



**CITY OF REDDING
CERTIFIED EXTENSION
OF
ENGINEERING AND TRAFFIC SURVEY
FOR
HARTNELL AVENUE**

For the determination of safe and reasonable speed zoning as required by Sections 22358 and 40802 of the California Vehicle Code (CVC), as defined by Section 627 of the CVC and in accordance with Section 2B. 13 of the California Manual on Uniform Traffic Control Devices, this Engineering and Traffic Survey (ETS) was initiated to verify or modify speed zones on Hartnell Avenue.

Based on the results of this ETS (attached) and adoption of Ordinance Number 2465 by the City Council of the City of Redding, amending Redding Municipal Code Section 11.12.010, a speed zone on Hartnell Avenue of 35 MPH from Cypress Avenue to Churn Creek Road is established, and a speed zone of 40 MPH from Churn Creek Road to Shasta View Drive is established, and a speed zone of 45 MPH from Shasta View Drive to Airport Road is established.

This ETS was reviewed by a Registered Engineer and no significant changes in roadway or traffic conditions have occurred, including, but not limited to, changes in adjoining property or land use, roadway width, or traffic volume since the original study date of preparation and is found to be in compliance with CVC 40802, valid until March 31, 2014.

Brian Crane, P. E.

Director of Public Works

3/26/2012

ATTEST:

PAMELA MIZE, City Clerk

**HARTNELL AVE
MARCH 2004
CONDITION SUMMARY**

| LOCATION | FROM CYPRESS | BEHELLI | CHURN CREEK |
|--------------------------|---------------------|---------------------|---------------------|
| | TO BEHELLI | CHURN CREEK | VICTOR |
| NO. OF LANES | 4 | 4 | 4 |
| ROADWAY WIDTH | 73' | 64' | 64' |
| ROADWAY LENGTH | 3,000' | 1,300' | 1,900' |
| ALIGNMENT HORIZONTAL | CURVE | STRAIGHT | STRAIGHT |
| ALIGNMENT VERTICAL | FLAT | FLAT | FLAT |
| DISTRICT | BUSINESS | BUSINESS | BUSINESS |
| ADT | 16,993 | 16,420 | 22,128 |
| PEDESTRIANS | FEW | NUMEROUS | FEW |
| SIDEWALKS | 40% | YES | YES |
| DRIVEWAYS | FEW | FEW | NUMEROUS |
| SPEED RELATED ACCIDENTS | NOT SIGNIFICANT | SIGNIFICANT | NOT SIGNIFICANT |
| EXISTING SPEED ZONE | 35 MPH | 35 MPH | 40 MPH |
| BALL BANK SPEED | N/A | N/A | N/A |
| 85TH% SPEED | 42 MPH | 40 MPH | 44 MPH |
| SURVEY CONCLUSION | | | |
| REASONABLE SPEED | *35 MPH | 35 MPH | 40 MPH |
| ACTION | | | |
| CITY COUNCIL APPROVED | CITY ORDINANCE 2011 | CITY ORDINANCE 2011 | CITY ORDINANCE 2011 |
| SIGNS POSTED | 12/4/84 | 12/17/98 | 4/1/80 |

ADDITIONAL COMMENTS:

***CONGESTION DUE TO SHOPPING CENTER, CROSS TRAFFIC, AND SENIOR CITIZENS FACILITY.**

**HARTNELL AVE
MARCH 2004
CONDITION SUMMARY**

| FROM | VICTOR | SHASTA VIEW |
|----------------------------|---------------------|---------------------|
| LOCATION | TO | AIRPORT |
| NO. OF LANES | 4 | 2 |
| ROADWAY WIDTH | VARIES | 30' |
| LENGTH | 3,850' | 1.43 MILES |
| ALIGNMENT HORIZONTAL | STRAIGHT | STRAIGHT |
| VERTICAL | FLAT | FLAT |
| DISTRICT | BUSINESS | BUSINESS |
| ADT | 13,800 | 3,940 |
| PEDESTRIANS | FEW | FEW |
| SIDEWALKS | 20% | 5% |
| DRIVEWAYS | FEW | FEW |
| SPEED RELATED ACCIDENTS | SIGNIFICANT | NOT SIGNIFICANT |
| EXISTING SPEED ZONE | 40 MPH | 45 MPH |
| BALL BANK SPEED | N/A | N/A |
| 85TH% SPEED | 44 MPH | 50 MPH |
| SURVEY CONCLUSION | | |
| REASONABLE SPEED | 40 MPH | 45 MPH |
| ACTION | | |
| CITY COUNCIL APPROVED | CITY ORDINANCE 2011 | CITY ORDINANCE 2011 |
| SIGNS POSTED | 4/1/80 | 6/1/89 |

