COOPERATIVE AGREEMENT BY AND BETWEEN THE CITIES OF ANAHEIM, BREA, FULLERTON, AND ORANGE FOR THE STATE COLLEGE BOULEVARD / THE CITY DRIVE REGIONAL TRAFFIC SIGNAL SYNCHRONIZATION PROJECT

This Cooperative Agreement ("Agreement") is made and entered into this _____ day of _____ _____, 2026, by and between the CITY OF ANAHEIM, a municipal corporation ("ANAHEIM"), the CITY OF BREA, a municipal corporation ("BREA"), the CITY OF FULLERTON, a municipal corporation ("FULLERTON"), and the CITY OF ORANGE, a municipal corporation ("ORANGE").

RECITALS:

A. Anaheim, with cooperation from Brea, Fullerton, and Orange, applied for a grant from the Orange County Transportation Authority ("OCTA") as part of Renewed Measure M2 Regional Traffic Signal Synchronization Program ("RTSSP") (Project P), aimed to coordinate traffic signals across multiple jurisdictions to enhance countywide traffic flow and reduce congestion.

B. The State College Boulevard/ The City Drive Regional Traffic Signal Synchronization Project was selected by OCTA as one of the RTSSP Projects to be funded in OCTA Fiscal Year 2025-2026. The project will include timing implementation and improvements at traffic signals along State College Boulevard/The City Drive, from Cliffwood Avenue in Brea to Garden Grove Bl in City of Orange, 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 $4,702,863.50. 80% ($3,762,290.80) is funded by the OCTA Regional Traffic Signal Synchronization Program and 20% ($940,572.70) is local agencies matching funds. The breakdown is shown in Exhibit A attached hereto and incorporated herein by this reference.

D. Anaheim, Brea, Fullerton, and Orange 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 Anaheim have entered into a Master Funding Agreement "Cooperative Agreement No. C-1-2754" defining the terms and conditions for approved Measure M2 projects that will be implemented by Anaheim.

F. Anaheim agrees to serve as the lead agency to oversee the design and implementation of the project.

G. Anaheim, Brea, Fullerton, and Orange desire to enter into this Cooperative Agreement to demonstrate their commitment to implement the project and improve inter-jurisdiction traffic signal synchronization on State College Boulevard/The City Drive.

H. This cooperative agreement defines the specific terms, conditions and funding responsibilities between Anaheim, Brea, Fullerton, and Orange for the implementation of the project.

NOW, THEREFORE, it is mutually understood and agreed by and between ANAHEIM, BREA, FULLERTON, and ORANGE as follows:

I. SCOPE:

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 agree 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 RESPONSIBILITIES:

Anaheim, Brea, Fullerton, and Orange 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.

h. 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 ANAHEIM:

Anaheim agrees to the following responsibilities:

a. Anaheim shall serve as lead agency for design, construction and construction management of the project, 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. Anaheim shall be responsible for completing the project in accordance with the funding guidelines and any and all other OCTA requirements related to these funding programs. Anaheim shall maintain coordination with all participating agencies throughout the duration of the project.

c. Anaheim shall provide staff, consultants, and contractors deemed necessary and appropriate to manage, administer, coordinate, and oversee timing implementation, engineering design, bid and award, and construction management of the project.

d. Anaheim shall enter into an agreement with a qualified consultant and contractor to assist in the completion and monitoring of the project.

e. Anaheim shall enter into any required Cooperative Agreement with Caltrans regarding Caltrans Improvements in cities; to comply with all the terms and conditions of said Cooperative Agreement; to pay invoices for such Caltrans Improvements as required by Caltrans; and to invoice participating agencies in a timely manner with detailed documentation of said Caltrans Improvements

f. Anaheim shall coordinate the work effort of this Project, provide the day-to-day management of the consultant and manage all consultant administration and contracting. Anaheim shall review the consultant's invoices and pay them accordingly after ensuring that the work has been adequately performed by the consultant.

g. Anaheim 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.

h. Upon issuance of a Notice to Proceed to the Consultant, Anaheim can issue invoices to Brea, Fullerton, and Orange for up to 80% of the cash match amount identified in Exhibit A. The remaining cash match amount will be invoiced after completion of the Primary Implementation Phase of the project.

i. Anaheim 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 BREA:

Brea agrees to the following responsibilities:

a. Brea 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. Brea shall provide Construction Inspection on all improvements within its jurisdiction. No additional compensation from the project is provided for providing inspection services.

c. Brea shall waive all costs and fees related to any and all permits, if such permits are required to perform any project related work within its jurisdiction.

