SAFETY COMMISSION AGENDA STATEMENT

ITEM TITLE: RESOLUTION OF THE SAFETY COMMISSION OF THE CITY OF CHULA VISTA RECOMMENDING THAT THE CHULA VISTA CITY COUNCIL INCREASE THE EXISTING SPEED LIMIT ON EASTLAKE PARKWAY BETWEEN OLYMPIC PARKWAY AND HUNTE PARKWAY FROM 45 MPH TO 50 MPH, AND THAT SCHEDULE X OF THE REGISTER MAINTAINED IN THE OFFICE OF THE CITY ENGINEER BE AMENDED TO REFLECT THESE SPEED LIMITS

SUBMITTED BY: Principal Traffic Engineer

Staff completed an Engineering and Traffic Survey (E&TS) on Eastlake Parkway between Olympic Parkway and Hunte Parkway (the "Segment") in accordance with the California Vehicle Code (CVC) and California Manual on Uniform Traffic Control Devices (CAMUTCD), which indicate that the posting of speed limits that are not the maximum or standard prima facie speed limits defined by the CVC be determined by an E&TS for each street with a posted speed limit within the City. Based on the results of the E&TS, staff has determined that the speed limit on Eastlake Parkway between Olympic Parkway and Hunte Parkway be increased from 45 mph to 50 mph (see Attachment 1, Location Plat).

RECOMMENDATION: That the Safety Commission adopt the resolution.

DISCUSSION:

The CVC establishes minimum and maximum prima facie speed limits for all streets in the State. The minimum prima facie speed limit is 25 mph for specific roadway conditions and the maximum speed limit is 65 mph (55 mph for undivided roads) and an Engineering and Traffic Survey (E&TS) is required to change the prima facie speed limit from these preset limits for any City roadway that do not meet those conditions.

The CVC requires that local agencies review changes in local speed limits every five to ten years to determine if the existing street segment speed limits require updating due to the age of the E&TS or changes in roadway and traffic conditions. In June 2019, staff completed an E&TS for the segment of Eastlake Parkway between Olympic Parkway and Hunte Parkway in accordance with the California Vehicle Code.

As described in the California Vehicle Code, the survey shall include:

   (1) Prevailing speeds as determined by traffic engineering measurements;
   (2) Accident records;
   (3) Traffic/roadside conditions not readily apparent to the driver.

Currently, the existing posted speed limit on the Segment is 50 mph, and signs and pavement legends have indicated 50 mph since prior to October 2012. However, Ordinance 3190 approved

in July 2011 establishes a speed limit of 45 mph on the Segment, and its underlying E&TS has expired. It is proposed to update the E&TS and Ordinance 3190 based on the observed 85th percentile speed.

Physical Conditions

The following information describes the existing conditions along the subject Segment on Eastlake Parkway:

- Six-lane Prime Arterial.
- Length/Width – 1.05 miles long and 104' to 120' wide.
- Average Daily Traffic: 12,718 (2018)
- Number of Lanes: 6 lanes (3 per direction).
- Existing Speed Limit – Posted 50 mph.
- 85% Percentile Speed: 1) Olympic PW to Birch Rd - 46 mph. 2) Birch Rd to Hunte PW – 50 mph.
- Striping – Six lanes of traffic.
- Parking – Parking is not allowed along entire segment.
- Bike Lanes in both directions.
- Horizontal Alignment – Horizontal Curve with a radius of 1100' over a length of 204' yields a design speed of 55 mph.
- Vertical Alignment – Crest Vertical Curve with a 7.25% over 1350' yields a design speed of 55 mph.
- Accident Rate History – The accident rate at this segment is 0.41 accidents per million vehicle miles, which is lower than the rate of 1.36 for similar roadways in the State of California (2016).

Traffic Calming
Given the short length and major roadway classification, no traffic calming measures are feasible.