**ADDITIONAL
COMMENTS:**



35 MPH
SPEED
ZONE

40 MPH
SPEED
ZONE

45 MPH
SPEED
ZONE

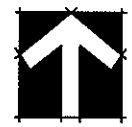
LEGEND

● SPEED LIMIT SIGN

CITY OF REDDING MUNICIPAL UTILITIES TRAFFIC OPERATIONS



HARTNELL AVE SPEED STUDY
CYPRESS AVE TO AIRPORT RD



HARTNELL AVE S/ PARKVIEW AVE

Day: Wednesday
 Date: 8/13/03
 Time: 10:15 - 10:40

Observer: Lori Lackey

Calcs: Frank Hogue

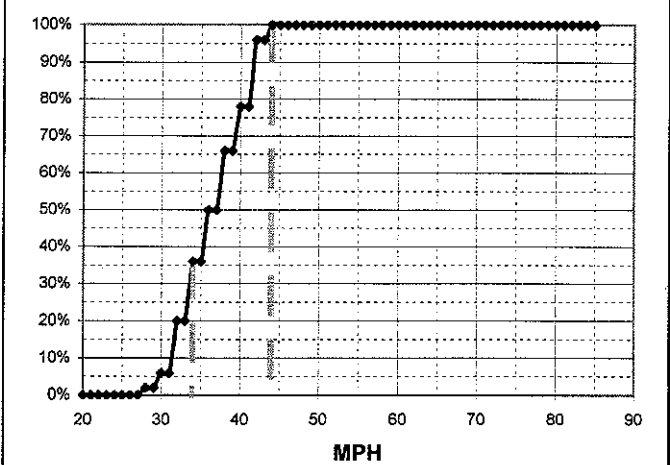
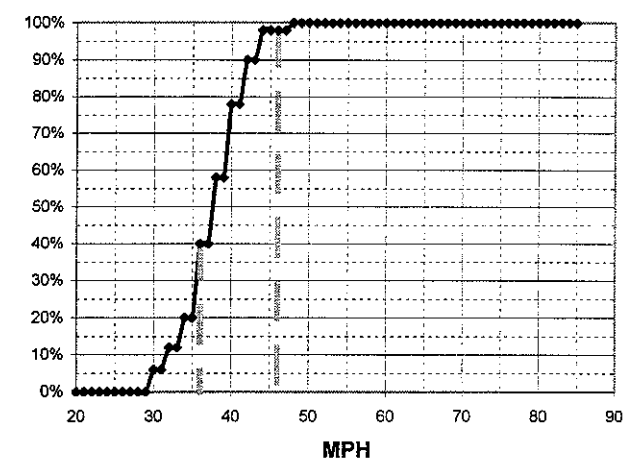
Posted Speed: 35
 Weather: Clear & Dry

| | | |
|---------------------|----------------|------------|
| Critical Speed : | <u>42</u> | <u>mph</u> |
| Average Speed : | <u>38.0</u> | <u>mph</u> |
| Median Speed : | <u>38</u> | <u>mph</u> |
| Standard Deviation: | <u>4.0</u> | <u>mph</u> |
| Pace Range : | <u>36 - 46</u> | <u>mph</u> |
| Percent in Pace : | <u>78.0%</u> | |
| Total # Vehicles : | <u>50</u> | |

| | | |
|---------------------|----------------|------------|
| Critical Speed : | <u>42</u> | <u>mph</u> |
| Average Speed : | <u>36.9</u> | <u>mph</u> |
| Median Speed : | <u>0</u> | <u>mph</u> |
| Standard Deviation: | <u>4.0</u> | <u>mph</u> |
| Pace Range : | <u>34 - 44</u> | <u>mph</u> |
| Percent in Pace : | <u>76.0%</u> | |
| Total # Vehicles : | <u>50</u> | |

| MPH | # of Veh. | Northbound | % |
|-----|-----------|------------|--------|
| 85 | | | 100.0% |
| 84 | | | 100.0% |
| 83 | | | 100.0% |
| 82 | | | 100.0% |
| 81 | | | 100.0% |
| 80 | | | 100.0% |
| 79 | | | 100.0% |
| 78 | | | 100.0% |
| 77 | | | 100.0% |
| 76 | | | 100.0% |
| 75 | | | 100.0% |
| 74 | | | 100.0% |
| 73 | | | 100.0% |
| 72 | | | 100.0% |
| 71 | | | 100.0% |
| 70 | | | 100.0% |
| 69 | | | 100.0% |
| 68 | | | 100.0% |
| 67 | | | 100.0% |
| 66 | | | 100.0% |
| 65 | | | 100.0% |
| 64 | | | 100.0% |
| 63 | | | 100.0% |
| 62 | | | 100.0% |
| 61 | | | 100.0% |
| 60 | | | 100.0% |
| 59 | | | 100.0% |
| 58 | | | 100.0% |
| 57 | | | 100.0% |
| 56 | | | 100.0% |
| 55 | | | 100.0% |
| 54 | | | 100.0% |
| 53 | | | 100.0% |
| 52 | | | 100.0% |
| 51 | | | 100.0% |
| 50 | | | 100.0% |
| 49 | | | 100.0% |
| 48 | 1 | ◆ | 100.0% |
| 47 | | | 98.0% |
| 46 | | | 98.0% |
| 45 | | | 98.0% |
| 44 | 4 | ◆◆◆◆ | 98.0% |
| 43 | | | 90.0% |
| 42 | 6 | ◆◆◆◆◆◆ | 90.0% |
| 41 | | | 78.0% |
| 40 | 10 | ◆◆◆◆◆◆◆◆ | 78.0% |
| 39 | | | 58.0% |
| 38 | 9 | ◆◆◆◆◆◆◆◆ | 58.0% |
| 37 | | | 40.0% |
| 36 | 10 | ◆◆◆◆◆◆◆◆ | 40.0% |
| 35 | | | 20.0% |
| 34 | 4 | ◆◆◆◆ | 20.0% |
| 33 | | | 12.0% |
| 32 | 3 | ◆◆◆ | 12.0% |
| 31 | | | 6.0% |
| 30 | 3 | ◆◆◆ | 6.0% |
| 29 | | | 0.0% |
| 28 | | | 0.0% |
| 27 | | | 0.0% |
| 26 | | | 0.0% |
| 25 | | | 0.0% |
| 24 | | | 0.0% |
| 23 | | | 0.0% |
| 22 | | | 0.0% |
| 21 | | | 0.0% |
| 20 | | | 0.0% |

