

CITY OF ARCATA ENGINEERING & TRAFFIC STUDY (E&TS)

Roadway Surveyed:	K Street	Lanes:	2
Survey Limits:	4th to 13th Street	ADT:	3700
Direction of Travel:	Westbound	Length (ft):	2800
Observer:	Radar Box/M. Early	Width (ft):	38
Survey Dates:	5/10/2012 to 5/17/2102		
Roadway Type:			

Roadside Development: Residential, light commercial

Critical Speed (85th Percentile)	Prima Facie Speed Limit:	50th Percentile Speed
30	25	25
10-MPH Pace Speed:	Posted Speed Limit:	Percent in Pace Speed
22-31	25	64

Collision History (2 year): Nine (9) collisions recorded since June 2011

Recommended Speed Limit:	25	
---------------------------------	----	--

Justification: The 85th Percentile speed combined with the residential element indicates an appropriate speed of 25 MPH (including 5 MPH reduction).

CITY OF ARCATA ENGINEERING & TRAFFIC STUDY (E&TS)

Roadway Surveyed:	11th Street	Lanes:	2
Survey Limits:	K Street to Janes Road	ADT:	920
Direction of Travel:	Westbound	Length (ft):	3300
Observer:	Radar Box/M. Early	Width (ft):	40
Survey Dates:	4/23/2012 to 4/27/2102		
Roadway Type:			

Roadside Development: Residential, school, light commercial

Critical Speed (85th Percentile)	Prima Facie Speed Limit:	50th Percentile Speed
30	25	25
10-MPH Pace Speed:	Posted Speed Limit:	Percent in Pace Speed
22-31	25	65

Collision History (2 year): Eleven (11) collisions recorded since June 2011

Recommended Speed Limit:	25	
---------------------------------	----	--

Justification: The 85th Percentile speed combined with the residential element and the walking school traffic indicates an appropriate speed of 25 MPH.

CITY OF ARCATA ENGINEERING & TRAFFIC STUDY (E&TS)

Roadway Surveyed:	14th Street	Lanes:	2
Survey Limits:	Union to LK Wood	ADT:	1200
Direction of Travel:	Eastbound	Length (ft):	1200
Observer:	Radar Box/M. Early	Width (ft):	40
Survey Dates:	6/18/2012 to 6/25/2012		
Roadway Type:			

Roadside Development: Residential, university, preschool facility

Critical Speed (85th Percentile)	Prima Facie Speed Limit:	50th Percentile Speed
24	25	19
10-MPH Pace Speed:	Posted Speed Limit:	Percent in Pace Speed
16-25	25	60

Collision History (2 year): Three (3) collisions recorded since June 2011

Recommended Speed Limit:	25	
---------------------------------	----	--

Justification: The 85th Percentile speed combined with the residential element and the proximity to schools indicates an appropriate speed of 25 MPH.

CITY OF ARCATA ENGINEERING & TRAFFIC STUDY (E&TS)

Roadway Surveyed:	14th Street	Lanes:	2
Survey Limits:	Union to LK Wood	ADT:	1200
Direction of Travel:	Westbound	Length (ft):	1200
Observer:	Radar Box/M. Early	Width (ft):	40
Survey Dates:	6/18/2012 to 6/25/2012		
Roadway Type:			

Roadside Development: Residential, university, preschool facility

Critical Speed (85th Percentile)	Prima Facie Speed Limit:	50th Percentile Speed
23	25	18
10-MPH Pace Speed:	Posted Speed Limit:	Percent in Pace Speed
16-25	25	65

Collision History (2 year): Three (3) collisions recorded since June 2011

Recommended Speed Limit:	25	
---------------------------------	----	--

Justification: The 85th Percentile speed combined with the residential element and the proximity to schools indicates an appropriate speed of 25 MPH.

CITY OF ARCATA ENGINEERING & TRAFFIC STUDY (E&TS)

Roadway Surveyed:	Alliance Road	Lanes:	2 w/2-way turn
Survey Limits:	13th Street to Spear	ADT:	4000
Direction of Travel:	Northbound	Length (ft):	4500
Observer:	Radar Box/M. Early	Width (ft):	45
Survey Dates:	5/7/2012 to 5/10/2102		
Roadway Type:			

Roadside Development: Residential, light commercial

Critical Speed (85th Percentile)	Prima Facie Speed Limit:	50th Percentile Speed
34	25	29
10-MPH Pace Speed:	Posted Speed Limit:	Percent in Pace Speed
27-36	25	66

Collision History (2 year): Fourteen (14) collisions recorded since June 2011

Recommended Speed Limit:	25	
---------------------------------	----	--

Justification: The 85th Percentile speed combined with the residential element and school crossings indicates an appropriate speed of 25 MPH (including 5 MPH reduction).

