

EXHIBIT

“A”



Mayor
Craig Morgan

Councilmembers
Michelle Ly
Rene Flores
Melissa Fleming
Frank Ortega
Hilda Montgomery

City Manager
Brooks Bennett

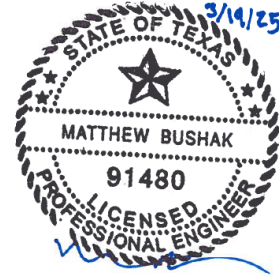
Mayor Pro-Tem
Kristin Stevens

City Attorney
Stephanie L. Sandre

To: Brian Kuhn, PE, Assistant Director of Transportation

From: Matt Bushak, PE, Senior Transportation Engineer

Date: March 18, 2025



RE: SPEED STUDY FOR KENNEY FORT BLVD BETWEEN FOREST CREEK DR AND THE SH 45 FRONTAGE ROADS

The City of Round Rock Transportation Department has completed a speed study along Kenney Fort Blvd between Forest Creek Dr and the SH45 Frontage Roads. The objective of this study was to assess the current speed within the area and post speed limit signs that are appropriate based on the collected data. Note that this study did not include evaluations of curve advisory speeds or school zone speed limits. Below is a summary of the study's methodology, findings, and recommendations.

EXISTING CONDITIONS

Kenney Fort Blvd is a six-lane arterial road (three lanes in each direction) with a raised center median. Minimal driveways and side streets connect to this section of the roadway. These access points adhere to the City's access management policies in terms of spacing and design. There is currently no posted speed limit. The Texas Transportation Code defines 45 mph for an arterial that has no posted speed limit. Figure 2 shows the study area and the location of proposed speed limit signs. Table 2 shows the boundaries of the existing speed limits.

DATA COLLECTION

In accordance with TXDOT's *Procedures for Establishing Speed Zones* manual, specific criteria were followed to collect accurate speed data. The manual advises that speed checks should:

- Be conducted on average weekdays during off-peak hours
- Occur under favorable weather conditions
- Include only free-flowing vehicles (not impeded by traffic signals or congestion)
- Record a minimum of 125 vehicles in each direction at each location
- Be completed within a two-hour window when radar equipment is used

NDS Data Services conducted speed measurements using radar technology at four locations along the study area, capturing both northbound and southbound traffic during March 2025. These locations are shown in Figure 1, with detailed data included in the Field Tally Sheets (Appendix A). Below is a summary of the measured 85th percentile speeds at each location.

Location	Point	NB (mph)	SB (mph)
Approx. 850 feet north of the westbound SH 45 frontage road	RAD-001	56	55
Approx. 1,000 feet north of Gattis School Rd	RAD-002	53	55
Approx. 2,200 feet north of Gattis School Rd	RAD-003	56	60
Approx. 3,600 feet north of Gattis School Rd	RAD-004	60	54

Table 1: Collected Data

SPEED STUDY METHODOLOGY

TXDOT's manual recommends using the 85th percentile speed of free-flowing traffic as the basis for determining appropriate speed limits. The 85th percentile speed represents the speed at or below which 85% of drivers are traveling under ideal conditions. This method is widely accepted and based on the assumption that most drivers:

- Are prudent and drive safely
- Aim to avoid crashes
- Want to reach their destinations as quickly as possible

A speed limit set at or near the 85th percentile speed is considered safe under good weather and visibility conditions. The final posted speed limit is typically rounded to the nearest 5 mph. However, it can be adjusted up or down by up to 5 mph, depending on the professional judgment of the supervising engineer.

RESULTS AND RECOMMENDATIONS

The study's findings indicate 85th percentile speeds ranging from 53 mph to 60 mph, which are generally consistent. Based on this data, the recommended speed limit for the entire study area is 55 mph.

Considering the data collected, the Transportation Department recommends adjusting the speed limits as follows:

From	To	Existing Speed Limit (NB/SB)	Proposed Speed Limit (NB/SB)
Forest Creek Dr	SH 45 Frontage Roads	45 mph (based on Texas Transportation Code)	55 mph

Table 2: Recommendations

Recommended sign locations are shown in Figure 2.



