

## **FY 2017 Call for Projects**

### **Regional Traffic Signal Synchronization Program Project P**

#### **Supplemental Application Information**

##### **Euclid Street**

8/14/2017

Agency: City of Fountain Valley

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Contact Number: 714.555.5555

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## Section 1: Key Technical Information

- a. The proposed project would synchronize Euclid Street. The limits for the project are from Imperial Highway in the north to Ellis Street in the south. Figure 1 shows a map of the project.

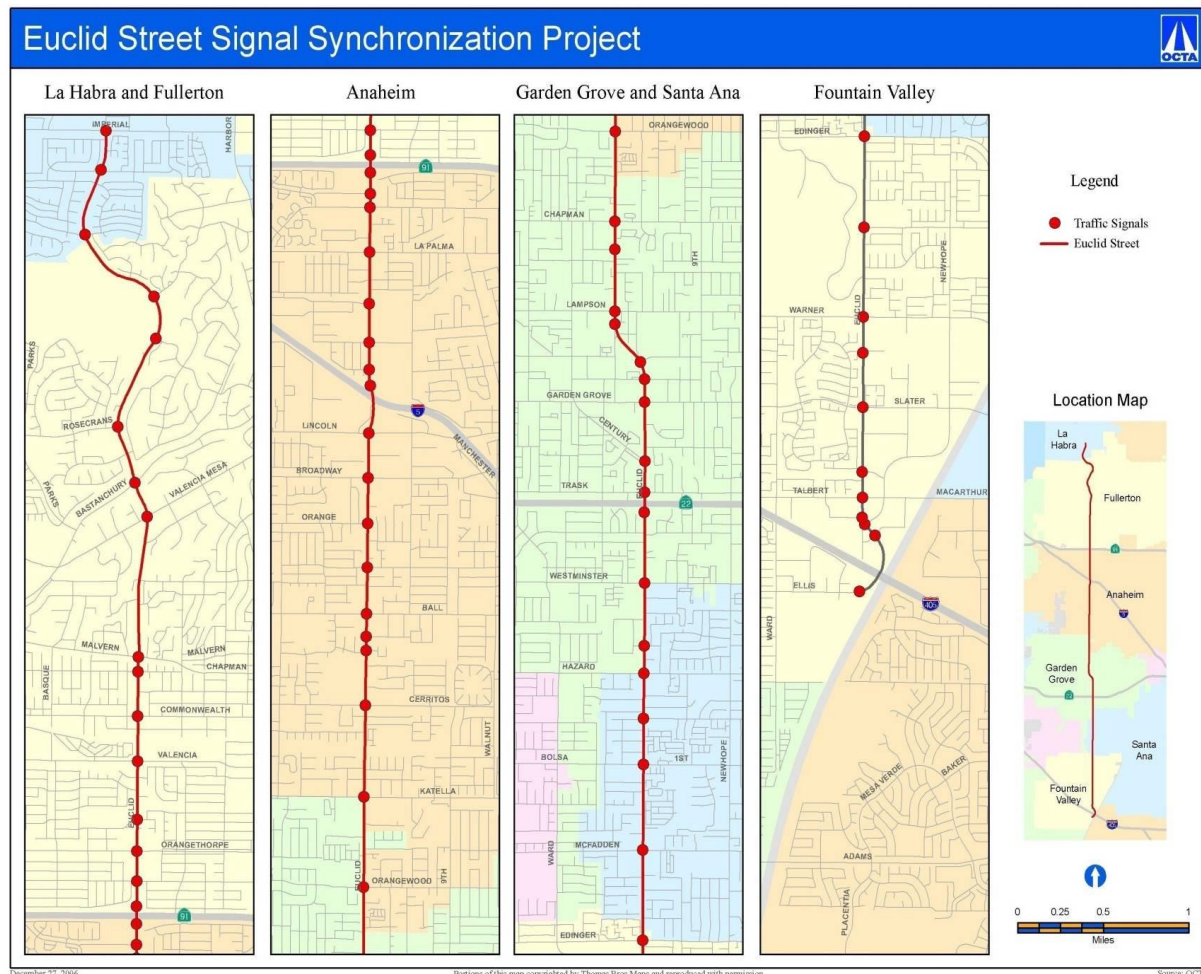


Figure 1: Signalized intersection and proposed project limits

- b. Designation of the corridor to synchronize:

