

City of Garden Grove

INTER-DEPARTMENT MEMORANDUM

To:	Matthew J. Fertal	From:	Keith G. Jones
Dept:	City Manager	Dept.:	Public Works
Subject:	RESOLUTION APPROVING THE SUBMITTAL OF THE EUCLID STREET TRAFFIC SIGNAL SYNCHRONIZATION IMPROVEMENT PROJECT TO THE ORANGE COUNTY TRANSPORTATION AUTHORITY FOR FUNDING		
		Date:	April 26, 2011

OBJECTIVE

To adopt a resolution approving the submittal of the Euclid Street Traffic Signal Synchronization Improvement Project to the Orange County Transportation Authority (OCTA) for funding under the competitive Measure 2 Regional Traffic Synchronization Program.

BACKGROUND/DISCUSSION

OCTA issued a call for projects through the Regional Traffic Signal Synchronization Program to coordinate traffic signals across jurisdictional boundaries in the county. The City of Fullerton, in coordination with participating cities, identified Euclid Street as a heavily traveled corridor that would benefit from traffic signal coordination.

The proposed project spans approximately 17 miles and includes 66 traffic signals. It would begin at La Habra Boulevard in the City of La Habra and terminate at Ellis Avenue in the City of Fountain Valley (see attached funding application – Exhibit A).

The entire project cost is estimated at \$1,250,000. The project subtotal for the City of Garden Grove is \$185,120. The local match (@20%) is \$37,024.

FINANCIAL IMPACT

The City of Garden Grove's financial responsibility towards the project is estimated at \$37,024. Measure M2 Local Fair Share funds have been allocated in FY '11/'12 to cover this cost.

RESOLUTION APPROVING THE SUBMITTAL OF THE EUCLID STREET TRAFFIC
SIGNAL SYNCHRONIZATION IMPROVEMENT PROJECT TO THE ORANGE COUNTY
TRANSPORTATION AUTHORITY FOR FUNDING

April 26, 2011

Page 2 of 2

RECOMMENDATION

It is recommended that the City Council:

- Adopt the attached resolution approving the submittal of the Euclid Street Traffic Signal Synchronization Improvement Project to the Orange County Transportation Authority for funding.


KEITH G. JONES
Public Works Director


By: Dan Candelaria, P.E., T.E.
City Traffic Engineer

Attachment 1: Resolution
Attachment 2: Exhibit A

Recommended for Approval


Matthew Ferial
City Manager

RESOLUTION NO.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF GARDEN GROVE
APPROVING THE SUBMITTAL OF THE EUCLID STREET IMPROVEMENT PROJECT TO
THE ORANGE COUNTY TRANSPORTATION AUTHORITY FOR FUNDING UNDER THE
COMPETITIVE MEASURE M2 REGIONAL TRAFFIC SIGNAL SYNCHRONIZATION
PROGRAM

WHEREAS, the Measure M2 Regional Traffic Signal Synchronization Program targets over 2,000 signalized intersections across Orange County to maintain traffic signal synchronization, improve traffic flow, and reduce congestion across jurisdictions;

WHEREAS, the City of Garden Grove has been declared by the Orange County Transportation Authority to meet the eligibility requirements to receive revenues as part of Measure M2;

WHEREAS, the City of Garden Grove has a currently adopted Local Signal Synchronization Plan consistent with the Regional Traffic Signal Synchronization Master Plan as a key component of local agencies' boundaries;

WHEREAS, the City of Garden Grove will provide matching funds for each project as required by the Orange County Comprehensive Transportation Funding Programs Procedures Manual;

WHEREAS, the City of Garden Grove will not use Measure M2 funds to supplant Developer Fees or other commitments; and

WHEREAS, the City of Garden Grove desires to implement multi-jurisdictional signal synchronization along Euclid Street.

NOW, THEREFORE, be it resolved that the City Council of the City of Garden Grove hereby approves the submittal of the application attached hereto as Exhibit "A" and requests the Orange County Transportation Authority allocate funds in the amount specified in the City's application to said City from the Regional Traffic Signal Synchronization Program to implement regional signal synchronization along Euclid Street.

Project P
Regional Traffic Signal Synchronization Program
Supplemental Application Information

Euclid Street

Submitted by:

City of Fullerton
Don Hoppe
Director of Engineering
714 738-6864
donh@ci.fullerton.ca.us

March 18, 2011



CITY OF FULLERTON

Engineering Department

March 17, 2011

Ref.: CTFP application for the
Regional Traffic Signal
Synchronization Program -
Euclid Street

Attn: Mr. Anup Kulkarni
Orange County Transportation Authority
Section Manager, Regional Modeling and Traffic Operations
550 S. Main Street
P.O. Box 14184
Orange, CA 92868

Dear Mr. Kulkarni,

The City of Fullerton, acting as the lead agency, is pleased to submit the application package for the Euclid Street Regional Traffic Signal Synchronization Program. An electronic package was submitted online.

Sincerely,

A handwritten signature in black ink, appearing to read "David Langstaff", written over a horizontal line.

David Langstaff
Traffic Engineering Analyst
City of Fullerton

Enclosure(s)

THE EDUCATION COMMUNITY

303 West Commonwealth Avenue, Fullerton, California 92832-1775
(714) 738-6845 • Fax (714) 738-3115 • Web Site: www.ci.fullerton.ca.us

Project P Regional Traffic Signal Synchronization Program Euclid Street Application Completed Checklist

Project P Application Checklist		Included
RTSSP Online Application – Submitted through OCFundTracker		Online and Attached
1. Vehicle Miles Traveled		
2. Benefit Cost Ratio		
3. Project Characteristics		
4. Transportation Significance		
5. Maintenance of Effort		
6. Project Scale		
7. Number of Jurisdictions		
8. Current Project Readiness		
9. Funding Over-Match		
Section 1: Key technical information		
a. Project limits of the corridor to synchronize		p. 1
b. Designation of the corridor to synchronize: priority corridor, signal synchronization network corridor, or master plan of arterial highways corridor		p. 1
c. Project start date and end date, including any commitment to operate signal synchronization beyond the three year grant period		p. 1
d. Signalized intersections that are part of the project		p. 2, 5-6
e. Traffic Forum members		p. 6
Section 2: Identify lead agency option		p. 7
Section 3: Provide a resolution of support from each member of the Traffic Forum/participating local agencies		p. 7-18
Section 4: Preliminary plans for the proposed project		
The plans shall include details about both phases of the project: <u>Primary Implementation</u> and the <u>Ongoing Maintenance and Operation</u> . The plan should be organized using the following setup.		
<u>Primary Implementation</u> shall include details about the following:		p. 19-20
a. Developing and implementing optimized signal synchronization timing (required)		
b. Producing a Before-and-After Study for the proposed project (required)		
c. Proposed Signal Improvements (optional):		
i. New or upgraded detection		
ii. New or upgraded communication systems		
iii. Intersection/field system modernization and replacement		
iv. Minor signal operation improvements		
v. Traffic management centers		
vi. Real time traffic actuated operations and demonstration projects		
<u>Ongoing Maintenance and Operation</u> will begin after the <u>Primary Implementation</u> of the project is completed. It shall include details about the following:		p. 21
a. Monitoring and improving optimized signal timing (required)		
b. Communications and detection support (optional)		
Section 5: funding needs/costs for the proposed project by task (with a total cost clearly identified) and fiscal year		p. 22-29
Section 6: Project schedule by task		p. 30
Section 7: Identification of local agency funding match type (e.g., in-kind or dollar), source, and description including any match over twenty percent (20%)		p. 31
Section 8: Environmental clearances and other permits		p. 31
Section 9: Calculations used to develop the VMT, benefit cost ratio, project scale, and all other submissions as part of the OCFundTracker online application		p. 31-33
Section 10: Any additional information deemed relevant by the applicant		p. 34

1. Key Technical Information

The Project P/Regional Traffic Signal Synchronization Program (RTSSP) sponsors projects that develop and maintain corridor-based, multi-jurisdictional signal synchronization along corridors through Orange County.

