.8	E
WB	Left Turn	30	23	75.0%	372.0	104.2	F
	Through	960	787	82.0%	386.9	61.5	F
	Right Turn	70	54	77.6%	377.8	72.4	F
	Subtotal	1,060	864	81.5%	386.2	61.4	F
Total		3,490	3,235	92.7%	152.5	16.8	F





















HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 9: Anderson Rd & Covell Blvd

Cumulative No Project Conditions - PM Peak Hour






















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	850	230	110	640	120	390	150	190	70	150	30
Future Volume (veh/h)	50	850	230	110	640	120	390	150	190	70	150	30
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1855	1900	1863	1863	1727	1792	1816	1900	1863	1776	1900
Adj Flow Rate, veh/h	54	924	0	120	696	0	424	163	0	76	163	0
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	7	2	2	2	2	10	6	8	8	2	8	8
Cap, veh/h	70	1203	0	149	1359	564	456	670	0	99	532	0
Arrive On Green	0.04	0.34	0.00	0.08	0.38	0.00	0.27	0.37	0.00	0.06	0.16	0.00
Sat Flow, veh/h	1691	3617	0	1774	3539	1468	1707	1816	0	1774	3463	0
Grp Volume(v), veh/h	54	924	0	120	696	0	424	163	0	76	163	0
Grp Sat Flow(s),veh/h/ln	1691	1762	0	1774	1770	1468	1707	1816	0	1774	1687	0
Q Serve(g_s), s	3.8	28.0	0.0	8.0	18.1	0.0	29.0	7.5	0.0	5.1	5.1	0.0
Cycle Q Clear(g_c), s	3.8	28.0	0.0	8.0	18.1	0.0	29.0	7.5	0.0	5.1	5.1	0.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	70	1203	0	149	1359	564	456	670	0	99	532	0
V/C Ratio(X)	0.78	0.77	0.00	0.81	0.51	0.00	0.93	0.24	0.00	0.77	0.31	0.00
Avail Cap(c_a), veh/h	565	1324	0	444	1359	564	570	670	0	593	1127	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	56.9	35.2	0.0	53.9	28.3	0.0	42.8	26.2	0.0	55.8	44.6	0.0
Incr Delay (d2), s/veh	16.6	2.5	0.0	9.8	1.1	0.0	19.4	0.2	0.0	11.8	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	14.0	0.0	4.3	9.0	0.0	16.1	3.7	0.0	2.8	2.4	0.0
LnGrp Delay(d),s/veh	73.5	37.8	0.0	63.7	29.4	0.0	62.2	26.4	0.0	67.6	45.0	0.0
LnGrp LOS	E	D		E	C		E	C		E	D	
Approach Vol, veh/h		978			816			587			239	
Approach Delay, s/veh		39.7			34.4			52.3			52.2	
Approach LOS		D			C			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.0	45.9	36.0	22.9	9.9	51.0	10.7	48.2				
Change Period (Y+Rc), s	5.0	5.0	4.0	4.0	5.0	5.0	4.0	4.0				
Max Green Setting (Gmax), s	30.0	45.0	40.0	40.0	40.0	45.0	40.0	40.0				
Max Q Clear Time (g_c+I1), s	10.0	30.0	31.0	7.1	5.8	20.1	7.1	9.5				
Green Ext Time (p_c), s	0.3	10.8	1.0	1.1	0.1	17.2	0.2	2.1				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			42.0									
HCM 2010 LOS			D									

HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 10: Oak Ave & Covell Blvd Cumulative No Project Conditions - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1070	110	100	730	0	170	0	260	0	0	0
Future Volume (veh/h)	0	1070	110	100	730	0	170	0	260	0	0	0
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	0	1863	0	1863	1900	1863	1900
Adj Flow Rate, veh/h	0	1092	0	109	793	0	179	0	0	0	0	0
Adj No. of Lanes	0	2	0	1	2	0	1	0	1	0	1	0
Peak Hour Factor	0.98	0.98	0.98	0.92	0.92	0.92	0.95	0.95	0.95	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0	2	0	2	2	2	2
Cap, veh/h	0	1817	0	143	2399	0	237	0	0	0	4	0
Arrive On Green	0.00	0.51	0.00	0.08	0.68	0.00	0.13	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	0	3725	0	1774	3632	0	1774	179		0	-93137	0
Grp Volume(v), veh/h	0	1092	0	109	793	0	179	24.8		0	0	0
Grp Sat Flow(s),veh/h/ln	0	1770	0	1774	1770	0	1774	C		0	1863	0
Q Serve(g_s), s	0.0	10.4	0.0	2.9	4.4	0.0	4.6			0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	10.4	0.0	2.9	4.4	0.0	4.6			0.0	0.0	0.0
Prop In Lane	0.00		0.00	1.00		0.00	1.00			0.00		0.00
Lane Grp Cap(c), veh/h	0	1817	0	143	2399	0	237			0	4	0
V/C Ratio(X)	0.00	0.60	0.00	0.76	0.33	0.00	0.75			0.00	0.00	0.00
Avail Cap(c_a), veh/h	0	2298	0	557	2399	0	743			0	585	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00	1.00			0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	8.2	0.0	21.5	3.2	0.0	19.9			0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	8.1	0.1	0.0	4.8			0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.1	0.0	1.7	2.1	0.0	2.6			0.0	0.0	0.0
LnGrp Delay(d),s/veh	0.0	8.5	0.0	29.6	3.3	0.0	24.8			0.0	0.0	0.0
LnGrp LOS		A		C	A		C					
Approach Vol, veh/h		1092			902							0
Approach Delay, s/veh		8.5			6.5							0.0
Approach LOS		A			A							
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4	5	6						
Phs Duration (G+Y+Rc), s		37.4	10.4	0.0	7.8	29.5						
Change Period (Y+Rc), s		5.0	4.0	5.0	4.0	5.0						
Max Green Setting (Gmax), s		32.0	20.0	15.0	15.0	31.0						
Max Q Clear Time (g_c+I1), s		6.4	6.6	0.0	4.9	12.4						
Green Ext Time (p_c), s		15.3	0.4	0.0	0.2	12.1						
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				9.0								
HCM 2010 LOS				A								
<b>Notes</b>												






















User approved pedestrian interval to be less than phase max green.

HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 11: F St & Covell Blvd Cumulative No Project Conditions - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	1250	170	200	830	270	150	160	270	120	160	50
Future Volume (veh/h)	70	1250	170	200	830	270	150	160	270	120	160	50
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1845	1863	1900	1845	1851	1900	1863	1846	1900
Adj Flow Rate, veh/h	76	1359	0	217	902	0	163	174	0	130	174	0
Adj No. of Lanes	1	2	1	2	2	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	3	2	2	3	2	2	2	2	2
Cap, veh/h	99	1582	708	297	1693	0	201	353	0	167	314	0
Arrive On Green	0.06	0.45	0.00	0.09	0.48	0.00	0.11	0.19	0.00	0.09	0.17	0.00
Sat Flow, veh/h	1774	3539	1583	3408	3632	0	1757	1851	0	1774	1846	0
Grp Volume(v), veh/h	76	1359	0	217	902	0	163	174	0	130	174	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1704	1770	0	1757	1851	0	1774	1846	0
Q Serve(g_s), s	4.0	32.3	0.0	5.8	16.7	0.0	8.5	7.9	0.0	6.7	8.1	0.0
Cycle Q Clear(g_c), s	4.0	32.3	0.0	5.8	16.7	0.0	8.5	7.9	0.0	6.7	8.1	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	99	1582	708	297	1693	0	201	353	0	167	314	0
V/C Ratio(X)	0.77	0.86	0.00	0.73	0.53	0.00	0.81	0.49	0.00	0.78	0.55	0.00
Avail Cap(c_a), veh/h	568	1698	760	1090	1698	0	562	592	0	568	590	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	43.7	23.3	0.0	41.7	17.1	0.0	40.5	33.9	0.0	41.5	35.6	0.0
Incr Delay (d2), s/veh	4.7	4.1	0.0	1.3	0.2	0.0	7.5	1.1	0.0	9.1	1.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	16.6	0.0	2.8	8.2	0.0	4.5	4.1	0.0	3.7	4.3	0.0
LnGrp Delay(d),s/veh	48.4	27.4	0.0	43.1	17.3	0.0	48.1	35.0	0.0	50.6	37.5	0.0
LnGrp LOS	D	C		D	B		D	C		D	D	
Approach Vol, veh/h		1435			1119			337			304	
Approach Delay, s/veh		28.5			22.3			41.3			43.1	
Approach LOS		C			C			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.2	49.9	14.7	20.0	12.2	46.9	12.8	21.9				
Change Period (Y+Rc), s	4.0	5.0	4.0	4.0	4.0	5.0	4.0	4.0				
Max Green Setting (Gmax), s	30.0	45.0	30.0	30.0	30.0	45.0	30.0	30.0				
Max Q Clear Time (g_c+I1), s	6.0	18.7	10.5	10.1	7.8	34.3	8.7	9.9				
Green Ext Time (p_c), s	0.1	13.7	0.4	2.2	0.4	7.6	0.4	2.2				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			29.1									
HCM 2010 LOS			C									
<b>Notes</b>												

User approved pedestrian interval to be less than phase max green.

HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 12: J St/Cannery Ave & Covell Blvd Cumulative No Project Conditions - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	1360	140	80	1060	120	140	140	50	190	110	80
Future Volume (veh/h)	140	1360	140	80	1060	120	140	140	50	190	110	80
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1810	1743	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	152	1478	63	87	1152	120	152	152	38	207	120	53
Adj No. of Lanes	1	2	1	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	5	9	2	2	2	2	2	2	2	2
Cap, veh/h	187	1456	602	109	1197	124	187	219	55	244	225	100
Arrive On Green	0.11	0.41	0.41	0.07	0.37	0.37	0.11	0.15	0.15	0.14	0.19	0.19
Sat Flow, veh/h	1774	3539	1464	1660	3218	334	1774	1427	357	1774	1217	537
Grp Volume(v), veh/h	152	1478	63	87	632	640	152	0	190	207	0	173
Grp Sat Flow(s),veh/h/ln	1774	1770	1464	1660	1770	1783	1774	0	1784	1774	0	1754
Q Serve(g_s), s	6.9	33.7	2.2	4.2	28.6	28.8	6.9	0.0	8.3	9.3	0.0	7.3
Cycle Q Clear(g_c), s	6.9	33.7	2.2	4.2	28.6	28.8	6.9	0.0	8.3	9.3	0.0	7.3
Prop In Lane	1.00		1.00	1.00		0.19	1.00		0.20	1.00		0.31
Lane Grp Cap(c), veh/h	187	1456	602	109	658	663	187	0	274	244	0	325
V/C Ratio(X)	0.81	1.01	0.10	0.80	0.96	0.96	0.81	0.00	0.69	0.85	0.00	0.53
Avail Cap(c_a), veh/h	206	1456	602	152	658	663	227	0	424	249	0	439
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.9	24.1	14.8	37.7	25.1	25.2	35.9	0.0	32.9	34.5	0.0	30.2
Incr Delay (d2), s/veh	20.8	27.4	0.1	19.5	25.6	26.3	17.4	0.0	3.8	24.5	0.0	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	21.9	0.9	2.5	18.6	18.9	4.3	0.0	4.4	6.3	0.0	3.7
LnGrp Delay(d),s/veh	56.7	51.5	14.9	57.3	50.8	51.5	53.3	0.0	36.6	59.0	0.0	32.7
LnGrp LOS	E	F	B	E	D	D	D		D	E		C
Approach Vol, veh/h		1693			1359			342			380	
Approach Delay, s/veh		50.6			51.5			44.0			47.0	
Approach LOS		D			D			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.2	20.7	13.1	35.0	15.8	18.1	9.9	38.2				
Change Period (Y+Rc), s	4.5	5.5	4.5	4.5	4.5	5.5	4.5	4.5				
Max Green Setting (Gmax), s	10.5	20.5	9.5	30.5	11.5	19.5	7.5	32.5				
Max Q Clear Time (g_c+I1), s	8.9	9.3	8.9	30.8	11.3	10.3	6.2	35.7				
Green Ext Time (p_c), s	0.1	2.2	0.0	0.0	0.0	1.9	0.0	0.0				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			50.0									
HCM 2010 LOS			D									



Major Street Risling Ct  
 Minor Street Hospital Dwy

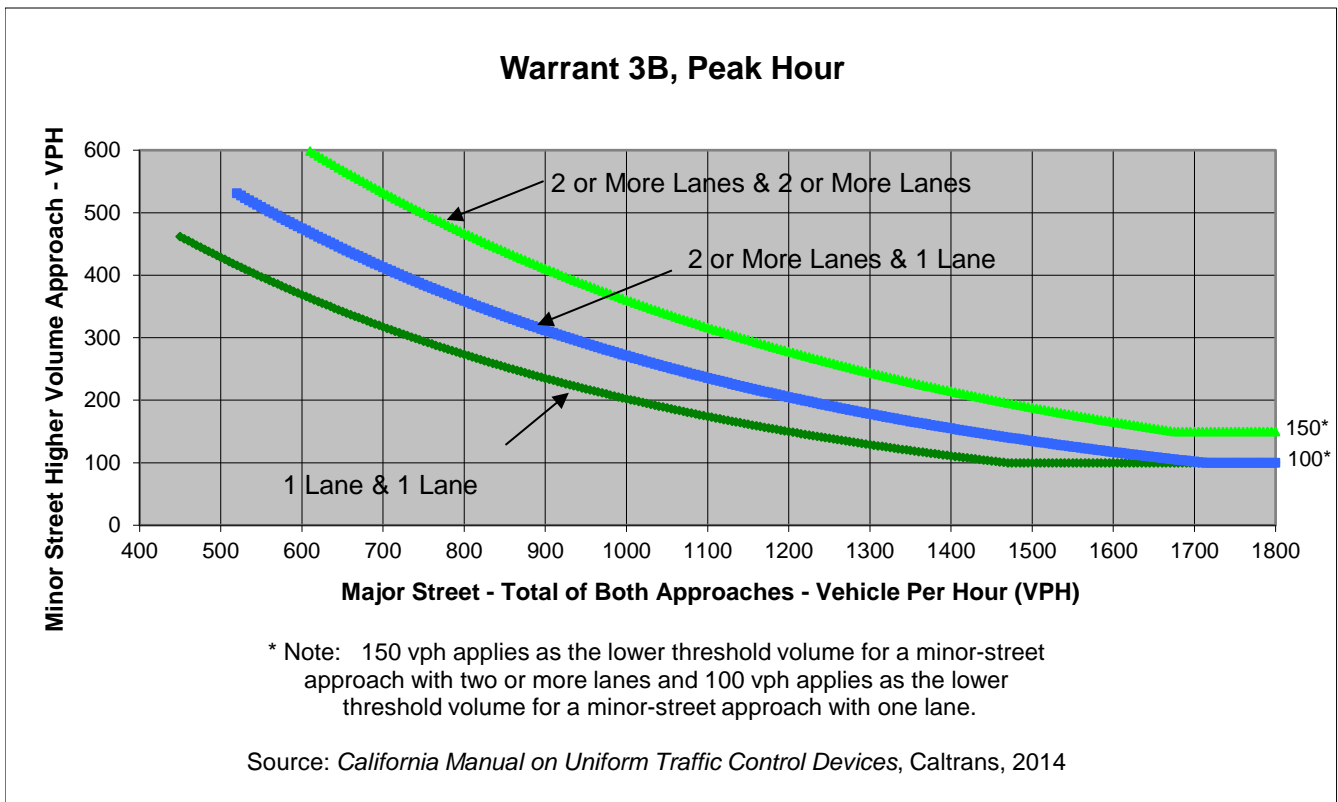
Project West Davis AAC EIR  
 Scenario Cumulative No Project  
 Peak Hour AM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	0	0	40
Through	100	50	0	0
Right	90	0	0	10
Total	190	50	0	50

Major Street Direction

x	North/South
	East/West



	Major Street	Minor Street	Warrant Met
	Risling Ct	Hospital Dwy	
<b>Number of Approach Lanes</b>	<b>1</b>	<b>1</b>	<b><u>NO</u></b>
<b>Traffic Volume (VPH) *</b>	<b>240</b>	<b>50</b>	

\* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.  
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street Risling Ct  
 Minor Street Hospital Dwy

Project West Davis AAC EIR  
 Scenario Cumulative No Project  
 Peak Hour AM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	0	0	40
Through	100	50	0	0
Right	90	0	0	10
Total	190	50	0	50

Major Street Direction

x	North/South
	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	4.6
Approach with Worst Case Delay	WB
Total Vehicles on Approach	50

<b>Warrant 3A, Peak Hour</b>			
	<b>Peak Hour Delay on Minor Approach (vehicle-hours)</b>	<b>Peak Hour Volume on Minor Approach (vph)</b>	<b>Peak Hour Entering Volume Served (vph)</b>
<b>Cumulative No Project</b>	<b>0.1</b>	<b>50</b>	<b>290</b>
<b>Limiting Value</b>	<b>4</b>	<b>100</b>	<b>650</b>
<b>Condition Satisfied?</b>	<b>Not Met</b>	<b>Not Met</b>	<b>Not Met</b>
<b>Warrant Met</b>	<b><u>NO</u></b>		





Major Street Risling Ct  
 Minor Street Hospital Dwy

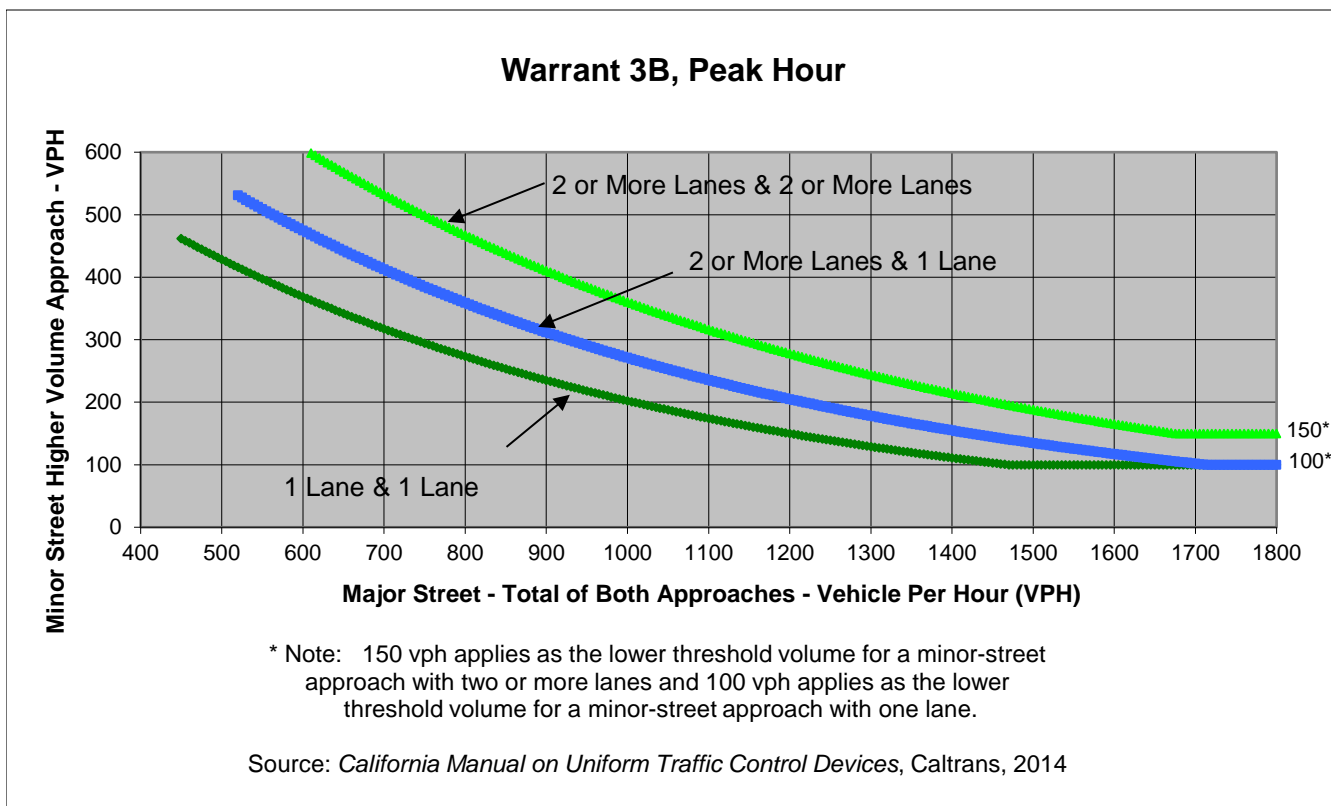
Project West Davis AAC EIR  
 Scenario Cumulative No Project  
 Peak Hour PM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	10	0	150
Through	40	110	0	0
Right	70	0	0	0
Total	110	120	0	150

Major Street Direction

x	North/South
	East/West



	Major Street	Minor Street	Warrant Met
	Risling Ct	Hospital Dwy	
<b>Number of Approach Lanes</b>	<b>1</b>	<b>1</b>	<b><u>NO</u></b>
<b>Traffic Volume (VPH) *</b>	<b>230</b>	<b>150</b>	

\* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.  
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street Risling Ct  
 Minor Street Hospital Dwy

Project West Davis AAC EIR  
 Scenario Cumulative No Project  
 Peak Hour PM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	10	0	150
Through	40	110	0	0
Right	70	0	0	0
<b>Total</b>	<b>110</b>	<b>120</b>	<b>0</b>	<b>150</b>

Major Street Direction

x	North/South
	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	5.0
Approach with Worst Case Delay	WB
Total Vehicles on Approach	150

<b>Warrant 3A, Peak Hour</b>			
	<b>Peak Hour Delay on Minor Approach (vehicle-hours)</b>	<b>Peak Hour Volume on Minor Approach (vph)</b>	<b>Peak Hour Entering Volume Served (vph)</b>
<b>Cumulative No Project</b>	<b>0.2</b>	<b>150</b>	<b>380</b>
<b>Limiting Value</b>	<b>4</b>	<b>100</b>	<b>650</b>
<b>Condition Satisfied?</b>	<b>Not Met</b>	<b>Met</b>	<b>Not Met</b>
<b>Warrant Met</b>	<b><u>NO</u></b>		

Intersection 3

Risling Ct/Sutter Hospital Dwy

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
NB	Through/Right	350	25	1	25	8	25	21	0%	0%
SB	Left/Through	1,000	25	0	25	4	25	14	0%	0%
WB	Shared	1,925	50	3	75	6	75	12	0%	0%
0										

Intersection 4

Risling Ct-Shasta Dr/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	225	100	10	200	28	225	26	1%	0%
	Through	5,700	150	11	250	15	275	29	22%	0%
	Right Turn	100	25	5	75	22	100	33	0%	0%
NB	Left Turn	125	25	4	75	10	100	18	0%	0%
	Through	350	75	11	125	44	200	102	4%	0%
	Right Turn	75	75	1	75	2	75	2	3%	0%
SB	Left Turn	125	50	6	100	12	125	11	3%	0%
	Through/Right	350	50	4	100	22	125	52	0%	0%
WB	U/Left Turns	325	100	6	150	10	175	17	0%	0%
	Left Turn	325	75	8	125	14	175	26	0%	0%
	Through	575	100	12	200	19	250	20	0%	0%
	Through/Right	575	125	10	225	12	275	27	0%	0%

Intersection 5

John Jones Rd/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	150	75	9	150	12	175	7	2%	0%
	Through	575	125	13	225	30	300	69	2%	0%
SB	Left Turn	250	125	11	200	17	225	25	0%	0%
	Through/Right	1,600	25	2	75	6	75	14	0%	0%
WB	Through	350	175	20	300	37	325	50	25%	0%
	Right Turn	75	75	2	100	5	100	0	8%	0%
NB	Shared	25	25	0	25	0	25	0	0%	0%

Intersection 6

SR 113 SB Ramps/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	350	200	19	325	28	350	24	0%	0%
	Through/Right	350	250	15	375	23	375	13	0%	2%
SB	Left/Through	1,425	150	12	225	19	275	31	0%	0%
	Right Turn	1,425	100	10	175	22	200	38	0%	0%
WB	Left Turn	225	175	18	250	21	225	1	5%	0%
	Through	500	175	49	400	116	500	108	0%	1%
O										

Intersection 7

SR 113 NB Ramps/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	U/Left Turns	175	50	6	75	16	100	23	0%	0%
	Left Turn	175	75	5	100	10	100	14	0%	0%
	Through	500	100	8	150	11	175	19	0%	0%
NB	Left/Through	2,400	175	14	275	23	325	34	0%	0%
	Right Turn	825	225	30	375	70	450	93	0%	0%
WB	Through	875	375	44	575	76	650	77	31%	0%
	Right Turn	150	125	11	200	8	175	0	0%	0%
0										

Intersection 8

Sycamore Ln/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	175	125	11	200	12	200	0	2%	0%
	Through	875	250	18	425	29	525	31	14%	0%
	Through/Right	875	300	16	450	24	475	21	0%	0%
NB	Left Turn	225	175	23	250	20	225	1	20%	0%
	Through/Right	2,050	175	87	400	187	500	175	1%	0%
SB	Left Turn	250	75	11	150	48	200	87	0%	0%
	Through	1,775	150	33	300	68	375	124	19%	0%
	Right Turn	75	75	2	100	4	100	0	2%	0%
WB	Left Turn	125	50	8	125	22	150	28	0%	0%
	Through	5,800	175	14	275	18	300	32	14%	0%
	Through/Right	5,800	200	15	300	23	325	45	0%	0%

Intersection 3

Risling Ct/Sutter Hospital Dwy

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
SB	Left/Through	1,000	25	1	25	8	50	17	0%	0%
WB	Shared	925	50	4	100	10	100	18	0%	0%
NB	Through/Right	1,025	25	0	25	0	25	0	0%	0%
0										

Intersection 4

Risling Ct-Shasta Dr/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	225	50	4	100	12	150	22	0%	0%
	Through	5,700	125	11	200	16	225	32	16%	0%
	Right Turn	100	25	5	75	18	125	0	0%	0%
NB	Left Turn	125	25	3	75	6	100	19	0%	0%
	Through	350	50	6	100	26	125	75	1%	0%
	Right Turn	75	75	1	75	6	75	6	2%	0%
SB	Left Turn	125	125	9	175	8	175	1	21%	0%
	Through/Right	350	100	14	200	34	275	50	6%	0%
WB	U/Left Turns	325	100	6	150	10	175	15	0%	0%
	Left Turn	325	75	8	125	18	150	27	0%	0%
	Through	575	100	13	225	32	275	59	0%	0%
	Through/Right	575	125	16	250	28	300	57	0%	0%

Intersection 5

John Jones Rd/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	150	50	7	100	14	125	18	0%	0%
	Through	575	100	9	175	13	225	32	1%	0%
SB	Left Turn	250	175	14	275	24	275	3	5%	0%
	Through/Right	1,600	75	18	200	69	325	83	0%	0%
WB	Through	350	125	16	250	31	300	31	14%	0%
	Right Turn	75	50	7	100	8	100	0	1%	0%
NB	Shared	25	25	0	25	0	25	0	0%	0%

Intersection 6

SR 113 SB Ramps/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	350	250	21	375	22	375	7	0%	2%
	Through/Right	350	275	15	375	9	375	19	0%	3%
SB	Left/Through	1,425	150	12	250	19	300	31	0%	0%
	Right Turn	1,425	75	7	150	14	175	20	0%	0%
WB	Left Turn	225	200	9	275	9	250	0	9%	0%
	Through	500	200	25	450	52	525	71	1%	1%
O										

Intersection 7

SR 113 NB Ramps/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	U/Left Turns	175	50	5	100	8	100	16	0%	0%
	Left Turn	175	100	10	200	18	200	0	0%	0%
	Through	500	250	18	375	44	425	66	16%	0%
NB	Left/Through	2,375	1,450	561	2,400	689	2,225	332	0%	15%
	Right Turn	725	725	56	825	56	775	0	42%	0%
WB	Through	875	850	22	1,025	25	925	14	55%	24%
	Right Turn	150	200	8	300	6	225	0	0%	0%
0										