V. RESPONSIBILITIES OF FULLERTON:

Fullerton agrees to the following responsibilities:

a. Fullerton 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. Fullerton shall provide Construction Inspection on all improvements within its jurisdiction. No additional compensation from the project is provided for providing inspection services.

c. Fullerton shall waive all costs and fees related to any and all permits, if such permits are required to perform any project related work within its jurisdiction.

VI. RESPONSIBILITIES OF ORANGE:

Orange agrees to the following responsibilities:

a. Orange 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. Orange shall provide Construction Inspection on all improvements within its jurisdiction. No additional compensation from the project is provided for providing inspection services.

c. Orange shall waive all costs and fees related to any and all permits, if such permits are required to perform any project related work within its jurisdiction.

VII. 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 ANAHEIM, BREA, FULLERTON, and ORANGE 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 conditions(s) of this Agreement. The above referenced Recitals are true and correct and are incorporated by reference herein.

b. Any modification of this Agreement shall only be by amendment upon written mutual consent of all cities. All modifications, amendments, changes and revisions 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 nonperforming party's obligation 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.

VIII. 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 that 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.

IX. ADDITIONAL PROVISIONS:

a. Term of Agreement: This Agreement shall commence on the date first written above and continue in full force and effect until December 31, 2032. This Agreement may be extended at the mutual consent of all parties in writing.

b. ANAHEIM, BREA, FULLERTON, and ORANGE 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 an unforeseeable cause beyond its control, including, but not limited to: any incidence 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 nonperformance 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 of 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 right to consent to such subsequent assignment.

i. 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.

l. Notices: Any notices, requests, or demands made between the parties pursuant to this Agreement are to be directed as follows:

City of Anaheim
Public Works Department – Traffic Management Center
201 S. Anaheim Blvd, Suite 502
Anaheim, CA 92805
Jane Keely
Principal Traffic Engineer
714-765-5202
jkeely@anaheim.net

City of Brea
Public Works Department
1 Civic Center Circle
Brea, CA 92821
Ryan Chapman
City Engineer
714-990-7763
ryanch@cityofbrea.gov

City of Fullerton
Public Works Department
303 W Commonwealth Avenue
Fullerton, CA 92832
Michael Plotnik
City Traffic Engineer
714-738-6864
michael.plotnik@cityoffullerton.com

City of Orange
Public Works Department
300 E. Chapman Avenue
Orange, CA 92866
Gabrielle Hayes
Principal Civil Engineer
714-744-5561
ghayes@cityoforange.org

X. DELAGATED AUTHORITY:

The actions required to be taken by the cities in the implementation of this Agreement are delegated to its City Manager or equivalent designee.

[SIGNATURES ON SUBSEQUENT PAGES]

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

CITY OF ANAHEIM:

_____
Jim Vanderpool
City Manager

ATTEST:

_____
Theresa Bass
City Clerk

APPROVED AS TO FORM:
ROBERT FABELA, CITY ATTORNEY

_____
Bryn M. Morley
Deputy City Attorney
157425

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

CITY OF BREA:

_____
Kristin Griffith
City Manager

ATTEST:

_____
Victoria Popescu
City Clerk

APPROVED AS TO FORM:

_____
Terence Boga
City Attorney

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

CITY OF FULLERTON:

_____
Eddie Manfro
Interim City Manager

ATTEST:

_____
Lucinda Williams
City Clerk

APPROVED AS TO FORM:

_____
Richard D. Jones
City Attorney

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

CITY OF ORANGE:

_____
Jarad L. Hildenbrand
City Manager

ATTEST:

_____
Pamela Coleman
City Clerk

APPROVED AS TO FORM:

_____
Nathalie Adourian √
City Attorney

EXHIBIT A

State College Boulevard / The City Drive Corridor Regional Traffic Signal Synchronization Program (RTSSP)

