

Sanborn Fire Insurance Company map, Mesa, AZ, West Main and South Macdonald, 1911.

INTRODUCTION

The City of Mesa Historic Preservation Office, a function of the Planning Division, is dedicated to the preservation and improvement of the City's significant historic districts. Property owners and residents within Mesa's diverse historic neighborhoods are also at the forefront of this effort, and act as excellent stewards of their irreplaceable historic homes.

Traffic and speeding within historic districts are ongoing concerns. In 2018, the Historic Preservation Office received a grant from the Salt River Pima-Maricopa Indian Community to conduct a study of vehicular patterns along the historic districts' streets. With quantifiable information about traffic and vehicle speeds, a clearer picture of these issues can come into focus.

METHODOLOGY

An informational postcard was mailed to every historic district resident and property owner on 11/17/2020 (Appendix A). This postcard included details of the data collection project and solicited feedback from any interested parties.

Through a collaboration between the Historic Preservation Office and the City Traffic Engineer, specific areas in four historic neighborhoods were determined to be ideal locations to perform data collection (see page 3):

- Five locations in the Evergreen Historic District;

- collection strips along the road bed.

Data from each strip was measured and collected in two 24-hour increments, on 12/02/2020 and 12/03/2020.

RESULTS

Data is reported in the following categories:

- 2. Number of vehicles on the road segment during each day
- 3. Time of day vehicles are recorded
- 4. Average speed of all drivers

Information from collection locations will be presented in tables. An overview for each historic district will be followed by location-specific data, which includes vehicle counts broken down by speed and time of day.

Two locations in the Washington-Escobedo Heritage Neighborhood;

Three locations in the Glenwood-Wilbur Historic District; and

Six locations in Fraser Fields were identified for placement of temporary data

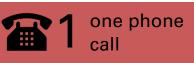
1. 85th Percentile Speed = the speed that most (85%) motorists are driving

FEEDBACK

An essential component of this study is to understand the personal experiences of historic district residents and community members. Through the postcard prompts and conversation with residents, the Historic Preservation Office received:







And several concerns through other anecdotal conversations.

The content of these communications shared much of the same concerns:

- Cars regularly exceeding the speed limit
- Inadequate signage
- Angry and inconsiderate drivers
- Cars cutting corners, driving across yards, and general unsafe driving
- Safety of children and pets
- Ineffectiveness of speed bumps
- Noise from speeding vehicles
- Increase in speeds correlating to light rail construction

The Historic Preservation Office still receives feedback following the date of this publication, and will continue to log these communications and respond to residents on an ongoing basis.

If you wish to contribute your experiences with traffic and speeding in a historic district, please contact the Historic Preservation Office:

historicpreservation@mesaaz.gov 480-644-2021

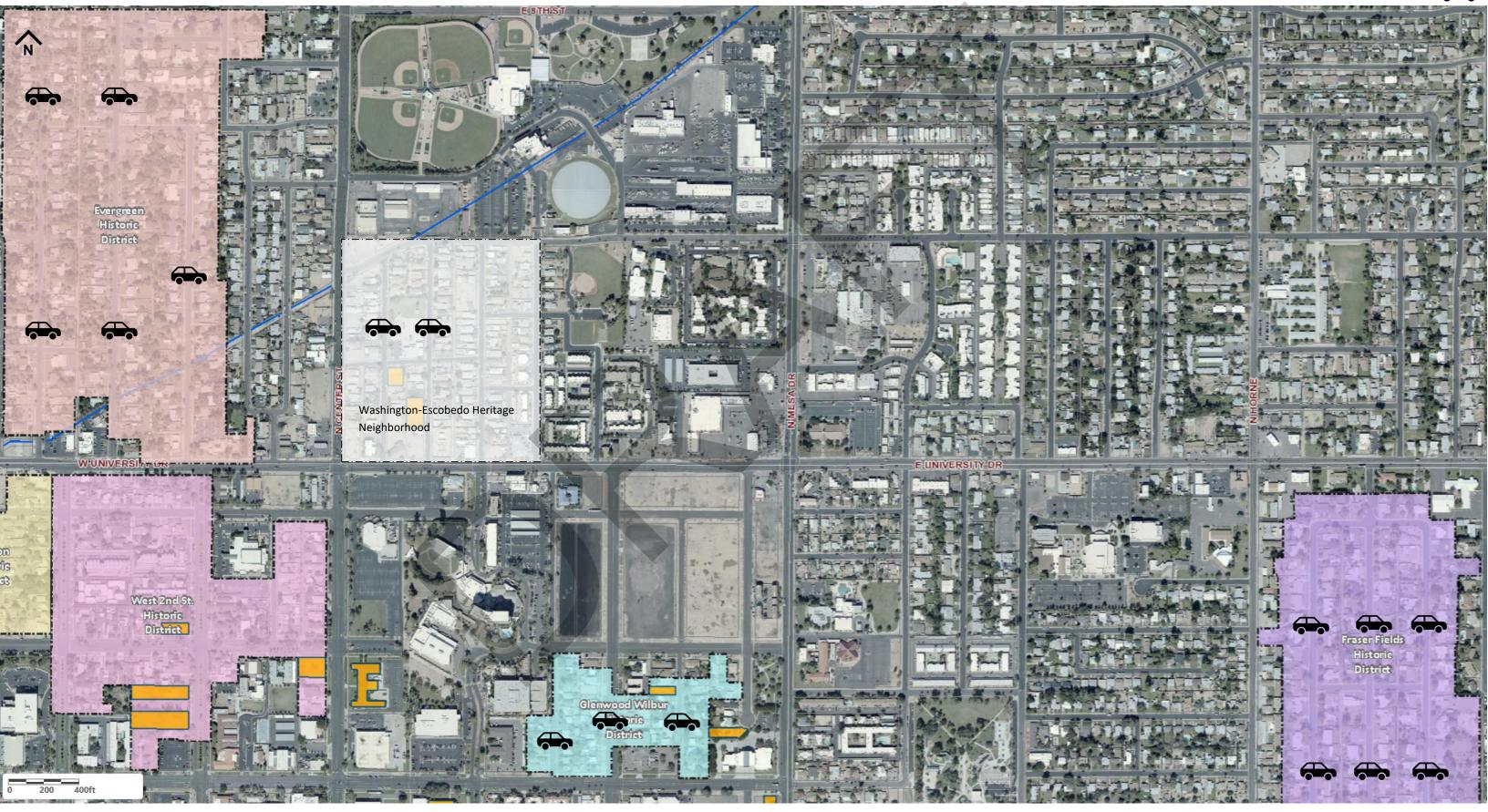




Photographs Courtesy of the Mesa Historical Museum.

COLLECTION LOCATIONS

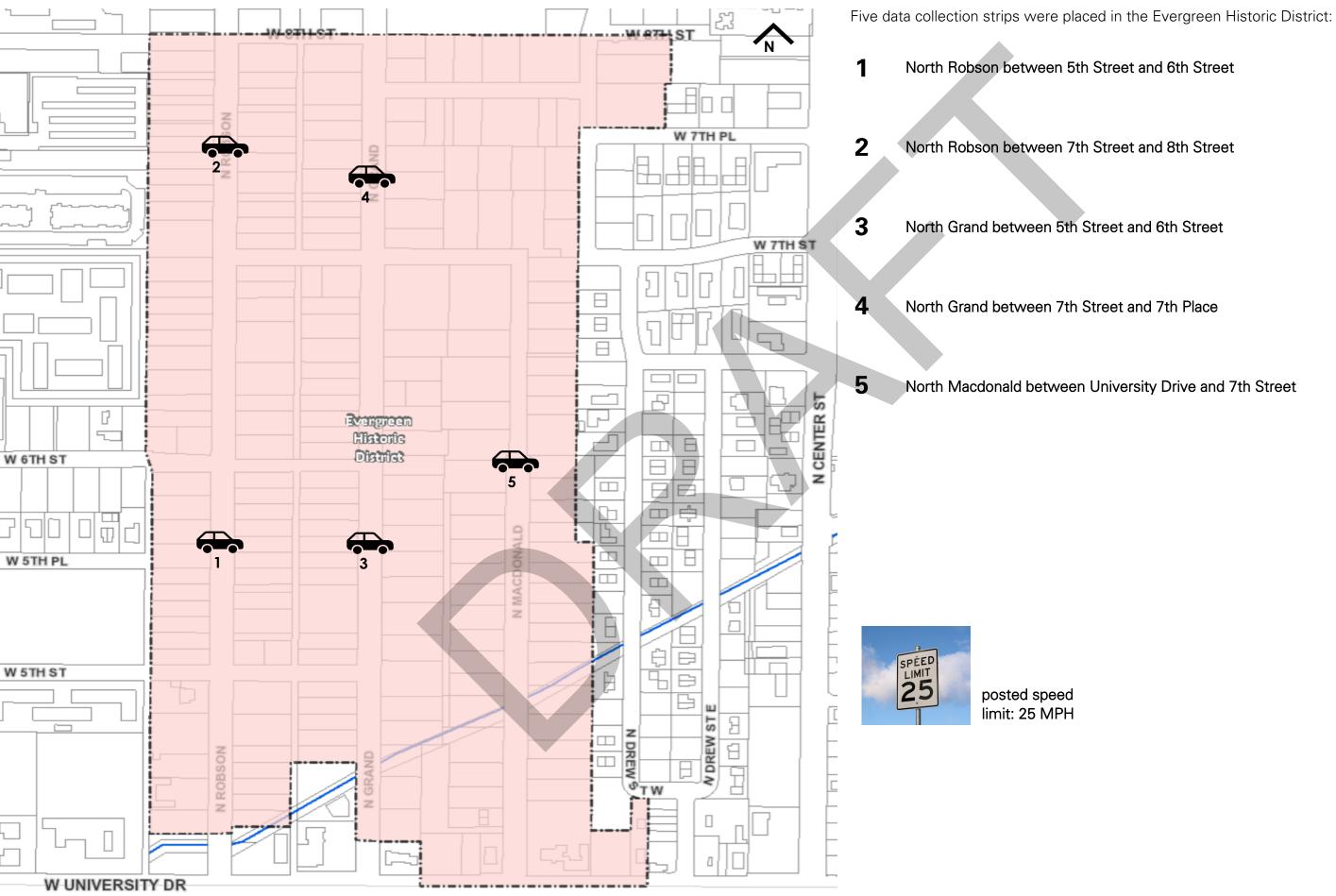
Fourteen locations for data collection were identified by the Historic Preservation Office and the City Traffic Engineer. Two additional locations, in the Washington-Escobedo Heritage Neighborhood, were added following feedback from the community.