Intersection 8

Sycamore Ln/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	175	200	4	225	11	225	0	37%	0%
	Through	875	525	67	775	89	825	76	25%	1%
	Through/Right	875	550	70	800	91	850	79	0%	1%
NB	Left Turn	225	225	12	275	17	250	0	49%	0%
	Through/Right	2,050	525	376	975	584	1,000	513	3%	0%
SB	Left Turn	250	100	22	250	53	275	39	0%	0%
	Through	1,775	250	79	475	184	550	208	47%	0%
	Right Turn	75	75	3	100	9	100	0	2%	0%
WB	Left Turn	125	50	8	150	18	175	1	0%	0%
	Through	5,800	1,850	394	3,200	749	3,050	708	73%	0%
	Through/Right	5,800	1,875	392	3,225	741	3,050	715	0%	0%



Arterial Level of Service  
 Cumulative No Project Conditions

AM Peak Hour

Arterial Level of Service: NB Route 1

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Covell Blvd	7	28.6	69.9	0.5	24
SR 113 SB Ramps	6	10.9	25.5	0.1	15
John Jones Rd	5	15.7	23.4	0.1	12
Risling Ct	4	18.6	30.8	0.1	14
	13	2.3	10.2	0.1	31
Total		76.2	159.6	0.8	19

Arterial Level of Service: SB Route 1

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	17.1	23.6	0.1	13
	5	10.5	22.9	0.1	19
SR 113 SB Ramps	6	18.0	25.9	0.1	10
Route 1	7	4.9	15.6	0.1	24
Total		50.5	88.0	0.4	16

Arterial Level of Service  
Cumulative No Project Conditions

AM Peak Hour

Arterial Level of Service: EB Route 2

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	17.1	23.6	0.1	13
	5	10.5	22.9	0.1	19
Route 2	6	21.8	33.3	0.1	8
Total		49.3	79.8	0.3	13

Arterial Level of Service: WB Route 2

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
John Jones Rd	5	-	-	0.1	-
Risling Ct	4	18.6	30.8	0.1	14
	13	2.3	10.2	0.1	31
Total		20.9	41.0	0.3	25

Arterial Level of Service  
 Cumulative No Project Conditions

PM Peak Hour

Arterial Level of Service: NB Route 1

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Covell Blvd	7	103.5	182.0	0.5	12
SR 113 SB Ramps	6	6.3	20.8	0.1	18
John Jones Rd	5	7.8	15.4	0.1	18
Risling Ct	4	10.4	22.6	0.1	19
	13	1.9	9.7	0.1	32
Total		129.8	250.5	0.8	14

Arterial Level of Service: SB Route 1

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	13.8	20.3	0.1	15
	5	7.3	19.7	0.1	22
SR 113 SB Ramps	6	21.9	29.8	0.1	9
Route 1	7	23.9	34.5	0.1	11
Total		66.8	104.3	0.4	13

Arterial Level of Service  
Cumulative No Project Conditions

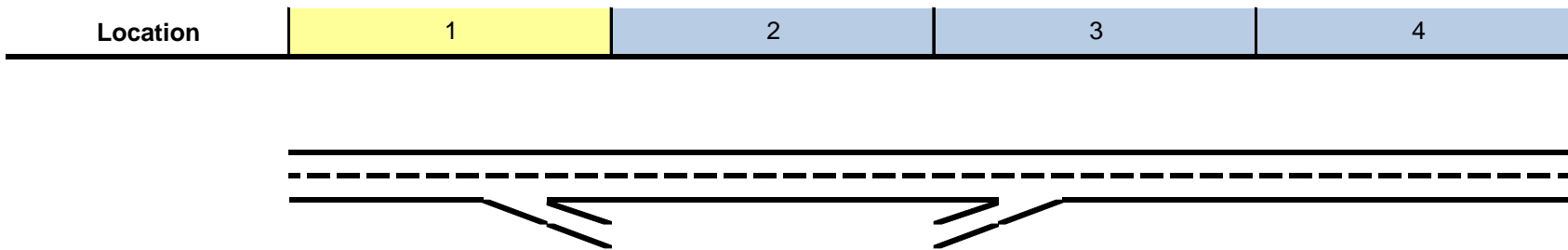
PM Peak Hour

Arterial Level of Service: EB Route 2

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	16.2	22.7	0.1	14
	5	6.8	19.3	0.1	22
Route 2	6	17.8	29.4	0.1	9
Total		40.8	71.5	0.3	14

Arterial Level of Service: WB Route 2

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
John Jones Rd	5	-	-	0.1	-
Risling Ct	4	13.7	26.0	0.1	16
	13	2.0	10.0	0.1	31
Total		15.7	35.9	0.3	28

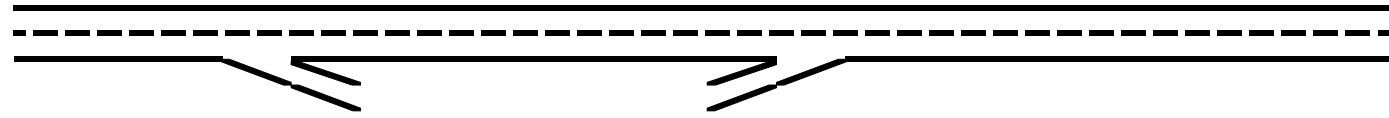


**Key**

<> Express Lane (HOV)

Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Freeway Segment</b>				
Type	Diverge	Basic	Merge	Basic
Length (ft)	1,500	2,560	1,500	5,980
Accel Length			370	
Decel Length	150			
Mainline Volume	1,370	450	450	740
On Ramp Volume			290	
Off Ramp Volume	920			
Express Lane Volume				
EL On Ramp Volume				
EL Off Ramp Volume				
<b>Flow Rate in Entering General Purpose Lanes (GP)</b>				
Volume (vph)	1,370	450	450	740
PHF	0.75	0.75	0.75	0.75
Lanes	2	2	2	2
Terrain	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00
Truck & Bus %	5.9%	5.9%	5.9%	5.9%
RV %	0.0%	0.0%	0.0%	0.0%
E <sub>T</sub>	1.5	1.5	1.5	1.5
E <sub>R</sub>	1.2	1.2	1.2	1.2
f <sub>HV</sub>	0.971	0.971	0.971	0.971
f <sub>P</sub>	1.00	1.00	1.00	1.00
Flow (pcph)	1,881	618	618	1,016
Flow (pcphpl)	940	309	309	508

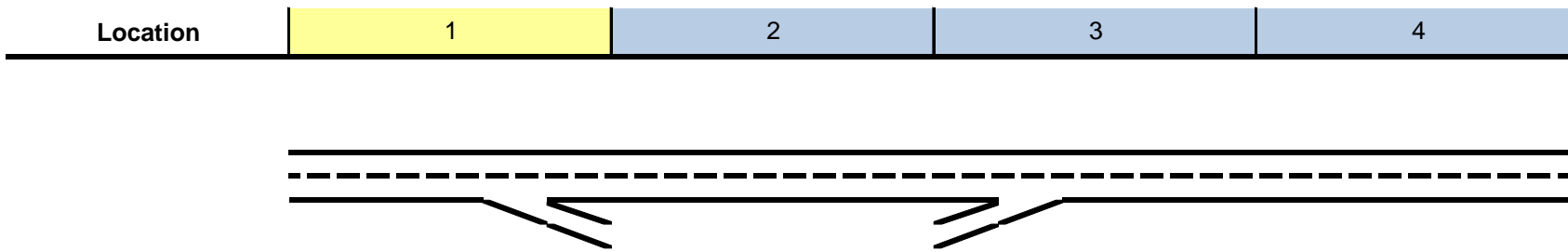
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**Key**

<> Express Lane (HOV)

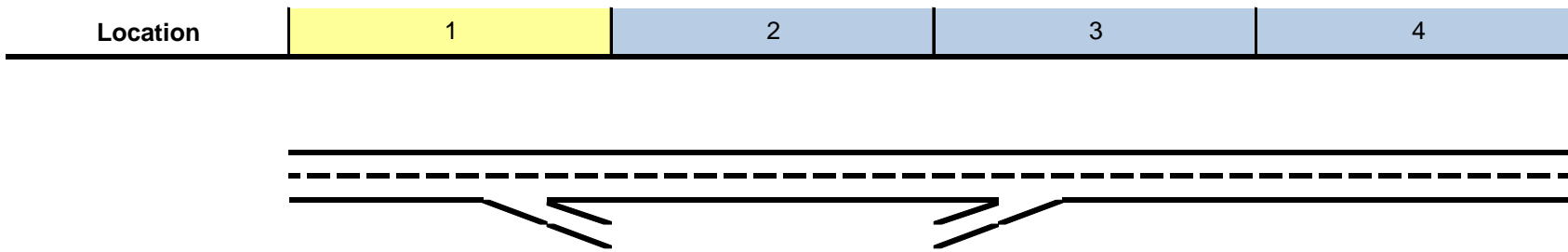
Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Free Flow Speed in Entering GP Lanes</b>				
Lane Width (ft)				
Shoulder Width				
TRD				
$f_{LW}$				
$f_{LC}$				
Calculated FFS				
Measured FFS				
FFS Curve	70	70	70	70
<b>Operations in Entering GP Lanes</b>				
Capacity (pcph)	4,800	4,800	4,800	4,800
v/c ratio	0.39	0.13	0.13	0.21
Speed (mph)	70.0	70.0	70.0	70.0
Density (pcphpl)	13.4	4.4	4.4	7.3
LOS	B	A	A	A
<b>Operations for Segment GP Lanes</b>				
Flow (pcph)			926	
Lanes			2	
Capacity (pcph)			4,800	
v/c ratio			0.19	
Flow Rate (pcphpl)			463	
Speed (mph)			70.0	
Density (pcphpl)			6.6	
LOS			A	
<b>Operations for Exiting GP Lanes</b>				
Flow (pcph)	902			
Lanes	2			
Capacity (pcph)	4,800			
v/c ratio	0.19			
Flow Rate (pcphpl)	451			
Speed (mph)	70.0			
Density (pcphpl)	6.4			
LOS	A			



**Key**

<> Express Lane (HOV)

Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Flow Rate in Express Lanes</b>				
<b>Operations in Express Lanes</b>				
<b>On Ramp Flow Rate</b>				
Volume (vph)			290	
PHF			0.95	
Lanes			1	
Terrain			Level	
Grade %			0.0%	
Grade Length (mi)			0.00	
Truck & Bus %			2.0%	
RV %			0.0%	
$E_T$			1.5	
$E_R$			1.2	
$f_{HV}$			0.990	
$f_P$			1.00	
Flow (pcph)			308	
Flow Rate (pcphpl)			308	
<b>On Ramp Roadway Operations</b>				
Ramp Type			Right	
Ramp Speed (mph)			45	
Ramp Capacity (pcph)			2,100	
Ramp v/c ratio			0.15	

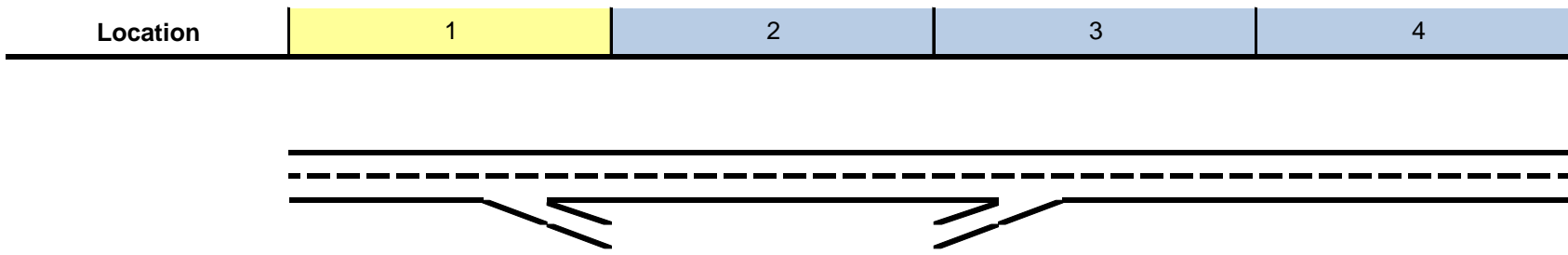


**Key**

<> Express Lane (HOV)

Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Off Ramp Flow Rate</b>				
Volume (vph)	920			
PHF	0.95			
Lanes	1			
Terrain	Level			
Grade %	0.0%			
Grade Length (mi)	0.00			
Truck & Bus %	2.0%			
RV %	0.0%			
$E_T$	1.5			
$E_R$	1.2			
$f_{HV}$	0.990			
$f_P$	1.00			
Flow (pcph)	978			
Flow Rate (pcphpl)	978			
<b>Off Ramp Roadway Operations</b>				
Ramp Type	Right			
Ramp Speed	45			
Ramp Capacity (pcph)	2,100			
Ramp v/c ratio	0.47			
<b>Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps</b>				

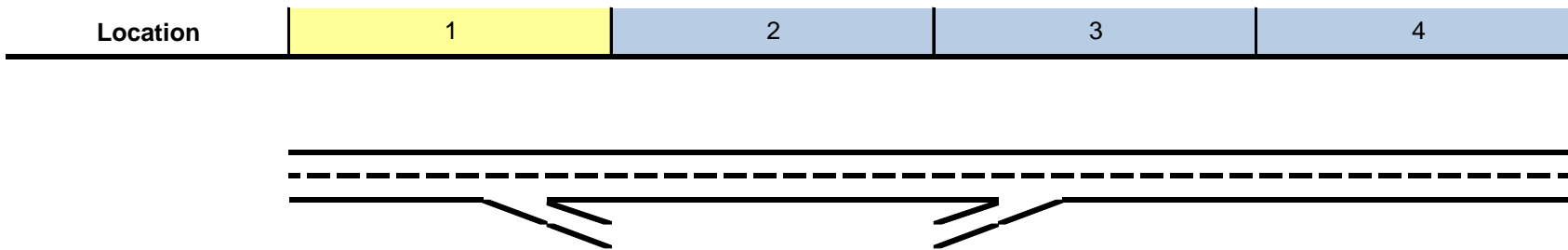




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<> Express Lane (HOV)

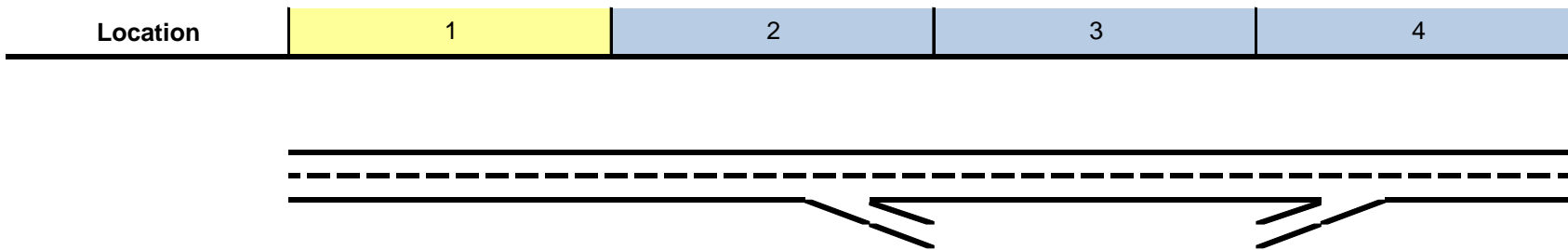
Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Merge Influence Area Operations</b>				
Effective $v_p$ (pcph)			618	
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FM}$ (Eqn 13-3)			0.588	
$P_{FM}$ (Eqn 13-4)				
$P_{FM}$ (Eqn 13-5)				
$P_{FM}$			1.000	
$v_{12}$ (pcph)			618	
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)			618	
$v_{R12a}$ (pcph)			926	
Speed Index			0.30	
Area Speed			61.7	
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed			61.7	
v/c ratio			0.20	
Density			10.2	
LOS			B	



**Key**

<> Express Lane (HOV)

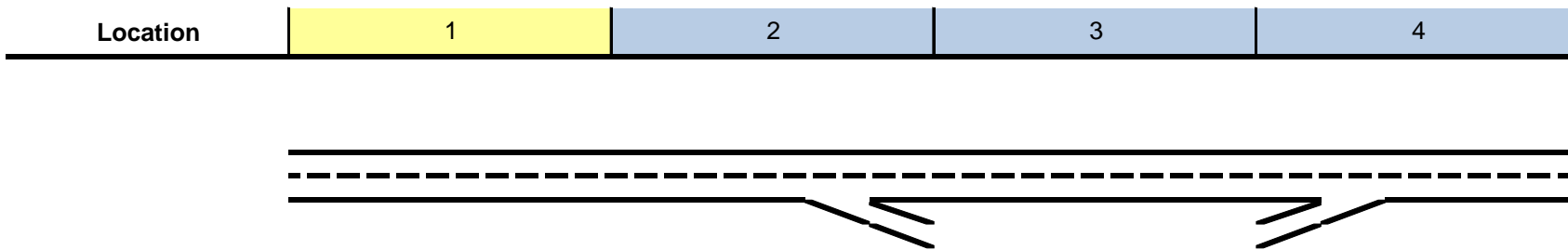
Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Diverge Influence Area Operations</b>				
Effective $v_p$ (pcph)	1,881			
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FD}$ (Eqn 13-9)	0.668			
$P_{FD}$ (Eqn 13-10)				
$P_{FD}$ (Eqn 13-11)				
$P_{FD}$	1.000			
$v_{12}$ (pcph)	1,881			
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)	1,881			
Speed Index	0.39			
Area Speed	59.2			
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed	59.2			
v/c ratio	0.43			
Density	19.1			
LOS	B			
<b>On Ramp to Off Ramp Flow Rate for Weave Segments</b>				
<b>On Ramp to Mainline Flow Rate for Weave Segments</b>				
<b>Mainline to Off Ramp Flow Rate for Weave Segments</b>				
<b>General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments</b>				
<b>Weave Segment Operations</b>				
<b>Summarize Segment Operations</b>				
Segment v/c ratio	0.43	0.13	0.20	0.21
Segment Density	19.1	4.4	10.2	7.3
Segment LOS	B	A	B	A
Over Capacity				



**Key**

<> Express Lane (HOV)

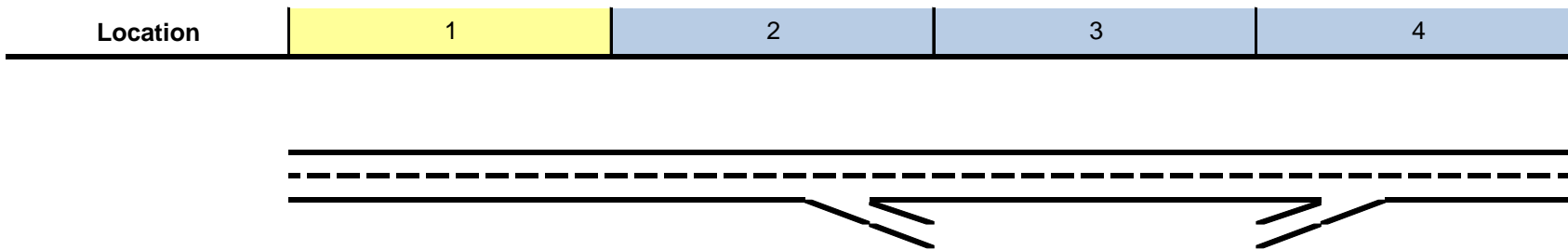
Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Freeway Segment</b>				
Type	Basic	Diverge	Basic	Merge
Length (ft)	4,920	1,500	2,850	1,550
Accel Length				330
Decel Length		170		
Mainline Volume	2,360	2,360	1,990	1,990
On Ramp Volume				1,010
Off Ramp Volume		370		
Express Lane Volume				
EL On Ramp Volume				
EL Off Ramp Volume				
<b>Flow Rate in Entering General Purpose Lanes (GP)</b>				
Volume (vph)	2,360	2,360	1,990	1,990
PHF	0.84	0.84	0.84	0.84
Lanes	2	2	2	2
Terrain	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00
Truck & Bus %	5.9%	5.9%	5.9%	5.9%
RV %	0.0%	0.0%	0.0%	0.0%
E <sub>T</sub>	1.5	1.5	1.5	1.5
E <sub>R</sub>	1.2	1.2	1.2	1.2
f <sub>HV</sub>	0.971	0.971	0.971	0.971
f <sub>P</sub>	1.00	1.00	1.00	1.00
Flow (pcph)	2,892	2,892	2,439	2,439
Flow (pcphpl)	1,446	1,446	1,219	1,219



**Key**

<> Express Lane (HOV)

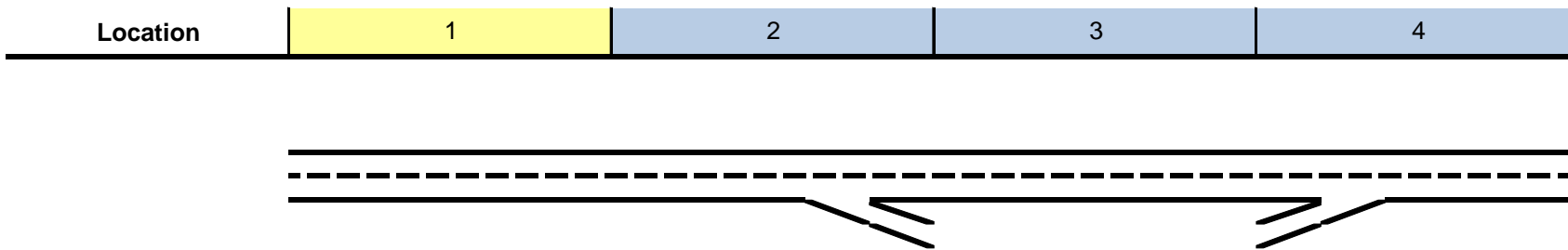
Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Free Flow Speed in Entering GP Lanes</b>				
Lane Width (ft)				
Shoulder Width				
TRD				
$f_{LW}$				
$f_{LC}$				
Calculated FFS				
Measured FFS				
FFS Curve	70	70	70	70
<b>Operations in Entering GP Lanes</b>				
Capacity (pcph)	4,800	4,800	4,800	4,800
v/c ratio	0.60	0.60	0.51	0.51
Speed (mph)	69.3	69.3	70.0	70.0
Density (pcphpl)	20.9	20.9	17.4	17.4
LOS	C	C	B	B
<b>Operations for Segment GP Lanes</b>				
Flow (pcph)				3,513
Lanes				2
Capacity (pcph)				4,800
v/c ratio				0.73
Flow Rate (pcphpl)				1,756
Speed (mph)				66.4
Density (pcphpl)				26.4
LOS				D
<b>Operations for Exiting GP Lanes</b>				
Flow (pcph)		2,499		
Lanes		2		
Capacity (pcph)		4,800		
v/c ratio		0.52		
Flow Rate (pcphpl)		1,250		
Speed (mph)		70.0		
Density (pcphpl)		17.9		
LOS		B		



**Key**

<> Express Lane (HOV)

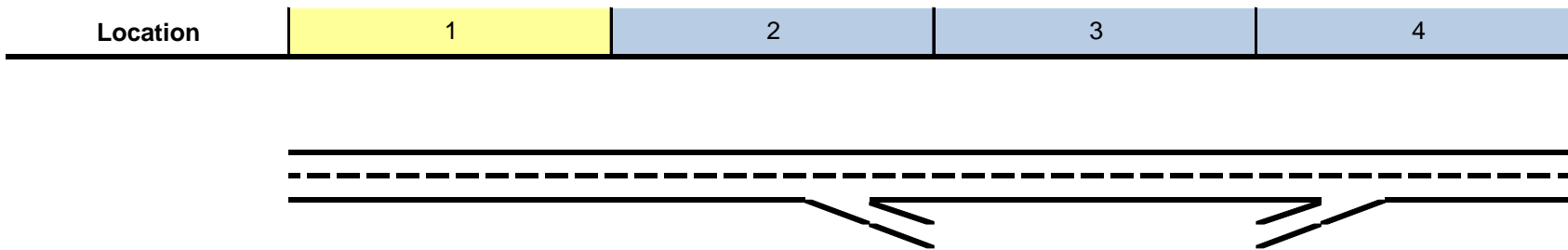
Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Flow Rate in Express Lanes</b>				
<b>Operations in Express Lanes</b>				
FFS	65	65	65	65
Capacity (pcph)				
v/c ratio				
<b>On Ramp Flow Rate</b>				
Volume (vph)				1,010
PHF				0.95
Lanes				1
Terrain				Level
Grade %				0.0%
Grade Length (mi)				0.00
Truck & Bus %				2.0%
RV %				0.0%
$E_T$				1.5
$E_R$				1.2
$f_{HV}$				0.990
$f_P$				1.00
Flow (pcph)				1,074
Flow Rate (pcphpl)				1,074
<b>On Ramp Roadway Operations</b>				
Ramp Type				Right
Ramp Speed (mph)				45
Ramp Capacity (pcph)				2,100
Ramp v/c ratio				0.51



**Key**

<> Express Lane (HOV)

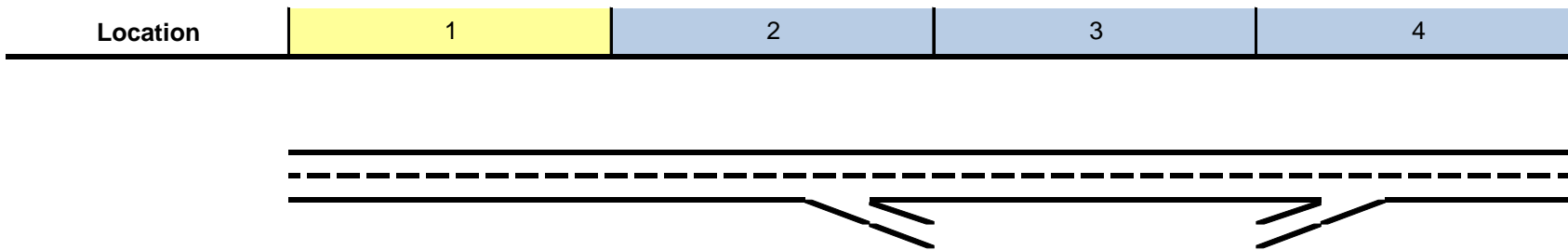
Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Off Ramp Flow Rate</b>				
Volume (vph)		370		
PHF		0.95		
Lanes		1		
Terrain		Level		
Grade %		0.0%		
Grade Length (mi)		0.00		
Truck & Bus %		2.0%		
RV %		0.0%		
$E_T$		1.5		
$E_R$		1.2		
$f_{HV}$		0.990		
$f_P$		1.00		
Flow (pcph)		393		
Flow Rate (pcphpl)		393		
<b>Off Ramp Roadway Operations</b>				
Ramp Type		Right		
Ramp Speed		45		
Ramp Capacity (pcph)		2,100		
Ramp v/c ratio		0.19		
<b>Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps</b>				



**Key**

<> Express Lane (HOV)

Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Merge Influence Area Operations</b>				
Effective $v_p$ (pcph)				2,439
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FM}$ (Eqn 13-3)				0.587
$P_{FM}$ (Eqn 13-4)				
$P_{FM}$ (Eqn 13-5)				
$P_{FM}$				1.000
$v_{12}$ (pcph)				2,439
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)				2,439
$v_{R12a}$ (pcph)				3,513
Speed Index				0.42
Area Speed				58.2
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed				58.2
v/c ratio				0.76
Density				30.3
LOS				D

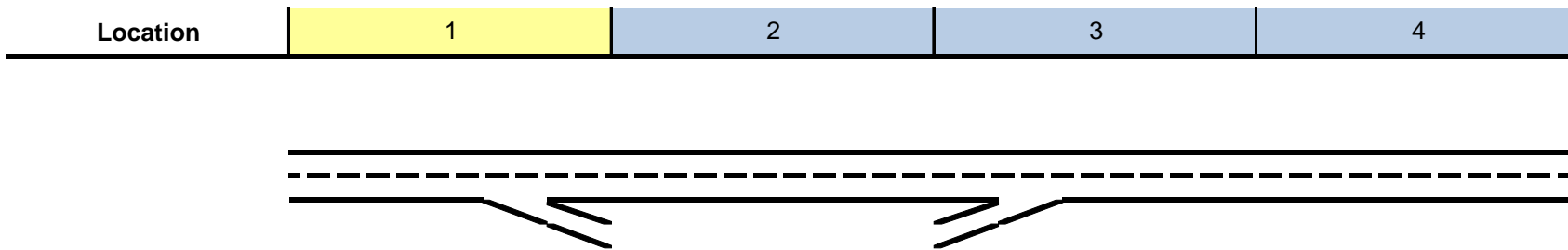


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<> Express Lane (HOV)