- ~~Priority Corridor~~       Signal Synchronization Network Corridor  
 Master Plan of Arterial Highways Corridor

- c. Project start date \_\_\_\_\_ Project end date \_\_\_\_\_

All agencies commit to operate signal synchronization **BEYOND** the three year grant period

for:  0 years     1 year     2 years     3 years     Other \_\_\_\_\_

d. Signalized intersections that are part of the project: see Table 1

<b>&lt;EXAMPLE&gt; Table 1: Project Traffic Signals for the Euclid Street Signal Synchronization Project</b>	
1 Euclid St @ Imperial Hwy Caltrans	32 Euclid St @ Katella Ave
2 Euclid St @ Montwood Ave	33 Euclid St @ Orangewood Ave
3 Euclid St @ Country Hills Dr	34 Euclid St @ Chapman Ave
4 Euclid St @ Lakeview Dr	35 Euclid St @ Marian Dr
5 Euclid St @ Laguna Rd	36 Euclid St @ Lampson Ave
6 Euclid St @ Rosecrans Ave	37 Euclid St @ Main St-College Ave
7 Euclid St @ Bastanchury Rd	38 Euclid St @ Stanford Ave
8 Euclid St @ Valencia Mesa Dr	39 Euclid St @ Acacia Pkwy
9 Euclid St @ Malvern Ave	40 Euclid St @ Garden Grove Blvd
10 Euclid St @ Chapman Ave	41 Euclid St @ Century Blvd
11 Euclid St @ Commonwealth Ave	42 Euclid St @ Trask Ave
12 Euclid St @ Valencia Dr	43 Trask Ave @ SR-22 WB Ramps-Havenwood Dr
13 Euclid St @ Hill Ave-Southgate Ave	44 Euclid St @ SR-22 EB Ramps
14 Euclid St @ Orangethorpe Ave	45 Euclid St @ Westminster Ave Garden Grove
15 Euclid St @ Baker Ave	46 Euclid St @ Business Center Pkwy-Oakfield Ave
16 Euclid St @ SR-91 WB Ramps	47 Euclid St @ Hazard Ave
17 Euclid St @ SR-91 EB Ramps	48 Euclid St @ 5th St
18 Euclid St @ Medical Center Dr	49 Euclid St @ Bolsa Ave-1st St
19 Euclid St @ Romneya Dr	50 Euclid St @ McFadden Ave
20 Euclid St @ La Palma Ave	51 Euclid St @ Edinger Ave
21 Euclid St @ Glenoaks Ave	52 Euclid St @ Heil Ave
22 Euclid St @ Crescent Ave	53 Euclid St @ Warner Ave
23 Euclid St @ Anaheim Plaza	54 Euclid St @ Hospital Campus
24 Euclid St @ I-5 Ramps Caltrans	55 Euclid St @ Slater Ave
25 Euclid St @ Lincoln Ave	56 Euclid St @ Southpark Ave
26 Euclid St @ Broadway	57 Euclid St @ Talbert Ave
27 Euclid St @ Orange Ave	58 Talbert Ave @ Newhope St
28 Euclid St @ Crone Ave	59 Euclid St @ Kalama River Ave
29 Euclid St @ Ball Rd	60 Euclid St @ I-405 NB Ramps-Newhope St Caltrans
30 Euclid St @ Palais Rd	61 Euclid St @ Condor Ave Fountain Valley
31 Euclid St @ Cerritos Ave	62 Ellis Ave-Euclid St @ I-405 SB Ramps

- e. Traffic Forum members: La Habra  
Fullerton  
Anaheim  
Santa Ana  
Garden Grove  
Fountain Valley

**Section 2: Lead Agency**

- City of Fountain Valley will be the lead agency  
 OCTA agency is requested to be the lead  
 County of Orange will be the lead agency

**Section 3: Resolutions of Support**

Resolutions of support from Traffic Forum members are provided on the following pages.