| MPH | No of Veh. | Southbound | % |
|-----|------------|------------|--------|
| 85 | | | 100.0% |
| 84 | | | 100.0% |
| 83 | | | 100.0% |
| 82 | | | 100.0% |
| 81 | | | 100.0% |
| 80 | | | 100.0% |
| 79 | | | 100.0% |
| 78 | | | 100.0% |
| 77 | | | 100.0% |
| 76 | | | 100.0% |
| 75 | | | 100.0% |
| 74 | | | 100.0% |
| 73 | | | 100.0% |
| 72 | | | 100.0% |
| 71 | | | 100.0% |
| 70 | | | 100.0% |
| 69 | | | 100.0% |
| 68 | | | 100.0% |
| 67 | | | 100.0% |
| 66 | | | 100.0% |
| 65 | | | 100.0% |
| 64 | | | 100.0% |
| 63 | | | 100.0% |
| 62 | | | 100.0% |
| 61 | | | 100.0% |
| 60 | | | 100.0% |
| 59 | | | 100.0% |
| 58 | | | 100.0% |
| 57 | | | 100.0% |
| 56 | | | 100.0% |
| 55 | | | 100.0% |
| 54 | | | 100.0% |
| 53 | | | 100.0% |
| 52 | | | 100.0% |
| 51 | | | 100.0% |
| 50 | | | 100.0% |
| 49 | | | 100.0% |
| 48 | | | 100.0% |
| 47 | | | 100.0% |
| 46 | | | 100.0% |
| 45 | | | 100.0% |
| 44 | 2 | ◆◆ | 100.0% |
| 43 | | | 96.0% |
| 42 | 9 | ◆◆◆◆◆◆◆◆ | 96.0% |
| 41 | | | 78.0% |
| 40 | 6 | ◆◆◆◆◆◆ | 78.0% |
| 39 | | | 66.0% |
| 38 | 8 | ◆◆◆◆◆◆◆◆ | 66.0% |
| 37 | | | 50.0% |
| 36 | 7 | ◆◆◆◆◆◆◆ | 50.0% |
| 35 | | | 36.0% |
| 34 | 8 | ◆◆◆◆◆◆◆◆ | 36.0% |
| 33 | | | 20.0% |
| 32 | 7 | ◆◆◆◆◆◆◆ | 20.0% |
| 31 | | | 6.0% |
| 30 | 2 | ◆◆ | 6.0% |
| 29 | | | 2.0% |
| 28 | | | 2.0% |
| 27 | 1 | ◆ | 0.0% |
| 26 | | | 0.0% |
| 25 | | | 0.0% |
| 24 | | | 0.0% |
| 23 | | | 0.0% |
| 22 | | | 0.0% |
| 21 | | | 0.0% |
| 20 | | | 0.0% |



HARTNELL AVE W/ SCHOOL ST

Day Thursday

Posted Speed: 35 MPH
Weather: Clear & Dry

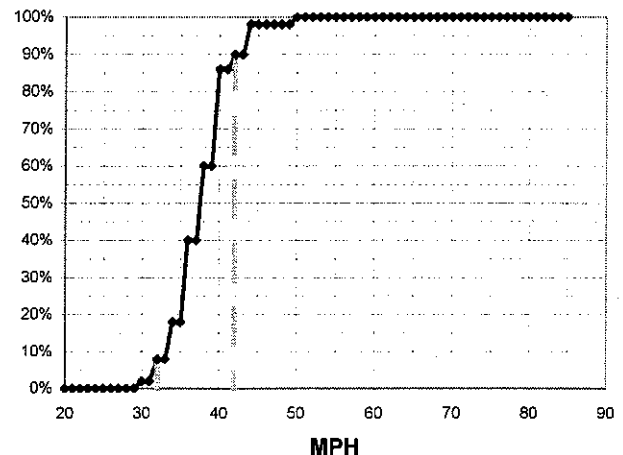
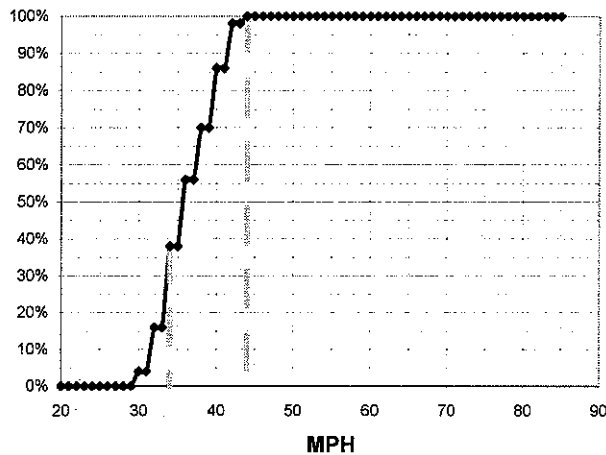
Date: 8/14/03
Time: 08:30 - 08:50

