



Highway Attachment -Excerpts TXDOT Speed Study

HWY22FH001

(4 pages)

IH-20 Speed Study

Control-Section: 0005-06

December 6, 2021

On this date, a traffic engineering speed study was performed by Texas Department of Transportation (TxDOT) personnel from the Abilene District Traffic Engineering Department. The study was conducted by Bryce Turentine, P.E., Doug Finnigan and Casey Walters. The study was performed on the eastbound mainlanes of IH-20 between mile markers 178 and 179 in Big Spring, Howard County, Texas. A picture of the location is attached and labeled as IMG_0624.jpg. Data was collected by a Jamar Technologies, Black Cat II Radar Traffic Recorder. Two reports are included with this study labeled Exhibit "A", and Exhibit "B".

Exhibit "A" is the Raw Data collected during the period of 12:00 p.m. through 2:00 p.m. on December 6, 2021. It includes the measured speeds of all vehicles passing the radar speed recorder during this time period.

Exhibit "B" is the same data, but is filtered data for determination of the 85th percentile speed which can be used for determination of posted regulatory speed limits. When setting regulatory speed zones, TxDOT personnel follow established policies outlined in the TxDOT manual "*Procedures for Establishing Speed Zones.*" The filters applied to the data are as follows:

- Trucks and Buses are excluded
- Exclude vehicles with speeds less than 55 mph or greater 85 mph
- Measure only "free floating" vehicles; minimum of 3 second gap between measured vehicles

Default Report Title
 Use Preferences to Define Titles

Site Code: Exhibit "A"
 Station ID: 08
 Location 1: I-20 in Big Spring, East of SH 350
 Start Date: December 6th 2021
 Date Printed: December 7th 2021
 File Name: I-20 EB
 Direction: Eastbound

Comment 1: Raw Data
 Comment 2: No Filters
 Comment 3:
 Comment 4:
 Latitude: 32.266321
 Longitude: -101.466520

12/6/2021	> 40 - 45	> 45 - 50	> 50 - 55	> 55 - 60	> 60 - 65	> 65 - 70	> 70 - 75	> 75 - 80	> 80 - 85	> 85 - 90	> 90 MPH	Total	
Time	0 - 40 MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH			
12:00 AM	*	*	*	*	*	*	*	*	*	*	*	0	
1:00	*	*	*	*	*	*	*	*	*	*	*	0	
2:00	*	*	*	*	*	*	*	*	*	*	*	0	
3:00	*	*	*	*	*	*	*	*	*	*	*	0	
4:00	*	*	*	*	*	*	*	*	*	*	*	0	
5:00	*	*	*	*	*	*	*	*	*	*	*	0	
6:00	*	*	*	*	*	*	*	*	*	*	*	0	
7:00	*	*	*	*	*	*	*	*	*	*	*	0	
8:00	*	*	*	*	*	*	*	*	*	*	*	0	
9:00	*	*	*	*	*	*	*	*	*	*	*	0	
10:00	*	*	*	*	*	*	*	*	*	*	*	0	
11:00	*	*	*	*	*	*	*	*	*	*	*	0	
12:00 PM	0	1	4	18	11	25	90	173	149	51	9	8	539
1:00	0	1	7	7	10	28	99	151	163	63	12	30	571
2:00	2	0	5	5	17	36	105	152	155	42	17	12	548
3:00	*	*	*	*	*	*	*	*	*	*	*	*	0
4:00	*	*	*	*	*	*	*	*	*	*	*	*	0
5:00	*	*	*	*	*	*	*	*	*	*	*	*	0
6:00	*	*	*	*	*	*	*	*	*	*	*	*	0
7:00	*	*	*	*	*	*	*	*	*	*	*	*	0
8:00	*	*	*	*	*	*	*	*	*	*	*	*	0
9:00	*	*	*	*	*	*	*	*	*	*	*	*	0
10:00	*	*	*	*	*	*	*	*	*	*	*	*	0
11:00	*	*	*	*	*	*	*	*	*	*	*	*	0
Total	2	2	16	30	38	89	294	476	467	156	38	50	1658
Grand Total	2	2	16	30	38	89	294	476	467	156	38	50	1658
Stats			Percentile	15th	50th	85th	95th						
			Speed	67.9	74.9	79.9	82.9						
			Mean Speed (Average)	75.8									
			10 MPH Pace Speed	70-79									
			Number in Pace	940									
			Percent in Pace	56.7%									
			Number > 75 MPH	711									
			Percent > 75 MPH	42.9%									

Default Report Title
 Use Preferences to Define Titles

Site Code: Exhibit "B"
 Station ID: 08
 Location 1: I-20 in Big Spring, East of SH 350
 Start Date: December 6th 2021
 Date Printed: December 7th 2021
 File Name: I-20 EB
 Direction: Eastbound

Comment 1: Filtered Data
 Comment 2: Two Axles
 Comment 3: 55-85 MPH
 Comment 4: 3 Second Gap
 Latitude: 32.266321
 Longitude: -101.466520

12/6/2021	> 40 - 45	> 45 - 50	> 50 - 55	> 55 - 60	> 60 - 65	> 65 - 70	> 70 - 75	> 75 - 80	> 80 - 85	> 85 - 90	> 90 MPH	Total
Time	0 - 40 MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH	MPH		
12:00 AM	*	*	*	*	*	*	*	*	*	*	*	0
1:00	*	*	*	*	*	*	*	*	*	*	*	0
2:00	*	*	*	*	*	*	*	*	*	*	*	0
3:00	*	*	*	*	*	*	*	*	*	*	*	0
4:00	*	*	*	*	*	*	*	*	*	*	*	0
5:00	*	*	*	*	*	*	*	*	*	*	*	0
6:00	*	*	*	*	*	*	*	*	*	*	*	0
7:00	*	*	*	*	*	*	*	*	*	*	*	0
8:00	*	*	*	*	*	*	*	*	*	*	*	0
9:00	*	*	*	*	*	*	*	*	*	*	*	0
10:00	*	*	*	*	*	*	*	*	*	*	*	0
11:00	*	*	*	*	*	*	*	*	*	*	*	0
12:00 PM	0	0	0	0	5	7	16	39	61	29	0	157
1:00	0	0	0	0	3	7	20	39	65	33	0	167
2:00	0	0	0	0	5	12	19	42	64	25	0	167
3:00	*	*	*	*	*	*	*	*	*	*	*	0
4:00	*	*	*	*	*	*	*	*	*	*	*	0
5:00	*	*	*	*	*	*	*	*	*	*	*	0
6:00	*	*	*	*	*	*	*	*	*	*	*	0
7:00	*	*	*	*	*	*	*	*	*	*	*	0
8:00	*	*	*	*	*	*	*	*	*	*	*	0
9:00	*	*	*	*	*	*	*	*	*	*	*	0
10:00	*	*	*	*	*	*	*	*	*	*	*	0
11:00	*	*	*	*	*	*	*	*	*	*	*	0
Total	0	0	0	0	13	26	55	120	190	87	0	491
Grand Total	0	0	0	0	13	26	55	120	190	87	0	491
Stats		Percentile	15th	50th	85th	95th						
		Speed	68.9	75.9	80.9	83.9						
		Mean Speed (Average)	74.8									
		10 MPH Pace Speed	70-79									
		Number in Pace	307									
		Percent in Pace	62.5%									
		Number > 75 MPH	277									
		Percent > 75 MPH	56.4%									