

ITEM # 2

To: Traffic Committee Members
From: Richard Pedersen, Deputy Town Engineer
Date: November 19, 2008
Subject: Four-way STOP sign installation at the intersection of Dale Evans Parkway and Corwin Road

Staff received a request to investigate the intersection of Dale Evans Parkway and Corwin Road to determine if a four-way stop is warranted. Currently there are STOP signs on the north and south legs of the intersection on Dale Evans Parkway.

Staff performed a traffic engineering investigation which included an evaluation of past records of vehicle conflict, traffic volumes, and a field review of the intersection. Four-way STOP controls may be warranted if 1) the total volume of the major approach legs of the intersection average 210 vehicles per hour for the peak eight hours and 2) that for the same eight hour period the minor approach legs average a total of 140 vehicles per hour. Currently the average is 167 vehicles per hour for the major legs and 35 vehicles per hour for the minor legs. While this volume is clearly less than the minimum normally required for a four-way stop warrant, it does indicate that significantly unbalanced traffic levels exist. The counts reveal that the traffic control currently in place at this intersection requires that the major leg stop, in conflict with normal two-way stop guidelines which require that the low volume approach be stopped. This may cause driver uncertainty if a motorist assumes the other approaches are required to stop.

State warrants also indicate that if 5 accidents occur in a 12 month period that may be susceptible to correction by placing additional stop signs, a four way stop may be justified. Between January 2005 and August 2008 there have been four (4) traffic collisions at this intersection, and four (4) collisions occurred where additional stop signs may be a correction measure.

Staff investigated for other contributing factors including surrounding geography, and intersection layout for clear sight views. Dale Evans Parkway has 2 lanes of traffic in each direction with a speed limit of 55 mph. Corwin Road has 2 lanes of traffic in each direction with a speed limit of 55 mph.

Recommendation

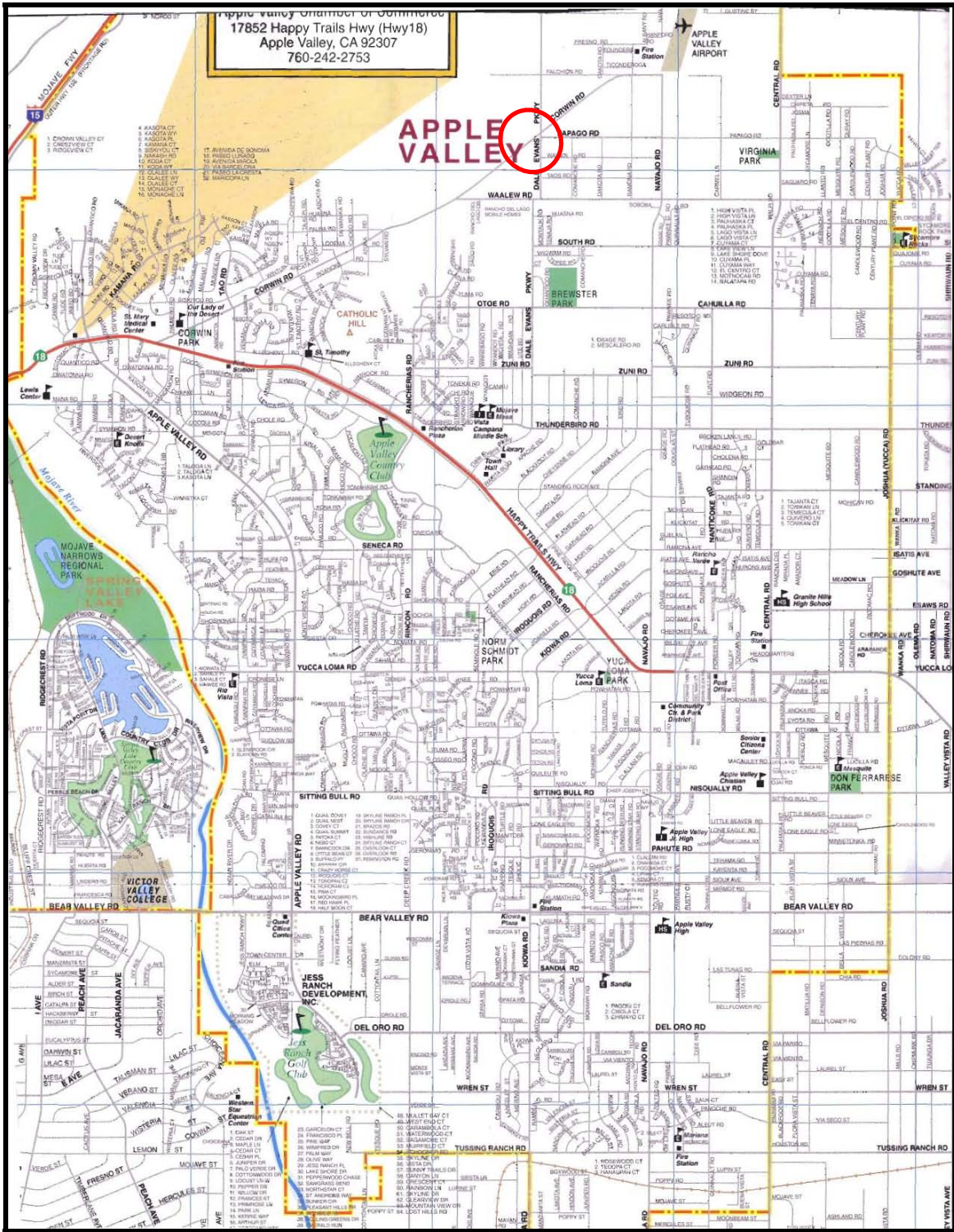
Staff recommends that four-way STOP controls be installed at the intersection of Dale Evans Parkway and Corwin Road.

