

17. TRAFFIC CONTROL DEVICES

The California Manual on Uniform Traffic Control Devices, the Caltrans Standard Specs and the Caltrans Highway Design manual shall be utilized to determine traffic warrants, design and construction procedures for all traffic control devices with the exception of left-turn lanes. Warrants for construction of a left-turn lane on County maintained roads as defined in Sections 18.112.040 through 18.112.080 of the County Code shall be as follows:

Left-Turn Lane Warrants: Use Permits or modifications thereof shall trigger the application of the following warrants to determine the necessity for a left-turn lane for the proposed use.

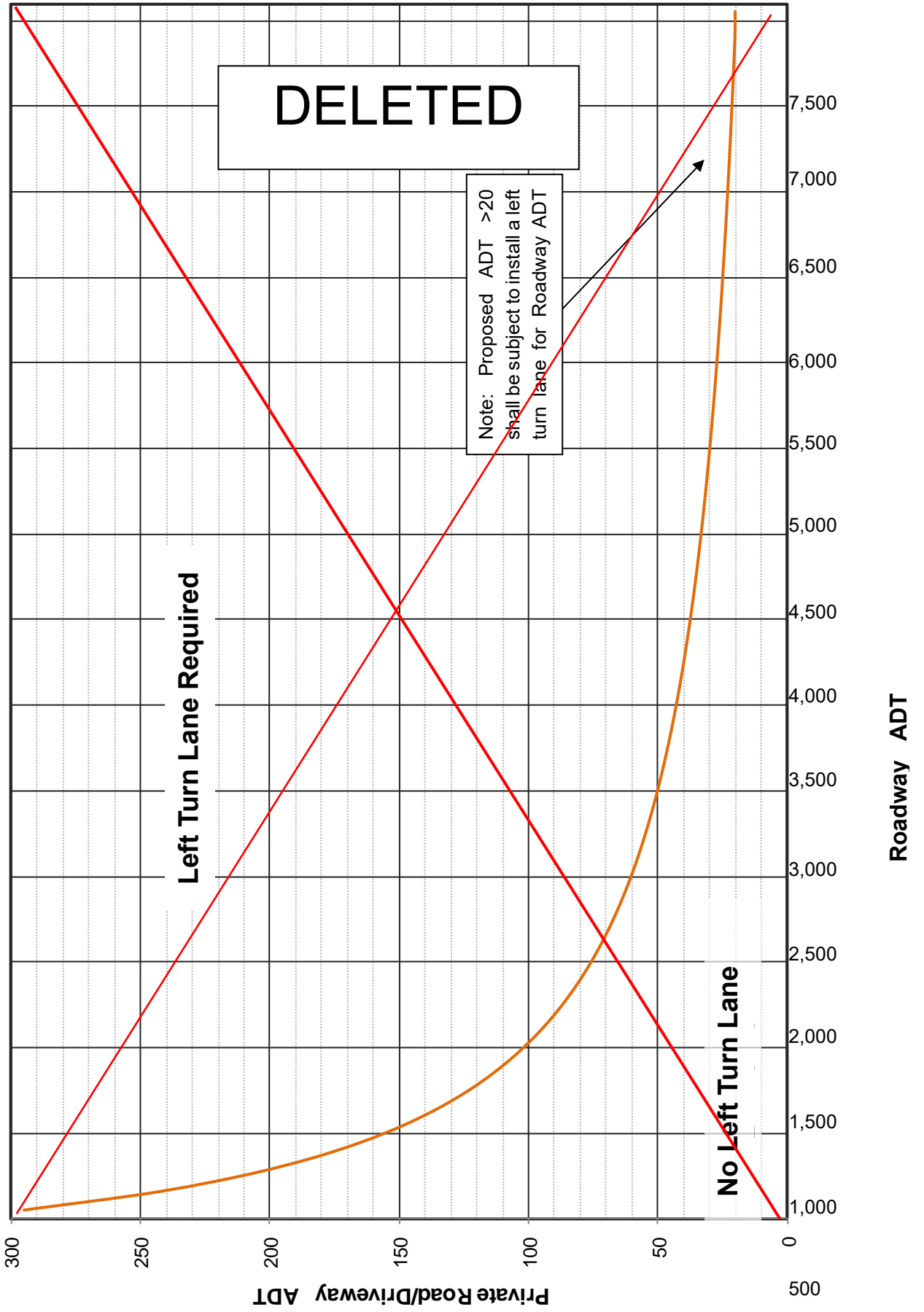
(a) Application of the Left-Turn Lane Screening Process as described in Attachment E (User Guide for Left-Turn Screening Process) based on NCHRP 745, County TIS Guidelines, and the proposed use.

