



Permit Number: _____

COUNTY OF SAN DIEGO
LAND USE AND ENVIRONMENT GROUP
Department of Planning & Development Services

Appendix A: Final Climate Action Plan

Consistency Review Checklist

Introduction

The County of San Diego (County) Climate Action Plan (CAP), adopted by the Board of Supervisors on February 14, 2018, outlines actions that the County will undertake to meet its greenhouse gas (GHG) emissions reduction targets. Implementation of the CAP will require that new development projects incorporate more sustainable design standards and implement applicable reduction measures consistent with the CAP. To help plan and design projects consistent with the CAP, and to assist County staff in implementing the CAP and determining the consistency of proposed projects with the CAP during development review, the County has prepared a CAP Consistency Review Checklist (Checklist). This Checklist, in conjunction with the CAP, provides a streamlined review process for proposed discretionary projects that require environmental review pursuant to the California Environmental Quality Act (CEQA). Please refer to the County's Guidelines for Determining Significance for Climate Change (Guidelines) for more information on GHG emissions, climate change impact requirements, thresholds of significance, and compliance with CEQA Guidelines Section 15183.5.

The purpose of this Checklist is to implement GHG reduction measures from the CAP that apply to new development projects. The CAP presents the County's comprehensive strategy to reduce GHG emissions to meet its reduction targets. These reductions will be achieved through a combination of County initiatives and reduction actions for both existing and new development. Reduction actions that apply to existing and new development will be implemented through a combination of mandatory requirements and incentives. This Checklist specifically applies to proposed discretionary projects that require environmental review pursuant to CEQA. Therefore, the Checklist represents one implementation tool in the County's overall strategy to implement the CAP. Implementation of measures that do not apply to new development projects will occur through the implementation mechanisms identified in Chapter 5 of the CAP. Implementation of applicable reduction measures in new development projects will help the County achieve incremental reductions towards its targets, with additional reductions occurring through County initiatives and measures related to existing development that are implemented outside of the Checklist process.

The Checklist follows a two-step process to determine if projects are consistent with the CAP and whether they may have a significant cumulative impact under the County's adopted GHG thresholds of significance. The Checklist first assesses a project's consistency with the growth projections and land use assumptions that formed the basis of CAP emissions projections. If a project is consistent with the projections and land use assumptions in the CAP, its associated growth in terms of GHG emissions would have been accounted for in the CAP's projections and project implementation of the CAP reduction measures will contribute towards reducing the County's emissions and meeting the County's reduction targets. Projects that include a land use plan and/or zoning designation amendment that would result in an equivalent or less GHG-intensive project

when compared to existing designation, would also be within the projections assumed in the CAP. Projects responding in the affirmative to Step 1 questions can move forward to Step 2 of the Checklist. If a land use and/or zoning designation amendment results in a more GHG-intensive project, the project is required to demonstrate consistency with applicable CAP measures and offset the increase in emissions as described in the Guidelines. Step 2 of the Checklist contains the CAP GHG reduction measures that projects are required to implement to ensure compliance with the CAP. Implementation of these measures would ensure that new development is consistent with relevant CAP strategies and measures and will contribute towards achieving the identified GHG reduction targets. Projects that are consistent with the CAP, as determined using this Checklist, may rely on the CAP for the cumulative impacts analysis of GHG emissions under CEQA.

A project's incremental contribution to cumulative GHG emissions may be determined to not be cumulatively considerable if it is determined to be consistent with the CAP. As specified in the CEQA Guidelines, the mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the project's incremental effects are "cumulatively considerable" (CCR, Title 14, Division 6, Chapter 3, Section 15064[h][4]). Projects requiring discretionary review that cannot demonstrate consistency with the CAP using this Checklist may have a cumulatively considerable contribution to a significant cumulative impact and would be required to prepare a separate, more detailed project-level GHG analysis as part of the CEQA document prepared for the project.

Checklist Applicability

This Checklist only applies to development projects that require discretionary review and are subject to environmental review (i.e., not statutorily or categorically exempt projects) pursuant to CEQA. Projects that are limited to ministerial review and approval (e.g., only building permits) would not be subject to the Checklist. The CAP contains other measures that, when implemented, would apply broadly to all ministerial and discretionary projects. These measures are included for discretionary projects in this Checklist, but could also apply more broadly once the County takes action to codify specific requirements or standards.

Checklist Procedures

General procedures for Checklist compliance and review are described below. Specific guidance is also provided under each of the questions under Steps 1 and 2 of the Checklist in subsequent pages.

1. The County's Department of Planning & Development Services (PDS) reviews development applications and makes determinations regarding environmental review requirements under CEQA. Procedures for CEQA can be found on the County's [Process Guidance & Regulations/Statutes Homepage](#). The Director of PDS will determine whether environmental review is required, and if so, whether completion of the CAP Checklist is required for a proposed project or whether a separate project-level GHG analysis is required.
2. The specific applicable requirements outlined in the Checklist shall be required as a condition of project approval.
3. The project must provide substantial evidence that demonstrates how the proposed project will implement each applicable Checklist requirement described herein to the satisfaction of the Director of PDS.
4. If a question in the Checklist is deemed not applicable (N/A) to a project, substantial evidence shall be provided to the satisfaction of the Director of PDS demonstrating why the Checklist item is not applicable. Feasibility of reduction measures for new projects was assessed in development of the

CAP and measures determined to be feasible were incorporated into the Checklist. Therefore, it is expected that projects would have the ability to comply with all applicable Checklist measures.

5. Development projects requiring discretionary review that cannot demonstrate consistency with the CAP using this Checklist shall prepare a separate, project-level GHG analysis as part of the CEQA document prepared for the project and may be required to prepare an Environmental Impact Report (EIR). Guidance for project-specific GHG Technical Reports is outlined in the Report Format and Content Requirements for Climate Change document, provided under separate cover. The Report Format and Content Requirements document provides guidance on the outline and content of GHG analyses for discretionary projects processed by PDS that cannot show compliance with the CAP Checklist.

Checklist Updates

The Guidelines and Checklist may be administratively updated by the County from time to time to comply with amendments to State laws or court directives, or to remove measures that may become mandatory through future updates to State or local codes. Administrative revisions to the Guidelines and Checklist will be limited to changes that do not trigger a subsequent EIR or a supplement to the SEIR for the CAP pursuant to CEQA Guidelines Section 15162. Administrative revisions, as described above, will not require approval by the Board of Supervisors (Board). All other changes to the Guidelines and Checklist require Board approval.

Comprehensive updates to the Guidelines and Checklist will be coordinated with each CAP update (i.e., every five years beginning in 2025) and would require Board approval. Future updates of the CAP, Guidelines, and Checklist shall comply with CEQA.

Application Information

Contact Information

Project No. and Name: _____
Property Address and
APN: _____

Applicant Name and Co.: _____

Contact Phone: _____ Contact Email: _____

Was a consultant retained to complete this checklist? ☐ Yes ☐ No

If Yes, complete the following:

Consultant Name: _____ Contact
Phone: _____

Company Name: _____ Contact Email: _____

Project Information

1. What is the size of the project site (acres [gross and net])? _____

2. Identify all applicable proposed land uses (indicate square footage [gross and net]):

☐ Residential (indicate # of single-family dwelling units): _____

☐ Residential (indicate # of multi-family dwelling units): _____

☐ Commercial (indicate total square footage [gross and net]): _____

☐ Industrial (indicate total square footage [gross and net]): _____

☐ Agricultural (indicate total acreage [gross and net]): _____

☐ Other (describe): _____

3. Provide a description of the project proposed. This description should match the project description used for the CEQA document. The description may be attached to the Checklist if there are space constraints.

CAP Consistency Checklist Questions

Step 1: Land Use Consistency

For projects that are subject to CAP consistency review, the first step in determining consistency is to assess the project's consistency with the growth projections used in the development of the CAP. This section allows the County to determine a project's consistency with the land use assumptions used in the CAP.

Step 1: Land Use Consistency		
Checklist Item (Check the appropriate box and provide explanation and supporting documentation for your answer)	Yes	No
<p>1. Is the proposed project consistent with the existing General Plan regional category, land use designations, and zoning designations?</p> <p>If "Yes," provide substantiation below and then proceed to Step 2 (CAP Measures Consistency) of the Checklist.</p> <p>If "No," proceed to question 2 below.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Project Detail:</p> <p>Please substantiate how the project satisfies question 1.</p> <hr/> <hr/> <hr/> <hr/> <hr/>		
<p>2. Does the project include a land use element and/or zoning designation amendment that would result in an equivalent or less GHG-intensive project when compared to the existing designations?</p> <p>If "Yes," the project must provide estimated project GHG emissions under both existing and proposed designation(s) for comparison to substantiate the response and proceed to Step 2 (CAP Measures Consistency) of the Checklist.</p> <p>If "No," (i.e., the project proposes an increase in density or intensity above that which is allowed under existing General Plan designations and consequently would not result in an equivalent or less GHG-intensive project when compared to the existing designations), the project must prepare a separate, more detailed project-level GHG analysis. As outlined in the County's Guidelines for Determining Significance for Climate Change and Report Format and Content Requirements for Climate Change, this analysis must demonstrate how the project would offset the increase in GHG emissions over the existing designations or baseline conditions. The project must also incorporate each of the CAP measures identified in Step 2 to mitigate cumulative GHG emissions impacts. Proceed and complete a separate project-specific GHG analysis and Step 2 of the Checklist. Refer to Section 4 of the County's Guidelines for procedures on analyzing General Plan Amendments.</p>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Project Detail:</p> <p>Please substantiate how the project satisfies question 2.</p> <hr/> <hr/> <hr/> <hr/> <hr/>		

Step 2: CAP Measures Consistency

The second step of the CAP consistency review is to review and evaluate a project's consistency with the applicable measures of the CAP. Each checklist item is associated with a specific GHG reduction measure(s) in the County CAP.