Data collection strip approximate location

EVERGREEN HISTORIC DISTRICT

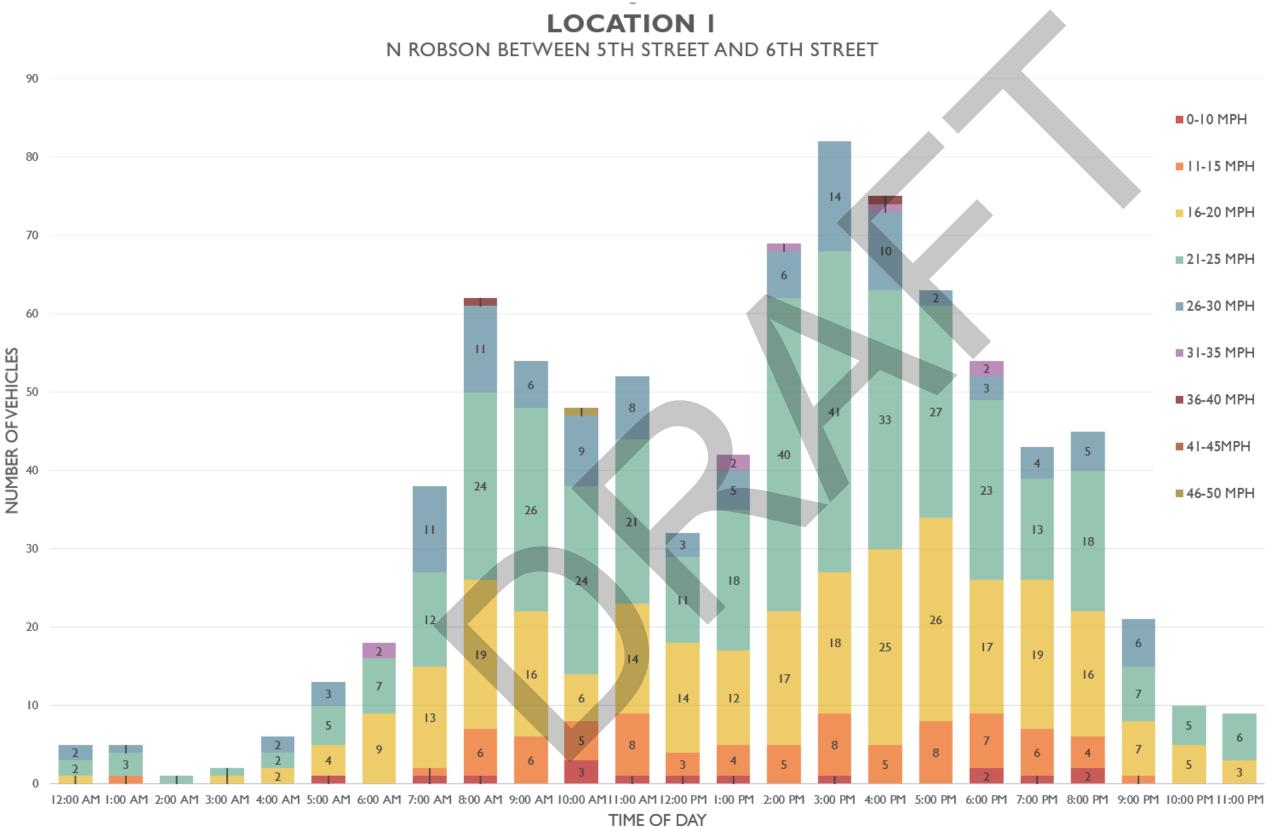


EVERGREEN HISTORIC DISTRICT results overview



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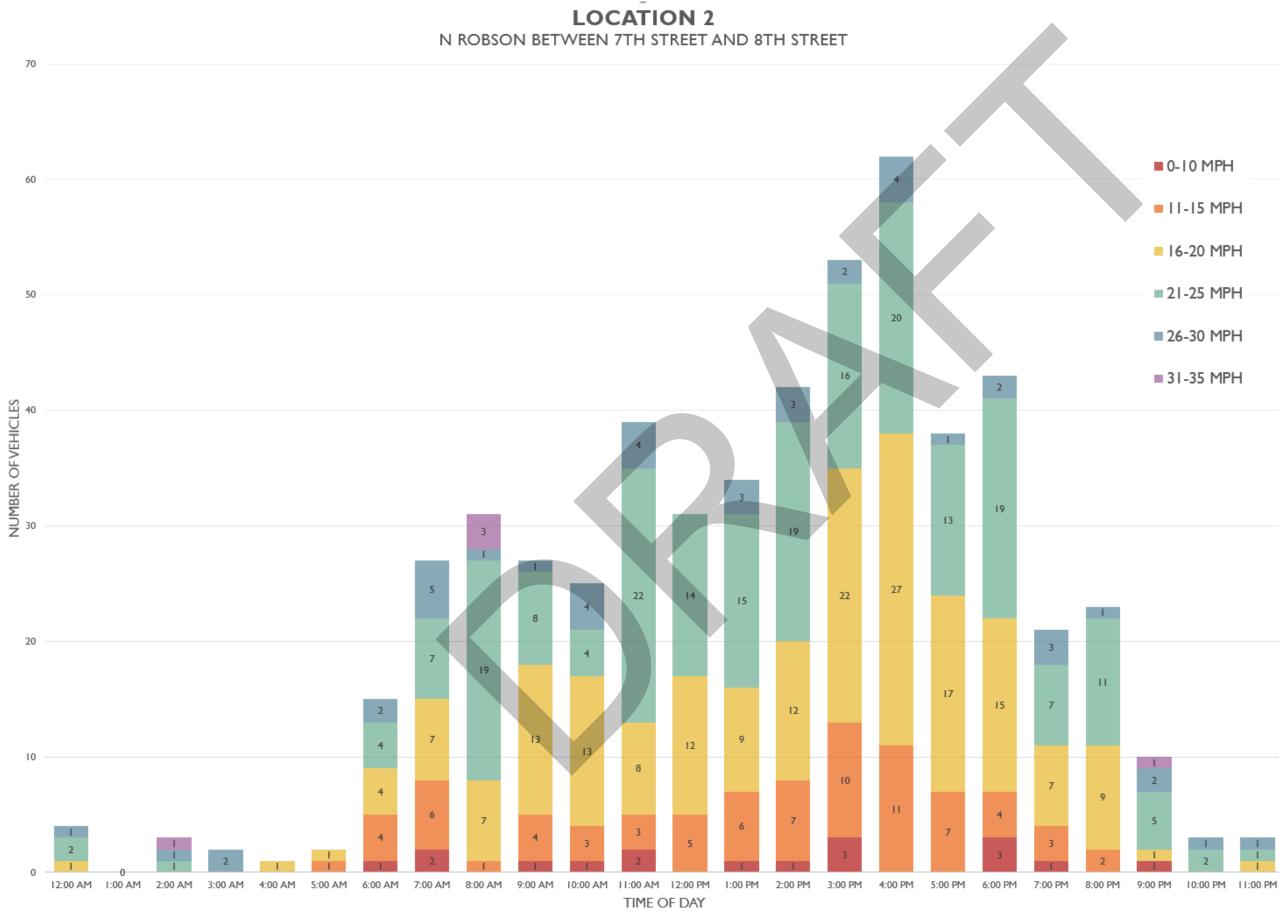
North Robson between 5th Street and 6th Street





- **849** At Location 1, on N Robson between 5th St and 6th St, a total of 849 vehicles were recorded over the course of two days, 12/02/2020 and 12/03/2020.
- 25.5 Most vehicles (85%) were recorded traveling around 25.5 miles per hour (MPH). The average recorded speed was 20.5 MPH.
 - **1** The fastest recorded speed, 46-50 MPH, was recorded from 1 vehicle, between 10:30AM and 10:45AM on 12/03/2020.

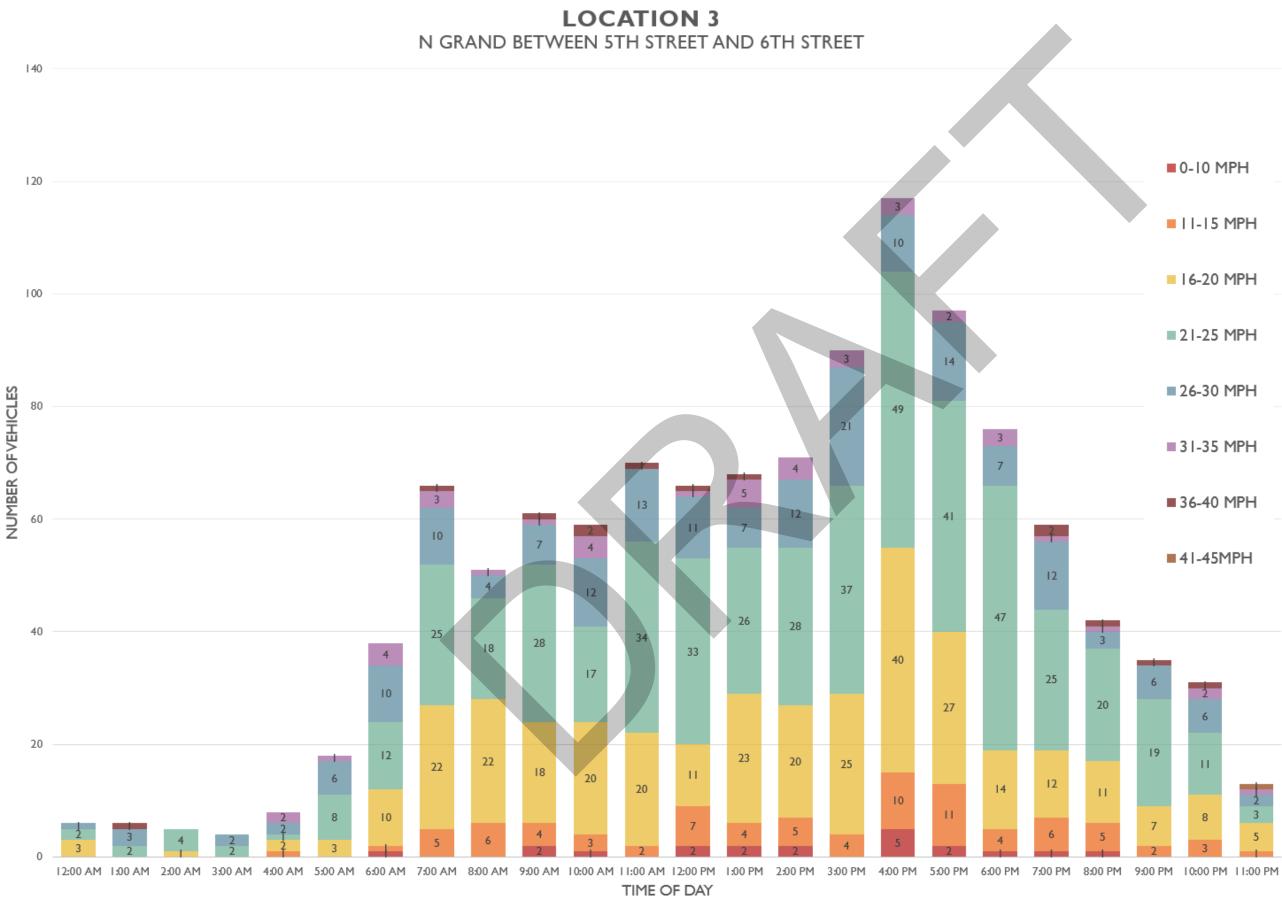
North Robson between 7th Street and 8th Street





- **539** At Location 2, on N Robson between 7th St and 8th St, a total of 539 vehicles were recorded over the course of two days, 12/02/2020 and 12/03/2020.
- 24.3 Most vehicles (85%) were recorded traveling around 24.3 miles per hour (MPH). The average recorded speed was 19.3 MPH.
 - **4** The fastest recorded speeds, 31-35 MPH, were recorded from 4 vehicles, between 2:30-2:45AM, 8:00-8:15AM, and 8:30-8:45AM on both 12/02/2020 and 12/03/2020.

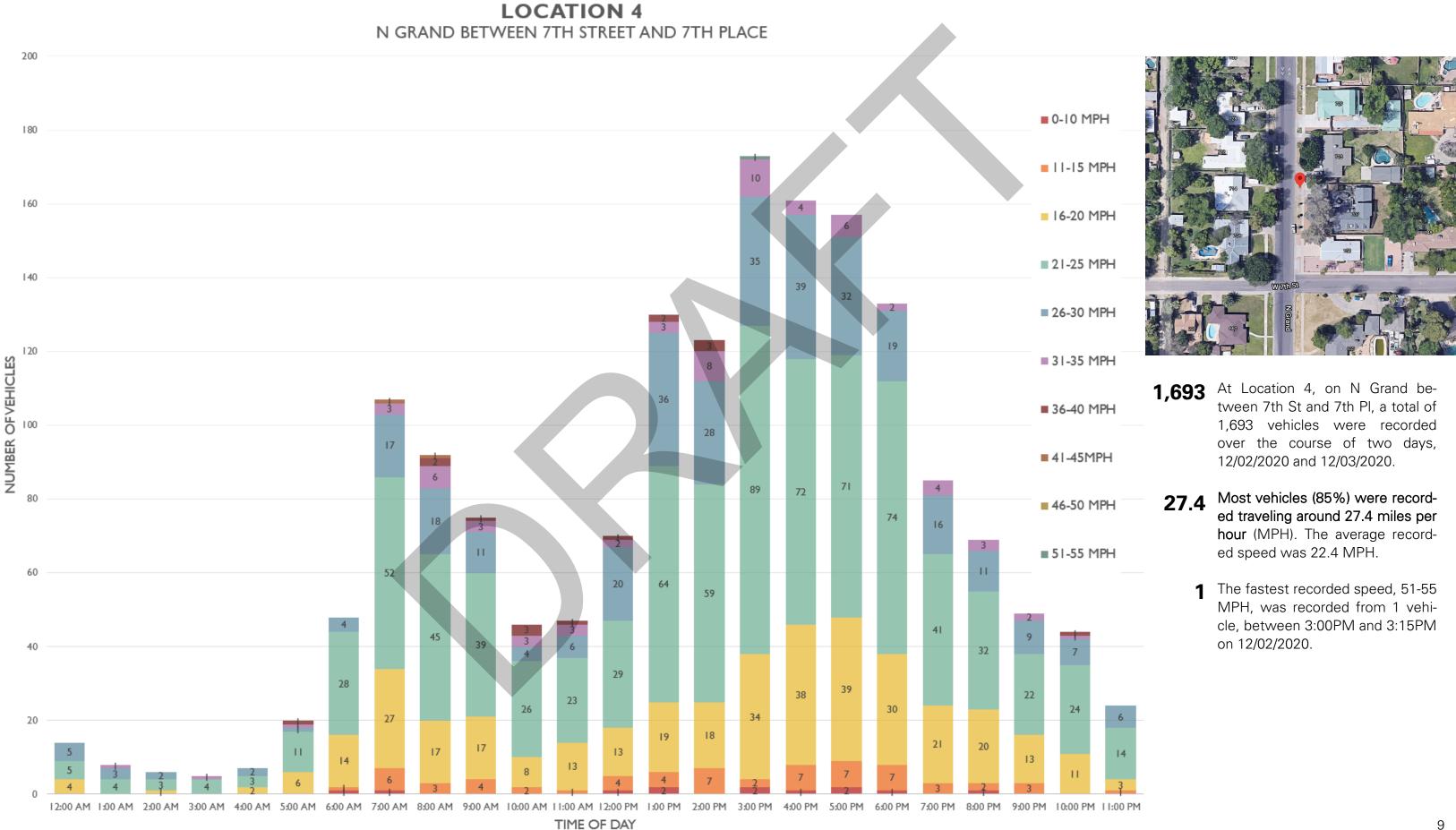
North Grand between 5th Street and 6th Street