In response to the 2011 RTSSP Call for Projects, the City of Fullerton is taking the lead in seeking OCTA funding for synchronizing traffic signals on Euclid Street.

A. Project Corridor Limits

The City of Fullerton is seeking funding for the synchronization of traffic signals on Euclid Street. The approximate 17 mile project segment will cover 66 traffic signals in the Cities of La Habra, Fullerton, Anaheim, Garden Grove, Santa Ana and Fountain Valley. Caltrans traffic signals at the various freeway interchanges and on Imperial Highway are also included.

Figure 1 shows the proposed project limits and project signals along the Euclid Street corridor.

B. Project Corridor Designation

Euclid Street is designated by the County as a Priority Corridor in the Regional Traffic Signal Synchronization Master Plan, shown in **Figure 2**. It is likewise classified as a Major/Primary arterial highway in the Orange County Master Plan of Arterial Highways, shown in **Figure 3**.

C. Project Start/Project End Date

Project Start Date: July 1, 2011
Project End Date: June 30, 2015

All agencies commit to operate signal synchronization beyond the three year grant period for:

- ☐ 0 year
- ☒ 1 year
- ☐ 2 years
- ☐ 3 years
- ☐ Other _____

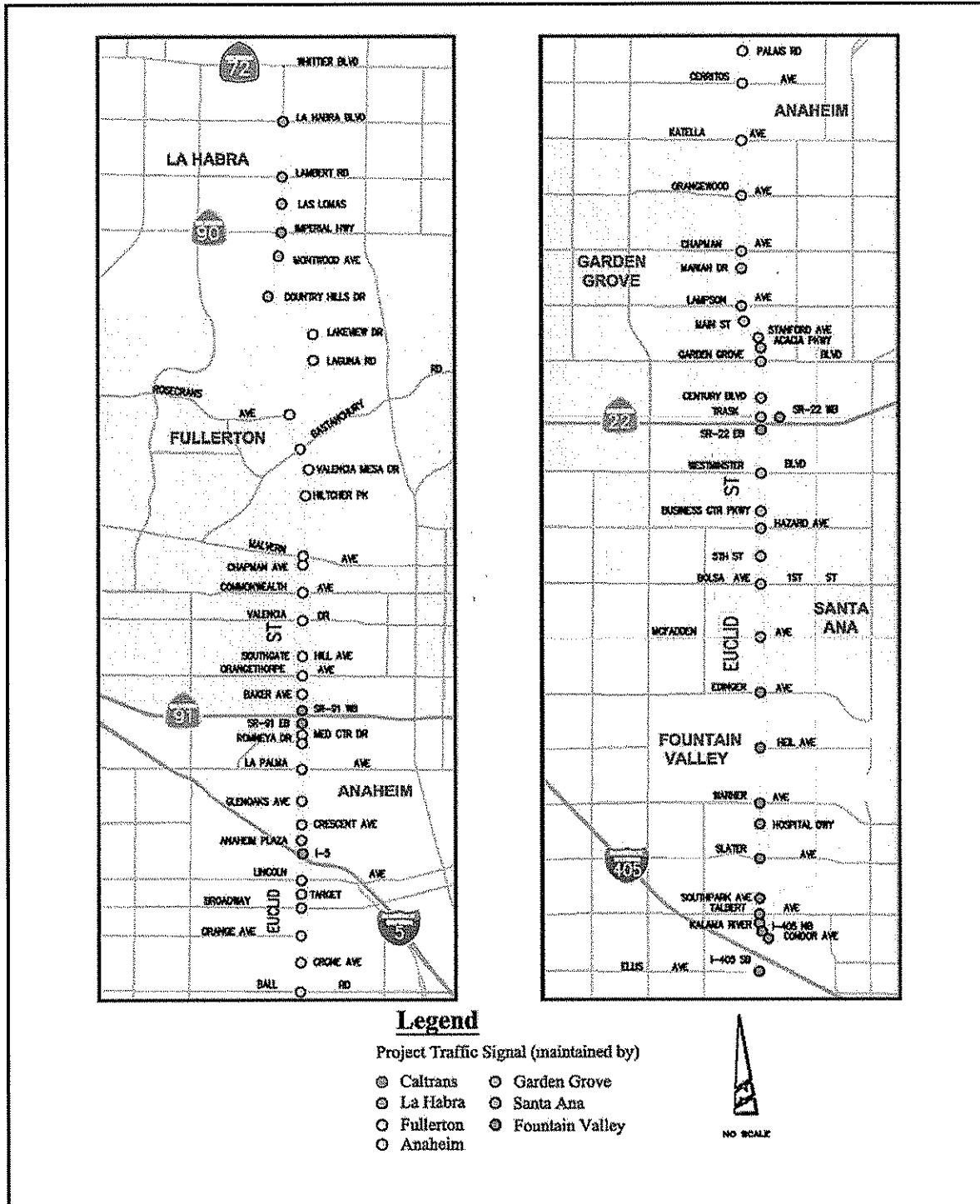


Figure 1: Euclid Street Corridor Signals

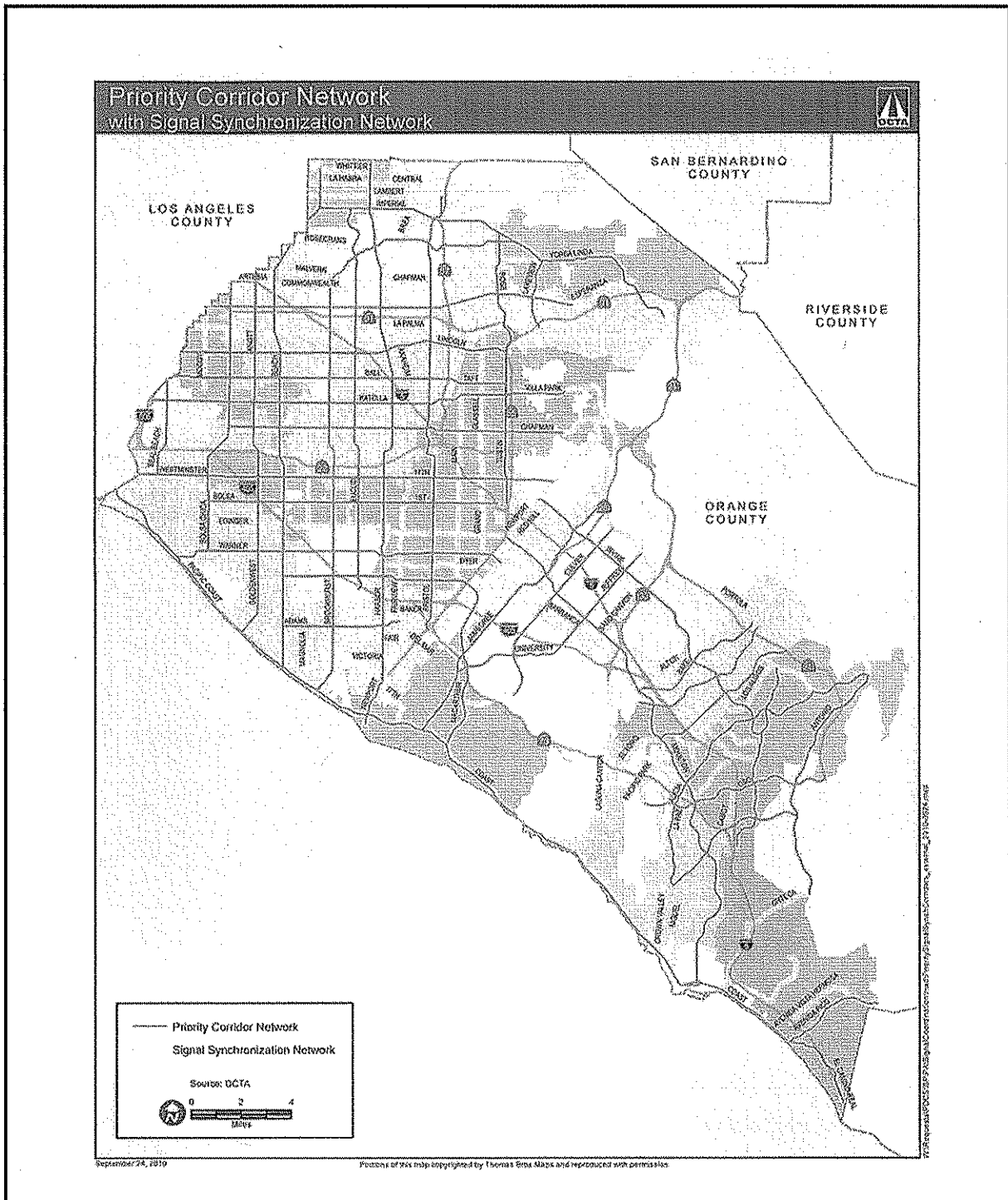


Figure 2: Orange County Regional Traffic Signal Synchronization Master Plan

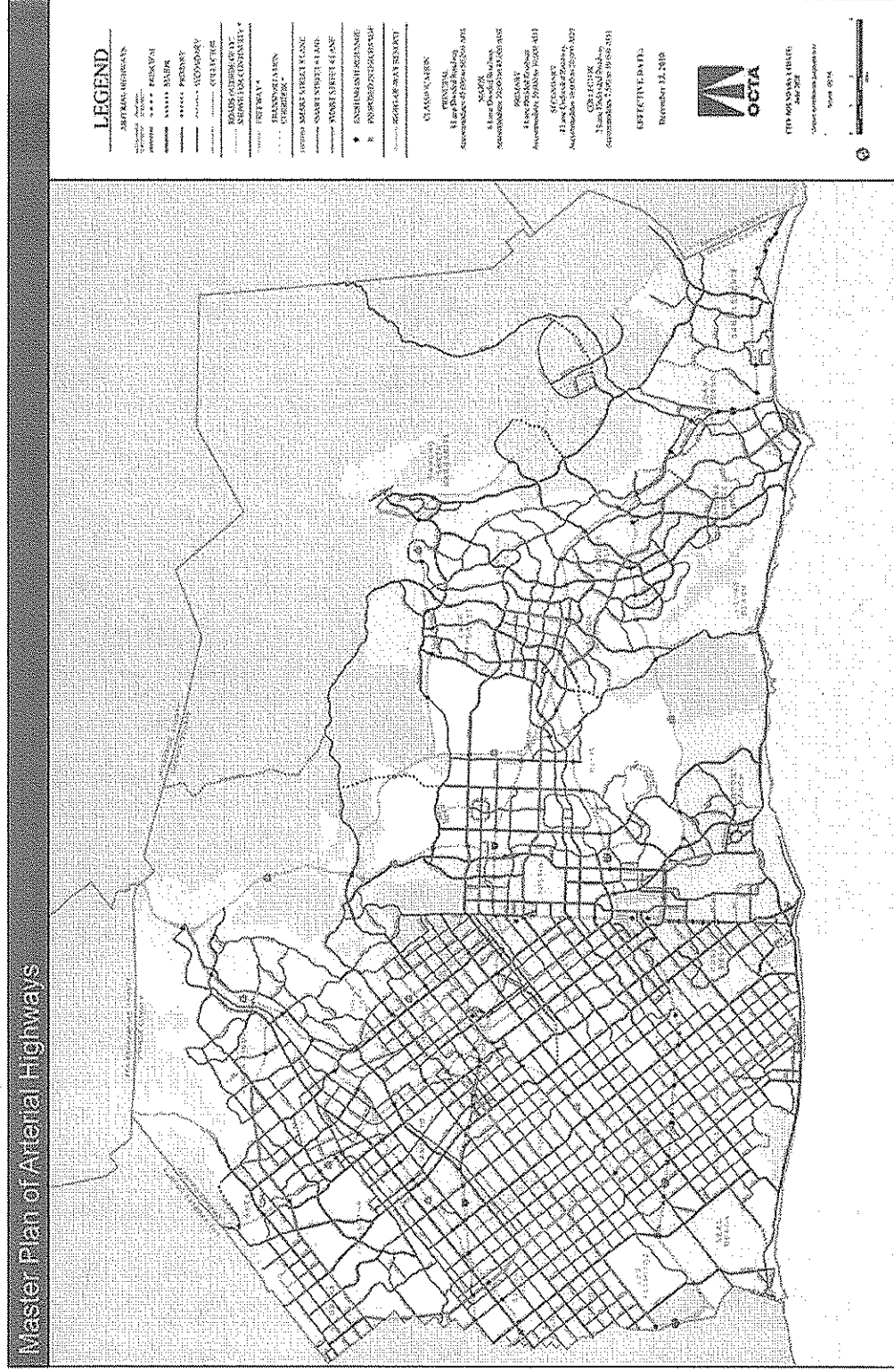


