

California Public Utilities Commission
Pipeline Safety and Reliability Project –
New Natural Gas Line 3602 and De-rating Line 1600 (PSRP)

Appendix H
Traffic Impact Analyses
for
CEQA Master Environmental Assessment

Prepared by:
Ecology and Environment, Inc.
November 2018

Existing Daily Roadway Segment Levels of Service

Roadway Segment	Jurisdiction	Road Classification	Baseline				Construction ^(a)				Change in V/C	Change in ADT	Established LOS Goal ^(c)	Applicable Threshold ^(d)	Exceeds Applicable Thresholds
			ADT	LOS E Capacity ^(b)	V/C	LOS ^(b)	ADT	LOS E Capacity ^(b)	V/C	LOS ^(b)					
Line 3602 Project Components															
Old Highway 395															
Rainbow Valley Boulevard to Rainbow Valley Boulevard W	County of San Diego	2 Lane Community Collector (intermittent turn lane)	7,334	19,000	0.386	C	7842	9500	0.825	E	0.439	508	D	100 ADT	Yes
Rainbow Valley Boulevard W to Rainbow Glen Road	County of San Diego	2 Lane Community Collector (intermittent turn lane)	4,634	19,000	0.244	B	5142	9500	0.541	D	0.297	508	D	n/a	No
Rainbow Glen Underpass															
Rainbow Hills Road to Old Highway 395	County of San Diego	2 Lane Light Collector (No Median)	1,150	16,200	0.071	A	1658	8100	0.205	B	0.134	508	D	n/a	No
Mission Road															
Avo Drive to Old Highway 395	County of San Diego	2 Lane Light Collector	20,656	19,000	1.087	F	21164	9500	2.228	F	1.141	508	D	100 ADT	Yes
Old Highway 395															
Mission Road to Reche Road	County of San Diego	2 Lane Community Collector (intermittent turn lane)	5,392	19,000	0.284	B	5900	9500	0.621	D	0.337	508	D	100 ADT	No
Reche Road to Stewart Canyon Road	County of San Diego	2 Lane Community Collector (intermittent turn lane)	6,151	19,000	0.324	C	6659	9500	0.701	D	0.377	508	D	100 ADT	No
Stewart Canyon Road to Pala Mesa Drive	County of San Diego	2 Lane Community Collector (intermittent turn lane)	6,071	19,000	0.32	C	6579	9500	0.693	D	0.373	508	D	100 ADT	No
Pala Mesa Drive to Pala Road	County of San Diego	2 Lane Community Collector (intermittent turn lane)	7,519	19,000	0.396	C	8027	9500	0.845	E	0.449	508	D	100 ADT	Yes