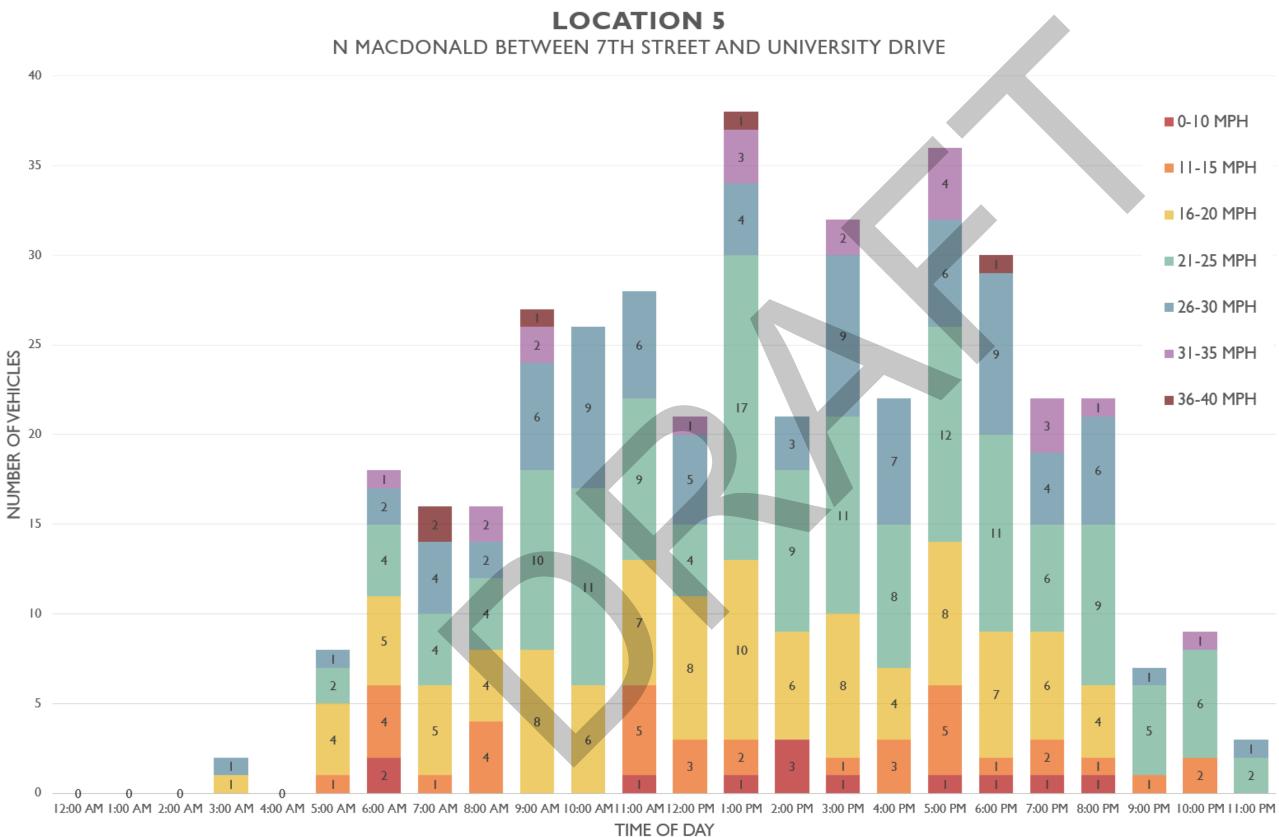


- PH
 1,157 At Location 3, on N Grand between 5th St and 6th St, a total of 1,157 vehicles were recorded over the course of two days, 12/02/2020 and 12/03/2020.
- 5MPH 26.8 Most vehicles (85%) were recorded traveling around 26.8 miles per hour (MPH). The average recorded speed was 21.4 MPH.
 - **1** The fastest recorded speed, 41-45 MPH, was recorded from 1 vehicle, between 11:00PM and 11:15PM on 12/02/2020.

North Grand between 7th Street and 7th Place



North Macdonald between University Drive and 7th Street





- **404** At Location 5, on N Macdonald between University Dr and 7th St, a total of 404 vehicles were recorded over the course of two days, 12/02/2020 and 12/03/2020.
- **28.0** Most vehicles (85%) were recorded traveling around 28.0 miles per hour (MPH). The average recorded speed was 21.6 MPH.
 - **5** The fastest recorded speeds, 36-40 MPH, were recorded from 5 vehicles. On 12/02/2020, one car was recorded at 7:30AM and one car was recorded at 9:45AM. On 12/03/2020, One car was recorded at 7:30AM, one at 1:30PM, and one at 6:45PM.

EVERGREEN HISTORIC DISTRICT results analysis

85% SPEED INDICATES THE SPEED THAT MOST CARS WERE RECORDED TRAVELING.

COUNT #	LOCATION	85% SPEED (MPH)	POSTED SPEED LIMIT	EXCEEDS SPEED LIMIT	MPH OVER SPEED LIMIT
1	N ROBSON BETWEEN 5TH ST AND 6TH ST	25.2	25	Х	0.2
2	N ROBSON BETWEEN 7TH ST AND 8TH ST	24.3	25		
3	N GRAND BETWEEN 5TH ST AND 6TH ST	26.8	25	X	1.8
4	N GRAND BETWEEN 7TH ST AND 7TH PL	27.4	25	Х	2.4
5	N MACDONALD BETWEEN UNI- VERSITY DR AND 7TH ST	28.0	25	Х	3.0
				Î	Î

4 OF THE 5 LOCATIONS RECORDED MOST CARS EXCEEDING THE POSTED SPEED LIMIT.

ON AVERAGE T SPEED LIMIT BY

OBSERVATIONS

- 1. While four of the five count locations recorded most cars exceeding the 25 MPH posted speed limit, they did so (on average) by only 2.4 MPH.
- 2. One count location recorded most cars abiding by the speed limit, but only by 0.7 MPH.
- 3. Location 4, on N Grand between 7th St and 7th Pl, recorded the greatest volume of cars, at 1,693 over the course of two days, which generally exceeded the speed limit. This stretch of N Grand is the only street in Evergreen that connects University Dr with Brown Rd, which drivers may use as an alternative to Country Club Rd. This location recorded the highest volume of cars in the entire study.
- 4. Location 5, on N Macdonald, observed the fastest overall speeds in Evergreen, with most cars exceeding the speed limit by 3 MPH.

NOTABLE SPEEDING OCCURRANCES (over 40 MPH):

DOES NOT EXCEED SPEED LIMIT	TOTAL VEHICLES	
	849	
Х	539	
	1157	
	1693	
	404	
IESE CARS EXCEEDED TI 2.4 MPH		T OTAL CARS RECORDED

a. 46-50 MPH: Location 1, between 10:30 and 10:45AM on 12/03/2020.

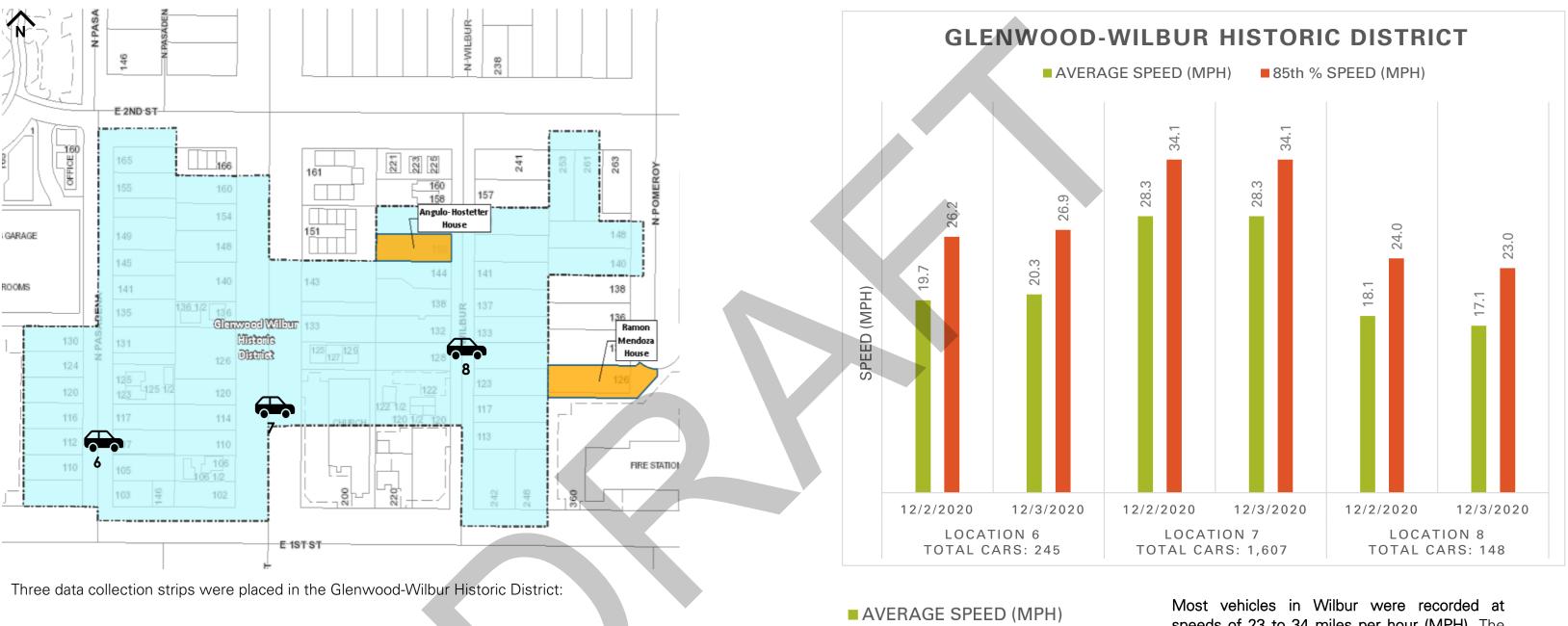
b. 41-45 MPH: Location 3, between 11:00 and 11:15PM, on 12/02/2020.

c. 51-55 MPH: Location 4, between 5:00 and 5:15 PM, on 12/02/2020.

d. 41-45 MPH: Location 4, between 7:45 and 8:00AM, on 12/03/2020.

e. 41-45 MPH: Location 4, between 8:00 and 8:15AM, on 12/03/2020.

GLENWOOD-WILBUR HISTORIC DISTRICT



6 North Pasadena between 1st Street and 2nd Street

7 North Hibbert between 1st Street and 2nd Street

8 North Wilbur between 1st Street and 2nd Street

Average is the MIDDLE POINT of all recorded speeds

■ 85th % SPEED (MPH)

85% speed is the speed that MOST vehicles were traveling

speeds of 23 to 34 miles per hour (MPH). The average recorded speed was 21.9 MPH.

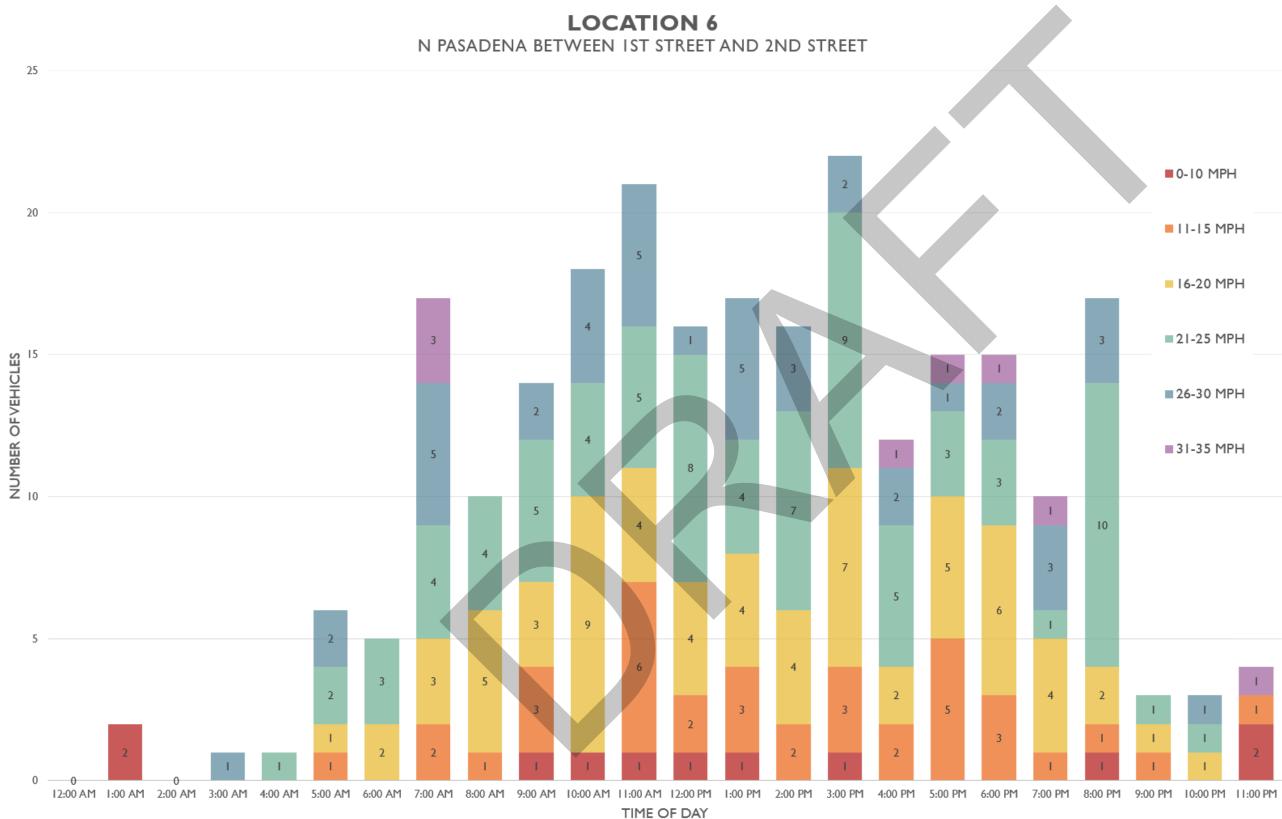
The posted speed is 25 MPH.



