COOPERATIVE AGREEMENT BY AND BETWEEN THE CITIES OF HUNTINGTON BEACH, GARDEN GROVE AND WESTMINSTER FOR THE VALLEY VIEW STREET/BOLSA CHICA STREET CORRIDOR TRAFFIC SIGNAL SYNCHRONIZATION PROJECT

This Cooperative Agreement ("Agreement") is made and entered into this ____ day of _____, 2022, by and between the CITY OF HUNTINGTON BEACH, the CITY OF GARDEN GROVE and the CITY OF WESTMINSTER.

- A. The City of Huntington Beach, with cooperation from the Cities of Garden Grove and Westminster, applied for a grant from the Orange County Transportation Authority ("OCTA") Measure M2 Regional Traffic Signal Synchronization Program ("RTSSP"), aimed to coordinate traffic signals across multiple jurisdictions to enhance the countywide traffic flow and reduce congestion.
- B. The Valley View Street/Bolsa Chica Street Corridor Traffic Signal Synchronization Project was selected by OCTA as one of the RTSSP Projects to be funded in OCTA Fiscal Year 2020-2021. A two-year project delay was received from OCTA, with a revised project funding Fiscal Year of 2022-2023. The project will include timing implementation and improvements at traffic signals along Valley View Street/Bolsa Chica Street, from Chapman Avenue in Garden Grove to Warner Avenue in Huntington Beach, as listed in the Project Application attached hereto as Exhibit B and incorporated herein by this reference.
- C. The total budget for the project is \$1,871,410. Of this budget, 80% (\$1,497.120) is funded by the OCTA Regional Traffic Signal Synchronization Program and 20% (\$374,280) is local agencies matching funds. The breakdown is shown in Exhibit A attached hereto and incorporated herein by this reference.
- D. Huntington Beach, Garden Grove and Westminster agree to provide twenty percent (20%) matching funds for the total project cost. Matching funds can be a combination of cash and in-kind match as defined by the RTSSP grant.
- E. OCTA and Huntington Beach have entered into a Master Funding Agreement "Cooperative Agreement No. C-1-2765" defining the terms and conditions for approved Measure M2 projects that will be implemented by Huntington Beach.
- F. Huntington Beach agrees to serve as the lead agency to oversee the design and implementation of the project.
- G. Huntington Beach, Garden Grove and Westminster desire to enter into this Cooperative Agreement to demonstrate their commitment to implement the project and improve interjurisdiction traffic signal synchronization on Valley View Street/Bolsa Chica Street.
- H. This Cooperative Agreement defines the specific terms, conditions and funding responsibilities between Huntington Beach, Garden Grove and Westminster for the implementation of the project.

NOW THEREFORE, it is mutually understood and agreed by and between HUNTINGTON BEACH, GARDEN GROVE AND WESTIMINSTER:

I. <u>SCOPE:</u>

This Agreement specifies the roles and responsibilities of the cities as they pertain to the subjects and projects addressed herein. The project is specifically detailed in the Project Application attached hereto as Exhibit B and incorporated herein by this reference. All of the cities agreed that each will cooperate and coordinate with the other in all activities covered by this Agreement and any other supplemental agreements that may be required to facilitate purposes thereof.

II. MUTUAL RESPONSIBLITIES:

Huntington Beach, Garden Grove and Westminster mutually agree to:

- a. Designate a lead staff to act as the liaison for the project. The liaison and any other project personnel, if necessary, will attend and participate in all related project meetings.
- b. Participate, cooperate and coordinate with contractors, consultants, vendors and staff in good faith using reasonable efforts to resolve any unforeseen issues and disputes arising out of the project to the extent practicable with respect to the performance of the project.
- c. Maintain project related traffic signals and telecommunications equipment with high priority during the project, and be responsible for repair of their own signal control systems in each of their respective jurisdictions.
- d. Provide on-site support for signal control systems, timing plans, detection systems and related equipment during construction, installation and integration, and be available to change or make adjustments to timing plans when necessitated by the project.
- e. Document in-kind match or dollar match funding as identified in the project application, and provide verification of such expenditures as part of any review or audit process, which may include payroll records, contracts and purchase orders.
- f. Monitor and operate the project traffic signals and improvements within its jurisdiction for a period of two (2) years following the completion of the Primary Implementation Phase of the project, as required by the program funding.
- g. Coordinate the inclusion of other improvements and in-kind services, where necessary, that the owning agency requires for the implementation of the project, but are not included in the project application. The owning agency shall be responsible for the inclusion of such elements within reason and at its own costs.

 Unused project funds for improvements from one City can be used by another City (with matching fund responsibility) upon mutual consent of the involved parties.

III. RESPONSIBILITIES OF HUNTINGTON BEACH:

Huntington Beach agrees to the following responsibilities:

- a. Huntington Beach shall serve as lead agency for design and traffic signal timing implementation and shall provide oversight by establishing milestones and overseeing the project development to ensure that all standards and requirements set forth by the agreement is adhered to.
- b. Huntington Beach shall be responsible for completing the project inaccordance with the funding guidelines and any and all other OCTA requirements related to these funding programs. Huntington Beach shall maintain coordination with all participating agencies throughout the duration of the project.
- c. Huntington Beach shall provide staff, consultants, and contractors deemed necessary and appropriate to manage, administer, coordinate, and oversee engineering design and timing implementation of the project.
- d. Huntington Beach shall coordinate the work effort of the Project, provide the day-to-day management of the consultant and manage all consultant administration. Huntington Beach shall review the consultant's invoices and pay them accordingly after ensuring that the work has been adequately performed by the consultant.
- e. Huntington Beach shall provide its share of matching fund as shown in Exhibit A attached hereto and incorporated herein by this reference. The final amount may vary and will be based on the 20% of actual cost of implementing all timing, improvements and maintenance, as identified in the project application.
- f. Upon issuance of a Notice to Proceed to the Consultant, Huntington Beach can issue invoices to Garden Grove and Westminster for up to 80% of the cash match amount identified in Exhibit A. The remaining case match amount will be invoiced after completion of the Primary Implementation Phase of the project.
- g. Huntington Beach shall comply with all of the terms and conditions of the Cooperative Agreement with OCTA, including the Project Reporting and Audit Requirements contained therein.

IV. RESPONSIBILITIES OF GARDEN GROVE:

Garden Grove agrees to the following responsibilities:

- a. Garden Grove shall provide its share of matching funds as shown in Exhibit A. The final amount may vary and will be based on the 20% of actual cost of the implementing all timing, improvements and maintenance, as identified in the project application.
- b. Garden Grove shall be responsible for construction contracting, construction administration and construction inspection for all improvements within its jurisdiction. Costs of such inspection services shall be part of the in-kind labor services provided within the matching fund. No additional compensation from the project is provided for providing inspection services.
- c. Garden Grove shall waive all costs and fees related to any and all permits, if such permits are required to perform any project related work in its jurisdiction.

V. RESPONSIBILITIES OF WESTMISTER:

Westminster agrees to the following responsibilities:

- a. Westminster shall provide its share of matching funds as shown in Exhibit A. The final amount may vary and will be based on the 20% of actual cost of implementing all timing, improvements and maintenance, as identified in the project application.
- b. Westminster shall be responsible for construction contracting, construction administration and construction inspection for all improvements within its jurisdiction. Costs of such inspection services shall be part of the in-kind labor services provided within the matching fund. No additional compensation from the project is provided for providing inspection services.
- c. Westminster shall waive all costs and fees related to any and all permits, if such permits are required to perform any project related work in its jurisdiction.

VI. COMPLETE AGREEMENT

- a. This Agreement, including any attachments incorporated herein and made applicable by reference, constitutes the complete and exclusive statement of the terms and conditions of this Agreement between HUNTINGTON BEACH, GARDEN GROVE AND WESTMINSTER and it supersedes all prior representations, understandings and communications between the parties. The invalidity in whole or in part of any term or condition of this Agreement shall not affect the validity of other term(s) or condition(s) of this Agreement. The above referenced Recitals are true and correct and are incorporated by reference herein.
- b. Any modifications of this Agreement shall only be by amendment upon written mutual consent of all cities. All modifications, amendments, changes and revision of this Agreement in whole or in part, and from time to time, shall be binding upon the cities so long as the same shall be in writing and executed by each agency.
- c. A party's failure to insist on any instance(s) of any other party's performance of any term(s) or condition(s) of this Agreement shall not be construed as a waiver of the non-enforcing party's right to such performance or to future performance of such

term(s) or condition(s), and the non-performing party's obligations in respect thereto shall continue in full force and effect. Changes to any portion of this Agreement shall not be binding upon either party except when specifically confirmed in writing by way of a written amendment to this Agreement between the parties and issued in accordance with the provisions of this Agreement.

VII. INSURANCE AND INDEMNIFICATION

- a. Each City shall jointly and severally indemnify, defend and hold harmless every other City, it's officers, directors, employees and agents from and against any and all claims for any loss or damages, bodily injuries, damage to, or loss of property caused by the negligent acts, omissions or willful misconduct by the City, its officers, directors, employees, or agents in connection with or arising out of the performance of this Agreement.
- b. Each City shall maintain adequate levels of insurance, or self-insurance to assure full indemnification of every other City.

VIII. ADDITIONAL PROVISIONS

- a. Term of Agreement: This Agreement shall continue in full force and effect until December 31, 2026. This Agreement may be extended at the mutual consent of all parties in writing.
- b. HUNTINGTON BEACH, GARDEN GROVE and WESTIMINSTER hereto affirm that they are authorized to execute this Agreement on behalf of said parties and that, by so executing this Agreement, the parties hereto are formally bound to the provisions of this Agreement.
- c. Severability: If any term, provision, covenant or condition of this Agreement is held to be invalid, void or otherwise unenforceable to any extent, by any court of competent jurisdiction, the remainder of this Agreement shall not be affected thereby, and each term, provision, covenant or condition of this Agreement shall be valid and enforceable to the fullest extent permitted by law.
- d. Counterparts of Agreement: This Agreement may be executed and delivered in any number of counterparts, each of which, when executed and delivered shall be deemed an original and all of which together shall constitute the same agreement. Facsimile and electronic signatures will be permitted.
- e. In the event that the project costs exceed the estimates submitted in the Project Application as prepared, all parties agree to meet and determine project revisions to meet the budget, or a revised funding proposal by the Cities that shall be documented and submitted in writing as a revision to the Agreement.
- f. The parties shall comply with all applicable Federal, State and local laws, statutes, ordinances and regulations of any governmental agency having jurisdiction over the project.

- g. Force Majeure: Any party shall be excused from performing its obligations under this Agreement during the time and to the extent that it is prevented from performing by any unforeseeable cause beyond its control, including but not limited to, any incident of fire; flood; acts of God; commandeering of material products, plants or facilities by the Federal, State or local government; national fuel shortage; or, a material act or omission by the other party; when satisfactory evidence of such cause is presented to the other parties, and provided further that such non-performance is unforeseeable beyond the control and is not due to the fault or negligence of the party not performing.
- h. Assignment: Neither this Agreement, nor any of the parties' rights, obligations or duties hereunder may be assigned in whole or in part by any party without the prior written consent of all the other parties in their sole and absolute discretion. Any such attempt at assignment shall be deemed void and of no force and effect. Consent to one assignment shall not be deemed consent to any subsequent assignment, nor the waiver of any rights to, consent to such subsequent assignment.
- Obligations to Comply with Law: Nothing herein shall be deemed nor construed to authorize or require any party to issue bonds, notes or other evidences of indebtedness under the terms, in amounts, or for purposes other than as authorized by local, State or Federal law.
- j. Governing Law: The laws of the State of California and applicable local and Federal laws, regulations and guidelines shall govern this Agreement.
- k. Litigation fees: Should litigation arise out of this Agreement for the performance thereof, the court shall award costs and expenses, including attorney's fees, to the prevailing party.
- Notices: Any notices, requests or demands made between the parties pursuant to this Agreement are to be directed to:

City of Huntington Beach
Public Works/Engineering
Attn: William Janusz, Principal Civil Engineer
2000 Main Street
Huntington Beach, CA 92648
(714) 374-1628

City of Garden Grove Public Works Department Attn: Dai Vu, City Traffic Engineer 11222 Acacia Parkway Garden Grove, CA 92842 (714) 741-5189

City of Westminster Public Works Department Attn: Adolfo Ozeata, Transportation Manager 8200 Westminster Blvd., Westminster, CA 92683 (714) 554-3462

IX. <u>DELEGATED AUTHORITY</u>

The actions required to be taken by the Cities in this implementation of this Agreement are deleted to its Mayor, City Manager or equivalent designee.

[SIGNATURES ON SUBSEQUENT PAGES]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement the day and year first above written:

CITY OF HUN	TINGTON B	BEACH:	
Mayor			
ATTEST:			
City Clerk			
APPROVED A	S TO FORM	: *	
City Attorney	WV		

IN WITNESS WHEREOF, the parties hereto have executed this Agreement the day and year first above written:

CITY OF GARDEN GRO	VE:
Docusigned by: State Date Dones Mayor Steve Jones	8/16/2022 -
ATTEST: Docusing ed by: Turusa Pomuroy	8/16/2022
City Clerk	
APPROVED AS TO FORM	M:
Omer Dandera &	8/16/2022
City Attorney	

IN WITNESS WHEREOF, the parties hereto have executed this Agreement the day and year first above written:

CITY OF WESTMINSTER:

Mayor

ATTEST:

City Clerk, Interim

APPROVED AS TO FORM:

City Attorney

EXHIBIT A
Valley View Street / Bolsa Chica Street TSSP
Project Funds Breakdown

AGENCY	PROJECT	M2 GRANT	LOCAL MATCH (20%)						
	FUNDS BY	(80%)	TOTAL MATCH TYPE		PE				
	AGENCY *		MATCH **	CASH	IN-KIND				
HUNTINGTON	\$654,000.00	\$523,200.00	\$134,311.58	\$131,165.58	\$3,146.00				
BEACH GARDEN	\$567,300.00	\$453,840.00	\$115,654.74	\$32,494.74	\$83,160.00				
GROVE WESTMINSTER	\$597,600.00	\$478,080.00	\$122,153.68	\$122,153.68	\$0.00				
CALTRANS	\$41,700.00	\$33,360.00	\$0.00	\$0.00	\$0.00				
TOTAL	\$1,860,600.00	\$1,488,480.00	\$372,120.00	\$285,814.00	\$86,306.00				

^{*} Unused project funds from one Agency can be transferred to another agency with mutual consent.

^{**} Total match amount may vary; the final match amount will be based on the actual project implementation costs, to be determined at the Primary Implementation Phase of this project.

EXHIBIT B PROJECT APPLICATION 3/19/2020



CITY OF HUNTINGTON BEACH

Public Works Department

Tom Herbel, PE Acting Director of Public Works

March 19, 2020

Mr. Alfonso Hernandez Orange County Transportation Authority 600 S. Main Street Orange, CA 92863

Subject:

Revised Application for Regional Traffic Signal Synchronization Program

Funds Under the Comprehensive Transportation Funding Program

Valley View Street / Bolsa Chica Street from Chapman Avenue to Warner

Avenue

Dear Mr. Hernandez:

The City of Huntington Beach, in conjunction with the Cities of Garden Grove and Westminster, is submitting the enclosed revised application for funding consideration for the Valley View Street / Bolsa Chica Street corridor under the Regional Traffic Signal Synchronization Program of the Comprehensive Transportation Funding Program. The application is for operational and infrastructure improvements along Valley View Street / Bolsa Chica Street from Chapman Avenue to Warner Avenue.

Enclosed is a printout of the revised supplemental application. This application has been revised based upon your comments dated March 18, 2020.

We appreciate your consideration of our application. If there are any questions, please contact me at (714) 374-1628.