# "Sample Resolution"

## Exhibit X-2 Form

### Regional Transportation Signal Synchronization Program Projects

A resolution of the \_\_\_\_\_ City Council approving the submittal of \_\_\_\_\_ improvement project(s) to the Orange County Transportation Authority for funding under the competitive Measure M2 Regional Transportation Signal Synchronization Program

THE CITY COUNCIL OF THE CITY OF \_\_\_\_\_ HEREBY RESOLVES, DETERMINES, AND ORDERS AS FOLLOWS THAT:

- (a) 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
- (b) WHEREAS, the City of \_\_\_\_\_ has been declared by the Orange County Transportation Authority to meet the eligibility requirements to receive revenues as part of Measure M2; and
- (c) WHEREAS, the City of \_\_\_\_\_ 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' efforts to synchronizing traffic signals across local agencies' boundaries; and
- (d) WHEREAS, the City of \_\_\_\_\_ will provide matching funds for each project as required by the Orange County Comprehensive Transportation Funding Programs Procedures Manual; and
- (e) WHEREAS, the City of \_\_\_\_\_ will not use Measure M funds to supplant Developer Fees or other commitments; and
- (f) WHEREAS, the City of \_\_\_\_\_ desires to implement multi-jurisdictional signal synchronization listed below; and

NOW, THEREFORE, BE IT RESOLVED THAT:

The City Council of the City of \_\_\_\_\_ 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):

ADOPTED BY THE CITY COUNCIL on \_\_\_\_\_, 20\_\_\_\_.

SIGNED AND APPROVED on \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
City Clerk

\_\_\_\_\_  
Mayor

## Section 4: Preliminary Plans for the Project

### Primary Implementation

#### a. Project Administration

<EXAMPLE TEXT> The City of Fountain Valley will lead the project using contracted consultant staff to optimize signal synchronization timing along the Euclid corridor. The City of Fountain Valley will work cooperatively with all other agencies involved in the project to improve traffic flow. The local agencies shall perform normal day to day project administration duties. Project budget shall include time and funding for agency outreach and cooperative agreement development and execution and collection of matching funds required of and by participating agencies. The contracted consultant staff shall be responsible for all aspects of the project with City of Fountain Valley internal staff.

#### b. Developing and implementing optimized signal synchronization timing (required)

<EXAMPLE TEXT> 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, PM Peak, Mid-day Peak and Weekend Peak. Special Generators such as schools and businesses along with cross street traffic will be considered as part of the project. Timing plans will be developed that assist traffic in getting to its destination without regard to physical or political boundaries.

#### c. Producing a Before and After Study for the project (required)

<EXAMPLE TEXT> Project team will develop a before and after study for the project. This report will be completed after the Primary Implementation is completed and will include the following:

- Introduction/project description: a summary of the project including the purpose, background, and objectives of the project.
- Data collection: a summary of the data collected as part of the effort including the traffic counts, phasing, lane configurations, etc.
- Traffic signal systems improvements: a summary of the implemented traffic signal systems improvements by city.
- Signal timing optimization: a summary of the development and implementation of updated signal timing including the models, selected cycle lengths, intersection groupings, etc.

- Results: the study will contain directional morning and evening peak period using travel times, average speeds, green lights to red lights, stops per mile, and the derived corridor system performance index (CSPI) metric. This information shall be collected both before any signal timing changes have been made. Additional details based on the Final Report Template will also be included.
- Benefits to cost analysis: project benefits resulting from signal synchronization will be evaluated based on the before and after study results. Savings will be calculated for travel time, fuel consumptions, vehicle maintenance, Greenhouse Gas (GHG) reduction, and a final benefit cost ratio.
- Future signal corridor improvements: recommendations for system and equipment enhancements to improve traffic flow and signal synchronization will be provided.
- Conclusion: a summary of the before and after study and its findings.

**d. Engineering design of signal improvements for the project (recommended if not existing)**

<EXAMPLE TEXT> The City of Fountain Valley will use qualified traffic engineering consultants' assistance to complete the engineering design of the fiber upgrade and communications for the project. Additionally, the traffic engineering consultant will provide design support for the central control software upgrade in the City of La Habra.

**e. System integration (optional)**

<EXAMPLE TEXT> The City of Fountain Valley will not assume system integration costs.

**f. Proposed signal improvements (optional)**

<EXAMPLE TEXT>

Caltrans

At Caltrans locations, two 170 controllers will be replaced with 2070 local controllers with TSCP firmware at the EB SR-22 ramps and at the NB I-405 ramps. A new 2070 Field Master controller with TRFM firmware shall be installed. A GPS time source unit with antennae shall be supplied and installed, and interfaced to the new 2070 TRFM controller. If feasible, the system shall be integrated into the Caltrans Central ATMS.