Data was collected over the course of two days: Wednesday 12/2/2020, and Thursday 12/3/2020

GLENWOOD-WILBUR HISTORIC DISTRICT location 6

North Pasadena between 1st Street and 2nd Street

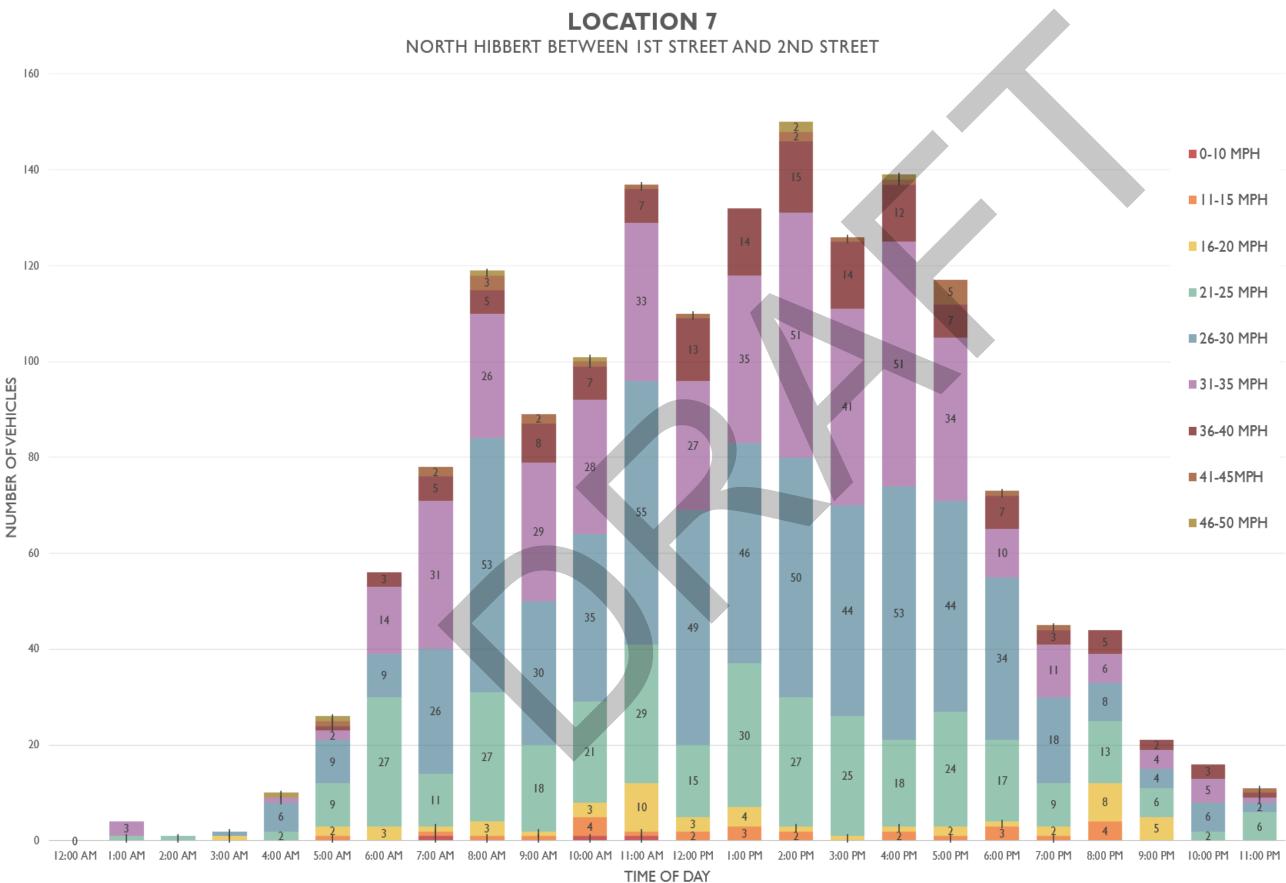




- 245 At Location 6, on N Pasadena between 1st St and 2nd St, a total of 245 vehicles were recorded over the course of two days, 12/02/2020 and 12/03/2020.
- 26.5 Most vehicles (85%) were recorded traveling around 26.5 miles per hour (MPH). The average recorded speed was 20.0 MPH.
 - 8 The fastest recorded speeds, 31-35 MPH, were recorded from 8 vehicles, during the morning, late afternoon, and late night on both 12/02/2020 and 12/03/2020.

GLENWOOD-WILBUR HISTORIC DISTRICT location 7

North Hibbert between 1st Street and 2nd Street



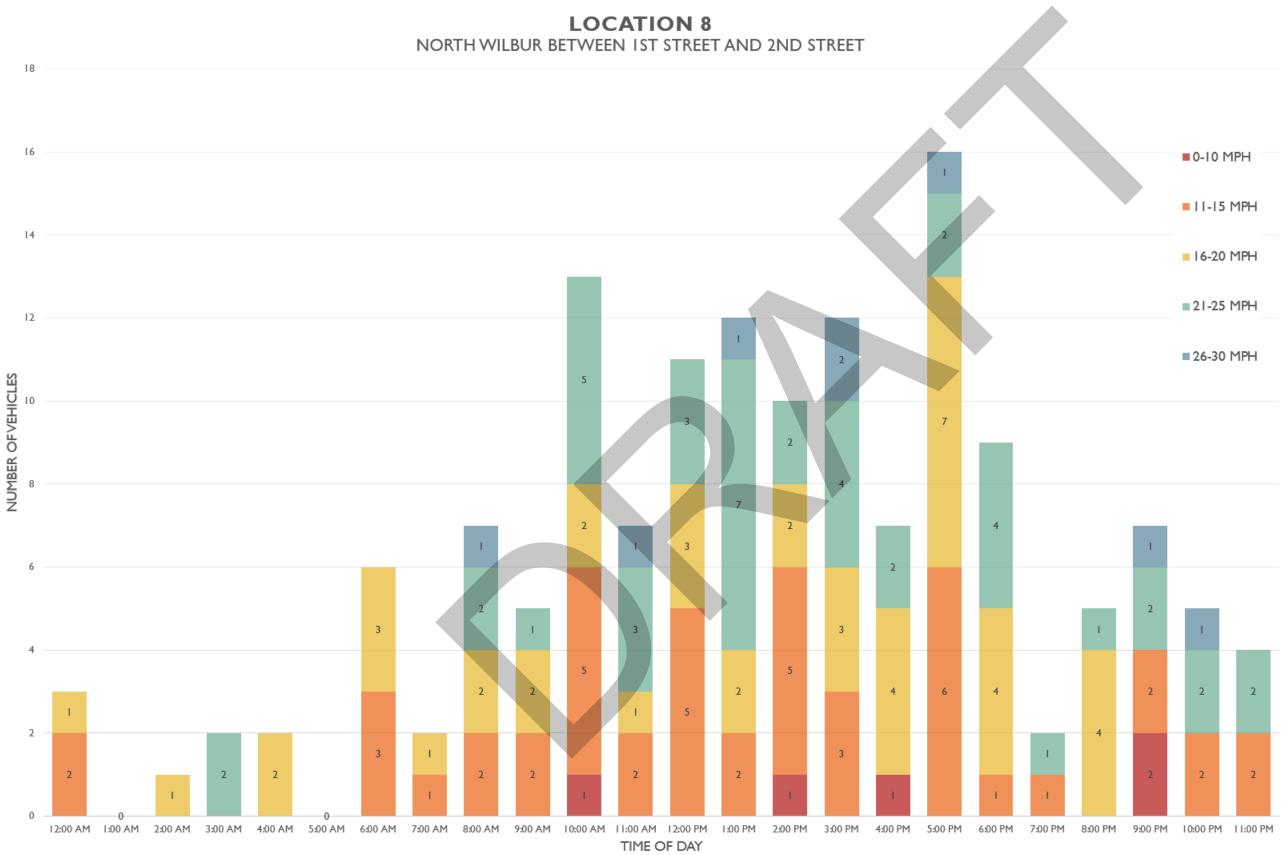


- **1,607** At Location 7, on N Hibbert between 1st St and 2nd St, a total of 1,607 vehicles were recorded over the course of two days, 12/02/2020 and 12/03/2020.
- **34.1** Most vehicles (85%) were recorded traveling around 34.1 miles per hour (MPH). The average recorded speed was 28.3 MPH.
 - 6 The fastest recorded speeds, 46-50 MPH, were recorded from 6 vehicles, between the early morning and late afternoon on both study days.

14

GLENWOOD-WILBUR HISTORIC DISTRICT location 8

North Wilbur between 1st Street and 2nd Street





- **148** At Location 8, on N Wilbur between 1st St and 2nd St, a total of 148 vehicles were recorded over the course of two days, 12/02/2020 and 12/03/2020.
- 23.5 Most vehicles (85%) were recorded traveling around 23.5 miles per hour (MPH). The average recorded speed was 17.6 MPH.
 - 8 The fastest recorded speeds, 26-30 MPH, were recorded from 8 vehicles. On both study days, these speeds were recorded between 8:00AM and 10:45PM.

GLENWOOD-WILBUR HISTORIC DISTRICT results analysis

85% SPEED INDICATES THE SPEED THAT MOST CARS WERE RECORDED TRAVELING.

5 N HIBBERT BETWEEN 1ST ST AND 2ND ST 34.1 25 X 9.1 160	UNT # LOCATION	85% SPEED (MPH)	POSTED SPEED LIMIT	EXCEEDS SPEED LIMIT	MPH OVER SPEED LIMIT	DOES NOT EXCEED SPEED LIMIT	TOTAL VEHICLES
5 2ND ST 34.1 25 X 9.1 160		D 26.5	25	X	1.5		245
6 N WILBUR BETWEEN 1ST ST AND 2ND 23 5 25 25 14	h) 34.1	25	x	9.1		1607
ST 23.5 25 X 140	6	ND 23.5	25			Х	148

OBSERVATIONS

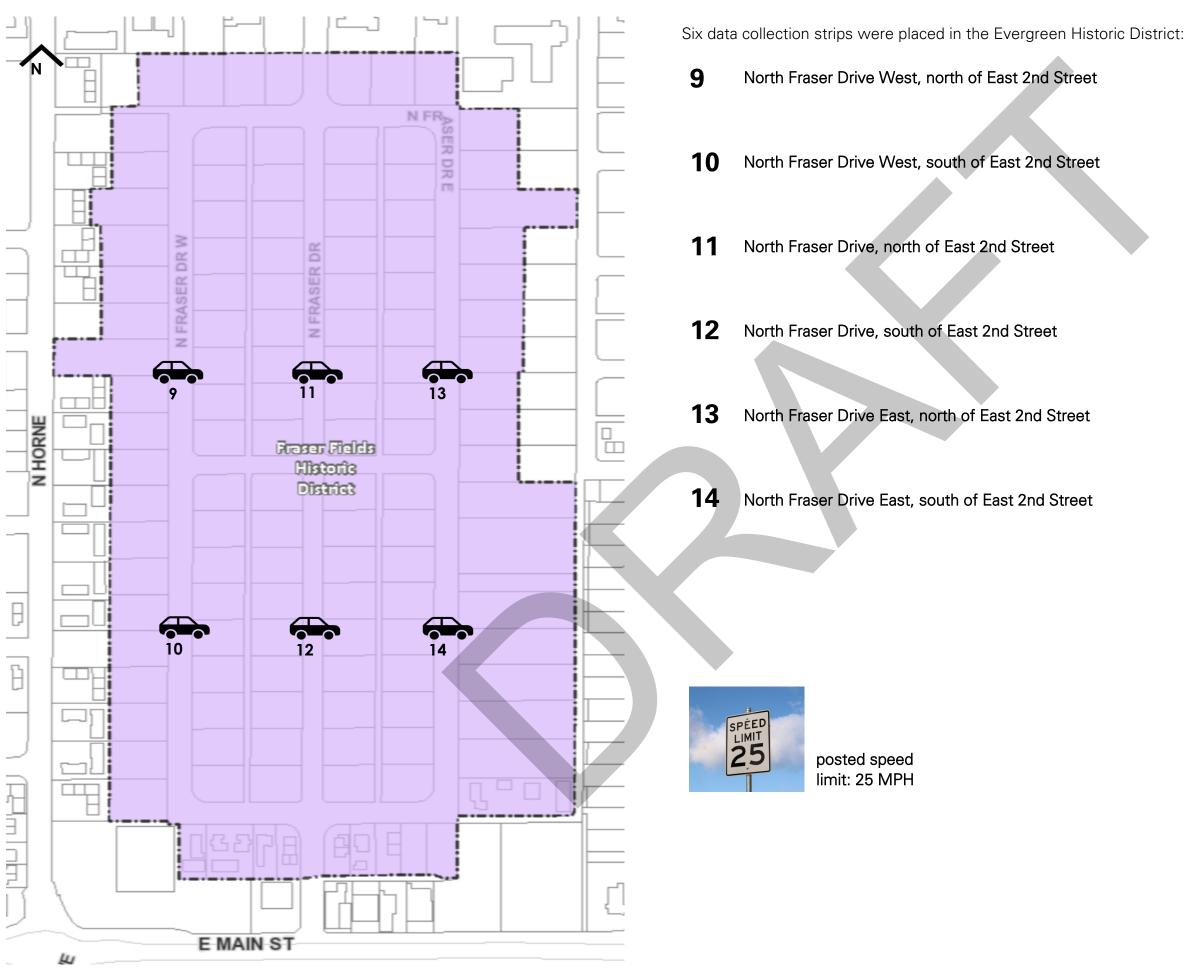
- 1. 2 of the 3 locations in Glenwood-Wilbur were recorded with most cars exceeding the speed limit, by an average of 5.3 MPH.
- 2. One count location recorded most cars abiding by the speed limit, but only by 1.5 MPH.
- 3. Location 5, on N Hibbert between 1st St and 2nd St, recorded the greatest volume of cars, at 1,607 over the course of two days, which generally exceeded the speed limit by 9.1 MPH. This stretch of N Hibbert is twice as wide as N Pasadena and N Wilbur, and can be used as a shortcut between University Dr and Main St.
- 4. N Hibbert is also the least characteristically residential street in Glenwood-Wilbur, as it includes a multi-story apartment building, and a church complex.