Project Funds Breakdown

Agency	Project Cost	Project Cost	M2 Grant (80%)	City Match* (20%)
Brea	**PI**	$ 376,442.50	$ 301,154.00	$ 75,288.50
	O&M	$ 63,800.00	$ 51,040.00	$ 12,760.00
	City Total	$ 440,242.50	$ 352,194.00	$ 88,048.50
Fullerton	**PI**	$ 937,675.00	$ 750,140.00	$ 187,535.00
	O&M	$ 75,400.00	$ 60,320.00	$ 15,080.00
	City Total	$ 1,013,075.00	$ 810,460.00	$ 202,615.00
Anaheim	**PI**	$ 2,188,040.00	$ 1,750,432.00	$ 437,608.00
	O&M	$ 133,400.00	$ 106,720.00	$ 26,680.00
	City Total	$ 2,321,440.00	$ 1,857,152.00	$ 464,288.00
Orange	**PI**	$ 864,306.00	$ 691,444.80	$ 172,861.20
	O&M	$ 63,800.00	$ 51,040.00	$ 12,760.00
	City Total	$ 928,106.00	$ 742,484.80	$ 185,621.20
	TOTAL	**$ 4,702,863.50**	**$ 3,762,290.80**	**$ 940,572.70**

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

EXHIBIT B

State College Boulevard / The City Drive Corridor Regional Traffic Signal Synchronization Program (RTSSP)

Project Application

FY 2025 Call for Projects

Regional Traffic Signal Synchronization Program

Project P

Supplemental Application

State College Boulevard / The City Drive Regional Traffic Signal Synchronization Program Project

10/24/2024
Application Deadline

Project Overview

Length of Corridor (mi):	11.3
Number of signals:	58
Total Project Cost:	$4,702,863.50
M2 funds requested:	$3,762,290.80
Total Match:	$940,572.70
Cash Match:	*$940,572.70*
In-kind Match:	*$0.00*
Participating Agencies:	Anaheim
	Brea
	Fullerton
	Orange
	Caltrans

Applicant Agency: City of Anaheim

Contact Name: John Thai

Contact Number: 714-765-5202

Contact Email: jthai@anaheim.net

Project P Regional Traffic Signal Synchronization Program
Table of Contents

Project P Supplemental Application Checklist	Page
RTSSP Online Application – submitted through OCFundTracker	
a. Transportation Significance	
b. Economic Effectiveness	
c. Project Characteristics	Online
d. Project Scale	
e. Number of Jurisdictions	
f. Current Project Status	
g. Funding Match	
h. Cabinet photos, equipment specifications, as-built drawings, cabinet drawings, etc.	Online only
Section 1: Key Technical Information	
a. Name of Project Corridor/Grid/Route	1
b. Project Limits	1
c. Project Length	1
d. Number of Signalized Intersections Along Corridor	1
e. Participating Agencies/Traffic Forum Members	1
f. Lead Agency	1
g. Designation of the corridor to synchronize	1
h. Project Start and End Date	1
i. Previous funding	1
j. Contact Information	1
k. Signalized intersections that are part of the project	2
l. Offset signalized intersections that are part of the project	2
m. Project Map Depicting the Project Limits	3a
Section 2: Regional Significance	4
Section 3: Acknowledgement of Required Tasks	5
Section 4: Funding Needs/Costs for Proposed Project by Task	
a. Summary of Project Cost	8
b. Summary of Cost by Agency	9
c. Summary of Intersection Improvement Costs	11
Section 5: Detailed Local Match Commitment	13
Section 6: Project Schedule by Task	
a. Project Start and End Dates	15
b. Project Schedule by Task	15
Appendices	
A. Calculations and Estimated Points	16
B. Agency Improvement Calculations	19
C. Vehicle Miles Traveled (VMT)	28
D. Agency Resolutions and Letters of Support	29
E. Additional Information (Optional)	

SECTION 1: KEY TECHNICAL INFORMATION

a. Project Corridor
State College Boulevard / The City Drive Regional Traffic Signal Synchronization Program Project

b. Project Limits:
from **Cliffwood Ave** to **Garden Grove Bl**

c. Project Length (*miles*):
11.32

d. Number of signalized intersections along the corridor (include all Caltrans intersections):
58 number of signals on project corridor(s) **0** number of offset signals included in this project

e. Participating agencies / Traffic Forum Members (*including applicant agency*):

☐ Aliso Viejo	☐ Cypress	☐ La Habra	☐ Los Alamitos	☐ San Juan Capistrano
☑ Anaheim	☐ Dana Point	☐ La Palma	☐ Mission Viejo	☐ Santa Ana
☑ Brea	☐ Fountain Valley	☐ Laguna Beach	☐ Newport Beach	☐ Seal Beach
☐ Buena Park	☑ Fullerton	☐ Laguna Hills	☑ Orange	☐ Stanton
☑ Caltrans	☐ Garden Grove	☐ Laguna Niguel	☐ Placentia	☐ Tustin
☐ Costa Mesa	☐ Huntington Beach	☐ Laguna Woods	☐ Rancho Santa Margarita	☐ Villa Park
☐ County of Orange	☐ Irvine	☐ Lake Forest	☐ San Clemente	☐ Westminster
				☐ Yorba Linda

f. Lead Agency ☑ **Anaheim**

g. Is this project on either the Signal Synchronization Network or Master Plan of Arterial Highways?