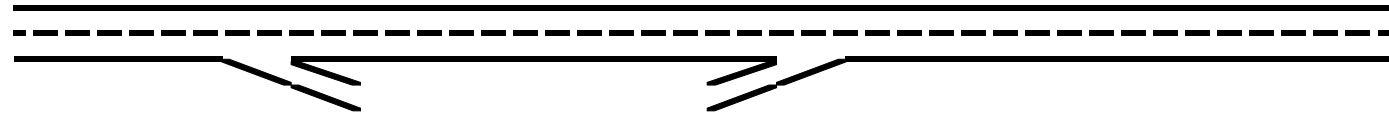
Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Diverge Influence Area Operations</b>				
Effective $v_p$ (pcph)		2,892		
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FD}$ (Eqn 13-9)		0.670		
$P_{FD}$ (Eqn 13-10)				
$P_{FD}$ (Eqn 13-11)				
$P_{FD}$		1.000		
$v_{12}$ (pcph)		2,892		
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)		2,892		
Speed Index		0.33		
Area Speed		60.7		
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed		60.7		
v/c ratio		0.66		
Density		27.6		
LOS		C		
<b>On Ramp to Off Ramp Flow Rate for Weave Segments</b>				
<b>On Ramp to Mainline Flow Rate for Weave Segments</b>				
<b>Mainline to Off Ramp Flow Rate for Weave Segments</b>				
<b>General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments</b>				
<b>Weave Segment Operations</b>				
<b>Summarize Segment Operations</b>				
Segment v/c ratio	0.60	0.66	0.51	0.76
Segment Density	20.9	27.6	17.4	30.3
Segment LOS	C	C	B	D
Over Capacity				





Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Freeway Segment</b>				
Type	Diverge	Basic	Merge	Basic
Length (ft)	1,500	2,560	1,500	5,980
Accel Length			370	
Decel Length	150			
Mainline Volume	2,490	1,250	1,250	1,650
On Ramp Volume			400	
Off Ramp Volume	1,240			
Express Lane Volume				
EL On Ramp Volume				
EL Off Ramp Volume				
<b>Flow Rate in Entering General Purpose Lanes (GP)</b>				
Volume (vph)	2,490	1,250	1,250	1,650
PHF	0.86	0.86	0.86	0.86
Lanes	2	2	2	2
Terrain	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00
Truck & Bus %	5.9%	5.9%	5.9%	5.9%
RV %	0.0%	0.0%	0.0%	0.0%
$E_T$	1.5	1.5	1.5	1.5
$E_R$	1.2	1.2	1.2	1.2
$f_{HV}$	0.971	0.971	0.971	0.971
$f_P$	1.00	1.00	1.00	1.00
Flow (pcph)	2,981	1,496	1,496	1,975
Flow (pcphpl)	1,490	748	748	988

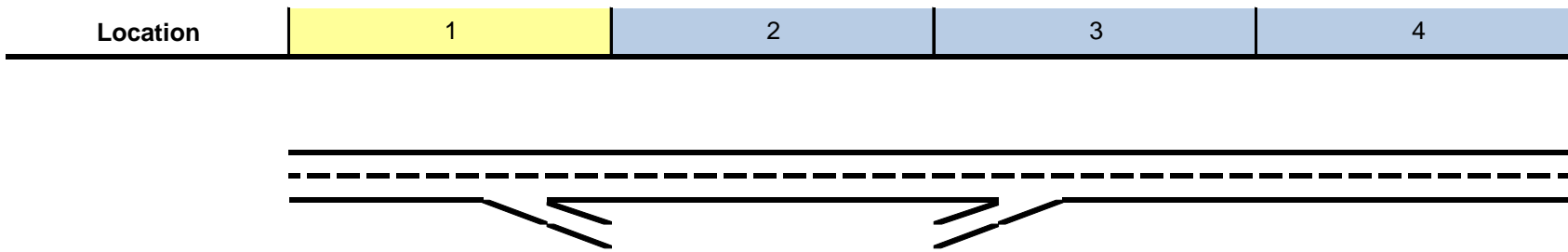
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**Key**

<> Express Lane (HOV)

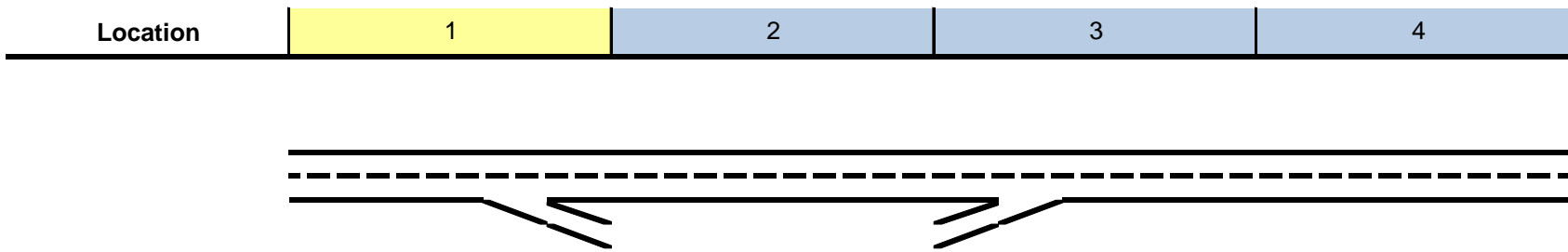
Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Free Flow Speed in Entering GP Lanes</b>				
Lane Width (ft)				
Shoulder Width				
TRD				
$f_{LW}$				
$f_{LC}$				
Calculated FFS				
Measured FFS				
FFS Curve	70	70	70	70
<b>Operations in Entering GP Lanes</b>				
Capacity (pcph)	4,800	4,800	4,800	4,800
v/c ratio	0.62	0.31	0.31	0.41
Speed (mph)	69.0	70.0	70.0	70.0
Density (pcphpl)	21.6	10.7	10.7	14.1
LOS	C	A	A	B
<b>Operations for Segment GP Lanes</b>				
Flow (pcph)			1,922	
Lanes			2	
Capacity (pcph)			4,800	
v/c ratio			0.40	
Flow Rate (pcphpl)			961	
Speed (mph)			70.0	
Density (pcphpl)			13.7	
LOS			B	
<b>Operations for Exiting GP Lanes</b>				
Flow (pcph)	1,662			
Lanes	2			
Capacity (pcph)	4,800			
v/c ratio	0.35			
Flow Rate (pcphpl)	831			
Speed (mph)	70.0			
Density (pcphpl)	11.9			
LOS	B			



**Key**

<> Express Lane (HOV)

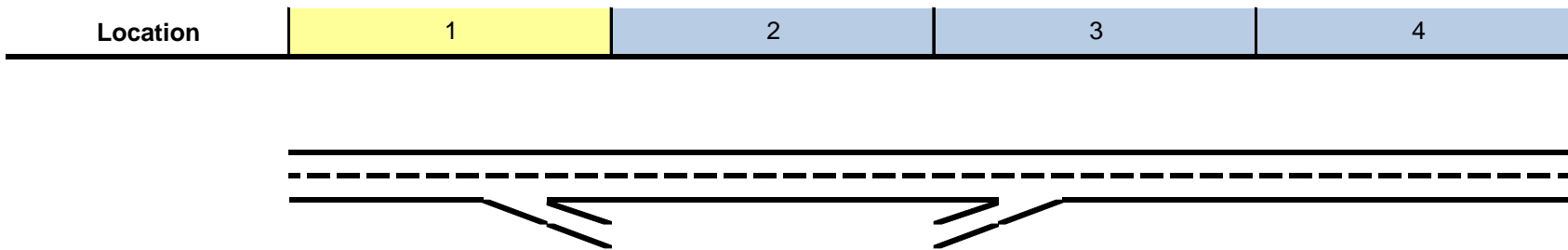
Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Flow Rate in Express Lanes</b>				
<b>Operations in Express Lanes</b>				
<b>On Ramp Flow Rate</b>				
Volume (vph)			400	
PHF			0.95	
Lanes			1	
Terrain			Level	
Grade %			0.0%	
Grade Length (mi)			0.00	
Truck & Bus %			2.0%	
RV %			0.0%	
$E_T$			1.5	
$E_R$			1.2	
$f_{HV}$			0.990	
$f_P$			1.00	
Flow (pcph)			425	
Flow Rate (pcphpl)			425	
<b>On Ramp Roadway Operations</b>				
Ramp Type			Right	
Ramp Speed (mph)			45	
Ramp Capacity (pcph)			2,100	
Ramp v/c ratio			0.20	



**Key**

<> Express Lane (HOV)

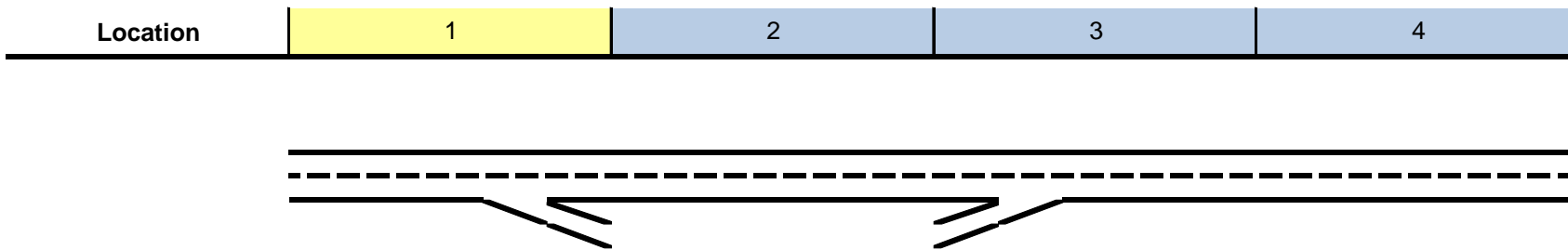
Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Off Ramp Flow Rate</b>				
Volume (vph)	1,240			
PHF	0.95			
Lanes	1			
Terrain	Level			
Grade %	0.0%			
Grade Length (mi)	0.00			
Truck & Bus %	2.0%			
RV %	0.0%			
$E_T$	1.5			
$E_R$	1.2			
$f_{HV}$	0.990			
$f_P$	1.00			
Flow (pcph)	1,318			
Flow Rate (pcphpl)	1,318			
<b>Off Ramp Roadway Operations</b>				
Ramp Type	Right			
Ramp Speed	45			
Ramp Capacity (pcph)	2,100			
Ramp v/c ratio	0.63			
<b>Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps</b>				



**Key**

<> Express Lane (HOV)

Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Merge Influence Area Operations</b>				
Effective $v_p$ (pcph)			1,496	
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FM}$ (Eqn 13-3)			0.588	
$P_{FM}$ (Eqn 13-4)				
$P_{FM}$ (Eqn 13-5)				
$P_{FM}$			1.000	
$v_{12}$ (pcph)			1,496	
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)			1,496	
$v_{R12a}$ (pcph)			1,922	
Speed Index			0.31	
Area Speed			61.2	
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed			61.2	
v/c ratio			0.42	
Density			17.9	
LOS			B	

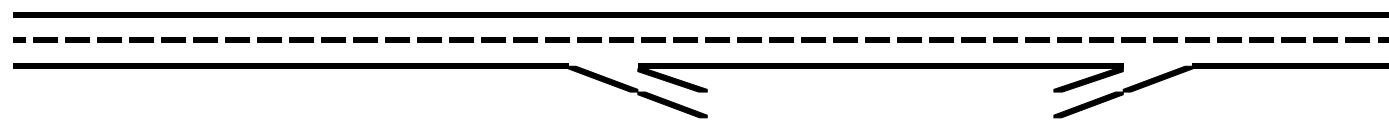


**Key**

<> Express Lane (HOV)

Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Diverge Influence Area Operations</b>				
Effective $v_p$ (pcph)	2,981			
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FD}$ (Eqn 13-9)	0.625			
$P_{FD}$ (Eqn 13-10)				
$P_{FD}$ (Eqn 13-11)				
$P_{FD}$	1.000			
$v_{12}$ (pcph)	2,981			
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)	2,981			
Speed Index	0.42			
Area Speed	58.3			
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed	58.3			
v/c ratio	0.68			
Density	28.5			
LOS	D			
<b>On Ramp to Off Ramp Flow Rate for Weave Segments</b>				
<b>On Ramp to Mainline Flow Rate for Weave Segments</b>				
<b>Mainline to Off Ramp Flow Rate for Weave Segments</b>				
<b>General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments</b>				
<b>Weave Segment Operations</b>				
<b>Summarize Segment Operations</b>				
Segment v/c ratio	0.68	0.31	0.42	0.41
Segment Density	28.5	10.7	17.9	14.1
Segment LOS	D	A	B	B
Over Capacity				

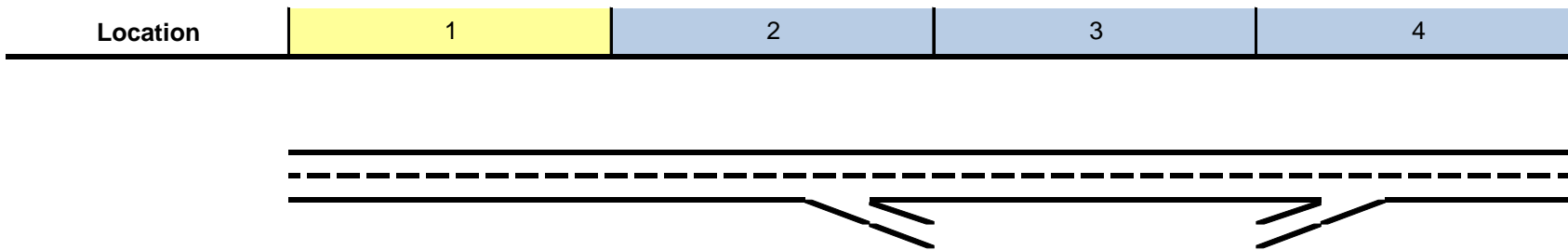
Location	1	2	3	4
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**Key**

<> Express Lane (HOV)

Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Freeway Segment</b>				
Type	Basic	Diverge	Basic	Merge
Length (ft)	4,920	1,500	2,850	1,550
Accel Length				330
Decel Length		170		
Mainline Volume	1,200	1,200	910	910
On Ramp Volume				820
Off Ramp Volume		290		
Express Lane Volume				
EL On Ramp Volume				
EL Off Ramp Volume				
<b>Flow Rate in Entering General Purpose Lanes (GP)</b>				
Volume (vph)	1,200	1,200	910	910
PHF	0.93	0.93	0.93	0.93
Lanes	2	2	2	2
Terrain	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00
Truck & Bus %	5.9%	5.9%	5.9%	5.9%
RV %	0.0%	0.0%	0.0%	0.0%
E <sub>T</sub>	1.5	1.5	1.5	1.5
E <sub>R</sub>	1.2	1.2	1.2	1.2
f <sub>HV</sub>	0.971	0.971	0.971	0.971
f <sub>P</sub>	1.00	1.00	1.00	1.00
Flow (pcph)	1,328	1,328	1,007	1,007
Flow (pcphpl)	664	664	504	504

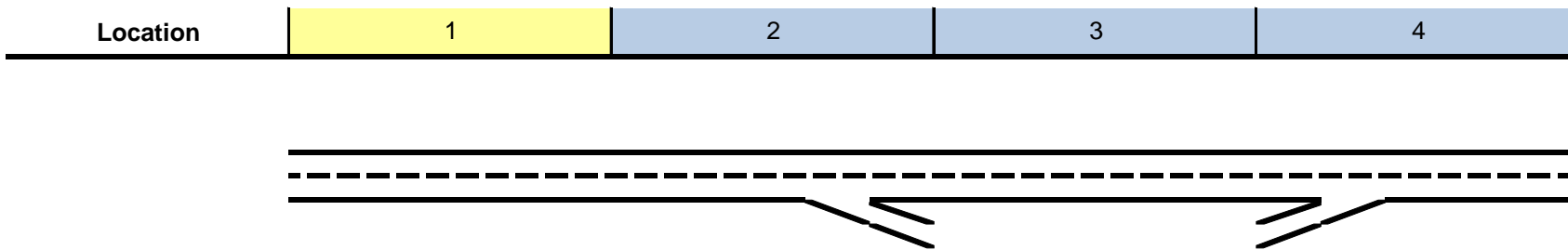


**Key**

<> Express Lane (HOV)

Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Free Flow Speed in Entering GP Lanes</b>				
Lane Width (ft)				
Shoulder Width				
TRD				
$f_{LW}$				
$f_{LC}$				
Calculated FFS				
Measured FFS				
FFS Curve	70	70	70	70
<b>Operations in Entering GP Lanes</b>				
Capacity (pcph)	4,800	4,800	4,800	4,800
v/c ratio	0.28	0.28	0.21	0.21
Speed (mph)	70.0	70.0	70.0	70.0
Density (pcphpl)	9.5	9.5	7.2	7.2
LOS	A	A	A	A
<b>Operations for Segment GP Lanes</b>				
Flow (pcph)				1,879
Lanes				2
Capacity (pcph)				4,800
v/c ratio				0.39
Flow Rate (pcphpl)				940
Speed (mph)				70.0
Density (pcphpl)				13.4
LOS				B
<b>Operations for Exiting GP Lanes</b>				
Flow (pcph)		1,020		
Lanes		2		
Capacity (pcph)		4,800		
v/c ratio		0.21		
Flow Rate (pcphpl)		510		
Speed (mph)		70.0		
Density (pcphpl)		7.3		
LOS		A		

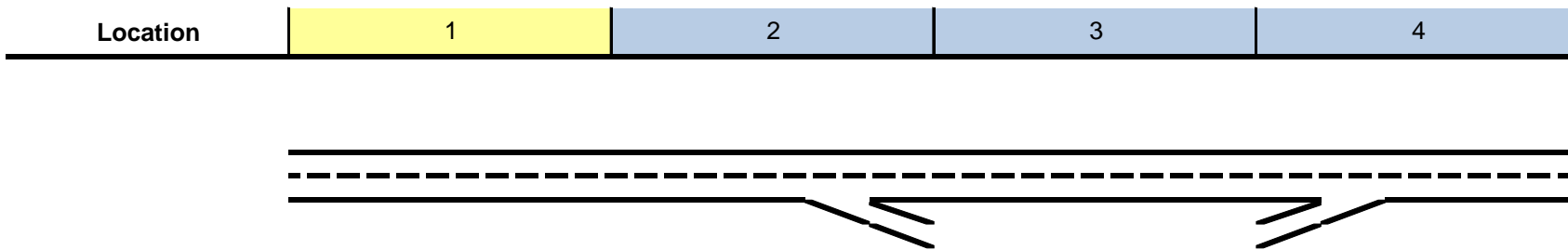




**Key**

<> Express Lane (HOV)

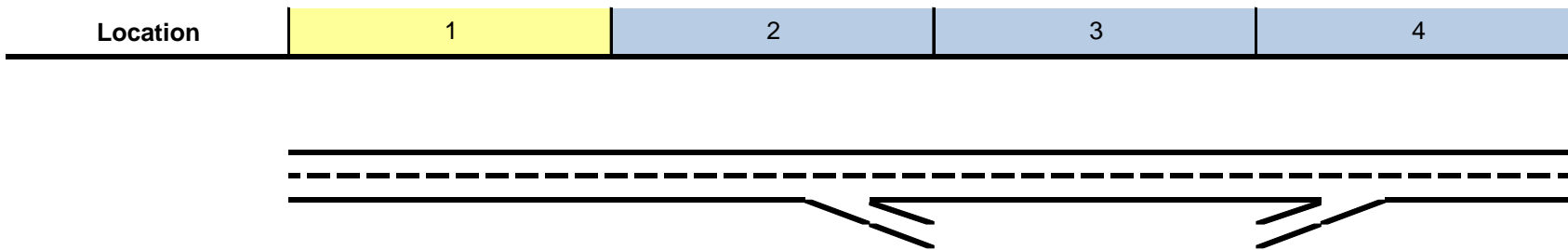
Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Flow Rate in Express Lanes</b>				
<b>Operations in Express Lanes</b>				
<b>On Ramp Flow Rate</b>				
Volume (vph)				820
PHF				0.95
Lanes				1
Terrain				Level
Grade %				0.0%
Grade Length (mi)				0.00
Truck & Bus %				2.0%
RV %				0.0%
$E_T$				1.5
$E_R$				1.2
$f_{HV}$				0.990
$f_P$				1.00
Flow (pcph)				872
Flow Rate (pcphpl)				872
<b>On Ramp Roadway Operations</b>				
Ramp Type				Right
Ramp Speed (mph)				45
Ramp Capacity (pcph)				2,100
Ramp v/c ratio				0.42



**Key**

<> Express Lane (HOV)

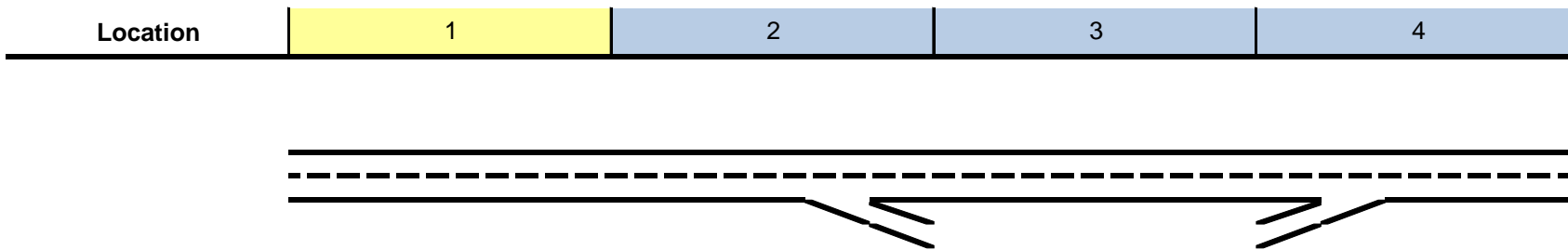
Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Off Ramp Flow Rate</b>				
Volume (vph)		290		
PHF		0.95		
Lanes		1		
Terrain		Level		
Grade %		0.0%		
Grade Length (mi)		0.00		
Truck & Bus %		2.0%		
RV %		0.0%		
$E_T$		1.5		
$E_R$		1.2		
$f_{HV}$		0.990		
$f_P$		1.00		
Flow (pcph)		308		
Flow Rate (pcphpl)		308		
<b>Off Ramp Roadway Operations</b>				
Ramp Type		Right		
Ramp Speed		45		
Ramp Capacity (pcph)		2,100		
Ramp v/c ratio		0.15		
<b>Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps</b>				



**Key**

<> Express Lane (HOV)

Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Merge Influence Area Operations</b>				
Effective $v_p$ (pcph)				1,007
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FM}$ (Eqn 13-3)				0.587
$P_{FM}$ (Eqn 13-4)				
$P_{FM}$ (Eqn 13-5)				
$P_{FM}$				1.000
$v_{12}$ (pcph)				1,007
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)				1,007
$v_{R12a}$ (pcph)				1,879
Speed Index				0.32
Area Speed				61.1
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed				61.1
v/c ratio				0.41
Density				17.7
LOS				B






















**Key**

<> Express Lane (HOV)

Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Diverge Influence Area Operations</b>				
Effective $v_p$ (pcph)		1,328		
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FD}$ (Eqn 13-9)		0.713		
$P_{FD}$ (Eqn 13-10)				
$P_{FD}$ (Eqn 13-11)				
$P_{FD}$		1.000		
$v_{12}$ (pcph)		1,328		
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)		1,328		
Speed Index		0.33		
Area Speed		60.9		
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed		60.9		
v/c ratio		0.30		
Density		14.1		
LOS		B		
<b>On Ramp to Off Ramp Flow Rate for Weave Segments</b>				
<b>On Ramp to Mainline Flow Rate for Weave Segments</b>				
<b>Mainline to Off Ramp Flow Rate for Weave Segments</b>				
<b>General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments</b>				
<b>Weave Segment Operations</b>				
<b>Summarize Segment Operations</b>				
Segment v/c ratio	0.28	0.30	0.21	0.41
Segment Density	9.5	14.1	7.2	17.7
Segment LOS	A	B	A	B
Over Capacity				

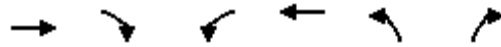
# **Cumulative Plus Project Level of Service (LOS) Calculations**

HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 1: Lake Blvd/CR 99 & Covell Blvd Cumulative Plus Project Conditions - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	304	50	173	225	10	40	60	352	40	60	10
Future Volume (veh/h)	10	304	50	173	225	10	40	60	352	40	60	10
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	11	327	0	188	245	10	43	65	0	43	65	7
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	0	1	0
Peak Hour Factor	0.93	0.93	0.93	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	25	426	0	296	678	28	140	147	0	62	94	10
Arrive On Green	0.01	0.23	0.00	0.17	0.38	0.38	0.08	0.08	0.00	0.09	0.09	0.09
Sat Flow, veh/h	1774	1863	0	1774	1777	73	1774	1863	0	677	1023	110
Grp Volume(v), veh/h	11	327	0	188	0	255	43	65	0	115	0	0
Grp Sat Flow(s),veh/h/ln	1774	1863	0	1774	0	1849	1774	1863	0	1809	0	0
Q Serve(g_s), s	0.3	8.0	0.0	4.8	0.0	4.8	1.1	1.6	0.0	3.0	0.0	0.0
Cycle Q Clear(g_c), s	0.3	8.0	0.0	4.8	0.0	4.8	1.1	1.6	0.0	3.0	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.04	1.00		0.00	0.37		0.06
Lane Grp Cap(c), veh/h	25	426	0	296	0	705	140	147	0	167	0	0
V/C Ratio(X)	0.44	0.77	0.00	0.64	0.00	0.36	0.31	0.44	0.00	0.69	0.00	0.00
Avail Cap(c_a), veh/h	239	709	0	1038	0	1536	900	945	0	622	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	23.9	17.6	0.0	19.0	0.0	10.8	21.3	21.5	0.0	21.5	0.0	0.0
Incr Delay (d2), s/veh	11.5	2.9	0.0	2.3	0.0	0.3	2.6	4.4	0.0	10.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	4.4	0.0	2.5	0.0	2.5	0.7	1.0	0.0	2.0	0.0	0.0
LnGrp Delay(d),s/veh	35.4	20.5	0.0	21.2	0.0	11.2	23.9	25.9	0.0	31.9	0.0	0.0
LnGrp LOS	D	C		C		B	C	C		C		
Approach Vol, veh/h		338			443			108			115	
Approach Delay, s/veh		21.0			15.4			25.1			31.9	
Approach LOS		C			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.5	16.6		9.7	6.1	24.0		9.0				
Change Period (Y+Rc), s	5.4	5.4		* 5.2	5.4	5.4		5.2				
Max Green Setting (Gmax), s	28.6	18.6		* 17	6.6	40.6		24.8				
Max Q Clear Time (g_c+I1), s	6.8	10.0		5.0	2.3	6.8		3.6				
Green Ext Time (p_c), s	2.0	1.2		0.7	0.0	2.2		0.8				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				20.2								
HCM 2010 LOS				C								
<b>Notes</b>												

\* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 2: Denali Dr & Covell Blvd Cumulative Plus Project Conditions - AM Peak Hour



Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑		↵	↑↑	↵			
Traffic Volume (veh/h)	678	30	105	512	40	209		
Future Volume (veh/h)	678	30	105	512	40	209		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1900		
Adj Flow Rate, veh/h	737	0	113	551	43	0		
Adj No. of Lanes	2	0	1	2	0	0		
Peak Hour Factor	0.92	0.92	0.93	0.93	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	0	0		
Cap, veh/h	1670	0	166	2391	86	0		
Arrive On Green	0.47	0.00	0.09	0.68	0.05	0.00		
Sat Flow, veh/h	3725	0	1774	3632	1736	0		
Grp Volume(v), veh/h	737	0	113	551	44	0		
Grp Sat Flow(s),veh/h/ln	1770	0	1774	1770	1776	0		
Q Serve(g_s), s	5.0	0.0	2.2	2.2	0.9	0.0		
Cycle Q Clear(g_c), s	5.0	0.0	2.2	2.2	0.9	0.0		
Prop In Lane		0.00	1.00		0.98	0.00		
Lane Grp Cap(c), veh/h	1670	0	166	2391	88	0		
V/C Ratio(X)	0.44	0.00	0.68	0.23	0.50	0.00		
Avail Cap(c_a), veh/h	3408	0	976	3408	977	0		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh	6.4	0.0	15.9	2.3	16.8	0.0		
Incr Delay (d2), s/veh	0.2	0.0	4.8	0.0	9.2	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	2.4	0.0	1.3	1.0	0.7	0.0		
LnGrp Delay(d),s/veh	6.6	0.0	20.8	2.3	26.0	0.0		
LnGrp LOS	A		C	A	C			
Approach Vol, veh/h	737			664	44			
Approach Delay, s/veh	6.6			5.5	26.0			
Approach LOS	A			A	C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	7.4	23.2				30.6		5.8
Change Period (Y+Rc), s	4.0	6.0				6.0		4.0
Max Green Setting (Gmax), s	20.0	35.0				35.0		20.0
Max Q Clear Time (g_c+I1), s	4.2	7.0				4.2		2.9
Green Ext Time (p_c), s	0.2	10.1				10.4		0.1
<b>Intersection Summary</b>								
HCM 2010 Ctrl Delay			6.7					
HCM 2010 LOS			A					
<b>Notes</b>								



User approved volume balancing among the lanes for turning movement.