NOTABLE SPEEDING OCCURRANCES (Location 7, over 40 MPH):

TIME	VOLUME	SPEED	DAY
4:00-6:00AM	2 CARS	46-50 MPH	12/02/2020
8:00-10:00AM	4 CARS	41-45 MPH	12/02/2020
10:00AM-	2 CARS	41-45 MPH	12/02/2020
12:00PM	1 CAR	46-50 MPH	12/02/2020
12:00-2:00PM	1 CAR	41-45 MPH	12/02/2020
2:00-4:00PM	2 CARS	41-45 MPH	12/02/2020
2.00-4.00F10	2 CARS	46-50 MPH	12/02/2020
4:00-6:00PM		41-45 MPH	12/02/2020
4.00-0.00F10	1 CARS	46-50 MPH	12/02/2020
6:00-8:00PM	1 CAR	41-45 MPH	12/02/2020

TIME	VOLUME	SPEED	DAY
5:00-7:00AM	1 CAR	41-45 MPH	12/03/2020
7:00-9:00AM	3 CARS	41-45 MPH	12/03/2020
7.00-9.00AW	1 CAR	46-50 MPH	12/03/2020
2:00-4:00PM	1 CAR	41-45 MPH	12/03/2020
2:00-4:00PM	2 CARS	41-45 MPH	12/03/2020
2.00-4.00F10	2 CARS	46-50 MPH	12/03/2020
4:00-6:00PM	3 CARS	41-45 MPH	12/03/2020
6:00-8:00PM	1 CAR	41-45 MPH	12/03/2020
9:00-11:00PM	1 CAR	41-45 MPH	12/03/2020

FRASER FIELDS HISTORIC DISTRICT



FRASER FIELDS HISTORIC DISTRICT results overview



Average is the MIDDLE POINT of all recorded speeds

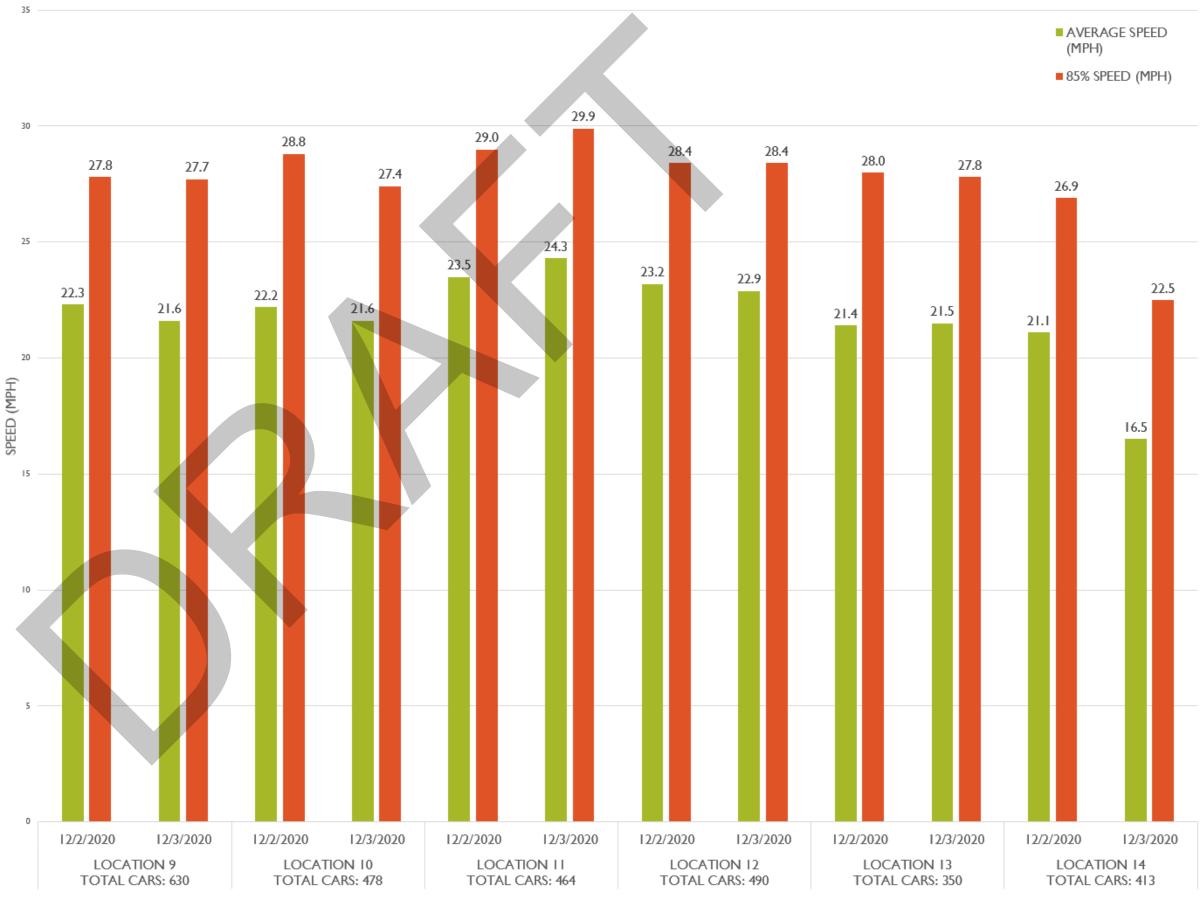
■ 85th % SPEED (MPH)

85% speed is the speed that MOST vehicles were traveling

Most vehicles in Fraser Fields were recorded at speeds of 22 to 30 miles per hour (MPH). The average recorded speed was 21.8 MPH.

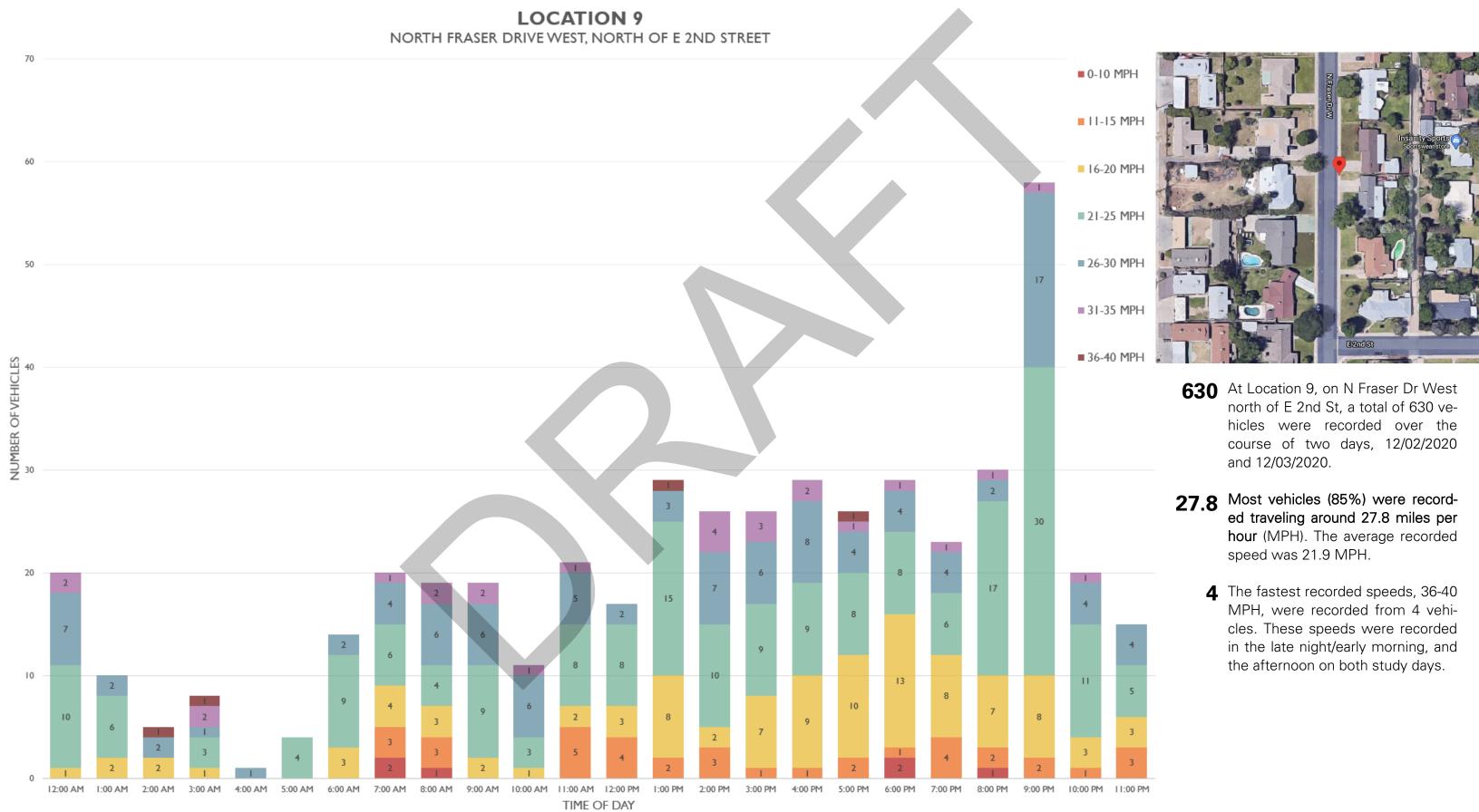
The posted speed is 25 MPH.