Kenney Fort Blvd Speed Study

Forest Creek Dr to SH 45 Frontage Rd

LEGEND

NB: Northbound Speed
SB: Southbound Speed

Figure 1: Speed Data Collection Locations



Kenney Fort Blvd Speed Study

Forest Creek Dr to SH 45 Frontage Rd

LEGEND

NB: Northbound Speed
SB: Southbound Speed

Figure 2: Proposed Speed Limit Sign Locations

Spot Speed Study

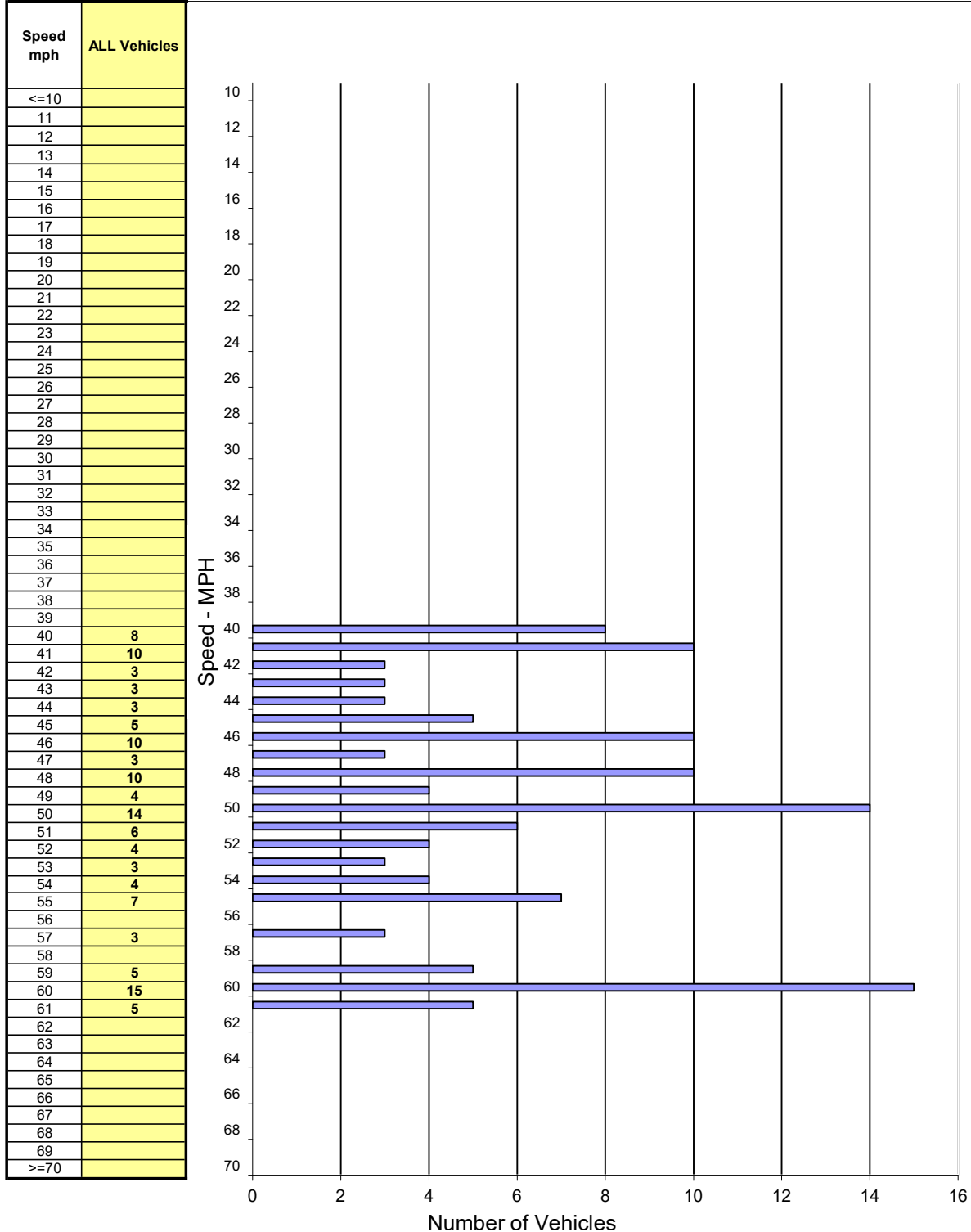
Prepared by: National Data & Surveying Services

City of Round Rock

DATE: 2/25/2025
TIME: 09:00-10:25

Location: S Kenny Fort Blvd NB S/O Forest Creek Dr (30.505406,-97.636113)
Posted Speed: None Weather: Clear/Dry Project #: 25-460012-001

Northbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	125	40 - 61	50 mph	60 mph	41 - 50	65	52%	6% / 8	42% / 52