Figure 3: Orange County Master Plan of Arterial Highways

D. Project Corridor Signalized Intersections

The signalized intersections comprising the Euclid Street corridor are listed in **Table 1**.

Table 1: Euclid Street Corridor Project Traffic Signals		
Intersection Name		Jurisdiction
1	Euclid Street at La Habra Blvd	La Habra
2	Euclid Street at Lambert Road	
3	Euclid Street at Las Lomas	
4	Euclid Street at Imperial Highway	Caltrans
5	Euclid Street at Montwood Ave	La Habra
6	Euclid Street at Country Hills Dr	
7	Euclid Street at Lakeview Dr	Fullerton
8	Euclid Street at Laguna Rd	
9	Euclid Street at Rosecrans Ave	
10	Euclid Street at Bastanchury Rd	
11	Euclid Street at Valencia Mesa Dr	
12	Euclid Street at Hiltcher Pk	
13	Euclid Street at Malvern Ave	
14	Euclid Street at Chapman Ave	
15	Euclid Street at Commonwealth Ave	
16	Euclid Street at Valencia Dr	
17	Euclid St at Hill Ave-Southgate Ave	
18	Euclid St at Orangethorpe Ave	
19	Euclid St at Baker Ave	Caltrans
20	Euclid St at SR-91 WB Ramps	
21	Euclid St at SR-91 EB Ramps	Anaheim
22	Euclid St at Medical Center Dr	
23	Euclid St at Romneya Dr	
24	Euclid St at La Palma Ave	
25	Euclid St at Glenoaks Ave	
26	Euclid St at Crescent Ave	
27	Euclid St at Anaheim Plaza	Caltrans
28	Euclid St at I-5 Ramps	
29	Euclid St at Lincoln Ave	Anaheim
30	Euclid Street at Target	
31	Euclid St at Broadway	
32	Euclid St at Orange Ave	
33	Euclid St at Crone Ave	
34	Euclid St at Ball Rd	
35	Euclid St at Palais Rd	
36	Euclid St at Cerritos Ave	
37	Euclid St at Katella Ave	