Sincerely,

William F. Janusz, P.E. Principal Civil Engineer

Enclosures

C:

Dai Vu, City Traffic Engineer, Garden Grove Bill (Hoa) Pham, Civil Engineering Associate, Westminster

FY 2020 Call for Projects

Regional Traffic Signal Synchronization Program

Project P

Supplemental Application

VALLEY VIEW STREET / BOLSA CHICA STREET

10/24/2019 - RESUBMITTED 3/19/2020

Project Overview

Length of Corridor (mi): 5.35 Number of signals: 22

Total Project Cost: \$1,860,600.00 M2 funds requested: \$1,488,480.00

Total Match: \$372,120.00 Cash Match: \$285,814.00 In-kind Match: \$86,306.00

Participating agencies: Cities of Garden Grove,

Westminster and Huntington Beach

and Caltrans

Applicant Agency: City of Huntington Beach

Contact Name: William F. Janusz

Contact Number: 714-374-1628

Contact Email: wianusz@surfcity-hb.org

Project P Regional Traffic Signal Synchronization Program Application Checklist

Project P Application Checklist	Page
RTSSP Online Application – submitted through OCFundTracker	
1. Vehicle Miles Traveled	1
2. Benefic Cost Ratio	
3. Project Characteristics	1
4. Transportation Significance	
5. Maintenance of Effort	Online
6. Project Scale	1
7. Number of Jurisdictions	1
8. Current Project Readiness	ļ
9. Funding Over-Match	
10. Cabinet photos, equipment specifications, as-built drawings, cabinet drawings, etc. (if	Flashdrive
Section 1: Key Technical Information	
a. Project Corridor Limits	1 1
 Designation of the corridor to synchronize: Signal Synchronization Network corridor or 	
Master Plan of Arterial Highways corridor	1 1
 Project start date and end date, including any commitment to operate signal 	1
synchronization beyond the three year grant period	
d. Signalized intersections that are part of the project	1
e. Traffic Forum members	1
Section 2: Lead agency	2
Section 3: Resolutions of support from the project's Traffic Forum members	3
Corridor "After" Study (required) Task 5: Signal Timing Optimization and Implementation (required) Task 7: Sychronization System Construction (required) Task 8: Project Report (required) Task 9: On-going Operations (O&M) will begin after the Primary Implementation of the project completed. It shall include details about the following: Task 1: Project Administration (required) Task 2: Data Collection (required) Task 3: Field Review and Plans Specifications and Estimates (required) Task 5: Signal Timing Optimization and Implementation (required) Task 6: Corridor "After" Study (required) Task 7: Sychronization System Construction (required) Task 8: Project Report (required) Task 9: On-going Operations and Maintenance (required) Ingoing Maintenance and Operations (O&M) will begin after the Primary Implementation of the project completed. It shall include details about the following: a. Monitoring and improving optimized signal timing (required) D. Communications and detection support (optional)	Pg. 8-11
c. O&M Final Memorandum (required) ection 5: Funding Needs/Costs for Proposed Project by Task	
a. Table I: Summary of Improvements	Pg. 12
b. Table II: Detailed Improvement Breakdown	Pg. 13
ection 6: Project schedule for the 3 year grant period by task	Pg. 14-16
	Pg. 17
ection 7: Matching funds	Pg. 18
ection 8: Environmental clearances and other permits	Pg. 19
	Pg. 19-20
ection 10: Any additional information deemed relevant by the applicant	Pg. 21-22
pendices	Pg. 23

SECTION 1: KEY TECHNICAL INFORMATION

a. The proposed project will synchronize Valley View Street / Bolsa Chica Street from Chapman Avenue to Warner Avenue. The project includes (22) signals over approximately (5) miles. Figure 1 shows a map of the project area.

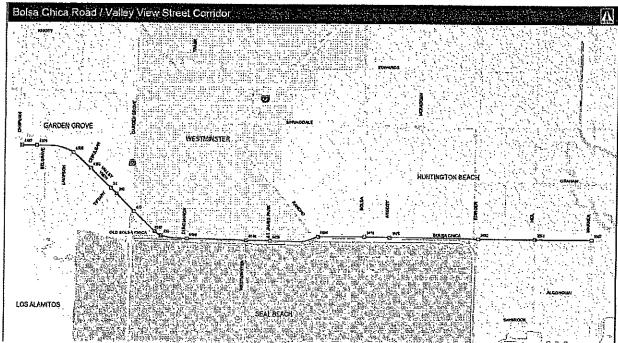


Figure 1: Signalized intersection and proposed project limits.

b.	 Designation of the corridor to synchronize: Master Plan of Arterial Highways Corridor Signal Synchronization Network Corridor 			
C.	c. Project Start Date: 7/1/2020 Proje	ct End Date:	6/30/2023	
	All agencies commit to operate signal sychronization	BEYOND the th	ree year grant period for	
		Two Years	Three Years	Other
d.	. Signalized intersections that are part of the project:			
	City of Garden Grove	11. Bolsa Chica	Street @ Westminster Blv	a. To Manager
	Valley View Street @ Chapman Avenue		Street @ St James Park	
	2. Valley View Street @ Cinema Main Driveway		Street @ Churchill Avenue	
	3. Valley View Street @ Belgrave Avenue		Street @ Rancho Road	
	4. Valley View Street @ Lampson Avenue			
	5. Valley View Street @ Cerulean Avenue	City of Hunting	iton Beach	antigora i tit
	그 한국에 취하는 생물으로 보는 것이 하나 되다.		Street @ Bolsa Avenue	
	CALTRANS	2	Street @ Argosy Avenue	
	6. Valley View Street @ Tiffany Avenue		Street @ McFadden Avent	l e
	7. Valley View Street @ WB SR 22 Ramps		Street @ Robinwood Drive	
	8. Valley View Street @ Garden Grove Boulevard		Street @ Edinger Avenue	
			Street @ Heil Avenue	
	City of Westminster		Street @ Pearce Drive	
	9. Bolsa Chica Street @ Old Bolsa Chica Road		Street @ Warner Avenue	
	10. Bolsa Chica Street @ Duncannon Avenue			

SECTION 2: LEAD AGENCY	
X City of Huntington Beach	will be the lead agency
County of Orange will be the lead age	ncy
Please note OCTA will not be leading	ng projects for this Call for Projects.
	•
•	
Explain why this project is regionally si	ignificant;
Bolsa Chica Street / Valley View Stree	et is a major north-south arterial in western Orange County. The project provides a primary access route between Interstate 405
and State Route 22 with the beach cor	mmunities to the south and the cities of Garden Grove, Cypress
per day.	e daily traffic volumes near the freeways exceed 50,000 vehicles

SECTION 3: RESOLUTIONS OF SUPPORT

Attached are resolutions of support from the Cities of Huntington Beach, Garden Grove and Westminster which were approved by their City Councils on December 16, 2019, November 26, 2019 and January 15, 2020 respectively. A letter of support is included for Caltrans, who will not be a part of any cooperative agreement.

RESOLUTION NO. 2019-74

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF HUNTINGTON BEACH APPROVING THE SUBMITTAL OF AN IMPROVEMENT PROJECT TO THE ORANGE COUNTY TRANSPORTATION AUTHORITY FOR FUNDING UNDER THE COMPREHENSIVE TRANSPORTATION FUNDING PROGRAM

WHEREAS, the Orange County Transportation Authority intends to allocate funds for transportation improvements within the incorporated cities and the County; and

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; and

The City of Huntington Beach has been declared by the Orange County Transportation Authority to meet the eligibility requirements to receive revenues as part of Measure M2; and

The City of Huntington Beach must include all projects funded by Net Revenues in the seven-year Capital Improvement Program as part of the Renewed Measure M Ordinance eligibility requirement; and

The City of Huntington Beach authorizes a formal amendment to the seven-year Capital Improvement Program to add projects approved for funding upon approval from the Orange County Transportation Authority Board of Directors; and

The City of Huntington Beach has 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 synchronize traffic signals across local agencies' boundaries; and

The City Council of the City of Huntington Beach desires to implement the multijurisdictional signal synchronization listed herein; and

The City's Circulation Element is consistent with the County of Orange Master Plan of Arterial Highways; and

The City of Huntington Beach will provide matching funds for the project as required by the Orange County Comprehensive Transportation Program Procedures Manual; and

The City of Huntington Beach will not use Renewed Measure M funds to supplant Developer Fees or other commitments,

NOW, THEREFORE, the City Council of the City of Huntington Beach does hereby resolve as follows:

The City Council of the City of Huntington Beach hereby requests the Orange County. Transportation Authority to allocate funds in the amounts specified in the City's application for the Comprehensive Transportation Funding Program. Said funds shall be matched by funds from the City as required and shall be used as supplemental funding to aid the City in signal synchronization along the following streets:

Bolsa Chica Street

PASSED AND ADOPTED by the City Council of the City of Huntington Beach at a regular meeting thereof held on the 16th day of December 2019.

City Manager

APPROVED AS TOFFIRM

City Attorney A

DITIATED AND APPROVED

Director of Public Works

STATE OF CALIFORNIA
COUNTY OF ORANGE) ss:
CITY OF HUNTINGTON BEACH)

I, ROBIN ESTANISLAU, the duly elected, qualified City Clerk of the City of Huntington Beach, and ex-officio Clerk of the City Council of said City, do hereby certify that the whole number of members of the City Council of the City of Huntington Beach is seven; that the foregoing resolution was passed and adopted by the affirmative vote of at least a majority of all the members of said City Council at a Regular meeting thereof held on December 16, 2019 by the following vote:

AYES:

Brenden; Carr, Semeta, Peterson, Delgleize, Hardy

NOES:

None

ABSENT:

Posey

RECUSE:

None

City Clerk and ex-officio Clerk of the City Council of the City of Huntington Beach, California

GARDEN GROVE CITY COUNCIL

RESOLUTION NO. 9595-19

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

WHEREAS, the City of Garden Grove desires to implement transportation improvements listed below;

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;

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 must include all projects funded by Net Revenues in the seven-year Capital Improvements Program as part of the Renewed Measure M Ordinance eligibility requirement;

WHEREAS, the City authorizes a formal amendment to the seven-year Capital Improvement program to add projects approved for funding upon approval from the Orange County Transportation Authority;

WHEREAS, the City of Garden Grove 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;

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 M funds to supplant Developer Fees or other commitments; and

WHEREAS, the City of Garden Grove desires to implement multi-jurisdictional signal synchronization listed below.

NOW THEREFORE BE IT RESOLVED, that the City Council of the City of Garden Grove does hereby request the Orange County Transportation Authority allocate funds in the amounts specified in the City's application to said City from the

Garden Grove City Council Resolution No. 9595-19 Page 2

Regional Traffic Signal Synchronization Program. Said funds, if approved, shall be matched by funds from said City as required, and shall be used as supplemental funding to aid the City if signal synchronization along the following street:

1. Valley View Street/Bolsa Chica Street

Adopted this 26th d	lay of	November	2019.
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<u>/s/ STEVEN R. JONES</u> MAYOR

/s/ TERESA POMEROY, CMC CITY CLERK

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS:
CITY OF GARDEN GROVE)

I, TERESA POMEROY, City Clerk of the City of Garden Grove, do hereby certify that the foregoing Resolution was duly adopted by the City Council of the City of Garden Grove, California, at a meeting held on November 26, 2019, by the following vote:

AYES:

COUNCIL MEMBERS:

(7) BRIETIGAM, O'NEILL, NGUYEN T., BUI KLOPFENSTEIN, NGUYEN K., JONES

NOES:

COUNCIL MEMBERS:

(0) NONE

ABSENT: COUNCIL MEMBERS:

(0) NONE

/s/ TERESA POMEROY, CMC · CITY CLERK

RESOLUTION NO. 4977

A RESOLUTION OF THE MAYOR AND CITY COUNCIL OF THE CITY OF WESTMINSTER APPROVING THE SUBMITTAL OF VALLEY VIEW STREET/BOLSA CHICA STREET TRAFFIC SIGNAL SYNCHRONIZATION IMPROVEMENT PROJECT TO THE ORANGE COUNTY TRANSPORTATION AUTHORITY FOR FUNDING UNDER COMPETITIVE MEASURE M2 REGIONAL TRANSPORTATION SIGNAL SYNCHRONIZATION PROGRAM

WHEREAS, the City of Westminster desires to implement transportation improvements listed below; and

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 Westminster 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 must include all projects funded by Net Revenues in the sevenyear Capital Improvements Program as part of the Renewed Measure M Ordinance eligibility requirement; and

WHEREAS, the City authorizes a formal amendment to the seven-year Capital Improvement program to add projects approved for funding upon approval from the Orange County Transportation Authority; and

WHEREAS, the City of Westminster 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

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

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

WHEREAS, the City of Westminster desires to implement multi-jurisdictional signal synchronization listed below.

NOW, THEREFORE, BE IT RESOLVED THAT, the Mayor of City Council of the City of Westminster 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. Said funds, if approved, shall be matched by funds from said City as required, and shall be used to supplement funding to aid the implementation of signal synchronization along the following street:

1. Valley View Street/Bolsa Chica Street

PASSED, APPROVED, and ADOPTED this 15th day of January 2020, by the following vote:

AYES:

COUNCIL MEMBERS:

TA, HO, CONTRERAS, DO, NGUYEN

NOES:

COUNCIL MEMBERS:

NONE

ABSENT: COUNCIL MÉMBERS:

TRI TA, MAYOR

ATTEST:

CHRISTINE CORDON, CITY CLERK

APPROVED AS TO FORM:

RICHARD D. JONES, CITY ATTORNEY

STATE OF CALIFORNIA)
COUNTY OF ORANGE) ss.
CITY OF WESTMINSTER)

I, CHRISTINE CORDON, hereby certify that I am the duly appointed City Clerk of the City of Westminster and that the foregoing resolution was duly adopted at a regular meeting of the City Council of the City of Westminster held on the 15th day of January 2020.

Christine Cordon, City Clerk

DEPARTMENT OF TRANSPORTATION



December 19, 2019

William F. Janusz, P.E., PTOE Principal Civil Engineer City of Huntington Beach 2000 Main Street, P.O. Box 190 Huntington Beach, CA 92648

Subject:

Letter of Support for the Regional Traffic Signal Synchronization Application – Valley View Street/Bolsa Chica Street Corridor

Dear Mr. Janusz:

The Orange County Transportation Authority recently issued the 2020 Comprehensive Transportation Funding Program Call for Projects for Regional Traffic Signal Synchronization Program to coordinate traffic signals across jurisdictional boundaries in the County.

The State of California Department of Transportation (Caltrans) is in support of the City of Huntington Beach's submittal of the CTFP application to OCTA for signal synchronization on Valley View Street/Bolsa Chica Street between the intersection of Chapman Avenue in Garden Grove to Warner Avenue in Huntington Beach with three Caltrans traffic signals in between — Valley View Street and Tiffany Avenue, Valley View Street at the WB SR-22 Ramps, and Bolsa Chica Street and Garden Grove Boulevard (EB SR-22 Ramps).

If you have any questions or require additional information, please contact Mr. Denny Ngo at (949) 936-3512 or by email at Denny.Ngo@dot.ca.gov,

Sincerely.

Shivinderjit Singh, MS, PE, PMP Branch Chief, Electrical Systems

ITS, New Technology, TMS Support & Traffic Signals .

Division of Traffic Operations and Maintenance

TMC District 12, Caltrans,

SECTION 4: PRELIMINARY PLANS FOR THE PROJECT

Primary Implementation (PI)

The Primary Implementation phase will last approximately one year and include the following elements:

Task 1: Project Administration

The City of Huntington Beach will lead and administer the project on a daily basis using a consulting engineering firm (hereafter referred to as PROJECT CONSULTANT) to optimize signal synchronization timing along the Valley View Street / Bolsa Chica Street corridor. Other participants in the project are the Cities of Garden Grove and Westminster along with Caltrans (the project team). The City of Huntington Beach staff shall perform normal day to day project administration duties. Local agency staff will perform local project administration duties. Project budget shall include time and funding for agency outreach, development and execution of cooperative agreements and administering both in-kind and cash matches. As Caltrans is not a financial participant in this project, work at the three Caltrans intersections will be limited to coordination timing efforts. At the conclusion of the timing efforts, these timings will be provided to Caltrans who will decide whether or not to implement the timing. No cooperative agreements will be executed between Caltrans and the local agencies.

PROJECT CONSULTANT selection will conform with the City of Huntington Beach's procedures for consulant selection for professional services contracts. This includes publishing a Request for Proposals (RFP) on the City's website, ranking the proposals utilizing City staff and representatives from Westminster and Garden Grove, conducting interviews, negotiating with the top ranked firm and finally recommending one firm for contract award to the Huntington Beach City Council.

The engineering design consultant (DESIGN CONSULTANT) for the design of improvements will be under a separate contract from the engineering firm undertaking the coordination anyalsis (PROJECT CONSULTANT). Each agency will contract seperately with an engineering consultant for the design of improvements and seperately contract with a construction contractor to construct the improvements.

Task 2: Data Collection

The PROJECT CONSULTANT will collect data necessary to thoroughly understand existing traffic conditions in the study area and be able to develop optimal time-of-day traffic signal coordination plans, if applicable. This includes 24-hour counts along the corridor in the AM, Midday and PM periods along with midday on a weekend. Travel time analyses will also be performed for both the before and after project condition.

Task 3: Field Review and Plans Specifications, and Estimates

Each agency will contract seperately with a DESIGN CONSULTANT to design the improvements for this project within their jurisdiction. This includes fiber optic communications, installation of CCTV cameras, changeout of some of the existing controllers and other controller modifications. Each city's DESIGN CONSULTANT will review the geometric layout, existing traffic signal equipment, and signal synchronization related infrastructure to identify any deficiencies for each intersection and within the city.

Improvement plans and specifications will be prepared seperately for each city and each City will be responsible for procuring a construction contractor. With permission of the local AGENCIES, the DESIGN CONSULTANTS shall inspect the interior of each traffic control cabinet, inspect the telemetry systems and determine their respective condition and make recommendations for equipment upgrades. The following is a summary of the proposed improvements. See Attachment B for more details and cost estimates.