La Habra

La Habra will receive a new license for Intelight MAXVIEW central control software (or equivalent) to replace Siemens ACTRA. A GPS antenna time source receiver or server will also be connected with their central control system.

Fullerton

Fullerton will receive a new GPS antenna time source receiver at Street D. Fullerton will also receive central master modifications at city hall.

Anaheim



Anaheim will receive a single 2070LN controller to replace a T-1 controller at Street E along with a software upgrade at the location.

Garden Grove

Garden Grove will receive an Emergency vehicle preempt at Street H (jointly controlled with Santa Ana).

Santa Ana

Santa Ana will receive an Emergency vehicle preempt system for all directions at Street I.

Fountain Valley

Fountain Valley will install approximately 10lineal feet of fiber in existing conduit to upgrade communications between city hall and Street J. Fountain Valley will receive an Ethernet switch to improve communications at Street L.

**g. Contingencies (optional)**

<EXAMPLE TEXT> The City of Fountain Valley and all partner agencies will assume a 10% contingency for their respective proposed signal improvements.

**h. Construction management (optional)**

<EXAMPLE TEXT> The City of Fountain Valley and all partner agencies will assume 15% for construction management for their respective proposed signal improvements.

**Ongoing Maintenance and Operation**

<EXAMPLE TEXT> The ongoing maintenance and operation period shall start after signal timing is implemented and last for a period of two years. It will consist both of (1) monitoring and improving optimized signal timing and (2) communications and detection support. Descriptions of both are provided below:

**a. Monitoring and improving optimized signal timing**

<EXAMPLE TEXT> The corridor will be driven monthly from end to end in order to monitor and regularly improve the signal synchronization timing 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 24 months or until the end of the three-year grant period, whichever occurs first.

**b. Communications and detection support timing**

<EXAMPLE TEXT> Regular scheduled communication and detection support will be provided along the synchronized corridor in Figure 1 and the intersections identified in Table 1 to ensure the necessary conditions for signal synchronization. The primary focus will be on the monitoring and reporting of communications and detection issues. As issues are

identified, they will be reported to the local agencies and potential repairs will be identified with local agencies' consultation. These reviews will begin upon the completion of the primary implementation and will continue until the end of the three year grant period. This support can be implemented using a variety of tools including monthly drives along the corridor, analysis of central system report output, and discussion with the local agency staff.

**c. Final report**

<EXAMPLE TEXT> Project team will develop a final report for the project. This report will be completed after the three year grant period. In addition to the CTFP Guideline requirements, the report will include the before and after report and an update of the results from the ongoing maintenance and operations phase (general findings from the monthly drives, timing updates, detection support, etc.).

SAMPLE

## Section 5: Total Proposed Project Cost by Task

### Primary Implementation <EXAMPLE>

The Primary Implementation will last for one year and include the following elements (See Table 2). Be sure to carefully review those items included in the signal system improvements that may need engineering design or development of specifications prior to construction (For Example – Interconnect conduit installation, new service locations, or cabinet foundation). Include this cost in the engineering estimate.