Spot Speed Study

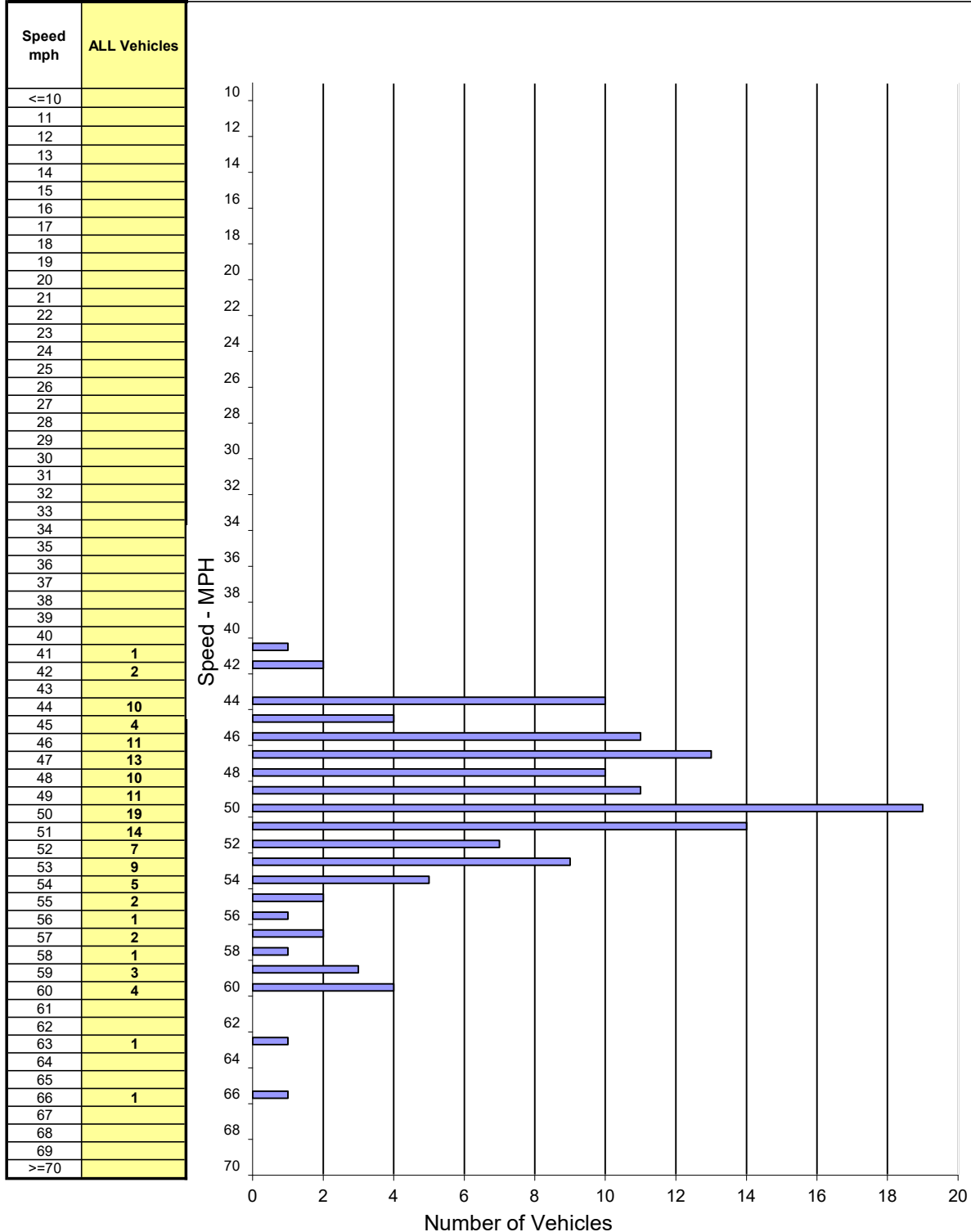
Prepared by: National Data & Surveying Services

City of Round Rock

DATE: 2/25/2025
TIME: 10:30-11:55

Location: S Kenny Fort Blvd SB S/O Forest Creek Dr (30.505383,-97.636477)
Posted Speed: None Weather: Clear/Dry Project #: 25-460012-002

Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	131	41 - 66	50 mph	54 mph	44 - 53	108	82%	2% / 3	16% / 20