City of Huntington Beach - The City of Huntington Beach will be installing approximately one and one-half mile of fiber optic cable in existing conduit from Rancho Road to Edinger Avenue. This will replace the existing twisted pair copper interconnect cable. The existing 170 controllers will be changed out to 2070 ATC controllers. The fiber optic cable will connect to a fiber optic hub which will be constructed at the intersection of Bolsa Chica Street and Edinger Avenue under the Edinger Avenue TSSP project which is being administered by OCTA (fiber optic cable will be installed from Edinger Avenue to Warner Avenue as part of the Edinger Avenue TSSP project). New CCTV cameras will be installed at four locations within the city (the budget includes three additional licenses for the City's Aviglion video software). Although the existing conduit is currently serviceable for the twisted pair cable, an allowance is included in the budget for pull box replacement and conduit installation should the existing conduit and pullboxes be found to be unable to accomodate the fiber optic cable.

City of Garden Grove - Work in the City of Garden Grove consists primarily of replacing the existing controlllers and cabinets along with rewiring the intersections. There is also the installation of APS pedestrian push buttons and CCTV cameras at some locations. The traffic signals on Valley View Street in Garden Grove have old individual signal wires in old conduits. The conduits are currently full and cannot accomodate any additional wiring for additional equipment such as video detection cameras. To increase available capacity, it is proposed to replace the individual traffic signal conductors with traffic signal conductor cable. The new conductor cable will provide the capacity to accomodate the additional equipment proposed for this intersection. Similiar rewiring was included in the Brookhurst Street TSSP project. The City is also proposing the replacement of existing pull boxes as part of the rewiring effort. Considering the age and condition of the pull boxes, they will likely not be servicible after the rewiring activity. Upgrades will also be made to the City's Traffic Management center including the addition of Layer III switches, uninterruptible power supply and video management software.

City of Westminster - Work within the City of Westminster will consist primarily of rewiring intersections along with the installation of CCTV Cameras, video detection systems, battery back-up systems and ethernet switches. The need for rewiring the intersections is realted to the age and reliability of the existing conductors.

Task 4: Corridor "Before" Study

The PROJECT CONSULTANT will conduct "before" floating car travel runs prior to timing implementation. The PROJECT CONSULTANT will conduct a 'Before' field study report representative of the times and days for which synchronization plans will be developed. The report shall identify Measures of Effectiveness (MOE) to evaluate the effects of the synchronization plans. MOE's will likely include traffic flow, travel time, average speed, number of stops per mile, number of intersections traversed on green vs. stopped by red (Greens per Red) (note: Average Speed, Stops per Mile, and Greens per Red are the new OCTA MOE, Corridor Synchronization Performance Index (CSPI)), fuel consumption reduction, pollution reduction, and other pertinent items.

Task 5: Signal Timing Optimization and Implementation

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 jurisdictional boundaries. Implementation will include the system integration (including graphics) with the Huntington Beach Transparity system.

Task 6: Corridor "After" Study

The PROJECT CONSULTANT will conduct "after" floating car travel runs after timing implementation. The Consultant will conduct an 'After' field study representative of the times and days for which synchronization plans will be developed. The 'After' study must be conducted in the same manner and contain the same MOE's as the 'Before' study in order to evaluate the improvements of the synchronization plans. MOE's should be compiled for the optimized corridor using the floating car method.

Task 7: Synchronization System Construction

Each agency will issue separate construction contracts for work within their jurisdiction. The City of Huntington Beach will utilize the DESIGN CONSULTANT prepared plans and specifications to advertise the project for sealed contractor bids utilizing the City of Huntington Beach's adopted procedures for bidding public works construction projects. The Cites of Westminster and Garden Grove will issue construction contracts in compliance with their individual city's practices and policies.

The DESIGN CONSULTANTS' contracts will include construction support and communications implementation. The DESIGN CONSULTANTS and construction contractors will be overseen by the individual agency staff. Construction inspection will be the responsibility of each individual agency. All installations and upgrades will be per the owning agencies' standards. Details of equipment upgrades are tabulated in Tables I and II.

The cooperative agreements between the cities will include language to ensure conformance with the schedule set by OCTA.

Task 8: Primary Implementation Project Report

The PROJECT CONSULTANT 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, mid-day, evening, and weekend peak periods
 using travel times, average speeds, green lights to red lights, stops per mile, and the derived corridor
 synchronization performance index (CSPI) metric. This information shall be collected both before and
 after 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.

Task 9: On-going Maintenance & Operations

The PROJECT CONSULTANT will provide "on-call" signal timing support services for a period of two years or 24 months following the completion of the primary implementation tasks (Tasks 5 through 8), to address any future adjustments that may be needed during this period. Depending on the nature of the adjustment, the PROJECT CONSULTANT may accomplish the fine-tuning adjustments remotely from the office through the traffic management systems. During this 24-month period the PROJECT CONSULTANT will be prepared to review any project intersection requested within (24) hours of written notice, including observing and fine-tuning the signal timing. The PROJECT CONSULTANT will also assist with resolving detection issues along the corridor.

The PROJECT CONSULTANT will drive the length of the project arterial during all designated corridor synchronization timing plan hours of operation on a monthly basis in order to verify that the synchronization timing is working as designed, and complete any necessary adjustments. Monthly driving times will consist of a full 12-hour weekday and a 4-hour Saturday. All drives shall be documented. A copy, limited to jurisdictional boundaries, shall also be sent to each agency.

At the end of the 2-year O&M phase, the PROJECT CONSULTANT shall prepare a memorandum to summarize the O&M phase. It should, at the minimum, include when travel runs were conducted, issues and solutions throughout the phase, and recommendations for future improvements.

SECTION 5: FUNDING NEEDS / COSTS FOR PROPOSED PROJECT BY TASK

Primary Implementation

The Primary Implementation will last one year and include the following elements (See Table I and Table II). INSTRUCTIONS: Be sure to carefully review improvements that may need engineering design or develoment of specifications prior to construction. For example, the interconnect conduit installation, new service locations, or cabinet foundations. Include this cost in your estimate. Costs associated with Caltrans fees, SCE fees, and/or special inspection requirements should also be included. Even though Caltrans is not a participant, costs associated with Tasks 2, 4, 5, and 6 shall also be included for Caltrans intersections.

ask 7: Synchronization System Construction (See Table II) ask 8: Primary Implementation Project Report	Cost / Int	Total Cost		Ма	atch			
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	\$ 850.00	\$ 18,700.00	İš	3,740	\$	0,140		
Task 3: Field Review and Plans Specifications, and Estimate	d \$ -	\$ 137,300.00	Š	27,460	\$			
Task 4: Corridor "Before" Study	\$ 500.00	\$ 11,000.00	5	2.200	8			
Task 5: Signal Timing Optimization and Implementation	\$4,650.00	\$ 102,300.00	\$	20,460	8			
Task 6: Corridor "After" Study	\$ 500.00	\$ 11,000.00	\$		1			
Task 7: Synchronization System Construction (See Table II)		\$ 1,465,000.00	· · ·	209,840	7	83,160		
Task 8: Primary Implementation Project Report	\$ 500.00	 11,000.00	\$	2,200	4	00, 700		
Task 9: Ongoing Operations & Maintenance (See Task 9 Det	\$2,400.00	\$ 52,800.00	\$	10,560	\$			
	roject Cost:	 ,860,600.00	\$	285,814	\$	86,306		

⁽a) Project Administration is \$2,000 per local agency intersection and \$4,500 per Caltrans intersection. Ongoing Operations & Maintenance

Ongoing Operations and Maintenance will last two years and include the following elements. (See Task 9 Details):

Task 9 Details:

Task	Description of Work	Unit Price / Intersection	# of signals	Cost
Project Administration	Day to day administrative duties during O&M	15年時間等級法	tersection signals Cost included \$1,680.00 22 \$36,960 \$720.00 22 \$15,840	
Monitoring and improving optimized signal timing	Drive monthly and improve timing parameters along 22 signals for 24 months after signal timing and implemented along Valley View / Bolsa Chica from Chapman to Warner	\$1,680.00		
Communications and detection support	Monitor, maintain, and repair communication and detection along for 22 signals for 24 months after signal timing is implemented along Valley View / Bolsa Chica from Chapman to Warner (@\$30/signal/month)	\$720.00	22	\$15,840
OMM Memorandum	A memorandum to summarize the O&M phase, including details on when travel runs were conducted; issues and solutions throughout the phase; and recommendations for future improvements.			included
	Proposed Onging	Operations & Ma	intenance:	\$52,800

Total Project Cost (Including Pl and O&M for a total of 3 years):

	Total
Total M2 Request:	\$1,488,480.00
Total Agency Match:	\$372,120.00
Total Project Cost:	\$1,860,600.00

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TABLE II: DETAILED IMPROVEMENTS BREAKDOWN

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		Furnish & Install Ethernet Switch	ā	-	\$ 1,000.00	5	2,000,00	3,000.00		3	, ,	vvestminater
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_		Furnish & install 2070 ATC controller unit	E	-	1.000.00	١,	5 000.00	00 000 9		20000		Avestralinger.
_		Furnish & Install CCTV Camera	1.5	,	\$ 2,000 00	4	10,000,00	12,000,00		260000		VVestininster
<u>.</u>	Rancho Road	Furnish & install Battery Back-up System	EA	1	\$ 8,000.00	×	2,000.00 \$	10,000.00		2 000 00		Mediminator
		Furnish & install Ethernet Switch	Ą		\$ 1,000.00	ы	2,000,000 \$	3,000.00	55	500.00		Westminster
1		Furnish & install Video Detection - Iteris Vantage EdgeConnect	LS	F	\$ 3,000,00	.,	22,000.00 \$	25,000.00	5	5.000.00	ter	Manteniante
		rumish 4 instat 2070 ATC controller unit	EA	-	\$ 2,000.00	١,	5,000.00 \$	8,000.00	L,	1,600.00		Hitofordiacher Basen
		rumish 6 install CCTV Camera	EA	-	\$ 2,000.00	\$	10,000.00	12,000.00		2,400,00		Handington Boach
		rumsn & install riber Distribution Unit, Spice Endosure, and SMFQ-6 Orop Cable + splicing	ā	-	\$ 2,000.00	45	8,000.000	10,000.00	55	2,000.00	ta	Huntington Beach
	Boisa Avenue	Pull 100' 96 SMFO cable in pullbox adjacent to Controller Cabinet	\dashv	-		15	300.00	1,000.00	25	200,00	5	Huntington Beach
		rumish & install 96 SMFC cape (Kancho to Bolsa)	3	2850	\$ 18,550.00	4	3.00 \$	26,500.00	53	5,300.00	1	Huntington Beach
		Furnish & install pullboxes (#6E) (Rancho to Bolsa)	ង	-	\$ 2,500.00	4	1,500.00 \$	4,000.00	55	800.00	*	Huntington Beach
		Fumish & install puliboxes (#6) (Rancho to Boisa)	ΕĄ	ō	\$ 9,000.00	43	1,500.00 \$	18,000.00	5	3,600,00	3	Huntington Reach
1		Furnish & Install Z conduit as replacement (Rancho to Bolsa)	<u></u>	200	\$ 10,000,00	٠,	5.00 \$	11,000.00		2 200 00	53	Hintington Seach
		Cumish & Install 20/0 A i C controller upit	ង	-	\$ 2,000.00	14	6,000.00 \$	8,000.00		1, 500,00	in	Hunthotton Brach
		ruman a assai rubel Distriction om, Spice Encosure, and SMFQ-6 Orop Cable + sokong	ន	1	\$ 2,000.00	44	8,000.00	10,000.00	53	2.000.00	64	Huntington Beach
	Argosy Avenue	Furnish & install 96 SMFO cable (Bolsa to Argosy)	\dashv	1600	\$ 11,200.00	\$	3.00 \$	16,000.00	5	3 200 00		Himbitanton Sameh
	•	Formen & metall pullboxes (#8E) (Bolsa to Argosty)	ā	-	\$ 2,500.00	is,	1,500.00	4,000,00		800.00	Ls	Huntington Seach
		Fumish & install pullboxes (#6) (Boisa to Argosy)	4	4	\$ 6,000.00	4	1,500.00 \$	12,000.00	.,	2,400.00	64	Huntington Beach
-		Furnish & install 2" conduit as replacement (Bolsa to Argosy)	15	200	\$ 10,000.00	ч	5.00 \$	11.000.00	4	2 200 00		
		rollerunit	ËÀ	-		5	8.000.00	8.000.00		2000	,	nonlington Beach
		Furnish & Install COTY Camera Furnish & Install Elber Oktribution (Intl. Soling Englement 2015)	F	J	\$ 2,000,00	4	10,000,00	12,000.00		2,400,00	*	Huntington Beach
-	McEadden Avenue	Drop Cable + spleing	S	1	\$ 2,000,00	₩	8,000.000	10,000.00	64	2,000.00	1	Huntington Beach
		Fumish & install 98 SMFO cable (Argosy to McFadden)	Н	1900	\$ 13,300.00	s	3.00 \$	19,000.00	5	3.800.00	4	Handloofen December
		Furnish & Install pullboxes (#6E) (Argosy to McFadden)	¥.	-		5	2,500.00 \$	4,000.00	25	800.00		Huntington Beach
		First & install of south 8	+	4	\$ 6,000,00	5		12,000.00	3	2,400.00		Huntington Beach
j		I THE RESIDENCE CONTINUES INDICACHINE INVIDER TO MICHARDS		200	20000	·	204	44 000 00				

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Ppice Enclosure, and SMFO-6	Furnish & install 2070 ATC controller unit Funish & install Fiber Distribution Unit. Splice Enclosure, and SMFG-6 LS 1 Doop Cable + Solicina Doop Cable + Solicina Funish & instal 96 SMFG cable (MoFadden to Robinwood) Funish & instal 96 SMFG (RoFadden to Robinwood) Funish & install pullboxes (#6E) (McFadden to Robinwood) Funish & install pullboxee (#6) (McFadden to Robinwood) Funish & install 2" conduit as replacement (McFadden to Robinwood) Funish & install 2" conduit as replacement (McFadden to Robinwood)		\$ 2,000.00 \$	\$ 200000 \$		3.00 \$	ı			\$ 1500 00 C	* ^~~~		
plice Enclosure, and SMFG-6 LS den to Robinwood) LF den to Robinwood) EA en to Robinwood) EA int (MoFadden to Robinwood) LF	Furnish & Install 2070 ATC controller unit Furnish & Install Fiber Distribution Unit, Splice Enclosure, and SMFO-6 Drop Cable + Solicina Drop Cable + Soli	20000	0,000,00	00'000'8 \$		\$ 15,400.00		3,300,00		\$ 750000) ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	00 000	
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	Tabinwood Orive	Furnish & install 2079 ATC controller unit		Distribtuion Unit, Splice Er	CO critical (National of Co.	TOTAL THE STORY OF STATE OF ST	Furnish & Josies Districtors (#AFF) (NATRALASS to Octions of	TOTAL CONTRACTOR OF THE PROPERTY OF THE PROPER		Furnish & install pullboxes (#6) (McFadden to Robinwood)		Funish & Install 2" conduit as replacement (McHadden to Bobiowood)	

8	-	Furnish & install 2070 ATC controller unit	EA	ŀ	200000	4 00000				
6		Fumish & Install CCTV Camera	1		2000.00	0,000,00	8,00,000	1,600.00	•	Huntington Beach
	1	Contract Investigate Contract	S	2	3.33	10,000,00 \$	12,000.00	2,400,00		Hondon Control
92		The state of the material of a control capies into the capinal (the installed with	S		200 002	200,000	20000			1
6	1			,	, ,,,,,,	300.00	\$ ON.O.O.T.	200.00	•	Hunlington Beach
4	Edmger Avenue	Furthsh & Install 96 SMFO cable (Robinwood to Edinger)	LF 1000	8	7 000 00	3.00 \$	\$ 00.000.01	2 000 00		1
3		Furnish & install pullboxes (#6E) (Robinwood to Edinger)	EA 4	5	4 Em m	2 500 00	* ******			nurangion Beach
88		Furnish & install cultboxee (#8) (Rabinwood to Edinger)	· ·	,	20000	20000	4,000,00	800.00	,	Huntington Beach
L	<u> </u>		5	2	3,000,00	1,500,00	6,000.00	1,200,00		Huntington Reson
96		Furnish & install 2" condult as replacement (Robinwood to Edinger)	100	4	6.000.00	5.00 \$	5,500.00	1.100.00		tree colonial
6		Description of the state of the			1			•		topac soldier
	Heil Avenue	THINGS A STATE TO LA COUNTY OF THE PROPERTY OF	S.	L 9	2.000.00	\$ 6000000 S	> 00 000 B	* 60,000		
88		Fumish & Install CCTV Camera	47		2000	l		200.000		Munungton Beach
86		Givenish & South 1 0030 ATO Assessing			3	20,000,00	12,000.00	2,400.00	•	Huntington Beach
	.	The state of the s	Ę	67	2 000 00	\$ 6,000,00	8.000.00	* \$00,000		
ó	Peace UNG	Furnish & Install Fiber Districturion Unit. Spice Enclosure, and SMEO-R			+-	ı		\$ 000.00 S	,	Hunangton Beach
20		Drop Cable + splicing	2	4,	2,000.00	\$ 6,000,00 \$	10,000,00	2 000 00 \$	•	A continued to
ţ00	_	Furnish & Install 2070 ATC controller unit	,		20000	ı		2000000		runningion beard
101	Angular Value	Figure 2 Color Color	S		2,000.00 S	1	8,000.00	1,600,00	•	Muntington Beach
L			Š	5	2,000.00	10,000.00	12,000.00	2 400.00	,	Mindian Canal
						Subtotal: 5	1,172,000,00	234,400.00		Department
					1	1 1000				
_					2	CONTRIBETICY (10%):13	\$ [00.002,717	23,440,00 \$	•	-
				Construc	ction Manac	Construction Management (15%): \$	175,800.00 \$	35,160,00 \$		
			SYS	EM IMP	COVEME	SYSTEM IMPROVEMENT TOTAL: \$	1,465,000,00	293.000.00		· · · · · · · · · · · · · · · · · · ·