Step 2: CAP Measures Consistency				
Checklist Item (Check the appropriate box and provide an explanation for your answer)	CAP Measure	Yes	No	N/A
Step 2A: Project Operations (All projects with an operational component must fill out this portion of the Checklist)				
Reducing Vehicle Miles Traveled				
<p>1a. Reducing Vehicle Miles Traveled</p> <p><u>Non-Residential:</u> For non-residential projects with anticipated tenant-occupants of 25 or more, will the project achieve a 15% reduction in emissions from commute vehicle miles traveled (VMT), and commit to monitoring and reporting results to demonstrate on-going compliance? VMT reduction may be achieved through a combination of Transportation Demand Management (TDM) and parking strategies, as long as the 15% reduction can be substantiated.</p> <p>VMT reduction actions though TDM may include, but are not limited to:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Telecommuting <input type="checkbox"/> Car Sharing <input type="checkbox"/> Shuttle Service <input type="checkbox"/> Carpools <input type="checkbox"/> Vanpools <input type="checkbox"/> Bicycle Parking Facilities <input type="checkbox"/> Transit Subsidies <p>Shared and reduced parking strategies may include, but are not limited to:¹</p> <ul style="list-style-type: none"> <input type="checkbox"/> Shared parking facilities <input type="checkbox"/> Carpool/vanpool-only parking spaces <input type="checkbox"/> Shuttle facilities <input type="checkbox"/> Electric Vehicle-only parking spaces <p>The project may incorporate the measures listed above, and propose additional trip reduction measures, as long as a 15% reduction in emissions from commute VMT can be demonstrated through substantial evidence.</p> <p>Check "N/A" if the project is a residential project or if the project would not accommodate more than 25 tenant-occupants.</p>	<p>T-2.2 and T-2.4</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>1b. Project Detail:</p> <p>Please substantiate how the project satisfies question 1a.</p> <hr/> <hr/> <hr/>				

¹ Reduction actions and strategies under 1a may be used to achieve a 10% reduction in emissions from commute VMT under 2a

Step 2: CAP Measures Consistency

Step 2: CAP Measures Consistency				
Checklist Item (Check the appropriate box and provide an explanation for your answer)	CAP Measure	Yes	No	N/A
Shared and Reduced Parking				
<p>2a. Shared and Reduced Parking</p> <p><u>Non-Residential:</u> For non-residential projects with anticipated tenant-occupants of 24 or less, will the project implement shared and reduced parking strategies that achieves a 10% reduction in emissions from commute VMT?</p> <p>Shared and reduced parking strategies may include, but are not limited to:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Shared parking facilities <input type="checkbox"/> Carpool/vanpool-only parking spaces <input type="checkbox"/> Shuttle facilities <input type="checkbox"/> Electric Vehicle-only parking spaces <p>Check "N/A" if the project is a residential project or if the project would accommodate 25 or more tenant-occupants.</p>	T-2.4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>2b. Project Detail:</p> <p>Please substantiate how the project satisfies question 2a.</p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>				
Water Heating Systems				
<p>3a. Electric or Alternately-Fueled Water Heating Systems</p> <p><u>Residential:</u> For projects that include residential construction, will the project, as a condition of approval, install the following types of electric or alternately-fueled water heating system(s)? Please check which types of system(s) will be installed:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Solar thermal water heater <input type="checkbox"/> Tankless electric water heater <input type="checkbox"/> Storage electric water heaters <input type="checkbox"/> Electric heat pump water heater <input type="checkbox"/> Tankless gas water heater <input type="checkbox"/> Other <p>Check "N/A" if the project does not contain any residential buildings.</p>	E-1.2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>3b. Project Detail:</p> <p>Please substantiate how the project satisfies question 3a.</p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>				

Step 2: CAP Measures Consistency

Checklist Item (Check the appropriate box and provide an explanation for your answer)	CAP Measure	Yes	No	N/A
Water-Efficient Appliances and Plumbing Fixtures				
<p>4a. Water Efficient Appliances and Plumbing Fixtures</p> <p><u>Residential:</u> For new residential projects, will the project comply with all of the following water efficiency and conservation BMPs²?</p> <p><input type="checkbox"/> Kitchen Faucets: The maximum flow rate of kitchen faucets shall not exceed 1.5 gallons per minute at 60 psi. Kitchen faucets may temporarily increase the flow above the maximum rate, but not to exceed 2.2 gallons per minute at 60 psi, and must default to a maximum flow rate of 1.5 gallons per minute at 60 psi³.</p> <p><input type="checkbox"/> Energy Efficient Appliances: Install at least one qualified ENERGY STAR dishwasher or clothes washer per unit.</p> <p>Check "N/A" if the project is a non-residential project.</p>	W-1.1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>4b. Project Detail:</p> <p>Please substantiate how the project satisfies question 4a.</p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>				
Rain Barrel Installations				
<p>5a. Rain Barrel Installations</p> <p><u>Residential:</u> For new residential projects, will the project make use of incentives to install one rain barrel per every 500 square feet of available roof area?</p> <p>Check "N/A" if the project is a non-residential project; if State, regional or local incentives/rebates to purchase rain barrels are not available; or if funding for programs/rebates has been exhausted.</p>	W-2.1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>5b. Project Detail:</p> <p>Please substantiate how the project satisfies question 5a.</p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>				

² CALGreen Tier 1 residential voluntary measure A4.303 of the [California Green Building Standards Code](#).

³ Where complying faucets are unavailable, aerators or other means may be used to achieve reduction.

Step 2: CAP Measures Consistency

Checklist Item (Check the appropriate box and provide an explanation for your answer)	CAP Measure	Yes	No	N/A
Reduce Outdoor Water Use				
<p>6a. Reduce Outdoor Water Use</p> <p><u>Residential:</u> Will the project submit a Landscape Document Package that is compliant with the County's Water Conservation in Landscaping Ordinance⁴ and demonstrates a 40% reduction in current Maximum Applied Water Allowance (MAWA) for outdoor use?</p> <p><u>Non-Residential:</u> Will the project submit a Landscape Document Package that is compliant with the County's Water Conservation in Landscaping Ordinance and demonstrates a 40% reduction in current MAWA for outdoor use?</p> <p>Check "N/A" if the project does not propose any landscaping, or if the aggregate landscaped area is between 500 – 2,499 square feet and elects to comply with the Prescriptive Compliance Option within the Water Conservation in Landscaping Ordinance.</p>	W-1.2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>6b. Project Detail:</p> <p>Please substantiate how the project satisfies question 6a.</p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>				
Agricultural and Farming Operations⁵				
<p>7a. Agricultural and Farming Equipment</p> <p>Will the project use the San Diego County Air Pollution Control District's (SDAPCD's) farm equipment incentive program to convert gas- and diesel-powered farm equipment to electric equipment?</p> <p>Check "N/A" if the project does not contain any agricultural or farming operations; if the SDAPCD incentive program is no longer available; or if funding for the incentive program has been exhausted.</p>	A-1.1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>7b. Project Detail:</p> <p>Please substantiate how the project satisfies question 7a.</p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>				

⁴ <http://www.sandiegocounty.gov/content/dam/sdc/cob/ordinances/ord10427.pdf>.

⁵ Existing agricultural operations would not be subject to questions 7 and 8 of the Checklist, unless a proposed expansion is subject to discretionary review and requires environmental review pursuant to CEQA.

Step 2: CAP Measures Consistency

Checklist Item (Check the appropriate box and provide an explanation for your answer)	CAP Measure	Yes	No	N/A
<p>8a. Electric Irrigation Pumps</p> <p>Will the project use SDAPCD's farm equipment incentive program to convert diesel- or gas-powered irrigation pumps to electric irrigation pumps?</p> <p>Check "N/A" if the project does not contain any agricultural or farming operations; if the SDAPCD incentive program is no longer available; or if funding for the incentive program has been exhausted.</p>	A-1.2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8b. Project Detail:

Please substantiate how the project satisfies question 8a.

Tree Planting

<p>9a. Tree Planting</p> <p><u>Residential</u>: For residential projects, will the project plant, at a minimum, two trees per every new residential dwelling unit proposed?</p> <p>Check "N/A" if the project is a non-residential project.</p>	A-2.1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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9b. Project Detail:

Please substantiate how the project satisfies question 9a.

CAP Attachment A - VMT Reductions

The proposed project would construct a much needed commercial space which would include a supermarket and retail structures which are highly lacking in the Valley Center area. The nearest existing shopping center with a major grocery store is located in Escondido, 5 miles from the intersection of Valley Center Road and Woods Valley Road in southern Valley Center. A vehicle miles traveled (VMT) assessment was conducted for the site back in 2006 and found that the Project would actually reduce area related (VMT) since the area was lacking commercial land uses and a major grocery store (LLG Engineers, 2006). Based on that assessment, it was found that the project would reduce approximately 2.2 million VMT per year and subsequently lower the emissions as can be seen in the analysis provided on the following pages. Since that analysis, more residential units have been approved and built in the Valley Center area but no major grocery store.



February 11, 2008

Mr. Bill Lewis
c/o Mr. Steve Flynn
BELL ENTERPRISE
2029 Balboa Avenue
Del Mar, CA 92014

SUEJECT: Neighborhood Shopping Center at Valley Center Air Quality Evaluation

Dear Mr. Lewis:

INTRODUCTION

The proposed project plans to construct an 85,000 square foot neighborhood shopping center anchored by a modest size grocery store in the Valley Center area. The site is located on the east site of Valley Center Road opposite Mirar De Valle Road in the Valley Center area of the County of San Diego.

The purpose of this evaluation is to estimate the amount of new emissions related to vehicular travel that will be added to the air basin as a result of the retail development. An assumption is that a portion of the traffic that would patronize the proposed project would otherwise need to travel to other retail destinations, principally in the City of Escondido as discussed in the study: Traffic Report Neighborhood Shopping Center At Valley Center (Linscott Law & Greenspan, March 5, 2007).

PROJECT EMISSIONS

Operational activities associated with the proposed project will result in emissions of Volatile Organic Compounds (VOCs), Oxides of Nitrogen (NO_x), Carbon Monoxide (CO), Particulate Matter less than 10 microns (PM₁₀), Particulate Matter less than 2.5 microns (PM_{2.5}), Sulfur Oxides (SO_x), and Carbon Dioxide (CO₂). The EMFAC 2007 emissions inventory model was used to forecast emissions levels for project vehicular activity. Output from the model run for operational activities is provided in Attachment "A". Operational emissions would be expected from vehicular emissions as well as fugitive dust related to vehicular travel on study area roadways. For purposes of this

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analysis, two vehicular trip alternatives have been evaluated (consistent with the project traffic report): Economic Study Pre/Post-Project and San Diego Association of Governments (SANDAG) Pre/Post-Project.

Vehicle Emissions

Project operational (vehicular) impacts are dependent primarily on overall daily vehicle trip generation and associated vehicle miles traveled (VMT) in the project vicinity. For purposes of this analysis, the amount VMT that the project will generate will actually reduce with implementation of the proposed project as discussed in the Traffic Report: Traffic Report Neighborhood Shopping Center At Valley Center (Linscott Law & Greenspan, March 5, 2007). Therefore the project related operational air quality emissions centers on the reduction of approximately 21,323 daily VMT. The Annual Vehicle Miles Traveled (AVMT) for the entire neighborhood was calculated for both economic study pre-project and economic study post project by multiplying the VMT by 365. Based on this calculation the post net project AVMT savings due to the project was calculated to be approximately 7,782,895 AVMT (21,323 x 365). Attachment "B" presents the project Traffic Report for review.

Alternatively, based on SANDAG projections, the project will result in a reduction of approximately 6,117 daily VMT. The AVMT for the entire neighborhood was calculated for both SANDAG pre-project and SANDAG post-project by multiplying the VMT by 365. Based on this calculation the post net project AVMT savings due to the project was calculated to be approximately 2,232,705 AVMT (6,117 x 365). Attachment "B" presents the project Traffic Report for review.

