

Traffic Counts

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Reaching New Heights



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Why do I need traffic counts

- #1 - A tool to make informed decisions
 - Surface Selection Tool
 - Maintenance Frequency
- “I get about 80 trucks a day on this road going 70mph plus”

Why do I need traffic counts

- **Subjective** refers to personal perspectives, feelings, or opinions entering the decision making process.
- **Objective** refers to the elimination of **subjective** perspectives and a process that is purely based on hard facts

- ADT - Average Daily Traffic
 - Average # of vehicle (short duration)
 - ADT can be converted to AADT
- AADT - Annual Average Daily Traffic
 - Represents data for the entire year (more accurate)
 - $AADT = ADT \times \text{Adjustment Factor}$



85th Percentile Speed

- 85% of vehicle traveling in this speed.
Used as a guide in setting or adjusting the posted speed.



-small, portable and easy to deploy package

Features of a Radar Traffic Counter

- 2+ Weeks Run Time On Batteries
- Simple point and go installation
- Multilane Bidirectional Counting
- Approx: \$3000 turn-key setup

Features of a Radar Traffic Counter

- Tube counters require work in the roadway to place and recover the equipment
- Tubes degrade if broken may be difficult to repair immediately
- Around 50,000 miles of gravel road

Loan Program



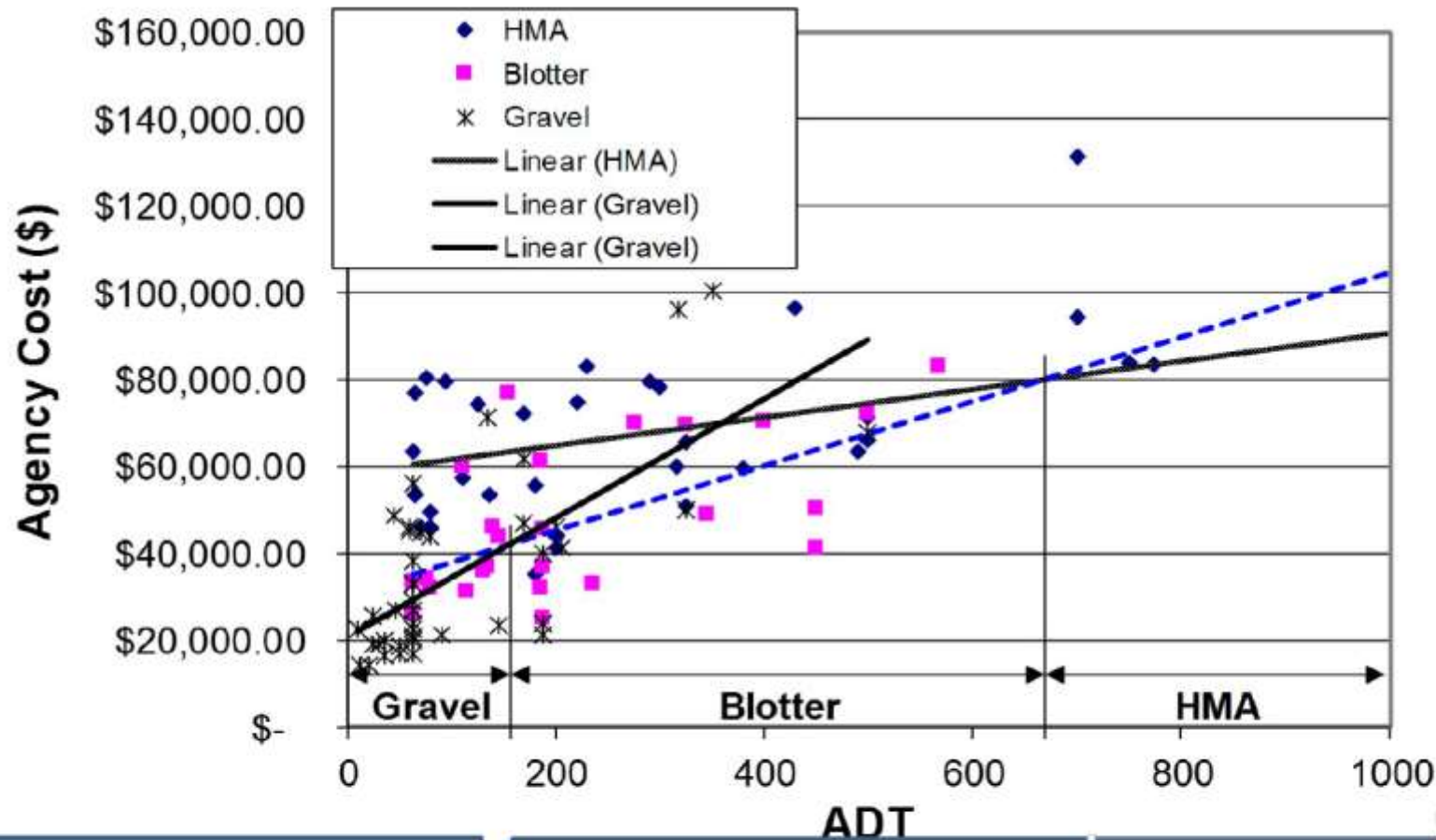
Loan Program- RoadVista 922 Retroreflectometer

SD LTAP recently acquired a retro-reflectometer and a **radar traffic counter** that will be available to any local public agency to loan. If you are interested in using either of these instrument, please contact [Andrew](#).

The new traffic counter will be a fully integrated radar, so that means no more tubes! This will be very beneficial on gravel roads since there will be no tubes that get destroyed or the hassle of moving them when you have to blade. These radars can collect vehicle counts, speeds, and classification of vehicle. Not only are they more efficient but also safer!



Summary of gravel, AST and HMA surface life cycle costs related to ADT – SDDOT Surface Selection Criteria Study



Gravel – cost effective to 150 ADT

AST (Blotter) – cost effective to 650 ADT

HMA Pavement – cost effective above 650 ADT

For Project:	Brookings	County			
Project Notes:					
Location/Name:	Merged				
Report Generated:	05/07/2019	15:02			
Speed Intervals	1 MPH				
Time Intervals	Instant				
Traffic Report From	04/25/2019	01:00:00	through	05/06/2019	23:59:59
85th Percentile Speed	57 MPH				
85th Percentile Vehicles	7176				
Max Speed	83 MPH	on	05/03/2019	19:14:07	
Total Vehicles	8443				
AADT:	706				

Volumes - weekly counts

Time	5 Day	7 Day
Average Daily	706	690
AM Peak	06:00	74
PM Peak	04:00	82

Speed

Speed Limit:	55
85th Percentile Speed:	57
Average Speed:	48.27

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Count over limit	354	143	121	327	331	205	244
% over limit	25.5	22.8	20.2	20.8	20.0	14.9	19.9
Avg Speeder	58.4	58.5	58.2	58.4	58.1	58.1	58.2

Class Counts

Number	%
VEH_SM	70
VEH_MED	8050
VEH_LG	323
[VEH_SM=motorcycle,	VEH_MED = sedan,
	VEH_LG = truck]