(b) If the corner sight distance in advancing direction, measured from the driveway, is less than required per Caltrans design standards (Topic 405 Intersection Design Standards, Caltrans Highway Design Manual), roadway reconfiguration will be required to ensure all applicable sight distance requirements are met. This could include the installation of acceleration lanes, deceleration lanes, median refuges, and turn lanes.

(c) If traffic conditions or turning movements pose a considerable threat to public safety, as determined by the Director of Public Works, a left-turn lane shall be installed.

Design: Design of the left-turn lane shall be prepared by a Licensed Civil Engineer and be based on the County Standard Detail LTL-1, available at the PBES Department. Installation of a left-turn lane on a County public road shall require an encroachment permit issued by the Department of Public Works and the property owner shall be required to enter into a one-year maintenance agreement including appropriate bonding. Installation of a left-turn lane on a State Highway requires an encroachment permit issued by Caltrans.

LEFT TURN LANE WARRANT GRAPH





Napa County Left-Turn Lane Screening Form

Project Name and Number:			
Project Location / APN:			
Applicant Company:		Preparer Email:	
Preparer Name:		Preparer Phone Number:	

Refer to the Napa County Left-Turn Lane Screening Form User Guide for more information.

Step 1 – Data Input		
1A. When was the data collected at the major roadway?		
Data Collection Dates	Start	
	End	
Is a Seasonal Adjustment needed? (See Table 2, TIS Guidelines)		<i>Yes, 15% adjustment</i>
1B. What were the traffic volumes collected at the major roadway?		
24-Hour Vehicle Count on Major Street	<input type="checkbox"/>	
1C. What is the speed on the major roadway?		
Collected 85th Percentile Speed	<input type="checkbox"/>	
Posted Speed Limit		7

Step 2 – Volume-Based Left Turn Lane Warrant Calculation		
2A. What are names of the major and minor roadways?		
Major Roadway Street Name		
Minor Road Street Name	Project Driveway	
2B. What are peak-hour turning movement volumes?		
	←	
Major Opposing (vph)	→	Major Advancing (vph)
Major Right (vph)	↘	Major Left (vph)
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; width: 150px; height: 20px;"></div> <div style="border: 1px solid black; width: 150px; height: 20px;"></div> </div>		
Does the expected traffic volumes warrant a left-turn lane?		<i>No</i>

Step 3 – Evaluate Sight Distance		
4A. What are the sight distances for the major advancing motorist?		
Required Stopping Sight Distance	50	feet
Available Sight Distance		feet
4B. Does the advancing motorist have enough stopping sight distance?		
<i>Adequate SSD is not available between a motorist waiting to turn left onto the minor street and a motorist approaching in the same direction. Installation of a left turn lane is one potential measure that may address this insufficient SSD.</i>		

Applicant Certification		
I certify that the information provided in this form is accurate to the best of my knowledge and is based on available traffic data, project trip generation estimates, roadway geometry, and applicable County guidance.		
Applicant Signature:		Date:
County Traffic Engineer Notes:		

Warning: No changes, revisions, or alterations shall be made to this Left Turn Lane Screening Form. Any modification, regardless of its nature or extent, will render the Screening Form invalid and subject to rejection.