SECTION 6: PROJECT SCHEDULE BY TASK

Project start date: July 1, 2020

Project end date: June 30, 2023

Primary Implementation

Task	Starting Date	Ending Date
Task 1: Project Administration	July 1, 2020	June 30, 2021
Task 2: Data Collection	July 1, 2020	December 31, 2020
Task 3: Field Review and Plans Specifications, and Estimates	July 1, 2020	January 31, 2021
Task 4: Corridor "Before" Study	January 12, 2021	January 19, 2021
Task 5: Signal Timing Optimization and Implementation	August 1, 2020	May 18, 2021
Task 6: Corridor "After" Study	May 5, 2021	May 18, 2021
Task 7: Synchronization System Construction	July 1, 2020	May 31, 2021
Task 8: Primary Implementation Project Report	July 1, 2020	June 9, 2021
Task 9; Ongoing Operations & Maintenance	July 1, 2021	June 30, 2023

Ongoing Monitoring and Maintenance

Task	Starting Date	Ending Date
a. Monitoring and improving optimized signal timing	July 1, 2021	June 30, 2023
b. Communications and detection support	July 1, 2021	June 30, 2023
c. OMM Memo	July 1, 2021	June 30, 2023

SECTION 7: DETAILED LOCAL MATCH COMMITMENT

PART 1: AGENCY TOTAL MATCH SUMMARY

Input Only

Agency	CAS	H	IN-H	CIND	TOTAL MATCH			
geney	PI	OMM	Pi	OMM	Pl	OMM		
City of Garden Grove	\$27,900,00	\$2,400.00	\$83,160.00	\$0.00	\$111,060.00	\$2,400.00		
	\$30,300	.00	\$83,1	60,00	31/2	460.00		
CALTRANS	\$6,900,00	\$1,440.00	\$0.00	\$0.00	\$6,900,00	\$1,440.00		
	\$8,340	00	\$0	oo e	\$8,3	(0.00		
Cily of Westminster	\$116,540.00	\$2,880.00	30.00 A	\$0.00	\$116,640.00	\$2,880.00		
	\$119,520	200	\$0	00	3119,1	520.00 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
City of Huntington Beach	\$123,814.00	\$3,840.00	\$3,146,00	\$0.00	\$126,960.00	\$3,840,00		
ony or monthlyton bedien	\$127,654	.00	\$3,14	6.00 😅 🖓	\$130,8	00.00		
TOTAL MATCH	\$275,254.00	\$10,560.00	\$88,306.00	\$0.00	\$361,560.00	\$10,560.00		
101AL MAICH	\$285,814	00	\$86,30)6.00 E	\$372,1	20.00		

PART 2: MATCH BREAKDOWN (CASH vs IN-KIND SERVICES) A. Cash Match

Agency ·		
City of Garden Grove	Local Funds	\$30,300.00
CALTRANS	TO BE COVERED BY LOCAL AGENCIES	\$8,340.00
City of Westminster	Local Funds	\$119,520,00
City of Huntington Beach	Local Funds .	\$127,654.00
	TOTAL CASH MATCH:	\$285,814.00

B. In-Kind Services

i. Specific Improvements (List items and Cost):

Agency	De	Expenditure	
City of Garden Grove	\$83,160.00		
CALTRANS		N/A 200 Description	\$0.00
City of Westminster		N/A	A \$0.00
City of Huntington Beach	7. 2	N/A	\$0.00
	TotalS	pecific improvements (i):	\$83,160,00

ii. Staffing Commitment:

Agency	Staff Position	Type of Service to Project	No, of Hours	Fully Burdened Hourly Rate	Total*
City of Garden Grove			6 2		\$0.00
			Total for C	ity of Garden Grave:	\$0.00
CALTRANS			0		\$0.00
··············			Total for	City of CALTRANS:	\$0.00
City of Westminster			. 0		\$0.00
			Total for	City of Westminster:	\$0.00 ES
City of Huntington Beach	Principal Civil Engineer	Project Administration	25	\$125,85	\$3,146.25
			Total for City o	f Hunlington Beach:	
				g Commitment (ii):	

TOTAL IN-KIND MATCH* (I + II): 3 586,306.25

[&]quot;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.

SECTION 8: ENVIRONMENTAL CLEARANCE AND OTHER PERMITS

Environmental clearance and other permits (if needed) will be obtained for this project.

SECTION 9: SELECTION CRITERIA CALCULATIONS

Vehicle Miles Traveled (VMT):

Segment	ADTs	Distance	VMT
Chapman Ave to Cinema Main Driveway	48,330	0.13	6,481
Cinema Main Driveway to Belgrave Ave	48,330	0.08	3,881
Belgrave Ave to Lampson Ave	53,440	0.25	13,320
Lampson Ave to Cerulean Ave	47,311	0.21	10,036
Cerulean Ave to Tiffany Ave	49,986	0.25	12,553
Tiffany Ave to SR 22 WB Ramps	54,000	0.07	3,723
Garden Grove FWY Exit to Garden Grove Blvd	54,000	0.22	12,048
Garden Grove Blvd to Old Bolsa Chica Rd	44,000	0.32	14,217
Old Bolsa Chica Rd to Duncannon Ave	42,659	0.23	9,905
Duncannon Ave to Westminster Blvd	42,659	0.53	22,493
Westminster Blvd to St James Park	45,410	0.21	9,374
St James Park to Churchill Ave	45,410	0.27	12,453
Churchill Ave to Rancho Rd	45,410	0.16	7,087
Rancho Rd to Bolsa Ave	45,163	0.41	18,527
Bolsa Ave to Argosy Ave	37,935	0.23	8,650
Argosy Ave to McFadden Ave	37,935	0.27	10,389
McFadden Ave to Robinwood Ave	33,262	0.35	11,742
Robinwood Ave to Edinger Ave	33,262	0.15	4,964
Edinger Ave to Hell Ave	28,785	0.50	14,393
Heil Ave to Pearce Dr	21,804	0.25	5,468
Pearce Dr to Warner Ave	21,804	0.25	5,468
Tota	il Project VMT:	5.35	217,171

Source: 2019 City of Huntington Beach, City of Garden Grove and City of Westminster ADT Counts

Calculations and Estimated Points					
Criteria (Max Points)	Estimated Points				
Vehicle Miles Traveled (VMT) (20 points)					
<u>VMT = 217,171 (See VMT Table)</u>	15				
2. Cost Benefit Ratio: (15 points)					
Calculation for Total Project Cost / VMT = \$1,860,600/217,171 = 8.6	8.30				
Project Characteristics: (10 points)					
New or upgraded detection (1); Intersection/field modernization (2); new or upgraded communication systems(2); Bicycle/Ped detection (2); TMC/TOC and motorist information (1)	8				
4. Transportation Significance (10 points)					
Signal Synchronization Network	5				
5. Maintenance of Effort: (5 points)					
0 years beyond 3 year grant period					
6. Project Scale: (10 points)					
a. Number of signals = 22	2				
 b. Number of signals being synchronized / Total number of corridor signals= 22/46=47.8% 					
7. Number of Jurisdictions: (20 points)					
4 <u>Jurisdictions</u>	16				
8. Current Project Readiness (5 points)					
Project start date: <u>July 1, 2020</u>					
9. Funding Match: (5 points)					
\$374,280 / \$1,871,400 = 20% <u>= 20%</u>					
Total Points	59				

SECTION 10: DETAILED BREAKDOWN OF COSTS BY AGENCIES

City of Garden Grove Number of Signals: 5

Project Tasks (Garden Grove)		Total Cost		Match			
		Otal COSt		Cash		n-Kind	
Task 1: Project Administration	\$	10,000	s	2,000	\$		
Task 2: Data Collection	\$	4.250	\$	850			
Task 3: Field Review and Plans Specifications, and Estimates	\$	37,800	\$	7,560	2		
Task 4: Corridor "Before" Study	\$	2,500	\$	500	\$		
Task 5: Signal Timing Optimization and Implementation	ŝ	23,250	\$	4,650	\$		
Task 6: Corridor "After" Study	\$	2,500	\$	500	\$		
Task 7: Synchronization System Construction (See Table II)	S	472,500	\$	11,340	\$	83,160	
Task 8: Primary Implementation Project Report	\$	2,500	\$	500	S	00,700	
Task 9: Ongoing Operations & Maintenance (See Task 9 Details)	\$	12,000	\$	2,400	\$		
Total Project Cost:	\$	567,300	\$	30,300	\$	83,160	

Caltrans
Number of Signals: 3

Project Tasks (Caltrans)		Total Cost		Match			
				Cash		In-Kind	
Task 1: Project Administration	\$	13,500	\$	2,700	S		
Task 2: Data Collection	\$	2,550	\$	510	\$		
Task 3: Field Review and Plans Specifications, and Estimates	\$	•	\$		ŝ		
Task 4: Corridor "Before" Study	\$	1,500	\$	300	\$		
Task 5: Signal Timing Optimization and Implementation	\$	13,950	\$	2.790	\$	 -	
Task 6: Corridor "After" Study	\$	1,500	Ŝ	300	\$		
Task 7: Synchronization System Construction (See Table II)	\$	-	Ŝ		Ŝ		
Task 8: Primary Implementation Project Report	\$	1,500	S	300	\$		
Task 9: Ongoing Operations & Maintenance (See Task 9 Details)	\$	7,200	\$	1,440	\$		
Total Project Cost:	\$	41,700	S	8,340	<u>;</u>	-	

City of Westminster Number of Signals: 6

Project Tasks (Westminster)		Total Cost		Maţch			
				Cash		-Kind	
Task 1: Project Administration	\$	12,000	\$	2,400	\$		
Task 2: Data Collection	\$	5,100	\$	1,020	\$	-	
Task 3: Field Review and Plans Specifications, and Estimates	\$	39,200	\$	7.840	S		
Task 4: Corridor "Before" Study	\$	3,000	\$	600	\$		
Task 5: Signal Timing Optimization and Implementation	\$	27,900	\$	5,580	\$		
Task 6: Corridor "After" Study	\$	3,000	\$	600	\$		
Task 7: Synchronization System Construction (See Table II)	\$	490,000	\$	98,000	\$		
Task 8: Primary Implementation Project Report	\$	3,000	\$	600	\$	-	
Task 9: Ongoing Operations & Maintenance (See Task 9 Details)	\$	14,400	\$	2.880	\$		
Total Project Cost:	\$	597,600	\$	119,520	S	#	

City of Huntington Beach Number of Signals: 8

Project Tasks (Huntington Beach)		Total Cost		Match			
				Cash		n-Kind	
Task 1: Project Administration	\$	16,000	S	54	S	3,146	
Task 2: Data Collection	\$	6,800	\$	1.360	Ŝ		
Task 3: Field Review and Plans Specifications, and Estimates	\$	60,300	\$	12.060	\$		
Task 4: Corridor "Before" Study	\$	4,000	Š	800	S		
Task 5: Signal Timing Optimization and Implementation	\$	37,200	\$	7,440	4		
Task 6: Corridor "After" Study	\$	4,000	8	800	8		
Task 7: Synchronization System Construction (See Table II)	\$	502,500	\$	100,500	& A		
Task 8: Primary Implementation Project Report	\$	4,000	\$	800	\$		
Task 9: Ongoing Operations & Maintenance (See Task 9 Details)	\$	19,200	\$	3,840	\$	-	
Total Project Cost:		654,000	\$	127,654	\$	3,146	

Grand Total Project Cost	\$ 1,860,600 \$	285,814 \$	86,306
 Total Match	\$ 372,120	<u> </u>	, , , , , , , , , , , , , , , , , , ,
M2 Grant Total	\$ 1,488,480		

Project Summary

All guidelines were met for this project. X

> Not all qualifications were met. An explanation of why the guidelines were not met for this project is provided below.

LIST OF CONTACTS

Agency	Phone	Email	Street Address
City of Garden Grove Dai Vu, P.E. City Traffic Engineer	(714) 741-5189	daiv@ggcity.org	City of Garden Grove 11222 Acacia Parkway Garden Grove, CA 92840
CALTRANS Denny Ngo Transportation Engineer	(949) 936-3512	<u>Denny.Ngo@dot.ca.gov</u>	Caltrans 1750 E. 4th Street, Suite 100 Santa Ana, CA 92705
City of Westminster Bill (Hoa) Pham Civil Engineering Associate	(714) 548-3457	bpham@westminster-ca.gov	City of Westminster 8200 Westminster Boulevard Westminster, CA 92683
City of Huntington Beach William F. Janusz, P.E. Principal Civil Engineer	(714) 374-1628	Wjanusz@surfcity-hb.org	City of Huntington Beach 2000 Main St, P.O. Box 190 Huntington Beach, CA 92648

BUDGET SPREADSHEET

Corridor: BOLSA CHICA / VALLEY VIEW AGENCY COST SUMMARY

		Total Project	- 5		Sec Taba	2002, 2002	\$41,700	000	DOG, Sect	TREE DOO	30.1	. S1.860 500		41,488,480	SA6 306	200	\$285,814	
		Mairti Tuno	175	In-kind	G)		20		0.00	2		The contract of the contract o						4日1日 1 日 1 日 1 日 1 日 1 日 1 日 1 日 1 日 1 日
	PERATION	2		Sag.	\$2400		\$1,440	62 690	#Z, 620	53.840	İ	210.56						The state of the state of the
	UNGOING MAINT & OPERATION	;	Match		\$2,400		\$1.440	T7 880		53.840	ŀ	090016	CAT DAM	24.47	2	440 000	000,01	S 352 800:
	CINGO		MZ Grant		\$8.600	707	30,/00	\$11.520		096,318	0,000	042.240						1. 水子等於於
		Ţ	3		\$12,000	67 100	207/2	\$14,400		8 8,200	Ì							小子のない となかな!
		Match Type	An'y'at	2000	363,160	Ç,		08	24.4.44	33. 40	305 385 ···							是一种,我们就是一个人的,我们就是一个人的,我们就是一个人的,我们就是一个人的,我们就是一个人的,我们们就是一个人的,我们们们们们们们们们们们们们们们们们们们们
ATION	1	Match	Cath		377,800	56 900		\$116,640	770 0074	\$ 123,0 4	V2C 34C3 @	1000					ŀ	1
PRIMARY IMPLEMENTATION	101	Match	1	2444	000,1114	55 900	4,7	5176,640	C130 000	000,021	A \$351 580 m.	200	\$1,446,240	200 200	200	\$275.254		**1,807,800 vg 25,727 C
PPINA		M2 Grant		67.47.540	0111,610	\$27,600	6400 500	34cp,350	\$507 840		0 51 446 240						THE PARTY OF THE P	Section of the sectio
		Ç		CERR 200	000000	\$34 500	6689 300	3383 200	\$634 ADD		\$1.807,800						Applications of the same	The state of the state of
	1 0 0	NO. ORGINAL		¥		m	ď	5	-		A. T. T. 22 ' W. W.		MES CAR	in-king Match		Casa Match	Ohose Total	Littad Joins
	Anenay			GARDEN GROVE	41110	CAL RANS	WESTMINSTER		HUNTINGTON BEACH	Total T	Cial							
				<u>-</u>	r	, ,	m		*	The second of th	1.5							

TOTAL TASKS SUMMARY

	Type	la-kind	4.50	0 t - 70 t	50	\$0	\$3.146	03	\$83,180	65	\$0	\$237,300 141 \$83 460	\$275.254	\$	\$	3	12 - 12 OS42 - 21	A \$86 306 38
Local Match (20%)	Match Type	Cash	67.45.4	70.	\$26.400	\$4.400	\$37,854	527 480	\$151,240	\$23.440	\$35,160	- \$237 300	\$275.254	\$7,392	\$3.168	201,120	\$10,560	\$285,814 . Ser \$86,306 PM
٦	Total Match		£10 200	302	\$26.400	\$4,400	\$41,100	\$27,460	\$234,400	\$23,440	\$35,180	15320,480	\$1,446,240 - \$361,560 -	\$7.382	\$3.168	201	\$10,580	\$372,120 ≥
	M2 Grant		£41 200	, , ,	\$105,600	\$17,500	\$164,400	\$109,840	\$937,600	593,780	\$140,640	\$1,281,840	\$1,445,240	\$29,568	\$12.672	- 1-1-	. \$42,240	51,488,480
	Costs		\$54.500		\$132,000	\$22,000	\$205,500	\$137,300	\$1,172,000	\$117,200	\$175,800	\$1,502,300	\$1,807,800	\$36,960	\$15,840		\$52,800	51,850,800: P 51,488,480: A \$372,120
	Tasks		Project Administration	(inc Callrans fee)	Develop & Implement	Sefore & After Study	Sub-Total	Deskon	System Improvements	Contingency	Construction Engineering	Sub-Total	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Ongoing Maintenance - Monitoring	Ongoing Maintenance - Comm &	Tigging 180	Luase 10(a)	튑
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TOTAL AGENCY MATCH SUMMARY

8	Match Type	n-kind	182 180		2	20	\$3.146	ľ
.ocal Match (20%)	new .	Cash	\$30.300	076 83	25.03	07C'6LL4	\$127,654	\$285,814
1	Total Match		\$113.460	SA 340	200	770'6114	\$130,800	\$372,120
	M2 Grant (80%)		\$453,840	533 360	6478 080	2413,000	\$523,200	-151,488,480
	Project Cost by Agency		\$567,300	\$41.700	£507 BOR	2007	\$654,000	\$1,860,600 %
	Agency		GARDEN GROVE	CALTRANS	WESTMINSTER		HUN ING FON BEACH	of the set Total Sets, " . " are the treatment
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CALTRANS MATCH DISTRIBUTED TO EACH AGENCY
CARDEN GROVE

GARDEN GROVE	\$2,194,74	
WESTMINSTER	47 527 68	
	99,550,34	
HUNTINGTON BEACH	\$3,511,58	
	\$8,340.00	\$372.1

TOTAL MATCH \$115,654,74 \$122,153.68 \$134.311.58 \$372,120.00 April the interview.

