7.5 Traffic Counts for Low-Volume Roads

Before a contract can be signed for a low-volume road project, the applicant is responsible for validating that the road has 500 vehicles per day or less consistent with Commission and any local QAB policy. The Program's "Traffic Count Validation form and Instructions" can be found in <u>Appendix F</u>.

- Applicant is responsible for providing traffic counts before a contract can be signed.
- A traffic count is not required in order to submit an application, unless required by local QAB policy.
- The district is responsible for verifying that a count exists, and that the count meets the criteria established in state and local policy.
- Traffic counts are considered valid for a period of five years, provided there are no new significant changes in traffic flow volumes or patterns.
- Documentation of traffic counts using a signed "Traffic Count Validation Form" must be retained with project files according to the Commission's record retention policy. Districts may opt to include the completed traffic count validation form as an attachment to the project contract.
- Districts may, at their discretion, use administrative and education funding to facilitate or support traffic counts for applicants. Districts should ensure that all potential applicants have equal access to any traffic count facilitation measures they may employ.
- Traffic counts only apply to a segment of road between intersections, not to an entire length of road. Application sites that include intersections may require multiple counts.
- Traffic counts should be done on the proposed project location, or on a road that ensures that traffic on the project location can be determined.

7.5.1 OPTION A: Validate with Existing Traffic Count Data or Extrapolation

7.5.1.1 Use of Existing Data

Existing traffic counts can be used to verify road eligibility for LVR funding. Existing data must have been collected within the previous five years and conform to the Program's Level 2 count protocol at a minimum. "Estimated" traffic counts that exist for many municipal roads cannot be used.

7.5.1.2 Extrapolation of Existing Data

It is permissible to use existing data for roads with 500 vehicles per day or less to logically extrapolate to subsidiary roads. (For example, a spur road between two state roads where both state roads have less than 500 vehicles per day must also have less than 500.) This extrapolation of data can be used to verify that a road has 500 vehicles per day or less without performing a count. This extrapolation of traffic counts must prove the ADT on the road is 500 or less to be eligible for LVR funding. Potential sources of existing traffic count data include:

• State Roads: <u>Traffic Volume Maps</u>

• Local Roads: PennDOT regional offices or County Planning Commissions.

7.5.2 OPTION B: Validate with Level 1 Count: 2 Hour Count

An applicant may do a Level 1 count to determine the traffic count on a potential project site. This involves counting traffic for a two hour period, either by hand tally, video recording, or an automated traffic counter. A Level 1 count of 500 vehicles per day or less will qualify the road for LVR funding. A Level 1 count must meet the following criteria:

- It must be conducted between March 1 and the week before Thanksgiving.
- It cannot be conducted on a holiday, or the day before or after a holiday.
- It must be conducted on a Tuesday, Wednesday, or Thursday
- It must be conducted for a minimum of two consecutive hours between 3:00 pm and 6:00 pm.
- Only the number of vehicle passes is counted, regardless of direction of travel or type of vehicle.
- The traffic count for the time period will be adjusted to a 24 hour period by simply multiplying the 2 hour count volume times twelve (12)
- Applicants may skip the Level 1 count and go straight to a Level 2 count if desired
- Only licensed motor vehicles should be counted.

If a Level 1 count produces a count of 500 vehicles per day or less, the project on the road is considered eligible without a Level 2 count. If a Level 1 count produces a count of more than 500 vehicles per day, it does not disqualify the road, but necessitates a Level 2 count because of its increased accuracy. The purpose of a Level 1 count is to provide a reasonably accurate traffic count with minimal time investment.

7.5.2.1 Level 1 Count Examples

Example 1: A traffic count for two consecutive hours between 4:00 pm and 6:00 pm produces a count of 25 vehicles. 24 hours (per day) / 2 hours (per study) = 12

$12 \times 25 = 300$ average daily count.

This worksite would be eligible (no Level 2 count needed).

Example 2: A traffic count for two consecutive hours between 3:30 pm and 5:30 pm produces a count of 53 vehicles. 24 hours (per day) / 2 hours (per study) = 12

$12 \times 53 = 636$ average daily count.

This does not disqualify the road. It simply means that a more accurate Level 2 count is required if the applicant wants to continue to pursue Program funding.

7.5.3 OPTION C: Validate with Level 2 Count: 24-hour Automated Count

A Level 2 count involves the placement of an automated traffic counter on the road for a minimum period of 24 hours. Note that these are the minimum criteria for a count. More comprehensive or longer counts can be substituted as long as they meet the minimum requirements below for a "Level 2 count". A Level 2 count of 500 vehicles per day or less will qualify the road for LVR funding. Level 2 counts supersede Level 1 counts if there is a discrepancy. A level 2 count must meet the following criteria:

- It must be conducted between March 1 and the week before Thanksgiving.
- It cannot be conducted on a holiday, or the day before or after a holiday.
- It must be conducted between 12 AM Tuesday and 12 AM Friday.
- It must be conducted for a minimum of 24 consecutive hours.
- Only the number of vehicle passes is counted, regardless of direction of travel or type of vehicle.