Table 2. Estimated Cost of Proposed Signal Improvements for Euclid Street by Agency <EXAMPLE>								Total	Match*	
									Cash	In-Kind
a. Project Administration								\$62,000	\$6,000	\$6,400
b. Developing and Implementing Optimized Signal Synchronization Timing								\$310,000	\$55,800	\$6,200
c. Producing a Before and After Study for the proposed project								\$62,000	\$9,300	\$3,100
<b>Total 1 – Project Admin, Developing/Implement Timing, Final Report, and Engineering Design</b>								<b>\$434,000</b>	<b>\$71,100</b>	<b>\$15,700</b>
d. System integration								\$0	\$0	\$0
e. Proposed Signal System Improvements										
Agency	Euclid @	Description of Work at This Location	Unit Price	Unit	Design	Material, Tax, & Labor	Total	Match*		
								Cash	In-Kind	
Caltrans^	EB SR-22 Ramp	Controller upgrade, installed	\$2,000/ea	1	0	\$2,000	\$2,000	\$400	\$0	
Caltrans^	EB SR-22 Ramp	New GPS unit, installed	\$2,000/ea	1	0	\$2,000	\$2,000	\$400	\$0	
Caltrans^	NB I-405 Ramp	Controller upgrade, installed	\$2,000/ea	1	0	\$2,000	\$2,000	\$400	\$0	
Fullerton	Street D	New GPS unit, installed	\$2,000/ea	1	0	\$2,000	\$2,000	\$400	\$0	
Fullerton	System Wide	Central Master Modifications	\$52,500/ea	1	0	\$52,500	\$52,500	\$10,500	\$0	
Anaheim	Street E	Controller upgrade, installed	\$2,000/ea	1	0	\$2,000	\$2,000	\$400	\$0	
Anaheim	Street E	Software upgrade, installed	\$1,000/ea	1	0	\$1,000	\$1,000	\$200	\$0	
Garden Grove/Santa Ana	Street H	EVP, installed	\$8,000/ea	1	0	\$8,000	\$8,000	\$1,600	\$0	
Santa Ana	Street I	EVP, installed	\$8,000/ea	1	0	\$8,000	\$8,000	\$1,600	\$0	
Fountain Valley	Street J	Install fiber in existing conduit	\$1,000/ft	10 ft.	\$3,000	\$10,000	\$13,000	\$0	\$2,600	
Fountain Valley	Street L	Ethernet switch (Long Range)	\$8,000/ea	1	0	\$8,000	\$8,000	\$1,600	\$0	
<i>Subtotal: Estimated cost of "Proposed Signal System Improvements" (total combined)</i>					\$3,000	\$97,500	<b>\$100,500</b>	<b>\$17,500</b>	<b>\$2,600</b>	
g. Contingency (up to 10% of the estimated costs of "Proposed Signal System Improvements")						\$10,050		\$2,010	\$0	
h. Construction management (up to 15% of the estimated costs of "Proposed Signal System Improvements" for support and inspection costs)						\$15,075		\$3,015	\$0	
<b>Total 2- Signal System Improvements, Construction Support/Inspection, and Contingency Costs</b>						<b>\$125,625</b>		<b>\$22,525</b>	<b>\$2,600</b>	
<b>Totals 1+2</b>						<b>\$559,625</b>		<b>\$111,925</b>		

Please refer to Chapter 8 of the CTFP Guidelines for additional information about eligible and ineligible items as part of Project P. Examples of eligible signal synchronization improvements: new or upgraded detection, including inductive loops, video, and others; New or upgraded communication systems; Replacement of fiber optic or copper cabling; Software and hardware for system traffic control; Interconnect conduit; Intersection/field system modernization and replacement; Traffic signal controllers; Controller cabinets; CCTV, GPS, etc.; Minor signal improvements; Emergency vehicle preempt (signal equipment only); Transit signal priority (intersection control equipment only); Channelization improvements; Traffic signal phasing improvements; New or upgrades to existing Traffic Management Center (TMC) or Traffic Operations Center (TOC); Motorist information systems; and Adaptive traffic signal systems.

\*Agency will provide design through in-kind services

^Agencies will cover match

SAMPLE

**Ongoing Maintenance and Operation <EXAMPLE>**

a. Monitoring and improving optimized signal timing

Estimated Cost: \$104,160 (see Table 3)

b. Communications and detection support

Estimated Cost: \$44,640 (see Table 3)

Description of Work	Description	Unit Price	Unit Measure	Cost	Match*	
					Cash	In-Kind
Monitoring and improving optimized signal timing	Drive monthly and improve timing parameters along 62 signals for 24 months after signal timing is implemented along Euclid Street from Imperial Highway to I-405 after signal timing	\$70 per signal per month	62 signals for 24 months	\$104,160	\$17,992	\$2,840
Communications and detection support	Regularly monitor, maintain, and provide reports on communication and detection issues along for 62 signals for 24 months after signal timing is implemented along Euclid Street from Imperial Highway to I-405	\$30 per signal per month	62 signals for 24 months	\$44,640	\$8,928	\$0
Project final report	Project team will develop a final report for the project. This report will be completed after the three year grant period.	Negligible	Negligible	\$0	\$0	\$0
Proposed Ongoing Maintenance and Operation				\$148,800	\$26,920	\$2,840

**Total Project Cost Including Primary Implementation and Ongoing Maintenance and Operation for Three Year Grant Period**