CITY OF ARCATA ENGINEERING & TRAFFIC STUDY (E&TS)

Roadway Surveyed:	Alliance Road	Lanes:	2 w/2-way turn
Survey Limits:	13th Street to Spear	ADT:	4000
Direction of Travel:	Southbound	Length (ft):	4500
Observer:	Radar Box/M. Early	Width (ft):	45
Survey Dates:	5/7/2012 to 5/10/2102		
Roadway Type:			

Roadside Development: Residential, light commercial

Critical Speed (85th Percentile)	Prima Facie Speed Limit:	50th Percentile Speed
32	25	27
10-MPH Pace Speed:	Posted Speed Limit:	Percent in Pace Speed
25-34	25	67

Collision History (2 year): Fourteen (14) collisions recorded since June 2011

Recommended Speed Limit:	25	
---------------------------------	----	--

Justification: The 85th Percentile speed combined with the residential element and school crossings indicates an appropriate speed of 25 MPH (including 5 MPH reduction).

CITY OF ARCATA ENGINEERING & TRAFFIC STUDY (E&TS)

Roadway Surveyed:	Bayside Road	Lanes:	2
Survey Limits:	Union to Crescent	ADT:	860
Direction of Travel:	Southbound	Length (ft):	3300
Observer:	Radar Box/M. Early	Width (ft):	32
Survey Dates:	3/19/2012 to 3/26/2012		
Roadway Type:			

Roadside Development: Residential

Critical Speed (85th Percentile)	Prima Facie Speed Limit:	50th Percentile Speed
31	25	26
10-MPH Pace Speed:	Posted Speed Limit:	Percent in Pace Speed
23-32	25	70

Collision History (2 year): No collisions recorded since June 2011

Recommended Speed Limit:	25	
---------------------------------	----	--

Justification: This road segment should remain at 25 MPH based on the 85th percentile speeds with 5 MPH reduction.

CITY OF ARCATA ENGINEERING & TRAFFIC STUDY (E&TS)

Roadway Surveyed:	Bayside Road	Lanes:	2
Survey Limits:	Union to Crescent	ADT:	1100
Direction of Travel:	Northbound	Length (ft):	3300
Observer:	Radar Box/M. Early	Width (ft):	32
Survey Dates:	3/19/2012 to 3/26/2012		
Roadway Type:			

Roadside Development: Residential

Critical Speed (85th Percentile)	Prima Facie Speed Limit:	50th Percentile Speed
25	25	21
10-MPH Pace Speed:	Posted Speed Limit:	Percent in Pace Speed
18-27	25	75

Collision History (2 year): No collisions recorded since June 2011

Recommended Speed Limit:	25	
---------------------------------	----	--

Justification: This road segment should remain at 25 MPH based on the 85th percentile speeds with 5 MPH reduction.

CITY OF ARCATA ENGINEERING & TRAFFIC STUDY (E&TS)

Roadway Surveyed:	Buttermilk Lane	Lanes:	2
Survey Limits:	City Limit to Sunnybrae School	ADT:	470
Direction of Travel:	Northbound	Length (ft):	2800
Observer:	Radar Box/M. Early	Width (ft):	27-38
Survey Dates:	2/6/2012 to 2/10/2012		
Roadway Type:			

Roadside Development: Residential city lots on north side of street, residential/agricultural mix on south side.

Critical Speed (85th Percentile)	Prima Facie Speed Limit:	50th Percentile Speed
27	25	22
10-MPH Pace Speed:	Posted Speed Limit:	Percent in Pace Speed
19-28	25	63

Collision History (2 year): One recorded accident since 6/2011

Recommended Speed Limit:	25	
---------------------------------	----	--

Justification: There are several factors that justify a 25 MPH speed limit, including residential on both sides, narrowness of the street, and Sunnybrae Middle School located to the west of the road segment.

CITY OF ARCATA ENGINEERING & TRAFFIC STUDY (E&TS)

Roadway Surveyed:	Buttermilk Lane	Lanes:	2
Survey Limits:	City Limit to Sunnybrae School	ADT:	470
Direction of Travel:	Southbound	Length (ft):	2800
Observer:	Radar Box/M. Early	Width (ft):	27-38
Survey Dates:	2/6/2012 to 2/10/2012		
Roadway Type:			

Roadside Development: Residential city lots on north side of street, residential/agricultural mix on south side.