VALLEY VIEW ST GARDEN GROVE Corridor. Agettay:

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					A Author &		Design T	١		24.6.2h		SAR 2003		\$78,200			268.20	Ì	
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Ongoing Maintenance per signal per mentic Orgaing Comm & Det Support per signal per mentic COSTS SUMMARY

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	•				Local Mas	ocal Metch (20%)	
	- Azkz	Costs	M2 Grant	Total Starte		Malch Type	
					Cash	In-kind	Fund Source
	Project Administration	\$10,000	\$4,000	22,000	\$2,000		Azestien Ka
	Develop & Implement	\$30,000	\$24 000	U00 95	2		
	Batore & Aster Study	D00 13	000 73	\$1 500	4		ACCRECATE IN
Primary	Design	337,300	\$30,260	G95 L5	17 SR	4	Manage M
plement	System Improvements	000,8762	2302.400	£74 85f	500	F17480	The state of the s
	Contingency	008' LCS	530 240	T7 56h	17 San	1	No of the last
	Construction Engineering	54.4 Jun	016 343			3	MORPHE M
			ADT FOR	1947	211.340	8	Measure M
-	WIN AREIL	3555,300	8444240		227 900	263 160	
	Choosing Maintenance -	7					
Changes Mains 2	Monttoning		27.120	23,080	51,080	1,000 T	Measure
) and	Crigolog Maintenance -	444					
	Comm & Det Support	70a7r#	22,340	1720	2720	*:- *:-	Measure M
	Phase Total	900 213	C04 08	67 400	43 400		
	174						

Staffing Commitment For in-hine Masch

Tybe of Service No. of Manner March Paint 1	THE STATE OF THE S	 05	DS .	O\$	Total and the second of the se
 Staff Position					
Agimey		 GANDEN GROVE			

VALLEY WEW ST Corridor,

ALYANS Poliser Cast	Project Squal Inneg	Develop E Berjare & After Ongoing inhersection/Field Cor	SOLIDOD WASHINGTON OF THE PROPERTY ACCESS	\$1,000 SZ,400 ST,000 SZ,400 SZ	SS 000 E1 DO 89 4M	CALTRANS VALLEVIEWET GASTIER STORY 62 400 150 150 150 150 150 150 150 150 150 1		
CALTHAMS		Agency	CALTRANS		CALTRANS	CALTRAINS	118 11977	
Agency	Ale of Creed	No. dt organi	-			-	3	Annual Section of the Control of the

Ongoleg Maintenance per algrai por monin; Ongolng Comm & Det Bupped per algnai per monin; COSTS SUMMARY

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				-			
	,				Local Match (20%)	GF (20%)	
	STREET	Cests	M2 Grant	Todat htatah		Match Lype	
				TANK INC.	23	h-kind	Fund Spurca
	Protect Administration	\$13,500	3.10, B00	\$2,700	1007.63		
	Develop & Implement	\$18,000	\$14,400	\$3.600			
	Before & After Study	000 63	\$2,400	\$600			
Printancy	Design	05	Os.	05	20	S	
Implement	System Improvements	0\$	05	2	OS.	S	3
	Contingency	20	0\$	os	çş	5	
	Construction Engineering	0\$	01	05	SO	S	
	Phase Total	234 500	22,860	006.95	505 85	G.	
	Ongolog Makintenzerce -	UP 33					
Ornooino Mator &		out to	250, FG	blyn'i E	\$00°L\$	\$1,000 con and a superior con a superior	
ò	_	091-63	#4 *73				
•	Comm & Dei Succort			7040	EF.	2	
	Phase Tolai	\$7,200	25,760	3.140	\$1,440	105	
27. 20.	Total	\$41,700	DBC EST 1017 1017 1011	SE 340	5 340		

Staffing Commitment For In-Mind Match

CALTRANS 50	Agency	Staff Position	Type of Service	No. of Hours"	Hourly Rate	Amount
						63
	CALTRANS					S
0\$						20
					1	20

BOLSA CHICA ET WESTMINSTER Corridor: Agency:

			_						Continue						
_									ביט השלים רסים	iso.					
No of Stone	Anence	- Inflammation		To see		Signal Timing			System Improvements	vements					
	_	Library Section		6 sharinie tresson	Develop	Before & Affer	Ondoing	Piatriological property	Commission	Petartina					
		1	_		molement	Shide	•	Syclem Undrade			This control in	Depar	1	HIDT A LOSON WHICH	SO Watch
-	WESTWINSTER	SOUSA CHICA ST SOUSANDER	CO TO 10 TO 10 TO 10 CO	24.55	200	1	т.				100		Design Total Ma	atch (20%) Case	A
	14/007341840766	ı	2000	25.50	20,00	31,000	12,400	131 000	2	225,000	000 83	5	TES BATT	44.7	7
	VI CONTRACTOR	NACTOR TO SELECTION OF THE PROPERTY OF THE PRO	CONCLUSION AVE	900	36 000	CUO 13	20 400	440			_		200,100	14,044	4.065
-	WESTANSTER	BOCK CHICA NT LABORAGES	ALBENTANISCHED DAVID	1			3	DDG CC		525,000	\$78,000		\$85.800	317 180 · · · · S17 161	Los
	144000000000000000000000000000000000000	Ì	7210 1510	44,000	Mn'et	21,000	\$2,400	\$65,000	US	MIC SCA	COC VES		40000		
	WEST MINE DA	BOLSA CHICAST ST.JAMES PARK	PARK	2000	1000 33	500	1000			TA STA CH	200,050	000	DOD'68*	\$18,500 ··· \$1	219,000
	WESTAINSTER	יייייייייייייייייייייייייייייייייייייי				300	100 Ze	33,000	10	175,000	\$56,000	\$56,000	361 600	112 128	120
		AVE TO LO COLLO DO LO COLLO DO		\$2,000	\$6.000	000	32 40D	424 400	i	ľ					2
	WESTARKSTER	COCACAGE TO ACECACION	100	45 000	1000			1	0	\$25,000	255,000	255,000	161.500	\$12,320	\$17.370
		2000		42.000	DAY OF	\$1,000	\$2,400	\$31,000	O	000 563	AN AN	46 RAM	A	l	
		6年時は、1、12、1、12、1、13、10、10、10、10、10、10、10、10、10、10、10、10、10、		212 000		- CE	201 114			TAX SECTION AND ADDRESS OF THE PARTY AND ADDRE	No.		201001	07070	
					1000000	20000	no tie	r r 242 000	3 1 1 1 1 1 1 N	2150,000	2392,000	\$38,200	5431200	1. \$66.240 mg 286.340	S 240
•	Oncolog Mainten	Oncoing Maintenance are stock har month.	***						Subject		\$392,000	139 700	543 1 2013	Cas 2.11	200
	Ongoing Gorner & Def Sur								19% Canabatency		539 200				100
			DC.					_	15% Construction Forty sector	Tankanda	248 100		1		040
	VOALUL CO CALLAND								Total		200 000		1	1	331,780
	THE WINDS										200			0.50.00	0.000

Testos		Costs	M7 Grant	•	Local Match (20%)	ch (20%)	
	_		THE CHARLE	Total Majer		MINICH TYPE	
	Ī				ē	lo-kind	Fund Source
Project Administration	_	\$12,000	\$9,600	\$2.400!	\$2.400	. 2.	
Develop & Implement		000,000	\$24.500	\$7.700	27 720		
Before & After Study		000'9\$	\$4,800	\$1,200	\$1,200		·
Deskan	П	002 663	\$31,380	37.840	27 140	0.	
System Improvements	П	000,5853	-	378 400	178 100	5	
Confingency		007 623	\$31.360	17 BAD	UTV CS	3	
Construction Engineering	~~	156,800	\$47,040	311 760	111760	2	
Phase Total		\$583,200	\$406,560	\$115640	Ì	\$	
Ongoing Maintenance - Monitoring		\$10,080		\$2,016		2	
Ongoing Maintenance - Corrun & Del Support		\$4,320	\$3,656	3864	7903	80	
Phase Tolai	П	\$14,400	311,520	\$2.690	52 880	12 880	03
10,4		\$597,600	1	1110 620	1110 6201		-
	ı		A				

Staffing Commitment For in-kind Match

Agency	Staff Posidon	Type of Service 1 N	Vo. of Hours	Houriv Rate:	Smarron
		1			20
WESTWINSTER					O.S
		1			2
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Conitor BOLSA CHICA ST Agency HUNTINGTON BEACH

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				mor & Design Matry	, det		\$20.9	77.3		1	\$18,100	ķ	9 01 4	54 600	ſ	2	7	592 450 c · · 502 480	100	i	Ş		3112 560
				Ē	1,70%		520.8 51	\$14		20 / /	\$19.100	3000	600	24 600		1	200	\$82.4501	3		2	2.2 0.00	002.7114
				L.	CKI Male		075	150	100	2	L	l		\$23,000	į		loc.	-3462.300 Per	Ē	-		ľ	
-				mpr &	Design Total [Match (20%)]	١	\$104.075	\$70.150	202		380.500			\$23	200		523,000	\$462	5467 300				
				On river			513.575	\$9.150	707 . 13		\$10,500	340 53		23 600	107 CX		2.00	360,300	\$50,300				
		ŀ		10nts			37.70	000 199	25,000		000 02	OUS 975		20 000	CTR COO	200	3	402 DOO	402 000	0000	100	3 8	3
				improvements.	e o	ľ	٦	98	٦		3	ā		7	4	١	ř	5.40	240	a		۱	200
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	150	Bystem Improvements	l		. Upgr		l	9								Ļ					5% Construction Fediteentee		
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		Interes			10 67						_	3							ar month.	Ì	CO SCIENTIFICATION.		
					SAC AR		BOLSA CHICA ST	ROLSA CHICA ST		BOLSA CRICA SI	BOLSA CHICA ST	FOR 40000	Š	BOLSA CHICA ST	10 1050 1050		1018		e tienes	- January			
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Project Amministration Costs	Q.	Table 1	4			Local Malch (20%)	th (2,0%)	
Project Administration \$16,000 \$12,000		2	Costs	M2 Grant	Total Maten		Meter lype	
Project Anniergement \$16,000 \$12,000 \$15,000 \$						Cash	200	Fund Source
Deviator Refer Study \$18,000 \$18,400 \$19,600 \$		Project Administration	\$16,000		\$3,200	22	\$3,146	
Design		Develop E (mplement	\$48,000	•	\$9.500	\$9,600	rs.	
Overland September Septe	1	Before & Affer Study	\$6,000	\$6,400	\$1,800	908 13	Ç	
System Invescences 140,200 121,150 150,400 150	Primitary	Design	200,300	\$48,240	\$12,060	512.080	S	
Computation Engineering \$10,000 \$13,150 \$10,000	molement	System Immovements	2402,000	\$321.800	280 400	007 088	\$	
Construction Sept. 200 S		Continuency	\$40,200	\$32,160	88 040	650	Ş	
Organ Authorities		Construction Engineering	360,380	\$49,240	\$ 12 050	1/2 050	: 5	
Organic Maintenance \$13,440 \$10,752 \$2,886 \$2,688 \$5,189		Phase Total	\$534,500	\$507.840	1178 953	111111111111111111111111111111111111111		
Organing Maintenance \$6.760 \$4,500 \$1,520 \$1,520 \$5,540 Comma & Del Support \$19,200 \$15,540 \$3,540 \$3,540 \$3,540 Total Pleas Total \$554,000 \$53,520 \$17,554 \$3,540	A Paris Contraction	Ongoing Maintenance - Maritacing	\$13,440	\$10,752	\$2,096	\$2,588	05	
\$19,200 c. \$19,200 c. \$15,380 c. \$23,580 c. \$1,580 er	Ongoing Maintenance - Comm & Det Support	\$6,760	34,600	\$1,152	\$1,152	205		
ľ		Phase Total	\$19,200	4.5	53.840;	S	93	
		. LDCII)	\$654,000	\$\$23,200	\$130,800	\$127.654	23 48	

iffing Commitment For in-kind Mate

Agency	Staff Position	Type of Service	No. of Hours	Hourty Rates	amount
	Principal Civil Engineer	Project Administration	25.00	\$125.85	\$3.146
TINGTON BEACH					ş
			-		2
***************************************					50
	THE P. LEWIS CO., LANSING, MICH. 400, 1879.	The state of the state of	1.00	Total	871.53

CORRIDOR

	댐	Intersection	ADT	Distance (mile)	VMT	Number of	A Charles	Cabinet
/ ST	CHAPMAN	AVE.				Intersections	- Cualifica	Pictures
/ ST	CINEMA M	AIN DWY	48330	66.0	0.000			3
	BELGRAV	BELGRAVE AVE	48330	800	1000			,
187	CAMPSO	N AVE	53440	0.75	CERT			>
181	CERULE	CERULEAN AVE	47311	0.21	10036	٧.	370 000	
10.	I CHAN	AVE	49986	0.25	12553		3/3/2/2	,,
10.	SR 22 W	RAMPS	54000	0.07	3723			,
101	GARDEN	GARDEN GROVE BLVD	\$4000	0 22	12048	24	375000	<;>
100	OLD 801.	OLD BOLSA CHICA RD	44000	0.32	14217		* 443,000	4
10.	UUNCAN	DUNCANNON AVE	42659	0.23	5066	•		,
15	WESTM	WESTMINSTERBLVD	42659	0.53	52402			
131	STUAME	ST JAMES PARK	45410	021	P/65			•
	CHURCH	LL AVE	45410	0.27	12451			
151	RANCHO	10	45410	0.16	COUL	ı		
	BOLSA AV	E	45163	0.41	1001	٥	450,000	>
HINTAIGHTON BEACH	ARGOSYA	,	37935	144.0	7700			>
ST	MCFADDEN	(AVE	37935	0.27	10380			>
18	ROBINAVOC	OD DR	33262	0.35	11747			
10	EDINGER A	WE	33262	0.15	8968			\ \
10	HEIL AVE	The state of the state of	28785	0.50	14302			>
PEARCEOR	PEARCE		21804	31, 0				>
ST	WARN	WARNER AVE	21804	30.0	0000		1	>
comments to a march to the responsibility of local agencies,			14047	4	POPO		\$ 600,000	>