Fugitive Dust Related to Vehicle Travel

Vehicles traveling on paved roads would be a source of fugitive emissions due to the generation of road dust. The emissions estimates for travel on paved roads used assumptions from the URBEMISIS 2007 model. The estimated PM₁₀/PM_{2.5} emissions from vehicles for fugitive dust are provided in Attachment "A".

ANALYSIS PROCEDURES AND FINDINGS

Exhaust Emissions will result from vehicular travel associated with the proposed project. Exhaust Emissions generated have been evaluated as described below in accordance with SCAQMD protocol:

$$E = AVMT \times EF$$

Where AVMT= Annual Vehicle Miles Traveled, and EF = emission factor (pounds per mile)

E = Emissions (pounds per day);

AVMT = -7,782,895 (Economic Study Projections) or -2,232,705 (SANDAG Projections);

EF = Highest (Most Conservative) EMFAC 2007 (version 2.3) Emission Factors for On-Road Passenger Vehicles & Delivery Trucks Year 2008, (SCAQMD, March 2007). For purposes of this analysis, the passenger vehicle emission factors have been utilized.

Entrained road dust emissions are generated by vehicles traveling on paved roads. For paved roads, the analysis utilized the following equation (consistent with the URBEMIS 2007 emissions inventory model):

$$E = k (sL+2)^{0.65} (W+3)^{1.5}$$

E = particulate emission factor (lb/VMT);

k = particle size multiplier for particle size range and units of interest;

sL = road surface silt loading (grams per square meter) (g/m^2);

W = average weight of the vehicles traveling the road (megagrams).

The following default assumptions were utilized for this evaluation (consistent with the URBEMIS 2007 emissions inventory model).

k = 0.016 (for the 10 microns and under particle size cutoff);

sL = 0.1 (allowable range of 0.02-400 grams per square meter);

W = 2.2 (allowable range of 1.8-38 megagrams).

Vehicular Exhaust & Entrained Road Dust Emissions resulting from the project are summarized below in Tables 1 & 2:

Table 1 — Vehicular Emissions Summary Table—Economic Study Approach

Pollutant	CO	NOx	ROGs	SOx	PM10	PM2.5	CO2
Units	lbs./day	lbs./day	lbs./day	lbs./day	lbs./day	lbs./day	lbs./day
Total	-224.92	-23.52	-23.01	-0.23	-32.38	-7.55	-23,445.33
Units	lbs./yr	lbs./yr	lbs./yr	lbs./yr	lbs./yr	lbs./yr	lbs./yr
Total	-82,097.40	-8,583.60	-8,399.22	-83.67	-11,818.84	-2,754.90	-8,557,544.13

→ 4278 tons/yr

Table 2 — Vehicular Emissions Summary Table—SANDAG Approach

Pollutant	CO	NOx	ROGs	SOx	PM10	PM2.5	CO2
Units	lbs./day	lbs./day	lbs./day	lbs./day	lbs./day	lbs./day	lbs./day
Total	-64.52	-6.75	-6.60	-0.07	-9.29	-2.17	-6,725.84
Units	lbs./yr	lbs./yr	lbs./yr	lbs./yr	lbs./yr	lbs./yr	lbs./yr
Total	-23,551.55	-2,462.41	-2,409.51	-24.00	-3,390.51	-790.31	-2,454,931.17

CONCLUSION

Based on the aforementioned analysis, the proposed project site would reduce rather than increase air emissions (based on both operational scenarios evaluated) because it would capture shopping trips (and related emissions) that would otherwise extend to Escondido because there are no other similar retail opportunities in the Valley Center area and therefore residents must travel along distances out of the area (the City of Escondido provides the closest opportunities) to shop.

Mr. Bill Lewis
c/o Mr. Steve Flynn
BELL ENTERPRISE
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If you have any questions or require any additional information regarding this letter, please don't hesitate to give me a call at (760) 931-0664.

Sincerely,

UREAN CROSSROADS, INC.

A handwritten signature in black ink, appearing to be 'Haseeb Qureshi', with a stylized, cursive script.

Haseeb Qureshi,
Senior Air Quality Specialist

JL:AE:HQ
JN:05724-02_LTR

A handwritten signature in black ink, appearing to be 'Jeremy Loudon', with a stylized, cursive script.

Jeremy Loudon,
Associate Principal

REFERENCES

1. California Air Resources Board, 2006. Emfac2007 (Version 2.3) – Calculating Emission Inventories for Vehicles in California.
2. Rimpco and Associates. URBEMIS 2007 (Version 9.2.2) – Calculating emissions from land use sources.
3. South Coast Air Quality Management District. 2007.
4. Linscott Law and Greenspan Engineers, 2007. Traffic Report Neighborhood Shopping Center at Valley Center (March 5, 2007).

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ATTACHMENT A

EMISSIONS CALCULATIONS AND OUTPUTS

SUMMARY OF TOTAL EMISSIONS (EXHAUST AND ROAD DUST)—ECONOMIC STUDY FACTORS

	CO	NOx	ROG	SOx	PM10	PM2.5	CO2
Exhaust Emissions (lbs/day)	-224.92	-23.52	-23.01	-0.23	-1.81	-1.13	-23445.33
Road Dust Emissions (lbs/day)	0.00	0.00	0.00	0.00	-30.57	-6.42	0.00
TOTAL Emissions (lbs/day)	-224.92	-23.52	-23.01	-0.23	-32.38	-7.55	-23445.33

Exhaust Emissions (lbs/year)	-82097.40	-8583.60	-8399.22	-83.67	-661.94	-411.95	-8557544.13
Road Dust Emissions (lbs/yr.)	0.00	0.00	0.00	0.00	-11156.91	-2342.93	0.00
TOTAL Emissions (lbs/yr.)	-82097.40	-8583.60	-8399.22	-83.67	-11818.84	-2754.90	-8557544.13

SUMMARY OF TOTAL EMISSIONS (EXHAUST AND ROAD DUST)—SANDAG PROJECTIONS

	CO	NOx	ROG	SOx	PM10	PM2.5	CO2
Exhaust Emissions (lbs/day)	-64.52	-6.75	-6.60	-0.07	-0.52	-0.32	-6725.84
Road Dust Emissions (lbs/day)	0.00	0.00	0.00	0.00	-8.77	-1.84	0.00
TOTAL Emissions (lbs/day)	-64.52	-6.75	-6.60	-0.07	-9.29	-2.17	-6725.84

Exhaust Emissions (lbs/year)	-23551.55	-2462.41	-2409.51	-24.00	-189.89	-118.18	-2454931.17
Road Dust Emissions (lbs/yr.)	0.00	0.00	0.00	0.00	-3200.62	-672.13	0.00
TOTAL Emissions (lbs/yr.)	-23551.55	-2462.41	-2409.51	-24.00	-3390.51	-790.31	-2454931.17

Mobile Source Activity (Passenger Vehicles)—ECONOMIC STUDY FACTORS

Travel Conditions

Summary of VMT

Unit Type	VMT	Annual VMT
	-21323	-7782895
Sum of Total Trips	-21323	
Total Vehicle Miles Traveled		-7782895

EMFAC 2007 (Version 2.3) SCAQMD (http://www.aqmd.gov/ceqa/handbook/onroad/onroadEF07_26.xls)

Scenario Year 2008—Model Years 1965-2008

Pollutant (pounds/mile)	CO	NOx	ROG	SOx	PM10	PM2.5	CO2
	0.01054844	0.00110288	0.00107919	1.08E-05	0.000085	0.000053	1.09953226
Emissions (lbs/year)	-82097.40	-8583.60	-8399.22	-83.67	-661.94	-411.95	-8557544.129
Total Emissions (lbs/day)	-224.92	-23.52	-23.01	-0.23	-1.81	-1.13	-23445.32638
Total Emissions (lbs/year)	-82097.40	-8583.60	-8399.22	-83.67	-661.94	-411.95	-8557544.129

Mobile Source Activity (Passenger Vehicles)—SANDAG STUDY FACTORS

Travel Conditions

Summary of VMT

Unit Type	VMT	Annual VMT
	-6117	-2232705
Sum of Total Trips	-6117	
Total Vehicle Miles Traveled		-2232705

EMFAC 2007 (Version 2.3) SCAQMD (http://www.aqmd.gov/ceqa/handbook/onroad/onroadEF07_26.xls)

Scenario Year 2008—Model Years 1965-2008

Pollutant (pounds/mile)	CO	NOx	ROG	SOx	PM10	PM2.5	CO2
	0.01054844	0.00110288	0.00107919	1.08E-05	0.000085	0.000053	1.09953226
Emissions (lbs/year)	-23551.55	-2462.41	-2409.51	-24.00	-189.89	-118.18	-2454931.175
Total Emissions (lbs/day)	-64.52	-6.75	-6.60	-0.07	-0.52	-0.32	-6725.838834
Total Emissions (lbs/year)	-23551.55	-2462.41	-2409.51	-24.00	-189.89	-118.18	-2454931.175

Paved Roads--1 ECONOMIC STUDY FACTORS

For paved roads

$$lb/VMT = k (sL/2)^{0.85} (W/3)^{1.2}$$

k = particle size multiplier for particle size range and units of interest;

sL = road surface silt loading (grams per square meter);

W = average weight of vehicles traveling the roads (megagrams).

The following default assumptions are used by URBEMIS2007:

k = 0.016 (for the 10 microns and under particle size cutoff)

sL = 0.1 (allowable range of 0.02-400 grams per square meter)

W = 2.2 (allowable range of 1.8-38 megagrams)

lb/VMT	0.001433516
Total VMT Project	-7782893
Total lbs PM10/yr	-11156.90656
Total lbs PM2.5/yr	-2342.950378
Total lbs PM10/day	-30.5668673
Total lbs PM2.5/day	-6.419042133

Paved Roads--5 ANDAG STUDY FACTORS

For paved roads

$$lb/VMT = k (sL/2)^{0.85} (W/3)^{1.2}$$

k = particle size multiplier for particle size range and units of interest;

sL = road surface silt loading (grams per square meter);

W = average weight of vehicles traveling the roads (megagrams).

The following default assumptions are used by URBEMIS2007:

k = 0.016 (for the 10 microns and under particle size cutoff)

sL = 0.1 (allowable range of 0.02-400 grams per square meter)

W = 2.2 (allowable range of 1.8-38 megagrams)

lb/VMT	0.001433516
Total VMT Project	-2232705
Total lbs PM10/yr	-3200.61893
Total lbs PM2.5/yr	-672.1299754
Total lbs PM10/day	-8.768818987
Total lbs PM2.5/day	-1.841451987



Highest (Most Conservative) EMFAC2007 (version 2.3) Emission Factors for On-Road Passenger Vehicles & Delivery Trucks

Projects in the SCAQMD (Scenario Years 2007 - 2026)
Derived from Peak Emissions Inventory (Winter, Annual, Summer)

Vehicle Class:

Passenger Vehicles (<8500 pounds) & Delivery Trucks (>8500 pounds)

The following emission factors were compiled by running the California Air Resources Board's EMFAC2007 (version 2.3) Burden Model, taking the weighted average of vehicle types and simplifying into two categories:

Passenger Vehicles & Delivery Trucks.