Traffic Calming Measure	Applicable?	Feasible?	Implemented?
Police SAM Trailer	Y	N	N
Large Signs/Legends	Y	N	N
Narrowed Lanes	N	N	N
Striped Chicanes	N	N	N
Permanent Feedback Sign	N	N	N
Speed Cushions	N	N	N
Curb Extensions	N	N	N
Traffic Circles/Diverters	N	N	N

Speed Enforceability
If the proposed speed increase is not approved, the following are the only means of enforcing speed on the Segment:

- Basic Speed Law: police car matches speed of vehicle and determines that speed is unsafe for current conditions. Infeasible due to insufficient police availability and the segment is too short.
- Maximum Speed Law: use RADAR/LiDAR methods to enforce speed limit of 65 mph.

If the proposed speed limit is approved, police can use RADAR/LiDAR to enforce the approved posted speed limit.

CONCLUSION:

When speed limits are appropriately established the following objectives are achieved:
- Meaningful, unambiguous enforcement
- Voluntary public compliance
- Clear identification of the unreasonable violator
- Elimination of unjustifiable "tolerances" of higher speed travel

Based on the 85th percentile speed of the roadway, as well as a low collision rate outlined in the Engineering/Traffic Survey, staff has is recommending the speed limit increase.

Should the City Council establish the proposed 50 mph speed limit, Schedule X of the register maintained in the Office of the City Engineer be amended to reflect the speed limit increase:

- Eastlake Parkway, between Olympic Parkway and Hunte Parkway, proposed Speed Limit Increase to 50 mph.

FISCAL IMPACT:

There is no fiscal impact with the increase of the speed limit because existing signs and marking already indicate the proposed speed limit.

