



WALTER ROAD / PINTAIL DRIVE TRAFFIC SIGNAL PROJECT

Air Quality Conformity Task Force Meeting: January 22, 2015

Project Definition

1. Install a traffic signal
2. Improve pedestrian accessibility
3. Install new curb ramps to meet current accessibility requirement
4. Install crosswalks



Project Location



Purpose and Need

1. Walters Road serves 12,600 vehicles daily, the new signal will decrease vehicle delay
2. The roadway serves not only residential uses but Travis Air Force Base
3. Improves safety for motorists, bicyclists, and pedestrians
4. Upgrades pedestrian facilities to current accessibility standards

PROPOSED TRAFFIC SIGNAL PHASE DIAGRAM



STEADY DEMAND SENSING

EMERGENCY VEHICLE PREEMPTION



TRAFFIC SIGNAL KEY NOTES

- INITIAL SIGNAL CONTROLLER. SEE NOTE 1A, SHEET 7002
- INITIAL SERVICE EQUIPMENT. SEE NOTE 17, SHEET 7002
- INITIAL EMERGENCY VEHICLE PREEMPTION PER STANDARD PLAN ES-4E
- INITIAL WEED DETECTION EQUIPMENT
- INITIAL STREET NAME SIGN ON SIGNAL MAST ARM, SEE SIGN DETAIL, SHEET 7002
- INITIAL "NO U-TURN" SIGN ON SIGNAL MAST ARM
- INITIAL DETECTOR MOUNT HOLE AT TOP OF CUTTER
- △ SEE CONDUIT AND COORDINATE SCHEDULE, SHEET 7002
- ▨ WEED DETECTION ZONE (EXACT LOCATION AND SIZE TO BE DETERMINED IN THE FIELD)

Pintail Drive

Walters Road



Project Status and Schedule

1. Design currently at 95% complete
2. Caltrans E76 for Construction scheduled for March 2015
3. Bidding scheduled for May 2015
4. Construction scheduled for Summer 2015

Volume Counts and Truck %

1. Surveys Illustrate 12,600 Average Daily Traffic
2. 5% is truck traffic
3. # of the truck trips are buses

FHWA Vehicle Classification													
Class 1 - Motorcycles				Class 8 - Four or Fewer Axle Single-Trailer Trucks									
Class 2 - Passenger Cars				Class 9 - Five-Axle Single-Trailer Trucks									
Class 3 - Other Two-Axle, Four-Tire Single Unit Vehicles				Class 10 - Six or More Axle Single-Trailer Trucks									
Class 4 - Buses				Class 11 - Five or fewer Axle Multi-Trailer Trucks									
Class 5 - Two-Axle, Six-Tire, Single-Unit Trucks				Class 12 - Six-Axle Multi-Trailer Trucks									
Class 6 - Three-Axle Single-Unit Trucks				Class 13 - Seven or More Axle Multi-Trailer Trucks									
Class 7 - Four or More Axle Single-Unit Trucks													

Total Study Average Southbound														
Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	1	39	9	0	0	0	0	0	0	0	0	0	0	49
1:00 AM	0	23	6	0	0	0	0	0	1	0	0	0	0	30
2:00 AM	0	24	4	0	0	0	0	0	2	0	0	0	0	30
3:00 AM	1	33	9	1	0	0	0	2	3	0	0	0	0	49
4:00 AM	1	75	30	1	0	0	0	1	3	0	0	0	0	111
5:00 AM	1	176	63	0	1	4	0	2	3	0	0	0	0	250
6:00 AM	3	222	80	2	3	4	0	3	6	0	1	0	0	324
7:00 AM	4	299	91	2	3	3	1	3	4	0	1	0	0	411
8:00 AM	3	238	79	3	3	5	0	4	9	0	1	0	0	345
9:00 AM	3	247	79	2	2	7	0	4	10	0	1	0	0	355
10:00 AM	3	251	78	3	3	7	0	3	12	0	1	0	0	361
11:00 AM	3	271	89	3	2	5	0	4	10	0	1	0	0	388
12:00 PM	3	278	79	2	2	5	1	5	11	0	2	0	0	388
1:00 PM	5	289	75	2	3	5	1	3	8	0	1	0	0	392
2:00 PM	4	326	88	2	2	7	1	2	11	0	1	0	0	444
3:00 PM	4	345	98	2	2	5	2	3	7	0	1	0	0	469
4:00 PM	4	408	90	1	1	2	1	2	5	0	1	0	0	513
5:00 PM	4	382	86	1	1	2	1	2	5	0	0	0	0	484
6:00 PM	3	294	70	0	1	1	0	1	4	0	0	0	0	374
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	1	150	28	0	0	0	0	0	2	0	0	0	0	181
9:00 PM	1	146	24	0	0	0	0	0	1	0	0	0	0	172
10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	56	11	0	0	0	0	0	1	0	0	0	0	68
Total	52	4,570	1,266	27	29	62	8	44	118	0	12	0	0	6,188
Percent	0.8%	73.3%	20.5%	0.4%	0.5%	1.0%	0.1%	0.7%	1.9%	0.0%	0.2%	0.0%	0.0%	