Critical Speed (85th Percentile)	Prima Facie Speed Limit:	50th Percentile Speed
29	25	24
10-MPH Pace Speed:	Posted Speed Limit:	Percent in Pace Speed
21-30	25	55

Collision History (2 year): One recorded accident since 6/2011

Recommended Speed Limit:	25	
---------------------------------	----	--

Justification: There are several factors that justify a 25 MPH speed limit, including residential on both sides, narrowness of the street, and Sunnybrae Middle School located to the west of the road segment.

CITY OF ARCATA ENGINEERING & TRAFFIC STUDY (E&TS)

Roadway Surveyed:	California Avenue	Lanes:	2
Survey Limits:	LK Wood to End	ADT:	110
Direction of Travel:	Northbound	Length (ft):	5500
Observer:	Radar Box/M. Early	Width (ft):	35
Survey Dates:	9/26/2012 to 10/2/2012		
Roadway Type:			

Roadside Development: Residential

Critical Speed (85th Percentile)	Prima Facie Speed Limit:	50th Percentile Speed
31	25	25
10-MPH Pace Speed:	Posted Speed Limit:	Percent in Pace Speed
23-32	25	51

Collision History (2 year): Three (3) collisions recorded since June 2011

Recommended Speed Limit:	25	
---------------------------------	----	--

Justification: This road segment should remain at 25 MPH based on the 85th percentile speeds with 5 MPH reduction, and the fact that it is residential with steep grades and narrow widths.

CITY OF ARCATA ENGINEERING & TRAFFIC STUDY (E&TS)

Roadway Surveyed:	California Avenue	Lanes:	2
Survey Limits:	LK Wood to End	ADT:	115
Direction of Travel:	Southbound	Length (ft):	5500
Observer:	Radar Box/M. Early	Width (ft):	35
Survey Dates:	9/26/2012 to 10/2/2012		
Roadway Type:			

Roadside Development: Residential

Critical Speed (85th Percentile)	Prima Facie Speed Limit:	50th Percentile Speed
31	25	25
10-MPH Pace Speed:	Posted Speed Limit:	Percent in Pace Speed
23-32	25	51

Collision History (2 year): Three (3) collisions recorded since June 2011

Recommended Speed Limit:	25	
---------------------------------	----	--

Justification: This road segment should remain at 25 MPH based on the 85th percentile speeds with 5 MPH reduction, and the fact that it is residential with steep grades and narrow widths.

STAFF REPORT

City Council Agenda

November 7th, 2012

TO: Randal J. Mendosa, City Manager
BY: Morgan Kessler, Deputy Public Works Director
SUBJECT: Ordinance 1426: Prima Facie Speed Limits
DATE: October 29th, 2012

RECOMMENDATION

It is recommended that the City Council:

1. Adopt Ordinance 1426, Prima Facie Speed Limits

INTRODUCTION

The California Vehicle Code (CVC) Section 22352 establishes prima facie or “on the face of it” speed limits for certain zones:

- 15 MPH: When traversing railroad grades and highway intersections with limited visibility, and on any alley
- 25 MPH: On any highway other than a state highway, and business/residential districts unless determined to be otherwise by local authorities, and when approaching or passing a posted “SCHOOL” zone, and when passing a senior facility marked “SENIOR”.

The determination of locally-established prima facie speed limits is allowed under CVC 22357, and permits local authorities, based upon an engineering and traffic survey (E&TS), to declare and determine by ordinance prima facie speeds in 5 MPH increments up to 65 MPH. The City of Arcata has historically established such prima facie speed limits for certain streets, as referenced in the Arcata Municipal Code, Title III, Chapter 2, Article 13, Section 3604.

DISCUSSION

A current speed study/ordinance must be in place for police officers to effectively and reliably enforce established prima facie speed limits. CVC Section 40802 specifies that a speed survey must be performed every 5 years, with 7 and 10 year allowances under certain circumstances:

- 7 years if issuing police officer is POST certified, his/her radar equipment conforms to NHTSA standards and is independently certified every 3 years;

- 10 years if engineer certifies no significant changes in roadway or traffic conditions.

Arcata's most recent Council adoption of a prima facie speed limit ordinance was December 12th, 1999. Since the adoption of this ordinance, there have been no significant changes to roadway or traffic conditions in the prima facie study areas. Additionally, Arcata has moved toward an "I Drive 25 in Arcata" public safety campaign—this has been supported by the fact that the prima facie speeds for most of Arcata streets are 25 MPH.