These emission factors can be used to calculate on-road mobile source emissions for the vehicle categories listed in the tables below, by use of the following equation:

$$\text{Emissions (pounds per day)} = N \times TL \times EF$$

where N = number of trips, TL = trip length (miles/day), and EF = emission factor (pounds per mile)

This methodology replaces the old EMFAC emission factors in Tables A-9-5-J-1 through A-9-5-L in Appendix A9 of the current SCAQMD CEQA Handbook. All the emission factors account for the emissions from start, running and idling exhaust. In addition, the ROG emission factors include diurnal, hot soak, running and resting emissions, and the PM10 & PM2.5 emission factors include tire and brake wear.

Scenario Year: 2007

All model years in the range 1965 to 2007

Passenger Vehicles (pounds/mile)		Delivery Trucks (pounds/mile)	
CO	0.01155158	CO	0.02407553
NOx	0.00121328	NOx	0.02508445
ROG	0.00118234	ROG	0.00323145
SOx	0.00001078	SOx	0.00002626
PM10	0.00008447	PM10	0.00091020
PM2.5	0.00005243	PM2.5	0.00078884
CO2	1.10672236	CO2	2.72245619

Scenario Year: 2008

All model years in the range 1965 to 2008

Passenger Vehicles (pounds/mile)		Delivery Trucks (pounds/mile)	
CO	0.01054844	CO	0.02194915
NOx	0.00110288	NOx	0.02371258
ROG	0.00107919	ROG	0.00299270
SOx	0.00001075	SOx	0.00002565
PM10	0.00008505	PM10	0.00085607
PM2.5	0.00005293	PM2.5	0.00073933
CO2	1.09953226	CO2	2.71943400

Scenario Year: 2009

All model years in the range 1965 to 2009

Passenger Vehicles (pounds/mile)		Delivery Trucks (pounds/mile)	
CO	0.00968562	CO	0.02016075
NOx	0.00100518	NOx	0.02236636
ROG	0.00099245	ROG	0.00278899
SOx	0.00001066	SOx	0.00002679
PM10	0.00008601	PM10	0.00080550
PM2.5	0.00005384	PM2.5	0.00069228
CO2	1.09755398	CO2	2.72330496

Scenario Year: 2010

All model years in the range 1966 to 2010

Passenger Vehicles (pounds/mile)		Delivery Trucks (pounds/mile)	
CO	0.00826276	CO	0.01843765
NOx	0.00091814	NOx	0.02062460
ROG	0.00091399	ROG	0.00258958
SOx	0.00001077	SOx	0.00002701
PM10	0.00008698	PM10	0.00075121
PM2.5	0.00005478	PM2.5	0.00064233
CO2	1.09568235	CO2	2.73222199



Highest (Most Conservative) EMFAC2007 (version 2.3)
Emission Factors for On-Road Passenger Vehicles & Delivery Trucks
 Projects in the SCAQMD (Scenario Years 2007 - 2026)
 Derived from Peak Emissions Inventory (Winter, Annual, Summer)

Vehicle Class:
Passenger Vehicles (<8500 pounds) & Delivery Trucks (>8500 pounds)

Scenario Year: 2011

All model years in the range 1967 to 2011

Passenger Vehicles (pounds/mile)		Delivery Trucks (pounds/mile)	
CO	0.00826276	CO	0.01693242
NOx	0.00084460	NOx	0.01893366
ROG	0.00085233	ROG	0.00241868
SOx	0.00001077	SOx	0.00002728
PM10	0.00008879	PM10	0.00070097
PM2.5	0.00005653	PM2.5	0.00059682
CO2	1.10235154	CO2	2.75180822

Scenario Year: 2012

All model years in the range 1968 to 2012

Passenger Vehicles (pounds/mile)		Delivery Trucks (pounds/mile)	
CO	0.00765475	CO	0.01545741
NOx	0.00077583	NOx	0.01732423
ROG	0.00079628	ROG	0.00223776
SOx	0.00001073	SOx	0.00002667
PM10	0.00008979	PM10	0.00064975
PM2.5	0.00005750	PM2.5	0.00054954
CO2	1.10152540	CO2	2.76628414

Scenario Year: 2013

All model years in the range 1969 to 2013

Passenger Vehicles (pounds/mile)		Delivery Trucks (pounds/mile)	
CO	0.00709228	CO	0.01407778
NOx	0.00071158	NOx	0.01577311
ROG	0.00074567	ROG	0.00206295
SOx	0.00001072	SOx	0.00002682
PM10	0.00009067	PM10	0.00059956
PM2.5	0.00005834	PM2.5	0.00050174
CO2	1.10087435	CO2	2.78163459

Scenario Year: 2014

All model years in the range 1970 to 2014

Passenger Vehicles (pounds/mile)		Delivery Trucks (pounds/mile)	
CO	0.00660353	CO	0.01284321
NOx	0.00065484	NOx	0.01425162
ROG	0.00070227	ROG	0.00189649
SOx	0.00001069	SOx	0.00002754
PM10	0.00009185	PM10	0.00054929
PM2.5	0.00005939	PM2.5	0.00045519
CO2	1.10257205	CO2	2.79845465

Scenario Year: 2015

All model years in the range 1971 to 2015

Passenger Vehicles (pounds/mile)		Delivery Trucks (pounds/mile)	
CO	0.00614108	CO	0.01169445
NOx	0.00060188	NOx	0.01285026
ROG	0.00066355	ROG	0.00173890
SOx	0.00001070	SOx	0.00002741
PM10	0.00009259	PM10	0.00050307
PM2.5	0.00006015	PM2.5	0.00041268
CO2	1.10192837	CO2	2.81247685

Scenario Year: 2016

All model years in the range 1972 to 2016

Passenger Vehicles (pounds/mile)		Delivery Trucks (pounds/mile)	
CO	0.00575800	CO	0.01080542
NOx	0.00055658	NOx	0.01172881
ROG	0.00063254	ROG	0.00161521
SOx	0.00001071	SOx	0.00002767
PM10	0.00009392	PM10	0.00046606
PM2.5	0.00006131	PM2.5	0.00037868
CO2	1.10677664	CO2	2.83134285



Highest (Most Conservative) EMFAC2007 (version 2.3)
Emission Factors for On-Road Passenger Vehicles & Delivery Trucks
 Projects in the SCAQMD (Scenario Years 2007 - 2026)
 Derived from Peak Emissions Inventory (Winter, Annual, Summer)

Vehicle Class:

Passenger Vehicles (<8500 pounds) & Delivery Trucks (>8500 pounds)

Scenario Year: 2017

All model years in the range 1973 to 2017

Passenger Vehicles (pounds/mile)		Delivery Trucks (pounds/mile)	
CO	0.00537891	CO	0.00998101
NOx	0.00051297	NOx	0.01070034
ROG	0.00060109	ROG	0.00150242
SOx	0.00001079	SOx	0.00002723
PM10	0.00009446	PM10	0.00043131
PM2.5	0.00006192	PM2.5	0.00034605
CO2	1.10627489	CO2	2.84005015

Scenario Year: 2018

All model years in the range 1974 to 2018

Passenger Vehicles (pounds/mile)		Delivery Trucks (pounds/mile)	
CO	0.00502881	CO	0.00923234
NOx	0.00047300	NOx	0.00979416
ROG	0.00057178	ROG	0.00139856
SOx	0.00001071	SOx	0.00002749
PM10	0.00009494	PM10	0.00040110
PM2.5	0.00006234	PM2.5	0.00031792
CO2	1.10562643	CO2	2.84646835

Scenario Year: 2019

All model years in the range 1975 to 2019

Passenger Vehicles (pounds/mile)		Delivery Trucks (pounds/mile)	
CO	0.00471820	CO	0.00857192
NOx	0.00043716	NOx	0.00900205
ROG	0.00054654	ROG	0.00130563
SOx	0.00001072	SOx	0.00002706
PM10	0.00009523	PM10	0.00037393
PM2.5	0.00006259	PM2.5	0.00029276
CO2	1.10496100	CO2	2.85060182

Scenario Year: 2020

All model years in the range 1976 to 2020

Passenger Vehicles (pounds/mile)		Delivery Trucks (pounds/mile)	
CO	0.00444247	CO	0.00799617
NOx	0.00040506	NOx	0.00831802
ROG	0.00052463	ROG	0.00122382
SOx	0.00001073	SOx	0.00002733
PM10	0.00009550	PM10	0.00035054
PM2.5	0.00006279	PM2.5	0.00027128
CO2	1.10456157	CO2	2.85148109

Scenario Year: 2021

All model years in the range 1977 to 2021

Passenger Vehicles (pounds/mile)		Delivery Trucks (pounds/mile)	
CO	0.00421218	CO	0.00748303
NOx	0.00037757	NOx	0.00773500
ROG	0.00050573	ROG	0.00115568
SOx	0.00001073	SOx	0.00002755
PM10	0.00009640	PM10	0.00033125
PM2.5	0.00006364	PM2.5	0.00025331
CO2	1.11009559	CO2	2.86434187

Scenario Year: 2022

All model years in the range 1978 to 2022

Passenger Vehicles (pounds/mile)		Delivery Trucks (pounds/mile)	
CO	0.00397866	CO	0.00699290
NOx	0.00035150	NOx	0.00722470
ROG	0.00048658	ROG	0.00108569
SOx	0.00001072	SOx	0.00002774
PM10	0.00009661	PM10	0.00031501
PM2.5	0.00006389	PM2.5	0.00023906
CO2	1.11019931	CO2	2.87006769



Highest (Most Conservative) EMFAC2007 (version 2.3) **Emission Factors for On-Road Passenger Vehicles & Delivery Trucks**

Projects in the SCAQMD (Scenario Years 2007 - 2026)
 Derived from Peak Emissions Inventory (Winter, Annual, Summer)

Vehicle Class:

Passenger Vehicles (<8500 pounds) & Delivery Trucks (>8500 pounds)

Scenario Year: 2023

All model years in the range 1979 to 2023

Passenger Vehicles (pounds/mile)		Delivery Trucks (pounds/mile)	
CO	0.00377527	CO	0.00658123
NOx	0.00032851	NOx	0.00679147
ROG	0.00046900	ROG	0.00102852
SOx	0.00001070	SOx	0.00002790
PM10	0.00009676	PM10	0.00030109
PM2.5	0.00006405	PM2.5	0.00022582
CO2	1.11023373	CO2	2.87466338