Comidor: VALLEY VIEW ST Agency: GARDEN GROVE

	y: GARDEN GROVE						
Category	Description	Unit	Quantit	y . Unit Cost	Amount	Sub-total	Intersection To
Intersection:	CHAPMAN AVE		1	7 7. 0000) Fallouit	1 SULPICIAL	intersection to
			T"	1	T		4
Intersection/Flek	Controller	T EA	1				1
			1_1_	\$ 6,000.00			
System Upgrade	CCTV (Replace Pullboxes)	LS	1	\$ 22,000.00			
		EA_	1	\$ 10,000,00	\$ 10,000.00)	l
	APS PPB	l LS	1	\$ 10,000,00	\$ 10,000.00	ភា	I
			7		\$ -		İ
C			+				\$48,000
Communication			 		\$ -	J	1 ,,,,,,,
Upgrade			1		\$ -	\$0	1
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Detection Upgrade			ļ		\$ -	_[
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lu.1	And the second s		L		\$ -	1	
Intersection:	CINEMA MAIN DWY						
	install City Furnished Cabinet, Foundation and		Ī .	1	<u> </u>	1	
Andreas and select a to	Service	LS	1	\$ 24,000.00	\$ 24,000.00	1 1	
Intersection/Field	Controller					J	
System Upgrade		£Α	1	\$ 6,000,00	\$ 6,000.00	\$62,000	
	Rewire Intersection (Including Puliboxes)	LS	1	\$ 22,000.00	\$ 22,000,00	7 /	
	APS PPB	LS	1	\$ 10,000,00	\$ 10,000,00		
				4 10,000,00		 	
			 	ļl	\$ -] [\$62,000
Communication					\$ -	j l	
Upgrade					\$ -	ĭ \$0	
				1	\$ -	1	
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Detection Upgrade				<u> </u>	\$ -	J I	
noronou obdunce				<u> </u>	\$ -	\$0	
				1	\$ -	i I	
ntersection;	BELGRAVE AVE						
	Install City Furnished Cabinet, Foundation and	1					
	Service	LS	1	\$ 24,000.00	\$ 24,000.00	1 1	
Intersection/Field					* • • • • • • • • • • • • • • • • • • •	1 1	
System Upgrade	Controller	EA	1	\$ 6,000,00	\$ 6,000.00	\$62,000	
,	Rewire Intersection (including Puliboxes)	LS	1		\$ 22,000,00		
	APS PPB	LS	- i			[[
			'		\$ 10,000,00		
					5 -	1 1	\$62,000
Communication					\$ -	l i	402,000
Upgrad e		1			\$ -	\$ a	
opgrade		1	***************************************			**	
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Barrier and a				i 1	\$ -		
Detection Upgrade					5 -	\$0	
		Ti i			\$ -		
ntersection;	LAMPSON AVE				- 1		
	Install City Furnished Cabinet and Foundation	1 -2 1					
		LS	1	\$ 20,000.00	\$ 20,000,00		
Intersection/Field	Controller	EA	1	\$ 6,000.00	\$ 6,000.00	- 1	
System Upgrade	Rewire Intersection (Including Pullboxes)	LS	1		\$ 22,000.00	\$68,000	
oystem opgrade	CCTV	ĒĀ	1			400,000	
	APS PP8				\$ 10,000.00	- 1	
		LS	1		\$ 10,000,00		
	Ethernet Switch	EA	1 1		\$ 4,000.00		
Communication					\$ -	1	\$72,000
							
Upgrade			إ		<u> </u>	\$4,000	
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etection Upgrade						en l	
		+	!			\$0	
ersection:	CERULEAN AVE	1		1	<u> </u>		***************************************
	Install City Furnished Cabinet and Foundation	LS	1	\$ 20,000.00	20,000.00		
ntersection/Field	Controller	EA	1		6,000,00	- 1	
	Rewire Intersection (including Pullboxes)	LS					
System Upgrade	CCTV		1	\$ 22,000.00 \$		\$68,000	
		EA	1	\$ 10,000,00 \$		i	
	APS PPB	EA	1 [\$ 10,000,00 \$	10,000.00	ļ	
	Ethernet Switch	EA	1		4,000.00		
^I		 				. 1	\$72,000
Communication		 		5		·	• • • •
Upgrade		 		\$		\$4,000	
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rsection: itersection/Field	FMC JPS /deo Management Software	LS		\$ 15,000.00 \$ \$ 12,000.00 \$	15,000.0D	\$27,000	

	III Switches	LS.	1	\$ 35,000,00	\$ 35,000.00	F35 000	\$62,000
Upgrade		LS			\$ -	\$35,000	1
Detection Upgrade		LS			\$ -	\$0	
L		li			\$ -	***	

Total

\$378,000

Corridor: VALLEY VIEW ST Agency: CALTRANS

Category	Description	Unit	Quantity	Unit Cost	Amount	Substatal	Intersection Total
Intersection	SR 22 WB RAMPS			Chile Cost	Amount	1200-fotat	BREISECTION 1002
l .		1	1		\$0	T	
Intersection/Field		1	1		\$0	1	
System Upgrade		1	1		\$0	\$0	
		1			\$0	1	
i					\$0		
Communication		1			\$0	1 1	\$0
Upgrade					\$0	\$0	V -
1			1		\$0		
ļ					\$0		
					\$0		
Detection Upgrade					\$0	\$0	
				***************************************	\$0		
Intersection:	GARDEN GROVE BLVD						
t_1					50		
Intersection/Field					\$0	\$ 0	
System Upgrade					\$0	30	
					\$0		
					\$0		
Communication					\$Ω	- [\$0
Upgrade					\$0	\$0	
		<u> </u>			20		
					\$0	ŀ	
5 . 1. <i>1</i>	,			Ţ	\$0		
Detection Upgrade		<u> </u>			\$0	\$0	
					\$0	- 1	
intersection:	TIFFANY AVE						
					\$0	***************************************	
Intersection/Field					\$0	\$0	
System Upgrade					\$0	30	
					\$0	1	
			T		\$0		
Communication					\$0		\$0
Upgrade				T	\$0	\$0	
. =					\$0		
					\$0		
Detection Upgrade					\$0	1	
Detection obgrade					\$0	\$0	i
i					\$8		