Observer: Lori Lackey

Calcs: Frank Hogue

| MPH | # of Veh. | Eastbound | % |
|-----------|-----------|-------------|--------|
| 85 | | | 100.0% |
| 84 | | | 100.0% |
| 83 | | | 100.0% |
| 82 | | | 100.0% |
| 81 | | | 100.0% |
| 80 | | | 100.0% |
| 79 | | | 100.0% |
| 78 | | | 100.0% |
| 77 | | | 100.0% |
| 76 | | | 100.0% |
| 75 | | | 100.0% |
| 74 | | | 100.0% |
| 73 | | | 100.0% |
| 72 | | | 100.0% |
| 71 | | | 100.0% |
| 70 | | | 100.0% |
| 69 | | | 100.0% |
| 68 | | | 100.0% |
| 67 | | | 100.0% |
| 66 | | | 100.0% |
| 65 | | | 100.0% |
| 64 | | | 100.0% |
| 63 | | | 100.0% |
| 62 | | | 100.0% |
| 61 | | | 100.0% |
| 60 | | | 100.0% |
| 59 | | | 100.0% |
| 58 | | | 100.0% |
| 57 | | | 100.0% |
| 56 | | | 100.0% |
| 55 | | | 100.0% |
| 54 | | | 100.0% |
| 53 | | | 100.0% |
| 52 | | | 100.0% |
| 51 | | | 100.0% |
| 50 | | | 100.0% |
| 49 | | | 100.0% |
| 48 | | | 100.0% |
| 47 | | | 100.0% |
| 46 | | | 100.0% |
| 45 | | | 100.0% |
| 44 | 1 | ♦ | 100.0% |
| 43 | | | 98.0% |
| 42 | 6 | ♦♦♦♦♦♦ | 98.0% |
| 41 | | | 86.0% |
| 40 | 8 | ♦♦♦♦♦♦♦♦ | 86.0% |
| 39 | | | 70.0% |
| 38 | 7 | ♦♦♦♦♦♦♦ | 70.0% |
| 37 | | | 56.0% |
| 36 | 9 | ♦♦♦♦♦♦♦♦♦ | 56.0% |
| 35 | | | 38.0% |
| 34 | 11 | ♦♦♦♦♦♦♦♦♦♦♦ | 38.0% |
| 33 | | | 16.0% |
| 32 | 6 | ♦♦♦♦♦♦ | 16.0% |
| 31 | | | 4.0% |
| 30 | 2 | ♦♦ | 4.0% |
| 29 | | | 0.0% |
| 28 | | | 0.0% |
| 27 | | | 0.0% |
| 26 | | | 0.0% |
| 25 | | | 0.0% |
| 24 | | | 0.0% |
| 23 | | | 0.0% |
| 22 | | | 0.0% |
| 21 | | | 0.0% |
| 20 | | | 0.0% |

| MPH | No of Veh. | Westbound | % |
|-----------|------------|--------------|--------|
| 85 | | | 100.0% |
| 84 | | | 100.0% |
| 83 | | | 100.0% |
| 82 | | | 100.0% |
| 81 | | | 100.0% |
| 80 | | | 100.0% |
| 79 | | | 100.0% |
| 78 | | | 100.0% |
| 77 | | | 100.0% |
| 76 | | | 100.0% |
| 75 | | | 100.0% |
| 74 | | | 100.0% |
| 73 | | | 100.0% |
| 72 | | | 100.0% |
| 71 | | | 100.0% |
| 70 | | | 100.0% |
| 69 | | | 100.0% |
| 68 | | | 100.0% |
| 67 | | | 100.0% |
| 66 | | | 100.0% |
| 65 | | | 100.0% |
| 64 | | | 100.0% |
| 63 | | | 100.0% |
| 62 | | | 100.0% |
| 61 | | | 100.0% |
| 60 | | | 100.0% |
| 59 | | | 100.0% |
| 58 | | | 100.0% |
| 57 | | | 100.0% |
| 56 | | | 100.0% |
| 55 | | | 100.0% |
| 54 | | | 100.0% |
| 53 | | | 100.0% |
| 52 | | | 100.0% |
| 51 | | | 100.0% |
| 50 | 1 | ♦ | 100.0% |
| 49 | | | 98.0% |
| 48 | | | 98.0% |
| 47 | | | 98.0% |
| 46 | | | 98.0% |
| 45 | | | 98.0% |
| 44 | 4 | ♦♦♦♦ | 98.0% |
| 43 | | | 90.0% |
| 42 | 2 | ♦♦ | 90.0% |
| 41 | | | 86.0% |
| 40 | 13 | ♦♦♦♦♦♦♦♦♦♦♦♦ | 86.0% |
| 39 | | | 60.0% |
| 38 | 10 | ♦♦♦♦♦♦♦♦♦♦ | 60.0% |
| 37 | | | 40.0% |
| 36 | 11 | ♦♦♦♦♦♦♦♦♦♦♦ | 40.0% |
| 35 | | | 18.0% |
| 34 | 5 | ♦♦♦♦♦ | 18.0% |
| 33 | | | 8.0% |
| 32 | 3 | ♦♦♦ | 8.0% |
| 31 | | | 2.0% |
| 30 | 1 | ♦ | 2.0% |
| 29 | | | 0.0% |
| 28 | | | 0.0% |
| 27 | | | 0.0% |
| 26 | | | 0.0% |
| 25 | | | 0.0% |
| 24 | | | 0.0% |
| 23 | | | 0.0% |
| 22 | | | 0.0% |
| 21 | | | 0.0% |
| 20 | | | 0.0% |