Data was collected over the course of two days: Wednesday 12/2/2020, and Thursday 12/3/2020

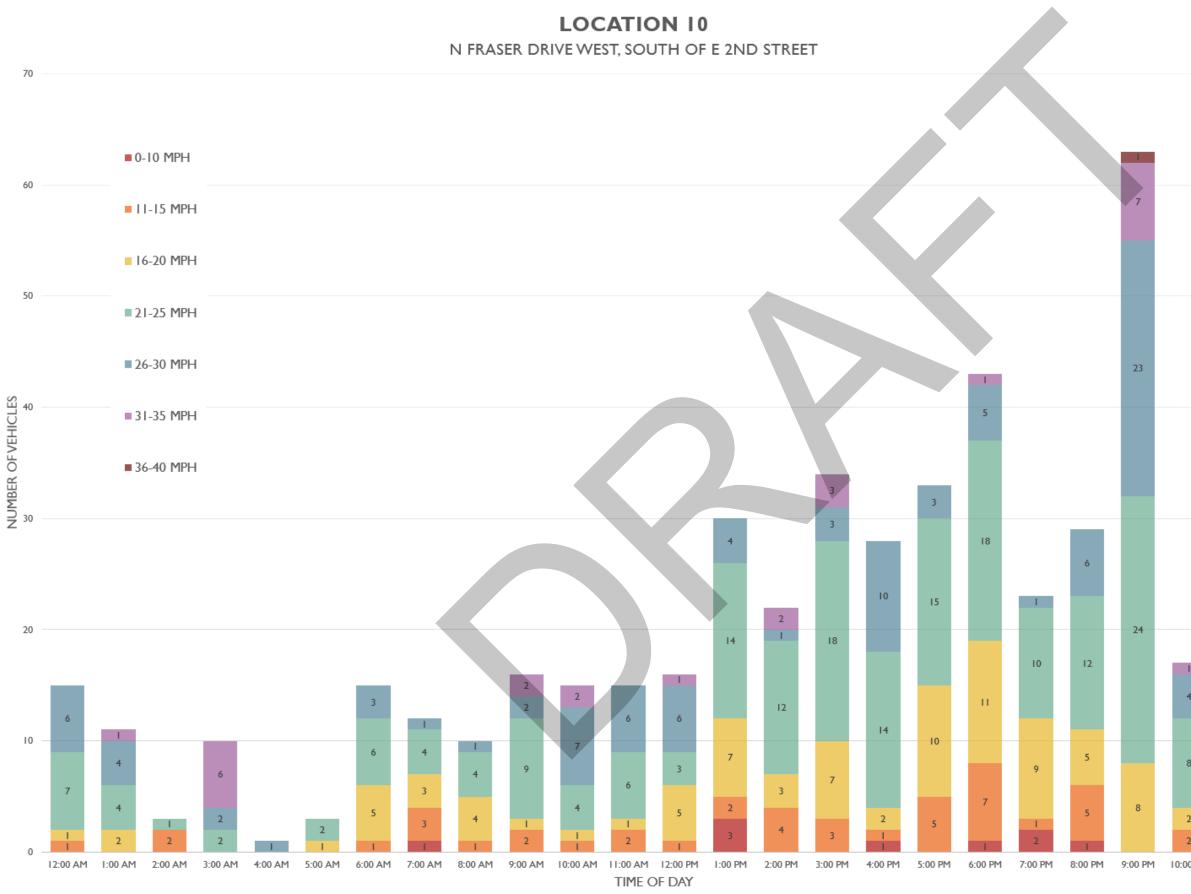


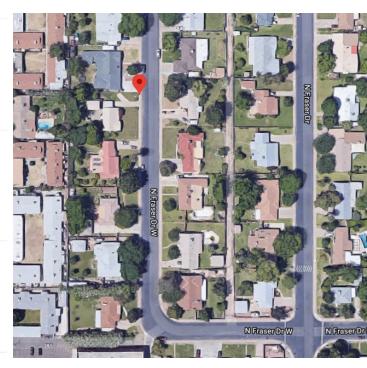


North Fraser Drive West, north of East 2nd Street

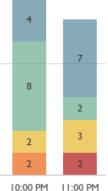


North Fraser Drive West, south of East 2nd Street

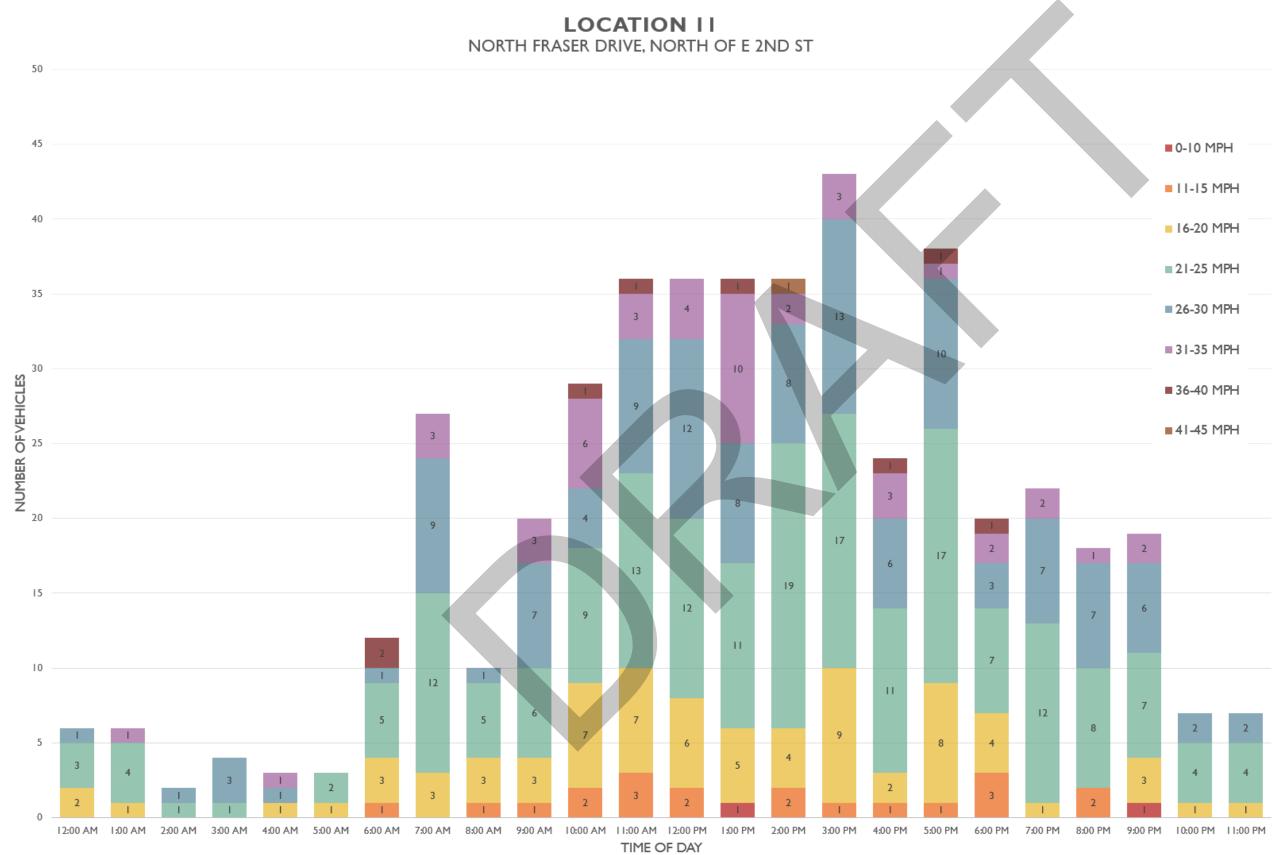




- **478** At Location 10, on N Fraser Dr West south of E 2nd St, a total of 478 vehicles were recorded over the course of two days, 12/02/2020 and 12/03/2020.
- 27.8 Most vehicles (85%) were recorded traveling around 27.8 miles per hour (MPH). The average recorded speed was 21.9 MPH.
 - **1** The fastest recorded speed, 36-40 MPH, was recorded from 1 vehicle, between 9:15PM and 9:30PM on 12/02/2020.



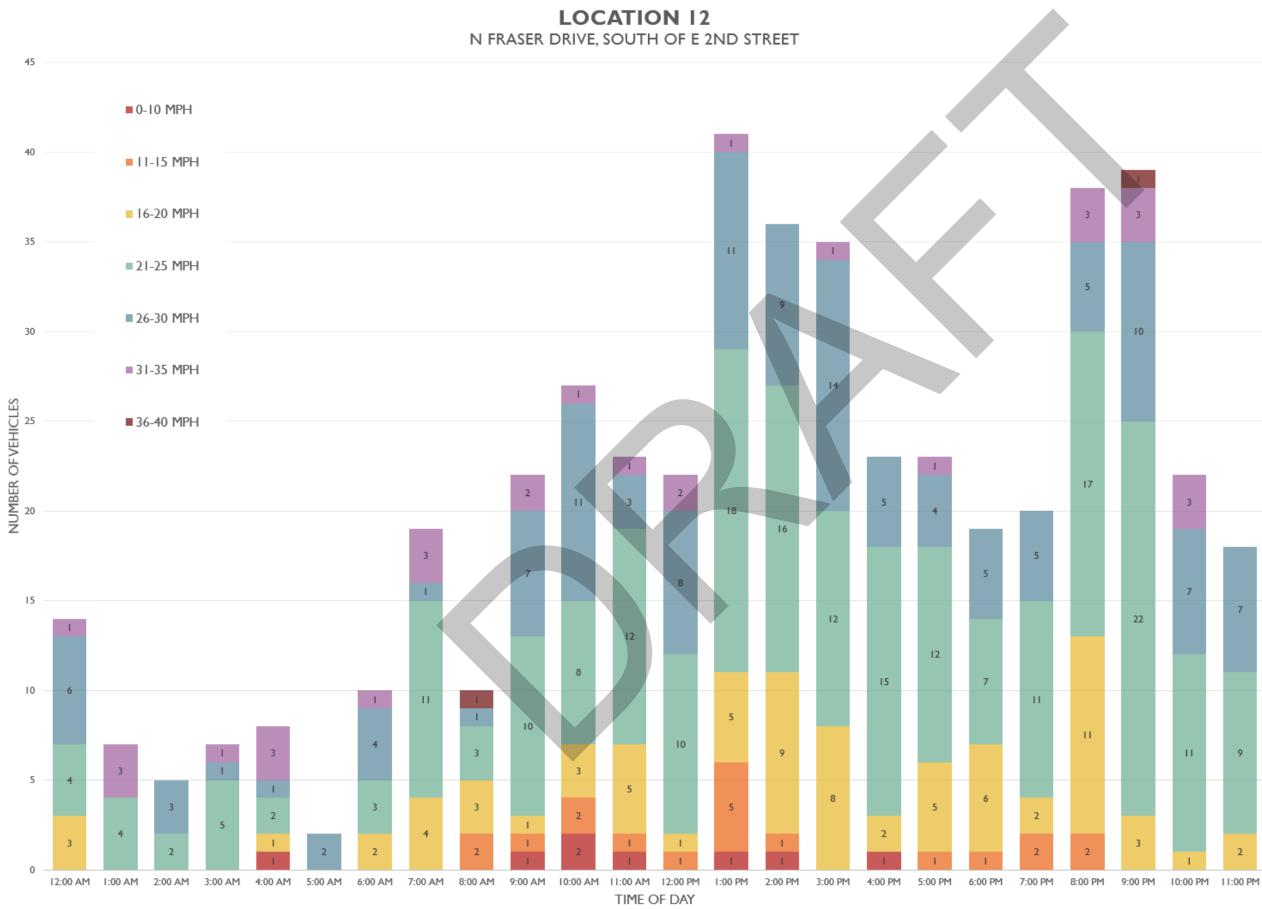
North Fraser Drive, north of East 2nd Street





- **464** At Location 11, on N Fraser Drive north of E 2nd St, a total of 464 vehicles were recorded over the course of two days, 12/02/2020 and 12/03/2020.
- 29.5 Most vehicles (85%) were recorded traveling around 29.5 miles per hour (MPH). The average recorded speed was 23.9 MPH.
 - **1** The fastest recorded speed, 41-45 MPH, was recorded from 1 vehicle, between 2:45PM and 3:00PM on 12/03/2020.

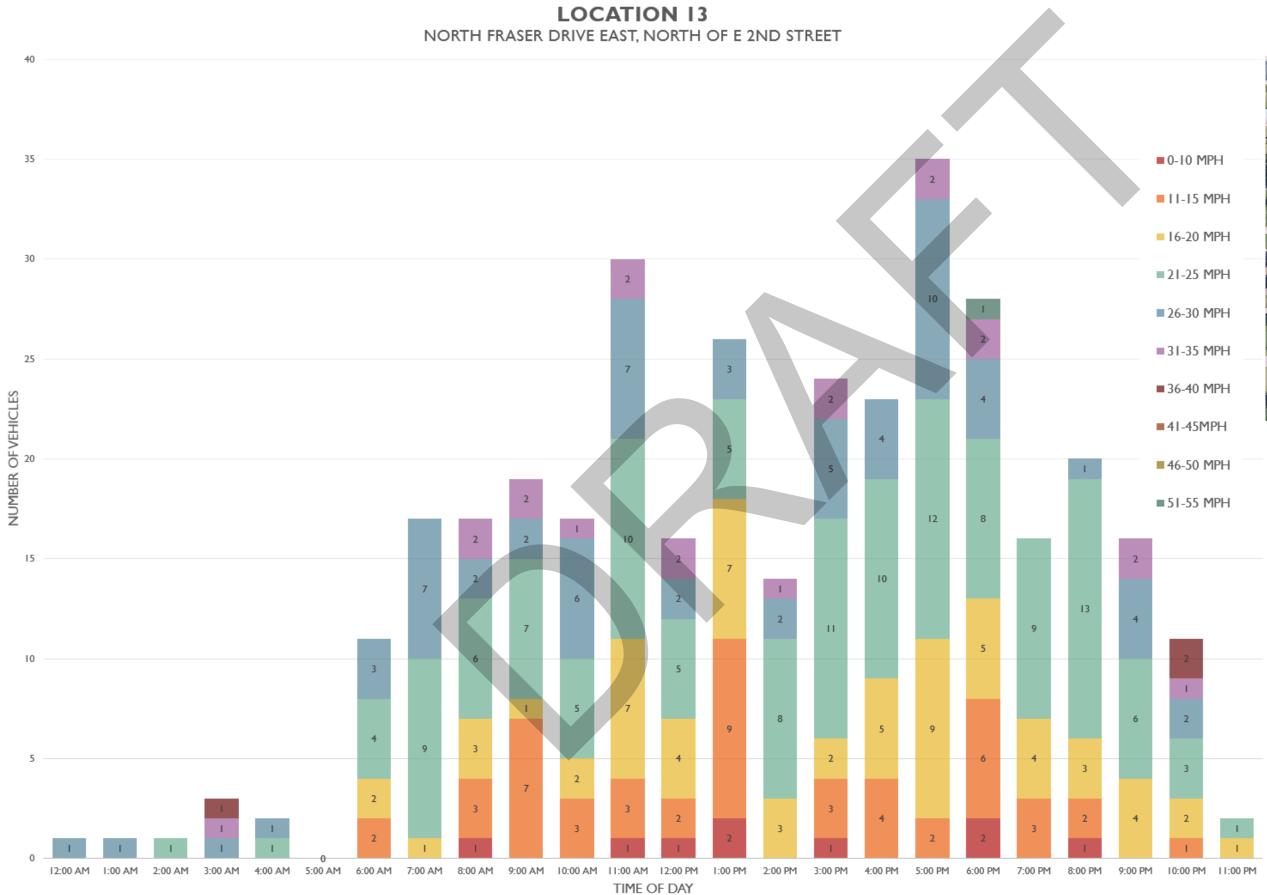
North Fraser Drive, south of East 2nd Street





- 490 At Location 12, on N Fraser Drive south of E 2nd St, a total of 490 vehicles were recorded over the course of two days, 12/02/2020 and 12/03/2020.
- Most vehicles (85%) were record-28.4 ed traveling around 28.4 miles per hour (MPH). The average recorded speed was 23.1 MPH.
 - The fastest recorded speeds, 41-45 2 MPH, were recorded from 2 vehicles, across both study days in the morning and night times.