Attachments:
1. Location Plat
2. Speed Survey

LOCATION MAP
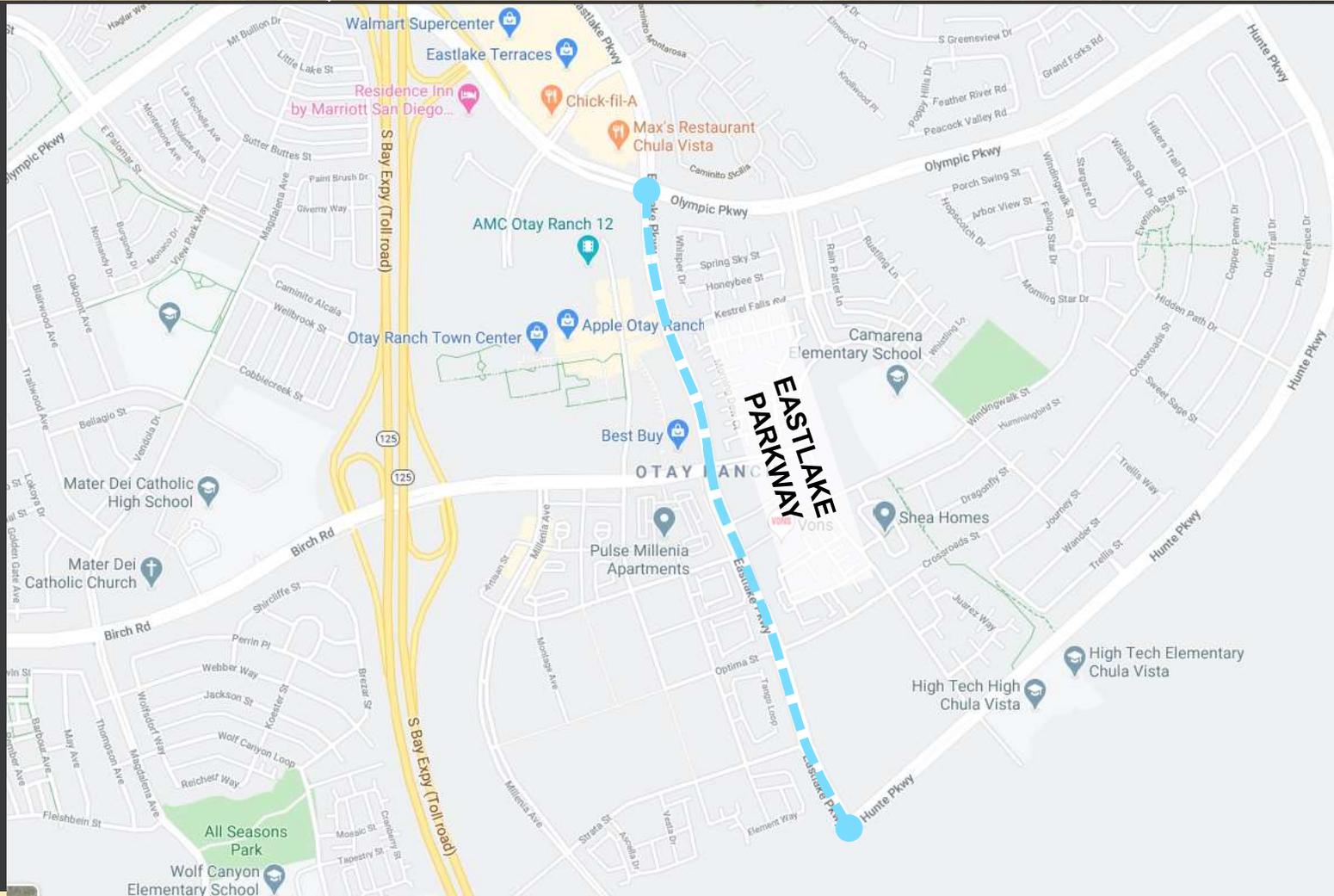
EASTLAKE PARKWAY

SPEED LIMIT - ENGINEERING/TRAFFIC SURVEY

STREET:	Eastlake Parkway
LIMITS:	Olympic Parkway - Hunte Parkway
Length of Segment (ft):	5,520' (1.05 miles)
Existing Posted Limit (mph):	45

SUMMARY OF SPEED SURVEYS

Segment:	Olympic Parkway - Birch Road	Birch Road - Hunte Parkway
Date Taken:	6/27/2019	6/27/2019
No. of Vehicles on Sample (cars):	108	52
85th Percentile (mph):	47	50
Range of Speeds Recorded (mph):	33 - 52	30 - 54

ROADWAY CHARACTERISTICS

Width (ft):	104' - 120' curb to curb with a 4' - 24' raised median
Total No. of Lanes:	6 lanes (3 per direction)
Horizontal Alignment:	A horizontal curve located about 650' south of Kestral Falls Drive with a radius of 1100' over a length of 204' along the centerline indicates a design speed of 55 mph.
Vertical Alignment:	A crest vertical curve located south of Birch Road with a +1.25% to a -6.00% grade change over 1350' indicates a design speed of 55 mph.

TRAFFIC CHARACTERISTICS

Average Daily Traffic:	12,718 (2018, Olympic Parkway - Birch Road)
On-Street Parking:	Not allowed
Special Conditions:	Otay Ranch Town Center is located along the entire west side of the road between Olympic Parkway and Birch Road. The Market Place shopping center is located on the southeast corner of Eastlake Parkway and Birch Road. Bus routes and bike lanes are located along the entire segment. Existing speed limit signed for 50 mph.
Accident History:	The accident rate at this segment is 0.41 (accidents per million vehicle miles) which is lower than the rate of 1.36 for similar roadways in the State of California (2016).