If a Level 2 count produces a count of 500 vehicles per day or less, the project on the road is considered eligible. If a Level 2 count produces a count of more than 500 vehicles per day, a project on that road is not eligible for LVR funding. 24-hour counts do not have be broken up by hour or any smaller time unit.

The criteria described in the Level 2 count represent a "minimum acceptable criteria". Counties may use or adopt more stringent traffic count requirements as long as it meets or exceeds the requirements here. (A more stringent requirement is a count that provides more statistically accurate data. For example: requiring Level 2 counts for all roads, requiring 48-hour counts, or requiring hourly totals on counts to provide information to PennDOT.)

7.5.4 Seasonal Activities and Special Circumstances

A traffic count survey cannot be conducted in a timeframe or manner that intentionally causes artificially low average daily traffic counts on a particular road segment. This includes conducting a traffic count during summer recess for a school access road, or conducting a traffic count when access to a road segment is temporarily or partially restricted or reduced (i.e. detoured, weight, or size restricted, etc.) or conducting a traffic count in any other timeframe or manner that intentionally causes low average daily traffic counts.

Dirt, Gravel, and Low Volume Road Maintenance Program (DGLVRP) Traffic Count Validation Form

Road Name and #:		Township:		
PS Location (if available):_		W,	N	
GPS location not available	, describe count loc	ation here:		
or example: Traffic count on Smith ro	ad % mile north of interse	ction with SR180 Manle ro		
raffic Counts can be validated				2 twenty-four-hour
ounts. Select the method used				
-	lation method on tl	ne back of this page	. If necessary, a	xisting data, describe th attach a description of the and maps.
LEVEL 1 TRAFFIC COUN			<u> </u>	·
Count Performed From				
	Date T	ime Tim	е	
Describe Count Metho	d: (hand/camera/counter	/etc.)		
Count Performed by: _		of		
	(name)			nization)
Total Count =	vehicles x 12 =	=	ADT	
LEVEL 2 TRAFFIC COUN	NT DETAILS (24 hou	r (minimum) autom	natic count)	
Count Length: 24hr	48hr 72 hour	other:		
Count Performed From				
Counter Used: air tu	ıbe other:	Counter Ma	ake/Model:	
Count Performed by: _	(name)	of	lorga	nization)
			ОТБО	·
Total Count =	24 hou	r count =		ADT
Applicant Validation: I her	eby swear that this c	ount is accurate as re	ported here and o	done in accordance with
State Conservation Commissi	•		,	
,, print name	position	sia	 nature	, date
·	•	J		
Conservation District Valid Conservation District in accordance			the applicant is a	cceptable to the

Details for use of existing data or extrapolation from existing data:

Existing Data must have been collected within the previous 5 years and conform to the Program's Level 2 count protocol at a minimum. "Estimated" traffic counts that exist for many municipal roads cannot be used.

It is possible to use existing data for roads with 500 vehicles per day or less to extrapolate logically to subsidiary roads. For example, a spur road between two State Roads where both state roads have less than 500 vehicles per day must also have less than 500. This extrapolation of data can be used to verify that a road has 500 vehicles per day or less without performing a count. This extrapolation of traffic counts must prove the ADT on the road is 500 or less to the satisfaction of the Conservation District.

Describe existing data used and extrapolation methodology below. Attach additional material and maps if needed.			

Dirt, Gravel, and Low Volume Road Maintenance Program (DGLVRP) <u>Traffic Count Instructions for Applicants</u> 10/20/14

This document is intended to provide instructions to applicants for performing traffic counts. For details of the Program's Traffic Count Policy, see the Program's administrative manual chapter 7.4.

<u>Traffic Count Location</u> – This section is to enter basic information about the location of the traffic count such as the name and location of the road, county and township, and the name of the road owning entity. GIS coordinates are helpful to locate the project on a map, but if this is not known, please describe the location so that it can be easily found (i.e. Intersection of Elk Lane and Beaver Creek Road).

Choose one of the 3 methods below to determining traffic count:

- Existing Data or Extrapolation Indicate whether this traffic count is taken from existing data, or extrapolated from existing data. See Chapter 7.4 of the administrative manual for more details on data extrapolation. Page two of the form can be used to describe the methodology used to extrapolate from existing traffic data.
- Level 1 Traffic count details Record the date and time the count was performed, describe what method was used to take the count (i.e. camcorder). Indicate the name of the person taking the count, and who they work for. For a 2 hour count, multiply the number of cars counted by 12 to determine the average daily traffic (ADT).
- <u>Level2 traffic count details</u> Record the length of the count, the dates and times of the count, and the type of counter used, including the make and model of the counter. Indicate the name of the person taking the count, and who they work for. Record the total count, then adjust to a 24 hour count if needed (i.e. 800 cars counted in 48 hours = 400 ADT).

<u>Applicant Validation</u> – Applicant must print and sign and date the validation form. Indicate the position held by the person signing the validation.

<u>Conservation District Validation</u> - Conservation District must print and sign and date the validation form. Indicate the position held by the person signing the validation.