Spot Speed Study

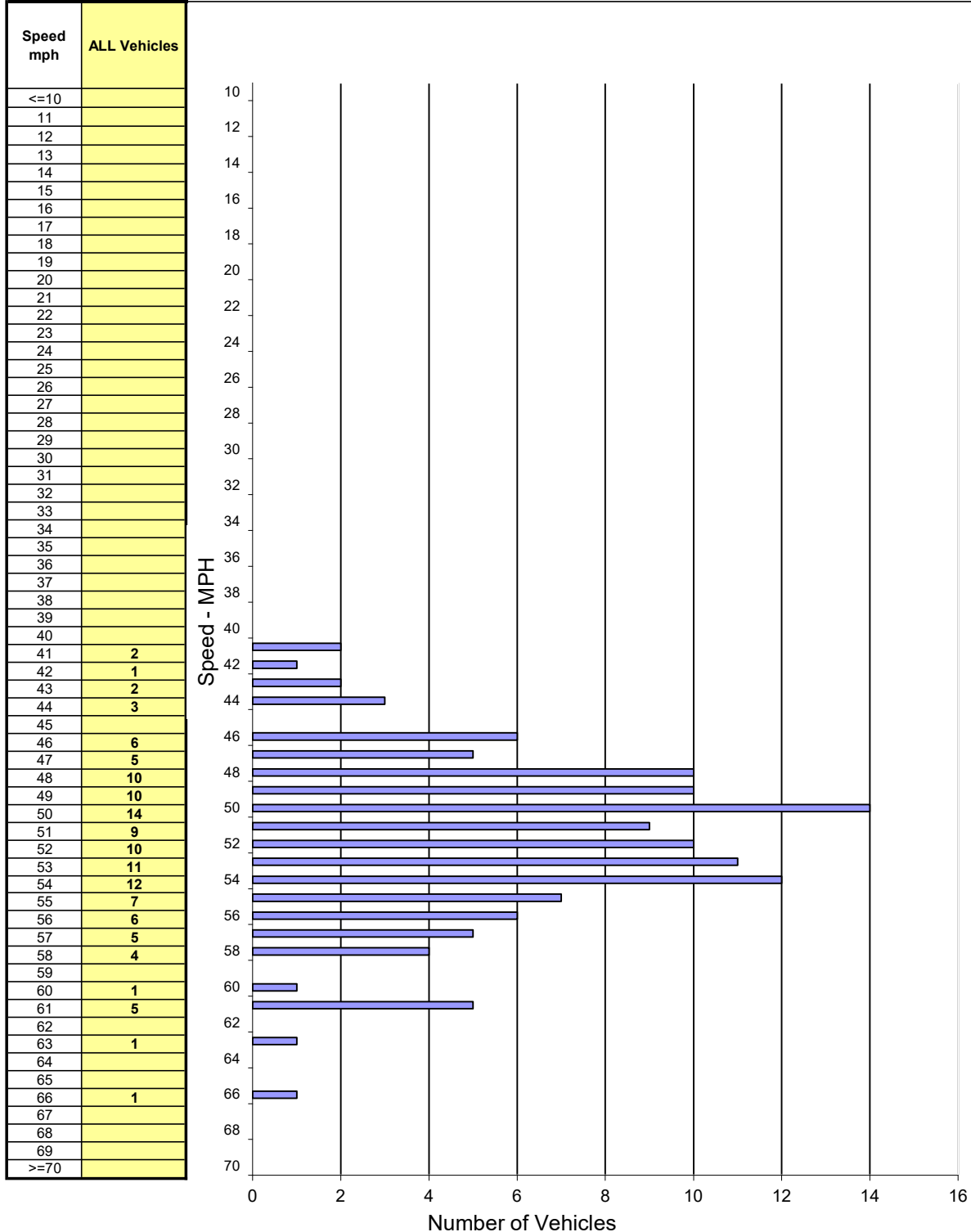
Prepared by: National Data & Surveying Services

City of Round Rock

DATE: 2/25/2025
TIME: 14:00-14:55

Location: S Kenny Fort Blvd NB Bet Forest Creek Dr & Gattis School Rd/CR 30 (30.502486,-97.63521)
Posted Speed: None Weather: Clear/Dry Project #: 25-460012-003

Northbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	125	41 - 66	52 mph	56 mph	46 - 55	94	75%	6% / 8	19% / 23

Spot Speed Study

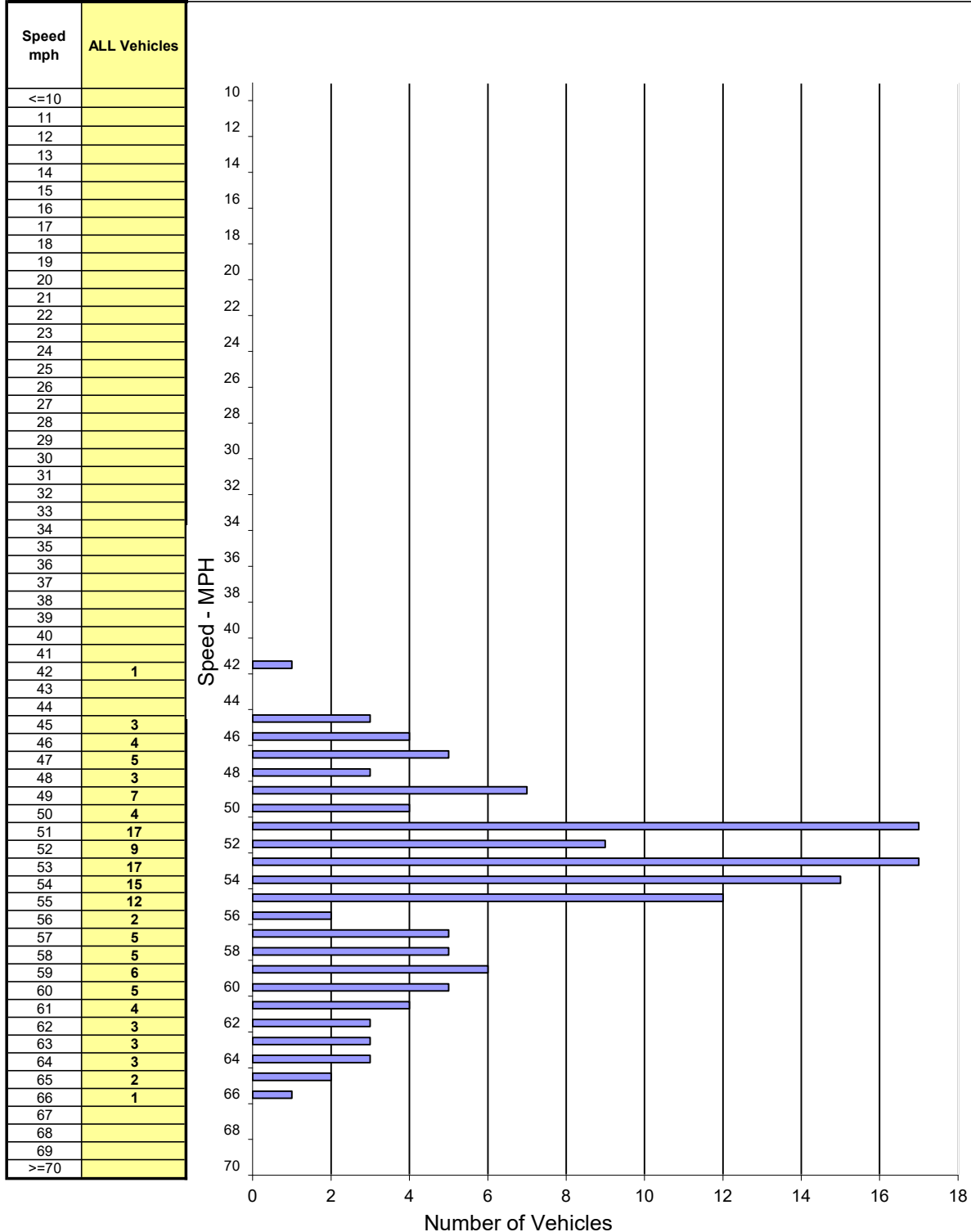
Prepared by: National Data & Surveying Services