Scenario Year: 2024

All model years in the range 1980 to 2024

Passenger Vehicles (pounds/mile)		Delivery Trucks (pounds/mile)	
CO	0.00358611	CO	0.00625076
NOx	0.00030721	NOx	0.00647083
ROG	0.00045136	ROG	0.00096578
SOx	0.00001080	SOx	0.00002807
PM10	0.00009676	PM10	0.00029407
PM2.5	0.00006410	PM2.5	0.00021880
CO2	1.11061572	CO2	2.88010717

Scenario Year: 2025

All model years in the range 1981 to 2025

Passenger Vehicles (pounds/mile)		Delivery Trucks (pounds/mile)	
CO	0.00342738	CO	0.00595363
NOx	0.00028846	NOx	0.00615945
ROG	0.00043545	ROG	0.00092178
SOx	0.00001070	SOx	0.00002761
PM10	0.00009679	PM10	0.00028425
PM2.5	0.00006418	PM2.5	0.00020958
CO2	1.11079571	CO2	2.88143570

Scenario Year: 2026

All model years in the range 1982 to 2026

Passenger Vehicles (pounds/mile)		Delivery Trucks (pounds/mile)	
CO	0.00328779	CO	0.00569435
NOx	0.00027141	NOx	0.00589869
ROG	0.00042052	ROG	0.00088403
SOx	0.00001076	SOx	0.00002716
PM10	0.00009687	PM10	0.00027657
PM2.5	0.00006415	PM2.5	0.00020187
CO2	1.11105829	CO2	2.88298299

Mr. Bill Lewis
c/o Mr. Steve Flynn
BELL ENTERPRISE
February 11, 2008
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ATTACHMENT B
PROJECT TRAFFIC REPORT

TRAFFIC REPORT
NEIGHBORHOOD SHOPPING CENTER
AT VALLEY CENTER
San Diego County, California
March 5, 2007

LLG Ref. 3-06-1639

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APPENDICES

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TRAFFIC ASSESSMENT REPORT

NEIGHBORHOOD SHOPPING CENTER

AT VALLEY CENTER

San Diego County, California
March 5, 2007

1.0 INTRODUCTION

It is proposed to construct an 85,000 sq ft neighborhood shopping center anchored by a modest size grocery store in the Valley Center area. The site is located on the east side of Valley Center Road opposite Mirar De Valle Road in the Valley Center area of the County of San Diego. *Figure 1-1* shows a project area map.

The purpose of this traffic assessment is to estimate the amount of new trips, which will be added to the project area roadways as a result of the retail development. An assumption is that a portion of the traffic that would patronize the proposed project would otherwise need to travel to other retail destinations, principally in the City of Escondido.

In order to obtain data to assist in preparing this traffic assessment, an Economic Analysis was prepared by the London Group Realty Advisors, Inc (dated July 2006). This analysis evaluated the development opportunity of a local service retail center at the subject site and studied the traffic and commute patterns of the Valley Center population. This economic analysis is attached as Appendix A. In addition, a SANDAG Select Zone Assignment was prepared to aid in determining the distribution of retail traffic, which would occur for the subject project.

Two different approaches were utilized to determine the amount of new project trips, one was completely based on the Economic Study conclusions (herein referred to as the *Economic Study Approach*) and the other was principally based on SANDAG methodologies (herein referred to as the *SANDAG Approach*). The Economic Study approach results are based on project specific and area specific traffic patterns, whereas as the SANDAG approach results are generally based on regional traffic pattern at various retail centers in San Diego County. Both approaches are explained in detail in the following sections in this report. Included in this traffic study are the traffic assessment methodology, the analysis results, and the report conclusions.

2.0 PROJECT TRIP GENERATION/DISTRIBUTION/ASSIGNMENT

2.1 Project Trip Generation

Trip rates from the SANDAG 'Brief Guide of Vehicular Traffic Generation Rates', April 2002, were utilized to determine the traffic generated by the project. The neighborhood shopping center rate was used for the project trip generation. *Table 2-1* shows the forecasted trip generation for the project.

TABLE 2-1
TRIP GENERATION SUMMARY

Land Use	Quantity	Daily Trip Ends (ADT)	
		Rate	Volume
Neighborhood Shopping Center	85,000 SF	120 / 1,000 SF	10,200

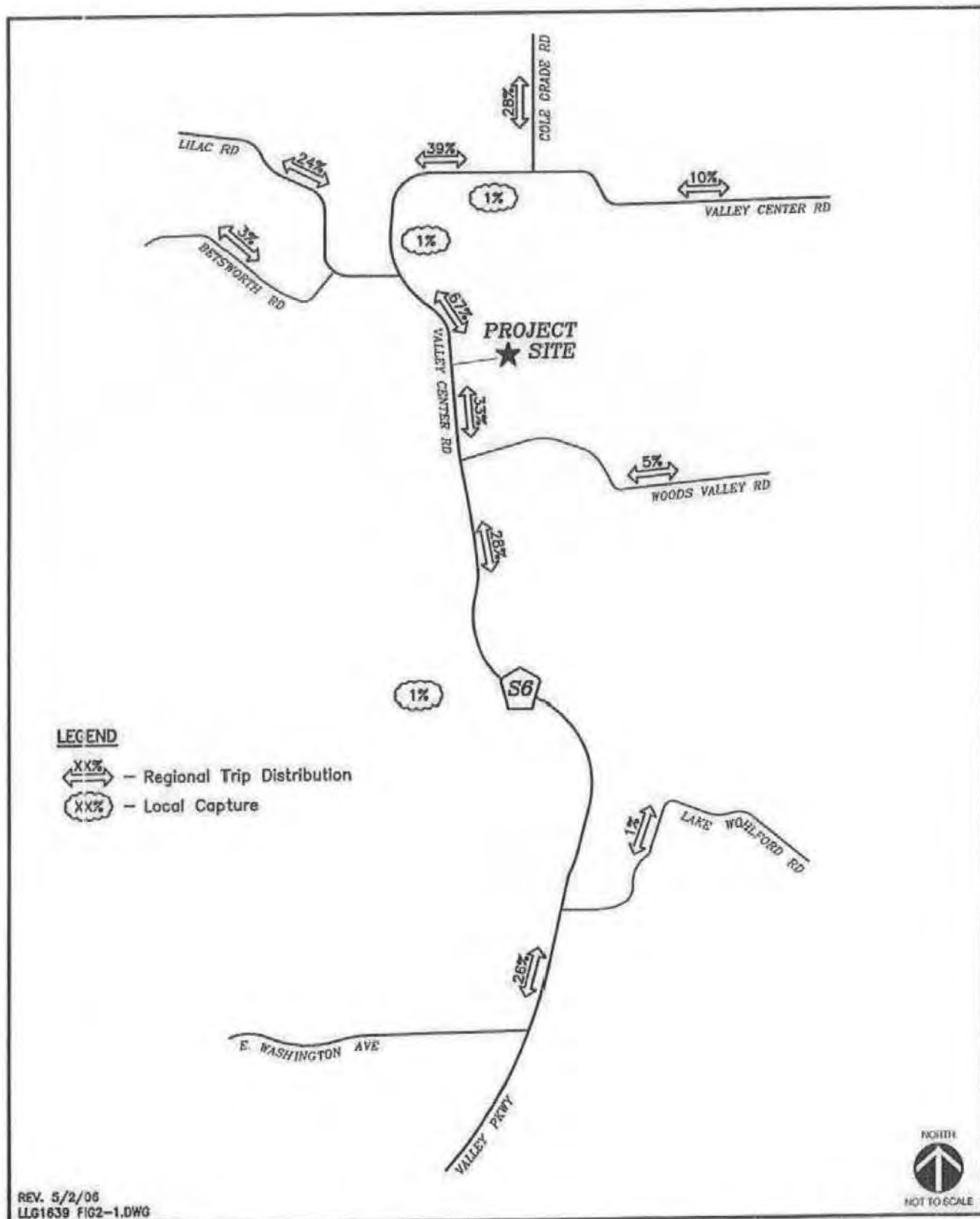
Footnotes:

1. Generation rate obtained from the SANDAG Brief Guide (April 2002).
2. Trip-ends are one-way traffic movements, either entering or leaving.

2.2 Trip Distribution

The project traffic was distributed to the street system based on a Select Zone Assignment (SZA) obtained by running the Series 10 Model (see *Appendix B*) and the Valley Center Retail Economic Analysis Report (see *Appendix A*). The SZA uses the land-use assumptions in the Series 10 Transportation Forecast to distribute traffic volumes generated by the Valley Center development throughout the region. It is noteworthy that the Select Zone Model was run considering the Valley Center development as its own TAZ. *Figure 2-1* depicts the regional project traffic distribution percentages.

As discussed earlier, a portion of the traffic that would patronize the proposed project would otherwise travel to other retail destinations principally in Escondido. *Figure 2-2* depicts the traffic distribution for drivers, which would otherwise patronize existing Escondido retail opportunities.