Table 1: Euclid Street Corridor Project Traffic Signals		
Intersection Name		Jurisdiction
38	Euclid St at Oranewood Ave	Garden Grove
39	Euclid St at Chapman Ave	
40	Euclid St at Marian Dr	
41	Euclid St at Lampson Ave	
42	Euclid St at Main St-College Ave	
43	Euclid St at Stanford Ave	
44	Euclid St at Acacia Pkwy	
45	Euclid St at Garden Grove Blvd	
46	Euclid St at Century Blvd	
47	Euclid St at Trask Ave	
48	Trask Ave at SR-22 WB Ramps-Havenwood Dr	Caltrans
49	Euclid St at SR-22 EB Ramps	
50	Euclid St at Westminster Ave	Garden Grove
51	Euclid St at Business Center Pkwy-Oakfield Ave	Santa Ana
52	Euclid St at Hazard Ave	
53	Euclid St at 5th St	
54	Euclid St at Bolsa Ave-1st St	
55	Euclid St at McFadden Ave	Fountain Valley
56	Euclid St at Edinger Ave	
57	Euclid St at Heil Ave	
58	Euclid St at Warner Ave	
59	Euclid St at Hospital Campus	
60	Euclid St at Slater Ave	
61	Euclid St at Southpark Ave	
62	Euclid St at Talbert Ave	
63	Euclid St at Kalama River Ave	Caltrans
64	Euclid St at I-405 NB Ramps-Newhope St	
65	Euclid St at Condor Ave	Fountain Valley
66	Ellis Ave-Euclid St at I-405 SB Ramps	Caltrans

E. Traffic Forum Members

The Euclid Street Traffic Forum members are:

City of La Habra
City of Fullerton
City of Anaheim
City of Garden Grove
City of Santa Ana
City of Fountain Valley
Caltrans

2. Lead Agency

The City of Fullerton will be the lead agency.

3. Resolution of Support

The Resolutions of Support or Letters of Intent from all participating agencies are provided on the following pages.



City of La Habra

"A Caring Community"

PUBLIC WORKS/ENGINEERING

201 E. La Habra Boulevard

La Habra, CA 90631

Office: (562) 905-9720

Fax: (562) 905-9643

March 15, 2011

Mr. Don Hoppe
Director of Engineering
City of Fullerton
303 W. Commonwealth Avenue
Fullerton, CA 92832

Subject: Letter of Intent for Regional Traffic Signal Synchronization
Program Application – Euclid Street

Dear Mr. Hoppe:

The Orange County Transportation Authority issued a call for projects for Regional Traffic Signal Synchronization Program to coordinate traffic signals across jurisdictional boundaries in the county. The City of La Habra in coordination with participating cities identified Euclid Street corridor for Project P application. The signal synchronization on Euclid Street between La Habra Boulevard in the City of La Habra and Ellis Avenue in the City of Fountain Valley will improve the signal coordination along this heavily traveled corridor.

The City of La Habra is in support of City of Fullerton's effort in pursuing Renewed Measure M funds for this project.

The City of La Habra is committed to provide the required matching funds and will be seeking City Council adoption of a resolution on April 18, 2011 in support of implementing and funding this project. We will forward the adopted resolution as soon as it is available.

Sincerely,

Christopher L. Johansen, P.E.
City Engineer



CITY OF FULLERTON

Engineering Department

March 16, 2011

Anup Kulkarni
Orange County Transportation Authority
Section Manager, Regional Modeling and Traffic Operations
550 S. Main Street
P.O. Box 14184
Orange, California 92863-1584

Subject: Letter of Intent for Regional Traffic Signal Synchronization
Program Application

Dear Mr. Kulkarni:

The Orange County Transportation Authority issued a call for projects for Regional Traffic Signal Synchronization Program to coordinate traffic signals across jurisdictional boundaries in the county. The City of Fullerton, in coordination with participating cities, identified the Euclid Street corridor for Project P application. The signal synchronization on Euclid Street, between La Habra Boulevard in the City of La Habra and Ellis Avenue in the city of Fountain Valley, will improve the signal coordination along this heavily traveled corridor.

The City of Fullerton is committed to provide the required matching funds and will be seeking City Council adoption of a resolution on April 19, 2011, in support of implementing and funding this project. We will forward the adopted resolution as soon as it is available.

Sincerely,

A handwritten signature in cursive script, appearing to read "Yelena Voronel".

Yelena Voronel
Senior Civil Engineer

THE EDUCATION COMMUNITY

303 West Commonwealth Avenue, Fullerton, California 92832-1775
(714) 738-6845 • Fax (714) 738-3115 • Web Site: www.ci.fullerton.ca.us



City of Anaheim
DEPARTMENT OF PUBLIC WORKS

March 15, 2011

Mr. Don Hoppe
City Engineer
City of Fullerton
303 West Commonwealth Avenue
Fullerton, CA 92832

Subject: Letter of Intent for Regional Traffic Signal Synchronization
Program Application – Euclid Street

Dear Mr. Hoppe:

The Orange County Transportation Authority issued a call for projects for Regional Traffic Signal Synchronization Program to coordinate traffic signals across jurisdictional boundaries in the county. The City of Anaheim in coordination with participating cities identified Euclid Street corridor for Project P application.

The City of Anaheim is in support of City of Fullerton's effort in pursuing Renewed Measure M funds for this project which will improve the signal coordination along this heavily traveled corridor.

The City of Anaheim is committed to provide the required matching funds and will be seeking City Council adoption of a resolution on April 12, 2011 in support of implementing and funding this project. We will forward the adopted resolution as soon as it is available.

Sincerely,

John Thai
Principal Traffic Engineer
City of Anaheim

200 S. Anaheim Blvd., Suite 276
Anaheim, California 92805

TEL (714) 765-5176
FAX (714) 765-5225



CITY OF GARDEN GROVE

March 15, 2011

Don Hoppe
Director of Engineering
City of Fullerton
303 W. Commonwealth Avenue
Fullerton, CA 92832

Subject: Letter of Intent for Regional Traffic Signal Synchronization
Program Application – Euclid Street

Dear Mr. Hoppe:

The Orange County Transportation Authority issued a call for projects for Regional Traffic Signal Synchronization Program to coordinate traffic signals across jurisdictional boundaries in the county. The City of Garden Grove in coordination with participating cities identified Euclid Street corridor for Project P application. The signal synchronization on Euclid Street between La Habra Boulevard in the City of La Habra and Ellis Avenue in the City of Fountain Valley will improve the signal coordination along this heavily traveled corridor.

The City of Garden Grove is in support of City of Fullerton's effort in pursuing Renewed Measure M funds for this project.

The City of Garden Grove is committed to provide the required matching funds and will be seeking City Council adoption of a resolution on April 26, 2011 in support of implementing and funding this project. We will forward the adopted resolution as soon as it is available.