Note: Average only considered on days with 24-hour of data.

Total "truck" (vehicle classifications 5 thru 13) percent for southbound = 4.4%

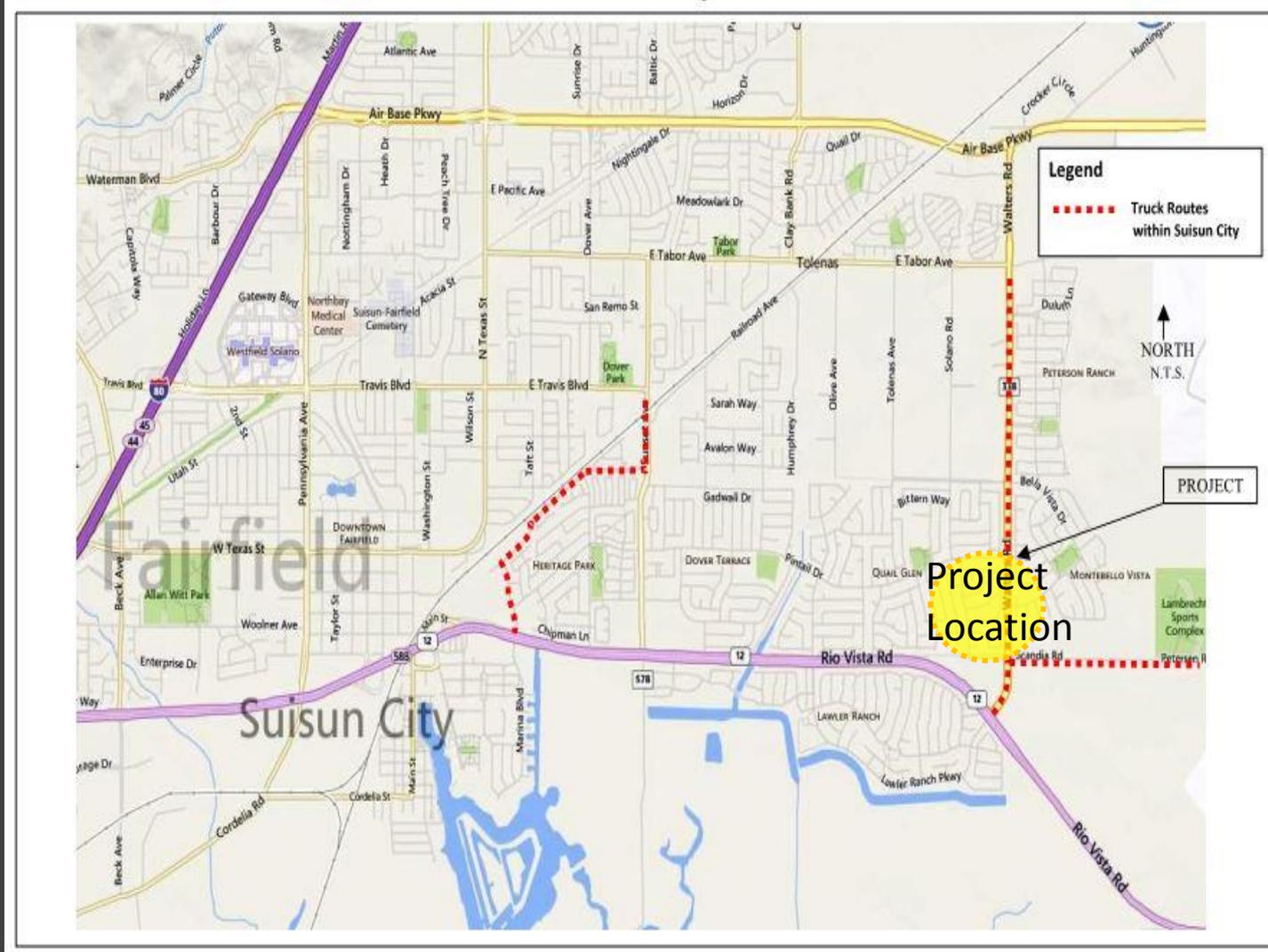
Total Study Average Northbound														
Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	1	53	8	0	0	0	0	0	1	0	0	0	0	63
1:00 AM	0	39	5	0	0	0	0	0	0	0	0	0	0	44
2:00 AM	0	19	4	0	0	0	0	0	0	2	0	0	0	25
3:00 AM	0	15	4	1	0	1	0	0	2	0	0	0	0	23
4:00 AM	0	33	9	0	0	2	0	0	5	0	1	0	0	50
5:00 AM	0	70	25	1	0	2	0	0	5	0	1	0	0	104
6:00 AM	3	191	60	1	1	7	2	2	7	1	1	0	1	277
7:00 AM	4	266	72	1	2	6	3	4	7	0	1	0	0	365
8:00 AM	3	211	62	1	2	6	1	3	7	0	1	0	0	297
9:00 AM	2	196	65	4	3	6	2	3	10	0	1	0	0	291
10:00 AM	2	201	63	2	1	7	1	2	7	1	1	0	0	288
11:00 AM	4	221	77	1	2	8	1	2	9	0	1	0	0	326
12:00 PM	3	269	76	2	2	6	3	2	6	1	0	0	0	370
1:00 PM	6	274	76	1	3	8	1	1	6	1	1	0	0	378
2:00 PM	5	305	83	1	2	8	1	5	7	1	1	0	0	419
3:00 PM	6	353	101	1	3	9	4	4	5	0	1	0	0	487
4:00 PM	6	406	113	0	2	11	4	8	5	1	1	0	1	558
5:00 PM	4	420	96	0	1	8	5	6	2	0	1	0	0	543
6:00 PM	3	349	77	0	1	5	5	5	2	1	1	0	0	449
7:00 PM	2	275	55	0	0	4	2	2	2	0	0	0	0	342
8:00 PM	1	206	39	0	0	2	1	1	3	0	0	0	0	253
9:00 PM	2	185	25	0	0	2	1	1	2	0	0	0	0	218
10:00 PM	1	126	23	0	0	0	0	0	1	0	0	0	0	151
11:00 PM	0	86	12	0	0	0	0	0	1	0	0	0	0	99
Total	58	4,767	1,230	17	25	100	37	51	104	7	14	0	2	6,420
Percent	0.9%	74.3%	19.2%	0.3%	0.4%	1.7%	0.6%	0.8%	1.6%	0.1%	0.2%	0.0%	0.0%	