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GREENSPAN
engineers

Figure 2-1
Project Traffic Distribution

Neighborhood Shopping Center

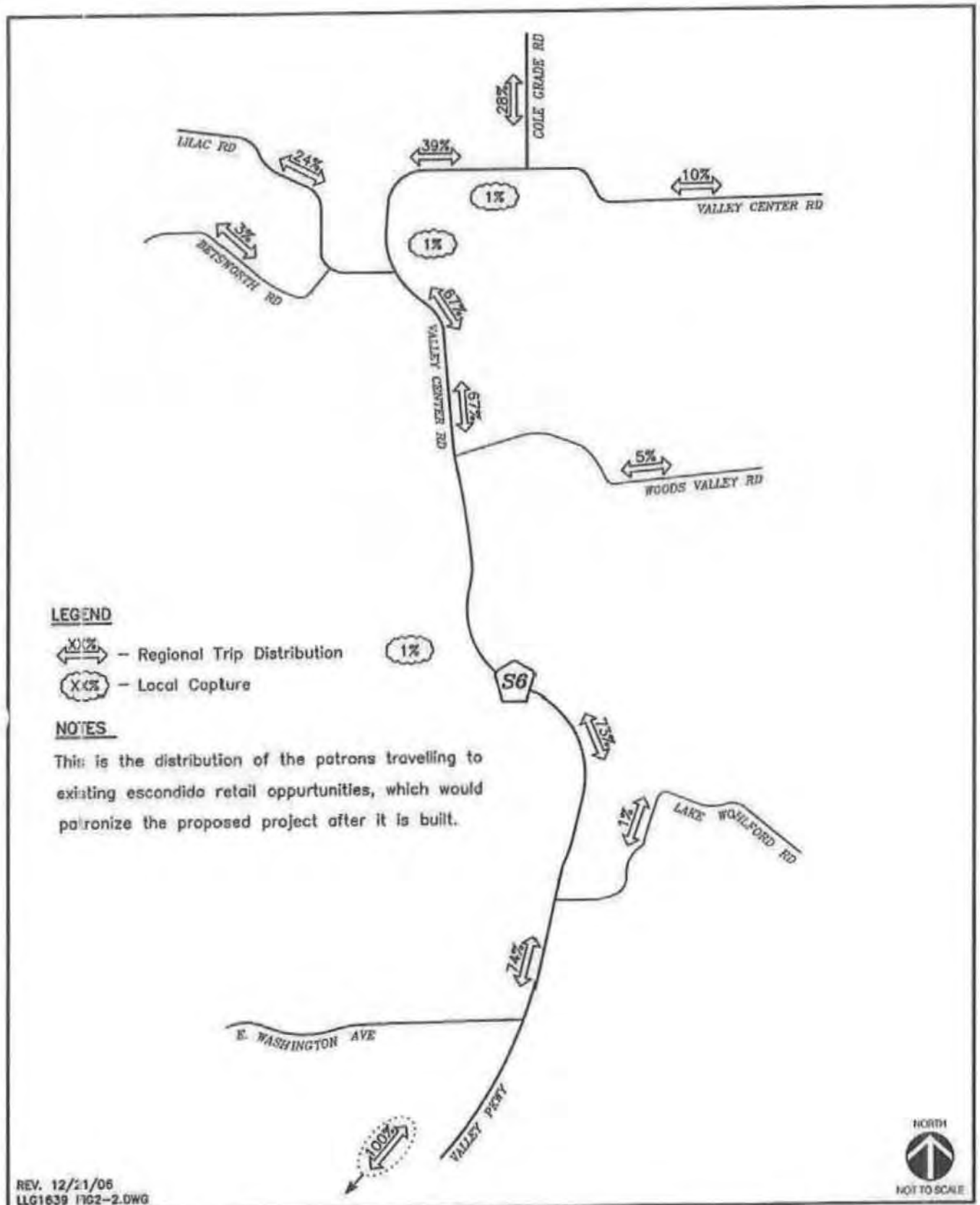


Figure 2-2
Traffic Distribution To Existing Escondido Retail Opportunities

Neighborhood Shopping Center

3.0 ECONOMIC STUDY APPROACH

3.1 Economic Study Key Findings

(Source: Valley Center Retail Economic Analyses, The London Group Realty Advisors, Inc.)

In order to estimate the amount of project traffic, which is already on the street network, an Economic Analysis (see Appendix A) was conducted and the following key findings were obtained from the economic analysis study.

1. Valley Center will remain a commuter economic unless there is a fundamental change in land use policy introducing goods and services to the community so that local residents reduce shopping trips outside of the local area. In short, it is residential development that is generating traffic, not commercial development.
2. Economic surveys suggest that the majority of households gravitate towards Escondido for retail shopping trips (e.g. grocery and pharmacy needs). This has resulted in traffic increases along Valley Center Road, which is the main arterial for Valley Center residents (see page 4 of the Economic Study).
3. Households in Valley Center can currently support 78,400 to 118,061 square feet of pharmacy and grocery space, based on housing unit counts and demand estimates. By 2030, it is estimated that Valley Center will be able to support between 155,484 and 234,141 square feet of pharmacy and grocery retail (see page 29 of the Economic Study).
4. A small grocer, two mini-marts, and a pharmacy currently exist in Valley Center, totaling approximately 24,000 square feet. There are ample neighborhood shopping centers in Escondido, however, these centers are difficult to access because of their distance from the Valley Center area and increasing traffic on Valley Center Road (see page 19 of the Economic Study). This suggests that Valley Center is and will continue to be significantly underserved in terms of pharmacy and grocery space. As a result, traffic will continue to increase since residents must commute to other communities for daily shopping and retail needs.
5. A pharmacy and retail facility at the subject site will likely alleviate traffic on Valley Center Road because the site would "capture" shoppers traveling to Escondido. The Economic Study also concluded that because of Valley Center's shortage of retail space, any convenience retail introduced in Valley Center would reduce traffic (see page 5 of the Economic Study).

6. The average household makes 2.1 grocery trips per week. Currently, Valley Center households generate 16,006 grocery trips per week. The Economic Study concluded that a pharmacy or grocery store at the subject site could reduce grocery and pharmacy trips on Valley Center Road, particularly for 72% of Valley Center residents who would not otherwise leave valley Center on a daily basis (i.e. local employees or residents not in the labor force). The study estimated that a pharmacy and grocery store at the subject site will reduce trips on valley Center Road by a range of 11,500 to 15,000 a week, resulting in 59,800 to 78,000 reduced trips a year. By 2010, the subject development could reduce trips by 12,300 to 16,000 a week or 147,600 to 192,000 trips a year (see page 17 of the Economic Study).

The final conclusion stated in the Economic Analysis Study is that *"a sizable neighborhood center at the subject site, anchored by a grocery store, would reduce rather than create traffic because it would capture shopping trips in the local market, eliminating extended shopping trips to Escondido"* (see page 5 of the Economic Study).

3.2 Trip Generation/Assignment

The retail project traffic generation was divided into (1) primary new trips generated by the project (referred as *"primary new trips"* in this section), (2) primary retail trips that now travel to other retail destinations in Escondido that would instead patronize the project after it is built, instead of traveling to Escondido (herein referred as *"primary (otherwise going to Escondido) trips"*) and (3) "pass-by trips".

3.2.1 Primary New Trips

Primary trips are the trips, which are made for the specific purpose of visiting the shopping center and therefore would return to its place of origin, such as home-to-shopping store-to-home. However, in this project they are further divided into two categories, the primary new trips and the primary (otherwise going to Escondido) trips. Primary new trips are trips that would add trips to the local system, in other words the trips that are not currently patronizing other retail destinations.

The Economic Study identified employment as one of the primary new trip generators and estimated that the project would generate about 108 new local jobs. Based on the Institute of Transportation Engineers (ITE) Trip Generation Manual this would account for approximately 5% of the project traffic. Appendix C contains a detailed calculation of the primary new trips percentage. Therefore 510 trips (5% of 10,200 ADT) were assigned to the street network based on the distribution illustrated in Figure 2-1. Appendix D-1 has the project assignment for the primary new trips.

3.2.2 Primary (otherwise going to Escondido) Trips

As discussed above, primary (otherwise going to Escondido) trips are trips that currently patronize other retail destinations in Escondido but would patronize the proposed project after it is built. The Economic Study indicated that the subject site would likely capture the shopping trips of 72% of Valley Center residents who would otherwise not leave Valley Center on a daily basis (page 5 of the Economic Study). However, because of store loyalty, some shoppers will continue to drive to Escondido for their pharmacy and grocery needs. The Economic study indicated the store loyalty to

be approximately 18%. Therefore the total primary (otherwise going to Escondido) trips were calculated to be approximately 54% ($=72\% - 18\%$) of the project trips.

Accordingly, 5508 trips (54% of 10,200 ADT) were assigned to the street network based on the distribution illustrated in Figure 2-2 (Appendix D-2 has the assignment), which indicates the trips currently patronizing retail markets in Escondido (*herein referred as "Economic Study pre-project trips"*). Similarly, 5508 trips were assigned to street network as project traffic based on the distribution illustrated in Figure 2-1 (Appendix D-3 has the assignment), which indicates the trips patronizing the proposed project when it is built.

3.2.3 Pass-By Trips

Pass-by trips are trips attracted from traffic already on the street system passing near the site while going from one location to another such as work-to-retail-to home. This is as opposed to primary trips in which the trip returns to its place of origin such as home-to-shopping store-to-home. Appendix C contains a detailed description of pass-by trips as contained in the Institute of Transportation Engineers (ITE) Trip Generation Manual.

Based on the previous calculations for the primary trips, pass-by trips were calculated to be 41% ($=100\% \text{ total} - 5\% \text{ primary new trips} - 54\% \text{ primary Escondido trips}$) of the project trips, which are 4182 trips per day. Even though the pass-by trips would have an impact on the project driveway intersections, the pass-by trips would neither add nor reduce the daily trips on the local street network and therefore they were not distributed and assigned as part of this traffic assessment.

3.3 Net Traffic On Streets

The sum of the primary new trips (Appendix D-1) and the primary (otherwise going to Escondido) trips (which would patronize the project when built, Appendix D-3) represents the total primary project trips on the street system (*herein referred as the "Economic Study post project trips"*). Appendix D-4 has the project assignment for the economic study post project trips.

The difference between the Economic Study Post Project Trips (Appendix D-4) and the Economic Study Pre-Project Trips (Appendix D-2) represents the net addition (or reduction) in the traffic on the streets. The net addition (or reduction) in traffic volumes is depicted in Figure 3-1.

3.4 Total Vehicle Miles Traveled

Based on the above analysis, Daily Vehicle Miles Traveled (DVMT) was calculated for the new trips generated by the project as shown in Table 3-1. The project is predicted to add traffic to some roadways and subtract traffic from others (since many drivers will no longer need to drive into Escondido). The average miles traveled were estimated based on the approximate average distance to residential neighborhoods on the respective street. Based on Table 4-1 the project would reduce about 21,323 VMT on the roadway system when the project is built. This is mainly due to the project capturing trips that would otherwise go to other retail opportunities.

The Annual Vehicle Miles Traveled (AVMT) for the entire neighborhood was calculated for both economic study pre-project and economic study post project by multiplying the VMT by 365. Based on this calculation the post net project AVMT savings due to the project was calculated to be approximately 8 million AVMT ($=21,323 \times 365$).