In order to make Arcata compliant with a valid speed ordinance, Public Works staff, in cooperation with the Police Department, has recently completed engineering and traffic studies for the street segments established in the Arcata Municipal Code Section 3604. The result of these studies is summarized by the attached Ordinance 1426, with prima facie speed recommendations for each specified street segment. Adoption of this ordinance will make Arcata compliant for at least 5 years, and will provide current and valid documentation that will support speed enforcement activities.

The speed data was collected over the past several months using Arcata's radar data collection device and APD staff's observations. The data was then evaluated using statistical software to generate the 85th percentile, the 50th percentile, and the pace speeds, all critical metrics of the E&TS. The 85th percentile has historically been used as the basis for setting appropriate speed limits, with the assumption that 85 percent of drivers are operating their vehicle in a reasonable manner.

The results of the speed studies generally did not change from the 1999 ordinance, with the exception of LK Wood, Old Arcata Road, and Spear Avenue, which indicated a 5 MPH upward adjustment of the speed limits based solely on the 85th percentile speeds. Upon review of the roadside development and conditions along these streets, it is felt that it would be inappropriate to increase the speed limits, as there are compensating factors such as high residential densities and nearby schools. When these results were presented to the Transportation Safety Committee at the 10/16/2012 meeting, a motion was made and unanimously approved that the speed limits should remain as currently posted.

RECOMMENDATIONS

It is recommended that Council adopt Ordinance 1426, establishing prima facie speed limits along certain street segments in Arcata.

BUDGET / FINANCIAL IMPACT

No impacts at this time.

ATTACHMENTS

1. Ordinance 1426
- 2.

CITY OF ARCATA ENGINEERING & TRAFFIC STUDY (E&TS)

Roadway Surveyed:	Giuntoli Road	Lanes:	2 w/2-way turn
Survey Limits:	299 OC to Valley West	ADT:	3600
Direction of Travel:	Eastbound	Length (ft):	3000
Observer:	Radar Box/M. Early	Width (ft):	38
Survey Dates:	5/31/2012 to 6/6/2012		
Roadway Type:			

Roadside Development: Light industrial/commercial

Critical Speed (85th Percentile)	Prima Facie Speed Limit:	50th Percentile Speed
38	35	32
10-MPH Pace Speed:	Posted Speed Limit:	Percent in Pace Speed
30-39	35	61

Collision History (2 year): Ten (10) recorded accidents since June 2011, mostly associated with the Guintoli/Valley West intersection

Recommended Speed Limit:	35	
---------------------------------	----	--

Justification: The 85th Percentile speed indicates an appropriate speed of 35 MPH.

CITY OF ARCATA ENGINEERING & TRAFFIC STUDY (E&TS)

Roadway Surveyed:	Giuntoli Road	Lanes:	2 w/2-way turn
Survey Limits:	299 OC to Valley West	ADT:	3800
Direction of Travel:	Westbound	Length (ft):	3000
Observer:	Radar Box/M. Early	Width (ft):	38
Survey Dates:	5/31/2012 to 6/6/2012		
Roadway Type:			

Roadside Development: Light industrial/commercial

Critical Speed (85th Percentile)	Prima Facie Speed Limit:	50th Percentile Speed
35	35	30
10-MPH Pace Speed:	Posted Speed Limit:	Percent in Pace Speed
27-36	35	63

Collision History (2 year): Ten (10) recorded accidents since June 2011, mostly associated with the Guintoli/Valley West intersection

Recommended Speed Limit:	35	
---------------------------------	----	--

Justification: The 85th Percentile speed indicates an appropriate speed of 35 MPH.

CITY OF ARCATA ENGINEERING & TRAFFIC STUDY (E&TS)

Roadway Surveyed:	K Street	Lanes:	2
Survey Limits:	4th to 13th Street	ADT:	3800
Direction of Travel:	Northbound	Length (ft):	2800
Observer:	Radar Box/M. Early	Width (ft):	38
Survey Dates:	5/10/2012 to 5/17/2102		
Roadway Type:			

Roadside Development: Residential, light commercial

Critical Speed (85th Percentile)	Prima Facie Speed Limit:	50th Percentile Speed
28	25	23
10-MPH Pace Speed:	Posted Speed Limit:	Percent in Pace Speed
21-30	25	65

Collision History (2 year): Nine (9) collisions recorded since June 2011

Recommended Speed Limit:	25	
---------------------------------	----	--

Justification: The 85th Percentile speed combined with the residential element indicates an appropriate speed of 25 MPH (including 5 MPH reduction).