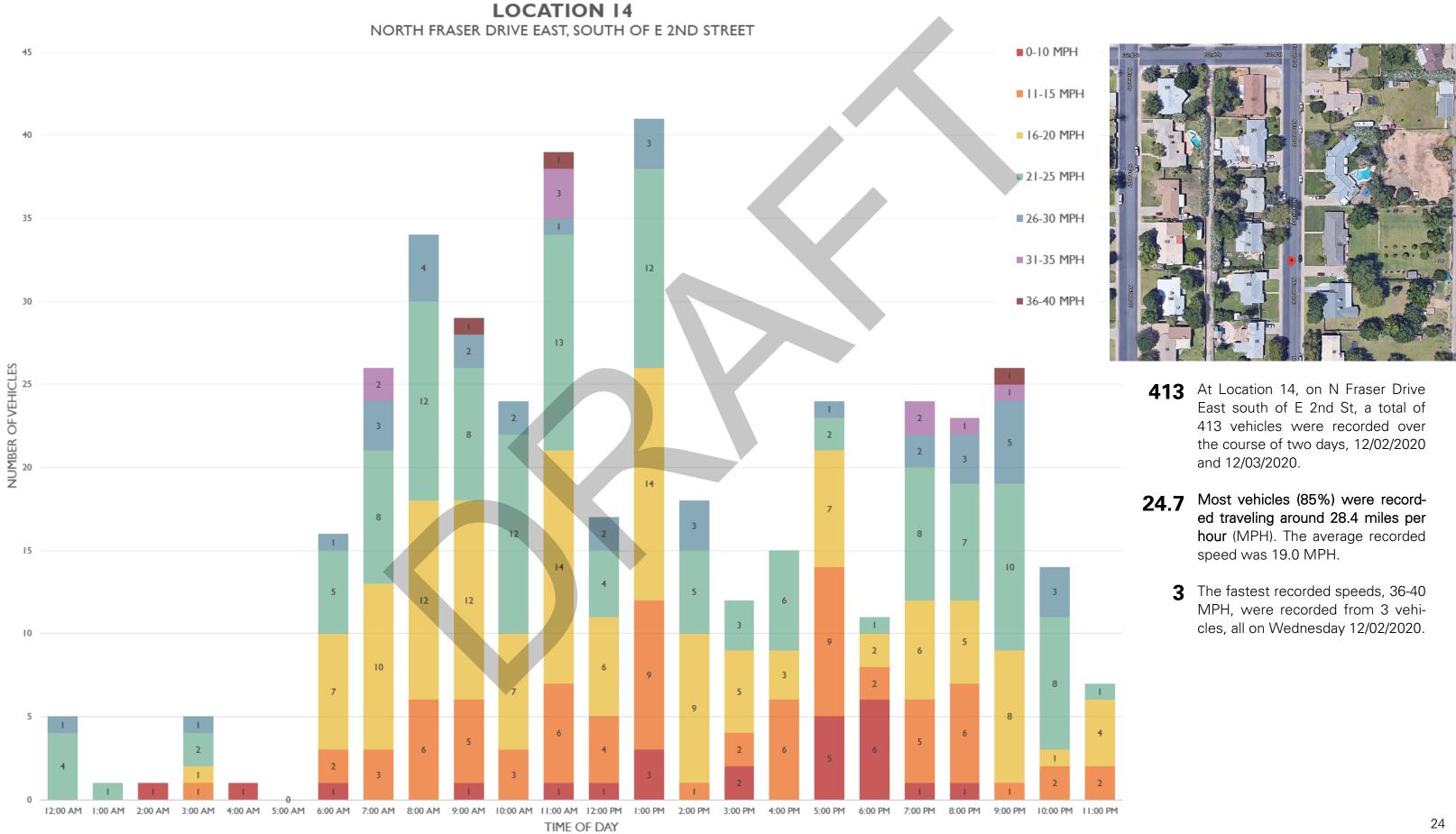
North Fraser Drive East, north of East 2nd Street





- **350** At Location 13, on N Fraser Drive East north of E 2nd St, a total of 350 vehicles were recorded over the course of two days, 12/02/2020 and 12/03/2020.
- 27.9 Most vehicles (85%) were recorded traveling around 27.9 miles per hour (MPH). The average recorded speed was 23.5 MPH.
 - **1** The fastest recorded speed, 51-55 MPH, was recorded from 1 vehicle, between 6:45PM and 7:00PM on 12/03/2020.

North Fraser Drive East, south of East 2nd Street



FRASER FIELDS HISTORIC DISTRICT

results analysis

85% SPEED INDICATES THE SPEED THAT MOST CARS WERE RECORDED TRAVELING.

COUNT #	LOCATION	85% SPEED (MPH)	POSTED SPEED LIMIT	EXCEEDS SPEED LIMIT	MPH OVER SPEED LIMIT	DOES NOT EXCEED SPEED LIMIT	TOTAL VEHICLES
9	N FRASER DR W, NORTH OF E 2ND ST	27.8	25	X	2.8		630
10	N FRASER DR W, SOUTH OF E 2ND ST	27.8	25	Х	2.8		478
11	N FRASER DR, NORTH OF E 2ND ST	29.5	25	X	4.5		464
12	N FRASER DR, SOUTH OF E 2ND ST	28.4	25	X	3.4		490
13	N FRASER DR E, NORTH OF E 2ND ST	27.9	25	X	2.9		350
14	N FRASER DR E, SOUTH OF E 2ND ST	24.7	25			Х	413
		5 OF THE 6 LOCAT EXCEEDING THE P			ON AVERAGE TH SPEED LIMIT BY	HESE CARS EXCEEDED T 3.3 MPH	THE 2,825 T WERE

OBSERVATIONS

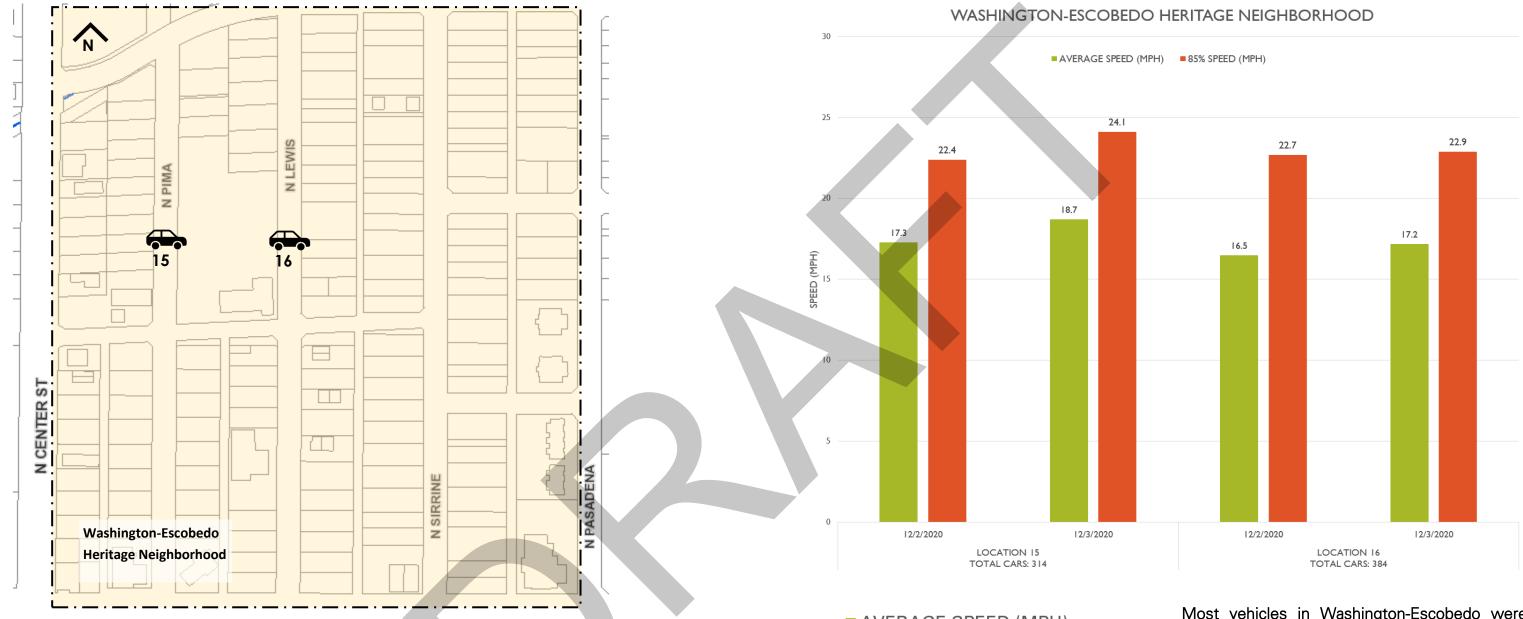
- 1. While five of the six count locations recorded most cars exceeding the 25 MPH posted speed limit, they did so (on average) by only 3.3 MPH.
- 2. One count location, 14, recorded most cars abiding by the speed limit, but only by 0.3 MPH.
- 3. Locations 11 and 12, on N Fraser Dr, recorded the fastest overall speeds, with most cars going 3.4 to 4.5 MPH over the speed limit. N Fraser Dr is considered the "through" street in the neighborhood, and provides direct access between Main St and University Dr.
- 4. However, Location 14, on N Fraser Dr W, recorded the highest volume of cars in the district, with 630 total cars counted.

NOTABLE SPEEDING OCCURRANCES (over 40 MPH):

a. 46-50 MPH: Location 11, between 2:45 and 3:00PM on 12/03/2020.

b. 51-55 MPH: Location 13, between 6:45 and 7:00 PM, on 12/02/2020.

WASHINGTON-ESCOBEDO HERITAGE NEIGHBORHOOD



Following feedback from the community, two data collection strips were placed in Washington-Escobedo:

15 North Pima between 5th Street and 6th Street

16 North Lewis between 5th Street and 6th Street AVERAGE SPEED (MPH)

Average is the MIDDLE POINT of all recorded speeds

■ 85th % SPEED (MPH)

85% speed is the speed that MOST vehicles were traveling

Most vehicles in Washington-Escobedo were recorded at speeds of 22 to 24 miles per hour (MPH). The average recorded speed was 17.4 MPH.