City of Round Rock

DATE: 2/25/2025
TIME: 11:57-12:39

Location: S Kenny Fort Blvd SB Bet Forest Creek Dr & Gattis School Rd/CR 30 (30.502399,-97.63549)
Posted Speed: None Weather: Clear/Dry Project #: 25-460012-004

Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	136	42 - 66	53 mph	60 mph	46 - 55	93	68%	2% / 4	29% / 39

Spot Speed Study

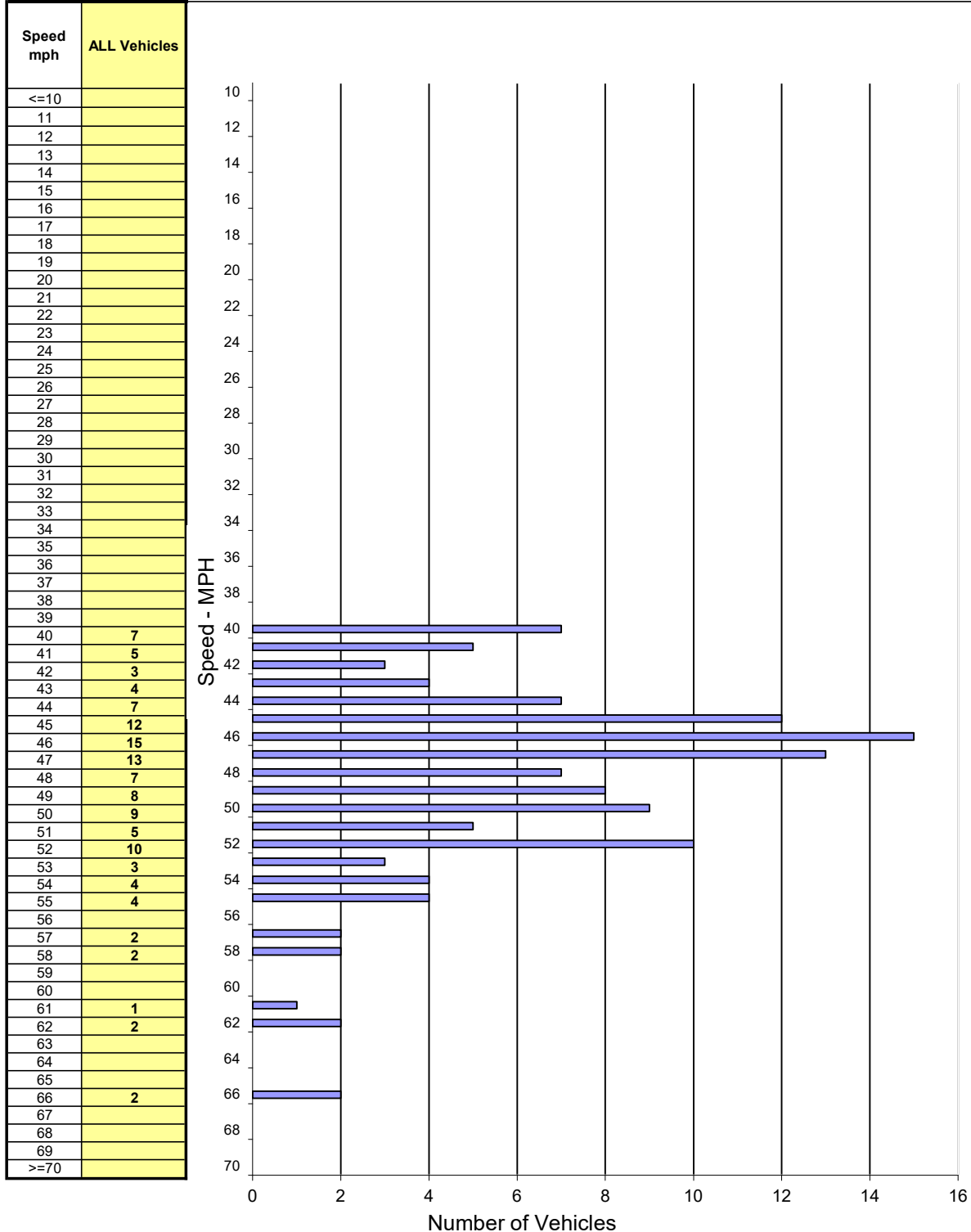
Prepared by: National Data & Surveying Services