HARTNELL AVE W/ ALFREDA WY

Day: Thursday

Posted Speed: 40 MPH

Date: 8/14/03

Weather: Clear & Dry

Time: 09:30 - 09:20

Observer: Lori Lackey

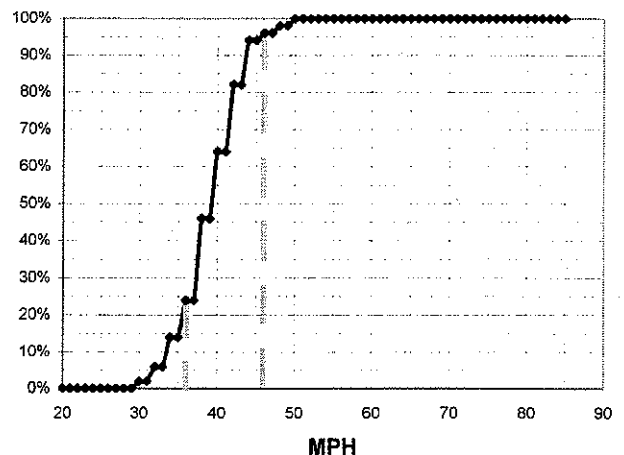
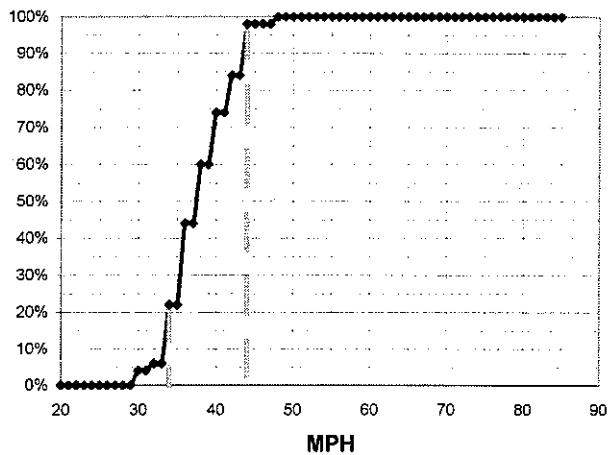
Calcs: Frank Hogue

| | | |
|---------------------|---------|-----|
| Critical Speed : | 44 | mph |
| Average Speed : | 38.2 | mph |
| Median Speed : | 38 | mph |
| Standard Deviation: | 4.0 | mph |
| Pace Range : | 34 - 44 | mph |
| Percent in Pace : | 78.0% | |
| Total # Vehicles : | 50 | |

| | | |
|---------------------|---------|-----|
| Critical Speed : | 44 | mph |
| Average Speed : | 39.5 | mph |
| Median Speed : | 40 | mph |
| Standard Deviation: | 4.0 | mph |
| Pace Range : | 36 - 46 | mph |
| Percent in Pace : | 80.0% | |
| Total # Vehicles : | 50 | |

| MPH | # of Veh. | Eastbound | % |
|-----|-----------|-------------|--------|
| 85 | | | 100.0% |
| 84 | | | 100.0% |
| 83 | | | 100.0% |
| 82 | | | 100.0% |
| 81 | | | 100.0% |
| 80 | | | 100.0% |
| 79 | | | 100.0% |
| 78 | | | 100.0% |
| 77 | | | 100.0% |
| 76 | | | 100.0% |
| 75 | | | 100.0% |
| 74 | | | 100.0% |
| 73 | | | 100.0% |
| 72 | | | 100.0% |
| 71 | | | 100.0% |
| 70 | | | 100.0% |
| 69 | | | 100.0% |
| 68 | | | 100.0% |
| 67 | | | 100.0% |
| 66 | | | 100.0% |
| 65 | | | 100.0% |
| 64 | | | 100.0% |
| 63 | | | 100.0% |
| 62 | | | 100.0% |
| 61 | | | 100.0% |
| 60 | | | 100.0% |
| 59 | | | 100.0% |
| 58 | | | 100.0% |
| 57 | | | 100.0% |
| 56 | | | 100.0% |
| 55 | | | 100.0% |
| 54 | | | 100.0% |
| 53 | | | 100.0% |
| 52 | | | 100.0% |
| 51 | | | 100.0% |
| 50 | | | 100.0% |
| 49 | | | 100.0% |
| 48 | 1 | ◆ | 100.0% |
| 47 | | | 98.0% |
| 46 | | | 98.0% |
| 45 | | | 98.0% |
| 44 | 7 | ◆◆◆◆◆◆◆ | 98.0% |
| 43 | | | 84.0% |
| 42 | 5 | ◆◆◆◆◆ | 84.0% |
| 41 | | | 74.0% |
| 40 | 7 | ◆◆◆◆◆◆◆ | 74.0% |
| 39 | | | 60.0% |
| 38 | 8 | ◆◆◆◆◆◆◆◆ | 60.0% |
| 37 | | | 44.0% |
| 36 | 11 | ◆◆◆◆◆◆◆◆◆◆◆ | 44.0% |
| 35 | | | 22.0% |
| 34 | 8 | ◆◆◆◆◆◆◆◆ | 22.0% |
| 33 | | | 6.0% |
| 32 | 1 | ◆ | 6.0% |
| 31 | | | 4.0% |
| 30 | 2 | ◆◆ | 4.0% |
| 29 | | | 0.0% |
| 28 | | | 0.0% |
| 27 | | | 0.0% |
| 26 | | | 0.0% |
| 25 | | | 0.0% |
| 24 | | | 0.0% |
| 23 | | | 0.0% |
| 22 | | | 0.0% |
| 21 | | | 0.0% |
| 20 | | | 0.0% |