Total

Corridor: BOLSA CHICA ST

Category	cy: Westminster						
	Description	Unit	Quantity	I Halt Cant		15	
Intersection	m: OLD BOLSA CHICA RD	I Chit	I dosutitA	Unit Cost	Amount	Sub-total	Intersection To
	2070 ATC Controller			T = 1 = 1 = 1 = 1			1
Intersection/Field		L EA	1	\$ 6,000.00			İ
System Upgrade	Rulling Book (in Custom	LS	1 1	\$ 12,000.00			
ayatem opgrade		EA] 1	\$ 10,000,00	\$ 10,000,00	+31,000	ł
	Ethernet Switch	EA	1	\$ 3,000.00	\$ 3,000,00	71	i
Communication		1			\$ -		\$56,000
Upgrade		Ī			\$ -	− sa	1,
********		l	1		\$ -	⊣ ~~	l
	Video Detection - Iteris Vantage EdgeConnect	LŞ	1 1	\$ 25,000.00		 	
Detection Upgrad	9	 	 	\$ 25,000.00	\$ 25,000.00		
, , , , , ,		-	!		\$ -	\$25,000	
intersection;	DUNCANNON AVE	_L	<u> </u>	l	\$ -		
, Mandada, E							
	2070 ATC Controller	I EA	1	\$ 6,000,00	\$ 6,000.00		
	CCTV CAMERA	LS	1	\$ 12,000,00	\$ 12,000.00		
Intersection/Field	Battery Back-up System	EA	1	\$ 10,000,00	\$ 10,000.00	i 1	
System Upgrade	Ethernel Switch	EA	1				
	Rewire Intersection (Existing conduit at capacity &	1 5		\$ 3,000.00	\$ 3,000.00	.!	
	can't handle additional anti-(-)	LS	l 1	\$ 22,000,00	\$ 22,000.00	1 1	
	can't handle additional cable(s))			9 22,000,00	\$ x2,000.00	1 1	\$78,000
Communication		.1.			\$ -		
Upgrade		·]			\$ -	i so i	
-F3.545		1			<u> </u>	{ ™	
	Video Detection - Iteris Vantage EdgeConnect	LS	1	C 75 000 00		 	
Detection Upgrade	- Simble Lage Collinect	+	<u> </u>	\$ 25,000,00	\$ 25,000.00	J	
		 			\$ -	\$25,000	
		.1			\$ -	1 1	
tersection;	WESTMINSTER BLVD						
	2070 ATC Controller	EA	1	\$ 6,000.00	\$6,000		
lalamast: 1075 - 1 4	CCTV CAMERA	LS				{	
Intersection/Field	Install New Conduit (Intersection Crossings)			\$ 12,000.00	\$12,000	! I	
System Upgrade		LS		\$ 30,000.00	\$30,000	\$65,000	
	Ethernet Switch	EA	1	\$ 3,000.00	\$3,000	1	
	Hub Ethernet Switch	EA	1	\$ 14,000.00	\$14,000	1	
Communication		1	1		011,100	· · · · · · · · · · · · · · · · · · ·	\$90,000
		1				- 1	
Upgrade		 	·			\$0	
	Video Delection - Iteris Vantage EdgeConnect	1					
election Upgrade	Video Detection - Rens Variage EdgeConnect	LS	1	\$ 25,000.00	\$25,000	1	
acteorous obbisant						\$25,000	
	1						
		<u>!</u> !	J	ł			
lersection:	ST JAMES PARK	<u> </u>	Ł				
lersection:		I FA I		< connon!	◆e ∧∧n		
	2070 ATC Controller	EA	1	\$ 6,000,00	\$6,000		
ntersection/Field	2070 ATC Controller CCTV CAMERA	LS	1	\$ 12,000.00	\$12,000		
ntersection/Field	2070 ATC Controller CCTV CAMERA Battery Back-up System	LS EA				\$31,000	
ntersection/Field	2070 ATC Controller CCTV CAMERA	LS	1	\$ 12,000.00	\$12,000 \$10,000	\$31,000	
ntersection/Field	2070 ATC Controller CCTV CAMERA Battery Back-up System	LS EA	1	\$ 12,000.00 \$ 10,000.00	\$12,000	\$31,000	
nlersection/Field System Upgrade	2070 ATC Controller CCTV CAMERA Battery Back-up System	LS EA	1	\$ 12,000.00 \$ 10,000.00	\$12,000 \$10,000	\$31,000	\$56,000
ntersection/Field System Upgrade Communication	2070 ATC Controller CCTV CAMERA Battery Back-up System	LS EA	1	\$ 12,000.00 \$ 10,000.00	\$12,000 \$10,000		\$56,000
nlersection/Field System Upgrade	2070 ATC Controller CCTV CAMERA Battery Back-up System	LS EA	1	\$ 12,000.00 \$ 10,000.00	\$12,000 \$10,000	\$31,000	\$58,000
ntersection/Field System Upgrade Communication	2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch	LS EA EA	1 1	\$ 12,000.00 \$ 10,000.00 \$ 3,000.00	\$12,000 \$10,000 \$3,000		\$55,000
ntersection/Field System Upgrade Communication Upgrade	2070 ATC Controller CCTV CAMERA Battery Back-up System	LS EA	1 1	\$ 12,000.00 \$ 10,000.00	\$12,000 \$10,000		\$56,000
ntersection/Field System Upgrade Communication Upgrade	2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch	LS EA EA	1 1	\$ 12,000.00 \$ 10,000.00 \$ 3,000.00	\$12,000 \$10,000 \$3,000		\$56,000
ntersection/Field System Upgrade Communication Upgrade etection Upgrade	2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch Video Detection - Iteris Vantage EdgeConnect	LS EA EA	1 1	\$ 12,000.00 \$ 10,000.00 \$ 3,000.00	\$12,000 \$10,000 \$3,000	\$0	\$55,000
ntersection/Field System Upgrade Communication Upgrade etection Upgrade	2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch	LS EA EA	1 1	\$ 12,000.00 \$ 10,000.00 \$ 3,000.00	\$12,000 \$10,000 \$3,000	\$0	\$56,000
ntersection/Field System Upgrade Communication Upgrade etection Upgrade ersection:	2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch Video Detection - Iteris Vantage EdgeConnect CHURCHILL AVE	LS EA EA	1 1 1	\$ 12,000.00 \$ 10,000.00 \$ 3,000.00 \$ 3,000.00	\$12,000 \$10,000 \$3,000 \$3,000 \$25,000	\$0	\$56,000
ntersection/Field System Upgrade Communication Upgrade etection Upgrade ersection:	2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch Video Detection - Iteris Vantage EdgeConnect CHURCHILL AVE 2070 ATC Controller	LS EA EA EA ES	1 1 1	\$ 12,000.00 \$ 10,000.00 \$ 3,000.00 \$ 25,000.00 \$ 25,000.00	\$12,000 \$10,000 \$3,000 \$3,000 \$25,000	\$0	\$56,000
ntersection/Field System Upgrade Communication Upgrade etection Upgrade ersection:	2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch Video Detection - Iteris Vantage EdgeConnect CHURCHILL AVE 2070 ATC Controller CCTV CAMERA	LS EA EA LS I	1 1 1 1	\$ 12,000.00 \$ 10,000.00 \$ 3,000.00 \$ 25,000.00 \$ 25,000.00 \$ 12,000.00 \$ 12,000.00	\$12,000 \$10,000 \$3,000 \$3,000 \$25,000 \$6,000 \$12,000	\$0	\$58,000
ntersection/Field System Upgrade Communication Upgrade etection Upgrade ersection:	2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch Video Detection - Iteris Vantage EdgeConnect CHURCHILL AVE 2070 ATC Controller CCTV CAMERA Battery Back-up System	LS EA LS EA LS EA LS EA	1 1 1 1 1 1 1	\$ 12,000.00 \$ 10,000.00 \$ 3,000.00 \$ 25,000.00 \$ 25,000.00 \$ 12,000.00 \$ 10,000.00	\$12,000 \$10,000 \$3,000 \$3,000 \$25,000	\$0	\$56,000
ntersection/Field System Upgrade Communication Upgrade etection Upgrade ersection:	2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch Video Detection - Iteris Vantage EdgeConnect CHURCHILL AVE 2070 ATC Controller CCTV CAMERA	LS EA EA LS EA LS EA LS	1 1 1 1 1 1 1	\$ 12,000.00 \$ 10,000.00 \$ 3,000.00 \$ 25,000.00 \$ 25,000.00 \$ 12,000.00 \$ 12,000.00	\$12,000 \$10,000 \$3,000 \$3,000 \$25,000 \$6,000 \$12,000	\$0	\$56,000
Intersection/Field System Upgrade Communication Upgrade etection Upgrade ersection:	2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch Video Detection - Iteris Vantage EdgeConnect CHURCHILL AVE 2070 ATC Controller CCTV CAMERA Battery Back-up System	LS EA LS EA LS EA LS EA	1 1 1 1 1 1 1	\$ 12,000.00 \$ 10,000.00 \$ 3,000.00 \$ 25,000.00 \$ 25,000.00 \$ 12,000.00 \$ 10,000.00	\$12,000 \$10,000 \$3,000 \$25,000 \$6,000 \$12,000 \$10,000	\$0	
ntersection/Field System Upgrade Communication Upgrade etection Upgrade ersection:	2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch Video Detection - Iteris Vantage EdgeConnect CHURCHILL AVE 2070 ATC Controller CCTV CAMERA Battery Back-up System	LS EA LS EA LS EA LS EA	1 1 1 1 1 1 1	\$ 12,000.00 \$ 10,000.00 \$ 3,000.00 \$ 25,000.00 \$ 25,000.00 \$ 12,000.00 \$ 10,000.00	\$12,000 \$10,000 \$3,000 \$25,000 \$6,000 \$12,000 \$10,000	\$0	\$56,000 \$56,000
ntersection/Field System Upgrade Communication Upgrade election Upgrade ersection: otersection/Field system Upgrade	2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch Video Detection - Iteris Vantage EdgeConnect CHURCHILL AVE 2070 ATC Controller CCTV CAMERA Battery Back-up System	LS EA LS EA LS EA LS EA	1 1 1 1 1 1 1	\$ 12,000.00 \$ 10,000.00 \$ 3,000.00 \$ 25,000.00 \$ 25,000.00 \$ 12,000.00 \$ 10,000.00	\$12,000 \$10,000 \$3,000 \$25,000 \$6,000 \$12,000 \$10,000	\$0 \$25,000 \$31,000	
ntersection/Field System Upgrade Communication Upgrade etection Upgrade ersection:	2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch Video Detection - Iteris Vantage EdgeConnect CHURCHILL AVE 2070 ATC Controller CCTV CAMERA Battery Back-up System	LS EA LS EA LS EA LS EA	1 1 1 1 1 1 1	\$ 12,000.00 \$ 10,000.00 \$ 3,000.00 \$ 25,000.00 \$ 25,000.00 \$ 12,000.00 \$ 10,000.00	\$12,000 \$10,000 \$3,000 \$25,000 \$6,000 \$12,000 \$10,000	\$0	
ntersection/Field System Upgrade Communication Upgrade etection Upgrade ersection: ntersection/Field system Upgrade Communication Upgrade	2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch Video Detection - Iteris Vantage EdgeConnect CHURCHILL AVE 2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch	LS EA LS EA EA EA	1 1 1 1 1 1 1 1 1	\$ 12,000.00 \$ 10,000.00 \$ 3,000.00 \$ 25,000.00 \$ 12,000.00 \$ 10,000.00 \$ 3,000.00	\$12,000 \$10,000 \$3,000 \$3,000 \$25,000 \$12,000 \$10,000 \$3,000	\$0 \$25,000 \$31,000	
ntersection/Field System Upgrade Communication Upgrade election Upgrade ersection: otersection/Field system Upgrade Communication Upgrade	2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch Video Detection - Iteris Vantage EdgeConnect CHURCHILL AVE 2070 ATC Controller CCTV CAMERA Battery Back-up System	LS EA LS EA LS EA LS EA	1 1 1 1 1 1 1 1 1	\$ 12,000.00 \$ 10,000.00 \$ 3,000.00 \$ 25,000.00 \$ 25,000.00 \$ 12,000.00 \$ 10,000.00	\$12,000 \$10,000 \$3,000 \$3,000 \$25,000 \$10,000 \$10,000 \$3,000 \$3,000	\$0 \$25,000 \$31,000 \$0	
ntersection/Field dystem Upgrade Communication Upgrade etection Upgrade ersection: tersection/Field ystem Upgrade Communication Upgrade	2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch Video Detection - Iteris Vantage EdgeConnect CHURCHILL AVE 2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch	LS EA LS EA EA EA	1 1 1 1 1 1 1 1 1	\$ 12,000.00 \$ 10,000.00 \$ 3,000.00 \$ 25,000.00 \$ 12,000.00 \$ 10,000.00 \$ 3,000.00	\$12,000 \$10,000 \$3,000 \$3,000 \$25,000 \$10,000 \$10,000 \$3,000 \$3,000	\$0 \$25,000 \$31,000	
ntersection/Field dystem Upgrade Communication Upgrade etection Upgrade resection: tersection/Field ystem Upgrade communication Upgrade tection Upgrade	2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch Video Detection - Iteris Vantage EdgeConnect CHURCHILL AVE 2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch Video Detection - Iteris Vantage EdgeConnect	LS EA LS EA EA EA	1 1 1 1 1 1 1 1 1	\$ 12,000.00 \$ 10,000.00 \$ 3,000.00 \$ 25,000.00 \$ 12,000.00 \$ 10,000.00 \$ 3,000.00	\$12,000 \$10,000 \$3,000 \$3,000 \$25,000 \$10,000 \$10,000 \$3,000 \$3,000	\$0 \$25,000 \$31,000 \$0	
Intersection/Field System Upgrade Communication Upgrade election Upgrade ersection: Idersection/Field system Upgrade Communication Upgrade tection Upgrade	2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch Video Detection - Iteris Vantage EdgeConnect CHURCHILL AVE 2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch Video Detection - Iteris Vantage EdgeConnect	LS EA LS EA EA EA	1 1 1 1 1 1 1 1 1	\$ 12,000.00 \$ 10,000.00 \$ 3,000.00 \$ 25,000.00 \$ 12,000.00 \$ 10,000.00 \$ 3,000.00	\$12,000 \$10,000 \$3,000 \$3,000 \$25,000 \$10,000 \$10,000 \$3,000 \$3,000	\$0 \$25,000 \$31,000 \$0	
Intersection/Field System Upgrade Communication Upgrade etection Upgrade ersection: Intersection/Field system Upgrade Communication Upgrade tection Upgrade tection Upgrade	2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch Video Detection - Iteris Vantage EdgeConnect CHURCHILL AVE 2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch Video Detection - Iteris Vantage EdgeConnect	LS EA LS EA	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	\$ 12,000.00 \$ 10,000.00 \$ 3,000.00 \$ 25,000.00 \$ 12,000.00 \$ 10,000.00 \$ 3,000.00 \$ 25,000.00	\$12,000 \$10,000 \$3,000 \$3,000 \$25,000 \$12,000 \$10,000 \$3,000 \$25,000	\$0 \$25,000 \$31,000 \$0	
ntersection/Field System Upgrade Communication Upgrade etection Upgrade ersection: blersection/Field system Upgrade Communication Upgrade etection Upgrade	2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch Video Detection - Iteris Vantage EdgeConnect CHURCHILL AVE 2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch Video Detection - Iteris Vantage EdgeConnect	LS EA EA LS EA EA EA EA EA EA EA EA EA EA EA EA EA	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	\$ 12,000.00 \$ 10,000.00 \$ 3,000.00 \$ 25,000.00 \$ 12,000.00 \$ 12,000.00 \$ 3,000.00 \$ 25,000.00 \$ 25,000.00	\$12,000 \$10,000 \$3,000 \$3,000 \$25,000 \$10,000 \$10,000 \$3,000 \$25,000 \$25,000	\$0 \$25,000 \$31,000 \$0	
ntersection/Field System Upgrade Communication Upgrade etection Upgrade ersection: ntersection/Field System Upgrade Communication Upgrade etection Upgrade etection Upgrade	2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch Video Detection - Iteris Vantage EdgeConnect CHURCHILL AVE 2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch Video Detection - Iteris Vantage EdgeConnect RANCHO RD 2070 ATC Controller CCTV CAMERA	LS EA EA LS EA LS EA LS LS LS LS LS LS LS LS LS LS LS LS LS	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	\$ 12,000.00 \$ 10,000.00 \$ 3,000.00 \$ 25,000.00 \$ 12,000.00 \$ 25,000.00 \$ 25,000.00 \$ 26,000.00 \$ 12,000.00 \$ 12,000.00	\$12,000 \$10,000 \$3,000 \$3,000 \$25,000 \$12,000 \$3,000 \$3,000 \$25,000 \$25,000 \$12,000 \$12,000	\$0 \$25,000 \$31,000 \$0 \$25,000	
ntersection/Field System Upgrade Communication Upgrade etection Upgrade ersection: othersection/Field system Upgrade tection Upgrade rsection: tersection:	2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch Video Detection - Iteris Vantage EdgeConnect CHURCHILL AVE 2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch Video Detection - Iteris Vantage EdgeConnect RANCHO RD 2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch	LS EA LS EA	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	\$ 12,000.00 \$ 10,000.00 \$ 3,000.00 \$ 3,000.00 \$ 25,000.00 \$ 12,000.00 \$ 26,000.00 \$ 26,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00	\$12,000 \$10,000 \$3,000 \$3,000 \$25,000 \$12,000 \$12,000 \$3,000 \$3,000 \$25,000 \$12,000 \$12,000 \$12,000 \$12,000 \$12,000 \$12,000	\$0 \$25,000 \$31,000 \$0	
ntersection/Field System Upgrade Communication Upgrade etection Upgrade ersection: othersection/Field system Upgrade tection Upgrade rsection: tersection:	2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch Video Detection - Iteris Vantage EdgeConnect CHURCHILL AVE 2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch Video Detection - Iteris Vantage EdgeConnect RANCHO RD 2070 ATC Controller CCTV CAMERA	LS EA EA LS EA LS EA LS LS LS LS LS LS LS LS LS LS LS LS LS	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	\$ 12,000.00 \$ 10,000.00 \$ 3,000.00 \$ 25,000.00 \$ 12,000.00 \$ 25,000.00 \$ 25,000.00 \$ 25,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00	\$12,000 \$10,000 \$3,000 \$3,000 \$25,000 \$12,000 \$3,000 \$3,000 \$25,000 \$25,000 \$12,000 \$12,000	\$0 \$25,000 \$31,000 \$0 \$25,000	
ntersection/Field System Upgrade Communication Upgrade etection Upgrade ersection: othersection/Field system Upgrade tection Upgrade rsection: tersection:	2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch Video Detection - Iteris Vantage EdgeConnect CHURCHILL AVE 2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch Video Detection - Iteris Vantage EdgeConnect RANCHO RD 2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch	LS EA LS EA	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	\$ 12,000.00 \$ 10,000.00 \$ 3,000.00 \$ 3,000.00 \$ 25,000.00 \$ 12,000.00 \$ 26,000.00 \$ 26,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00	\$12,000 \$10,000 \$3,000 \$3,000 \$25,000 \$12,000 \$12,000 \$3,000 \$3,000 \$25,000 \$12,000 \$12,000 \$12,000 \$12,000 \$12,000 \$12,000	\$0 \$25,000 \$31,000 \$0 \$25,000	\$56,000
ntersection/Field System Upgrade Communication Upgrade etection Upgrade ersection: stersection/Field ystem Upgrade tection Upgrade tection Upgrade tection Upgrade	2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch Video Detection - Iteris Vantage EdgeConnect CHURCHILL AVE 2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch Video Detection - Iteris Vantage EdgeConnect RANCHO RD 2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch	LS EA LS EA	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	\$ 12,000.00 \$ 10,000.00 \$ 3,000.00 \$ 3,000.00 \$ 25,000.00 \$ 12,000.00 \$ 26,000.00 \$ 26,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00	\$12,000 \$10,000 \$3,000 \$3,000 \$25,000 \$12,000 \$12,000 \$3,000 \$3,000 \$25,000 \$12,000 \$12,000 \$12,000 \$12,000 \$12,000 \$12,000	\$0 \$25,000 \$31,000 \$0 \$25,000	
ntersection/Field System Upgrade Communication Upgrade etection Upgrade ersection: Intersection/Field System Upgrade etection Upgrade etection Upgrade etection Upgrade etection Upgrade etection/Field system Upgrade etection/Field system Upgrade	2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch Video Detection - Iteris Vantage EdgeConnect CHURCHILL AVE 2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch Video Detection - Iteris Vantage EdgeConnect RANCHO RD 2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch	LS EA LS EA	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	\$ 12,000.00 \$ 10,000.00 \$ 3,000.00 \$ 3,000.00 \$ 25,000.00 \$ 12,000.00 \$ 26,000.00 \$ 26,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00	\$12,000 \$10,000 \$3,000 \$3,000 \$25,000 \$12,000 \$12,000 \$3,000 \$3,000 \$25,000 \$12,000 \$12,000 \$12,000 \$12,000 \$12,000 \$12,000	\$0 \$25,000 \$31,000 \$0 \$25,000 \$31,000	\$56,000
ntersection/Field System Upgrade Communication Upgrade etection Upgrade ersection: Intersection/Field System Upgrade etection Upgrade etection Upgrade etection Upgrade etection Upgrade	2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch Video Detection - Iteris Vantage EdgeConnect CHURCHILL AVE 2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch Video Detection - Iteris Vantage EdgeConnect RANCHO RD 2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch	LS EA LS EA	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	\$ 12,000.00 \$ 10,000.00 \$ 3,000.00 \$ 3,000.00 \$ 25,000.00 \$ 12,000.00 \$ 26,000.00 \$ 26,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00	\$12,000 \$10,000 \$3,000 \$3,000 \$25,000 \$12,000 \$12,000 \$3,000 \$3,000 \$25,000 \$12,000 \$12,000 \$12,000 \$12,000 \$12,000 \$12,000	\$0 \$25,000 \$31,000 \$0 \$25,000	\$56,000
ntersection/Field System Upgrade Communication Upgrade etection Upgrade ersection: ntersection/Field system Upgrade Communication Upgrade etection Upgrade etection Upgrade etection:	2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch Video Detection - Iteris Vantage EdgeConnect CHURCHILL AVE 2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch Video Detection - Iteris Vantage EdgeConnect RANCHO RD 2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch	EA LS LS LS EA EA EA EA EA EA EA EA EA EA EA EA EA	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	\$ 12,000.00 \$ 10,000.00 \$ 3,000.00 \$ 25,000.00 \$ 12,000.00 \$,000 \$10,000 \$3,000 \$25,000 \$12,000 \$10,000 \$3,000 \$12,000 \$12,000 \$12,000 \$12,000 \$10,000 \$10,000 \$10,000 \$10,000	\$0 \$25,000 \$31,000 \$0 \$25,000 \$31,000	\$56,000	
Intersection/Field System Upgrade Communication Upgrade election Upgrade ersection: Intersection/Field ystem Upgrade Communication Upgrade tection Upgrade tection Upgrade tection: Itersection/Field ystem Upgrade ommunication Upgrade	2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch Video Detection - Iteris Vantage EdgeConnect CHURCHILL AVE 2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch Video Detection - Iteris Vantage EdgeConnect RANCHO RD 2070 ATC Controller CCTV CAMERA Battery Back-up System Ethernet Switch	LS EA LS EA	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	\$ 12,000.00 \$ 10,000.00 \$ 3,000.00 \$ 3,000.00 \$ 25,000.00 \$ 12,000.00 \$ 26,000.00 \$ 26,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00	\$12,000 \$10,000 \$3,000 \$3,000 \$25,000 \$12,000 \$10,000 \$12,000 \$12,000 \$12,000 \$10,000	\$0 \$25,000 \$31,000 \$0 \$25,000 \$31,000	\$56,000