Sincerely,

Dan Candelaria, P.E., T.E.
City Traffic Engineer
City of Garden Grove

William J. Dalton
Mayor

Steven R. Jones
Mayor Pro Tem

Dina Nguyen
Council Member

Bruce A. Broadwater
Council Member

Andrew Do
Council Member

MAYOR
Miguel A. Pulido
MAYOR PRO TEM
Claudia C. Alvarez
COUNCILMEMBERS
P. David Benavides
Carlos Bustamante
Michele Martinez
Vincent F. Sarmiento
Sal Tinajero



CITY MANAGER
David N. Ream
CITY ATTORNEY
Joseph Straka
CLERK OF THE COUNCIL
Maria D. Huizar

CITY OF SANTA ANA
CLERK OF THE COUNCIL OFFICE M-30
P.O. Box 1988
Santa Ana, California 92702

MINUTES EXCERPT

MEETING DATE: March 7, 2011

COUNCIL MEMBERS PRESENT: Alvarez, Benavides Bustamante, Martinez, Sarmiento, Tinajero, Pulido (7)

ABSENT: None (0)

CONSENT CALENDAR

55C SUBMISSION OF GRANT APPLICATIONS FOR MEASURE M COMPREHENSIVE TRANSPORTATION FUNDING PROGRAM - Public Works Agency

MOTION: Adopt a resolution.

RESOLUTION NO. 2011-009 - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SANTA ANA APPROVING THE SUBMITTAL OF IMPROVEMENT PROJECTS TO THE ORANGE COUNTY TRANSPORTATION AUTHORITY FOR FUNDING UNDER THE COMPREHENSIVE TRANSPORTATION PROGRAM

MOTION: Alvarez

SECOND: Benavides

VOTE: **AYES:** Alvarez, Benavides, Bustamante, Martinez, Pulido, Sarmiento, Tinajero (7)

NOES: None (0)

ABSTAIN: None (0)

ABSENT: None (0)

STATE OF CALIFORNIA
COUNTY OF ORANGE

I, MARIA D. HUIZAR, Clerk of the Council, of the City of Santa Ana, California, hereby certify the foregoing to be a full, true and correct copy of the minute action on record in this office.

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 14th day of March, 2011.

Maria D. Huizar
Maria D. Huizar
Clerk of the Council

RESOLUTION NO. 2011-

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF
SANTA ANA APPROVING THE SUBMITTAL OF
IMPROVEMENT PROJECTS TO THE ORANGE COUNTY
TRANSPORTATION AUTHORITY FOR FUNDING UNDER
THE COMPETITIVE MEASURE M2 REGIONAL TRAFFIC
SYNCHRONIZATION PROGRAM

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF SANTA ANA AS
FOLLOWS:

Section 1: The City Council of the City of Santa Ana hereby finds, determines and
declares as follows:

- A. The Measure M2 Regional Traffic Synchronization Program targets over 2000
signalized intersections across Orange County to maintain traffic signal
synchronization, improve traffic flow and reduce congestion across
jurisdictions.
- B. The City of Santa Ana has been declared by the Orange County
Transportation Authority to meet the eligibility requirements to receive
revenues as part of Measure M2.
- C. The City of Santa Ana has a currently adopted a Local Signal Synchronization
Plan consistent with the Regional Traffic Signal Synchronization Master Plan
as a key component of local agencies' effort to synchronized traffic signals
across local agencies' boundary.
- D. The City of Santa Ana will provide matching funds for each project as
required by the Comprehensive Transportation Funding Program Procedures
Manual; and
- E. The City of Santa Ana will not use Measure M2 funds to supplant Developer
Fees or other commitments; and
- F. The City of Santa Ana desires to implement multi-jurisdictional listed below.

SECTION 2: The Executive Director of the Public Works Agency is authorized to
submit projects for funding consideration under the Combined Transportation Funding
Programs.

SECTION 3: The City Council of the City of Santa Ana hereby requests the Orange County Transportation Authority allocate funds in the amounts specified in the City's application to said City from the Regional Traffic Synchronization Program. Said funds shall be matched by funds from said City as required and shall be used as supplemental funding to aid the City in the implementation the following projects:

PROJECTS	FY
Warner Ave from Pacific Coast Hwy to Red Hill Ave	11/12
Tustin Ave from 1 st St to Imperial Hwy	11/12
Euclid Ave from 405 Fwy to Imperial Hwy	11/12
Fairview from SR 55 to SR 22	11/12
MacArthur Blvd from Beach Blvd to SR 55	11/12

SECTION 4: This Resolution shall take effect immediately upon its adoption by the City Council, and the Clerk of the Council shall attest to and certify the vote adopting this Resolution.

ADOPTED this ____ day of _____ 2011.

Miguel A. Pulido
Mayor

APPROVED AS TO FORM:
Joseph W. Fletcher, City Attorney

By: _____
Laura Sheedy
Assistant City Attorney

AYES: Councilmembers _____

NOES: Councilmembers _____

ABSTAIN: Councilmembers _____

NOT PRESENT: Councilmembers _____

CERTIFICATE OF ORIGINALITY

I, Maria D. Huizar, Clerk of the Council, do hereby certify the attached Resolution No. _____ to be the original resolution adopted by the City Council of the City of Santa Ana on _____, 2011.

Date: _____

Clerk of the Council
City of Santa Ana

RESOLUTION NO. 9299

A RESOLUTION OF THE FOUNTAIN VALLEY CITY COUNCIL APPROVING THE SUBMITTAL OF WARNER AVENUE, TALBERT AVENUE/MACARTHUR BOULEVARD, AND EUCLID STREET IMPROVEMENT PROJECTS TO THE ORANGE COUNTY TRANSPORTATION AUTHORITY FOR FUNDING UNDER THE COMPETITIVE MEASURE M2 REGIONAL TRANSPORTATION SIGNAL SYNCHRONIZATION PROGRAM

WHEREAS, the Measure M2 Regional Traffic Signal Synchronization Program targets over 2000 signalized intersections across Orange County to maintain traffic signal synchronization, improve traffic flow, and reduce congestion across jurisdictions; and

WHEREAS, the City of Fountain Valley has been declared by the Orange County Transportation Authority to meet the eligibility requirements to receive revenues as part of Measure M2; and

WHEREAS, the City of Fountain Valley has a currently adopted Local Signal Synchronization Plan consistent with the Regional Traffic Signal Synchronization Master Plan as a key component of local agencies' efforts to synchronizing traffic signals across local agencies' boundaries; and

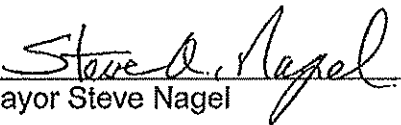
WHEREAS, the City of Fountain Valley will provide matching funds for each project as required by the Orange County Comprehensive Transportation Funding Programs Procedures Manual; and

WHEREAS, the City of Fountain Valley will not use Measure M funds to supplant Developer Fees or other commitments; and

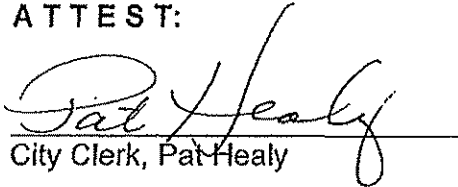
WHEREAS, the City of Fountain Valley desires to implement multi-jurisdictional signal synchronization listed below;

NOW, THEREFORE, BE IT RESOLVED the City Council of the City of Fountain Valley hereby requests the Orange County Transportation Authority allocate funds in the amounts specified in the City's application to said City from the Regional Transportation Signal Synchronization Program to implement regional signal synchronization along the following street(s): Warner Avenue, Talbert Avenue/MacArthur Boulevard, and Euclid Street.