Pala Road to Lilac Road	County of San Diego	2 Lane Community Collector (intermittent turn lane)	3,797	19,000	0.2	B	4305	9500	0.453	C	0.253	508	D	100 ADT	No
Lilac Road to I-15 Interchange	County of San Diego	2 Lane Community Collector (intermittent turn lane)	4,517	19,000	0.238	B	5025	9500	0.529	D	0.291	508	D	100 ADT	No
I-15 Interchange to Camino Del Rey	County of San Diego	2 Lane Community Collector (intermittent turn lane)	2,440	19,000	0.128	A	2948	9500	0.310	B	0.182	508	D	100 ADT	No
Camino Del Rey to Circle R Drive	County of San Diego	2 Lane Community Collector (intermittent turn lane)	6,943	19,000	0.365	C	7451	9500	0.784	E	0.419	508	D	100 ADT	Yes
Circle R Drive to Gopher Canyon Road	County of San Diego	2 Lane Community Collector (intermittent turn lane)	6,943	19,000	0.365	C	7451	9500	0.784	E	0.419	508	D	100 ADT	Yes
Champagne Boulevard															
Gopher Canyon Road to Lawrence Welk Lane	County of San Diego	2 Lane Community Collector (intermittent turn lane)	9,635	19,000	0.507	D	10143	9500	1.068	F	0.561	508	D	100 ADT	Yes
Lawrence Welk Lane to Deer Springs Road	County of San Diego	2 Lane Community Collector (intermittent turn lane)	6,221	19,000	0.327	C	6729	9500	0.708	C	0.381	508	D	100 ADT	No
Centre City Parkway^(e)															
Deer Springs Road to Mesa Rock Road	County of San Diego	2 Lane Community Collector (intermittent turn lane)	5,212	19,000	0.274	B	5720	9500	0.602	C	0.328	508	D	100 ADT	No
Mesa Rock Road to Country Club Lane	County of San Diego	2 Lane Community Collector (intermittent turn lane)	4,265	19,000	0.224	B	4773	9500	0.502	C	0.278	508	D	100 ADT	No
Country Club Lane to El Norte Parkway	City of Escondido	4 Lane Major	12,767	37,000	0.345	B	13275	27750	0.478	B	0.133	508	C	0.02 V/C	No
El Norte Parkway to SR-78 Ramps	City of Escondido	4 Lane Major	26,200	37,000	0.708	C	26708	27750	0.962	E	0.254	508	C	0.02 V/C	Yes
SR-78 to Mission Avenue	City of Escondido	4 Lane Major	31,608	37,000	0.854	D	32116	27750	1.157	F	0.303	508	C	0.02 V/C	Yes
Mission Avenue to Washington Avenue	City of Escondido	4 Lane Major	21,453	37,000	0.58	C	21961	27750	0.791	D	0.211	508	C	0.02 V/C	Yes