**Total Estimated Cost: \$708,425 (Table 2 + Table 3 = \$559,625+\$148,800)**

Comments( if any): \_\_\_\_\_  
 \_\_\_\_\_

**Section 6: Project Schedule by Task for the 3 Year Grant Period**

**Project start date:** September 1, 2018

**Project end date:** August 31, 2021

**Primary Implementation**

Task	Starting Date	Ending Date
a. Project Administration	September 1, 2018	August 31, 2019
b. Developing and implementing optimized signal synchronization timing	September 1, 2018	August 31, 2019
c. Producing a before and after study	September 1, 2018	August 31, 2019
d. Engineering design of Signal Systems Improvement	September 1, 2018	December 31, 2019
e. System integration	N/A	N/A

f. Proposed Signal System Improvements, Construction Support/Inspection, and Contingency Costs	September 1, 2018	August 31, 2019
g. Contingency	September 1, 2018	August 31, 2019
h. Construction management	September 1, 2018	August 31, 2019
i. Producing a Final Report	September 1, 2018	August 31, 2019

### Ongoing Maintenance and Operation

Task	Starting Date	Ending Date
a. Monitoring and improving optimized signal timing	September 1, 2019	August 31, 2021
b. Communications and detection support	September 1, 2019	August 31, 2021
c. OMM Memo	September 1, 2019	August 31, 2021

### Section 7: Matching Funds

<b>Table 2 (Implementation): M2 Funds Requested</b>	<b>\$447,700.00</b>
<b>Phase Match Amount</b>	<b>\$111,925.00</b>
<i>In-kind match amount</i>	\$18,300.00
<i>Cash match amount</i>	\$93,625.00
<b>Total Phase Cost</b>	<b>\$559,625.00</b>

<b>Table 3 (Ongoing Activities): M2 Funds Requested</b>	<b>\$119,040.00</b>
<b>Phase Match Amount</b>	<b>\$29,760.00</b>
<i>In-kind match amount</i>	\$2,840.00
<i>Cash match amount</i>	\$26,920.00
<b>Total Phase Cost</b>	<b>\$148,800.00</b>

<b>Project Total: M2 Funds Requested</b>	<b>\$566,740.00</b>
<b>Total Match Amount (min 20%)</b>	<b>\$141,685.00</b>
<i>In-kind match amount (max 20%)</i>	\$21,140.00
<i>Cash match amount</i>	\$125,545.00
<b>Total Project Cost</b>	<b>\$708,425.00</b>

Total Match Ratio (to total project cost)	$\$141,685 / \$708,425 = 20\%$
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**DETAILED LOCAL MATCH COMMITMENT**

**SECTION 1: AGENCY TOTAL MATCH SUMMARY**

<b>AGENCY</b>	<b>CASH</b>	<b>IN-KIND</b>	<b>TOTAL MATCH</b>
City of Fountain Valley	\$18,000.00	\$8,430.00	\$26,430.00
City of Santa Ana	\$12,400.00	\$0.00	\$12,400.00
City of Garden Grove	\$21,440.00	\$5,000.00	\$26,440.00
City of Fullerton	\$38,065.00	\$0.00	\$38,065.00
City of Anaheim	\$25,000.00	\$7,710.00	\$32,710.00
City of La Habra	\$5,640.00	\$0.00	\$5,640.00
<b>TOTAL</b>	<b>\$120,545.00</b>	<b>\$21,140.00</b>	<b>\$141,685.00</b>

**SECTION 2: MATCH BREAKDOWN (CASH VS IN-KIND SERVICES)**

**A. Cash Match**

<b>Agency</b>	<b>Funding Source</b>	<b>Amount of Cash Contribution</b>
City of Fountain Valley	M2 Turnback	\$18,000.00
City of Santa Ana	Gas Tax	\$12,400.00
City of Garden Grove	General Fund	\$21,440.00
City of Fullerton	M2 Turnback	\$38,065.00
City of Anaheim	Gas Tax	\$25,000.00
City of La Habra	M2 Turnback	\$5,640.00
<b>TOTAL CASH MATCH:</b>		<b>\$120,545.00</b>

**B. In-Kind Services**

*i. Specific Improvements (List items and Cost):*

<b>Agency</b>	<b>Improvement</b>	<b>Date of Construction</b>	<b>Expenditure</b>
City of Anaheim	Controller upgrades		\$7,000.00
<b>TOTAL</b>			<b>\$7,000.00<sup>a</sup></b>