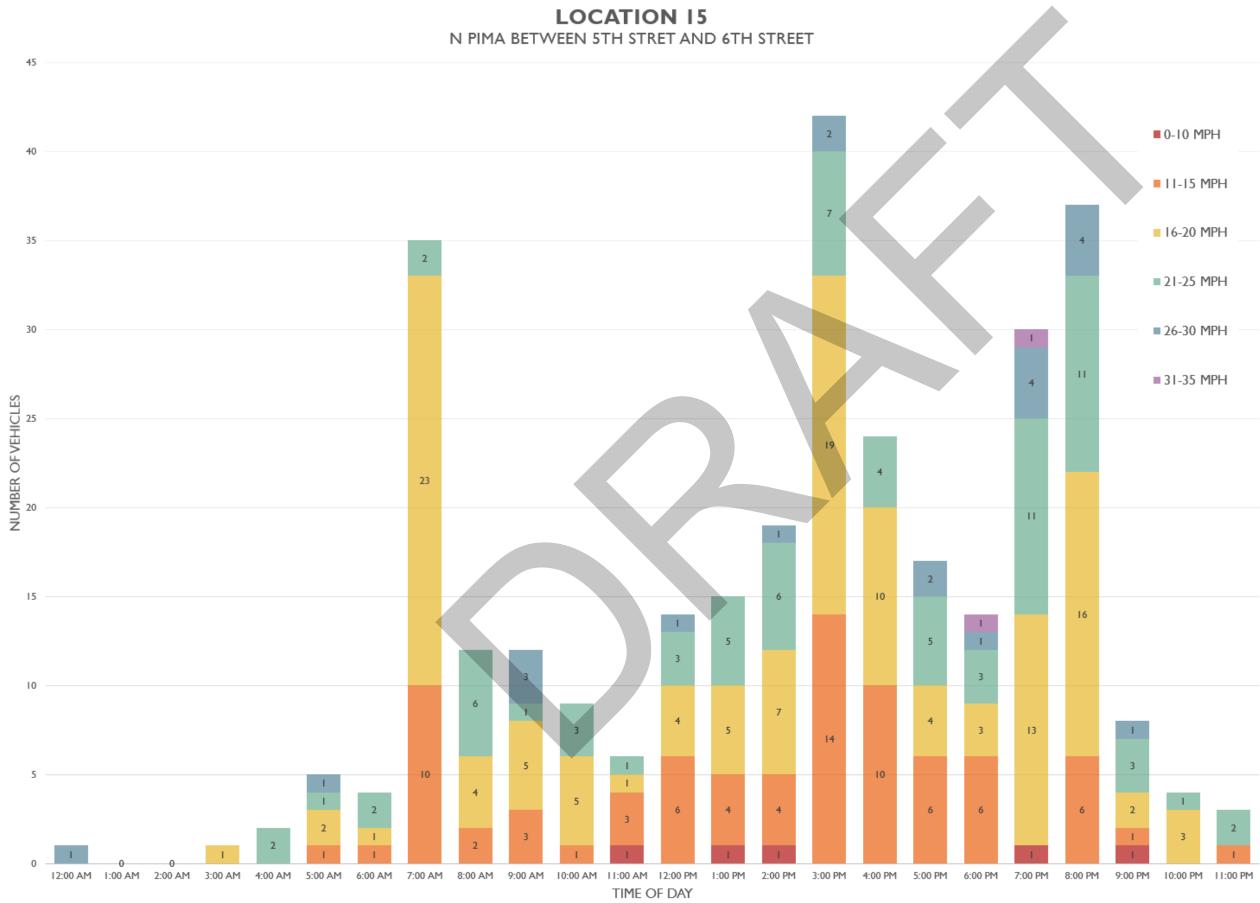
The posted speed is 25 MPH.



Data was collected over the course of two days: Wednesday 12/2/2020, and Thursday 12/3/2020

WASHINGTON-ESCOBEDO HERITAGE NEIGHBORHOOD location 15

North Pima between 5th Street and 6th Street

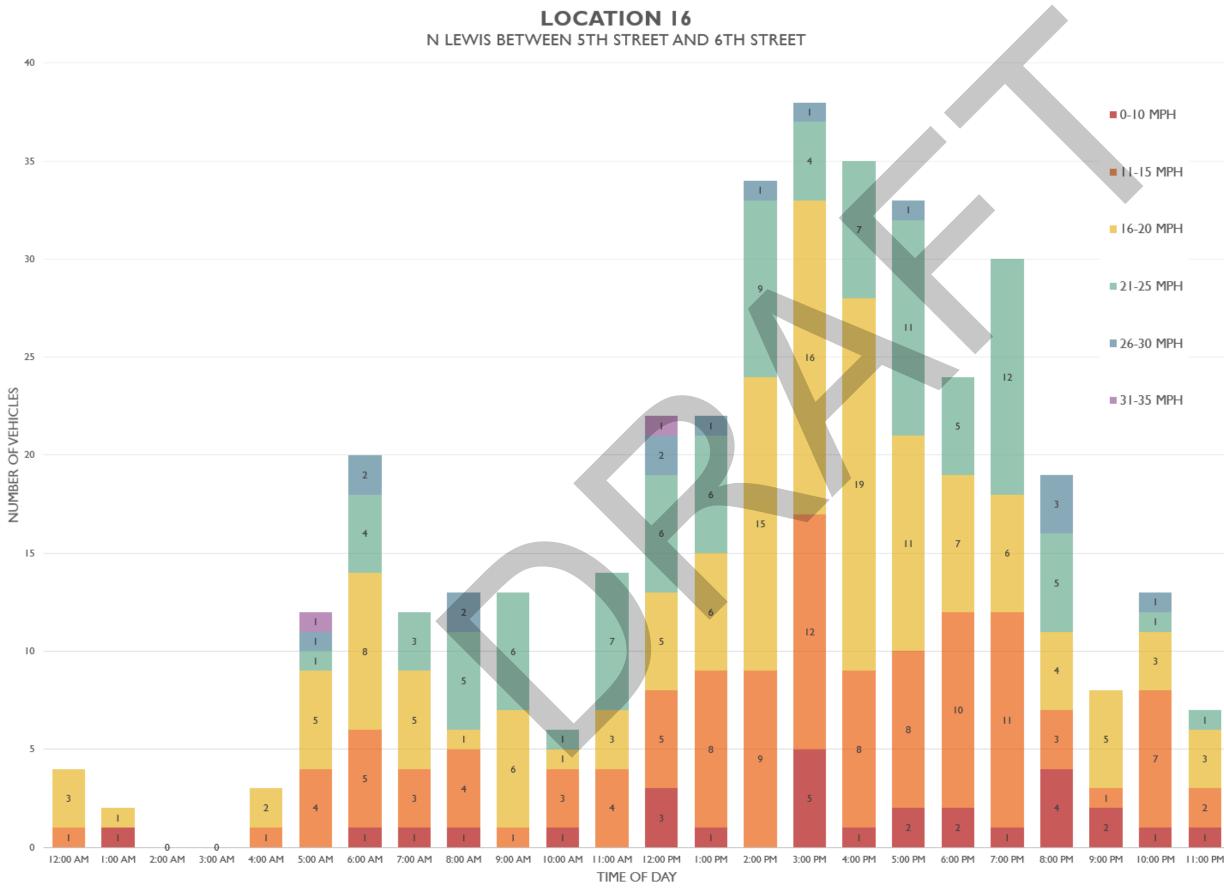




- 314 At Location 15, on N Pima between 5th St and 6th St, a total of 314 vehicles were recorded over the course of two days, 12/02/2020 and 12/03/2020.
- 23.3 Most vehicles (85%) were recorded traveling around 23.3 miles per hour (MPH). The average recorded speed was 18.0 MPH.
 - **2** The fastest recorded speeds, 31-35 MPH, were recorded from 2 vehicles, one on 12/02/2020 between 6:00 and 6:15PM, and the other on 12/03/2020 between 7:45 and 8:00PM.

WASHINGTON-ESCOBEDO HERITAGE NEIGHBORHOOD location 16

North Lewis between 5th Street and 6th Street





- 384 At Location 16, on N Lewis between 5th St and 6th St, a total of 384 vehicles were recorded over the course of two days, 12/02/2020 and 12/03/2020.
- 22.8 Most vehicles (85%) were recorded traveling around 22.8 miles per hour (MPH). The average recorded speed was 16.9 MPH.
 - **2** The fastest recorded speeds, 31-35 MPH, were recorded from 2 vehicles, on 12/02/2020 between 5:30 and 5:45AM, and between 12:45 and 1:00PM.

WASHINGTON-ESCOBEDO HERITAGE NEIGHBORHOOD results analysis

85% SPEED INDICATES THE SPEED THAT MOST CARS WERE RECORDED TRAVELING.

COUNT #	LOCATION	85% SPEED (MPH)	POSTED SPEED LIMIT	EXCEEDS SPEED LIMIT	MPH OVER SPEED LIMIT	DOES NOT EXCEED SPEED LIMIT	TOTAL VEHICLES
15	N PIMA BETWEEN 5TH ST AND 6TH ST	23.3	25			Х	849
16	N LEWIS BETWEEN 5TH ST AND 6TH ST	22.8	25			Х	539
		NEITHER LOCA					698 TC

NETHER LOCATION RECORDED MOST CARS EXCEEDING THE POSTED SPEED LIMIT.

OBSERVATIONS

- 1. Two additional count locations were added to the Washington-Escobedo Heritage Neighborhood following email feedback from the community. This feedback referenced speeding concerns in all streets in the neighborhood, particularly those adjacent to Washington Park and the Step Up School.
- 2. As such, count locations were chosen on N Pima and N Lewis, adjacent to the school and park.
- 3. Both Washington-Escobedo count locations did not record most cars exceeding the 25 MPH posted speed limit.
- 4. The City of Mesa will continue to hear feedback from the community regarding speeding and traffic in Washington-Escobedo.

NOTABLE SPEEDING OCCURRANCES (over 40 MPH):

Escobedo.

WERE RECORDED

a. No speeding occurrences were recorded over 40 MPH in Washington-

CONCLUSIONS

Speeding in Mesa's historic districts has been a longtime concern of residents, and the feedback received by the Historic Preservation Office emphasized these challenges. Locations for data collection were selected to be representative of the varied conditions present in each district.

The purpose of this study was to create a picture of vehicle speeds in historic districts, that can be interpreted at both micro and district-wide levels:

OVERALL

When examined together, across all districts in the study area, the speed data demonstrates a majority of vehicles traveling at or slightly above the posted speed limits. This accounts for some areas where little or no speeding was recorded, along with other areas where speed limits were regularly exceeded by 5 to 10 MPH. Across the entire study, the average speed that most (85%) vehicles were recorded traveling is 26.8 MPH. This is 1.8 MPH over the posted 25 MPH speed limit.

DISTRICT - LEVEL

At the district-level, a more acute picture of traffic speeds may be interpreted, and can help to prioritize which districts may need more assistance with traffic and speeding.

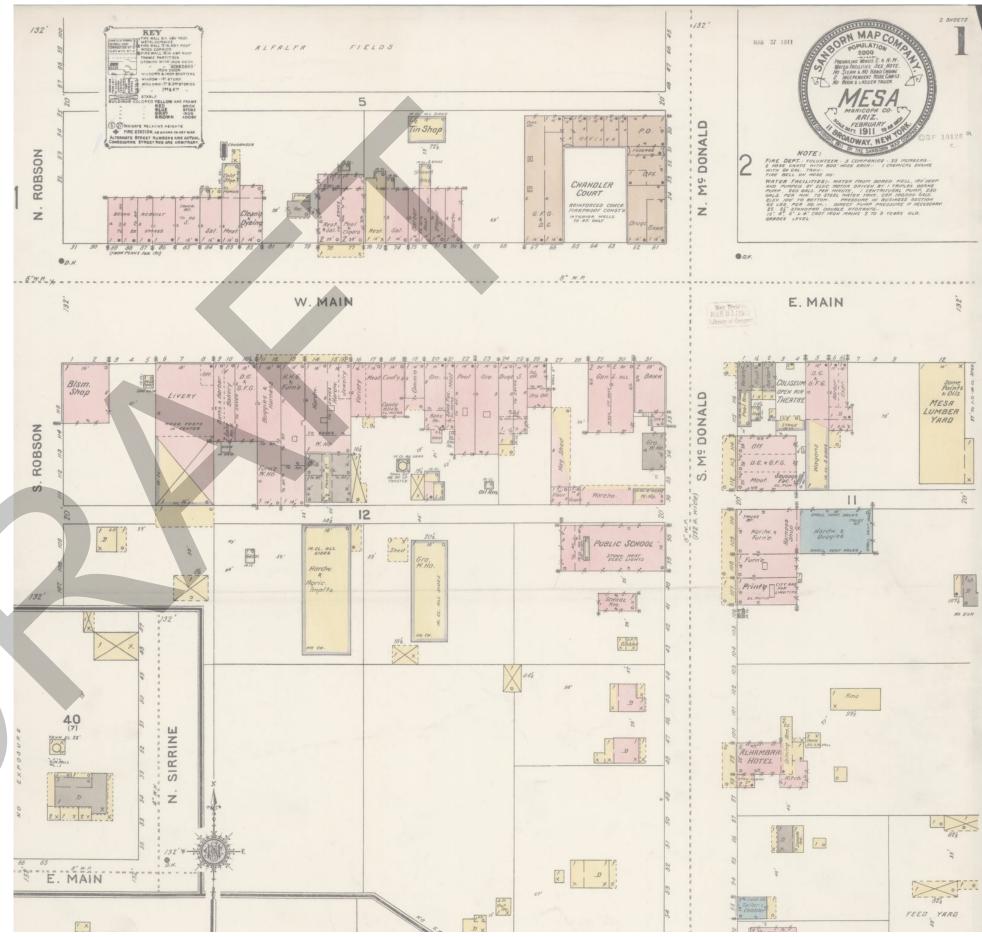
The Glenwood-Wilbur and Evergreen Historic Districts recorded the study's highest speeds, while the lowest average speeds were recorded in Washington-Escobedo.

PER COUNT LOCATION

An examination of data by each count location reveals the variation of conditions within each historic district. This level of data also highlights examples of notable or extreme speeding, which is corroborated by community feedback.

For example, the Glenwood-Wilbur Historic District recorded the greatest volume of speeding cars at one of its three locations, while the other two saw little or no speeding at all. When combined with environmental factors like traffic volume, access to major arterial streets, and density of use, this data can be used to better plan for ongoing monitoring or future traffic calmings.

It is important to remember that the data collected herein is only a representative example of vehicle speeds taken in certain locations, over the course of two week days in early December 2020. This will not provide a complete picture of all speeding and traffic conditions, as comprehensive information would require long-term and ongoing collection. The Historic Preservation Office intends to use this study data to equip residents with the information necessary to inform future speed and traffic mitigation strategies.



Sanborn Fire Insurance Company map, Mesa, AZ, West Main and South Macdonald, 191