City of Round Rock

DATE: 2/25/2025
TIME: 13:31-14:11

Location: S Kenny Fort Blvd NB N/O Gattis School Rd/CR 30 (30.499198,-97.633485)
Posted Speed: None Weather: Clear/Dry Project #: 25-460012-006

Northbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	125	40 - 66	47 mph	53 mph	43 - 52	90	72%	12% / 15	16% / 20

Spot Speed Study

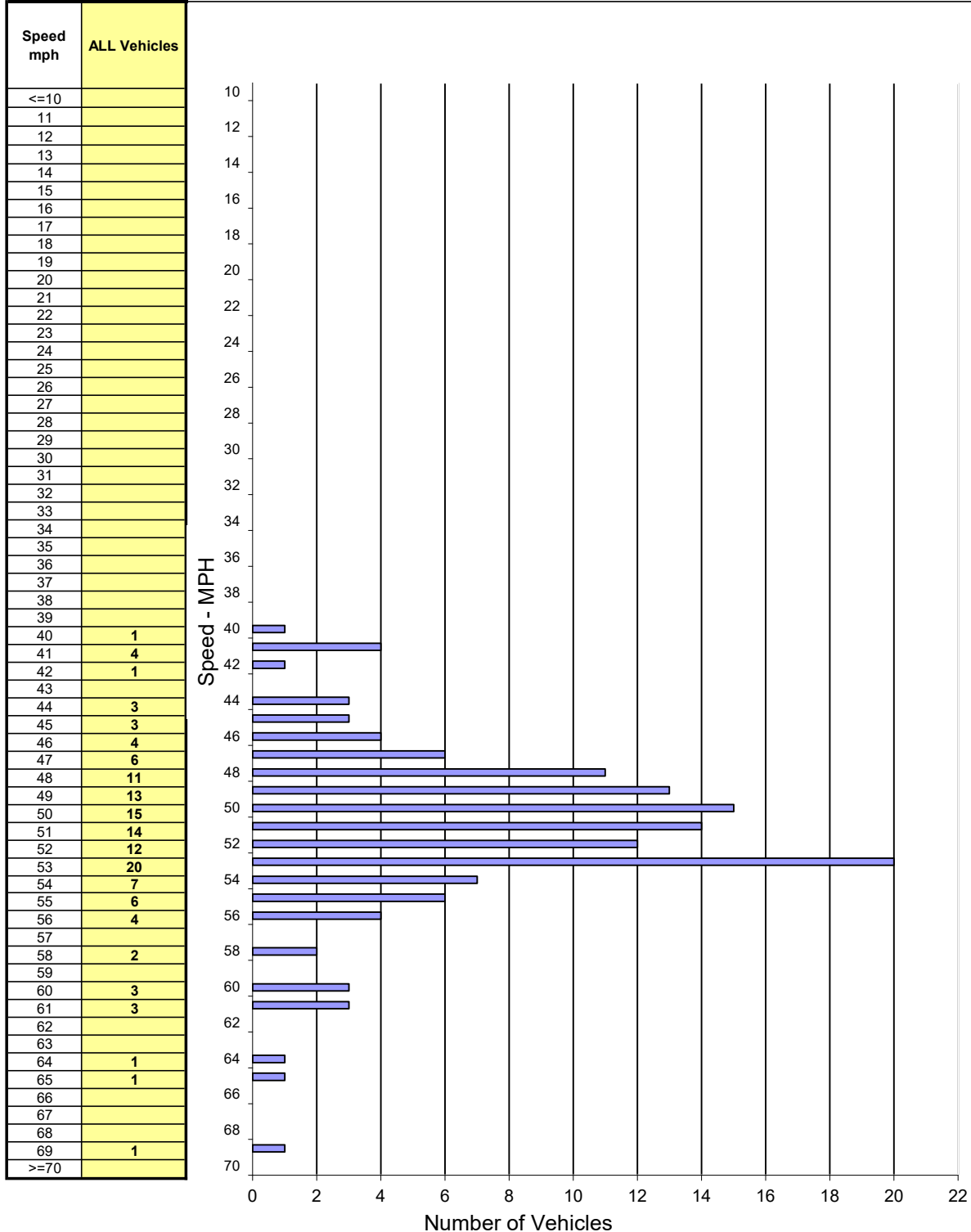
Prepared by: National Data & Surveying Services