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Cumulative Plus Project Conditions  
AM Peak Hour

Intersection 3                      Risling Ct/Sutter Hospital Dwy                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	57	59	103.0%	5.5	1.6	A
	Through	108	113	104.3%	4.0	0.9	A
	Right Turn	90	97	108.1%	3.7	1.7	A
	Subtotal	255	269	105.3%	4.3	0.9	A
SB	Left Turn	1	1	50.0%	0.9	2.9	A
	Through	118	121	102.3%	0.3	0.2	A
	Right Turn						
	Subtotal	119	121	101.8%	0.3	0.2	A
EB	Left Turn						
	Through	4	3	72.5%	3.5	3.8	A
	Right Turn	57	59	102.6%	3.4	0.5	A
	Subtotal	61	61	100.7%	3.5	0.5	A
WB	Left Turn	40	44	110.3%	5.7	1.0	A
	Through	3	3	83.3%	2.7	2.4	A
	Right Turn	10	12	122.0%	2.7	1.6	A
	Subtotal	53	59	110.9%	5.3	0.9	A
Total		488	510	104.5%	3.3	0.5	A

Intersection 4                      Risling Ct-Shasta Dr/W Covell Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	22	21	95.5%	53.5	17.1	D
	Through	27	25	92.2%	34.6	9.8	C
	Right Turn	290	284	97.8%	5.7	1.4	A
	Subtotal	339	330	97.2%	10.1	2.3	B
SB	Left Turn	158	162	102.5%	52.1	13.7	D
	Through	16	19	120.6%	37.0	27.7	D
	Right Turn	41	44	107.3%	18.1	8.8	B
	Subtotal	215	225	104.7%	44.6	12.3	D
EB	Left Turn	137	141	102.6%	45.4	7.8	D
	Through	770	761	98.9%	21.5	4.8	C
	Right Turn	20	21	103.0%	9.1	4.9	A
	Subtotal	927	923	99.5%	25.0	5.3	C
WB	Left Turn	150	151	100.5%	47.4	6.1	D
	Through	655	657	100.3%	25.7	5.5	C
	Right Turn	96	107	111.9%	11.4	4.3	B
	Subtotal	901	915	101.5%	27.6	4.2	C
Total		2,382	2,392	100.4%	26.0	3.4	C

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Cumulative Plus Project Conditions  
AM Peak Hour

Intersection 5                      John Jones Rd/W Covell Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	200	196	98.1%	28.3	3.8	C
	Through						
	Right Turn	61	62	101.1%	7.3	1.8	A
	Subtotal	261	258	98.8%	23.7	3.5	C
EB	Left Turn	92	91	99.2%	57.6	14.3	E
	Through	1,126	1,113	98.9%	19.1	9.5	B
	Right Turn						
	Subtotal	1,218	1,205	98.9%	22.0	8.8	C
WB	Left Turn						
	Through	840	855	101.8%	14.4	2.4	B
	Right Turn	350	347	99.3%	11.6	2.2	B
	Subtotal	1,190	1,202	101.0%	13.6	2.3	B
Total		2,669	2,665	99.8%	18.5	4.3	B

Intersection 6                      SR 113 SB Ramps/W Covell Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	220	213	96.7%	35.4	3.8	D
	Through	10	11	107.0%	32.7	18.2	C
	Right Turn	149	152	101.7%	33.3	3.9	C
	Subtotal	379	375	98.9%	34.5	1.8	C
EB	Left Turn						
	Through	833	817	98.1%	19.8	3.1	B
	Right Turn	493	492	99.7%	23.8	2.6	C
	Subtotal	1,326	1,309	98.7%	21.3	2.7	C
WB	Left Turn	550	549	99.8%	50.0	9.5	D
	Through	1,041	1,048	100.6%	10.8	1.1	B
	Right Turn						
	Subtotal	1,591	1,596	100.3%	24.5	4.7	C
Total		3,296	3,280	99.5%	24.4	2.9	C

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Cumulative Plus Project Conditions  
AM Peak Hour























Intersection 7 SR 113 NB Ramps/W Covell Blvd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	364	360	98.8%	28.5	4.4	C
	Through	10	9	93.0%	26.7	19.6	C
	Right Turn	570	568	99.6%	25.4	5.0	C
	Subtotal	944	937	99.3%	26.8	2.9	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	104	97	93.6%	56.3	4.9	E
	Through	949	933	98.3%	6.5	1.1	A
	Right Turn						
	Subtotal	1,053	1,030	97.9%	11.4	1.8	B
WB	Left Turn						
	Through	1,227	1,237	100.8%	54.6	20.6	D
	Right Turn	190	199	104.6%	39.4	19.4	D
	Subtotal	1,417	1,436	101.3%	52.5	20.5	D
Total		3,414	3,403	99.7%	33.1	8.3	C



















Intersection 8 Sycamore Ln/W Covell Blvd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	234	233	99.5%	82.2	38.7	F
	Through	80	76	94.4%	45.0	24.0	D
	Right Turn	70	71	100.7%	27.9	29.8	C
	Subtotal	384	379	98.7%	66.2	34.2	E
SB	Left Turn	50	46	92.0%	34.5	12.6	C
	Through	80	79	99.3%	35.8	5.4	D
	Right Turn	352	369	104.9%	13.8	6.0	B
	Subtotal	482	495	102.6%	19.5	5.4	B
EB	Left Turn	121	121	99.7%	56.0	9.2	E
	Through	864	864	100.0%	28.5	5.2	C
	Right Turn	356	343	96.5%	21.4	5.6	C
	Subtotal	1,341	1,328	99.0%	29.1	5.4	C
WB	Left Turn	40	41	102.0%	54.3	19.5	D
	Through	727	729	100.2%	34.4	20.3	C
	Right Turn	50	55	109.6%	29.1	21.3	C
	Subtotal	817	824	100.9%	35.0	20.1	D
Total		3,024	3,025	100.0%	34.1	6.9	C

HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 9: Anderson Rd & Covell Blvd Cumulative Plus Project Conditions - AM Peak Hour






















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	585	337	220	552	20	174	70	120	110	210	71
Future Volume (veh/h)	42	585	337	220	552	20	174	70	120	110	210	71
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1849	1900	1863	1863	1727	1792	1823	1900	1863	1784	1900
Adj Flow Rate, veh/h	46	636	0	239	600	0	189	76	0	120	228	0
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	7	2	2	2	2	10	6	8	8	2	8	8
Cap, veh/h	66	1234	0	285	1674	695	232	340	0	156	469	0
Arrive On Green	0.04	0.35	0.00	0.16	0.47	0.00	0.14	0.19	0.00	0.09	0.14	0.00
Sat Flow, veh/h	1691	3607	0	1774	3539	1468	1707	1823	0	1774	3479	0
Grp Volume(v), veh/h	46	636	0	239	600	0	189	76	0	120	228	0
Grp Sat Flow(s),veh/h/ln	1691	1757	0	1774	1770	1468	1707	1823	0	1774	1695	0
Q Serve(g_s), s	2.3	12.1	0.0	11.0	9.1	0.0	9.1	3.0	0.0	5.6	5.2	0.0
Cycle Q Clear(g_c), s	2.3	12.1	0.0	11.0	9.1	0.0	9.1	3.0	0.0	5.6	5.2	0.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	66	1234	0	285	1674	695	232	340	0	156	469	0
V/C Ratio(X)	0.70	0.52	0.00	0.84	0.36	0.00	0.81	0.22	0.00	0.77	0.49	0.00
Avail Cap(c_a), veh/h	802	1875	0	631	1888	783	810	865	0	841	1608	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	40.0	21.7	0.0	34.3	14.1	0.0	35.4	29.1	0.0	37.6	33.6	0.0
Incr Delay (d2), s/veh	12.3	0.3	0.0	6.4	0.5	0.0	6.8	0.3	0.0	7.7	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	5.9	0.0	5.9	4.5	0.0	4.7	1.5	0.0	3.1	2.5	0.0
LnGrp Delay(d),s/veh	52.4	22.0	0.0	40.8	14.6	0.0	42.2	29.5	0.0	45.3	34.3	0.0
LnGrp LOS	D	C		D	B		D	C		D	C	
Approach Vol, veh/h		682			839			265			348	
Approach Delay, s/veh		24.1			22.0			38.5			38.1	
Approach LOS		C			C			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	18.6	34.6	15.5	15.7	8.3	44.9	11.4	19.7				
Change Period (Y+Rc), s	5.0	5.0	4.0	4.0	5.0	5.0	4.0	4.0				
Max Green Setting (Gmax), s	30.0	45.0	40.0	40.0	40.0	45.0	40.0	40.0				
Max Q Clear Time (g_c+I1), s	13.0	14.1	11.1	7.2	4.3	11.1	7.6	5.0				
Green Ext Time (p_c), s	0.6	15.5	0.5	2.0	0.1	16.3	0.3	2.0				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				27.4								
HCM 2010 LOS				C								

HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 10: Oak Ave & Covell Blvd Cumulative Plus Project Conditions - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	688	85	220	749	0	112	0	220	0	0	0
Future Volume (veh/h)	0	688	85	220	749	0	112	0	220	0	0	0
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	0	1863	0	1863	1900	1863	1900
Adj Flow Rate, veh/h	0	748	0	239	814	0	122	0	0	0	0	0
Adj No. of Lanes	0	2	0	1	2	0	1	0	1	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0	2	0	2	2	2	2
Cap, veh/h	0	1582	0	306	2507	0	163	0	0	0	4	0
Arrive On Green	0.00	0.45	0.00	0.17	0.71	0.00	0.09	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	0	3725	0	1774	3632	0	1774	122		0	-93137	0
Grp Volume(v), veh/h	0	748	0	239	814	0	122	26.7		0	0	0
Grp Sat Flow(s),veh/h/ln	0	1770	0	1774	1770	0	1774	C		0	1863	0
Q Serve(g_s), s	0.0	6.7	0.0	5.8	3.9	0.0	3.0			0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	6.7	0.0	5.8	3.9	0.0	3.0			0.0	0.0	0.0
Prop In Lane	0.00		0.00	1.00		0.00	1.00			0.00		0.00
Lane Grp Cap(c), veh/h	0	1582	0	306	2507	0	163			0	4	0
V/C Ratio(X)	0.00	0.47	0.00	0.78	0.32	0.00	0.75			0.00	0.00	0.00
Avail Cap(c_a), veh/h	0	2437	0	591	2516	0	788			0	621	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00	1.00			0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	8.7	0.0	17.8	2.5	0.0	19.9			0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	4.3	0.1	0.0	6.8			0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.3	0.0	3.2	1.8	0.0	1.8			0.0	0.0	0.0
LnGrp Delay(d),s/veh	0.0	9.0	0.0	22.1	2.6	0.0	26.7			0.0	0.0	0.0
LnGrp LOS		A		C	A		C					
Approach Vol, veh/h		748			1053							0
Approach Delay, s/veh		9.0			7.0							0.0
Approach LOS		A			A							
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4	5	6						
Phs Duration (G+Y+Rc), s		36.9	8.1	0.0	11.8	25.1						
Change Period (Y+Rc), s		5.0	4.0	5.0	4.0	5.0						
Max Green Setting (Gmax), s		32.0	20.0	15.0	15.0	31.0						
Max Q Clear Time (g_c+I1), s		5.9	5.0	0.0	7.8	8.7						
Green Ext Time (p_c), s		12.4	0.3	0.0	0.4	11.4						
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			9.0									
HCM 2010 LOS			A									
<b>Notes</b>												

User approved pedestrian interval to be less than phase max green.






















HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 11: F St & Covell Blvd Cumulative Plus Project Conditions - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	901	156	230	885	120	64	90	170	250	230	90
Future Volume (veh/h)	50	901	156	230	885	120	64	90	170	250	230	90
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1845	1863	1900	1845	1851	1900	1863	1842	1900
Adj Flow Rate, veh/h	54	979	0	250	962	0	70	98	0	272	250	0
Adj No. of Lanes	1	2	1	2	2	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	3	2	2	3	2	2	2	2	2
Cap, veh/h	76	1361	609	340	1564	0	92	241	0	324	480	0
Arrive On Green	0.04	0.38	0.00	0.10	0.44	0.00	0.05	0.13	0.00	0.18	0.26	0.00
Sat Flow, veh/h	1774	3539	1583	3408	3632	0	1757	1851	0	1774	1842	0
Grp Volume(v), veh/h	54	979	0	250	962	0	70	98	0	272	250	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1704	1770	0	1757	1851	0	1774	1842	0
Q Serve(g_s), s	2.5	19.7	0.0	6.0	17.5	0.0	3.3	4.1	0.0	12.4	9.7	0.0
Cycle Q Clear(g_c), s	2.5	19.7	0.0	6.0	17.5	0.0	3.3	4.1	0.0	12.4	9.7	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	76	1361	609	340	1564	0	92	241	0	324	480	0
V/C Ratio(X)	0.71	0.72	0.00	0.73	0.62	0.00	0.76	0.41	0.00	0.84	0.52	0.00
Avail Cap(c_a), veh/h	634	1898	849	1218	1898	0	628	662	0	634	659	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	39.7	22.0	0.0	36.7	18.0	0.0	39.2	33.5	0.0	33.1	26.5	0.0
Incr Delay (d2), s/veh	4.6	0.4	0.0	1.2	0.2	0.0	12.2	1.1	0.0	6.9	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	9.7	0.0	2.9	8.6	0.0	1.9	2.2	0.0	6.7	5.1	0.0
LnGrp Delay(d),s/veh	44.2	22.3	0.0	37.8	18.1	0.0	51.4	34.6	0.0	40.0	27.6	0.0
LnGrp LOS	D	C		D	B		D	C		D	C	
Approach Vol, veh/h		1033			1212			168			522	
Approach Delay, s/veh		23.5			22.2			41.6			34.1	
Approach LOS		C			C			D			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.6	42.1	8.4	25.9	12.4	37.3	19.3	14.9				
Change Period (Y+Rc), s	4.0	5.0	4.0	4.0	4.0	5.0	4.0	4.0				
Max Green Setting (Gmax), s	30.0	45.0	30.0	30.0	30.0	45.0	30.0	30.0				
Max Q Clear Time (g_c+I1), s	4.5	19.5	5.3	11.7	8.0	21.7	14.4	6.1				
Green Ext Time (p_c), s	0.1	11.0	0.2	2.2	0.4	10.5	0.9	2.5				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			25.9									
HCM 2010 LOS			C									
<b>Notes</b>												



User approved pedestrian interval to be less than phase max green.

HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 12: J St/Cannery Ave & Covell Blvd Cumulative Plus Project Conditions - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	151	948	222	110	1014	120	171	50	80	180	90	50
Future Volume (veh/h)	151	948	222	110	1014	120	171	50	80	180	90	50
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.94	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1810	1743	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	164	1030	134	120	1102	120	186	54	11	196	98	28
Adj No. of Lanes	1	2	1	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	5	9	2	2	2	2	2	2	2	2
Cap, veh/h	201	1469	631	149	1258	137	224	173	35	236	169	48
Arrive On Green	0.11	0.41	0.41	0.09	0.39	0.39	0.13	0.12	0.12	0.13	0.12	0.12
Sat Flow, veh/h	1774	3539	1520	1660	3216	350	1774	1485	302	1774	1370	392
Grp Volume(v), veh/h	164	1030	134	120	606	616	186	0	65	196	0	126
Grp Sat Flow(s),veh/h/ln	1774	1770	1520	1660	1770	1796	1774	0	1787	1774	0	1762
Q Serve(g_s), s	7.0	18.6	4.4	5.5	24.5	24.6	7.9	0.0	2.6	8.3	0.0	5.2
Cycle Q Clear(g_c), s	7.0	18.6	4.4	5.5	24.5	24.6	7.9	0.0	2.6	8.3	0.0	5.2
Prop In Lane	1.00		1.00	1.00		0.19	1.00		0.17	1.00		0.22
Lane Grp Cap(c), veh/h	201	1469	631	149	692	703	224	0	208	236	0	217
V/C Ratio(X)	0.82	0.70	0.21	0.81	0.87	0.88	0.83	0.00	0.31	0.83	0.00	0.58
Avail Cap(c_a), veh/h	218	1488	639	161	698	709	241	0	451	264	0	467
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	33.5	18.7	14.5	34.5	21.8	21.8	33.0	0.0	31.3	32.6	0.0	32.0
Incr Delay (d2), s/veh	20.4	1.6	0.2	24.7	12.0	12.1	20.5	0.0	1.0	20.4	0.0	4.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	9.3	1.9	3.5	14.3	14.5	5.2	0.0	1.3	5.4	0.0	2.8
LnGrp Delay(d),s/veh	53.9	20.2	14.7	59.2	33.8	33.9	53.4	0.0	32.3	53.0	0.0	36.5
LnGrp LOS	D	C	B	E	C	C	D		C	D		D
Approach Vol, veh/h		1328			1342			251			322	
Approach Delay, s/veh		23.8			36.1			48.0			46.5	
Approach LOS		C			D			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.3	15.0	13.2	34.7	14.8	14.5	11.4	36.6				
Change Period (Y+Rc), s	4.5	5.5	4.5	4.5	4.5	5.5	4.5	4.5				
Max Green Setting (Gmax), s	10.5	20.5	9.5	30.5	11.5	19.5	7.5	32.5				
Max Q Clear Time (g_c+I1), s	9.9	7.2	9.0	26.6	10.3	4.6	7.5	20.6				
Green Ext Time (p_c), s	0.0	1.2	0.0	3.7	0.1	1.3	0.0	10.5				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			33.0									
HCM 2010 LOS			C									

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Cumulative Plus Project Conditions  
AM Peak Hour




















Intersection 13

Project Dwy/W Covell Blvd

Side-street Stop

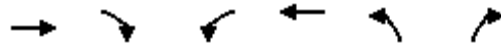
Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn						
	Through						
	Right Turn	16	17	106.9%	6.6	4.2	A
	Subtotal	16	17	106.9%	6.6	4.2	A
EB	Left Turn						
	Through	927	921	99.4%	4.4	0.6	A
	Right Turn						
	Subtotal	927	921	99.4%	4.4	0.6	A
WB	Left Turn						
	Through	691	696	100.7%	3.0	0.3	A
	Right Turn	32	28	86.3%	2.5	0.6	A
	Subtotal	723	723	100.0%	3.0	0.3	A
Total		1,666	1,662	99.7%	3.8	0.5	A

HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 1: Lake Blvd/CR 99 & Covell Blvd Cumulative Plus Project Conditions - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	276	40	434	314	40	50	70	275	30	50	20
Future Volume (veh/h)	30	276	40	434	314	40	50	70	275	30	50	20
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	33	300	0	472	341	39	54	76	0	32	54	12
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	61	369	0	573	798	91	136	142	0	45	76	17
Arrive On Green	0.03	0.20	0.00	0.32	0.49	0.49	0.08	0.08	0.00	0.08	0.08	0.08
Sat Flow, veh/h	1774	1863	0	1774	1641	188	1774	1863	0	586	989	220
Grp Volume(v), veh/h	33	300	0	472	0	380	54	76	0	98	0	0
Grp Sat Flow(s),veh/h/ln	1774	1863	0	1774	0	1828	1774	1863	0	1795	0	0
Q Serve(g_s), s	1.2	10.0	0.0	16.0	0.0	8.8	1.9	2.6	0.0	3.5	0.0	0.0
Cycle Q Clear(g_c), s	1.2	10.0	0.0	16.0	0.0	8.8	1.9	2.6	0.0	3.5	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.10	1.00		0.00	0.33		0.12
Lane Grp Cap(c), veh/h	61	369	0	573	0	890	136	142	0	137	0	0
V/C Ratio(X)	0.54	0.81	0.00	0.82	0.00	0.43	0.40	0.53	0.00	0.71	0.00	0.00
Avail Cap(c_a), veh/h	180	533	0	780	0	1142	677	710	0	464	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	30.9	24.9	0.0	20.3	0.0	10.8	28.6	28.9	0.0	29.3	0.0	0.0
Incr Delay (d2), s/veh	7.2	6.2	0.0	5.2	0.0	0.3	4.0	6.5	0.0	13.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	5.8	0.0	8.6	0.0	4.4	1.1	1.6	0.0	2.2	0.0	0.0
LnGrp Delay(d),s/veh	38.1	31.1	0.0	25.6	0.0	11.1	32.6	35.4	0.0	42.9	0.0	0.0
LnGrp LOS	D	C		C		B	C	D		D		
Approach Vol, veh/h		333			852			130			98	
Approach Delay, s/veh		31.8			19.1			34.3			42.9	
Approach LOS		C			B			C			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	26.4	18.3		10.2	7.6	37.0		10.2				
Change Period (Y+Rc), s	5.4	5.4		* 5.2	5.4	5.4		5.2				
Max Green Setting (Gmax), s	28.6	18.6		* 17	6.6	40.6		24.8				
Max Q Clear Time (g_c+I1), s	18.0	12.0		5.5	3.2	10.8		4.6				
Green Ext Time (p_c), s	3.0	0.9		0.5	0.0	4.2		0.9				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				25.2								
HCM 2010 LOS				C								
<b>Notes</b>												

\* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 2: Denali Dr & Covell Blvd Cumulative Plus Project Conditions - PM Peak Hour



Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑		↙	↑↑	↘			
Traffic Volume (veh/h)	634	40	268	771	30	118		
Future Volume (veh/h)	634	40	268	771	30	118		
Number	2	12	1	6	3	18		
Initial Q (Qb), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	1863	1863	1863	1900		
Adj Flow Rate, veh/h	689	0	279	803	33	0		
Adj No. of Lanes	2	0	1	2	0	0		
Peak Hour Factor	0.92	0.92	0.96	0.96	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	0	0		
Cap, veh/h	1580	0	357	2610	66	0		
Arrive On Green	0.45	0.00	0.20	0.74	0.04	0.00		
Sat Flow, veh/h	3725	0	1774	3632	1724	0		
Grp Volume(v), veh/h	689	0	279	803	34	0		
Grp Sat Flow(s),veh/h/ln	1770	0	1774	1770	1777	0		
Q Serve(g_s), s	6.0	0.0	6.7	3.4	0.8	0.0		
Cycle Q Clear(g_c), s	6.0	0.0	6.7	3.4	0.8	0.0		
Prop In Lane		0.00	1.00		0.97	0.00		
Lane Grp Cap(c), veh/h	1580	0	357	2610	68	0		
V/C Ratio(X)	0.44	0.00	0.78	0.31	0.50	0.00		
Avail Cap(c_a), veh/h	2777	0	795	2777	796	0		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh	8.5	0.0	16.9	2.0	21.0	0.0		
Incr Delay (d2), s/veh	0.2	0.0	3.8	0.1	11.4	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	2.9	0.0	3.6	1.6	0.6	0.0		
LnGrp Delay(d),s/veh	8.7	0.0	20.6	2.1	32.4	0.0		
LnGrp LOS	A		C	A	C			
Approach Vol, veh/h	689			1082	34			
Approach Delay, s/veh	8.7			6.9	32.4			
Approach LOS	A			A	C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	13.0	25.9				38.9		5.7
Change Period (Y+Rc), s	4.0	6.0				6.0		4.0
Max Green Setting (Gmax), s	20.0	35.0				35.0		20.0
Max Q Clear Time (g_c+I1), s	8.7	8.0				5.4		2.8
Green Ext Time (p_c), s	0.6	11.9				12.4		0.1
<b>Intersection Summary</b>								
HCM 2010 Ctrl Delay			8.0					
HCM 2010 LOS			A					
<b>Notes</b>								

User approved volume balancing among the lanes for turning movement.