SURVEY RESULTS

Study was Prepared by:	Nancy Chen
Date:	2/25/2020
Recommendation:	Increase the speed limit to 50 mph due to the 85th percentile speed and road conditions.
Date Recommendation Approved:	
By:	Paul Oberbauer, P.E.
Approved Speed Limit (mph):	50 mph
Per CVC 40802, Survey Expires:	6/26/2026

CITY OF CHULA VISTA - VEHICLE SPEED SURVEY

SEGMENT UNDER STUDY: Eastlake Parkway (Olympic Parkway - Birch Road)

DATE: 6/27/2019 SURVEY SITE: Midblock POSTED SPEED: 45/50

TIME START: 1:30PM TIME END: 2:36PM WEATHER: Sunny

DIRECTION: **NB** = O   **SB** = \

MPH	Tally	TOTAL	%	CUM %
60		0	0%	100%
59		0	0%	100%
58		0	0%	100%
57		0	0%	100%
56		0	0%	100%
55		0	0%	100%
54		0	0%	100%
53		0	0%	100%
52	/	1	1%	100%
51		0	0%	99%
50	0	1	1%	99%
49	/ / / 0	4	4%	98%
48	/ 0 0 0 0 0	6	6%	94%
47	/ / / 0 0	5	5%	89%
46	/ / / / / / 0 0 0 0 0	11	10%	84%
45	/ / / / / / 0 0 0 0	10	9%	74%
44	/ / / / / 0 0	7	6%	65%
43	/ / / / / / / 0 0 0	10	9%	58%
42	/ / / / / / / / 0 0 0 0 0 0 0 0	16	15%	49%
41	/ / / / 0 0 0 0	8	7%	34%
40	/ / / 0 0 0 0 0	8	7%	27%
39	/ / / 0 0 0 0 0 0	9	8%	19%
38	/ / / 0 0	5	5%	11%
37	/ /	2	2%	6%
36	0 0	2	2%	5%
35	0	1	1%	3%
34	0	1	1%	2%
33	/	1	1%	1%
32		0	0%	0%
31		0	0%	0%
30		0	0%	0%
29		0	0%	0%
28		0	0%	0%
27		0	0%	0%
26		0	0%	0%
25		0	0%	0%
24		0	0%	0%
23		0	0%	0%
22		0	0%	0%
21		0	0%	0%

RECORDER: Nancy Cen **TOTAL NUMBER OF VEHICLES:** 108

85th Percentile: 47 mph

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CITY OF CHULA VISTA - VEHICLE SPEED SURVEY

SEGMENT UNDER STUDY: Eastlake Parkway (Birch Road - Hunte Parkway)

DATE: 6/27/2019   SURVEY SITE: Midblock Stylus Street - Optima Street   POSTED SPEED: 45/50

TIME START: 2:40PM   TIME END: 3:37PM   WEATHER: Sunny

DIRECTION: **NB** = O   **SB** = \

MPH	5				10				15				20	TOTAL	%	CUM %
60														0	0%	100%
59														0	0%	100%
58														0	0%	100%
57														0	0%	100%
56														0	0%	100%
55														0	0%	100%
54	0													1	2%	100%
53														0	0%	98%
52	/	/	0											3	6%	98%
51	/	0	0											3	6%	92%
50	/	/	/	0										4	8%	87%
49														0	0%	79%
48	/	/												2	4%	79%
47	/	/	/	/	0									5	10%	75%
46	/	/	/	/	0	0								6	12%	65%
45	/	0												2	4%	54%
44	/	0												2	4%	50%
43	/													1	2%	46%
42	/	0												2	4%	44%
41	/	/	0	0										4	8%	40%
40	/	0	0											3	6%	33%
39	/	/	0	0	0	0								6	12%	27%
38	/	0	0	0										4	8%	15%
37														0	0%	8%
36														0	0%	8%
35	0	0												2	4%	8%
34														0	0%	4%
33														0	0%	4%
32														0	0%	4%
31	0													1	2%	4%
30	0													1	2%	2%
29														0	0%	0%
28														0	0%	0%
27														0	0%	0%
26														0	0%	0%
25														0	0%	0%
24														0	0%	0%
23														0	0%	0%
22														0	0%	0%
21														0	0%	0%

RECORDER: Nancy Cen   **TOTAL NUMBER OF VEHICLES:** 52

85th Percentile: 50 mph

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