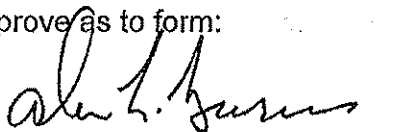
PASSED, APPROVED, AND ADOPTED at a regular meeting of the City Council of the City of Fountain Valley this 1st day of March, 2011.


Mayor Steve Nagel

ATTEST:


City Clerk, Pat Healy

Approve as to form:


City Attorney, Alan R. Burns

VOTE

STATE OF CALIFORNIA)
COUNTY OF ORANGE)ss.
CITY OF FOUNTAIN VALLEY)

I, Kathleen Heard, Deputy City Clerk of the City of Fountain Valley, do hereby certify that the foregoing Resolution was adopted at the Council meeting held on the 1st day of March 2011, by the following vote, to wit:

AYES: NAGEL, CRANDALL, COLLINS, MCCURDY, VO
ABSENT: NONE
NOES: NONE


Kathleen Heard, Deputy City Clerk

4. Preliminary Project Plans

Primary Implementation

A. Development and Implementation of Optimized Signal Synchronization Timing

The City of Fullerton will lead the project to optimize signal synchronization timing along the Euclid Street corridor. The City of Fullerton will work cooperatively with all other traffic forum members to improve traffic flow. Synchronization will be inter-jurisdictional in nature. All existing traffic patterns, flows and conditions will be taken into account. Synchronized timing will be developed for the AM Peak, Midday Peak, PM Peak and Weekend Peak periods. Cross street traffic will be considered as part of the project.

B. Before and After Study Analysis

The Project Team will develop a “Before” and “After” study analysis for the Euclid Street Corridor. The “before” study shall collect travel time and delay data for peak periods. Measures of Effectiveness (MOE) parameters, which provide a quantitative basis for determining traffic signal coordination benefits, will include stops, delays, travel times, average speeds and fuel consumption. MOE’s will be compiled via field measurements using the floating-car technique.

The “after” study will be conducted similar to the “before” study using data gathered after the implementation of the optimized timing. The same MOE parameters will be compiled and later compared to determine the improvements in efficiency of traffic flow resulting from the multi-jurisdictional traffic signal coordination.

Also to be included in the “before” and “after” analysis is the Corridor Synchronization Performance Index (CSPI) comparison. The CSPI index is based on the average speed, number of greens per red and the number of stops per mile.

C. Proposed Signal Timing Related System Improvements

City of La Habra:

The City of La Habra will be receiving a CCTV camera. Fiber will also be installed in existing conduits to connect to Harbor/Lambert (which connects to the City’s TMC). Controller software upgrades are also planned.

City of Fullerton:

The City of Fullerton will be receiving new controllers along Euclid Street. A new cabinet with foundation as well as one controller software upgrade are proposed. The City will also get a CCTV camera, wireless radios, Ethernet communications upgrades and video detection upgrade.

City of Anaheim:

The City of Anaheim will be receiving new 2070 controllers at 10 locations. Over 7500 feet of fiber will be installed using existing conduits between Medical Center Drive and Lincoln Avenue. Ethernet switches will be provided at 11 locations.

City of Garden Grove:

The City of Garden Grove will be receiving new ASC/3 controllers, Ethernet switches and interconnect termination units at 4 locations.

City of Santa Ana:

The City of Santa Ana will be installing fiber optic cable in existing conduits between McFadden Ave and Hazard Ave (approximately 5700 feet) to bring back communications to City TMC. Several Ethernet switches to enable Ethernet communications to the TMC are also proposed.

City of Fountain Valley:

The City of Fountain Valley will be installing fiber in new conduit between Kalama River and Condor traffic signals.

Caltrans:

Caltrans will be receiving new 2070 controllers at the freeway ramp traffic signals along Euclid Street.

Specific improvements in each agency are identified in **Table 2**.

Ongoing Maintenance and Operation

Ongoing maintenance and operation will last for a period of three years after the initial year and will consist of (A) monitoring and improving optimized signal timing, and (B) communications and detection support. Descriptions of both are provided below:

A. Monitoring and Improvement of Optimized Signal Timing

The Euclid Street corridor will be driven periodically during peak hours and non-peak hours to monitor and improve traffic signal synchronization timings and parameters. Improvements and corrections will be implemented as necessary. These reviews will begin upon the completion of the primary implementation and will continue for three years.

B. Communications and Detection Support Timing

Communication between a central system and signals will be monitored, maintained and repaired as necessary along the corridor across all agencies to ensure necessary conditions for signal synchronization. In addition, detection will be maintained well for a period of three years after signal timing is implemented with consultant help. The project will use a variety of methods to monitor, maintain and repair both communications and detections along the synchronized corridor as shown in Figure 1 and the intersections as identified in Table 1 to ensure the necessary conditions for signal synchronization. A number of tools will be used including monthly drives along the corridor, analysis of central system report output and discussions with respective agency staff.

5. Funding Needs/Costs

Primary Implementation

A. Development and Implementation of Optimized Signal Synchronization Timing

Estimated Cost: \$330,000.00

B. Before and After Study Analysis

Estimated Cost: Included in Task A

C. Proposed Signal Timing Related System Improvements

Estimated Cost: \$658,640.00

Ongoing Maintenance and Operation

A. Monitoring and Improvement of Optimized Signal Timing

Estimated Cost: \$190,080.00

B. Communications and Detection Support Timing

Estimated Cost: \$71,280.00

Total Estimated Cost: \$261,360.00

Additional details relative to project cost components are provided in **Table 2**.

Table 2: Euclid Street Corridor Project Cost Summary

Date: March 16, 2011

Page 1 of 7

Project Component	Project Cost						Total Cost
	City of Fullerton	City of La Habra	City of Anaheim	City of Garden Grove	City of Santa Ana	City of Fountain Valley	
Cost Breakdown							
Signal Timing Component (1st Year)	\$ 70,000.00	\$ 30,000.00	\$ 85,000.00	\$ 65,000.00	\$ 25,000.00	\$ 55,000.00	\$ 330,000.00
Signal Support Component (2nd, 3rd & 4th Yr)	\$ 55,440.00	\$ 23,760.00	\$ 67,320.00	\$ 51,480.00	\$ 19,800.00	\$ 43,560.00	\$ 261,360.00
Construction Cost	\$ 114,000.00	\$ 62,000.00	\$ 115,760.00	\$ 48,000.00	\$ 71,800.00	\$ 36,000.00	\$ 447,560.00
Contingency (10%)	\$ 11,400.00	\$ 6,200.00	\$ 11,576.00	\$ 4,800.00	\$ 7,180.00	\$ 3,600.00	\$ 44,756.00
Construction Eng/Design (15%)	\$ 18,810.00	\$ 10,230.00	\$ 19,100.40	\$ 7,920.00	\$ 11,847.00	\$ 5,940.00	\$ 73,847.40
Construction Mgmt & Inspection (15%)	\$ 18,810.00	\$ 10,230.00	\$ 19,100.40	\$ 7,920.00	\$ 11,847.00	\$ 5,940.00	\$ 73,847.40
Contract Administration (by Lead Agency)	\$ 18,630.00						\$ 18,630.00
Project Cost (Per Agency)	\$ 307,090.00	\$ 142,420.00	\$ 317,856.80	\$ 185,120.00	\$ 147,474.00	\$ 150,040.00	\$ 1,250,000.80
	SAY \$ 307,090.00	SAY \$ 142,420.00	SAY \$ 317,855.00	SAY \$ 185,120.00	SAY \$ 147,475.00	SAY \$ 150,040.00	SAY \$ 1,250,000.00
Funding Request							
OCTA Requested Grant Funds (80%)							\$ 1,000,000.00
Agency Match (20%)	\$ 61,418.00	\$ 28,484.00	\$ 63,571.00	\$ 37,024.00	\$ 29,495.00	\$ 30,008.00	\$ 250,000.00
					Euclid Street Corridor Grand Total: \$ 1,250,000.00		