CITY OF ARCATA ENGINEERING & TRAFFIC STUDY (E&TS)

Roadway Surveyed:	K Street	Lanes:	2
Survey Limits:	4th to 13th Street	ADT:	3700
Direction of Travel:	Westbound	Length (ft):	2800
Observer:	Radar Box/M. Early	Width (ft):	38
Survey Dates:	5/10/2012 to 5/17/2102		
Roadway Type:			

Roadside Development: Residential, light commercial

Critical Speed (85th Percentile)	Prima Facie Speed Limit:	50th Percentile Speed
30	25	25
10-MPH Pace Speed:	Posted Speed Limit:	Percent in Pace Speed
22-31	25	64

Collision History (2 year): Nine (9) collisions recorded since June 2011

Recommended Speed Limit:	25	
---------------------------------	----	--

Justification: The 85th Percentile speed combined with the residential element indicates an appropriate speed of 25 MPH (including 5 MPH reduction).

CITY OF ARCATA ENGINEERING & TRAFFIC STUDY (E&TS)

Roadway Surveyed:	LK Wood	Lanes:	2
Survey Limits:	14th to Curtis Avenue	ADT:	2800
Direction of Travel:	Northbound	Length (ft):	3300
Observer:	Radar Box/M. Early	Width (ft):	34
Survey Dates:	8/28/2012 to 9/7/2012		
Roadway Type:			

Roadside Development: Residential, State ROW, University

Critical Speed (85th Percentile)	Prima Facie Speed Limit:	50th Percentile Speed
36	25	31
10-MPH Pace Speed:	Posted Speed Limit:	Percent in Pace Speed
27-36	25	63

Collision History (2 year): No collisions recorded since June 2011

Recommended Speed Limit:	25	
---------------------------------	----	--

Justification: This road segment should remain at 25 MPH based on the 85th percentile speeds with 5 MPH reduction.

CITY OF ARCATA ENGINEERING & TRAFFIC STUDY (E&TS)

Roadway Surveyed:	LK Wood	Lanes:	2
Survey Limits:	14th to Curtis Avenue	ADT:	3000
Direction of Travel:	Southbound	Length (ft):	6800
Observer:	Radar Box/M. Early	Width (ft):	35
Survey Dates:	8/28/2012 to 9/7/2012		
Roadway Type:			

Roadside Development: Residential, State ROW, University

Critical Speed (85th Percentile)	Prima Facie Speed Limit:	50th Percentile Speed
33	25	27
10-MPH Pace Speed:	Posted Speed Limit:	Percent in Pace Speed
25-34	25	63

Collision History (2 year): Eight (8) collisions recorded since June 2011

Recommended Speed Limit:	25	
---------------------------------	----	--

Justification: This road segment should remain at 25 MPH based on the 85th percentile speeds with 5 MPH reduction.

CITY OF ARCATA ENGINEERING & TRAFFIC STUDY (E&TS)

Roadway Surveyed:	Old Arcata Road/Samoa Blvd.	Lanes:	2
Survey Limits:	Union to Jacoby Creek Road	ADT:	2300
Direction of Travel:	Northbound	Length (ft):	7800
Observer:	Radar Box/M. Early	Width (ft):	28-32
Survey Dates:	7/9/2012 to 7/13/2012		
Roadway Type:			

Roadside Development: Residential, agricultural, Jacoby Creek School

Critical Speed (85th Percentile)	Prima Facie Speed Limit:	50th Percentile Speed
32	25	26
10-MPH Pace Speed:	Posted Speed Limit:	Percent in Pace Speed
25-34	25	55

Collision History (2 year): Six (6) collisions recorded since June 2011

Recommended Speed Limit:	25	
---------------------------------	----	--

Justification: The 85th Percentile speed combined with the residential element and school crossings indicates an appropriate speed of 25 MPH (including 5 MPH reduction).

CITY OF ARCATA ENGINEERING & TRAFFIC STUDY (E&TS)

Roadway Surveyed:	Old Arcata Road/Samoa Blvd.	Lanes:	2
Survey Limits:	Union to Jacoby Creek Road	ADT:	2300
Direction of Travel:	Southbound	Length (ft):	7800
Observer:	Radar Box/M. Early	Width (ft):	28-32
Survey Dates:	7/9/2012 to 7/13/2012		
Roadway Type:			

Roadside Development: Residential, agricultural, Jacoby Creek School

Critical Speed (85th Percentile)	Prima Facie Speed Limit:	50th Percentile Speed
35	25	29
10-MPH Pace Speed:	Posted Speed Limit:	Percent in Pace Speed
27-36	25	59

Collision History (2 year): Six (6) collisions recorded since June 2011

Recommended Speed Limit:	25	
---------------------------------	----	--

Justification: The 85th Percentile speed combined with the residential element and school crossings indicates an appropriate speed of 25 MPH (including 5 MPH reduction).