Fiscal Impact

Installation of 2 stop signs \$150 each

Exhibits

Location Map, Traffic Volume Analysis, Traffic Collision History Report, Traffic Collision Diagram



LOCATION MAP

Dale Evans Parkway and Corwin Road

TOWN OF APPLE VALLEY

Traffic Count Datasheet

Intersection of Dale Evans Parkway and Corwin Road

Study Date: October 29, 2008 1:00 p.m. - October 30, 2008 1:00 p.m.

DALE EVANS PARKWAY AND CORWIN ROAD							
Time of Day	Location						
	Corwin Road E/B	Corwin Road W/B	Dale Evans Prkwy. N/B	Dale Evans Pkwy. S/B	Traffic Count on Major Legs	Traffic Count on Minor Legs	
<i>(Military Time)</i>					<i>210 Required</i>	<i>140 Required</i>	
00:00 - 01:00	2	2	2	17	19	4	
01:00 - 02:00	0	0	2	6	8	0	
02:00 - 03:00	1	1	6	17	23	2	
03:00 - 04:00	3	0	9	35	44	3	
04:00 - 05:00	9	4	35	4	39	13	
05:00 - 06:00	44	3	117	12	129	47	
06:00 - 07:00	23	4	108	25	133	27	
07:00 - 08:00	24	5	108	47	155	29	
08:00 - 09:00	17	3	74	56	130	20	
09:00 - 10:00	23	12	70	46	116	35	
10:00 - 11:00	18	13	54	34	88	31	
11:00 - 12:00	15	17	49	50	99	32	
12:00 - 13:00	18	12	62	44	106	30	
13:00 - 14:00	14	11	51	33	84	25	
14:00 - 15:00	20	15	52	93	145	35	
15:00 - 16:00	21	14	48	111	159	35	
16:00 - 17:00	20	24	67	233	300	44	
17:00 - 18:00	12	26	39	146	185	38	
18:00 - 19:00	11	10	41	91	132	21	
19:00 - 20:00	6	6	27	51	78	12	
20:00 - 21:00	9	12	12	31	43	21	
21:00 - 22:00	8	2	12	31	43	10	
22:00 - 23:00	3	3	17	29	46	6	
23:00 - 24:00	3	3	8	20	28	6	
TOTALS	324	202	1,070	1,262	2,332	526	
= 8 hour period					Average for highest 8 hours =	167	35
= maximum hour					Required =	210	140

TRAFFIC VOLUME ANALYSIS

**Town of Apple Valley
Traffic Engineering Department
Traffic Collision History Report**

11/3/2008
Page 1

Location: Dale Evans Pkwy / Corwin Rd
Date Range Reported: 1/1/2005 - 8/1/2008

Report No.	Date	Time	Dist.	Dir.	Type of Collision	Motor Veh. Involved With	Direct. of Travel 1	Movement Prec. Coll. 1	Direct. of Travel 2	Movement Prec. Coll. 2	PCF	inj.	Kill
180506527	10/4/05	10:58	0	In Int.	Broadside	Other Motor Vehicle	South	Proceeding Straight	East	Making Left Turn	Traffic Signals and Signs	0	0
180601723	3/20/06	08:45	0	In Int.	Broadside	Other Motor Vehicle	South	Proceeding Straight	West	Proceeding Straight	Auto R/W Violation	0	0
180607256	11/19/06	15:45	0	In Int.	Broadside	Other Motor Vehicle	North	Stopped In Road	East	Proceeding Straight	Auto R/W Violation	0	0
180804454	7/25/08	08:18	0	In Int.	Broadside	Other Motor Vehicle	South	Making Left Turn	West	Proceeding Straight	Auto R/W Violation	0	0