6. Project Schedule by Task

Estimated Project Start Date: July 1, 2011
Estimated Project End Date: June 30, 2015

Primary Implementation

A. Development and Implementation of Optimized Signal Synchronization Timing

Estimated Start Date: July 1, 2011
Estimated End Date: June 30, 2012

B. Before and After Study Analysis

Estimated Start Date: July 1, 2011
Estimated End Date: June 30, 2012

C. Proposed Signal Timing Related System Improvements

Estimated Start Date: July 1, 2011
Estimated End Date: June 30, 2012

Ongoing Maintenance and Operation

A. Monitoring and Improvement of Optimized Signal Timing

Estimated Start Date: July 1, 2012
Estimated End Date: June 30, 2015

B. Communications and Detection Support Timing

Estimated Start Date: July 1, 2012
Estimated End Date: June 30, 2015

7. Matching Funds

Total Match Amount	\$250,000.00
In-kind Match Amount	Local match will be a combination
Hard Dollar Match Amount	of in-kind and hard dollars
Total Match Ratio (To Total Project Cost)	0.20

Description of in-kind match:

Contract Administration and Project Management; Construction Management and Inspection; Traffic Forum Meetings.

Description of hard dollar match (if any):

Portion of engineering and construction will come from General Fund.

8. Environmental Clearances and Other Permits

This project is Categorically Exempt.

9. Selection Criteria Calculations

See Table 3 and Table 4.

Table 3: Euclid Street Corridor VMT Calculation

Agency	Segment	ADT	Segment Length	VMT
La Habra (2009 OCTA)	La Habra Bl to Lambert Rd	14,000	0.50	7,000
	Lambert Rd to Imperial Hwy	16,000	0.50	8,000
Fullerton (2009 OCTA)	Imperial Hwy to Rosecrans Ave	21,000	1.93	40,530
	Rosecrans Ave to Valencia Mesa	31,700	0.53	16,801
	Valencia Mesa to Malvern Ave	27,600	0.78	21,528
	Malvern Ave to Commonwealth	34,500	0.33	11,385
	Commonwealth to Orangethorpe Ave	38,300	0.75	28,725
	Orangethorpe Ave to SR-91 WB Ramps	47,600	0.31	14,756
Anaheim (2009 OCTA)	SR-91 WB ramp to SR-91 EB ramps	47,100	0.09	4,282
	SR-91 EB ramps to Romneya Dr	45,600	0.19	8,809
	Romneya Dr to Glenoaks Ave	46,000	0.53	24,525
	Glenoaks Ave to Anaheim Plaza	45,700	0.32	14,757
	Anaheim Plaza to I-5 ramps	44,200	0.12	5,399
	I-5 ramps to Target	41,000	0.40	16,307
	Target to Orange Ave	37,200	0.38	14,020
	Orange Ave to Ball Rd	35,000	0.51	17,765
	Ball Rd to Katella Ave	33,000	1.02	33,660
Garden Grove (2009 OCTA)	Katella Ave to Chapman Ave	30,000	1.00	30,000
	Chapman Ave to Lampson Ave	36,000	0.50	18,000
	Lampson Ave to Garden Grove Blvd	33,000	0.56	18,480
	Garden Grove Blvd to Trask Ave	38,000	0.50	19,000
	Trask Ave to Westminster Blvd	47,000	0.51	23,970
	Westminster Blvd to Hazard St	48,000	0.50	24,000
Santa Ana (2009 OCTA)	Hazard St to Bolsa Ave/1st St	48,000	0.50	24,000
	Bolsa Ave/1st St to McFadden Ave	37,000	0.47	17,390
	McFadden Ave to Edinger Ave	37,000	0.50	18,500
Fountain Valley (2009 OCTA)	Edinger Ave to Heil Ave	36,000	0.50	18,000
	Heil Ave to Warner Ave	35,000	0.50	17,500
	Warner Ave to Slater Ave	29,000	0.50	14,500
	Slater Ave to Talbert Ave	27,000	0.50	13,500
	Talbert Ave to Ellis Ave	30,000	0.60	18,000

Segment Length (mi): 16.83

TOTAL VMT: 563,090

Table 4: Selection Criteria Calculations

Corridor: Euclid Street

Total Criteria Points: 77

Vehicle Miles Traveled (VMT) - 20 points max				20
VMT:	563,090			
250,000 or above	1	20	20	
200,000 to 249,999		15	0	
150,000 to 199,000		10	0	
100,000 to 149,000		6	0	
50,000 to 99,000		3	0	
49,000 or below		1	0	
Points Earned:				20

Benefit Cost Ratio - 15 points max				1
Total Project Cost:	\$ 1,250,000.00			
VMT/Project Cost:	0.45			
0.81 or above		15	0	
0.71 to 0.80		12	0	
0.61 to 0.70		8	0	
0.51 to 0.60		4	0	
0.41 to 0.50	1	1	1	
0.40 or below		0	0	
Points Earned:				1

Project Characteristics - 10 points max				10
Signal Coordination	1	5	5	
Communication & Detection Support	1	3	3	
TMC/TOC and Motorist Information		2	0	
New or upgraded Communications System	1	1	1	
New or Upgraded Detection	1	1	1	
Intersection/field system modernization and replacement		1	0	
Minor signal operational Improvements		1	0	
Real-Time Traffic Actuated Operations and Demo Project		1	0	
Points Earned:				10

Transportation Significance - 10 points max				10
Corridor Type				
Priority Corridor	1	10	10	
Signal Synchronization Network		5	0	
Points Earned:				10

Maintenance of Effort - 5 points max				3
Commitment to Operate Signal Synchronization				
6 years or more		5	0	
4 to 5 years	1	3	3	
3 years		0	0	
Points Earned:				3

Project Scale - 10 points max				8
No of signals:	65			
Length of Corridor:	16.8			
Signals being retimed/mile:	3.9			
5 or above		5	0	
4.0 to 4.9		4	0	
3.0 to 3.9	1	3	3	
2.0 to 2.9		2	0	
1.9 or below		1	0	
Points Earned:				3

AND				
Percent of Corridor Signals Being Retimed				
90% or above	1	5	5	
80% to 89%		4	0	
70% to 79%		3	0	
60% to 69%		2	0	
50% to 59%		1	0	
Points Earned:				5

Number of Jurisdictions - 20 points max				20
Total Number of Involved Jurisdictions				
6 or above	1	20	20	
4		16	0	
3		12	0	
2		8	0	
Points Earned:				20

OR				
% of Priority Corridor Jurisdiction Involved				
100%	1	20	20	
75% to 99%		12	0	
50% to 75%		6	0	
Points Earned:				20

Current Project Readiness - 5 points max				5
Estimated Project Start				
Within 12 months	1	5	5	
Within 24 months		3	0	
Within 36 months		1	0	
Points Earned:				5

Funding Over-Match - 5 points max				0
Funding Over-Match				
50% or above		5	0	
40% to 49%		4	0	
35% to 39%		3	0	
30% to 34%		2	0	
25% to 29%		1	0	
Points Earned:				0

10. Additional Information or Documentation

Project Summary

☒ All guidelines were met for this project.