Existing Daily Roadway Segment Levels of Service

Roadway Segment	Jurisdiction	Road Classification	Baseline				Construction ^(a)				Change in V/C	Change in ADT	Established LOS Goal ^(c)	Applicable Threshold ^(d)	Exceeds Applicable Thresholds
			ADT	LOS E Capacity ^(b)	V/C	LOS ^(b)	ADT	LOS E Capacity ^(b)	V/C	LOS ^(b)					
Washington Avenue to Valley Parkway	City of Escondido	4 Lane Major	21,943	37,000	0.593	C	22451	27750	0.809	D	0.216	508	C	0.02 V/C	Yes
Valley Parkway to Grand Avenue	City of Escondido	4 Lane Major	22,469	37,000	0.607	C	22977	27750	0.828	D	0.221	508	C	0.02 V/C	Yes
Grand Avenue to 2nd Avenue	City of Escondido	4 Lane Major	21,642	37,000	0.585	C	22150	27750	0.798	D	0.213	508	C	0.02 V/C	Yes
2nd Avenue to 9th Avenue	City of Escondido	4 Lane Major	21,366	37,000	0.577	C	21874	27750	0.788	D	0.211	508	C	0.02 V/C	Yes
9th Avenue to 13th Avenue	City of Escondido	4 Lane Major	24,148	37,000	0.653	C	24656	27750	0.889	D	0.236	508	C	0.02 V/C	Yes
15th Avenue to Felicita Avenue	City of Escondido	4 Lane Major	24,906	37,000	0.673	C	25414	27750	0.916	E	0.243	508	C	0.02 V/C	Yes
Felicita Avenue/ 17th Avenue															
Centre City Parkway to Escondido Boulevard	City of Escondido	4 Lane Major	23,620	37,000	0.638	C	24128	27750	0.869	D	0.231	508	C	0.02 V/C	Yes
Escondido Boulevard to Juniper Street	City of Escondido	2 Lane Local Collector (No Parking)	18,752	15,000	1.25	F	19260	7500	2.568	F	1.318	508	C	0.02 V/C	Yes
Juniper Street to Encino Drive	City of Escondido	2 Lane Local Collector (with Parking)	12,417	10,000	1.242	F	12925	5000	2.585	F	1.343	508	C	0.02 V/C	Yes
Encino Drive															
Felicita Avenue to Eldorado Drive	City of Escondido	2 Lane Local Collector (with Parking)	1,490	10,000	0.149	A	1998	5000	0.3996	B	0.251	508	C	0.02 V/C	No
Eldorado Drive to Bear Valley Parkway	City of Escondido	2 Lane Local Collector (with Parking)	1,097	10,000	0.11	A	1605	5000	0.321	A	0.211	508	C	0.02 V/C	No
Bear Valley Parkway															
Encino Drive to Las Palmas Avenue	City of Escondido	2 Lane Local Collector (No Parking)	22,550	15,000	1.503	F	23058	7500	3.074	F	1.571	508	C	0.02 V/C	Yes
Las Palmas Avenue to Mary Lane	City of Escondido	4 Lane Major	25,807	37,000	0.697	C	26315	27750	0.948	E	0.251	508	C	0.02 V/C	Yes
Mary Lane to San Pasqual Road	City of Escondido	4 Lane Major	28,222	37,000	0.763	D	28730	27750	1.035	F	0.272	508	C	0.02 V/C	Yes
San Pasqual Road to Beethoven Drive	City of Escondido	4 Lane Major	38,512	37,000	1.041	F	39020	27750	1.406	F	0.365	508	C	0.02 V/C	Yes
Highland Valley Road															
East of Pomerado Road	City of San Diego	2 Lane Collector (no fronting property)	1,943	10,000	0.194	A	2451	5000	0.490	B	0.296	508	D	0.02 V/C	No
Pomerado Road															
Highland Valley Road to Escala Drive	City of San Diego	4 Lane Major Arterial	16,235	40,000	0.406	B	16743	30000	0.558	C	0.152	508	D	0.02 V/C	No
Escala Drive to Greens East Road	City of San Diego	4 Lane Major Arterial	14,175	40,000	0.354	A	14683	30000	0.489	B	0.135	508	D	0.02 V/C	No
Greens East Road to Rancho Bernardo Road	City of San Diego	4 Lane Major Arterial	19,339	40,000	0.483	B	19847	30000	0.662	C	0.179	508	D	0.02 V/C	No
Rancho Bernardo Road to Avenida La Valencia	City of San Diego	4 Lane Major Arterial	17,159	40,000	0.429	B	17667	30000	0.589	C	0.160	508	D	0.02 V/C	No
Avenida La Valencia to Bernardo Heights Parkway	City of San Diego	4 Lane Major Arterial	19,361	40,000	0.484	B	19869	30000	0.662	C	0.178	508	D	0.02 V/C	No
Bernardo Heights Parkway to Monte Vista Road	City of Poway	4 Lane Major Arterial	19,840	40,000	0.496	B	20348	30000	0.678	C	0.182	508	D	0.02 V/C	No