*ii. Staffing Commitment:*

<b>Agency</b>	<b>Staff Position</b>	<b>Type of Service to Project</b>	<b>No. of Hours**</b>	<b>Fully Burdened Hourly Rate</b>	<b>Total*</b>
City of Fountain Valley	Traffic Engineer	Admin	80	\$100	\$8,000.00
City of Fountain Valley	Tech	Field Review	4.3	\$100	\$430.00
<b>Total for City of Fountain Valley:</b>					<b>\$8,430.00</b>

Agency	Staff Position	Type of Service to Project	No. of Hours**	Fully Burdened Hourly Rate	Total*
City of Garden Grove	Traffic Engineer	Admin	50	\$100	\$5,000.00
<b>Total for City of Garden Grove:</b>					<b>\$5,000.00</b>
Agency	Staff Position	Type of Service to Project	No. of Hours**	Fully Burdened Hourly Rate	Total*
City of Anaheim	Traffic Engineer	Admin	7.1	\$100	\$710.00 <sup>b</sup>
<b>Total for City of Anaheim:</b>					<b>\$7,710.00<sup>a+b</sup></b>
<b>TOTAL IN-KIND MATCH*:</b>					<b>\$21,140.00</b>

*\*Total amount is the required participation by the identified agency. The number of hours and hourly rate will be based on each agency's actual fully burdened billing rates, which must collectively equal the same value of the assigned "Total" dollars. Each agency will be responsible for keeping detailed records of hours worked and description of work. An accounting record of personnel, hours at fully burdened rate is expected to be included with the final submittal. Records will be subject to auditing.*

**\*\*Note - Staff hours should not exceed staffing and reasonable dedicated time**



**Section 8: Environmental clearances and other permits**

Environmental clearance documentation and/or other permits obtained for this project are provided on the following pages. If none, then include a general statement outlining specific environmental clearances needed to be obtained. For instance, “A categorical exemption will be obtained for this project upon project award.”

**Section 9: Calculations used to Develop Selection Criteria Inputs <EXAMPLE: Modify as needed >**

## 1. Vehicle Miles Traveled (VMT):

Segment	Current Average Daily Traffic	Distance (mi)	VMT = ADT*D
Street A to Street B	17,300	1.82	31,486
Street B to Street C	30,800	1.6	49,280
Street C to Street D	35,748	0.94	33,603
Street D to Street E	44,200	0.39	17,238
Street E to Street F	43,900	0.7	30,730
Street F to Street G	46,600	1.1	51,260
Street G to Street H	33,100	1.77	58,587
Street H to Street I	26,800	0.93	24,924
Street I to Street J	38,100	0.91	34,671
Street J to Street K	43,200	0.91	39,312
Street K to Street L	32,800	0.88	28,864
Street L to Street M	33,200	1.3	43,160
Street M to Street N	25,900	0.82	21,238
Street N to Street O	22,700	0.15	3,405
Street O to Street P	46,600	0.48	22,368
Street P to Street Q	Total Project VMT		490,126

Source of current average daily traffic: Most recent corridor counts dated 2011 or later

<b>Calculations and Estimated Points</b>	
<b>Criteria</b>	<b>Estimated Points</b>
1. Vehicle Miles Traveled (VMT) (20 points) <u>VMT = 490,126 (See above Table)</u>	20
2. Cost Benefit Ratio: (15 points) <u>Calculation for Total Project Cost / VMT = \$708,425/490,126 = 1.45</u>	15
3. Project Characteristics: (10 points) <u>New or upgraded communication systems (2); Intersection/field system modernization and replacement (2); TMC (2)</u>	6
4. Transportation Significance: (10 points) <u>Signal Synchronization Network</u>	5
5. Maintenance of Effort: (5 points) <u>0 years beyond 3 year grant period</u>	0
6. Project Scale: (10 points) a. <u>Number of signals = 62</u> b. <u>Number of signals being synchronized/ Total number of corridor signals= 62/67=92.5%</u>	9
7. Number of Jurisdictions: (20 points) <u>6 jurisdictions</u>	20
8. Current Project Readiness (5 points) Project start date: <u>September 1, 2012</u>	5
9. Funding Match: (5 points) <u>141,685 / \$708,425 = 20%= 20%</u>	0
<b>Total Points</b>	<b>80</b>

**Section 10: Include any additional information or documentation deemed relevant by the applicant**

**Project Summary**

- All guidelines were met for this project
- Not all qualifications were met, provide an explanation below of why the guidelines were not met for this project. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_