TABLE 3-1
VEHICLE MILES TRAVELED - ECONOMIC STUDY APPROACH

Roadway	Net Traffic On Streets ^a	Average Miles Traveled	Daily Vehicle Miles Traveled
Cole Grade Rd			
<i>North of Valley Center</i>	143	3	429
Valley Center Rd			
<i>East of Cole Grade Rd</i>	51	4	204
<i>Between Cole Grade Rd & Lilac Rd</i>	199	1	199
<i>Between Lilac Rd & Project Entrance</i>	342	1	342
<i>Between Project Site to Woods Valley Rd</i>	-1705 ^b	1	-1705
<i>Between Woods Valley Rd & Lake Wohlford Rd</i>	-2336 ^b	4	-9344
<i>Between Lake Wohlford Rd & Washington Ave.</i>	-2511 ^b	1	-2511
<i>Between Lake Washington Ave & Exist Shopping Center.</i>	-3203 ^b	3	-9609
Lilac Rd			
<i>North of Betsworth Rd</i>	122	4	488
Betsworth Rd			
<i>West of Lilac Rd</i>	15	4	60
Woods Valley Rd			
<i>East of Valley Center Rd</i>	26	4	104
Wohlford Rd			
<i>East of Valley Center Rd</i>	5	4	20
Total Additional Miles Traveled Due to New Trips			-21,323

Footnote:

a. Volumes from Figure 3-1.

b. Traffic decreases due to drivers no longer needing to drive to Escondido

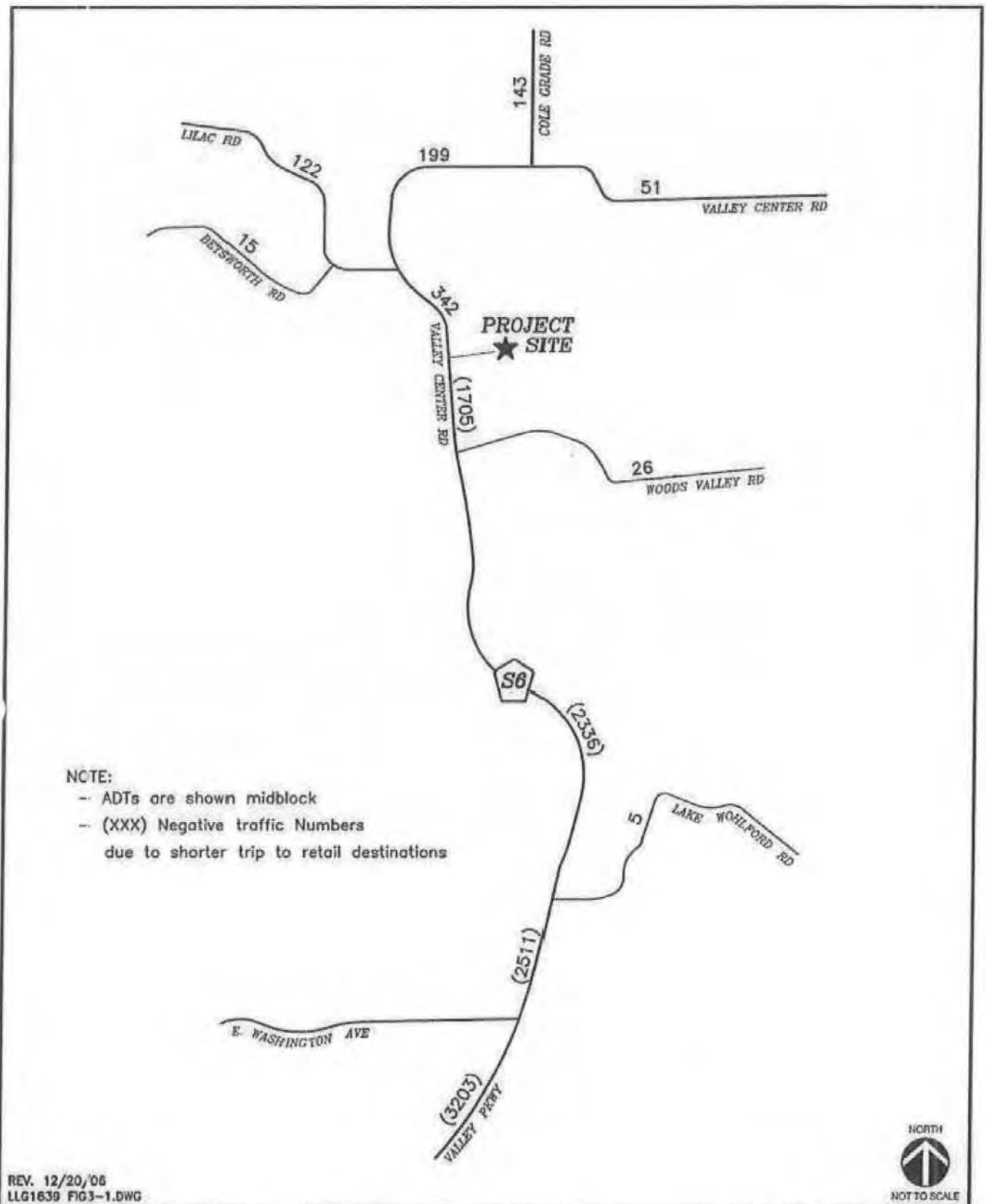


Figure 3-1

Economic Study Approach - Net New Project Trips

4.0 SANDAG APPROACH

4.1 Trip Generation/Assignment

As discussed earlier in Section 3.0, the retail project traffic generation was divided into (1) primary new trips generated by the project (*referred as "primary new trips" in this section*), (2) primary retail trips that now travel to other retail destinations in Escondido that would instead patronize the project after it is built, instead of traveling to Escondido (*herein referred as "primary (otherwise going to Escondido) trips"*) and (3) "pass-by trips".

4.1.1 Pass-By Trips

Based on the SANDAG 'Brief Guide of Vehicular Traffic Generation Rates', April 2002 pass-by trips were estimated to be 63% of the total traffic. Even though the pass-by trips would have an impact on the project driveway intersections, the pass-by trips would neither add nor reduce the daily trips on the local street network and therefore they were not distributed and assigned as part of the traffic assessment.

4.1.2 Primary New Trips

In order to estimate the primary new trips due to employment, the assumption from the Economic Study was utilized, which indicated that employment would account for approximately 5% of the project traffic. Appendix C contains a detailed calculation of the primary new trips percentage. However, to be conservative, and to account for increased frequency of the shoppers due to the closeness of the proposed shopping center an additional 5% of the project traffic was assumed to be primary new trips. Therefore 1020 trips (10% of 10,200 ADT) were assigned to the street network based on the distribution illustrated in Figure 2-1. Appendix E-1 has the project assignment for the primary new trips.

4.1.3 Primary (otherwise going to Escondido) Trips

Based on the previous calculations for the pass-by trips and the primary new trips, Primary (otherwise going to Escondido) Trips were calculated to be 27% (= 100% total – 63% Pass-by trips – 10% primary new trips) of the project trips.

Accordingly, 2754 trips (27% of 10,200 ADT) were assigned to the street network based on the distribution illustrated in Figure 2-2 (Appendix E-2 has the assignment), which indicates the trips currently patronizing retail markets in Escondido (*herein referred as "SANDAG pre-project trips"*). Similarly, 5508 trips were assigned to street network as project traffic based on the distribution illustrated in Figure 2-1 (Appendix E-3 has the assignment), which indicates the trips patronizing the proposed project when it is built.

4.2 Net Traffic On Streets

The sum of the primary new trips (Appendix E-1) and the primary (otherwise going to Escondido) trips (Appendix E-3) represents the total primary project trips on the streets system (*herein referred as the "SANDAG post project trips"*). Appendix E-4 has the project assignment for the economic study post project trips.

The difference between the SANDAG Post Project Trips (Appendix E-4) and the SANDAG Pre-Project Trips (Appendix E-2) represents the net addition (or reduction) in the traffic on the streets. The net addition (or reduction) in traffic volumes is depicted in *Figure 4-1*.

4.3 Total Vehicle Miles Traveled

Based on the above analysis, Daily Vehicle Miles Traveled (DVMT) was calculated for the new trips generated by the project as shown in Table 4-1. The project is predicted to add traffic to some roadways and subtract traffic for others (since many drivers will no longer need to drive into Escondido). The average miles traveled were estimated based on the approximate average distance to residential neighborhoods on the respective street. Based on Table 4-1 the project would reduce about 6,117 VMT on the roadway system when the project is built. This is mainly due to the project capturing trips that would otherwise go to other retail opportunities.

The Annual Vehicle Miles Traveled (AVMT) for the entire neighborhood was calculated for both SANDAG pre-project and SANDAG post project by multiplying the VMT by 365. Based on this calculation the post net AVMT savings due to the project was calculated to be approximately 2 million AVMT ($=6,117 \times 365$).

TABLE 4-1
VEHICLE MILES TRAVELED - SANDAG APPROACH

Roadway	Net Traffic On Streets^a	Average Miles Traveled	Daily Vehicle Miles Traveled
Cole Grade Rd			
<i>North of Valley Center</i>	286	3	858
Valley Center Rd			
<i>East of Cole Grade Rd</i>	102	4	408
<i>Between Cole Grade Rd & Lilac Rd</i>	398	1	398
<i>Between Lilac Rd & Project Entrance</i>	683	1	683
<i>Between Project Site to Woods Valley Rd</i>	-599 ^b	1	-599
<i>Between Woods Valley Rd & Lake Wohlford Rd</i>	-953 ^b	4	-3812
<i>Between Lake Wohlford Rd & Washington Ave.</i>	-1057 ^b	1	-1057
<i>Between Lake Washington Ave & Exist Shopping Center.</i>	-1448 ^b	3	-4344
Lilac Rd			
<i>North of Betsworth Rd</i>	245	4	980
Betsworth Rd			
<i>West of Lilac Rd</i>	31	4	124
Woods Valley Rd			
<i>East of Valley Center Rd</i>	51	4	204
Wohlford Rd			
<i>East of Valley Center Rd</i>	10	4	40
Total Additional Miles Traveled Due to New Trips			-6,117

Footnote:

a. Volumes from Figure 4-1.