◉ Yes ○ No

h. Project Start Date: **October 1, 2025** Project End Date: **December 31, 2029**

i. Project Status and Baseline Participation

None

Yes, all applicant agencies and project signals are participating in the Countywide Baseline Project

j. Contact Information (Include name, title, agency, phone, email, and address)

John Thai, PE, Principal Engineer City of Anaheim - Traffic Management Center 201 S Anaheim Bl Suite #502 Anaheim, CA 92805 jthai@anaheim.net 714-765-5202	Ryan Chapman, City Engineer City of Brea - Brea Civic & Cultural Center 1 Civic Center Circle Brea, CA 92821 ryanch@ci.brea.ca.us (714) 990-7763
Michael Plotnik, PE,TE, City Traffic Engineer City of Fullerton 303 W Commonwealth Ave Fullerton, CA 92832 Michael.Plotnik@cityoffullerton.com 714-738-6864	Gabrielle Hayes, PE, Principal Civil Engineer City of Orange-Public Works (Traffic Engineering) 300 E Chapman Ave Orange, CA 92866 ghayes@cityoforange.org 714-744-5561

k. Signalized intersections that are part of the project:

	Main Corridor	Cross Street
1	State College Bl	Cliffwood Ave
2	State College Bl	Balsa Ave
3	State College Bl	Lambert Rd
4	State College Bl	Avocado St / Tracks
5	State College Bl	Corporate
6	State College Bl	Birch St
7	State College Bl	Brea Mall North
8	State College Bl	Brea Mall Center
9	State College Bl	Brea Mall South
10	State College Bl	Imperial Hwy*
11	State College Bl	Elm St
12	State College Bl	Rolling Hills Dr
13	State College Bl	Delicata Dr
14	State College Bl	Bastanchury Rd
15	State College Bl	Palmetto Terrace/Mountain Ridge Dr
16	State College Bl	Yorbal Linda Bl
17	State College Bl	Dorothy Ln/Campus Dr
18	State College Bl	Arts Dr
19	State College Bl	Nutwood Ave
20	State College Bl	Chapman Ave (North)
21	State College Bl	Commonwealth Ave
22	State College Bl	Walnut Ave (Fender Ave)
23	State College Bl	Valencia Dr
24	State College Bl	Orangethorpe Ave
25	State College Bl	Via Burton St
26	State College Bl	SR-91WB Off-Ramp*
27	State College Bl	SR-91 EB Off-Ramp*
28	State College Bl	Placentia Ave/Romneya Dr
29	State College Bl	Shopping Center (McDonald's)
30	State College Bl	La Palma Ave
31	State College Bl	Underhill Ave
32	State College Bl	Lincoln Ave
33	State College Bl	Shopping Center (Anaheim Town Square)
34	State College Bl	Santa Ana St
35	State College Bl	South St
36	State College Bl	Vermont Ave
37	State College Bl	Wagner Ave
38	State College Bl	Ball Rd
39	State College Bl	Winston Rd
40	State College Bl	Cerritos Ave
41	State College Bl	Howell Ave
42	State College Bl	Railroad Crossing
43	State College Bl	Katella Ave
44	State College Bl	Gateway
45	State College Bl	Gene Autry Wy
46	State College Bl	Artisan Ct
47	State College Bl	Orangewood Ave
48	State College Bl	Orange Center Dr*
49	State College Bl	I-5 NB Off-Ramp*
50	The City Dr	I-5 SB Off-Ramp*
51	The City Dr	Chapman Ave
52	The City Dr	Medical Center
53	The City Dr	Dawn Way
54	The City Dr	Steiner Way/Style St
55	The City Dr	Outlet Dr
56	The City Dr	Metropolitan Dr
57	The City Dr	SR-22 EB Off/On-Ramp*
58	The City Dr	Garden Grove Bl