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Cumulative Plus Project Conditions  
PM Peak Hour

Intersection 3                      Risling Ct/Sutter Hospital Dwy                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	47	45	95.5%	4.8	0.7	A
	Through	63	57	90.8%	3.2	0.4	A
	Right Turn	70	63	90.1%	2.9	0.3	A
	Subtotal	180	165	91.8%	3.6	0.3	A
SB	Left Turn	10	10	102.0%	3.6	3.5	A
	Through	153	155	101.4%	1.7	2.1	A
	Right Turn	1	1	120.0%	0.0	0.0	A
	Subtotal	164	167	101.5%	1.9	2.0	A
EB	Left Turn						
	Through	3	3	103.3%	5.8	8.0	A
	Right Turn	63	60	94.4%	9.7	9.7	A
	Subtotal	66	63	94.8%	9.9	9.5	A
WB	Left Turn	120	122	101.6%	11.2	8.9	B
	Through	4	4	87.5%	3.8	3.2	A
	Right Turn						
	Subtotal	124	125	101.1%	11.1	8.7	B
Total		534	520	97.3%	6.0	4.5	A

Intersection 4                      Risling Ct-Shasta Dr/W Covell Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	22	20	90.0%	74.6	27.0	E
	Through	16	17	106.3%	48.7	14.5	D
	Right Turn	200	198	98.9%	3.7	0.7	A
	Subtotal	238	235	98.6%	11.9	2.1	B
SB	Left Turn	207	201	97.1%	85.8	28.5	F
	Through	39	39	100.3%	86.8	35.9	F
	Right Turn	90	95	106.0%	63.1	33.3	E
	Subtotal	336	336	99.9%	79.3	29.8	E
EB	Left Turn	82	78	94.6%	71.5	20.3	E
	Through	630	629	99.9%	18.0	4.2	B
	Right Turn	30	33	110.7%	4.4	2.3	A
	Subtotal	742	740	99.8%	23.0	3.1	C
WB	Left Turn	180	164	91.2%	63.9	13.1	E
	Through	982	866	88.2%	16.4	3.8	B
	Right Turn	94	83	88.7%	10.7	3.9	B
	Subtotal	1,256	1,114	88.7%	23.4	3.0	C
Total		2,572	2,424	94.2%	30.4	6.7	C



SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Cumulative Plus Project Conditions  
PM Peak Hour

Intersection 5                      John Jones Rd/W Covell Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	270	259	95.7%	55.5	11.3	E
	Through						
	Right Turn	62	65	104.7%	13.4	6.5	B
	Subtotal	332	323	97.4%	46.9	10.1	D
EB	Left Turn	52	49	93.8%	68.0	14.0	E
	Through	985	977	99.2%	11.3	1.9	B
	Right Turn						
	Subtotal	1,037	1,026	98.9%	13.8	2.6	B
WB	Left Turn						
	Through	1,194	1,048	87.8%	12.1	2.2	B
	Right Turn	210	178	85.0%	8.4	2.3	A
	Subtotal	1,404	1,226	87.3%	11.6	2.2	B
Total		2,773	2,575	92.9%	16.9	2.0	B

Intersection 6                      SR 113 SB Ramps/W Covell Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	190	186	98.1%	55.7	9.5	E
	Through	10	10	104.0%	49.0	31.3	D
	Right Turn	105	112	106.4%	49.4	6.8	D
	Subtotal	305	309	101.1%	53.6	6.4	D
EB	Left Turn						
	Through	936	924	98.7%	20.7	2.8	C
	Right Turn	319	316	99.1%	18.4	3.3	B
	Subtotal	1,255	1,240	98.8%	20.1	2.8	C
WB	Left Turn	530	430	81.2%	61.6	11.1	E
	Through	1,299	1,111	85.6%	10.3	1.1	B
	Right Turn						
	Subtotal	1,829	1,542	84.3%	23.7	2.0	C
Total		3,389	3,090	91.2%	25.2	2.0	C

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Cumulative Plus Project Conditions  
PM Peak Hour






















Intersection 7 SR 113 NB Ramps/W Covell Blvd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	504	459	91.1%	134.7	18.6	F
	Through						
	Right Turn	780	720	92.2%	179.8	23.0	F
	Subtotal	1,284	1,179	91.8%	162.7	21.7	F
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	102	95	92.7%	88.3	15.0	F
	Through	1,024	1,016	99.2%	31.0	10.6	C
	Right Turn						
	Subtotal	1,126	1,110	98.6%	35.8	10.3	D
WB	Left Turn						
	Through	1,325	1,097	82.8%	114.9	16.8	F
	Right Turn	310	252	81.3%	85.5	13.7	F
	Subtotal	1,635	1,349	82.5%	109.3	16.3	F
Total		4,045	3,638	89.9%	103.5	8.2	F



















Intersection 8 Sycamore Ln/W Covell Blvd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	286	240	84.0%	291.1	112.7	F
	Through	50	44	88.0%	261.2	133.2	F
	Right Turn	100	84	83.6%	256.1	140.8	F
	Subtotal	436	368	84.4%	279.4	119.5	F
SB	Left Turn	80	77	96.8%	64.3	37.9	E
	Through	140	142	101.2%	88.1	43.8	F
	Right Turn	231	231	100.0%	70.8	47.9	E
	Subtotal	451	450	99.8%	75.2	44.8	E
EB	Left Turn	302	276	91.2%	105.8	38.7	F
	Through	1,090	1,064	97.6%	62.1	17.4	E
	Right Turn	195	187	95.9%	49.0	17.8	D
	Subtotal	1,587	1,526	96.2%	68.7	21.9	E
WB	Left Turn	30	25	83.3%	333.7	74.2	F
	Through	997	847	85.0%	351.1	56.1	F
	Right Turn	70	59	83.9%	359.3	86.6	F
	Subtotal	1,097	931	84.8%	351.6	57.0	F
Total		3,571	3,275	91.7%	172.7	20.7	F

HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 9: Anderson Rd & Covell Blvd Cumulative Plus Project Conditions - PM Peak Hour






















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	53	871	236	110	669	120	397	150	190	70	150	31
Future Volume (veh/h)	53	871	236	110	669	120	397	150	190	70	150	31
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1855	1900	1863	1863	1727	1792	1816	1900	1863	1776	1900
Adj Flow Rate, veh/h	58	947	0	120	727	0	432	163	0	76	163	0
Adj No. of Lanes	1	2	0	1	2	1	1	1	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	7	2	2	2	2	10	6	8	8	2	8	8
Cap, veh/h	75	1201	0	148	1345	558	463	675	0	99	528	0
Arrive On Green	0.04	0.34	0.00	0.08	0.38	0.00	0.27	0.37	0.00	0.06	0.16	0.00
Sat Flow, veh/h	1691	3617	0	1774	3539	1468	1707	1816	0	1774	3464	0
Grp Volume(v), veh/h	58	947	0	120	727	0	432	163	0	76	163	0
Grp Sat Flow(s),veh/h/ln	1691	1762	0	1774	1770	1468	1707	1816	0	1774	1687	0
Q Serve(g_s), s	4.1	29.4	0.0	8.1	19.5	0.0	30.0	7.5	0.0	5.1	5.2	0.0
Cycle Q Clear(g_c), s	4.1	29.4	0.0	8.1	19.5	0.0	30.0	7.5	0.0	5.1	5.2	0.0
Prop In Lane	1.00		0.00	1.00		1.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	75	1201	0	148	1345	558	463	675	0	99	528	0
V/C Ratio(X)	0.78	0.79	0.00	0.81	0.54	0.00	0.93	0.24	0.00	0.77	0.31	0.00
Avail Cap(c_a), veh/h	557	1305	0	438	1345	558	562	675	0	584	1111	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	57.5	36.1	0.0	54.7	29.4	0.0	43.2	26.3	0.0	56.6	45.4	0.0
Incr Delay (d2), s/veh	15.6	3.1	0.0	9.9	1.3	0.0	20.6	0.2	0.0	11.8	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	14.9	0.0	4.4	9.7	0.0	16.8	3.8	0.0	2.8	2.4	0.0
LnGrp Delay(d),s/veh	73.0	39.2	0.0	64.6	30.7	0.0	63.9	26.5	0.0	68.5	45.8	0.0
LnGrp LOS	E	D		E	C		E	C		E	D	
Approach Vol, veh/h		1005			847			595			239	
Approach Delay, s/veh		41.2			35.5			53.6			53.0	
Approach LOS		D			D			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.2	46.4	36.9	23.0	10.4	51.2	10.8	49.2				
Change Period (Y+Rc), s	5.0	5.0	4.0	4.0	5.0	5.0	4.0	4.0				
Max Green Setting (Gmax), s	30.0	45.0	40.0	40.0	40.0	45.0	40.0	40.0				
Max Q Clear Time (g_c+I1), s	10.1	31.4	32.0	7.2	6.1	21.5	7.1	9.5				
Green Ext Time (p_c), s	0.3	10.0	0.9	1.1	0.1	17.0	0.2	2.1				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				43.2								
HCM 2010 LOS				D								

HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 10: Oak Ave & Covell Blvd Cumulative Plus Project Conditions - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1086	113	100	749	0	175	0	260	0	0	0
Future Volume (veh/h)	0	1086	113	100	749	0	175	0	260	0	0	0
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	0	1863	0	1863	1900	1863	1900
Adj Flow Rate, veh/h	0	1108	0	109	814	0	184	0	0	0	0	0
Adj No. of Lanes	0	2	0	1	2	0	1	0	1	0	1	0
Peak Hour Factor	0.98	0.98	0.98	0.92	0.92	0.92	0.95	0.95	0.95	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0	2	0	2	2	2	2
Cap, veh/h	0	1815	0	143	2394	0	243	0	0	0	4	0
Arrive On Green	0.00	0.51	0.00	0.08	0.68	0.00	0.14	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	0	3725	0	1774	3632	0	1774	184		0	-93137	0
Grp Volume(v), veh/h	0	1108	0	109	814	0	184	24.8		0	0	0
Grp Sat Flow(s),veh/h/ln	0	1770	0	1774	1770	0	1774	C		0	1863	0
Q Serve(g_s), s	0.0	10.7	0.0	2.9	4.7	0.0	4.8			0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	10.7	0.0	2.9	4.7	0.0	4.8			0.0	0.0	0.0
Prop In Lane	0.00		0.00	1.00		0.00	1.00			0.00		0.00
Lane Grp Cap(c), veh/h	0	1815	0	143	2394	0	243			0	4	0
V/C Ratio(X)	0.00	0.61	0.00	0.76	0.34	0.00	0.76			0.00	0.00	0.00
Avail Cap(c_a), veh/h	0	2276	0	552	2394	0	736			0	580	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	0.00	1.00	1.00	0.00	1.00			0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	8.3	0.0	21.7	3.3	0.0	20.0			0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	8.1	0.1	0.0	4.8			0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.2	0.0	1.7	2.3	0.0	2.7			0.0	0.0	0.0
LnGrp Delay(d),s/veh	0.0	8.7	0.0	29.8	3.4	0.0	24.8			0.0	0.0	0.0
LnGrp LOS		A		C	A		C					
Approach Vol, veh/h		1108			923							0
Approach Delay, s/veh		8.7			6.5							0.0
Approach LOS		A			A							
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2	3	4	5	6						
Phs Duration (G+Y+Rc), s		37.6	10.6	0.0	7.9	29.7						
Change Period (Y+Rc), s		5.0	4.0	5.0	4.0	5.0						
Max Green Setting (Gmax), s		32.0	20.0	15.0	15.0	31.0						
Max Q Clear Time (g_c+I1), s		6.7	6.8	0.0	4.9	12.7						
Green Ext Time (p_c), s		15.5	0.4	0.0	0.2	12.0						
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				9.1								
HCM 2010 LOS				A								
<b>Notes</b>												






















User approved pedestrian interval to be less than phase max green.

HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 11: F St & Covell Blvd Cumulative Plus Project Conditions - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	1260	175	200	841	270	157	160	270	120	160	50
Future Volume (veh/h)	70	1260	175	200	841	270	157	160	270	120	160	50
Number	1	6	16	5	2	12	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1845	1863	1900	1845	1851	1900	1863	1846	1900
Adj Flow Rate, veh/h	76	1370	0	217	914	0	171	174	0	130	174	0
Adj No. of Lanes	1	2	1	2	2	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	3	2	2	3	2	2	2	2	2
Cap, veh/h	99	1576	705	296	1686	0	210	361	0	167	313	0
Arrive On Green	0.06	0.45	0.00	0.09	0.48	0.00	0.12	0.19	0.00	0.09	0.17	0.00
Sat Flow, veh/h	1774	3539	1583	3408	3632	0	1757	1851	0	1774	1846	0
Grp Volume(v), veh/h	76	1370	0	217	914	0	171	174	0	130	174	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1704	1770	0	1757	1851	0	1774	1846	0
Q Serve(g_s), s	4.0	33.2	0.0	5.9	17.3	0.0	9.0	7.9	0.0	6.8	8.2	0.0
Cycle Q Clear(g_c), s	4.0	33.2	0.0	5.9	17.3	0.0	9.0	7.9	0.0	6.8	8.2	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	99	1576	705	296	1686	0	210	361	0	167	313	0
V/C Ratio(X)	0.77	0.87	0.00	0.73	0.54	0.00	0.82	0.48	0.00	0.78	0.56	0.00
Avail Cap(c_a), veh/h	561	1679	751	1078	1686	0	556	586	0	561	584	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	44.2	23.8	0.0	42.2	17.5	0.0	40.7	33.9	0.0	42.0	36.1	0.0
Incr Delay (d2), s/veh	4.7	4.7	0.0	1.3	0.2	0.0	7.5	1.0	0.0	9.1	1.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	17.2	0.0	2.8	8.4	0.0	4.8	4.2	0.0	3.7	4.3	0.0
LnGrp Delay(d),s/veh	48.9	28.5	0.0	43.6	17.7	0.0	48.3	34.9	0.0	51.1	38.0	0.0
LnGrp LOS	D	C		D	B		D	C		D	D	
Approach Vol, veh/h		1446			1131			345			304	
Approach Delay, s/veh		29.5			22.7			41.6			43.6	
Approach LOS		C			C			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.3	50.2	15.3	20.1	12.2	47.2	12.9	22.5				
Change Period (Y+Rc), s	4.0	5.0	4.0	4.0	4.0	5.0	4.0	4.0				
Max Green Setting (Gmax), s	30.0	45.0	30.0	30.0	30.0	45.0	30.0	30.0				
Max Q Clear Time (g_c+I1), s	6.0	19.3	11.0	10.2	7.9	35.2	8.8	9.9				
Green Ext Time (p_c), s	0.1	13.8	0.4	2.2	0.4	7.0	0.4	2.2				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			29.7									
HCM 2010 LOS			C									
<b>Notes</b>												

User approved pedestrian interval to be less than phase max green.

HCM 2010 Signalized Intersection Summary West Davis Active Adult Community Project EIR  
 12: J St/Cannery Ave & Covell Blvd Cumulative Plus Project Conditions - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	141	1367	142	80	1068	120	142	140	50	190	110	81
Future Volume (veh/h)	141	1367	142	80	1068	120	142	140	50	190	110	81
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1810	1743	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	153	1486	65	87	1161	120	154	152	38	207	120	54
Adj No. of Lanes	1	2	1	1	2	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	5	9	2	2	2	2	2	2	2	2
Cap, veh/h	188	1457	603	109	1197	123	190	219	55	244	223	100
Arrive On Green	0.11	0.41	0.41	0.07	0.37	0.37	0.11	0.15	0.15	0.14	0.18	0.18
Sat Flow, veh/h	1774	3539	1464	1660	3221	332	1774	1427	357	1774	1209	544
Grp Volume(v), veh/h	153	1486	65	87	637	644	154	0	190	207	0	174
Grp Sat Flow(s),veh/h/ln	1774	1770	1464	1660	1770	1783	1774	0	1784	1774	0	1753
Q Serve(g_s), s	6.9	33.8	2.2	4.2	29.0	29.2	7.0	0.0	8.3	9.3	0.0	7.4
Cycle Q Clear(g_c), s	6.9	33.8	2.2	4.2	29.0	29.2	7.0	0.0	8.3	9.3	0.0	7.4
Prop In Lane	1.00		1.00	1.00		0.19	1.00		0.20	1.00		0.31
Lane Grp Cap(c), veh/h	188	1457	603	109	658	663	190	0	274	244	0	323
V/C Ratio(X)	0.82	1.02	0.11	0.80	0.97	0.97	0.81	0.00	0.69	0.85	0.00	0.54
Avail Cap(c_a), veh/h	205	1457	603	152	658	663	227	0	424	249	0	438
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.9	24.1	14.9	37.8	25.3	25.4	35.8	0.0	32.9	34.6	0.0	30.3
Incr Delay (d2), s/veh	21.1	28.7	0.1	19.6	27.2	28.0	17.8	0.0	3.8	24.5	0.0	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	22.2	0.9	2.5	19.1	19.5	4.4	0.0	4.4	6.3	0.0	3.8
LnGrp Delay(d),s/veh	57.0	52.8	15.0	57.4	52.5	53.4	53.6	0.0	36.7	59.1	0.0	32.9
LnGrp LOS	E	F	B	E	D	D	D		D	E		C
Approach Vol, veh/h		1704			1368			344			381	
Approach Delay, s/veh		51.8			53.2			44.3			47.1	
Approach LOS		D			D			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.3	20.6	13.2	35.0	15.8	18.1	9.9	38.3				
Change Period (Y+Rc), s	4.5	5.5	4.5	4.5	4.5	5.5	4.5	4.5				
Max Green Setting (Gmax), s	10.5	20.5	9.5	30.5	11.5	19.5	7.5	32.5				
Max Q Clear Time (g_c+I1), s	9.0	9.4	8.9	31.2	11.3	10.3	6.2	35.8				
Green Ext Time (p_c), s	0.1	2.2	0.0	0.0	0.0	1.9	0.0	0.0				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			51.2									
HCM 2010 LOS			D									



SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Cumulative Plus Project Conditions  
PM Peak Hour

Intersection 13

Project Dwy/Covell Blvd

Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn						
	Through						
	Right Turn	19	20	105.8%	5.6	1.9	A
	Subtotal	19	20	105.8%	5.6	1.9	A
EB	Left Turn						
	Through	742	739	99.5%	3.4	0.3	A
	Right Turn						
	Subtotal	742	739	99.5%	3.4	0.3	A
WB	Left Turn						
	Through	1,020	915	89.7%	3.0	0.5	A
	Right Turn	86	78	90.5%	2.7	0.4	A
	Subtotal	1,106	993	89.8%	2.9	0.5	A
Total		1,867	1,752	93.8%	3.2	0.3	A



Major Street **Risling Ct**  
 Minor Street **Hospital Dwy**

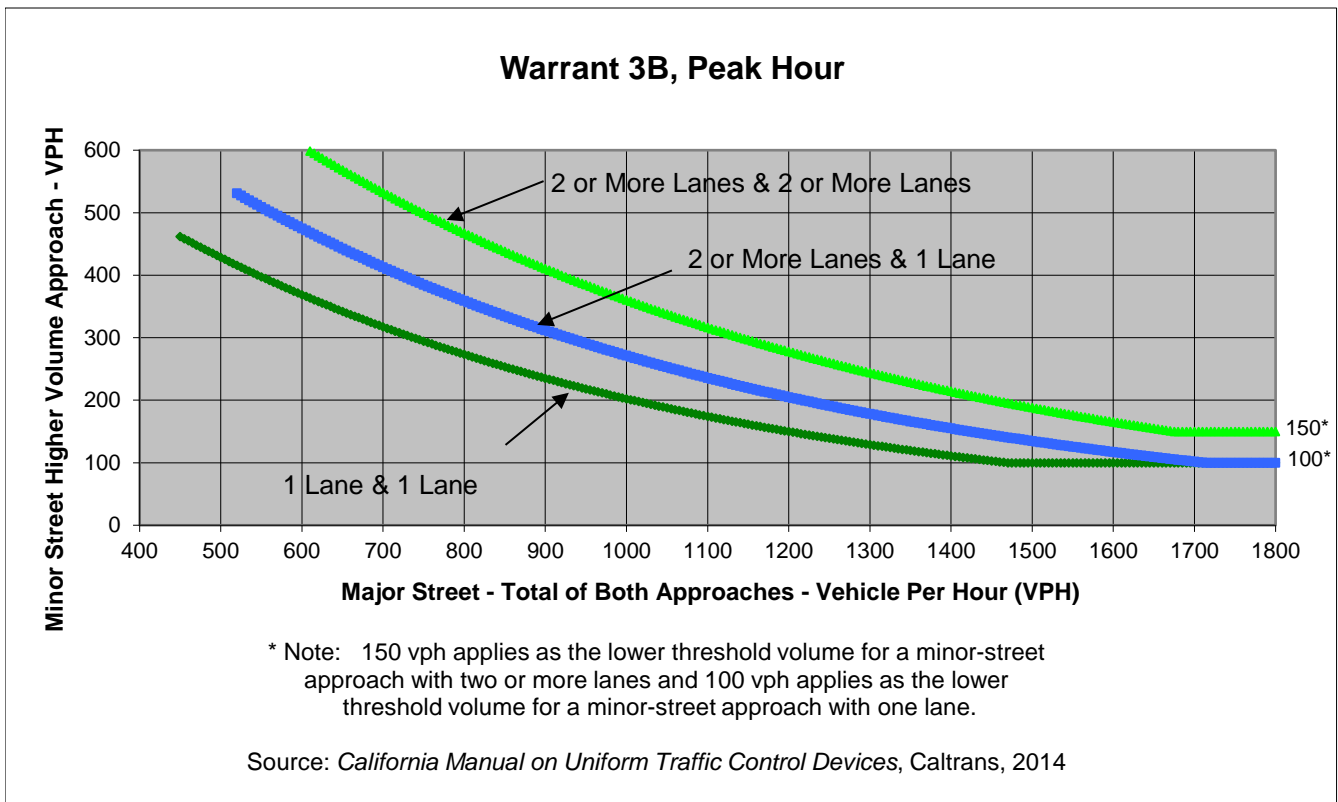
Project **West Davis AAC EIR**  
 Scenario **Cumulative Plus Project**  
 Peak Hour **AM Peak Hour**

Turn Movement Volumes

	NB	SB	EB	WB
Left	57	1	0	40
Through	108	118	4	3
Right	90	0	57	10
Total	255	119	61	53

Major Street Direction

x	North/South
	East/West



	Major Street	Minor Street	Warrant Met
	Risling Ct	Hospital Dwy	
<b>Number of Approach Lanes</b>	<b>1</b>	<b>1</b>	<b><u>NO</u></b>
<b>Traffic Volume (VPH) *</b>	<b>374</b>	<b>61</b>	

\* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.  
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street Risling Ct  
 Minor Street Hospital Dwy

Project West Davis AAC EIR  
 Scenario Cumulative Plus Project  
 Peak Hour AM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	57	1	0	40
Through	108	118	4	3
Right	90	0	57	10
Total	255	119	61	53

Major Street Direction

x	North/South
	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	4

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	5.7
Approach with Worst Case Delay	WB
Total Vehicles on Approach	53

<b>Warrant 3A, Peak Hour</b>			
	<b>Peak Hour Delay on Minor Approach (vehicle-hours)</b>	<b>Peak Hour Volume on Minor Approach (vph)</b>	<b>Peak Hour Entering Volume Served (vph)</b>
<b>Cumulative Plus Project</b>	<b>0.1</b>	<b>61</b>	<b>488</b>
<b>Limiting Value</b>	<b>4</b>	<b>100</b>	<b>800</b>
<b>Condition Satisfied?</b>	<b>Not Met</b>	<b>Not Met</b>	<b>Not Met</b>
<b>Warrant Met</b>	<b><u>NO</u></b>		



Major Street Risling Ct  
 Minor Street Hospital Dwy

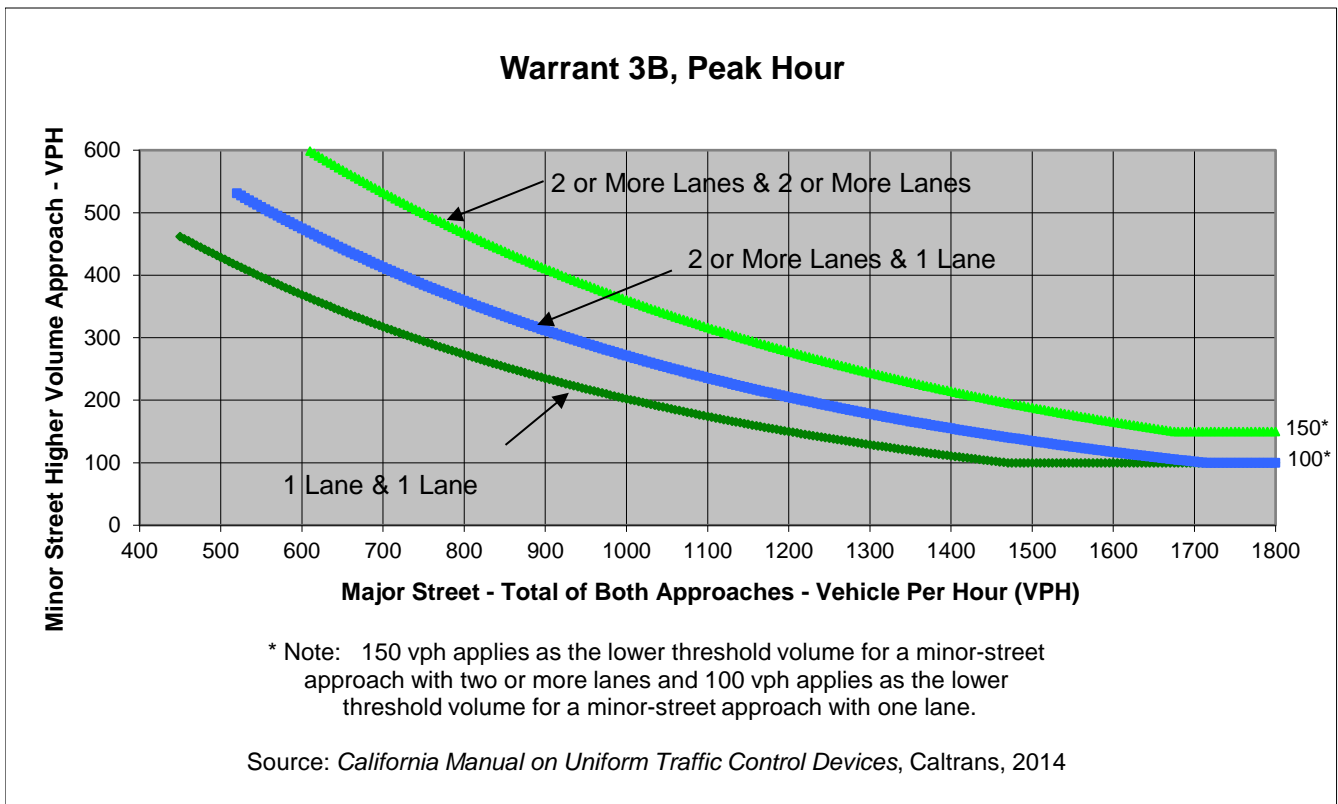
Project West Davis AAC EIR  
 Scenario Cumulative Plus Project  
 Peak Hour PM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	47	10	0	120
Through	63	153	3	4
Right	70	1	63	0
Total	180	164	66	124

Major Street Direction

x	North/South
	East/West



	Major Street	Minor Street	Warrant Met
	Risling Ct	Hospital Dwy	
<b>Number of Approach Lanes</b>	<b>1</b>	<b>1</b>	<b><u>NO</u></b>
<b>Traffic Volume (VPH) *</b>	<b>344</b>	<b>124</b>	

\* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.  
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street Risling Ct  
 Minor Street Hospital Dwy

Project West Davis AAC EIR  
 Scenario Cumulative Plus Project  
 Peak Hour PM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	47	10	0	120
Through	63	153	3	4
Right	70	1	63	0
Total	180	164	66	124

Major Street Direction

x	North/South
	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	4

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	11.1
Approach with Worst Case Delay	WB
Total Vehicles on Approach	124

<b>Warrant 3A, Peak Hour</b>			
	<b>Peak Hour Delay on Minor Approach (vehicle-hours)</b>	<b>Peak Hour Volume on Minor Approach (vph)</b>	<b>Peak Hour Entering Volume Served (vph)</b>
<b>Cumulative Plus Project</b>	<b>0.4</b>	<b>124</b>	<b>534</b>
<b>Limiting Value</b>	<b>4</b>	<b>100</b>	<b>800</b>
<b>Condition Satisfied?</b>	<b>Not Met</b>	<b>Met</b>	<b>Not Met</b>
<b>Warrant Met</b>	<b><u>NO</u></b>		

Intersection 3

Risling Ct/Sutter Hospital Dwy

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Shared	900	50	4	75	5	75	12	0%	0%
NB	Shared	525	25	4	50	10	75	22	0%	0%
SB	Shared	2,000	25	1	25	5	25	16	0%	0%
WB	Shared	950	50	2	75	6	75	15	0%	0%

Intersection 4

Risling Ct-Shasta Dr/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	U/Left Turns	225	125	13	200	18	225	7	0%	0%
	Through	400	175	14	275	30	300	45	27%	0%
	Right Turn	100	25	7	75	23	125	1	0%	0%
NB	Left Turn	125	25	4	75	11	100	30	0%	0%
	Through	350	75	8	150	22	200	47	3%	0%
	Right Turn	75	75	1	75	2	100	0	3%	0%
SB	Left Turn	525	150	18	250	52	325	87	26%	0%
	Through/Right	125	75	12	150	23	125	1	0%	0%
WB	U/Left Turns	325	100	6	125	13	150	26	0%	0%
	Left Turn	325	50	6	125	25	150	76	0%	0%
	Through	575	125	16	250	38	275	54	0%	0%
	Through/Right	575	150	15	275	32	325	56	0%	0%

Intersection 5

John Jones Rd/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	150	100	8	150	14	175	7	3%	0%
	Through	575	175	25	325	83	375	115	5%	0%
SB	Left Turn	250	125	8	200	17	225	22	0%	0%
	Through/Right	1,600	50	6	75	22	100	68	0%	0%
WB	Through	350	200	14	350	27	350	21	28%	1%
	Right Turn	75	75	4	100	5	100	0	7%	0%
NB	Shared	25	25	0	25	0	25	0	0%	0%

Intersection 6

SR 113 SB Ramps/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	350	200	17	350	15	350	8	0%	1%
	Through/Right	350	250	15	400	14	375	9	0%	3%
SB	Left/Through	1,425	150	7	225	16	275	53	0%	0%
	Right Turn	1,425	100	6	175	8	175	17	0%	0%
WB	Left Turn	225	175	13	250	13	225	2	4%	0%
	Through	500	175	43	375	93	500	123	0%	0%
O										

Intersection 7

SR 113 NB Ramps/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	U/Left Turns	175	50	5	75	12	100	15	0%	0%
	Left Turn	175	75	4	100	11	125	32	0%	0%
	Through	500	100	7	150	10	175	28	0%	0%
NB	Left/Through	2,400	175	12	275	21	325	32	0%	0%
	Right Turn	825	225	19	375	33	450	48	0%	0%
WB	Through	875	450	75	650	110	700	96	38%	2%
	Right Turn	150	125	14	225	6	175	0	0%	0%
0										

Intersection 8

Sycamore Ln/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	175	125	9	225	8	200	0	3%	0%
	Through	400	225	19	375	25	400	18	17%	1%
	Through/Right	400	250	14	400	18	425	8	0%	1%
NB	Left Turn	225	200	14	275	7	225	1	25%	0%
	Through/Right	2,050	200	108	475	223	550	180	0%	0%
SB	Left Turn	250	50	8	150	28	250	47	0%	0%
	Through	1,775	150	16	300	33	350	52	16%	0%
	Right Turn	75	75	2	100	5	100	0	2%	0%
WB	Left Turn	125	75	11	125	21	150	0	0%	0%
	Through	5,800	200	33	300	72	350	91	20%	0%
	Through/Right	5,800	225	34	350	72	400	88	0%	0%



Intersection 13

Project Dwy/W Covell Blvd

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
SB	Right Turn	925	25	3	50	5	50	11	0%	0%
	Through	400	25	1	25	5	25	16	0%	0%
WB	Through/Right	400	25	0	25	0	25	0	0%	0%
	Through	5,350	25	0	25	0	25	0	0%	0%
EB	Through	5,350	25	0	25	0	25	0	0%	0%
0										