☐ Not all qualifications were met.

MAIN MENU

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OCTA Orange County Transportation Authority

VIEW PREVIOUS VERSIONS OF THIS PROJECT

LATEST VERSION PDF

PROJECT SUMMARY (XLS)

UPLOAD PROJECT DOCUMENTS

APPLICATION NUMBER:	CTFP TOTAL ALLOCATIONS: \$1,000,000.00	TOTAL PROJECT COST \$1,250,000.00
PROJECT ID: CP--2977	CTFP TOTAL PAYMENTS: \$0.00	ACTUAL MATCH RATE 0.00
VERSION: 1	STATUS: Planned	

LAST MODIFIED BY: David Langstaff (3/17/2011) APPROVED BY: N/A HISTORY

PROJECT INFORMATION

IMPROVEMENT TYPE

TSSP - Traffic Signal Synchronization Program

IMPLEMENTING AGENCY

Fullerton, City of

DISTRICT

4

PROJECT MANAGER

David Langstaff

PHONE (10-DIGIT)

7147386858

EMAIL

davel@ci.fullerton.ca.us

PROJECT TITLE

Euclid Street Corridor Traffic Signal Synchronization Project

PROJECT DESCRIPTION - GUIDELINES

Primary Implementation includes developing and implementing optimized signal synchronization timing for 66 traffic signals along the approximate 16.8 miles of the Euclid Avenue corridor from La Habra Boulevard in La Habra to Ellis Avenue in Fountain Valley. The project involves the cities of La Habra, Fullerton, Anaheim, Garden Grove, Santa Ana and Fountain Valley. Caltrans will also be involved at all State Highway and or freeway locations. Before and after analysis will be conducted. Signal improvements including engineering design and construction management will provide new or upgraded video detection, upgraded fiber optic communications and/or equipment to provide Ethernet over copper communications, replacement of traffic signal controllers and/or upgraded software in existing controllers and CCTV installation. Ongoing maintenance and operation will provide continued support for monitoring and fine-tuning optimized traffic signal timing and maintaining communication and critical detection.

SYSTEM	ROUTE	INTERSECTION	LOCAL STREET NAME	FROM	TO
Local Street		NO	Euclid Street	La Habra Blvd (La)	Ellis Ave (Fountain)

GENERAL QUESTIONS

CTFP QUESTIONS

Is this application on your current approved measure M2 CIP? YES

Has your agency previously received CTFP funding for this Application? NO

If Yes, When?

Project ID?

Is this on agency's LOCAL SYNCHRONIZATION PLAN? YES

** TSSP PROGRAM RULES:

** If Project is TSSP Program, it should be 20% MINIMUM Match

** Traffic Sync Program (TSSP) - Primary Implementation can only be programmed in ENG Phase.

** Traffic Sync Program (TSSP) - Maintenance & Monitoring can only be programmed in CON Phase.

** TSSP Program can not be programmed in ROW Phase.

PROGRAMMING INFORMATION (\$0)

HISTORICAL REVENUES | GRAPH REVENUES

Please enter all funding required for the total project for all years. Note: This 2010 Call for Projects will allocate M2 funds for FY11/12, FY12/13, FY13/14 only.

Minimum match for local funds is 20%

** Actual Local Agency Match Rate is 20% **

FISCAL YEAR	FUND TYPE (PROGRAMMED REVENUE SOURCE)	ENG	ROW	CON	TOTAL
-------------	---------------------------------------	-----	-----	-----	-------

11/12	General Fund	\$195,040.00	\$0.00	\$0.00	\$195,040	X
11/12	Traffic Signal Sync Program (TSSP) - Primary Implementation	\$780,160.00	\$0.00	\$0.00	\$780,160	X
12/13	Traffic Signal Sync Program (TSSP) - Maintenance & Monitoring	\$0.00	\$0.00	\$73,280.00	\$73,280	X
12/13	General Fund	\$0.00	\$0.00	\$18,320.00	\$18,320	X
13/14	General Fund	\$0.00	\$0.00	\$18,320.00	\$18,320	X
13/14	Traffic Signal Sync Program (TSSP) - Maintenance & Monitoring	\$0.00	\$0.00	\$73,280.00	\$73,280	X
14/15	General Fund	\$0.00	\$0.00	\$18,320.00	\$18,320	X
14/15	Traffic Signal Sync Program (TSSP) - Maintenance & Monitoring	\$0.00	\$0.00	\$73,280.00	\$73,280	X
					\$0	
					\$0	
					\$0	
					\$0	
					\$0	
General Fund		\$195,040	\$0	\$54,960	\$250,000	
Traffic Signal Sync Program (TSSP) - Primary Implementation		\$780,160	\$0	\$0	\$780,160	
Traffic Signal Sync Program (TSSP) - Maintenance & Monitoring		\$0	\$0	\$219,840	\$219,840	
*Toll Fund Cred is not part of the GRAND TOTAL						
GRAND TOTAL		\$975,200	\$0	\$274,800	\$1,250,000	

SCHEDULE INFORMATION

	SCHEDULED START		SCHEDULED COMPLETION		STATUS
	MONTH	YEAR	MONTH	YEAR	
PLAN					
ENG	JUL	2011	JUN	2012	
ROW					
CON	JUL	2012	JUN	2015	

SPELL CHECK

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Orange County Transportation Authority

PROJECT RANKING**TSSP - Traffic Signal Synchronizaton Program****Facility Usage**

		POINT(S)
Vehicle Miles Traveled (VMT)	563090	20
Benefit Cost Ratio		1

Jurisdictions

		POINT(S)
Percent of Priority Corridor Jurisdictions Involved	100	20
Total Number of Involved Jurisdictions	7	20

Jurisdictions Score (higher of two scores above) 20

Project Scale

		POINT(S)
Percent of Corridor Signals Being Retimed	100	5
Signal Being Retimed perMile	3.9	3

Project Scale (Total) 8

Project Details

		POINT(S)
Project Characteristics	New or upgraded communication systems <input checked="" type="checkbox"/>	
	Minor signal operational improvements <input type="checkbox"/>	
	Int./field system modernization and replacement <input checked="" type="checkbox"/>	
	Real-time traffic actuated ops. and demo. projects <input type="checkbox"/>	
	New or upgraded detection <input checked="" type="checkbox"/>	
	TMC/TOC and motorist information <input type="checkbox"/>	
	Comm. and detection preservation and restoration <input checked="" type="checkbox"/>	
	Signal coordination <input checked="" type="checkbox"/>	10
	Transporation Significance Priority <input checked="" type="checkbox"/>	10
	Maintenance of Effort 4 to 5 years <input checked="" type="checkbox"/>	3

Project Effectiveness		POINT(S)
Current Project Readiness	Within 12 Months	5
Funding Match		0
<div>SAVE RANKING CLOSE WINDOW PRINT</div>		
TOTAL POINTS: 77		

CONTACT [OCTA](#) 0.42s EMAIL OCFUNDTRACKERHELP@ECOINTERACTIVE.COM