Legend

- Brea
- Fullerton
- Anaheim
- Orange

* Caltrans

l. Offset signalized intersections that are part of the project. *Baseline participants only need to list signals that are requesting improvements*:

	Main Street	Cross Street		Main Street	Cross Street
59			74		
60			75		
61			76		
62			77		
63			78		
64			79		
65			80		
66			81		
67			82		
68			83		
69			84		
70			85		
71			86		
72			87		
73			88		

m. Project Map Depicting the Project Limits and Offset Signals

Map should clearly show project limits, operating agencies, and local juridiction boundaries. Do not use satellite maps as they are hard to read and determine location. Map should also show all offset signals (MPAH only) along corridor/grid/route. Please distinguish the offset signals (MPAH only) that will be included/excluded.Feel free to use multiple maps if necessary.

SEE ABOVE RIGHT

City of Brea

City of Fullerton

City of Anaheim

City of Orange

Caltrans

N

SEE BELOW LEFT

SEE NEXT PAGE

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SECTION 2: REGIONAL SIGNIFICANCE

Explain why this project is regionally significant:

State College Boulevard is a north-south corridor identified in OCTA's MPAH. This corridor parallels the SR-57 freeway and is used to bypass major traffic congestion on the freeway or as a detour route if there is a major incident along the freeway. It is approximately 11.3 miles crossing four cities: Brea, Fullerton, Anaheim, and Orange and includes 58 signalized intersections. Traffic volume along this corridor ranges up to 25,000 vehicles per day. Land use varies along the corridor with major generators such as the Brea Mall, Regional Parks, and CSU Fullerton in the northern section and the Angel Stadium and the Outlets at Orange in the southern section of the corridor.

Through the City of Brea, State College Boulevard parallels the CA-57 freeway and provides primary access to the Brea Mall a regional shopping destination. It also provides connectivity between Central Avenue and Brea Boulevard/Brea Canyon Road to the CA-57 freeway ramps at Lambert Road and Imperial Highway. When there is construction or a major incident on the CA-57, State College Boulevard becomes the primary regional detour connecting Orange County to Los Angeles County through the foothills. Additionally, State College Boulevard is a key multi-modal transportation corridor providing Class II bike lanes that connect The Tracks, a regionally significant dedicated bike and pedestrian trail facility, to various key bike routes and pedestrian destinations. State College Boulevard also provides primary access to a Park-n-ride facility at the CA-57 and Lambert interchange and the Brea Mall Transit Center, which is a major destination and transfer point served by multiple transit lines from all three major transit providers in the region. State College Boulevard also provides primary access to Craig Regional Park providing various passive and active recreation opportunities and the Fullerton Dam and Reservoir. State College Boulevard also provides a key transportation alternative to CA-57 connecting neighborhoods and businesses in the region to California State University, Fullerton to the south.

Within the City of Fullerton, State College Boulevard is classified as a major arterial highway. The 57 freeway is located about a half mile east of this thoroughfare where drivers can easily access Cal State Fullerton or a plethora of shopping centers, businesses, and dining locations. Along this corridor, there are thirteen (13) intersections under the jurisdiction of the City of Fullerton and is connected from the north to Brea, where mostly residential housing can be found and from the south to Anaheim, where there is more commercial and industry. As such, this is a very heavily utilized corridor by all modes of transportation which will benefit from an updated synchronized network to help alleviate the congestion from daily demand.

In the City of Anaheim, State College Boulevard is classified as a major arterial except for the section between La Palma Ave and Ball Rd, where it is classified as a primary arterial. State College is bordered by the SR-91 freeway to the north, SR-22 freeway to the south, SR-57 to the east, and I-5 to the west, which makes it a main alternate route when the freeways are congested. Additionally, State College Boulevard is used by many visitors travelling to the Angel Stadium, the Grove and Honda Center. By upgrading the communication and signal equipment along this corridor, the City will be able to manage traffic more efficiently and provide better service to commuters, visitors, and residents.

Within the City of Orange, The City Drive is one of the busiest principal arterials and the backbone of several activity centers in west Orange. The southern limit of this corridor is surrounded with regionally significant land uses including the Outlets of Orange, University of California Irvine (UCI) Medical Center, various business centers, civic centers, and high-density housing. Additionally, The City Drive connects two major freeways within Orange County in less than a mile: State Route 22 and Interstate 5. This area sees some of the highest traffic volumes and would benefit from a well-synchronized network to meet the directional and oversaturated traffic demand.