Intersection 3

Risling Ct/Sutter Hospital Dwy

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Shared	900	50	5	75	12	100	26	0%	0%
NB	Shared	525	25	3	50	9	75	18	0%	0%
SB	Shared	2,000	25	3	50	9	75	16	0%	0%
WB	Shared	950	50	5	100	13	100	23	0%	0%

Intersection 4

Risling Ct-Shasta Dr/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	U/Left Turns	225	100	15	175	29	200	50	0%	0%
	Through	400	125	8	225	22	275	44	19%	0%
	Right Turn	100	25	6	75	28	125	38	0%	0%
NB	Left Turn	125	25	5	75	10	75	17	0%	0%
	Through	350	50	6	100	14	100	40	4%	0%
	Right Turn	75	75	1	75	7	75	2	2%	0%
SB	Left Turn	1,550	325	48	550	83	600	48	43%	0%
	Through/Right	125	100	5	175	6	150	0	12%	0%
WB	U/Left Turns	325	100	7	175	9	200	21	0%	0%
	Left Turn	325	75	8	150	25	200	81	0%	0%
	Through	575	150	13	275	21	325	59	0%	0%
	Through/Right	575	150	14	300	23	350	51	0%	0%

Intersection 5

John Jones Rd/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	150	75	6	125	17	150	36	1%	0%
	Through	575	125	11	225	25	275	44	2%	0%
SB	Left Turn	250	200	12	300	19	275	1	9%	0%
	Through/Right	1,600	100	38	275	116	400	138	0%	0%
WB	Through	350	200	26	350	37	350	16	21%	1%
	Right Turn	75	50	6	100	6	100	0	1%	0%
NB	Shared	25	25	0	25	0	25	0	0%	0%

Intersection 6

SR 113 SB Ramps/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	350	250	17	375	21	375	16	0%	2%
	Through/Right	350	250	17	400	14	375	10	0%	2%
SB	Left/Through	1,425	175	16	275	32	300	48	0%	0%
	Right Turn	1,425	100	10	175	18	200	18	0%	0%
WB	Left Turn	225	200	7	275	7	250	0	15%	0%
	Through	500	250	27	475	43	500	73	1%	1%
O										

Intersection 7

SR 113 NB Ramps/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	U/Left Turns	175	50	7	100	9	125	12	0%	0%
	Left Turn	175	100	11	175	23	200	1	0%	0%
	Through	500	250	34	425	69	450	61	23%	0%
NB	Left/Through	2,375	1,650	415	2,800	336	2,425	8	0%	21%
	Right Turn	725	725	51	875	78	775	0	41%	0%
WB	Through	875	875	33	1,025	41	925	12	54%	35%
	Right Turn	150	175	13	300	8	225	0	0%	0%
0										

Intersection 8

Sycamore Ln/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	175	200	3	250	11	225	0	38%	0%
	Through	875	600	85	825	103	850	76	30%	1%
	Through/Right	875	625	84	850	101	850	81	0%	1%
NB	Left Turn	225	225	5	250	11	250	0	67%	0%
	Through/Right	2,050	925	475	1,700	665	1,700	494	4%	14%
SB	Left Turn	250	150	21	325	30	275	0	0%	0%
	Through	1,775	375	81	625	173	700	166	50%	0%
	Right Turn	75	75	3	100	6	100	0	2%	0%
WB	Left Turn	125	75	16	150	38	175	28	0%	0%
	Through	5,800	1,550	324	2,775	464	2,700	433	69%	0%
	Through/Right	5,800	1,575	321	2,800	467	2,750	441	0%	0%

Intersection 13

Project Dwy/Covell Blvd

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
SB	Right Turn	925	25	3	50	4	50	12	0%	0%
		5,150	25	0	25	0	25	0	0%	0%
WB	Through	475	25	0	25	0	25	0	0%	0%
	Through/Right	475	25	0	25	0	25	0	0%	0%
0										

Arterial Level of Service  
 Cumulative Plus Project Conditions

AM Peak Hour

Arterial Level of Service: NB Route 1

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Covell Blvd	7	28.6	69.7	0.5	24
SR 113 SB Ramps	6	10.5	25.1	0.1	15
John Jones Rd	5	16.4	24.0	0.1	11
Risling Ct	4	23.9	36.0	0.1	12
	13	3.0	10.7	0.1	29
Total		82.3	165.6	0.8	19

Arterial Level of Service: SB Route 1

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	20.6	27.3	0.1	11
	5	13.2	25.6	0.1	17
SR 113 SB Ramps	6	17.5	25.3	0.1	11
Route 1	7	5.2	15.8	0.1	23
Total		56.5	94.1	0.4	15

Arterial Level of Service  
Cumulative Plus Project Conditions

AM Peak Hour

Arterial Level of Service: EB Route 2

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	20.6	27.3	0.1	11
	5	13.2	25.6	0.1	17
Route 2	6	22.1	33.6	0.1	8
Total		55.9	86.5	0.3	12

Arterial Level of Service: WB Route 2

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
John Jones Rd	5	-	-	0.1	-
Risling Ct	4	23.9	36.0	0.1	12
	13	3.0	10.7	0.1	29
Total		26.9	46.7	0.3	22

Arterial Level of Service  
 Cumulative Plus Project Conditions

PM Peak Hour

Arterial Level of Service: NB Route 1

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Covell Blvd	7	115.4	212.8	0.5	11
SR 113 SB Ramps	6	10.8	25.4	0.1	15
John Jones Rd	5	11.1	18.8	0.1	14
Risling Ct	4	15.4	27.5	0.1	16
	13	3.0	10.8	0.1	29
Total		155.7	295.3	0.8	13

Arterial Level of Service: SB Route 1

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	15.9	22.6	0.1	14
	5	7.3	19.6	0.1	22
SR 113 SB Ramps	6	17.3	25.1	0.1	11
Route 1	7	26.4	37.0	0.1	10
Total		66.8	104.3	0.4	13



Arterial Level of Service  
 Cumulative Plus Project Conditions

PM Peak Hour

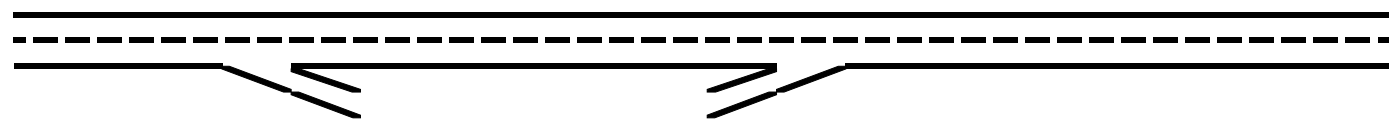
Arterial Level of Service: EB Route 2

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	16.6	23.3	0.1	13
	5	9.0	21.3	0.1	20
Route 2	6	16.8	28.3	0.1	10
Total		42.4	72.9	0.3	14

Arterial Level of Service: WB Route 2

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
John Jones Rd	5	-	-	0.1	-
Risling Ct	4	16.0	28.1	0.1	15
	13	3.1	10.9	0.1	29
Total		19.1	39.0	0.3	26

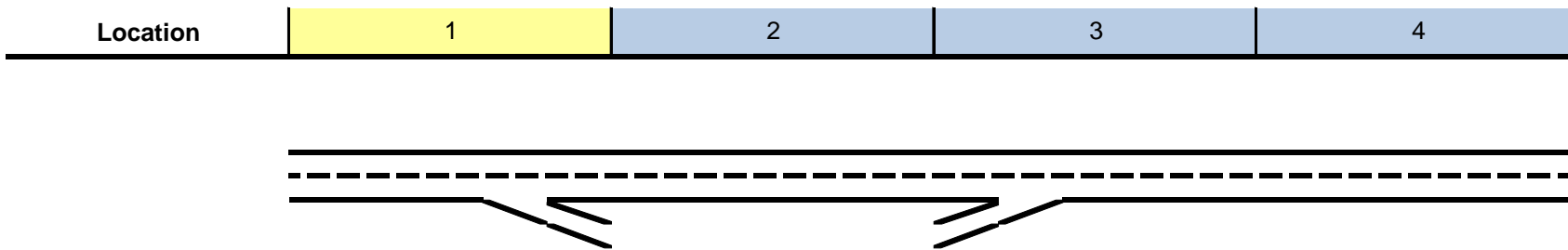
<b>Location</b>	1	2	3	4
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**Key**

<> Express Lane (HOV)

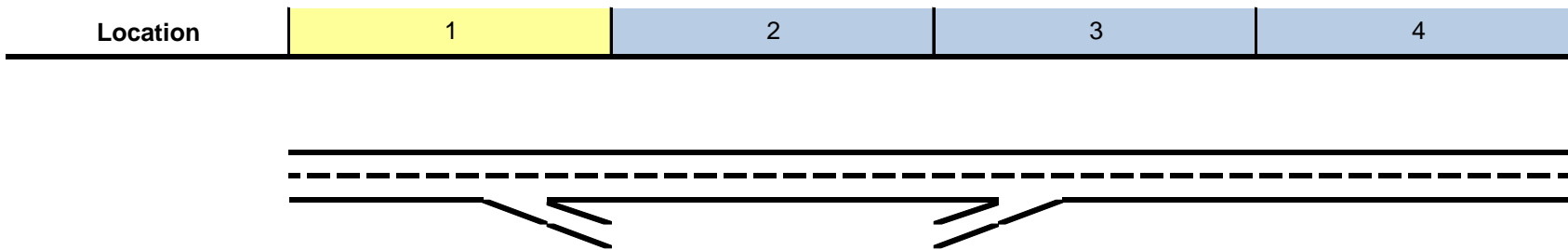
Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Freeway Segment</b>				
Type	Diverge	Basic	Merge	Basic
Length (ft)	1,500	2,560	1,500	5,980
Accel Length			370	
Decel Length	150			
Mainline Volume	1,394	450	450	754
On Ramp Volume			304	
Off Ramp Volume	944			
Express Lane Volume				
EL On Ramp Volume				
EL Off Ramp Volume				
<b>Flow Rate in Entering General Purpose Lanes (GP)</b>				
Volume (vph)	1,394	450	450	754
PHF	0.75	0.75	0.75	0.75
Lanes	2	2	2	2
Terrain	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00
Truck & Bus %	5.9%	5.9%	5.9%	5.9%
RV %	0.0%	0.0%	0.0%	0.0%
E <sub>T</sub>	1.5	1.5	1.5	1.5
E <sub>R</sub>	1.2	1.2	1.2	1.2
f <sub>HV</sub>	0.971	0.971	0.971	0.971
f <sub>P</sub>	1.00	1.00	1.00	1.00
Flow (pcph)	1,913	618	618	1,035
Flow (pcphpl)	957	309	309	517



**Key**

<> Express Lane (HOV)

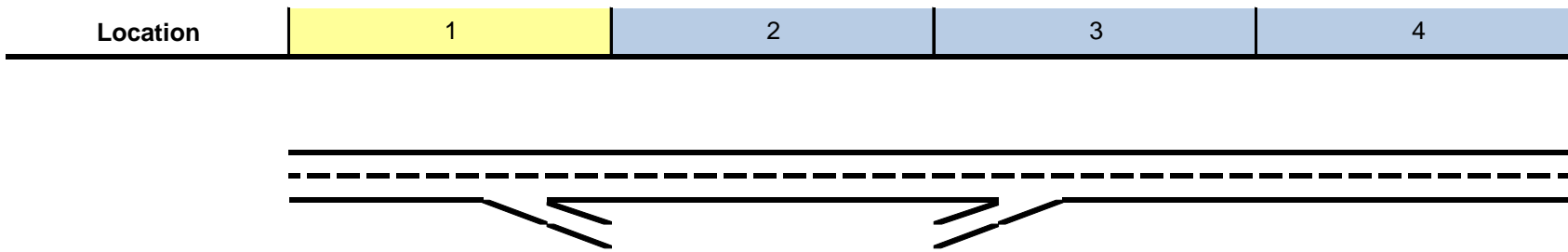
Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Free Flow Speed in Entering GP Lanes</b>				
Lane Width (ft)				
Shoulder Width				
TRD				
$f_{LW}$				
$f_{LC}$				
Calculated FFS				
Measured FFS				
FFS Curve	70	70	70	70
<b>Operations in Entering GP Lanes</b>				
Capacity (pcph)	4,800	4,800	4,800	4,800
v/c ratio	0.40	0.13	0.13	0.22
Speed (mph)	70.0	70.0	70.0	70.0
Density (pcphpl)	13.7	4.4	4.4	7.4
LOS	B	A	A	A
<b>Operations for Segment GP Lanes</b>				
Flow (pcph)			941	
Lanes			2	
Capacity (pcph)			4,800	
v/c ratio			0.20	
Flow Rate (pcphpl)			470	
Speed (mph)			70.0	
Density (pcphpl)			6.7	
LOS			A	
<b>Operations for Exiting GP Lanes</b>				
Flow (pcph)	910			
Lanes	2			
Capacity (pcph)	4,800			
v/c ratio	0.19			
Flow Rate (pcphpl)	455			
Speed (mph)	70.0			
Density (pcphpl)	6.5			
LOS	A			



**Key**

<> Express Lane (HOV)

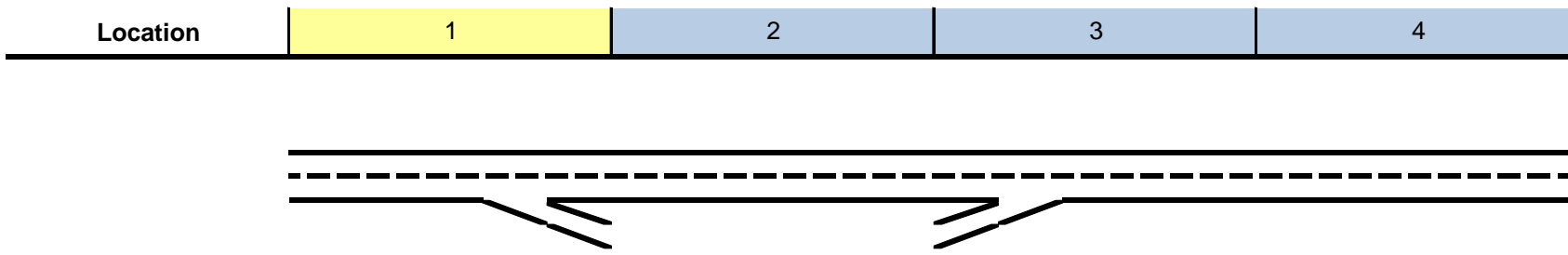
Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Flow Rate in Express Lanes</b>				
<b>Operations in Express Lanes</b>				
<b>On Ramp Flow Rate</b>				
Volume (vph)			304	
PHF			0.95	
Lanes			1	
Terrain			Level	
Grade %			0.0%	
Grade Length (mi)			0.00	
Truck & Bus %			2.0%	
RV %			0.0%	
$E_T$			1.5	
$E_R$			1.2	
$f_{HV}$			0.990	
$f_P$			1.00	
Flow (pcph)			323	
Flow Rate (pcphpl)			323	
<b>On Ramp Roadway Operations</b>				
Ramp Type			Right	
Ramp Speed (mph)			45	
Ramp Capacity (pcph)			2,100	
Ramp v/c ratio			0.15	



**Key**

<> Express Lane (HOV)

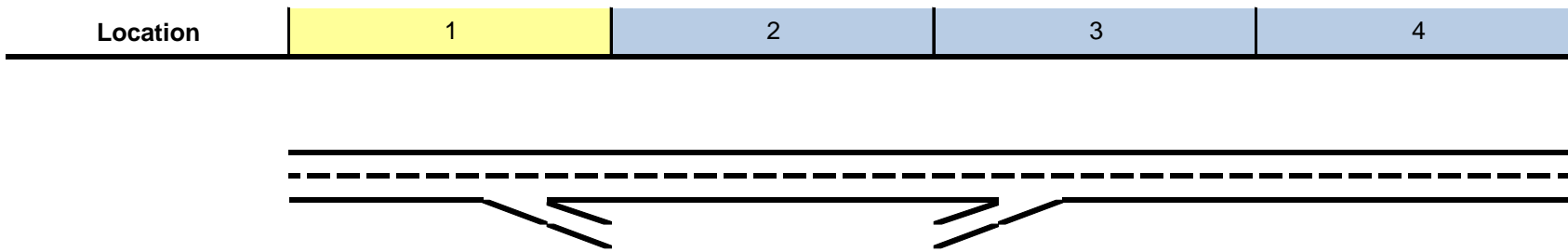
Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Off Ramp Flow Rate</b>				
Volume (vph)	944			
PHF	0.95			
Lanes	1			
Terrain	Level			
Grade %	0.0%			
Grade Length (mi)	0.00			
Truck & Bus %	2.0%			
RV %	0.0%			
E <sub>T</sub>	1.5			
E <sub>R</sub>	1.2			
f <sub>HV</sub>	0.990			
f <sub>P</sub>	1.00			
Flow (pcph)	1,004			
Flow Rate (pcphpl)	1,004			
<b>Off Ramp Roadway Operations</b>				
Ramp Type	Right			
Ramp Speed	45			
Ramp Capacity (pcph)	2,100			
Ramp v/c ratio	0.48			
<b>Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps</b>				



**Key**

<> Express Lane (HOV)

Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Merge Influence Area Operations</b>				
Effective $v_p$ (pcph)			618	
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FM}$ (Eqn 13-3)			0.588	
$P_{FM}$ (Eqn 13-4)				
$P_{FM}$ (Eqn 13-5)				
$P_{FM}$			1.000	
$v_{12}$ (pcph)			618	
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)			618	
$v_{R12a}$ (pcph)			941	
Speed Index			0.30	
Area Speed			61.7	
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed			61.7	
v/c ratio			0.20	
Density			10.3	
LOS			B	

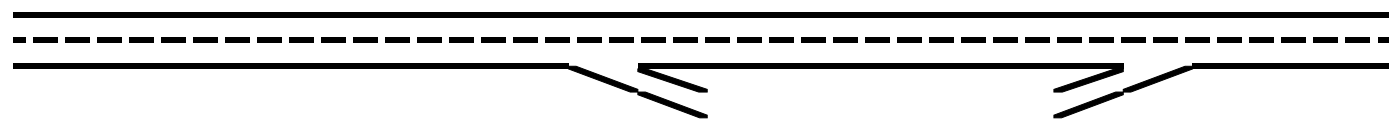


**Key**

<> Express Lane (HOV)

Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Diverge Influence Area Operations</b>				
Effective $v_p$ (pcph)	1,913			
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FD}$ (Eqn 13-9)	0.666			
$P_{FD}$ (Eqn 13-10)				
$P_{FD}$ (Eqn 13-11)				
$P_{FD}$	1.000			
$v_{12}$ (pcph)	1,913			
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)	1,913			
Speed Index	0.39			
Area Speed	59.1			
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed	59.1			
v/c ratio	0.43			
Density	19.4			
LOS	B			
<b>On Ramp to Off Ramp Flow Rate for Weave Segments</b>				
<b>On Ramp to Mainline Flow Rate for Weave Segments</b>				
<b>Mainline to Off Ramp Flow Rate for Weave Segments</b>				
<b>General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments</b>				
<b>Weave Segment Operations</b>				
<b>Summarize Segment Operations</b>				
Segment v/c ratio	0.43	0.13	0.20	0.22
Segment Density	19.4	4.4	10.3	7.4
Segment LOS	B	A	B	A
Over Capacity				

Location	1	2	3	4
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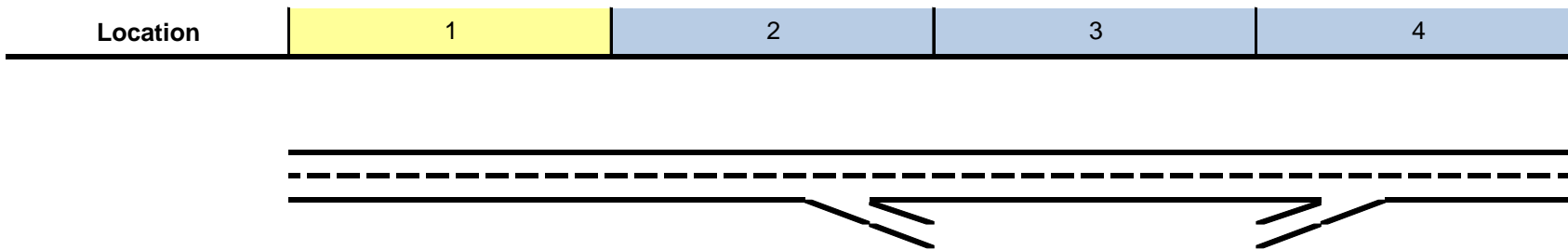


**Key**

<> Express Lane (HOV)

Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Freeway Segment</b>				
Type	Basic	Diverge	Basic	Merge
Length (ft)	4,920	1,500	2,850	1,550
Accel Length				330
Decel Length		170		
Mainline Volume	2,369	2,369	1,990	1,990
On Ramp Volume				1,053
Off Ramp Volume		379		
Express Lane Volume				
EL On Ramp Volume				
EL Off Ramp Volume				
<b>Flow Rate in Entering General Purpose Lanes (GP)</b>				
Volume (vph)	2,369	2,369	1,990	1,990
PHF	0.84	0.84	0.84	0.84
Lanes	2	2	2	2
Terrain	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00
Truck & Bus %	5.9%	5.9%	5.9%	5.9%
RV %	0.0%	0.0%	0.0%	0.0%
E <sub>T</sub>	1.5	1.5	1.5	1.5
E <sub>R</sub>	1.2	1.2	1.2	1.2
f <sub>HV</sub>	0.971	0.971	0.971	0.971
f <sub>P</sub>	1.00	1.00	1.00	1.00
Flow (pcph)	2,903	2,903	2,439	2,439
Flow (pcphpl)	1,452	1,452	1,219	1,219

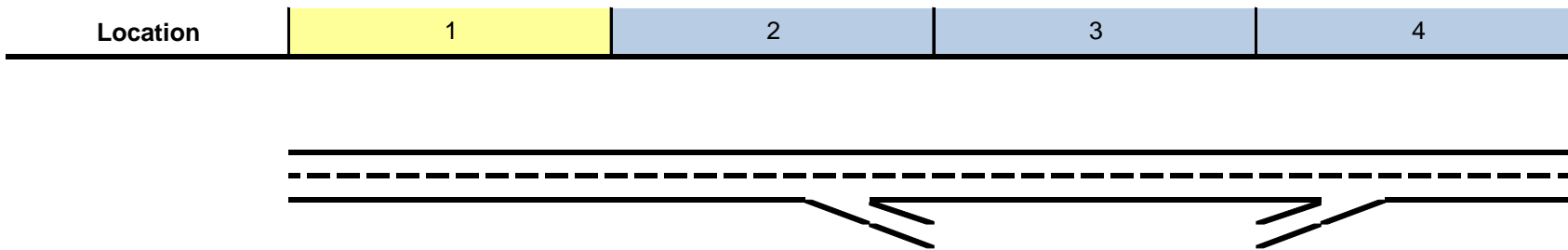




**Key**

<> Express Lane (HOV)

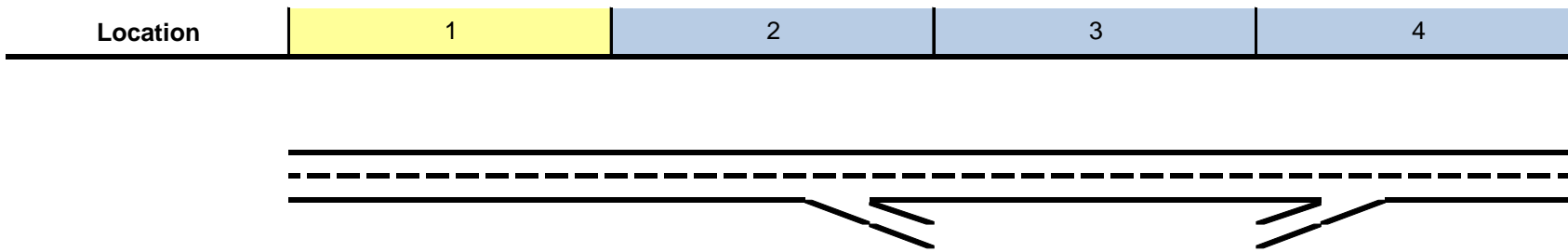
Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Free Flow Speed in Entering GP Lanes</b>				
Lane Width (ft)				
Shoulder Width				
TRD				
$f_{LW}$				
$f_{LC}$				
Calculated FFS				
Measured FFS				
FFS Curve	70	70	70	70
<b>Operations in Entering GP Lanes</b>				
Capacity (pcph)	4,800	4,800	4,800	4,800
v/c ratio	0.60	0.60	0.51	0.51
Speed (mph)	69.3	69.3	70.0	70.0
Density (pcphpl)	21.0	21.0	17.4	17.4
LOS	C	C	B	B
<b>Operations for Segment GP Lanes</b>				
Flow (pcph)				3,558
Lanes				2
Capacity (pcph)				4,800
v/c ratio				0.74
Flow Rate (pcphpl)				1,779
Speed (mph)				66.1
Density (pcphpl)				26.9
LOS				D
<b>Operations for Exiting GP Lanes</b>				
Flow (pcph)		2,500		
Lanes		2		
Capacity (pcph)		4,800		
v/c ratio		0.52		
Flow Rate (pcphpl)		1,250		
Speed (mph)		70.0		
Density (pcphpl)		17.9		
LOS		B		



**Key**

<> Express Lane (HOV)

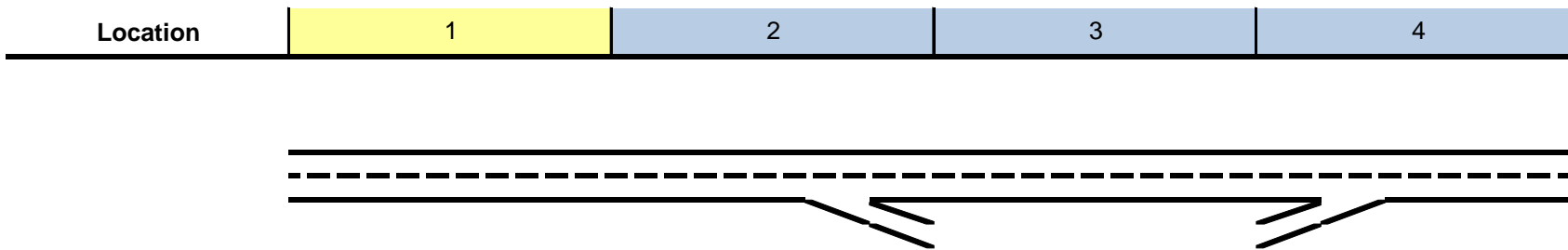
Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Flow Rate in Express Lanes</b>				
<b>Operations in Express Lanes</b>				
FFS	65	65	65	65
Capacity (pcph)				
v/c ratio				
<b>On Ramp Flow Rate</b>				
Volume (vph)				1,053
PHF				0.95
Lanes				1
Terrain				Level
Grade %				0.0%
Grade Length (mi)				0.00
Truck & Bus %				2.0%
RV %				0.0%
$E_T$				1.5
$E_R$				1.2
$f_{HV}$				0.990
$f_P$				1.00
Flow (pcph)				1,120
Flow Rate (pcphpl)				1,120
<b>On Ramp Roadway Operations</b>				
Ramp Type				Right
Ramp Speed (mph)				45
Ramp Capacity (pcph)				2,100
Ramp v/c ratio				0.53



**Key**

<> Express Lane (HOV)