Corridor: BOLSA CHICA ST Agency: HUNTINGTON BEACH

Category	W; HUNTINGTON BEACH						
	Description	Unit	Quantit	y Unit Cost	Amount	Sub-total	Intersection To
Intersection	n: BOLSA AVE						
	2070 ATC Controller	EA	1	\$ 6,000,00	\$ 8,000.0	7	1
Intersection/Field	teers or mercial functional liverise.	EA	1	\$ 12,000.00		∃	1
System Upgrade		1		1	S	\$20,000	1
			1	<u> </u>	\$ -	-1	1
	Fiber Distribtuion Unit, Splice Enclosure, and SMFO-6						1
	Drop Cable + splicing	EA	1 1	\$ 10,000.00	\$ 10,000,00	}	1
	Pult 100' 95 SMFO cable in pullbox adjacent to	 	+			4	
Communication	Rencho Controller Cabinet	LS	1	\$ 1,000.00	\$ 1,000.00)	\$90,500
Upgrade	Install 96 SMFO cable (Rancho to Bolsa)	 				\$70.50n	1
	Pullboxes (#6E) (Rancho to Bolsa)	LF	2650	\$ 10.00)	ĺ
		EA	1 1	\$ 4,000.00			1
	Puliboxes (#6) (Rancho lo Bolsa)	EA	6	\$ 3,000.00	\$ 18,000,00		İ
	Replace 2" Conduit (Rancho to Bolsa)	LF	200	\$ 55.00	\$ 11,000.00	ī	
F P. 11			<u> </u>		\$ -		1
Detection Upgrade	,				\$ -	\$0	İ
					\$ -	7	ļ
nlersection;	ARGOSY AVE				 		·
	2070 ATC Controller	EA	1	\$ 8,000,00	\$ 8,000,00	1	
Intersection/Field			 	4 5,000,00	\$ -		
System Upgrade			 		\$ -	- \$8,000	
·			 			- 	
**************************************	Fiber Distribtulon Unit, Splice Enclosure, and SMFO-6		 	 	\$ -	·	
	Drop Cable + splicing	LS	_ 1	\$ 10,000.00	\$ 10,000.00		
Communication	Install 96 SMFO cable (Bolsa to Argosy)				L	. 1	\$61,000
Upgrade		LF	1600	\$ 10.00	\$ 16,000.00		-01,000
opgrade	Pullboxes (#6E) (Bolsa to Argosy)	EA .	11	\$ 4,000.00			
	Pullboxes (#6) (Bolsa to Argosy)	EA	4	\$ 3,000.00			
	Replace 2* Conduit (Bolsa to Argosy)	ᄕ	200	\$ 55,06	\$11,000.00	1 1	
					\$ -		
Detection Upgrade				1	\$ -	so l	
		-			\$ -	1 ``	
ntersection;	MCFADDEN AVE			<u> </u>			
	2070 ATC Controller	EΑ	1	\$ 8,000.00	\$ 8,000.00		
Intersection/Field	(CCTV CAMERA (including license)	EA	1	\$ 12,000.00		4 1	
System Upgrade	Control of the Contro	EA		\$ 12,000,00	\$ 12,000.00	\$20,000	
-3-1-111					\$ -] ' [
	Fiber Distribution Link Safe, F. J				\$ -		
	Fiber Distribtuion Unit, Splice Enclosure, and SMFO-6	LS	1	5 10,000,00	\$ 10,000,00	1 1	
0	Drop Cable + splicing			• 10,000.00	¥ 10,000,00		\$76,000
Communication	Install 96 SMFO cable (Argosy to McFadden)	ᆙ	1900	\$ 10.00	\$ 19,000.00	\$56,000	410,000
Upgrade	Pullboxes (#6E) (Argosy to McFadden)	EA Í				1 420,000 1	
			1	\$ 4,000.00	\$ 4,000.00	(
	Pullboxes (#6) (Argosy to McFadden)	EA	4	\$ 4,000.00 \$ 3,000.00	\$ 12,000.00	'	
·					\$ 12,000.00		
***************************************	Pullboxes (#6) (Argosy to McFadden)	EA	4	\$ 3,000.00	\$ 12,000.00 \$ 11,000.00		
Detection Upgrade	Pullboxes (#6) (Argosy to McFadden)	EA	4	\$ 3,000.00	\$ 12,000.00 \$ 11,000.00 \$ -	so	
Detection Upgrade	Pullboxes (#6) (Argosy to McFadden)	EA	4	\$ 3,000.00	\$ 12,000.00 \$ 11,000.00 \$ - \$ -	\$ 0	
	Pullboxes (#6) (Argosy to McFadden) Replace 2* Conduit (Argosy to McFadden)	EA	4	\$ 3,000.00	\$ 12,000.00 \$ 11,000.00 \$ -	\$0	
	Pullboxes (#6) (Argosy to McFadden) Replace 2" Conduit (Argosy to McFadden)	EA LF	4 200	\$ 3,000.00 \$ 55.00	\$ 12,000.00 \$ 11,000.00 \$ - \$ - \$ -	\$0	
tersection:	Pullboxes (#6) (Argosy to McFadden) Replace 2* Conduit (Argosy to McFadden)	EA	4	\$ 3,000.00	\$ 12,000,00 \$ 11,000,00 \$ - \$ - \$ - \$ 8,000,00	\$0	
lersection: Intersection/Field	Pullboxes (#6) (Argosy to McFadden) Replace 2" Conduit (Argosy to McFadden)	EA LF	4 200	\$ 3,000.00 \$ 55.00 \$ 5,000.00	\$ 12,000.00 \$ 11,000.00 \$ - \$ - \$ - \$ 8,000.00		
tersection:	Pullboxes (#6) (Argosy to McFadden) Replace 2" Conduit (Argosy to McFadden)	EA LF	4 200	\$ 3,000.00 \$ 55.00 \$ 5,000.00	\$ 12,000,00 \$ 11,000,00 \$ - \$ - \$ - \$ 8,000,00	\$0	
lersection: Intersection/Field	Pullboxes (#6) (Argosy to McFadden) Replace 2* Conduit (Argosy to McFadden) ROBINWOOD DR 2070 ATC Controller	EA LF	4 200	\$ 3,000.00 \$ 55.00 \$ 5,000.00	\$ 12,000.00 \$ 11,000.00 \$ - \$ - \$ - \$ 8,000.00		
lersection: Intersection/Field	Pullboxes (#6) (Argosy to McFadden) Replace 2" Conduit (Argosy to McFadden) ROBINWOOD DR 2070 ATC Controller	EA LF	1	\$ 3,000.00	\$ 12,000.00 \$ 11,000.00 \$ - \$ - \$ - \$ 8,000.00 \$ - \$ - \$ -		
lersection: Intersection/Field System Upgrade	Pullboxes (#6) (Argosy to McFadden) Replace 2" Conduit (Argosy to McFadden) ROBINWOOD DR 2070 ATC Controller Fiber Distribtuion Unit, Splice Enclosure, and SMFO-6 Drop Cable 4 splicing	EA LF	1	\$ 3,000.00 \$ 55.00 \$ 8,000.00 \$ 10,000.00	\$ 12,000.00 \$ 11,000.00 \$ \$ \$ 8,000.00 \$ \$ 5 \$		ATO 200
Itersection: Intersection/Field System Upgrade Communication	Pullboxes (#6) (Argosy to McFadden) Replace 2* Conduit (Argosy to McFadden) ROBINWOOD DR 2070 ATC Controller Fiber Distribtuion Unit, Splice Enclosure, and SMFO-6 Drop Cable + splicing Install 96 SMFO cable (McFadden to Robinwood)	EA LF	1	\$ 3,000.00 \$ 55.00 \$ 8,000.00 \$ 10,000.00	\$ 12,000.00 \$ 11,000.00 \$ \$ \$ 8,000.00 \$ \$ 5 \$	\$8,000	\$70,000
Intersection: Intersection/Field System Upgrade Communication Upgrade	Pullboxes (#6) (Argosy to McFadden) Replace 2* Conduit (Argosy to McFadden) ROBINWOOD DR 2070 ATC Controller Fiber Distribtuion Unit, Splice Enclosure, and SMFO-6 Drop Cable + splicing Install 96 SMFO cable (McFadden to Robinwood) Pullboxes (#6E) (McFadden to Robinwood)	EA LF	1	\$ 3,000.00 \$ 55.00 \$ 8,000.00 \$ 10,000.00 \$ 10.00	\$ 12,000.00 \$ 11,000.00 \$ - \$ - \$ - \$ 8,000.00 \$ - \$ - \$ - \$ - \$ 10,000.00		\$70,000
Iersection: Intersection/Field System Upgrade Communication Upgrade	Pullboxes (#6) (Argosy to McFadden) Replace 2* Conduit (Argosy to McFadden) ROBINWOOD DR 2070 ATC Controller Fiber Distribtuion Unit, Splice Enclosure, and SMFO-6 Drop Cable + splicing Install 96 SMFO cable (McFadden to Robinwood) Pullboxes (#6E) (McFadden to Robinwood)	EA LS LF EA	1 1 2200 1	\$ 3,000.00 \$ 55.00 \$ 8,000.00 \$ 10,000.00 \$ 10.00 \$ 4,000.00	\$ 12,000.00 \$ 11,000.00 \$ \$ \$ 8,000.00 \$ \$ \$ 10,000.00 \$ 22,000.00 \$ 4,000.00	\$8,000	\$70,D00
Intersection: Intersection/Field System Upgrade Communication Upgrade	Pullboxes (#6) (Argosy to McFadden) Replace 2" Conduit (Argosy to McFadden) ROBINWOOD DR 2070 ATC Controller Fiber Distribution Unit, Splice Enclosure, and SMFO-6 Drop Cable + splicing Install 96 SMFO cable (McFadden to Robinwood) Pullboxes (#6E) (McFadden to Robinwood) Pullboxes (#6B) (McFadden to Robinwood)	EA LF EA LS LF EA EA	1 1 2200 1 2200 1 5	\$ 3,000.00 \$ 55.00 \$ 55.00 \$ 10,000.00 \$ 10,000.00 \$ 4,000.00 \$ 3,000.00	\$ 12,000.00 \$ 11,000.00 \$ \$ \$ 8,000.00 \$ \$ \$ 10,000.00 \$ 22,000.00 \$ 4,000.00 \$ 15,000.00	\$8,000	\$70,000
Communication Upgrade	Pullboxes (#6) (Argosy to McFadden) Replace 2* Conduit (Argosy to McFadden) ROBINWOOD DR 2070 ATC Controller Fiber Distribtuion Unit, Splice Enclosure, and SMFO-6 Drop Cable + splicing Install 96 SMFO cable (McFadden to Robinwood) Pullboxes (#6E) (McFadden to Robinwood)	EA LS LF EA	1 1 2200 1	\$ 8,000.00 \$ 55.00 \$ 8,000.00 \$ 10,000.00 \$ 10,000.00 \$ 4,000.00 \$ 3,000.00 \$ 55.00	\$ 12,000.00 \$ 11,000.00 \$ \$ \$ 8,000.00 \$ \$ 10,000.00 \$ 22,000.00 \$ 4,000.00 \$ 15,000.00 \$ 11,000.00	\$8,000	\$70,000
Intersection: Intersection/Field System Upgrade Communication Upgrade	Pullboxes (#6) (Argosy to McFadden) Replace 2" Conduit (Argosy to McFadden) ROBINWOOD DR 2070 ATC Controller Fiber Distribution Unit, Splice Enclosure, and SMFO-6 Drop Cable + splicing Install 96 SMFO cable (McFadden to Robinwood) Pullboxes (#6E) (McFadden to Robinwood) Pullboxes (#6B) (McFadden to Robinwood)	EA LF EA LS LF EA EA	1 1 2200 1 2200 1 5	\$ 8,000.00 \$ 55.00 \$ 8,000.00 \$ 10,000.00 \$ 10.00 \$ 4,000.00 \$ 3,000.00 \$ 55.00	\$ 12,000.00 \$ 11,000.00 \$ \$ \$ 8,000.00 \$ \$ 10,000.00 \$ 22,000.00 \$ 4,000.00 \$ 15,000.00 \$ 15,000.00 \$ 11,000.00	\$8,000	\$70,D00
Intersection: Intersection/Field System Upgrade Communication Upgrade	Pullboxes (#6) (Argosy to McFadden) Replace 2" Conduit (Argosy to McFadden) ROBINWOOD DR 2070 ATC Controller Fiber Distribution Unit, Splice Enclosure, and SMFO-6 Drop Cable + splicing Install 96 SMFO cable (McFadden to Robinwood) Pullboxes (#6E) (McFadden to Robinwood) Pullboxes (#6B) (McFadden to Robinwood)	EA LF EA LS LF EA EA	1 1 2200 1 2200 1 5	\$ 3,000.00 \$ 55.00 \$ 55.00 \$ 10,000.00 \$ 10,000.00 \$ 4,000.00 \$ 3,000.00 \$ 55.00	\$ 12,000.00 \$ 11,000.00 \$ \$ \$ 8,000.00 \$ \$ \$ 10,000.00 \$ 22,000.00 \$ 4,000.00 \$ 11,000.00 \$ 11,000.00 \$ 1,000.00 \$ 1,000.00	\$8,000	\$70,000
Intersection: Intersection/Field System Upgrade Communication Upgrade	Pullboxes (#6) (Argosy to McFadden) Replace 2* Conduit (Argosy to McFadden) ROBINWOOD DR 2070 ATC Controller Fiber Distribituion Unit, Splice Enclosure, and SMFO-6 Drop Cable + splicing Install 96 SMFO cable (McFadden to Robinwood) Pullboxes (#6E) (McFadden to Robinwood) Pullboxes (#6) (McFadden to Robinwood) Replace 2* Conduit (McFadden to Robinwood)	EA LF EA LS LF EA EA	1 1 2200 1 2200 1 5	\$ 3,000.00 \$ 55.00 \$ 55.00 \$ 10,000.00 \$ 10,000.00 \$ 4,000.00 \$ 3,000.00 \$ 55.00	\$ 12,000.00 \$ 11,000.00 \$ \$ \$ 8,000.00 \$ \$ 10,000.00 \$ 22,000.00 \$ 4,000.00 \$ 15,000.00 \$ 15,000.00 \$ 11,000.00	\$8,000	\$70,000
Intersection: Intersection/Field System Upgrade Communication Upgrade election Upgrade ersection:	Pullboxes (#6) (Argosy to McFadden) Replace 2" Conduit (Argosy to McFadden) ROBINWOOD DR 2070 ATC Controller	EA LS LF EA LF LF LF LF LF LF LF LF LF LF LF LF LF	1 1 2200 1 2200 1 5	\$ 8,000.00 \$ 55.00 \$ 8,000.00 \$ 10,000.00 \$ 10,000.00 \$ 4,000.00 \$ 3,000.00 \$ 55.00	\$ 12,000.00 \$ 11,000.00 \$ \$ \$ 8,000.00 \$ \$ \$ 10,000.00 \$ 22,000.00 \$ 4,000.00 \$ 15,000.00 \$ 11,000.00 \$ \$	\$8,000	\$70,000
Intersection: Intersection/Field System Upgrade Communication Upgrade election Upgrade ersection:	Pullboxes (#6) (Argosy to McFadden) Replace 2" Conduit (Argosy to McFadden) ROBINWOOD DR 2070 ATC Controller Pullboxes (#6) (McFadden to Robinwood) Install 96 SMFO cable (McFadden to Robinwood) Pullboxes (#6) (McFadden to Robinwood) Pullboxes (#6) (McFadden to Robinwood) Replace 2" Conduit (McFadden to Robinwood) Replace 2" Conduit (McFadden to Robinwood) Pullboxes (#6) (McFadden to Robinwood)	EA LS LF EA	1 1 2200 1 5 200	\$ 8,000.00 \$ 55.00 \$ 55.00 \$ 10,000.00 \$ 10,000.00 \$ 4,000.00 \$ 3,000.00 \$ 55.00 \$ 8,000.00	\$ 12,000.00 \$ 11,000.00 \$ \$ \$ 8,000.00 \$ \$ 10,000.00 \$ 22,000.00 \$ 4,000.00 \$ 11,000.00 \$ 11,000.00 \$ 11,000.00 \$ 15,000.00 \$	\$8,000	\$70,000
tersection: Intersection/Field System Upgrade Communication Upgrade election Upgrade ersection: Intersection/Field	Pullboxes (#6) (Argosy to McFadden) Replace 2" Conduit (Argosy to McFadden) ROBINWOOD DR 2070 ATC Controller	EA LS LF EA LF LF LF LF LF LF LF LF LF LF LF LF LF	1 1 2200 1 2200 1 5	\$ 8,000.00 \$ 55.00 \$ 55.00 \$ 10,000.00 \$ 10,000.00 \$ 10,000 \$ 3,000.00 \$ 55.00 \$ 8,000.00 \$ 12,000.00	\$ 12,000.00 \$ 11,000.00 \$ - \$ - \$ 8,000.00 \$ - \$ - \$ 10,000.00 \$ 22,000.00 \$ 4,000.00 \$ 11,000.00 \$ 11,000.00 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ 15,000.00 \$ 11,000.00 \$	\$8,000 \$62,000 \$6	\$70,D00
tersection: Intersection/Field System Upgrade Communication Upgrade election Upgrade ersection: Intersection/Field	Pullboxes (#6) (Argosy to McFadden) Replace 2" Conduit (Argosy to McFadden) ROBINWOOD DR 2070 ATC Controller Pullboxes (#6) (McFadden to Robinwood) Install 96 SMFO cable (McFadden to Robinwood) Pullboxes (#6) (McFadden to Robinwood) Pullboxes (#6) (McFadden to Robinwood) Replace 2" Conduit (McFadden to Robinwood) Replace 2" Conduit (McFadden to Robinwood) Pullboxes (#6) (McFadden to Robinwood)	EA LS LF EA	1 1 2200 1 5 200	\$ 8,000.00 \$ 55.00 \$ 55.00 \$ 10,000.00 \$ 10,000.00 \$ 4,000.00 \$ 3,000.00 \$ 55.00 \$ 55.00	\$ 12,000.00 \$ 11,000.00 \$ - \$ - \$ 8,000.00 \$ - \$ 10,000.00 \$ 22,000.00 \$ 4,000.00 \$ 16,000.00 \$ 11,000.00 \$ - \$ - \$ - \$ - \$ 1,000.00 \$ 11,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00	\$8,000	\$70,000
Intersection: Intersection/Field System Upgrade Communication Upgrade Detection Lipgrade Detection: Intersection/Field System Upgrade	Pullboxes (#6) (Argosy to McFadden) Replace 2" Conduit (Argosy to McFadden) ROBINWOOD DR 2070 ATC Controller	EA LS LF EA	1 1 2200 1 5 200	\$ 8,000.00 \$ 55.00 \$ 55.00 \$ 10,000.00 \$ 10,000.00 \$ 4,000.00 \$ 3,000.00 \$ 55.00 \$ 55.00	\$ 12,000.00 \$ 11,000.00 \$ - \$ - \$ 8,000.00 \$ - \$ - \$ 10,000.00 \$ 22,000.00 \$ 4,000.00 \$ 11,000.00 \$ 11,000.00 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ 15,000.00 \$ 11,000.00 \$	\$8,000 \$62,000 \$6	\$70,000
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Intersection: Intersection/Field System Upgrade Communication Upgrade Detection Upgrade Detection: Intersection: Intersection/Field System Upgrade	Pullboxes (#6) (Argosy to McFadden) Replace 2* Conduit (Argosy to McFadden) ROBINWOOD DR 2070 ATC Controller Fiber Distribution Unit, Splice Enclosure, and SMFO-6 Drop Cable + splicing Install 96 SMFO cable (McFadden to Robinwood) Pullboxes (#6E) (McFadden to Robinwood) Pullboxes (#6E) (McFadden to Robinwood) Replace 2* Conduit (McFadden to Robinwood) EDINGER AVE 2070 ATC Controller CCTV CAMERA (including license) Install 96 SMFO cable Into Hub Cabinet (Hub Installed with Edinger TSSP Prolect)	EA LS LF EA LF EA LF LF LS LF LF LF LF LF LF LF LF LF LF LF LS LS LS LS	1 1 2200 1 5 200	\$ 8,000.00 \$ 55.00 \$ 10,000.00 \$ 10,000.00 \$ 4,000.00 \$ 3,000.00 \$ 3,000.00 \$ 55.00 \$ 12,000.00	\$ 12,000.00 \$ 11,000.00 \$ - \$ - \$ 8,000.00 \$ - \$ 10,000.00 \$ 22,000.00 \$ 4,000.00 \$ 16,000.00 \$ 11,000.00 \$ - \$ - \$ - \$ - \$ 1,000.00 \$ 11,000.00 \$ 12,000.00 \$ 12,000.00 \$ 12,000.00	\$8,000 \$62,000 \$6	
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