Total "truck" (vehicle classifications 5 thru 13) percent for northbound = 5.7%

Note:
The average between the total study for the southbound and northbound direction is approximately 12,600 ADT and 5% truck traffic.

Truck Route Map

1. Truck Routes are Railroad Ave, Walters Road, and Peterson Road.
2. Majority of diesel trucks utilize Air Base Parkway or Peterson Road for destinations such as Travis Air Force Base as well as the industrial centers on Walters Road in Fairfield.



Level of Service (LOS)

- Existing LOS = C
 - AM Peak LOS= C
 - Delay = 17.2
 - PM Peak LOS= C
 - Delay = 29.4

Opening Year: If facility is a highway or street, Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility (The facility is an on-street bike lane.)

Intersection	NO BUILDING			BUILD		
	AADT	LOS	Trucks	AADT	LOS	Trucks
Walters Rd./Pintail Dr.	12,600	C	5%	12,600	B	5%

RTP Horizon Year / Design Year: If facility is a highway or street, Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

2035

Intersection	NO BUILDING			BUILD		
	AADT	LOS	Trucks	AADT	LOS	Trucks
Walters Rd./Pintail Dr.	23,400	F	5%	23,400	D or better	5%

- A LOS of B or better is expected when the new traffic signal is installed

Conclusion

- The project does not increase diesel truck traffic
- The project does not negatively impact traffic volumes
- Project enhances pedestrian access by improving ramps and adding new crosswalks