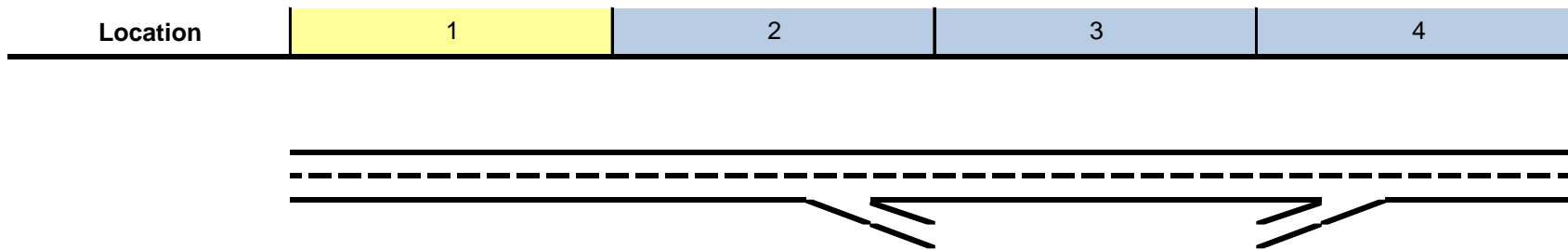
Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Off Ramp Flow Rate</b>				
Volume (vph)		379		
PHF		0.95		
Lanes		1		
Terrain		Level		
Grade %		0.0%		
Grade Length (mi)		0.00		
Truck & Bus %		2.0%		
RV %		0.0%		
$E_T$		1.5		
$E_R$		1.2		
$f_{HV}$		0.990		
$f_P$		1.00		
Flow (pcph)		403		
Flow Rate (pcphpl)		403		
<b>Off Ramp Roadway Operations</b>				
Ramp Type		Right		
Ramp Speed		45		
Ramp Capacity (pcph)		2,100		
Ramp v/c ratio		0.19		
<b>Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps</b>				



**Key**

<> Express Lane (HOV)

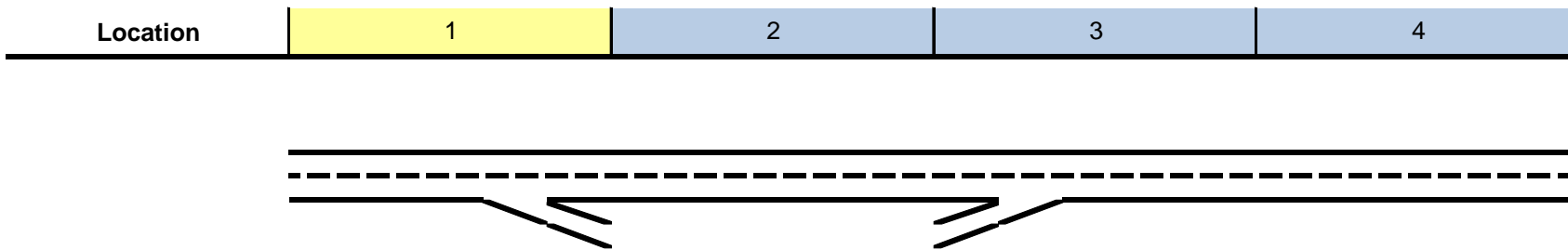
Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Merge Influence Area Operations</b>				
Effective $v_p$ (pcph)				2,439
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FM}$ (Eqn 13-3)				0.587
$P_{FM}$ (Eqn 13-4)				
$P_{FM}$ (Eqn 13-5)				
$P_{FM}$				1.000
$v_{12}$ (pcph)				2,439
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)				2,439
$v_{R12a}$ (pcph)				3,558
Speed Index				0.43
Area Speed				58.0
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed				58.0
v/c ratio				0.77
Density				30.6
LOS				D



**Key**

<> Express Lane (HOV)

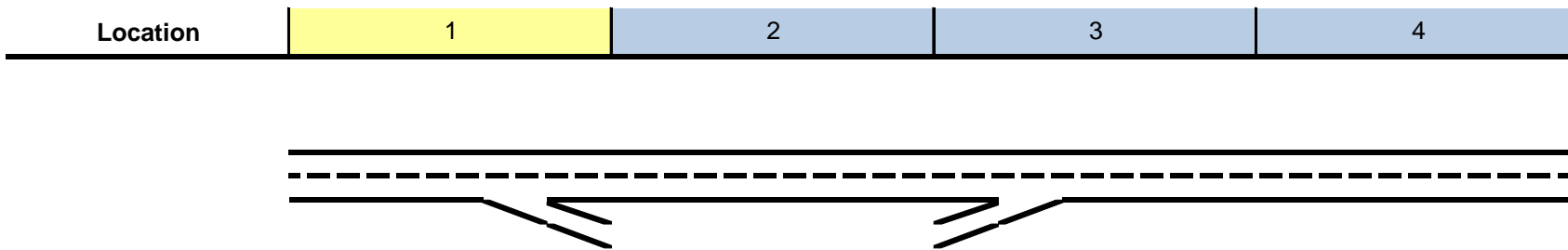
Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Diverge Influence Area Operations</b>				
Effective $v_p$ (pcph)		2,903		
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FD}$ (Eqn 13-9)		0.669		
$P_{FD}$ (Eqn 13-10)				
$P_{FD}$ (Eqn 13-11)				
$P_{FD}$		1.000		
$v_{12}$ (pcph)		2,903		
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)		2,903		
Speed Index		0.33		
Area Speed		60.6		
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed		60.6		
v/c ratio		0.66		
Density		27.7		
LOS		C		
<b>On Ramp to Off Ramp Flow Rate for Weave Segments</b>				
<b>On Ramp to Mainline Flow Rate for Weave Segments</b>				
<b>Mainline to Off Ramp Flow Rate for Weave Segments</b>				
<b>General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments</b>				
<b>Weave Segment Operations</b>				
<b>Summarize Segment Operations</b>				
Segment v/c ratio	0.60	0.66	0.51	0.77
Segment Density	21.0	27.7	17.4	30.6
Segment LOS	C	C	B	D
Over Capacity				



**Key**

<> Express Lane (HOV)

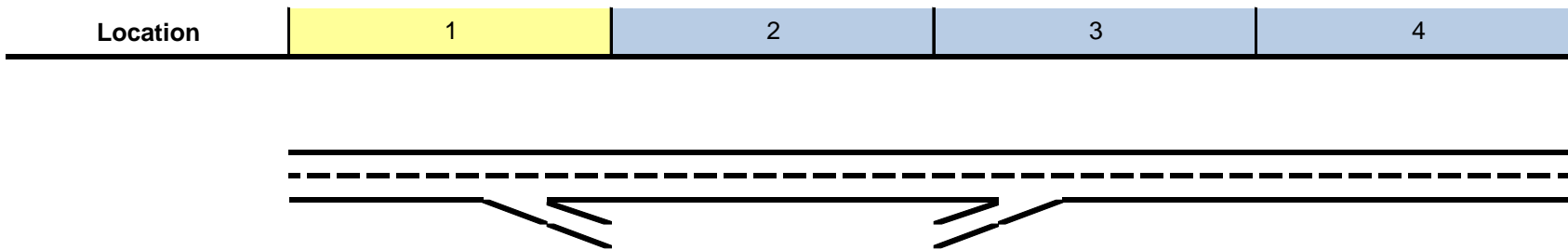
Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Freeway Segment</b>				
Type	Diverge	Basic	Merge	Basic
Length (ft)	1,500	2,560	1,500	5,980
Accel Length			370	
Decel Length	150			
Mainline Volume	2,534	1,250	1,250	1,662
On Ramp Volume			412	
Off Ramp Volume	1,284			
Express Lane Volume				
EL On Ramp Volume				
EL Off Ramp Volume				
<b>Flow Rate in Entering General Purpose Lanes (GP)</b>				
Volume (vph)	2,534	1,250	1,250	1,662
PHF	0.86	0.86	0.86	0.86
Lanes	2	2	2	2
Terrain	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00
Truck & Bus %	5.9%	5.9%	5.9%	5.9%
RV %	0.0%	0.0%	0.0%	0.0%
E <sub>T</sub>	1.5	1.5	1.5	1.5
E <sub>R</sub>	1.2	1.2	1.2	1.2
f <sub>HV</sub>	0.971	0.971	0.971	0.971
f <sub>P</sub>	1.00	1.00	1.00	1.00
Flow (pcph)	3,033	1,496	1,496	1,990
Flow (pcphpl)	1,517	748	748	995



**Key**

<> Express Lane (HOV)

Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Free Flow Speed in Entering GP Lanes</b>				
Lane Width (ft)				
Shoulder Width				
TRD				
$f_{LW}$				
$f_{LC}$				
Calculated FFS				
Measured FFS				
FFS Curve	70	70	70	70
<b>Operations in Entering GP Lanes</b>				
Capacity (pcph)	4,800	4,800	4,800	4,800
v/c ratio	0.63	0.31	0.31	0.41
Speed (mph)	68.8	70.0	70.0	70.0
Density (pcphpl)	22.0	10.7	10.7	14.2
LOS	C	A	A	B
<b>Operations for Segment GP Lanes</b>				
Flow (pcph)			1,934	
Lanes			2	
Capacity (pcph)			4,800	
v/c ratio			0.40	
Flow Rate (pcphpl)			967	
Speed (mph)			70.0	
Density (pcphpl)			13.8	
LOS			B	
<b>Operations for Exiting GP Lanes</b>				
Flow (pcph)	1,668			
Lanes	2			
Capacity (pcph)	4,800			
v/c ratio	0.35			
Flow Rate (pcphpl)	834			
Speed (mph)	70.0			
Density (pcphpl)	11.9			
LOS	B			

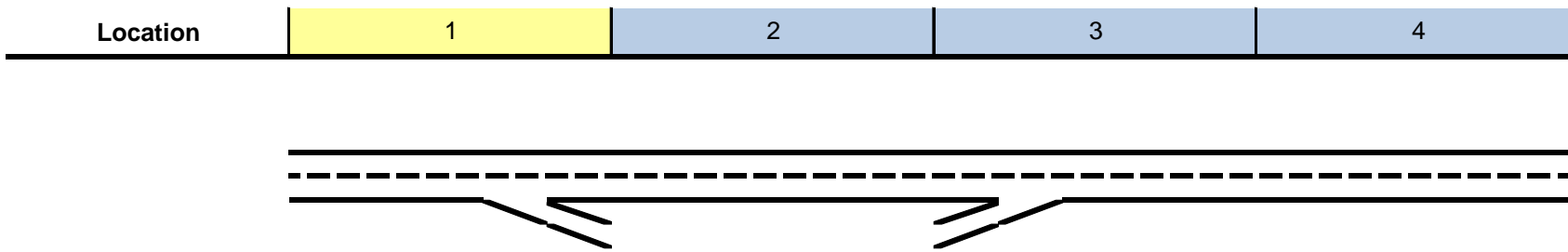


**Key**

<> Express Lane (HOV)

Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Flow Rate in Express Lanes</b>				
<b>Operations in Express Lanes</b>				
<b>On Ramp Flow Rate</b>				
Volume (vph)			412	
PHF			0.95	
Lanes			1	
Terrain			Level	
Grade %			0.0%	
Grade Length (mi)			0.00	
Truck & Bus %			2.0%	
RV %			0.0%	
$E_T$			1.5	
$E_R$			1.2	
$f_{HV}$			0.990	
$f_P$			1.00	
Flow (pcph)			438	
Flow Rate (pcphpl)			438	
<b>On Ramp Roadway Operations</b>				
Ramp Type			Right	
Ramp Speed (mph)			45	
Ramp Capacity (pcph)			2,100	
Ramp v/c ratio			0.21	

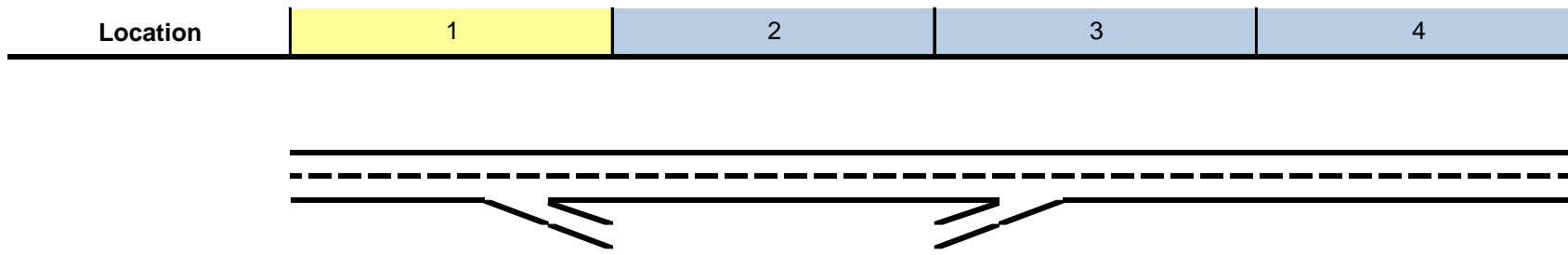




**Key**

<> Express Lane (HOV)

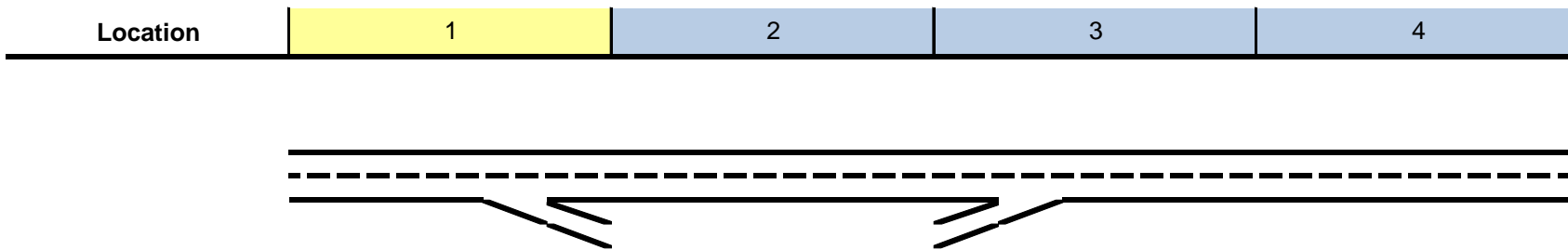
Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Off Ramp Flow Rate</b>				
Volume (vph)	1,284			
PHF	0.95			
Lanes	1			
Terrain	Level			
Grade %	0.0%			
Grade Length (mi)	0.00			
Truck & Bus %	2.0%			
RV %	0.0%			
$E_T$	1.5			
$E_R$	1.2			
$f_{HV}$	0.990			
$f_P$	1.00			
Flow (pcph)	1,365			
Flow Rate (pcphpl)	1,365			
<b>Off Ramp Roadway Operations</b>				
Ramp Type	Right			
Ramp Speed	45			
Ramp Capacity (pcph)	2,100			
Ramp v/c ratio	0.65			
<b>Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps</b>				



**Key**

<> Express Lane (HOV)

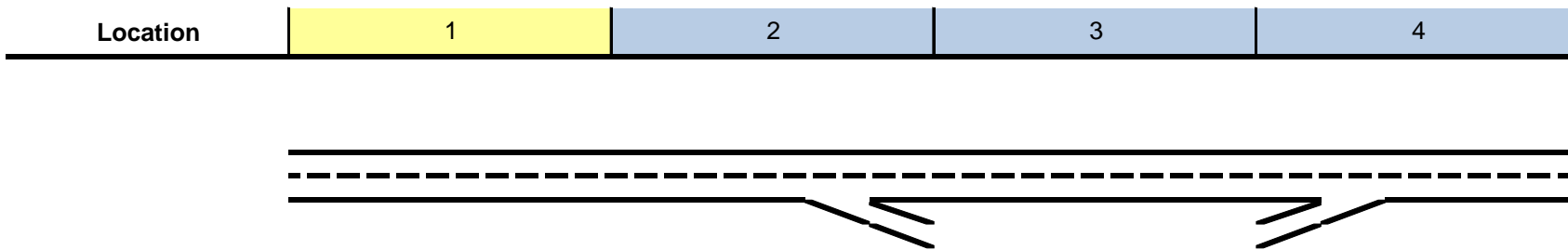
Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Merge Influence Area Operations</b>				
Effective $v_p$ (pcph)			1,496	
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FM}$ (Eqn 13-3)			0.588	
$P_{FM}$ (Eqn 13-4)				
$P_{FM}$ (Eqn 13-5)				
$P_{FM}$			1.000	
$v_{12}$ (pcph)			1,496	
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)			1,496	
$v_{R12a}$ (pcph)			1,934	
Speed Index			0.31	
Area Speed			61.2	
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed			61.2	
v/c ratio			0.42	
Density			18.0	
LOS			B	



**Key**

<> Express Lane (HOV)

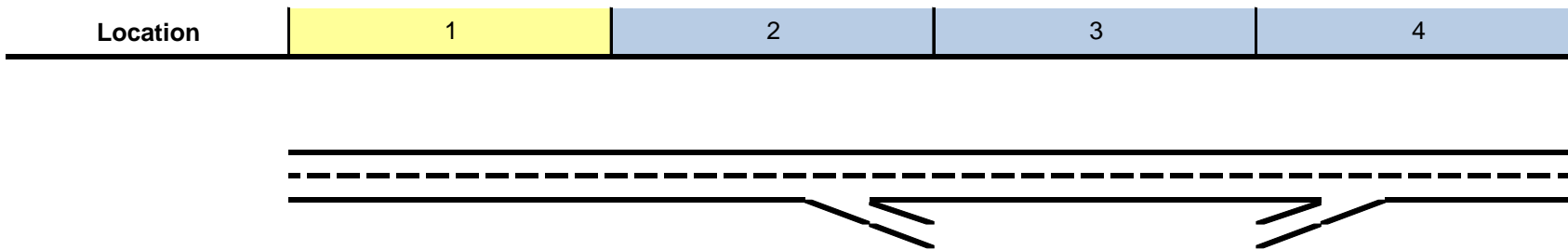
Name	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp	Covell Blvd On-Ramp to County Rd 29 Off-Ramp
<b>Diverge Influence Area Operations</b>				
Effective $v_p$ (pcph)	3,033			
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FD}$ (Eqn 13-9)	0.621			
$P_{FD}$ (Eqn 13-10)				
$P_{FD}$ (Eqn 13-11)				
$P_{FD}$	1.000			
$v_{12}$ (pcph)	3,033			
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)	3,033			
Speed Index	0.42			
Area Speed	58.2			
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed	58.2			
v/c ratio	0.69			
Density	29.0			
LOS	D			
<b>On Ramp to Off Ramp Flow Rate for Weave Segments</b>				
<b>On Ramp to Mainline Flow Rate for Weave Segments</b>				
<b>Mainline to Off Ramp Flow Rate for Weave Segments</b>				
<b>General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments</b>				
<b>Weave Segment Operations</b>				
<b>Summarize Segment Operations</b>				
Segment v/c ratio	0.69	0.31	0.42	0.41
Segment Density	29.0	10.7	18.0	14.2
Segment LOS	D	A	B	B
Over Capacity				



**Key**

<> Express Lane (HOV)

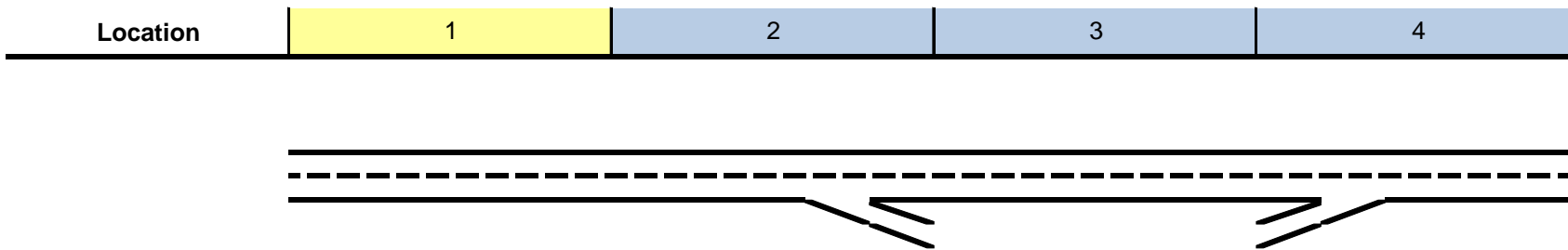
Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Freeway Segment</b>				
Type	Basic	Diverge	Basic	Merge
Length (ft)	4,920	1,500	2,850	1,550
Accel Length				330
Decel Length		170		
Mainline Volume	1,215	1,215	910	910
On Ramp Volume				859
Off Ramp Volume		305		
Express Lane Volume				
EL On Ramp Volume				
EL Off Ramp Volume				
<b>Flow Rate in Entering General Purpose Lanes (GP)</b>				
Volume (vph)	1,215	1,215	910	910
PHF	0.93	0.93	0.93	0.93
Lanes	2	2	2	2
Terrain	Level	Level	Level	Level
Grade %	0.0%	0.0%	0.0%	0.0%
Grade Length (mi)	0.00	0.00	0.00	0.00
Truck & Bus %	5.9%	5.9%	5.9%	5.9%
RV %	0.0%	0.0%	0.0%	0.0%
E <sub>T</sub>	1.5	1.5	1.5	1.5
E <sub>R</sub>	1.2	1.2	1.2	1.2
f <sub>HV</sub>	0.971	0.971	0.971	0.971
f <sub>P</sub>	1.00	1.00	1.00	1.00
Flow (pcph)	1,345	1,345	1,007	1,007
Flow (pcphpl)	672	672	504	504



**Key**

<> Express Lane (HOV)

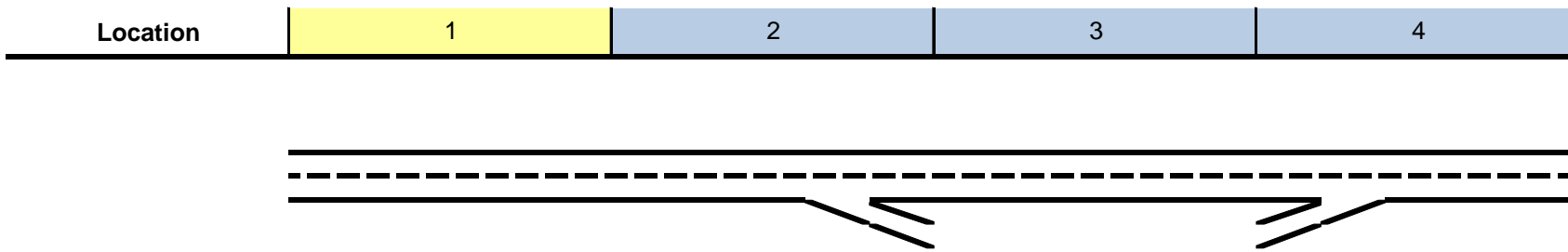
Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Free Flow Speed in Entering GP Lanes</b>				
Lane Width (ft)				
Shoulder Width				
TRD				
$f_{LW}$				
$f_{LC}$				
Calculated FFS				
Measured FFS				
FFS Curve	70	70	70	70
<b>Operations in Entering GP Lanes</b>				
Capacity (pcph)	4,800	4,800	4,800	4,800
v/c ratio	0.28	0.28	0.21	0.21
Speed (mph)	70.0	70.0	70.0	70.0
Density (pcphpl)	9.6	9.6	7.2	7.2
LOS	A	A	A	A
<b>Operations for Segment GP Lanes</b>				
Flow (pcph)				1,921
Lanes				2
Capacity (pcph)				4,800
v/c ratio				0.40
Flow Rate (pcphpl)				960
Speed (mph)				70.0
Density (pcphpl)				13.7
LOS				B
<b>Operations for Exiting GP Lanes</b>				
Flow (pcph)		1,021		
Lanes		2		
Capacity (pcph)		4,800		
v/c ratio		0.21		
Flow Rate (pcphpl)		510		
Speed (mph)		70.0		
Density (pcphpl)		7.3		
LOS		A		



**Key**

<> Express Lane (HOV)

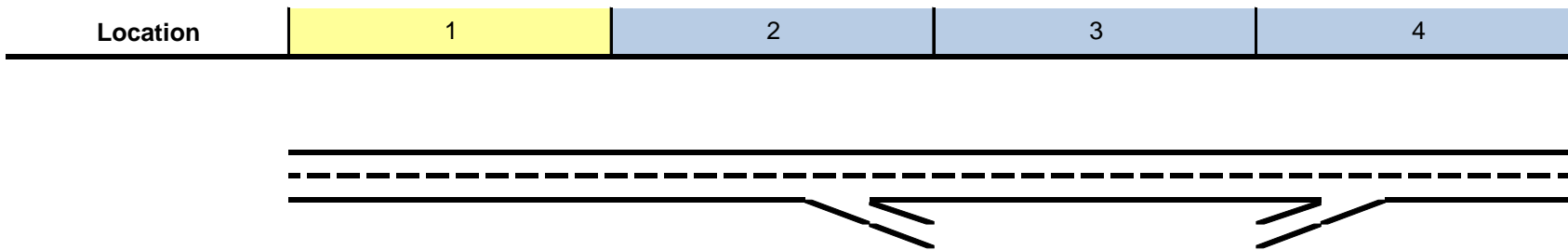
Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Flow Rate in Express Lanes</b>				
<b>Operations in Express Lanes</b>				
<b>On Ramp Flow Rate</b>				
Volume (vph)				859
PHF				0.95
Lanes				1
Terrain				Level
Grade %				0.0%
Grade Length (mi)				0.00
Truck & Bus %				2.0%
RV %				0.0%
$E_T$				1.5
$E_R$				1.2
$f_{HV}$				0.990
$f_P$				1.00
Flow (pcph)				913
Flow Rate (pcphpl)				913
<b>On Ramp Roadway Operations</b>				
Ramp Type				Right
Ramp Speed (mph)				45
Ramp Capacity (pcph)				2,100
Ramp v/c ratio				0.43



**Key**

<> Express Lane (HOV)

Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Off Ramp Flow Rate</b>				
Volume (vph)		305		
PHF		0.95		
Lanes		1		
Terrain		Level		
Grade %		0.0%		
Grade Length (mi)		0.00		
Truck & Bus %		2.0%		
RV %		0.0%		
$E_T$		1.5		
$E_R$		1.2		
$f_{HV}$		0.990		
$f_P$		1.00		
Flow (pcph)		324		
Flow Rate (pcphpl)		324		
<b>Off Ramp Roadway Operations</b>				
Ramp Type		Right		
Ramp Speed		45		
Ramp Capacity (pcph)		2,100		
Ramp v/c ratio		0.15		
<b>Adjacent Ramp for Three-Lane Mainline Segments with One-Lane Ramps</b>				

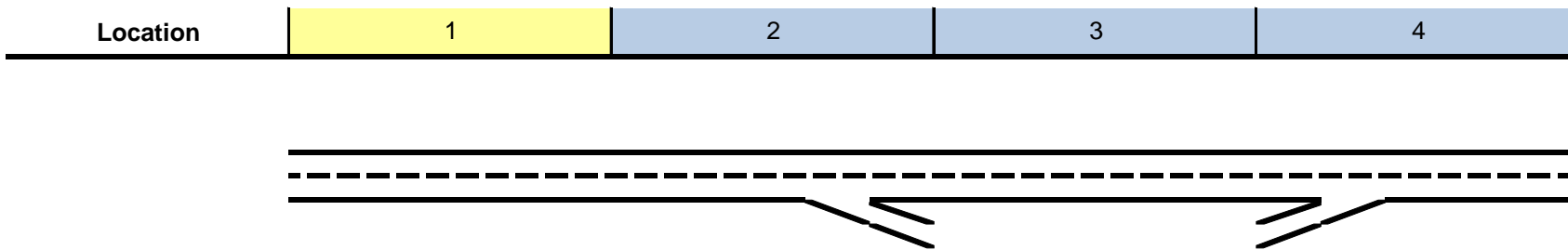


**Key**

<> Express Lane (HOV)

Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Merge Influence Area Operations</b>				
Effective $v_p$ (pcph)				1,007
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FM}$ (Eqn 13-3)				0.587
$P_{FM}$ (Eqn 13-4)				
$P_{FM}$ (Eqn 13-5)				
$P_{FM}$				1.000
$v_{12}$ (pcph)				1,007
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)				1,007
$v_{R12a}$ (pcph)				1,921
Speed Index				0.32
Area Speed				61.1
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed				61.1
v/c ratio				0.42
Density				18.0
LOS				B





**Key**

<> Express Lane (HOV)

Name	County Rd 29 On-Ramp to Covell Blvd Off-Ramp	Covell Blvd Off-Ramp	Covell Blvd Off-Ramp to Covell Blvd On-Ramp	Covell Blvd On-Ramp
<b>Diverge Influence Area Operations</b>				
Effective $v_p$ (pcph)		1,345		
Up Ramp $L_{EQ}$				
Down Ramp $L_{EQ}$				
$P_{FD}$ (Eqn 13-9)		0.711		
$P_{FD}$ (Eqn 13-10)				
$P_{FD}$ (Eqn 13-11)				
$P_{FD}$		1.000		
$v_{12}$ (pcph)		1,345		
$v_3$ (pcph)				
$v_{34}$ (pcph)				
$v_{12a}$ (pcph)		1,345		
Speed Index		0.33		
Area Speed		60.8		
Outer Lanes Volume				
Outer Lanes Speed				
Segment Speed		60.8		
v/c ratio		0.31		
Density		14.3		
LOS		B		
<b>On Ramp to Off Ramp Flow Rate for Weave Segments</b>				
<b>On Ramp to Mainline Flow Rate for Weave Segments</b>				
<b>Mainline to Off Ramp Flow Rate for Weave Segments</b>				
<b>General Purpose Lanes to General Purpose Lanes Flow Rate for Weave Segments</b>				
<b>Weave Segment Operations</b>				
<b>Summarize Segment Operations</b>				
Segment v/c ratio	0.28	0.31	0.21	0.42
Segment Density	9.6	14.3	7.2	18.0
Segment LOS	A	B	A	B
Over Capacity				