Existing Daily Roadway Segment Levels of Service

Roadway Segment	Jurisdiction	Road Classification	Baseline				Construction ^(a)				Change in V/C	Change in ADT	Established LOS Goal ^(c)	Applicable Threshold ^(d)	Exceeds Applicable Thresholds
			ADT	LOS E Capacity ^(b)	V/C	LOS ^(b)	ADT	LOS E Capacity ^(b)	V/C	LOS ^(b)					
Monte Vista Road to Camino Del Norte	City of Poway	4 Lane Major Arterial	24,496	40,000	0.612	C	25004	30000	0.833	D	0.221	508	D	0.02 V/C	No
Camino Del Norte to Ted Williams Parkway	City of Poway	4 Lane Major Arterial	22,600	40,000	0.565	C	23108	30000	0.770	D	0.205	508	D	0.02 V/C	No
Ted Williams Parkway to Vaughan Road	City of Poway	4 Lane Major Arterial	22,956	40,000	0.574	C	23464	30000	0.782	D	0.208	508	D	0.02 V/C	No
Vaughan Road to Robinson Boulevard	City of Poway	4 Lane Major Arterial	21,496	40,000	0.537	C	22004	30000	0.733	C	0.196	508	D	0.02 V/C	No
Robinson Boulevard to Poway Road	City of Poway	4 Lane Major Arterial	21,328	40,000	0.533	C	21836	30000	0.728	C	0.195	508	D	0.02 V/C	No
Poway Road to Oak Knoll Road	City of Poway	4 Lane Major Arterial	16,578	40,000	0.414	B	17086	30000	0.570	C	0.156	508	D	0.02 V/C	No
Oak Knoll Road to Metate Lane	City of Poway	4 Lane Major Arterial	19,015	40,000	0.475	B	19523	30000	0.651	C	0.176	508	D	0.02 V/C	No
Metate Lane to Stowe Drive	City of Poway	4 Lane Major Arterial	16,307	40,000	0.408	B	16815	30000	0.561	C	0.153	508	D	0.02 V/C	No
Stowe Drive to Scripps Poway Parkway	City of Poway	4 Lane Major Arterial	12,305	40,000	0.308	A	12813	30000	0.427	B	0.119	508	D	0.02 V/C	No
Scripps Poway Parkway to Treadwell Drive	City of Poway	4 Lane Major Arterial	22,681	40,000	0.567	C	23189	30000	0.773	D	0.206	508	D	0.02 V/C	No
Treadwell Drive to Stonebridge Parkway	City of Poway	4 Lane Major Arterial	20,429	40,000	0.511	B	20937	30000	0.698	C	0.187	508	D	0.02 V/C	No
Stonebridge Parkway to Cypress Canyon Park Drive	City of San Diego	4 Lane Major Arterial	20,357	40,000	0.509	B	20865	30000	0.696	C	0.187	508	D	0.02 V/C	No
Spring Canyon Road to Semillon Boulevard	City of San Diego	2 Lane Collector (continuous left-turn lane)	16,582	15,000	1.105	F	17090	7500	2.279	F	1.174	508	D	0.02 V/C	Yes
Semillon Boulevard at Fairbrook Road	City of San Diego	2 Lane Collector (continuous left-turn lane)	17,769	15,000	1.185	F	18277	7500	2.437	F	1.252	508	D	0.02 V/C	Yes
Fairbrook Road to Avenida Magnifica	City of San Diego	2 Lane Collector (continuous left-turn lane)	19,940	15,000	1.329	F	20448	7500	2.726	F	1.397	508	D	0.02 V/C	Yes
Avenida Magnifica to Scripps Ranch Row	City of San Diego	2 Lane Collector (continuous left-turn lane)	22,635	15,000	1.509	F	23143	7500	3.086	F	1.577	508	D	0.02 V/C	Yes
Scripps Ranch Row to Avenue of Nations	City of San Diego	2 Lane Collector (continuous left-turn lane)	23,068	15,000	1.538	F	23576	7500	3.143	F	1.605	508	D	0.02 V/C	Yes
Line 1600 Distribution Modifications															
Bernardo Heights Parkway															
Via Embeleso to Calle Nobleza	City of San Diego	4 Lane Major Arterial	9,400	40,000	0.235	A	9908	30000	0.330	A	0.095	508	D	0.02 V/C	No
Rancho Penasquitos Boulevard															
Calle De Las Rosas to Via Del Sud	City of San Diego	4 Lane Major Arterial	29,500	40,000	0.738	C	30008	30000	1.000	F	0.262	508	D	0.02 V/C	Yes
Hillery Drive															
Black Mountain Road to I-15 DAR	City of San Diego	2 Lane Collector (continuous left-turn lane)	7,800	15,000	0.52	C	8308	7500	1.108	F	0.588	508	D	0.02 V/C	Yes
Black Mountain Road															
Hillery Drive to Mira Mesa Boulevard	City of San Diego	4 Lane Major Arterial	14,300	40,000	0.358	A	14808	30000	0.494	B	0.136	508	D	0.02 V/C	No