CITY OF ARCATA ENGINEERING & TRAFFIC STUDY (E&TS)

Roadway Surveyed:	Fickle Hill/Park	Lanes:	2
Survey Limits:	Bayside Rd. to City Limits	ADT:	800
Direction of Travel:	Eastbound	Length (ft):	3100
Observer:	Radar Box/M. Early	Width (ft):	28-32
Survey Dates:	3/19/2012 to 3/26/2012		
Roadway Type:			

Roadside Development: Residential, park

Critical Speed (85th Percentile)	Prima Facie Speed Limit:	50th Percentile Speed
33	25	28
10-MPH Pace Speed:	Posted Speed Limit:	Percent in Pace Speed
25-34	25	70

Collision History (2 year): Three (3) collisions recorded since June 2011

Recommended Speed Limit:	25	
---------------------------------	----	--

Justification: This road segment should remain at 25 MPH based on the 85th percentile speeds with 5 MPH reduction. This is due to the residential nature of the street, plus the steep and winding inclines along its length.

CITY OF ARCATA ENGINEERING & TRAFFIC STUDY (E&TS)

Roadway Surveyed:	Fickle Hill/Park	Lanes:	2
Survey Limits:	Bayside Rd. to City Limits	ADT:	850
Direction of Travel:	Westbound	Length (ft):	4000
Observer:	Radar Box/M. Early	Width (ft):	28-32
Survey Dates:	3/19/2012 to 3/26/2012		
Roadway Type:			

Roadside Development: Residential, park

Critical Speed (85th Percentile)	Prima Facie Speed Limit:	50th Percentile Speed
32	25	27
10-MPH Pace Speed:	Posted Speed Limit:	Percent in Pace Speed
25-34	25	70

Collision History (2 year): Three (3) collisions recorded since June 2011

Recommended Speed Limit:	25	
---------------------------------	----	--

Justification: This road segment should remain at 25 MPH based on the 85th percentile speeds with 5 MPH reduction. This is due to the residential nature of the street, plus the steep and winding inclines along its length.

CITY OF ARCATA ENGINEERING & TRAFFIC STUDY (E&TS)

Roadway Surveyed:	South G Street	Lanes:	2
Survey Limits:	Corp Yard to 101 on-ramp	ADT:	220
Direction of Travel:	Northbound	Length (ft):	2700
Observer:	Radar Box/M. Early	Width (ft):	20
Survey Dates:	10/4/2012 to 10/11/2012		
Roadway Type:			

Roadside Development: Open fields, minor commercial

Critical Speed (85th Percentile)	Prima Facie Speed Limit:	50th Percentile Speed
37	45	31
10-MPH Pace Speed:	Posted Speed Limit:	Percent in Pace Speed
29-38	45	49

Collision History (2 year): None

Recommended Speed Limit:	45	
---------------------------------	----	--

Justification: This road segment should remain at 45 MPH based on the 85th percentile speeds, low accident history, and lack of development along roadway.

CITY OF ARCATA ENGINEERING & TRAFFIC STUDY (E&TS)

Roadway Surveyed:	South G Street	Lanes:	2
Survey Limits:	Corp Yard to 101 on-ramp	ADT:	350
Direction of Travel:	Southbound	Length (ft):	2700
Observer:	Radar Box/M. Early	Width (ft):	20
Survey Dates:	10/4/2012 to 10/11/2012		
Roadway Type:			

Roadside Development: Open fields, minor commercial

Critical Speed (85th Percentile)	Prima Facie Speed Limit:	50th Percentile Speed
47	45	40
10-MPH Pace Speed:	Posted Speed Limit:	Percent in Pace Speed
37-46	45	43

Collision History (2 year): None

Recommended Speed Limit:	45	
---------------------------------	----	--

Justification: This road segment should remain at 45 MPH based on the 85th percentile speeds, low accident history, and lack of development along roadway.

South G

SB

NB

38		28
39		32
27		29
29		31
32		39
30		32
34		27
29		30
29		25
38		30
33		32
31		29
41		35
37		34
36		37
33		26
29		29
29		32
30		27
38		27
36		31
31		
41	30	50th
40	34	85th
37		
26		
24		
32		
30		
38		
34		
42		
39		
32		
35		
31		
30		
23		
32.5	50th	
38.45	85th	

CITY OF ARCATA ENGINEERING & TRAFFIC STUDY (E&TS)

Roadway Surveyed:	Spear Avenue	Lanes:	2
Survey Limits:	Janes to West End Road	ADT:	2200
Direction of Travel:	Eastbound	Length (ft):	3800
Observer:	Radar Box/M. Early	Width (ft):	35
Survey Dates:	7/23/2012 to 7/27/2012		
Roadway Type:			