City of Round Rock

DATE: 2/25/2025
TIME: 12:40-13:29

Location: S Kenny Fort Blvd SB N/O Gattis School Rd/CR 30 (30.499066,-97.633823)
Posted Speed: None Weather: Clear/Dry Project #: 25-460012-005

Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	135	40 - 69	51 mph	55 mph	46 - 55	108	80%	8% / 12	12% / 15

Spot Speed Study

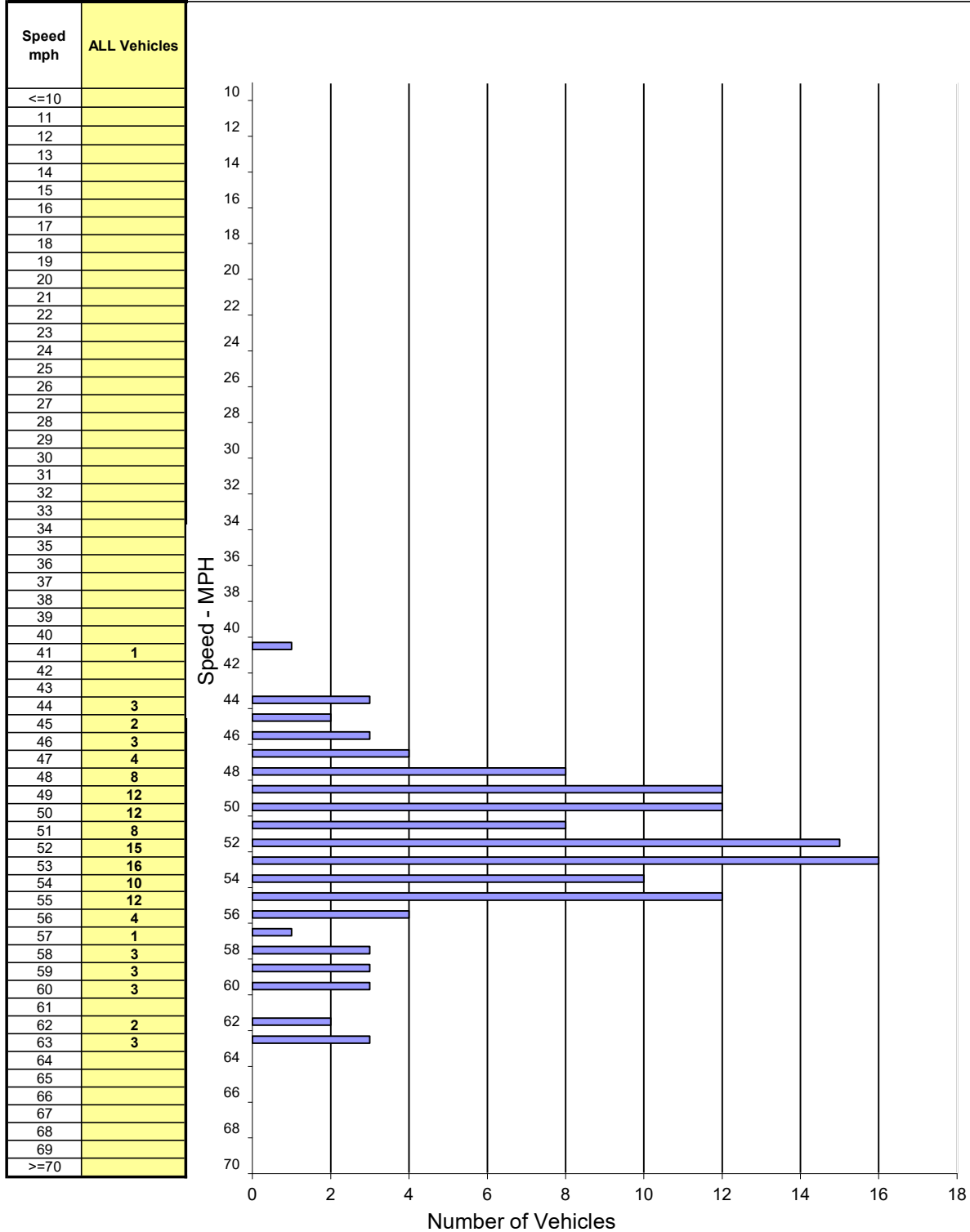
Prepared by: National Data & Surveying Services