b. Traffic decreases due to drivers no longer needing to drive to Escondido

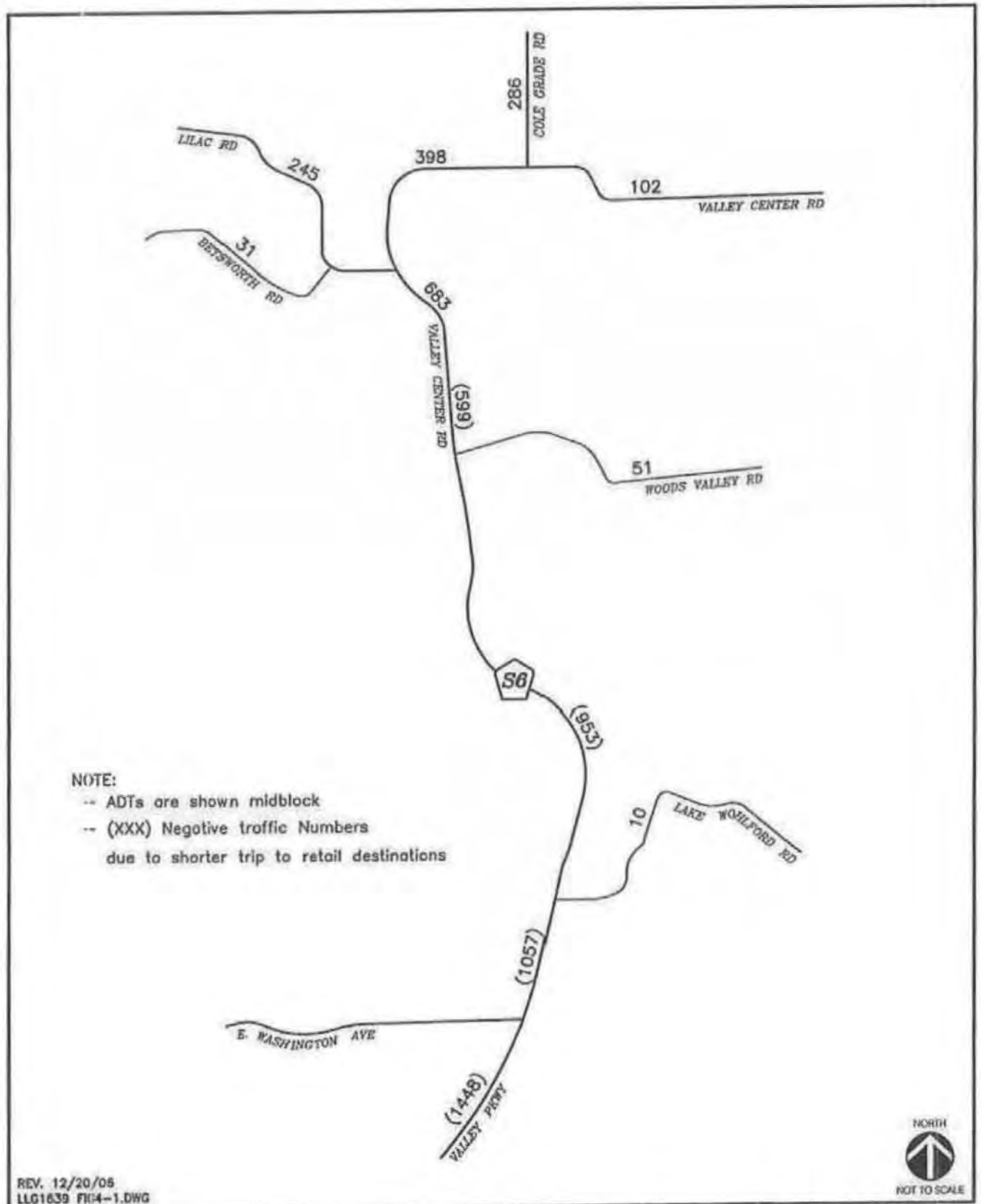


Figure 4-1

SANDAG Approach - Net New Project Trips

Figure 4-1 SANDAG Approach – Net New Project Trips

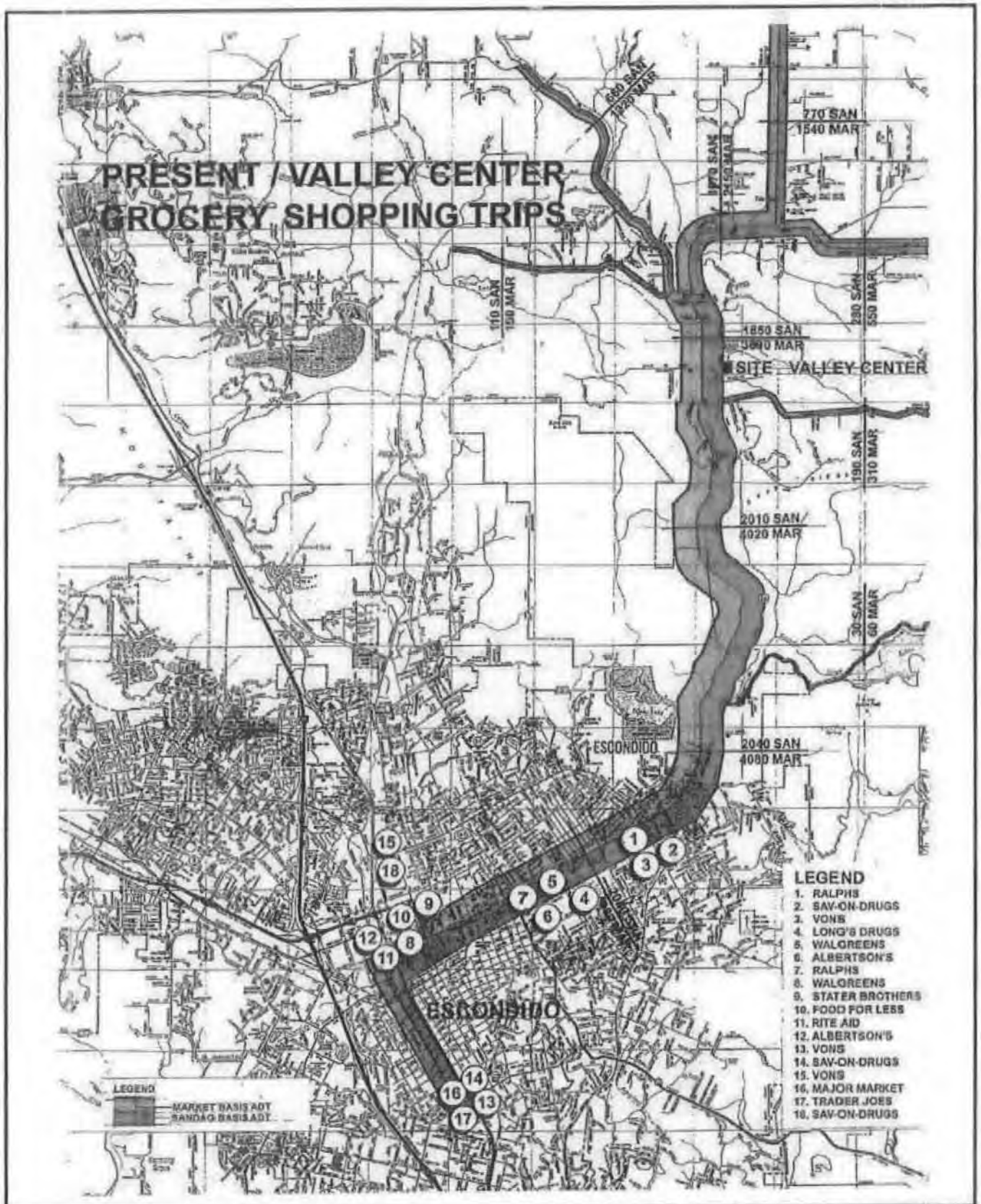
5.0 CONCLUSION

The Economic Analysis prepared for the subject site by the London Group Realty Advisors, Inc (dated July 2006) concludes that a 5.2-acre neighborhood center at the subject site would reduce rather than create traffic because it would capture shopping trips that would otherwise extend to Escondido. This is because there are no other similar retail opportunities in the Valley Center area and therefore residents must travel long distances out of the area (the City of Escondido provides the closest opportunities) to shop.

To supplement the conclusion of the market analysis, a traffic assessment was conducted to estimate the roadway locations where traffic would increase or decrease. Based on the Economic Analysis Approach, the vehicle miles traveled would be reduced by over 21,323 vehicle miles per day (or 8 million vehicle miles per year) if the project were built.

A different approach based on regional SANDAG methodologies predicts that the vehicle miles traveled would be reduced by over 6,117 vehicle miles per day (or 2 million vehicle miles per year) if the project were built.

Figure 5-1 graphically illustrates the pre-project traffic and Figure 5-2 graphically illustrates the post-project traffic for both the approaches. Similarly, Figure 5-3 represents the annual vehicle miles for the post and pre project for both approaches.



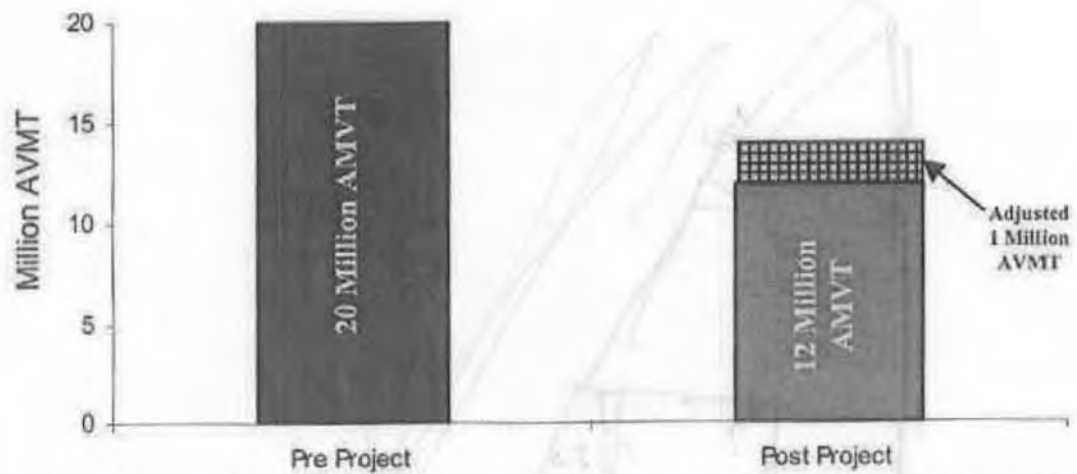
Source: Mr. William Lewis, 2006
LLG1639 FIG5-1.DWG

LINSCOTT
LAW &
GREENSPAN
engineers

Figure 5-1

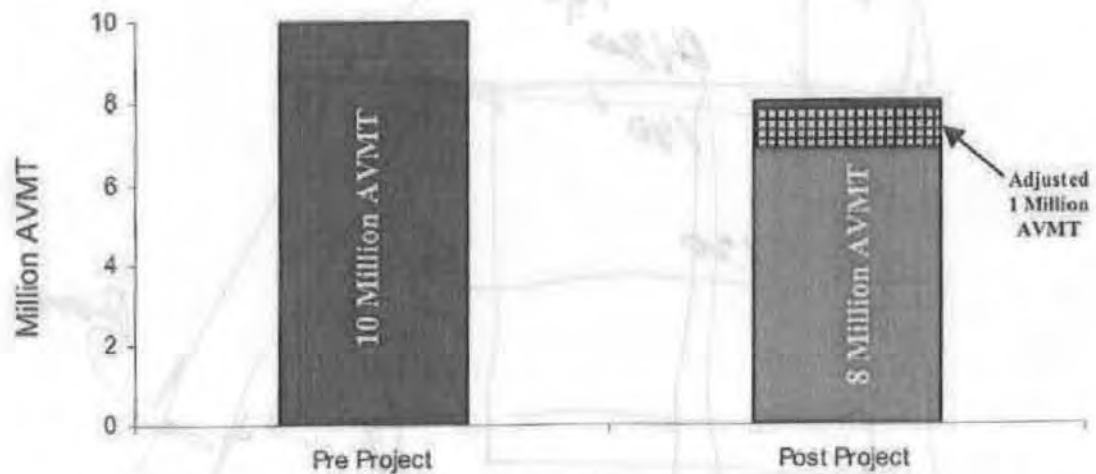
Pre Project Grocery Shopping Trips

ECONOMIC STUDY APPROACH



Valley Center Neighborhood Grocery Shoppers (Future Project Patrons Only) AVMT

SANDAG APPROACH



Valley Center Neighborhood Grocery Shoppers (Future Project Patrons Only) AVMT

Legend

AVMT: Annual Vehicle Miles Traveled

Pre Project Grocery Shoppers AVMT

Post Project Grocery Shoppers AVMT

Adjusted (Due to the Increased Shopping Trips) Project Related Grocery Shoppers AVMT

Figure 5-3

ANNUAL VEHICLE MILES TRAVELED

Neighborhood Shopping Center

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