TRAFFIC COLLISION HISTORY REPORT

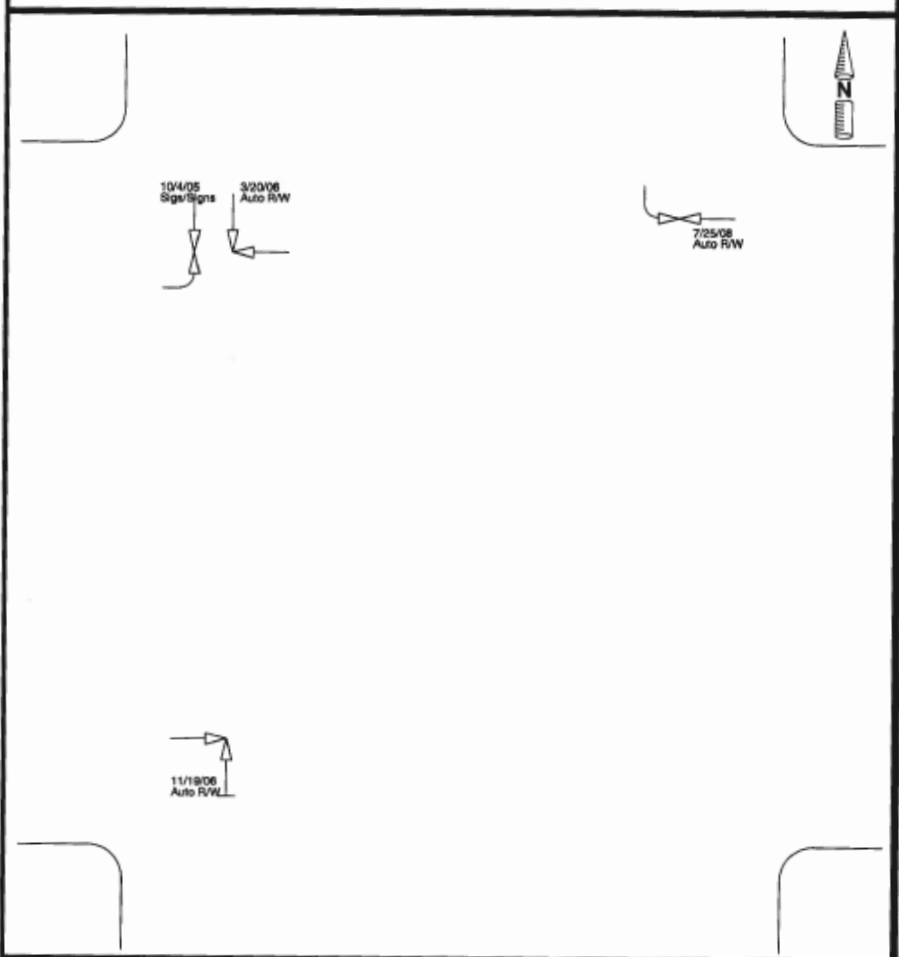
Collision Diagram

Horizontal Street: CORWIN RD

From: 1/1/2005 **To:** 8/1/2008

Vertical Street: DALE EVANS PKWY

Date Prepared: 11/3/2008



Number of Collisions

- 4 Property Damage Only
- 0 Injury Collisions
- 0 Fatal Collisions
- 4 Total Collisions

Legend

- | | | |
|--------------------|--------------|----------------|
| ← Moving Vehicle | ↗ Right Turn | 🚶 Pedestrian |
| ⏹ Stopped Vehicle | ↖ Left Turn | 📦 Fixed Object |
| ↔ Backing Vehicle | ↔ Sideswipe | 🚲 Bicycle |
| ⚡ Ran Off Road | ☀ Day | 🍷 DUI |
| ⋯ Movement Unknown | 🌙 Night | ⊙ Injury |
| | | ⊙ Fatal |

RESOLUTION NO. 2008-64

A RESOLUTION OF THE TOWN COUNCIL OF THE TOWN OF APPLE VALLEY ESTABLISHING THE INTERSECTION OF DALE EVANS PARKWAY AND CORWIN ROAD AS A FOUR-WAY STOP INTERSECTION.

WHEREAS, a traffic engineering investigation has determined that establishing the intersection of Dale Evans Parkway and Corwin Road as a four-way STOP intersection is warranted in accordance with Section 52.0111 of the San Bernardino County Code as adopted by the Town of Apple Valley.

NOW THEREFORE, THE TOWN COUNCIL OF THE TOWN OF APPLE VALLEY DOES RESOLVE AND ORDER AS FOLLOWS:

Section 1: Approves and establishes the intersection of Dale Evans Parkway and Corwin Road as a four-way STOP intersection.

Section 2: Authorizes and directs the Town Manager to cause additional STOP signs to be placed on Dale Evans Parkway and Corwin Road.

APPROVED and ADOPTED this the 9th day of December, 2008.

MAYOR

ATTESTED:

TOWN CLERK