Existing Daily Roadway Segment Levels of Service

Roadway Segment	Jurisdiction	Road Classification	Baseline				Construction ^(a)				Change in V/C	Change in ADT	Established LOS Goal ^(c)	Applicable Threshold ^(d)	Exceeds Applicable Thresholds
			ADT	LOS E Capacity ^(b)	V/C	LOS ^(b)	ADT	LOS E Capacity ^(b)	V/C	LOS ^(b)					
Mira Mesa Boulevard^(f)															
I-15 SB Ramps to Westview Parkway	City of San Diego	8 Lane Prime Arterial	71,600	60,000	1.193	F	72108	49999.98	1.442	F	0.249	508	D	0.02 V/C	Yes
San Pasqual Valley Road															
Bear Valley Parkway to 17th Street	County of San Diego	2 Lane Light Collector (No Median)	12,600	16,200	0.778	E	13108	8100	1.618	F	0.840	508	D	100 ADT	Yes
Pomerado Road															
I-15 to Willow Creek Road	City of San Diego	2 Lane Collector (continuous left-turn lane)	35,600	15,000	2.373	F	36108	7500	4.814	F	2.441	508	D	0.02 V/C	Yes
Mirasol Drive to Paseo Del Verano Norte	City of San Diego	4 Lane Major Arterial	14,000	40,000	0.35	A	14508	30000	0.484	B	0.134	508	D	0.02 V/C	No
Heath Drive to Camino Del Norte	City of San Diego	4 Lane Major Arterial	24,496	40,000	0.612	C	25004	30000	0.833	D	0.221	508	D	0.02 V/C	No
Poway Road to Oak Knoll Road	City of Poway	4 Lane Major Arterial	16,578	40,000	0.414	B	17086	30000	0.570	C	0.156	508	D	0.02 V/C	No
Camino Del Norte															
I-15 NB Ramps to Paseo Lucido	City of San Diego	6 Lane Prime Arterial	54,500	60,000	0.908	E	55008	49999.8	1.100	F	0.192	508	D	0.02 V/C	Yes

Sources:

County of San Diego. 2011. County of San Diego Guidelines for Determining Significance and Report Format and Content Requirements, Transportation and Traffic. <http://www.sandiegocounty.gov/content/dam/sdc/pds/ProjectPlanning/docs/AQ-Guidelines.pdf>

County of San Diego. 2012. "Public Road Standards." http://www.sandiegocounty.gov/content/dam/sdc/dpw/COUNTY_ROADS/roadspdf/pbrdstds.pdf

City of Escondido. 2013. City of Escondido Traffic Impact Analysis Guideline. <https://www.escondido.org/Data/Sites/1/media/PDFs/trafficengineering/6-TrafficImpactAnalysisGuidelines.pdf>

City of San Diego. 1998. Traffic Impact Study Manual. <https://www.sandiego.gov/sites/default/files/legacy/development-services/pdf/industry/trafficimpact.pdf>

Kimley-Horn (Kimley-Horn and Associates, Inc.). 2015. Traffic Analysis, San Diego Gas & Electric Company and Southern California Gas Company Pipeline Safety & Reliability Project. SDG&E and SoCalGas (San Diego Gas & Electric Company and Southern California Gas Company). 2016a. Proponent's Environmental Assessment Supplement for the Pipeline Safety & Reliability Project, vol. II. Application 15-09-013.

SDG&E and SoCalGas (San Diego Gas & Electric Company and Southern California Gas Company). 2016b. Roadway Level of Service Summary. Data provided to Ecology and Environment, Inc. on February 12, 2016

Notes:

(a) Construction includes construction traffic and the closure of one lane on each road segment.

(b) San Diego County based on County of San Diego Public Road Standards (County of San Diego 2012); City of Escondido based on City of Escondido Traffic Impact Analysis Guideline (City of Escondido 2013); City of San Diego and City of Poway based on City of San Diego Traffic Impact Study Manual (City of San Diego 1998).

(c) Based on each jurisdiction's established LOS goals. Applicable thresholds were not applied to road segments operating at or better than established LOS goal during construction.

(d) San Diego County based on County of Guidelines for Determining Significance and Report Format and Content Requirements (County of San Diego 2011); City of Escondido based on City of Escondido Traffic Impact Analysis Guideline (City of Escondido 2013); City of San Diego and City of Poway based on City of San Diego Traffic Impact Study Manual (City of San Diego 1998).

(e) Congestion Management Program Roadway

(f) Was noted as an 8 lane prime arterial in the Roadway Level of Service Summary (SDG&E and SoCalGas 2016b), however, the City of San Diego Traffic Analysis Guidelines does not include an 8 lane prime arterial classification; therefore the LOS E for a 6 Lane Expressway was used.

Yellow Highlights: V/C ratios and LOS calculated by Kimley-Horn were adjusted based on a review of the municipal guidelines.

Key:

ADT = average daily traffic

I-15 = Interstate 15

LOS = level of service

SR-78 = State Route 78

V/C = volume to capacity ratio