| MPH | No of Veh. | Westbound | % |
|-----|------------|-------------|--------|
| 85 | | | 100.0% |
| 84 | | | 100.0% |
| 83 | | | 100.0% |
| 82 | | | 100.0% |
| 81 | | | 100.0% |
| 80 | | | 100.0% |
| 79 | | | 100.0% |
| 78 | | | 100.0% |
| 77 | | | 100.0% |
| 76 | | | 100.0% |
| 75 | | | 100.0% |
| 74 | | | 100.0% |
| 73 | | | 100.0% |
| 72 | | | 100.0% |
| 71 | | | 100.0% |
| 70 | | | 100.0% |
| 69 | | | 100.0% |
| 68 | | | 100.0% |
| 67 | | | 100.0% |
| 66 | | | 100.0% |
| 65 | | | 100.0% |
| 64 | | | 100.0% |
| 63 | | | 100.0% |
| 62 | | | 100.0% |
| 61 | | | 100.0% |
| 60 | | | 100.0% |
| 59 | | | 100.0% |
| 58 | | | 100.0% |
| 57 | | | 100.0% |
| 56 | | | 100.0% |
| 55 | | | 100.0% |
| 54 | | | 100.0% |
| 53 | | | 100.0% |
| 52 | | | 100.0% |
| 51 | | | 100.0% |
| 50 | 1 | ◆ | 100.0% |
| 49 | | | 98.0% |
| 48 | 1 | ◆ | 98.0% |
| 47 | | | 96.0% |
| 46 | 1 | ◆ | 96.0% |
| 45 | | | 94.0% |
| 44 | 6 | ◆◆◆◆◆◆ | 94.0% |
| 43 | | | 82.0% |
| 42 | 9 | ◆◆◆◆◆◆◆◆ | 82.0% |
| 41 | | | 64.0% |
| 40 | 9 | ◆◆◆◆◆◆◆◆ | 64.0% |
| 39 | | | 46.0% |
| 38 | 11 | ◆◆◆◆◆◆◆◆◆◆◆ | 46.0% |
| 37 | | | 24.0% |
| 36 | 5 | ◆◆◆◆◆ | 24.0% |
| 35 | | | 14.0% |
| 34 | 4 | ◆◆◆◆ | 14.0% |
| 33 | | | 6.0% |
| 32 | 2 | ◆◆ | 6.0% |
| 31 | | | 2.0% |
| 30 | 1 | ◆ | 2.0% |
| 29 | | | 0.0% |
| 28 | | | 0.0% |
| 27 | | | 0.0% |
| 26 | | | 0.0% |
| 25 | | | 0.0% |
| 24 | | | 0.0% |
| 23 | | | 0.0% |
| 22 | | | 0.0% |
| 21 | | | 0.0% |
| 20 | | | 0.0% |



HARTNELL AVE W/ ALTA MESA DR

Day Thursday

Date: 8/14/03

Time: 09:30 - 09:55

Posted Speed: 40 MPH

Weather: Clear & Dry

Observer: Lori Lackey

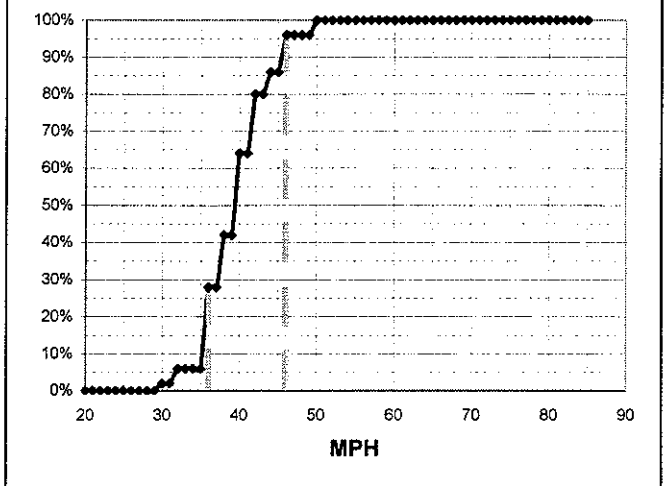
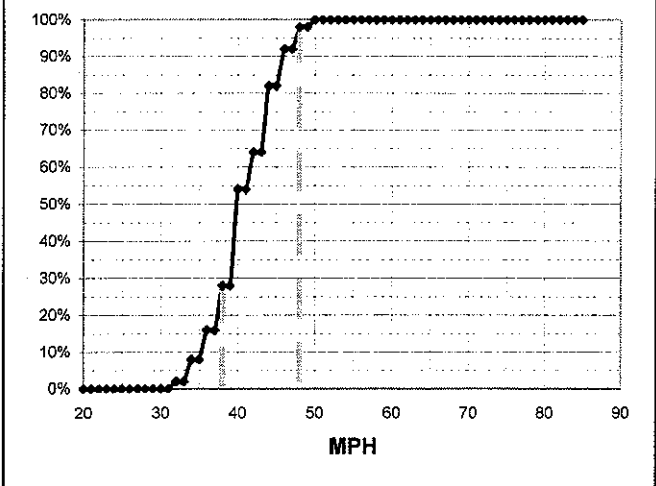
Calcs: Frank Hogue

| | | | |
|---------------------|--|-------------|--|
| Critical Speed : | | 46 mph | |
| Average Speed : | | 41.1 mph | |
| Median Speed : | | 40 mph | |
| Standard Deviation: | | 4.1 mph | |
| Pace Range : | | 38 - 48 mph | |
| Percent in Pace : | | 76.0% | |
| Total # Vehicles : | | 50 | |