Roadside Development: Residential, agricultural, Pacific Union School walking route

Critical Speed (85th Percentile)	Prima Facie Speed Limit:	50th Percentile Speed
35	25	31
10-MPH Pace Speed:	Posted Speed Limit:	Percent in Pace Speed
27-36	25	66

Collision History (2 year): Nine (9) collisions recorded since June 2011

Recommended Speed Limit:	25	
---------------------------------	----	--

Justification:

CITY OF ARCATA ENGINEERING & TRAFFIC STUDY (E&TS)

Roadway Surveyed:	Spear Avenue	Lanes:	2
Survey Limits:	Janes to West End Road	ADT:	2200
Direction of Travel:	Eastbound	Length (ft):	3800
Observer:	Radar Box/M. Early	Width (ft):	35
Survey Dates:	7/23/2012 to 7/27/2012		
Roadway Type:			

Roadside Development: Residential, agricultural, Pacific Union School walking route

Critical Speed (85th Percentile)	Prima Facie Speed Limit:	50th Percentile Speed
34	25	29
10-MPH Pace Speed:	Posted Speed Limit:	Percent in Pace Speed
26-35	25	65

Collision History (2 year): Nine (9) collisions recorded since June 2011

Recommended Speed Limit:	25	
---------------------------------	----	--

Justification:

CITY OF ARCATA ENGINEERING & TRAFFIC STUDY (E&TS)

Roadway Surveyed:	Union Street	Lanes:	2
Survey Limits:	Roundabout to Community Park Way	ADT:	1200
Direction of Travel:	Northbound	Length (ft):	1200
Observer:	Radar Box/M. Early	Width (ft):	38
Survey Dates:	4/2/2012 to 4/9/2012		
Roadway Type:			

Roadside Development: High density residential developments on east and west side with multiple driveways. Also present on east side is Union Street Charter School.

Critical Speed (85th Percentile)	Prima Facie Speed Limit:	50th Percentile Speed
28	25	23
10-MPH Pace Speed:	Posted Speed Limit:	Percent in Pace Speed:
21-30	25	60

Collision History (2 year): Two recorded accidents since 6/2011

Recommended Speed Limit:	25	
---------------------------------	----	--

Justification: This segment is a school zone, due to the proximity of Union Street Charter

CITY OF ARCATA ENGINEERING & TRAFFIC STUDY (E&TS)

Roadway Surveyed:	Union Street	Lanes:	2
Survey Limits:	Roundabout to Community Park Way	ADT:	1600
Direction of Travel:	Southbound	Length (ft):	1200
Observer:	Radar Box/M. Early	Width (ft):	38
Survey Dates:	4/2/2012 to 4/9/2012		
Roadway Type:			

Roadside Development: High density residential developments on east and west side with multiple driveways. Also present on east side is Union Street Charter School.

Critical Speed (85th Percentile)	Prima Facie Speed Limit:	50th Percentile Speed
28	25	22
10-MPH Pace Speed:	Posted Speed Limit:	Percent in Pace Speed:
21-30	25	55

Collision History (2 year): Two recorded accidents since 6/2011

Recommended Speed Limit:	25	
---------------------------------	----	--

Justification: This segment is a school zone, due to the proximity of Union Street Charter

CITY OF ARCATA ENGINEERING & TRAFFIC STUDY (E&TS)

Roadway Surveyed:	Valley East	Lanes:	2
Survey Limits:	Giuntoli to Valley West	ADT:	1100
Direction of Travel:	Northbound	Length (ft):	1900
Observer:	Radar Box/M. Early	Width (ft):	60
Survey Dates:	8/20/2012 to 8/24/2012		
Roadway Type:			

Roadside Development: Mixed light industrial and residential city lots and preschool on east side, mixed professional on west.

Critical Speed (85th Percentile)	Prima Facie Speed Limit:	50th Percentile Speed
30	25	25
10-MPH Pace Speed:	Posted Speed Limit:	Percent in Pace Speed
22-31	25	67

Collision History (2 year): No recorded accidents

Recommended Speed Limit:	25	
---------------------------------	----	--

Justification: The 85th Percentile speed, combined with the residential neighborhood and preschool indicates an appropriate speed of 25 MPH.

