


## 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 have been concerning to residents. In 2018, the Historic Preservation Office received a grant from the Salt River PimaMaricopa 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
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 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:

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

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:

## 10 ten emails

## ㄴ 3 <br> three voicemails


one phone call

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

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


## COLLECTION LOCATIONS



EVERGREEN HISTORIC DISTRICT


Five data collection strips were placed in the Evergreen Historic District

1 North Robson between 5th Street and 6th Street

2 North Robson between 7th Street and 8th Street

3 North Grand between 5th Street and 6th Street

4 North Grand between 7th Street and 7th Place

5 North Macdonald between University Drive and 7th Street
posted speed limit: 25 MPH

- 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 Evergreen were recorded at speeds of 24 to 28 miles per hour (MPH). The average record ed speed was 21.0 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

EVERGREEN HISTORIC DISTRICT
$■$ AVERAGE SPEED (MPH) $\quad 85 \%$ SPEED (MPH)


## EVERGREEN HISTORIC DISTRICT location 1

## LOCATION I

N 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.

## EVERGREEN HISTORIC DISTRICT Iocation 2

LOCATION 2
N 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

243 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, 8:008:15AM, and 8:30-8:45AM on both 12/02/2020 and 12/03/2020.

## EVERGREEN HISTORIC DISTRICT location 3

LOCATION 3
N GRAND BETWEEN 5TH STREET AND 6TH STREET


## EVERGREEN HISTORIC DISTRICT <br> location 4

LOCATION 4
N GRAND BETWEEN 7TH STREET AND 7TH PLACE


EVERGREEN HISTORIC DISTRICT location 5
North Macdonald between University Drive and 7th Street

## LOCATION 5

N MACDONALD BETWEEN 7TH STREET AND UNIVERSITY DRIVE



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 <br> SPEED <br> LIMIT | EXCEEDS SPEED LIMIT | MPH OVER SPEED LIMIT | DOES NOT <br> EXCEED <br> SPEED LIMIT | TOTAL VEHICLES |
| 1 | N ROBSON BETWEEN 5TH ST | 25.2 | 25 | $X$ | 0.2 |  | 849 |
| 2 | N ROBSON BETWEEN 7TH ST | 24.3 | 25 |  |  | X | 539 |
| 3 | N GRAND BETWEEN 5TH ST AND | 26.8 | 25 | $X$ | 1.8 |  | 1157 |
| 4 | N GRAND BETWEEN 7TH ST AND | 27.4 | 25 | $X$ | 2.4 |  | 1693 |
| 5 | N MACDONALD BETWEEN UNI- | 28.0 | 25 | X | 3.0 |  | 404 |

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

ON AVERAGE THESE CARS EXCEEDED THE SPEED LIMIT BY 2.4 MPH

4,624 TOTAL CARS WERE RECORDED

## 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 PI, 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.

## NOTABLE SPEEDING OCCURRANCES (over 40 MPH )

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.
4. Location 5, on N Macdonald, observed the fastest overall speeds in Evergreen, with most cars exceeding the speed limit by 3 MPH .

## GLENWOOD-WILBUR HISTORIC DISTRICT



Three data collection strips were placed in the Glenwood-Wilbur Historic District:

North Pasadena between 1st Street and 2nd Street

7
North Hibbert between 1st Street and 2nd Street

$\square$ 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 Wilbur were recorded at 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

LOCATION 6
N PASADENA BETWEEN IST STREET AND 2ND STREET


## GLENWOOD-WILBUR HISTORIC DISTRICT location 7

## LOCATION 7

NORTH HIbBERT BETWEEN IST STREET AND 2ND STREET


## GLENWOOD-WILBUR HISTORIC DISTRICT location 8

LOCATION 8
NORTH WILBUR BETWEEN IST STREET AND 2ND STREET


## GLENWOOD-WILBUR HISTORIC DISTRICT results analysis

| 85\% SPEED INDICATES THE SPEED THAT MOST CARS WERE RECORDED TRAVELING. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| COUNT \# | LOCATION | $85 \%$ <br> SPEED <br> (MPH) | POSTED SPEED LIMIT | EXCEEDS SPEED <br> LIMIT | MPH OVER <br> SPEED <br> LIMIT | DOES NOT EXCEED SPEED LIMIT | TOTAL VEHICLES |
| 4 | N PASADENA BETWEEN 1ST ST AND 2ND ST | 26.5 | 25 | $X$ | 1.5 |  | 245 |
| 5 | N HIBBERT BETVEEN 1ST ST AND 2ND ST | 34.1 | 25 | X | 9.1 |  | 1607 |
| 6 | NWILBUR BETWEEN 1ST ST AND 2ND ST | 23.5 | 25 |  |  | X | 148 |