| MPH | # of Veh. | Eastbound | % |
|-----|-----------|---------------|--------|
| 85 | | | 100.0% |
| 84 | | | 100.0% |
| 83 | | | 100.0% |
| 82 | | | 100.0% |
| 81 | | | 100.0% |
| 80 | | | 100.0% |
| 79 | | | 100.0% |
| 78 | | | 100.0% |
| 77 | | | 100.0% |
| 76 | | | 100.0% |
| 75 | | | 100.0% |
| 74 | | | 100.0% |
| 73 | | | 100.0% |
| 72 | | | 100.0% |
| 71 | | | 100.0% |
| 70 | | | 100.0% |
| 69 | | | 100.0% |
| 68 | | | 100.0% |
| 67 | | | 100.0% |
| 66 | | | 100.0% |
| 65 | | | 100.0% |
| 64 | | | 100.0% |
| 63 | | | 100.0% |
| 62 | | | 100.0% |
| 61 | | | 100.0% |
| 60 | | | 100.0% |
| 59 | | | 100.0% |
| 58 | | | 100.0% |
| 57 | | | 100.0% |
| 56 | | | 100.0% |
| 55 | | | 100.0% |
| 54 | | | 100.0% |
| 53 | | | 100.0% |
| 52 | | | 100.0% |
| 51 | | | 100.0% |
| 50 | 1 | ♦ | 100.0% |
| 49 | | | 98.0% |
| 48 | 3 | ♦♦♦ | 98.0% |
| 47 | | | 92.0% |
| 46 | 5 | ♦♦♦♦♦ | 92.0% |
| 45 | | | 82.0% |
| 44 | 9 | ♦♦♦♦♦♦♦♦♦ | 82.0% |
| 43 | | | 64.0% |
| 42 | 5 | ♦♦♦♦♦ | 64.0% |
| 41 | | | 54.0% |
| 40 | 13 | ♦♦♦♦♦♦♦♦♦♦♦♦♦ | 54.0% |
| 39 | | | 28.0% |
| 38 | 6 | ♦♦♦♦♦♦ | 28.0% |
| 37 | | | 16.0% |
| 36 | 4 | ♦♦♦♦ | 16.0% |
| 35 | | | 8.0% |
| 34 | 3 | ♦♦♦ | 8.0% |
| 33 | | | 2.0% |
| 32 | 1 | ♦ | 2.0% |
| 31 | | | 0.0% |
| 30 | | | 0.0% |
| 29 | | | 0.0% |
| 28 | | | 0.0% |
| 27 | | | 0.0% |
| 26 | | | 0.0% |
| 25 | | | 0.0% |
| 24 | | | 0.0% |
| 23 | | | 0.0% |
| 22 | | | 0.0% |
| 21 | | | 0.0% |
| 20 | | | 0.0% |

| | | | |
|---------------------|--|-------------|--|
| Critical Speed : | | 44 mph | |
| Average Speed : | | 39.9 mph | |
| Median Speed : | | 40 mph | |
| Standard Deviation: | | 4.2 mph | |
| Pace Range : | | 36 - 46 mph | |
| Percent in Pace : | | 80.0% | |
| Total # Vehicles : | | 50 | |

| MPH | No of Veh. | Westbound | % |
|-----|------------|-------------|--------|
| 85 | | | 100.0% |
| 84 | | | 100.0% |
| 83 | | | 100.0% |
| 82 | | | 100.0% |
| 81 | | | 100.0% |
| 80 | | | 100.0% |
| 79 | | | 100.0% |
| 78 | | | 100.0% |
| 77 | | | 100.0% |
| 76 | | | 100.0% |
| 75 | | | 100.0% |
| 74 | | | 100.0% |
| 73 | | | 100.0% |
| 72 | | | 100.0% |
| 71 | | | 100.0% |
| 70 | | | 100.0% |
| 69 | | | 100.0% |
| 68 | | | 100.0% |
| 67 | | | 100.0% |
| 66 | | | 100.0% |
| 65 | | | 100.0% |
| 64 | | | 100.0% |
| 63 | | | 100.0% |
| 62 | | | 100.0% |
| 61 | | | 100.0% |
| 60 | | | 100.0% |
| 59 | | | 100.0% |
| 58 | | | 100.0% |
| 57 | | | 100.0% |
| 56 | | | 100.0% |
| 55 | | | 100.0% |
| 54 | | | 100.0% |
| 53 | | | 100.0% |
| 52 | | | 100.0% |
| 51 | | | 100.0% |
| 50 | 2 | ♦♦ | 100.0% |
| 49 | | | 96.0% |
| 48 | | | 96.0% |
| 47 | | | 96.0% |
| 46 | 5 | ♦♦♦♦♦ | 96.0% |
| 45 | | | 86.0% |
| 44 | 3 | ♦♦♦ | 86.0% |
| 43 | | | 80.0% |
| 42 | 8 | ♦♦♦♦♦♦♦♦ | 80.0% |
| 41 | | | 64.0% |
| 40 | 11 | ♦♦♦♦♦♦♦♦♦♦♦ | 64.0% |
| 39 | | | 42.0% |
| 38 | 7 | ♦♦♦♦♦♦♦ | 42.0% |
| 37 | | | 28.0% |
| 36 | 11 | ♦♦♦♦♦♦♦♦♦♦♦ | 28.0% |
| 35 | | | 6.0% |
| 34 | | | 6.0% |
| 33 | | | 6.0% |
| 32 | 2 | ♦♦ | 6.0% |
| 31 | | | 2.0% |
| 30 | 1 | ♦ | 2.0% |
| 29 | | | 0.0% |
| 28 | | | 0.0% |
| 27 | | | 0.0% |
| 26 | | | 0.0% |
| 25 | | | 0.0% |
| 24 | | | 0.0% |
| 23 | | | 0.0% |
| 22 | | | 0.0% |
| 21 | | | 0.0% |
| 20 | | | 0.0% |