CITY OF ARCATA ENGINEERING & TRAFFIC STUDY (E&TS)

Roadway Surveyed:	Valley East	Lanes:	2
Survey Limits:	Giuntoli to Valley West	ADT:	1100
Direction of Travel:	Southbound	Length (ft):	
Observer:	Radar Box/M. Early	Width (ft):	
Survey Dates:	8/20/2012 to 8/24/2012		
Roadway Type:			

Roadside Development: Mixed light industrial and residential city lots and preschool on east side, mixed professional on west.

Critical Speed (85th Percentile)	Prima Facie Speed Limit:	50th Percentile Speed
28	25	23
10-MPH Pace Speed:	Posted Speed Limit:	Percent in Pace Speed
21-30	25	62

Collision History (2 year): No recorded accidents

Recommended Speed Limit:	25	
---------------------------------	----	--

Justification: The 85th Percentile speed, combined with the residential neighborhood and preschool indicate an appropriate speed of 25 MPH.

CITY OF ARCATA ENGINEERING & TRAFFIC STUDY (E&TS)

Roadway Surveyed:	Valley West	Lanes:	2 w/2-way turn
Survey Limits:	Giuntoli to Valley East	ADT:	1500
Direction of Travel:	Northbound	Length (ft):	1700
Observer:	Radar Box/M. Early	Width (ft):	55
Survey Dates:	6/8/2012 to 6/14/2012		
Roadway Type:			

Roadside Development: commercial/hospitality/professional offices

Critical Speed (85th Percentile)	Prima Facie Speed Limit:	50th Percentile Speed
29	25	23
10-MPH Pace Speed:	Posted Speed Limit:	Percent in Pace Speed
21-30	25	54

Collision History (2 year): Nine (9) recorded accidents since June 2011

Recommended Speed Limit:	25	
---------------------------------	----	--

Justification: The 85th Percentile speed indicates an appropriate speed of 25 MPH. Accident history associated with high level of turning movements also indicates need for slower speeds.

CITY OF ARCATA ENGINEERING & TRAFFIC STUDY (E&TS)

Roadway Surveyed:	Valley West	Lanes:	2 w/2-way turn
Survey Limits:	Giuntoli to Valley East	ADT:	1200
Direction of Travel:	Southbound	Length (ft):	1700
Observer:	Radar Box/M. Early	Width (ft):	55
Survey Dates:	6/8/2012 to 6/14/2012		
Roadway Type:			

Roadside Development: commercial/hospitality/professional offices

Critical Speed (85th Percentile)	Prima Facie Speed Limit:	50th Percentile Speed
28	25	21
10-MPH Pace Speed:	Posted Speed Limit:	Percent in Pace Speed
20-29	25	50

Collision History (2 year): Nine (9) recorded accidents since June 2011

Recommended Speed Limit:	25	
---------------------------------	----	--

Justification: The 85th Percentile speed indicates an appropriate speed of 25 MPH. Accident history associated with high level of turning movements also indicates need for slower speeds.

CITY OF ARCATA ENGINEERING & TRAFFIC STUDY (E&TS)

Roadway Surveyed:	West End Road	Lanes:	2
Survey Limits:	Spear Avenue to City Limit	ADT:	1000
Direction of Travel:	Northbound	Length (ft):	8700
Observer:	Radar Box/M. Early	Width (ft):	30
Survey Dates:	9/10/2012 to 9/17/2012		
Roadway Type:			

Roadside Development: Industrial/commercial

Critical Speed (85th Percentile)	Prima Facie Speed Limit:	50th Percentile Speed
41	35	25
10-MPH Pace Speed:	Posted Speed Limit:	Percent in Pace Speed
32-41	35	60

Collision History (2 year): Two (2) collisions recorded since June 2011

Recommended Speed Limit:	35	
---------------------------------	----	--

Justification: This road segment should remain at 35 MPH based on the 85th percentile speeds with 5 MPH reduction.

CITY OF ARCATA ENGINEERING & TRAFFIC STUDY (E&TS)

Roadway Surveyed:	West End Road	Lanes:	2
Survey Limits:	Spear Avenue to City Limit	ADT:	1400
Direction of Travel:	Southbound	Length (ft):	8700
Observer:	Radar Box/M. Early	Width (ft):	30
Survey Dates:	9/10/2012 to 9/17/2012		
Roadway Type:			

Roadside Development: Industrial/commercial

Critical Speed (85th Percentile)	Prima Facie Speed Limit:	50th Percentile Speed
39	35	34
10-MPH Pace Speed:	Posted Speed Limit:	Percent in Pace Speed
31-40	35	60

Collision History (2 year): Two (2) collisions recorded since June 2011

Recommended Speed Limit:	35	
---------------------------------	----	--

Justification: This road segment should remain at 35 MPH based on the 85th percentile speeds with 5 MPH reduction.