2 OF THE 3 LOCATIONS RECORDED MOST CARS EXCEEDING THE POSTED SPEED LIMIT.

ON average these cars exceeded the SPEED LIMIT BY 5.3 MPH

2,000 TOTAL CARS WERE RECORDED

## 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 1 st St and 2 nd 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 | $46-50 \mathrm{MPH}$ | $12 / 02 / 2020$ |
| 8:00-10:00AM | 4 CARS | $41-45 \mathrm{MPH}$ | $12 / 02 / 2020$ |
| 10:00AM- <br> 12:00PM | 2 CARS | $41-45 \mathrm{MPH}$ | $12 / 02 / 2020$ |
|  | 1 CAR | $46-50 \mathrm{MPH}$ | $12 / 02 / 2020$ |
| 12:00-2:00PM | 1 CAR | $41-45 \mathrm{MPH}$ | $12 / 02 / 2020$ |
| $2: 00-4: 00 \mathrm{PM}$ | 2 CARS | $41-45 \mathrm{MPH}$ | $12 / 02 / 2020$ |
|  | 2 CARS | $46-50 \mathrm{MPH}$ | $12 / 02 / 2020$ |
| $4: 00-6: 00 \mathrm{PM}$ | 3 CARS | $41-45 \mathrm{MPH}$ | $12 / 02 / 2020$ |
|  | 1 CARS | $46-50 \mathrm{MPH}$ | $12 / 02 / 2020$ |
| 6:00-8:00PM | 1 CAR | $41-45 \mathrm{MPH}$ | $12 / 02 / 2020$ |


| TIME | VOLUME | SPEED | DAY |
| :--- | :---: | :--- | :--- |
| 5:00-7:00AM | 1 CAR | $41-45 \mathrm{MPH}$ | $12 / 03 / 2020$ |
| 7:00-9:00AM | 3 CARS | $41-45 \mathrm{MPH}$ | $12 / 03 / 2020$ |
|  | 1 CAR | $46-50 \mathrm{MPH}$ | $12 / 03 / 2020$ |
| 2:00-4:00PM | 1 CAR | $41-45 \mathrm{MPH}$ | $12 / 03 / 2020$ |
| 2:00-4:00PM | 2 CARS | $41-45 \mathrm{MPH}$ | $12 / 03 / 2020$ |
|  | 2 CARS | $46-50 \mathrm{MPH}$ | $12 / 03 / 2020$ |
| 4:00-6:00PM | 3 CARS | $41-45 \mathrm{MPH}$ | $12 / 03 / 2020$ |
| 6:00-8:00PM | 1 CAR | $41-45 \mathrm{MPH}$ | $12 / 03 / 2020$ |
| 9:00-11:00PM | 1 CAR | $41-45 \mathrm{MPH}$ | $12 / 03 / 2020$ |

## FRASER FIELDS HISTORIC DISTRICT



Six data collection strips were placed in the Evergreen Historic District:
9 North Fraser Drive West, north of East 2nd Street

North Fraser Drive West, south of East 2nd Street

North Fraser Drive, north of East 2nd Street

12
North Fraser Drive, south of East 2nd Street

13
North Fraser Drive East, north of East 2nd Street

14
North Fraser Drive East, south of East 2nd Street
posted speed limit: 25 MPH

## FRASER FIELDS HISTORIC DISTRICT results overview

- 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 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

FRASER FIELDS HISTORIC DISTRICT



## FRASER FIELDS HISTORIC DISTRICT location 9

LOCATION 9
NORTH FRASER DRIVE WEST, NORTH OF E 2ND STREET


TIME OF DAY

## FRASER FIELDS HISTORIC DISTRICT location 10

North Fraser Drive West, south of East 2nd Street

LOCATION 10
N FRASER DRIVE WEST, SOUTH OF E 2ND STREET


## FRASER FIELDS HISTORIC DISTRICT location 11

LOCATION II
NORTH FRASER DRIVE, NORTH OF E 2ND ST


## FRASER FIELDS HISTORIC DISTRICT location 12

LOCATION 12
N FRASER DRIVE, SOUTH OF E 2ND STREET


## FRASER FIELDS HISTORIC DISTRICT

LOCATION 13
NORTH FRASER DRIVE EAST, NORTH OF E 2ND STREET


TIME OF DAY

## FRASER FIELDS HISTORIC DISTRICT location 14

North Fraser Drive East, south of East 2nd Street

LOCATION 14
NORTH FRASER DRIVE EAST, SOUTH OF E 2ND STREET


TIME OF DAY

## FRASER FIELDS HISTORIC DISTRICT

results analysis $\quad 85 \%$ SPEED INDICATES THE SPEED THAT MOST
 EXCEEDING THE POSTED SPEED LIMIT.

SPEED LIMIT BY 3.3 MPH

2,825 TOTAL CARS WERE RECORDED

## 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

North Lewis between 5th Street and 6th Street

WASHINGTON-ESCOBEDO HERITAGE NEIGHBORHOOD


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 .

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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 5 th Street and 6th Stree

LOCATION I5
N PIMA BETWEEN 5TH STRET AND 6TH STREET


TIME OF DAY

## WASHINGTON-ESCOBEDO HERITAGE NEIGHBORHOOD location 16

## North Lewis between 5th Street and 6th Street

LOCATION 16
N LEWIS BETWEEN 5TH STREET AND 6TH STREET


## WASHINGTON-ESCOBEDO HERITAGE NEIGHBORHOOD results analysis



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):

a. No speeding occurrences were recorded over 40 MPH in WashingtonEscobedo.

## CONCLUSIONS

Speeding in Mesa's historic districts is of concern to 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 the posted speed limit, with a few noted outliers. This accounts for some areas where little or no speeding was recorded, along with other areas where speed limits were 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 WashingtonEscobedo.

## 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.