HARTNELL AVE W/ ARGYLE RD

Day **Thursday**

Observer: **Lori Lackey**

Calcs: **Frank Hogue**

Posted Speed: **45 MPH**

Date: **8/14/03**

Weather: **Clear & Dry**

Time: **10:00 - 10:30**

| | | |
|---------------------|----------------|------------|
| Critical Speed : | 50 | mph |
| Average Speed : | 45.1 | mph |
| Median Speed : | 0 | mph |
| Standard Deviation: | 5.0 | mph |
| Pace Range : | 40 - 50 | mph |
| Percent in Pace : | 70.0% | |
| Total # Vehicles : | 50 | |

| | | |
|---------------------|----------------|------------|
| Critical Speed : | 52 | mph |
| Average Speed : | 47.2 | mph |
| Median Speed : | 48 | mph |
| Standard Deviation: | 4.7 | mph |
| Pace Range : | 44 - 54 | mph |
| Percent in Pace : | 70.0% | |
| Total # Vehicles : | 50 | |

| MPH | # of Veh. | Eastbound | % |
|-----------|-----------|-----------|--------|
| 85 | | | 100.0% |
| 84 | | | 100.0% |
| 83 | | | 100.0% |
| 82 | | | 100.0% |
| 81 | | | 100.0% |
| 80 | | | 100.0% |
| 79 | | | 100.0% |
| 78 | | | 100.0% |
| 77 | | | 100.0% |
| 76 | | | 100.0% |
| 75 | | | 100.0% |
| 74 | | | 100.0% |
| 73 | | | 100.0% |
| 72 | | | 100.0% |
| 71 | | | 100.0% |
| 70 | | | 100.0% |
| 69 | | | 100.0% |
| 68 | | | 100.0% |
| 67 | | | 100.0% |
| 66 | | | 100.0% |
| 65 | | | 100.0% |
| 64 | | | 100.0% |
| 63 | | | 100.0% |
| 62 | | | 100.0% |
| 61 | | | 100.0% |
| 60 | | | 100.0% |
| 59 | | | 100.0% |
| 58 | 2 | ♦♦ | 100.0% |
| 57 | | | 96.0% |
| 56 | | | 96.0% |
| 55 | | | 96.0% |
| 54 | 1 | ♦ | 96.0% |
| 53 | | | 94.0% |
| 52 | 2 | ♦♦ | 94.0% |
| 51 | | | 90.0% |
| 50 | 5 | ♦♦♦♦♦ | 90.0% |
| 49 | | | 80.0% |
| 48 | 7 | ♦♦♦♦♦♦♦ | 80.0% |
| 47 | | | 66.0% |
| 46 | 8 | ♦♦♦♦♦♦♦♦ | 66.0% |
| 45 | | | 50.0% |
| 44 | 7 | ♦♦♦♦♦♦♦ | 50.0% |
| 43 | | | 36.0% |
| 42 | 6 | ♦♦♦♦♦♦ | 36.0% |
| 41 | | | 24.0% |
| 40 | 7 | ♦♦♦♦♦♦♦ | 24.0% |
| 39 | | | 10.0% |
| 38 | 4 | ♦♦♦♦ | 10.0% |
| 37 | | | 2.0% |
| 36 | 1 | ♦ | 2.0% |
| 35 | | | 0.0% |
| 34 | | | 0.0% |
| 33 | | | 0.0% |
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| 23 | | | 0.0% |
| 22 | | | 0.0% |
| 21 | | | 0.0% |
| 20 | | | 0.0% |

| MPH | No of Veh. | Westbound | % |
|-----------|------------|------------|--------|
| 85 | | | 100.0% |
| 84 | | | 100.0% |
| 83 | | | 100.0% |
| 82 | | | 100.0% |
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| 60 | | | 100.0% |
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| 58 | 1 | ♦ | 100.0% |
| 57 | | | 98.0% |
| 56 | 1 | ♦ | 98.0% |
| 55 | | | 96.0% |
| 54 | 3 | ♦♦♦ | 96.0% |
| 53 | | | 90.0% |
| 52 | 5 | ♦♦♦♦♦ | 90.0% |
| 51 | | | 80.0% |
| 50 | 10 | ♦♦♦♦♦♦♦♦♦♦ | 80.0% |
| 49 | | | 60.0% |
| 48 | 7 | ♦♦♦♦♦♦♦ | 60.0% |
| 47 | | | 46.0% |
| 46 | 6 | ♦♦♦♦♦♦ | 46.0% |
| 45 | | | 34.0% |
| 44 | 7 | ♦♦♦♦♦♦♦ | 34.0% |
| 43 | | | 20.0% |
| 42 | 4 | ♦♦♦♦ | 20.0% |
| 41 | | | 12.0% |
| 40 | 5 | ♦♦♦♦♦ | 12.0% |
| 39 | | | 2.0% |
| 38 | | | 2.0% |
| 37 | | | 2.0% |
| 36 | 1 | ♦ | 2.0% |
| 35 | | | 0.0% |
| 34 | | | 0.0% |
| 33 | | | 0.0% |
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