# **Cumulative Plus Project (Mitigated) Level of Service (LOS) Calculations**

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Cumulative Plus Project Conditions (Mitigated)  
AM Peak Hour

Intersection 3                      Risling Ct/Sutter Hospital Dwy                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	57	58	101.6%	4.7	1.2	A
	Through	108	112	104.0%	3.9	0.4	A
	Right Turn	90	92	101.8%	3.1	0.7	A
	Subtotal	255	262	102.7%	3.8	0.4	A
SB	Left Turn	1	1	90.0%	1.1	1.5	A
	Through	118	119	100.9%	0.2	0.1	A
	Right Turn						
	Subtotal	119	120	100.8%	0.2	0.1	A
EB	Left Turn						
	Through	4	4	95.0%	4.4	4.0	A
	Right Turn	57	58	100.9%	3.4	0.5	A
	Subtotal	61	61	100.5%	3.6	0.5	A
WB	Left Turn	40	43	107.0%	5.3	1.8	A
	Through	3	3	110.0%	3.4	5.1	A
	Right Turn	10	11	107.0%	2.8	1.0	A
	Subtotal	53	57	107.2%	4.9	1.4	A
Total		488	500	102.4%	3.1	0.4	A

Intersection 4                      Risling Ct-Shasta Dr/W Covell Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	22	24	110.5%	37.4	9.8	D
	Through	27	28	104.4%	30.9	12.0	C
	Right Turn	290	300	103.3%	7.7	3.8	A
	Subtotal	339	352	103.8%	12.0	3.8	B
SB	Left Turn	158	160	101.3%	56.6	23.7	E
	Through	16	14	88.1%	33.2	15.1	C
	Right Turn	41	42	102.9%	12.6	8.1	B
	Subtotal	215	216	100.6%	45.5	19.9	D
EB	Left Turn	137	138	100.7%	45.6	8.2	D
	Through	770	776	100.8%	22.4	3.8	C
	Right Turn	20	20	100.5%	6.7	4.1	A
	Subtotal	927	934	100.8%	25.7	3.9	C
WB	Left Turn	150	154	102.5%	47.4	4.0	D
	Through	655	660	100.7%	23.7	4.7	C
	Right Turn	96	99	102.8%	14.1	4.9	B
	Subtotal	901	912	101.3%	27.1	3.5	C
Total		2,382	2,415	101.4%	26.2	3.7	C

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Cumulative Plus Project Conditions (Mitigated)  
AM Peak Hour

Intersection 5                      John Jones Rd/W Covell Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	200	195	97.3%	30.1	4.4	C
	Through						
	Right Turn	61	64	104.6%	6.7	1.7	A
	Subtotal	261	258	99.0%	24.1	3.0	C
EB	Left Turn	92	90	97.4%	57.0	13.1	E
	Through	1,126	1,146	101.8%	20.5	12.0	C
	Right Turn						
	Subtotal	1,218	1,236	101.5%	23.2	11.4	C
WB	Left Turn						
	Through	840	846	100.8%	15.0	3.8	B
	Right Turn	350	350	100.0%	11.9	3.2	B
	Subtotal	1,190	1,196	100.5%	14.1	3.6	B
Total		2,669	2,691	100.8%	19.5	6.4	B

Intersection 6                      SR 113 SB Ramps/W Covell Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	220	224	101.7%	35.9	3.5	D
	Through	10	11	113.0%	35.6	16.0	D
	Right Turn	149	145	97.4%	36.0	5.6	D
	Subtotal	379	380	100.3%	36.1	2.7	D
EB	Left Turn						
	Through	833	841	101.0%	23.3	4.3	C
	Right Turn	493	503	102.0%	27.5	3.6	C
	Subtotal	1,326	1,344	101.3%	24.9	3.7	C
WB	Left Turn	550	550	99.9%	47.1	4.1	D
	Through	1,041	1,050	100.8%	11.2	1.3	B
	Right Turn						
	Subtotal	1,591	1,599	100.5%	23.4	2.0	C
Total		3,296	3,323	100.8%	25.5	1.9	C

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Cumulative Plus Project Conditions (Mitigated)  
AM Peak Hour

Intersection 7 SR 113 NB Ramps/W Covell Blvd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	364	375	103.1%	25.6	2.9	C
	Through	10	10	102.0%	32.2	14.6	C
	Right Turn	570	567	99.4%	19.3	2.1	B
	Subtotal	944	952	100.9%	21.9	2.1	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	104	108	103.7%	60.5	7.6	E
	Through	949	957	100.9%	6.9	0.6	A
	Right Turn						
	Subtotal	1,053	1,065	101.1%	12.2	1.3	B
WB	Left Turn						
	Through	1,227	1,226	99.9%	46.1	11.2	D
	Right Turn	190	196	103.2%	31.1	10.2	C
	Subtotal	1,417	1,422	100.4%	44.0	11.1	D
Total		3,414	3,439	100.7%	27.8	4.3	C

Intersection 8 Sycamore Ln/W Covell Blvd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	234	237	101.2%	93.9	72.6	F
	Through	80	79	99.0%	56.3	65.3	E
	Right Turn	70	72	102.1%	33.7	71.4	C
	Subtotal	384	387	100.9%	75.0	70.7	E
SB	Left Turn	50	49	97.6%	37.1	6.6	D
	Through	80	82	102.9%	35.7	5.4	D
	Right Turn	352	350	99.5%	7.4	2.1	A
	Subtotal	482	481	99.9%	15.7	1.6	B
EB	Left Turn	121	122	100.5%	57.4	9.8	E
	Through	864	869	100.5%	22.4	4.7	C
	Right Turn	356	359	100.9%	16.8	6.0	B
	Subtotal	1,341	1,349	100.6%	24.2	5.2	C
WB	Left Turn	40	38	95.8%	51.1	12.5	D
	Through	727	724	99.6%	23.3	3.5	C
	Right Turn	50	50	100.6%	18.0	6.6	B
	Subtotal	817	813	99.5%	24.1	3.4	C
Total		3,024	3,031	100.2%	29.7	10.7	C

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Cumulative Plus Project Conditions (Mitigated)  
AM Peak Hour

Intersection 13

Project Dwy/W Covell Blvd

Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn						
	Through						
	Right Turn	16	16	100.0%	4.4	2.8	A
	Subtotal	16	16	100.0%	4.4	2.8	A
EB	Left Turn						
	Through	927	936	101.0%	4.4	0.4	A
	Right Turn						
	Subtotal	927	936	101.0%	4.4	0.4	A
WB	Left Turn						
	Through	691	698	101.0%	2.9	0.4	A
	Right Turn	32	33	103.1%	2.4	0.6	A
	Subtotal	723	731	101.1%	2.8	0.4	A
Total		1,666	1,683	101.0%	3.7	0.3	A

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Cumulative Plus Project Conditions (Mitigated)  
PM Peak Hour

Intersection 3                      Risling Ct/Sutter Hospital Dwy                      Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	47	45	96.2%	5.2	1.6	A
	Through	63	62	98.9%	3.7	0.9	A
	Right Turn	70	72	103.3%	3.3	0.7	A
	Subtotal	180	180	99.9%	3.9	0.7	A
SB	Left Turn	10	8	82.0%	1.4	1.0	A
	Through	153	152	99.1%	0.3	0.2	A
	Right Turn	1	1	120.0%	0.0	0.1	A
	Subtotal	164	161	98.2%	0.4	0.2	A
EB	Left Turn						
	Through	3	3	110.0%	5.6	4.6	A
	Right Turn	63	63	99.7%	4.1	1.0	A
	Subtotal	66	66	100.2%	4.3	1.0	A
WB	Left Turn	120	121	100.6%	5.9	0.9	A
	Through	4	4	95.0%	3.5	3.0	A
	Right Turn						
	Subtotal	124	125	100.4%	5.9	0.9	A
Total		534	531	99.5%	3.5	0.2	A

Intersection 4                      Risling Ct-Shasta Dr/W Covell Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	22	17	77.3%	66.0	12.1	E
	Through	16	20	122.5%	54.2	16.0	D
	Right Turn	200	201	100.5%	4.4	2.3	A
	Subtotal	238	238	99.8%	13.4	2.9	B
SB	Left Turn	207	203	98.3%	60.9	11.0	E
	Through	39	39	100.3%	48.3	15.1	D
	Right Turn	90	92	101.8%	25.9	8.3	C
	Subtotal	336	334	99.4%	49.5	9.3	D
EB	Left Turn	82	81	98.7%	83.3	17.1	F
	Through	630	638	101.2%	16.4	2.3	B
	Right Turn	30	29	96.0%	6.0	4.2	A
	Subtotal	742	747	100.7%	23.3	3.2	C
WB	Left Turn	180	170	94.2%	69.2	13.3	E
	Through	982	974	99.2%	16.3	3.5	B
	Right Turn	94	92	98.0%	10.7	4.0	B
	Subtotal	1,256	1,235	98.4%	23.0	2.9	C
Total		2,572	2,554	99.3%	26.0	2.5	C

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Cumulative Plus Project Conditions (Mitigated)  
PM Peak Hour

Intersection 5                      John Jones Rd/W Covell Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	270	269	99.7%	51.6	7.0	D
	Through						
	Right Turn	62	66	106.6%	14.8	4.0	B
	Subtotal	332	335	101.0%	44.1	6.6	D
EB	Left Turn	52	56	107.1%	70.0	13.5	E
	Through	985	991	100.6%	11.5	2.2	B
	Right Turn						
	Subtotal	1,037	1,047	101.0%	14.5	2.4	B
WB	Left Turn						
	Through	1,194	1,175	98.4%	13.3	2.2	B
	Right Turn	210	211	100.2%	10.7	2.5	B
	Subtotal	1,404	1,385	98.7%	12.9	2.1	B
Total		2,773	2,767	99.8%	17.5	2.5	B

Intersection 6                      SR 113 SB Ramps/W Covell Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	190	194	102.1%	52.3	6.8	D
	Through	10	12	123.0%	47.8	32.4	D
	Right Turn	105	105	100.0%	51.6	9.6	D
	Subtotal	305	311	102.1%	52.2	6.1	D
EB	Left Turn						
	Through	936	950	101.5%	22.4	2.2	C
	Right Turn	319	321	100.5%	18.9	3.1	B
	Subtotal	1,255	1,271	101.3%	21.5	2.4	C
WB	Left Turn	530	507	95.6%	64.4	12.5	E
	Through	1,299	1,272	97.9%	13.8	1.7	B
	Right Turn						
	Subtotal	1,829	1,779	97.3%	28.4	3.3	C
Total		3,389	3,361	99.2%	28.0	1.9	C



SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Cumulative Plus Project Conditions (Mitigated)  
PM Peak Hour

Intersection 7 SR 113 NB Ramps/W Covell Blvd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	504	500	99.3%	69.5	34.7	E
	Through						
	Right Turn	780	777	99.7%	51.0	22.5	D
	Subtotal	1,284	1,278	99.5%	58.2	26.9	E
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	102	97	94.8%	72.9	8.5	E
	Through	1,024	1,042	101.7%	18.8	3.7	B
	Right Turn						
	Subtotal	1,126	1,139	101.1%	23.4	3.4	C
WB	Left Turn						
	Through	1,325	1,302	98.2%	63.9	10.8	E
	Right Turn	310	304	98.0%	45.8	8.0	D
	Subtotal	1,635	1,605	98.2%	60.3	10.3	E
Total		4,045	4,022	99.4%	49.0	11.4	D

Intersection 8 Sycamore Ln/W Covell Blvd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	286	276	96.4%	86.1	35.3	F
	Through	50	47	94.0%	77.6	35.2	E
	Right Turn	100	103	103.0%	28.7	24.2	C
	Subtotal	436	426	97.7%	71.4	32.0	E
SB	Left Turn	80	82	102.9%	41.3	10.5	D
	Through	140	147	105.1%	51.5	8.5	D
	Right Turn	231	238	103.1%	17.9	8.4	B
	Subtotal	451	468	103.7%	33.2	9.2	C
EB	Left Turn	302	290	95.9%	121.1	39.6	F
	Through	1,090	1,116	102.4%	48.4	17.8	D
	Right Turn	195	191	97.8%	39.6	16.6	D
	Subtotal	1,587	1,596	100.6%	60.4	20.2	E
WB	Left Turn	30	29	96.7%	89.4	24.8	F
	Through	997	1,011	101.4%	88.0	35.8	F
	Right Turn	70	70	100.3%	90.5	45.7	F
	Subtotal	1,097	1,110	101.2%	88.2	35.9	F
Total		3,571	3,600	100.8%	67.3	12.0	E

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Cumulative Plus Project Conditions (Mitigated)  
PM Peak Hour

Intersection 13

Project Dwy/Covell Blvd

Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn						
	Through						
	Right Turn	19	16	85.8%	5.6	2.4	A
	Subtotal	19	16	85.8%	5.6	2.4	A
EB	Left Turn						
	Through	742	747	100.7%	3.5	0.4	A
	Right Turn						
	Subtotal	742	747	100.7%	3.5	0.4	A
WB	Left Turn						
	Through	1,020	1,007	98.7%	3.1	0.5	A
	Right Turn	86	87	100.6%	2.8	0.6	A
	Subtotal	1,106	1,094	98.9%	3.1	0.5	A
Total		1,867	1,857	99.5%	3.3	0.3	A

Intersection 3

Risling Ct/Sutter Hospital Dwy

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Shared	900	50	3	75	4	75	6	0%	0%
NB	Shared	525	25	5	50	16	75	28	0%	0%
SB	Shared	2,000	25	1	25	6	25	16	0%	0%
WB	Shared	950	50	3	75	5	75	12	0%	0%

Intersection 4

Risling Ct-Shasta Dr/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	U/Left Turns	225	125	14	200	21	225	2	0%	0%
	Through	400	175	13	275	23	300	36	30%	0%
	Right Turn	100	25	5	75	15	125	0	0%	0%
NB	Left Turn	125	50	6	75	17	100	33	0%	0%
	Through	350	75	16	175	48	225	64	5%	0%
	Right Turn	75	75	1	75	4	75	1	3%	0%
SB	Left Turn	525	150	26	225	54	275	83	4%	0%
	Through/Right	225	50	13	100	46	175	70	0%	0%
WB	U/Left Turns	325	100	6	150	11	150	17	0%	0%
	Left Turn	325	50	7	125	11	125	15	0%	0%
	Through	575	150	17	250	29	300	39	0%	0%
	Through/Right	575	175	18	275	27	350	41	0%	0%

Intersection 5

John Jones Rd/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	150	100	6	150	11	175	0	3%	0%
	Through	575	175	30	325	71	400	104	7%	0%
SB	Left Turn	250	125	10	200	17	225	27	0%	0%
	Through/Right	1,600	25	6	75	21	100	67	0%	0%
WB	Through	350	200	18	325	36	350	25	28%	0%
	Right Turn	75	75	3	100	4	100	0	7%	0%
NB	Shared	25	25	0	25	0	25	0	0%	0%

Intersection 6

SR 113 SB Ramps/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	350	225	17	375	20	350	7	0%	1%
	Through/Right	350	275	13	400	12	375	6	0%	4%
SB	Left/Through	1,425	150	11	250	21	275	53	0%	0%
	Right Turn	1,425	100	11	175	16	200	24	0%	0%
WB	Left Turn	225	175	11	250	12	225	1	4%	0%
	Through	500	175	39	350	100	450	128	0%	0%
O										

Intersection 7

SR 113 NB Ramps/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	U/Left Turns	175	50	5	75	10	100	26	0%	0%
	Left Turn	175	75	4	100	8	125	11	0%	0%
	Through	500	100	8	175	13	175	33	0%	0%
NB	Left Turn	2,400	125	7	200	23	250	50	0%	0%
	Shared	2,400	200	10	275	20	325	41	0%	0%
	Right Turn	825	150	6	225	16	275	48	0%	0%
WB	Through	850	400	43	625	72	750	77	34%	1%
	Right Turn	150	125	11	225	5	175	0	0%	0%
0										

Intersection 8

Sycamore Ln/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	300	125	8	200	26	250	68	0%	0%
	Through	850	250	18	400	36	550	52	2%	0%
	Through/Right	850	275	15	425	26	525	42	0%	0%
NB	Left Turn	225	200	18	275	16	225	1	30%	0%
	Through	2,050	250	149	550	345	625	331	3%	0%
	Right Turn	125	25	4	50	20	100	33	0%	0%
SB	Left Turn	250	50	10	125	36	175	79	0%	0%
	Through	1,775	100	18	225	38	325	69	3%	0%
	Right Turn	125	75	9	175	11	150	0	8%	0%
WB	Left Turn	125	50	11	125	23	150	13	1%	0%
	Through	5,800	175	16	275	33	300	41	14%	0%
	Through/Right	5,800	200	12	300	28	325	34	0%	0%

Intersection 13

Project Dwy/W Covell Blvd

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
SB	Right Turn	925	25	3	50	4	50	10	0%	0%
	Through	475	25	0	25	0	25	0	0%	0%
WB	Through/Right	475	25	0	25	0	25	0	0%	0%
0										
0										

Intersection 3

Risling Ct/Sutter Hospital Dwy

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Shared	900	50	4	75	5	75	9	0%	0%
NB	Shared	525	25	2	50	6	75	13	0%	0%
SB	Shared	2,000	25	2	25	11	25	22	0%	0%
WB	Shared	950	50	4	75	6	100	12	0%	0%

Intersection 4

Risling Ct-Shasta Dr/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	U/Left Turns	225	100	10	175	15	200	31	0%	0%
	Through	400	125	11	225	21	275	36	17%	0%
	Right Turn	100	25	5	75	16	125	0	0%	0%
NB	Left Turn	125	25	4	75	10	100	28	0%	0%
	Through	350	50	11	100	38	150	84	5%	0%
	Right Turn	75	75	1	75	3	75	4	2%	0%
SB	Left Turn	525	200	30	350	56	425	62	10%	0%
	Through/Right	225	125	14	250	23	250	0	0%	0%
WB	U/Left Turns	325	125	8	175	12	175	21	0%	0%
	Left Turn	325	100	8	150	25	200	79	0%	0%
	Through	575	150	21	300	46	375	80	1%	0%
	Through/Right	575	175	17	325	42	400	77	0%	0%

Intersection 5

John Jones Rd/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	150	75	10	125	18	150	25	1%	0%
	Through	575	125	12	225	29	275	85	3%	0%
SB	Left Turn	250	225	13	300	10	275	0	10%	0%
	Through/Right	1,600	100	30	300	83	450	87	0%	0%
WB	Through	350	225	26	400	31	375	18	21%	2%
	Right Turn	75	50	6	100	6	100	0	1%	0%
NB	Shared	25	25	0	25	0	25	0	0%	0%

Intersection 6

SR 113 SB Ramps/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	350	275	10	400	15	350	6	0%	2%
	Through/Right	350	275	11	400	14	375	10	0%	3%
SB	Left/Through	1,425	175	12	275	32	350	61	0%	0%
	Right Turn	1,425	100	8	175	20	225	45	0%	0%
WB	Left Turn	225	225	5	275	9	250	0	26%	0%
	Through	500	375	28	600	46	550	19	2%	6%
O										



Intersection 7

SR 113 NB Ramps/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	U/Left Turns	175	50	7	100	11	125	26	0%	0%
	Left Turn	175	75	13	150	31	200	23	0%	0%
	Through	500	200	33	350	56	450	50	12%	0%
NB	Left Turn	725	300	37	500	81	575	120	0%	0%
	Shared	2,375	400	58	600	198	775	462	0%	0%
	Right Turn	725	325	29	500	67	600	121	0%	0%
WB	Through	850	675	38	900	60	925	46	43%	6%
	Right Turn	150	175	16	300	9	225	0	1%	0%
0										

Intersection 8

Sycamore Ln/W Covell Blvd

Signal

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	300	300	19	400	12	350	0	36%	0%
	Through	850	525	103	750	124	800	109	12%	1%
	Through/Right	850	525	91	750	115	800	107	0%	1%
NB	Left Turn	225	225	11	275	13	250	1	51%	0%
	Through	2,050	425	164	750	219	750	214	3%	0%
	Right Turn	125	25	8	100	19	125	12	1%	0%
SB	Left Turn	250	100	14	200	40	250	43	0%	0%
	Through	1,775	200	36	375	55	475	87	24%	0%
	Right Turn	125	100	8	200	3	150	0	9%	0%
WB	Left Turn	125	50	13	150	29	175	0	0%	0%
	Through	5,800	550	158	875	282	950	285	56%	0%
	Through/Right	5,800	600	160	925	275	975	253	0%	0%

Intersection 13

Project Dwy/Covell Blvd

Side-street Stop

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
SB	Right Turn	925	25	3	50	4	50	12	0%	0%
EB	Through	5,150	25	0	25	0	25	0	0%	0%
WB	Through	475	25	0	25	0	25	0	0%	0%
	Through/Right	475	25	0	25	0	25	0	0%	0%
0										

Arterial Level of Service  
 Cumulative Plus Project (Mitigated) Conditions

AM Peak Hour

Arterial Level of Service: NB Route 1

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Covell Blvd	7	28.7	68.6	0.5	24
SR 113 SB Ramps	6	12.6	27.0	0.1	14
John Jones Rd	5	15.2	22.9	0.1	12
Risling Ct	4	24.9	37.1	0.1	12
	13	3.1	10.8	0.1	29
Total		84.5	166.3	0.8	18

Arterial Level of Service: SB Route 1

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	22.6	29.3	0.1	11
	5	14.8	27.1	0.1	16
SR 113 SB Ramps	6	19.5	27.4	0.1	10
Route 1	7	4.9	15.4	0.1	24
Total		61.7	99.3	0.4	14

Arterial Level of Service  
 Cumulative Plus Project (Mitigated) Conditions

AM Peak Hour

Arterial Level of Service: EB Route 2

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	22.6	29.3	0.1	11
	5	14.8	27.1	0.1	16
Route 2	6	23.9	35.5	0.1	8
Total		61.3	91.9	0.3	11

Arterial Level of Service: WB Route 2

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
John Jones Rd	5	-	-	0.1	-
Risling Ct	4	24.9	37.1	0.1	12
	13	3.1	10.8	0.1	29
Total		28.0	47.8	0.3	21

Arterial Level of Service  
 Cumulative Plus Project (Mitigated) Conditions

PM Peak Hour

Arterial Level of Service: NB Route 1

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Covell Blvd	7	92.3	133.2	0.5	13
SR 113 SB Ramps	6	13.4	27.4	0.1	13
John Jones Rd	5	12.1	19.7	0.1	14
Risling Ct	4	17.2	29.4	0.1	15
	13	3.6	11.3	0.1	28
Total		138.5	221.0	0.8	14

Arterial Level of Service: SB Route 1

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	16.1	22.9	0.1	14
	5	8.5	20.8	0.1	21
SR 113 SB Ramps	6	20.3	28.1	0.1	10
Route 1	7	19.8	30.4	0.1	12
Total		64.7	102.2	0.4	14

Arterial Level of Service  
 Cumulative Plus Project (Mitigated) Conditions

PM Peak Hour

Arterial Level of Service: EB Route 2

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
Shasta Dr	4	16.2	22.9	0.1	14
	5	8.2	20.6	0.1	21
Route 2	6	16.6	28.2	0.1	10
Total		41.1	71.7	0.3	14

Arterial Level of Service: WB Route 2

Cross Street	Node	Delay (s/veh)	Travel time (s)	Dist (mi)	Arterial Speed
John Jones Rd	5	-	-	0.1	-
Risling Ct	4	15.4	27.6	0.1	16
	13	3.2	11.0	0.1	29
Total		18.6	38.6	0.3	26

# **Supplemental Analysis Level of Service (LOS) Calculations**

SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Supplemental Analysis  
AM Peak Hour

Intersection 4

Risling Ct-Shasta Dr/W Covell Blvd

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	22	23	102.3%	42.9	9.9	D
	Through	27	26	95.9%	27.1	6.8	C
	Right Turn	290	288	99.4%	17.7	2.4	B
	Subtotal	339	337	99.3%	20.4	2.7	C
SB	Left Turn	158	150	95.0%	62.9	37.0	E
	Through	16	16	96.9%	25.8	27.2	C
	Right Turn	41	40	96.8%	11.4	9.0	B
	Subtotal	215	205	95.5%	50.5	30.7	D
EB	Left Turn	137	135	98.8%	46.9	9.8	D
	Through	770	770	100.0%	28.7	6.0	C
	Right Turn	20	20	102.0%	20.8	11.4	C
	Subtotal	927	926	99.9%	31.1	6.4	C
WB	Left Turn	150	148	98.8%	50.4	5.4	D
	Through	655	651	99.4%	24.5	5.2	C
	Right Turn	96	99	102.6%	7.9	2.0	A
	Subtotal	901	898	99.6%	27.3	4.4	C
Total		2,382	2,366	99.3%	30.1	4.4	C



SimTraffic Post-Processor  
Average Results from 10 Runs  
Volume and Delay by Movement

West Davis Active Adult Community Project EIR  
Supplemental Analysis  
PM Peak Hour

Intersection 4                      Risling Ct-Shasta Dr/W Covell Blvd                      Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		LOS
			Average	Percent	Average	Std. Dev.	
NB	Left Turn	22	23	106.4%	69.9	23.1	E
	Through	16	18	113.1%	64.3	21.7	E
	Right Turn	200	197	98.4%	27.6	11.3	C
	Subtotal	238	238	100.1%	33.6	12.2	C
SB	Left Turn	207	198	95.6%	53.6	5.4	D
	Through	39	40	102.8%	51.7	13.4	D
	Right Turn	90	87	96.7%	28.8	10.5	C
	Subtotal	336	325	96.7%	46.4	7.2	D
EB	Left Turn	82	80	97.8%	73.2	12.5	E
	Through	630	629	99.8%	22.8	3.0	C
	Right Turn	30	29	96.3%	17.6	7.8	B
	Subtotal	742	738	99.5%	28.2	4.3	C
WB	Left Turn	180	177	98.1%	67.8	9.4	E
	Through	982	973	99.1%	14.8	3.6	B
	Right Turn	94	95	101.5%	7.0	3.6	A
	Subtotal	1,256	1,245	99.1%	21.7	3.3	C
Total		2,572	2,546	99.0%	28.0	3.0	C

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	U/Left Turns	225	125	17	200	31	225	3	0%	0%
	Through	400	175	12	275	27	325	29	3%	0%
	Through/Right	400	200	12	275	24	325	40	0%	0%
NB	Left Turn	125	50	6	100	13	125	0	0%	0%
	Through/Right	350	125	11	225	23	275	35	16%	0%
SB	Left Turn	525	125	43	225	85	250	89	6%	0%
	Through/Right	225	50	23	100	74	125	78	0%	0%
WB	U/Left Turns	325	100	4	150	11	175	12	0%	0%
	Left Turn	325	50	5	100	8	125	8	0%	0%
	Through	575	150	15	250	25	325	39	7%	0%
	Right Turn	175	50	10	150	24	200	0	0%	0%

Direction	Lane Group	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
			Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	U/Left Turns	225	100	12	175	28	225	30	1%	0%
	Through	400	150	11	250	21	275	37	2%	0%
	Through/Right	400	150	12	250	23	275	34	0%	0%
NB	Left Turn	125	50	7	100	19	125	30	0%	0%
	Through/Right	350	125	20	250	49	325	69	14%	0%
SB	Left Turn	525	175	15	300	34	350	44	6%	0%
	Through/Right	225	100	14	225	26	250	0	0%	0%
WB	U/Left Turns	325	125	11	175	13	200	20	0%	0%
	Left Turn	325	100	11	175	33	225	101	0%	0%
	Through	575	150	25	300	43	400	79	9%	0%
	Right Turn	175	50	12	125	44	150	62	0%	0%