How to Conduct a Speed Study

Materials

NECESSARY

- Radar Gun
    - Here is an example of a radar gun (https://tinyurl.com/34zs79ds) Strong Towns provided to a member who successfully completed a speed study.
- Pen & Clipboard

OPTIONAL

- Template for recording speed study data

Collection Goal

- The objective of conducting this speed study is to collect two hours' worth of data or 250 measurements in each direction, whichever comes first.

Tracking Process

- Use your radar gun to track the speeds that people are traveling at.
- List speeds on a piece of paper and then put a checkmark next to the speed people are driving upon measurement.
- Once you've reached your collection goal, add up the checks to see how many people were driving within each speed interval.
- Keep the raw data you have collected, as data points may be used to calculate 85th percentile speed.

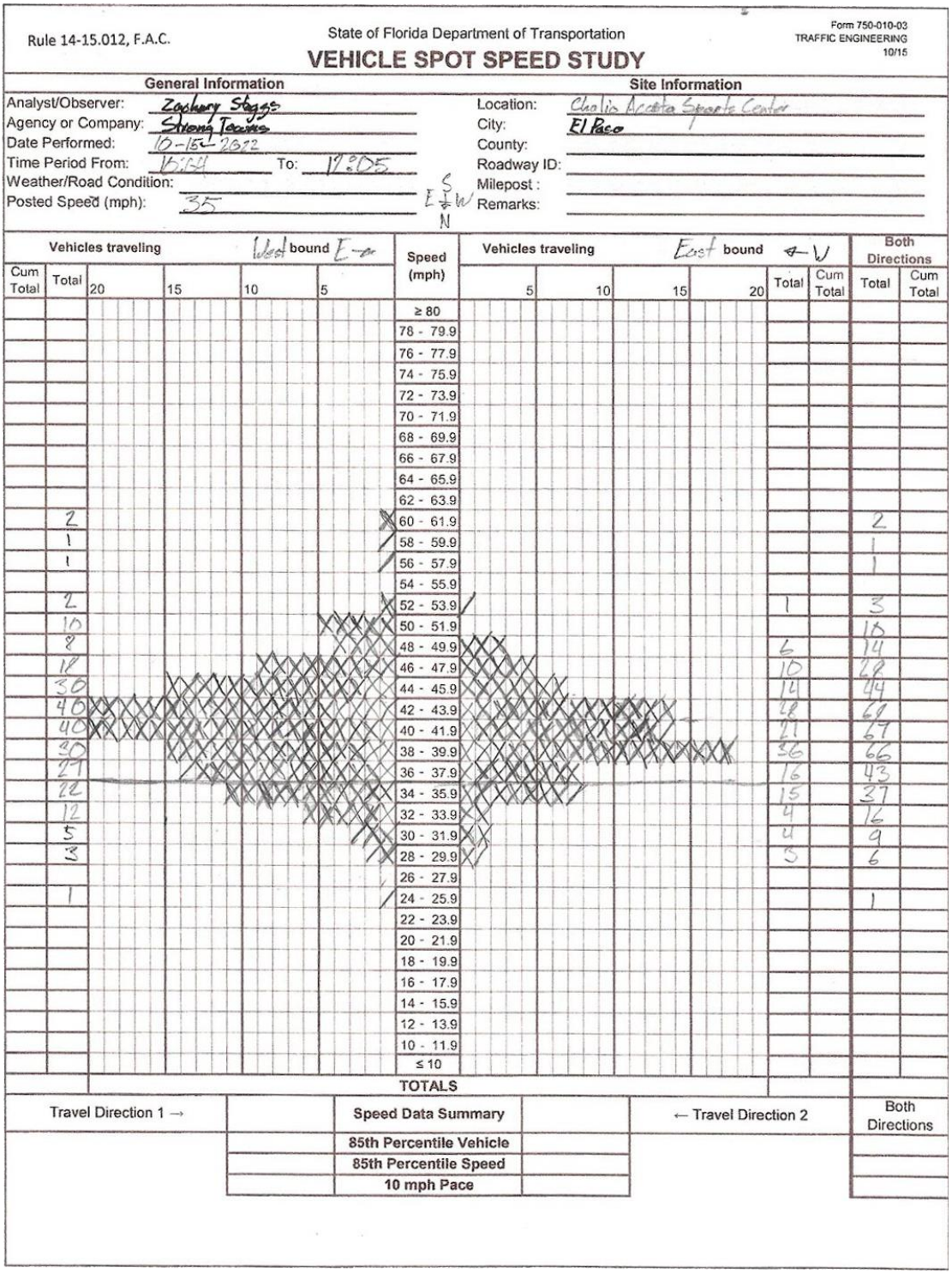
Guidelines and Cautions

- Position yourself as inconspicuously as possible to ensure that your presence doesn't influence or alter the speed at which people are driving.
- Measure speeds in free-flow conditions. For example, in the event that three cars are bunched up, take the reading on the first car but not the other two.
- Conduct the study on a normal day. Do not conduct the study on a rainy day, a day when there is a detour in place, or on a day when other extenuating circumstances will impact traffic flow.
- Do not conduct the study during prime travel times for commuters. Strong Towns suggests performing the study at midday, or sometime between the hours of 9 a.m. and 3 p.m.

STRONG TOWNS

Sample Speed Study

- Below is an example speed study for your reference.



Rule 14-15.012, F.A.C.

State of Florida Department of Transportation

Form 750-010-03
TRAFFIC ENGINEERING
10/15

VEHICLE SPOT SPEED STUDY

General Information

Analyst/Observer: Zachary Stagg
Agency or Company: Strong Towns
Date Performed: 10-15-2012
Time Period From: 16:54 To: 17:05
Weather/Road Condition:
Posted Speed (mph): 35

Site Information

Location: Chaparral Arcata Sports Center
City: El Paso
County:
Roadway ID:
Milepost :
Remarks:

E S W N

Vehicles traveling Westbound E→						Speed (mph)	Vehicles traveling Eastbound ←W						Both Directions	
Cum Total	Total	20	15	10	5		5	10	15	20	Total	Cum Total	Total	Cum Total
						≥ 80								
						78 - 79.9								
						76 - 77.9								
						74 - 75.9								
						72 - 73.9								
						70 - 71.9								
						68 - 69.9								
						66 - 67.9								
						64 - 65.9								
						62 - 63.9								
2	2					60 - 61.9							2	
1	1					58 - 59.9							1	
1	1					56 - 57.9							1	
						54 - 55.9								
2	2					52 - 53.9					1		3	
10	8					50 - 51.9							10	
18	8					48 - 49.9					6		14	
30	12					46 - 47.9					10		24	
40	10					44 - 45.9					14		44	
40	0					42 - 43.9					23		67	
30	10					40 - 41.9					21		67	
29	1					38 - 39.9					36		66	
22	7					36 - 37.9					16		43	
12	10					34 - 35.9					15		37	
5	7					32 - 33.9					4		16	
3	2					30 - 31.9					4		9	
						28 - 29.9					3		6	
						26 - 27.9								
1	1					24 - 25.9							1	
						22 - 23.9								
						20 - 21.9								
						18 - 19.9								
						16 - 17.9								
						14 - 15.9								
						12 - 13.9								
						10 - 11.9								
						≤ 10								
		TOTALS												

Travel Direction 1 →		Speed Data Summary		← Travel Direction 2	Both Directions
		85th Percentile Vehicle			
		85th Percentile Speed			
		10 mph Pace			