City of Round Rock

DATE: 2/25/2025
TIME: 13:36-14:00

Location: S Kenny Fort Blvd NB N/O Louis Henna Blvd/SR 45 (30.491012,-97.629806)
Posted Speed: 50 MPH Weather: Clear/Dry Project #: 25-460012-010

Northbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	125	41 - 63	52 mph	56 mph	47 - 56	101	81%	7% / 9	12% / 15

Spot Speed Study

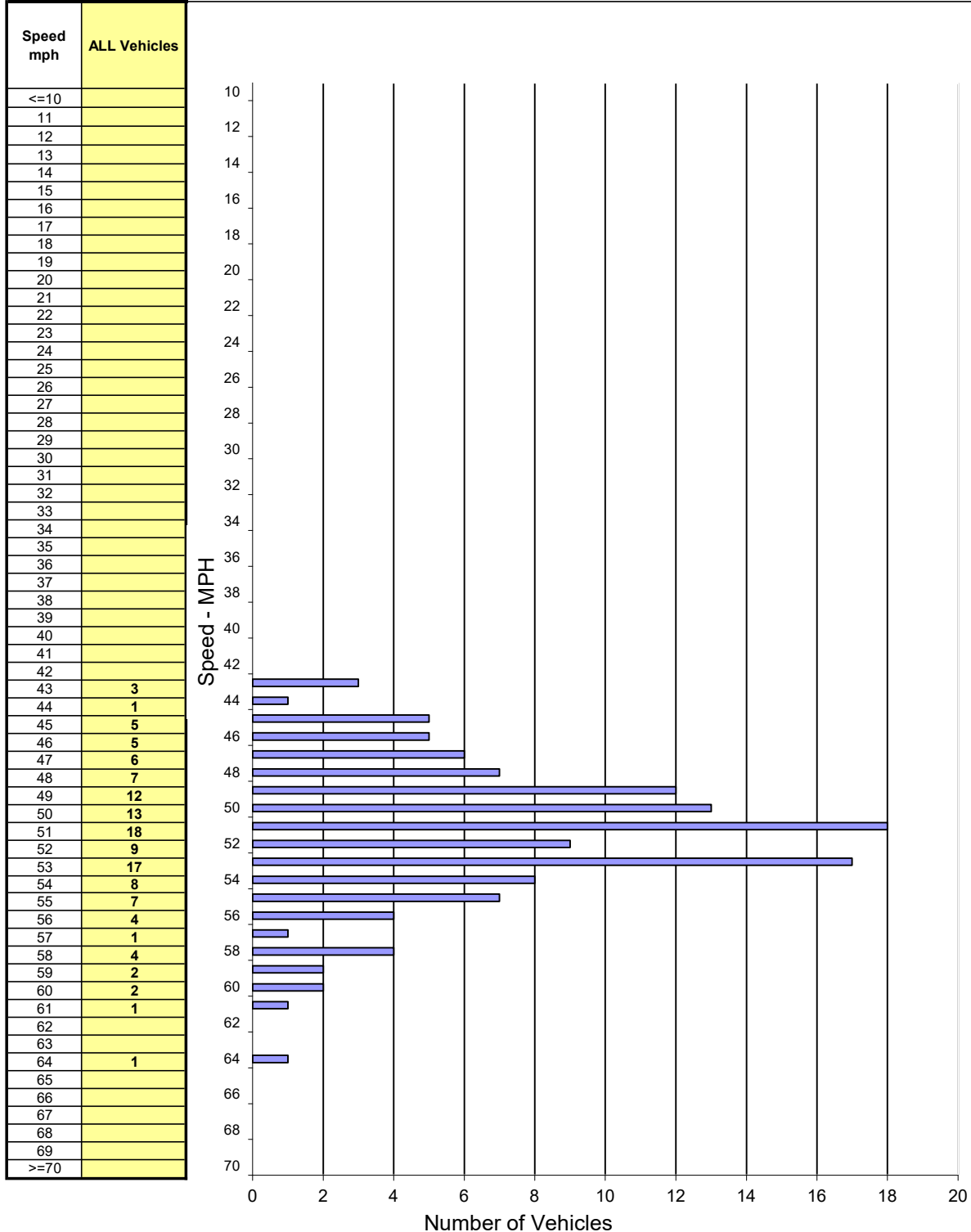
Prepared by: National Data & Surveying Services

City of Round Rock

DATE: 2/25/2025
TIME: 13:05-13:35

Location: S Kenny Fort Blvd SB N/O Louis Henna Blvd/SR 45 (30.490978,-97.630178)
Posted Speed: 50 MPH Weather: Clear/Dry Project #: 25-460012-009

Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	126	43 - 64	51 mph	55 mph	46 - 55	102	81%	7% / 9	12% / 15