SECTION 3: ACKNOWLEDGEMENT OF REQUIRED TASKS

a. **PROJECT TASKS**

☑ **By checking this box, the Applicant Agency, on behalf of all the participating agencies, agree to the following tasks:**

Primary Implementation (PI) Phase, lasting approximately one year shall include the following:

Task 1: Project Management - PI Phase

This task is ongoing throughout the duration of the PI Phase of the project. It includes day-to-day project management, such as meetings, progress reports, tracking of schedules, tracking of cost by agency, invoicing, and overall administration of the PROJECT.

The following list is a minimum of what is required of this task:

- *A running record of project cost broken down by Participating Agency shall be part of this task. This information will be used by the Lead Agency to bill Participating Agencies for their respective project match.*
- *A running record of all scope changes and/or any deviations from the final approved application. This information will be used by the Lead Agency to request for Scope Changes at the Semi-Annual Review (SAR).*

Task 2: Data Collection and Field Review

This task shall include collecting seven-day, 24-hour machine counts, including vehicle and bike classifications, along each 1-mile segment of the corridor(s). The project shall also produce weekday and weekend peak period intersection turning movement (ITM) counts at every signalized intersection, including pedestrian and bicycle counts. ITM counts shall be conducted for two hours of each weekday peak period (AM, mid-day, and PM) and a single four-hour Saturday mid-day peak period. All counts shall be summarized in Microsoft Excel format. All data shall adhere to the CTFP Guidelines for data compatibility.

Data collection also includes field review of before and after conditions. The floating car method shall be utilized with software and GPS for the 'Before' Study to fine-tune the corridor operation and verify integrity of system intersection clocks. Synchronized Video shall be used to compare actual conditions to anticipated conditions dictated by the time-space diagram so that any anomalies may be corrected prior to the 'After' studies task.

Field review conducted as part of this task will document the existing conditions for all signal timing, infrastructure, and system improvements on the project. This includes pre-construction pictures for comparison during the post-construction walkthrough, should there be any questions or discrepancies noted by any parties. Data Collection and Field Review Memos shall be provided to all participating agencies.

☑ ***Check this box to indicate all agencies on this application will opt out of the data collection portion of Task 3 due to participation in the Countywide Baseline Project. A Before/After study is still required. A memorandum shall be submitted to indicate completion of this task.***

Task 3: System Design and Construction

The Lead Agency will hire a consultant(s), licensed contractor(s), and/or use city staff, or extension of staff, to design, procure, install, construct, and implement all desired components of the project as described in this application in accordance with the CTFP Guidelines.

All work and equipment supplied for the project shall comply and be done in accordance with the latest standards and provisions of each Participating Agency or latest approved California Department of Transportation (Caltrans) Standard Plans and Standard Specifications.

SECTION 3: ACKNOWLEDGEMENT OF REQUIRED TASKS

As-built plans shall be provided to match the improvements. This task is not complete until all participating agencies approve the improvements implemented in their jurisdiction.

Task 4: Signal Timing Optimization and Implementation

Synchronization will be inter-jurisdictional in nature. All existing traffic patterns, flows, and conditions will be taken into account. At a minimum, synchronized timing plans will be developed for a weekday AM, Mid-day, PM, and a Weekend peak period. Special generators such as schools and businesses along with cross street traffic will be considered as part of the project. Timing plans that will be developed will assist traffic in getting to its destination without regard to physical or jurisdictional boundaries.

The following list is a minimum of what is required of this task:

- *A review of the basic timing parameters*
- *Concept of Operations documenting the recommended coordination strategies (e.g. segments, cycle lengths, etc.) based on existing data collection and simulations*
- *Existing and Optimized simulation networks in Synchro (version 10) that is also shared with OCTA using the OCTA designated ID numbers*
- *Implementation and fine-tuning of proposed timing plans*

This task will not be complete until all participating agencies approve the new timing plans

☑ ***Check this box to indicate all agencies on this application (excluding Caltrans) will opt out of the Signal Timing Optimization and Implementation task (Task 4) due to participation in the Countywide Baseline Project. The Final PI Report shall still include a section on timing optimization and implementation from the Baseline Project.Task 4 for Caltrans signals is the responsibility of the applicant.***

Task 5: Final PI Report

A Final PI Report, with an executive summary, shall provide complete documentation of the project, including, but not limited to:

- *Project scope, objectives, locations, findings, and recommendations*
- *Data collected: counts, travel time studies, and project benefits achieved in terms of fuel savings, travel time, and other measurable parameters*
- *For each intersection: lane configurations, signal phasing, turning movement data, and cycle lengths for existing and proposed timings for all peak periods*
- *All work performed for system construction and signal timing optimization*
- *Implementation schedule and improvements accomplished, including dates*
- *Procedures for continuing maintenance, surveillance, and evaluation of the coordinated signal system*

The report shall document all planned and programmed improvements on the study corridor as well as recommendations based on PI tasks for further infrastructure improvements that would likely improve the corridor signal coordination project results. The report shall be completed in accordance with the current CTFP Guidelines.

Finally, the report shall provide recommendations with cost and benefit estimates for future improvements to traffic signal infrastructure (signal controllers, vehicle detection, communications, etc.), intersection capacity (appropriate signal phasing, lane geometrics, and alleviation of physical bottlenecks that curtail arterial capacity), and traffic management strategies. These proposed improvements should be useful in determining future enhancements to the corridor.

A Project Summary Sheet, one sheet front and back, that describes the project and improvements gained shall be provided to OCTA. This sheet will be used by OCTA and Participating Agencies to present to the Board and elected officials.

SECTION 3: ACKNOWLEDGEMENT OF REQUIRED TASKS

☑ ***By checking this box, the following additional PI task(s) and/or exceptions will be made:***
Each agency is responsible for Task 4 for Caltrans intersections within their city. Each agency will coordinate with Caltrans as needed to develop and implement signal timing.

ONGOING OPERATIONS AND MAINTENANCE (O&M) PHASE, lasting approximately two (2) years, shall include the following:

Task 6: Project Management - O&M Phase
This task includes day-to-day project management, such as meetings, tracking of schedules, invoicing, and overall administration of the project. This task shall continue in full force as specified in the Primary Implementation Phase.

Task 7: Continuing Support
During this 24-month period, the signal timing along the corridor/route/grid shall be observed and fine-tuned. This task shall also include the monitoring, maintaining, and repair of detection and communication implemented as part of this project. Monthly drives shall be conducted along the length of the project during all designated corridor synchronization timing plan hours of operation in order to verify that the synchronization timing is working as designed and complete any necessary adjustments. This is followed by a monthly memorandum summarizing the status and trends of the corridor based on the runs conducted. Trip logs for the month shall be provided to the Participating Agencies. The memorandum shall include all additional tasks requested and completed during that month. Performance metrics comparisons from ATSPM, where available, shall also be included in the

Task 8: Final O&M Report
At the end of the O&M Phase, a Final O&M Report documenting the Ongoing Operations and Maintenance efforts and procedures for continuing maintenance shall be prepared. At the minimum, the memorandum shall include when travel runs were conducted and issues and solutions throughout the phase. The memorandum shall document all planned and programmed improvements on the study corridor as well as recommendations for further infrastructure improvements that would likely improve the corridor signal coordination project results.

☐ ***By checking this box, the following additional O&M task(s) and/or exceptions will be made:***
<Insert Text>

b. **ENVIRONMENTAL CLEARANCE AND OTHER PERMITS**

☑ By checking this box, the Applicant Agency, on behalf of all the participating agencies, agree to obtain environmental clearance and other permits (if needed) for this project

c. **ACKNOWLEDGMENT OF MEETING CTFP GUIDELINES**

☑ By checking this box, the Applicant Agency, on behalf of all the participating agencies, certify that all current CTFP guidelines were met for this project.

SECTION 4: FUNDING NEEDS / COSTS FOR PROPOSED PROJECT BY TASK

a. Summary of Project Cost

Project Tasks	Total Cost
Task 1: Project Management - PI Phase	$ 145,000.00
Task 2: Data Collection	$ 58,000.00
Task 3: System Design and Construction	$ 4,070,463.50
Task 4: Signal Timing Optimization and Implementation	$ 35,000.00
Task 5: Project Report	$ 58,000.00
Task 6: Project Management - O&M Phase	$ 29,000.00
Task 7: Continuing Support	$ 290,000.00
Task 8: Final Technical Memorandum	$ 17,400.00
Total Project Cost:	**$ 4,702,863.50**

Match Commitment: **20%** *(minimum 20%)*

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

	Project Total
Total M2 Request:	*$ 3,762,290.80*
Total Agency Match:	*$ 940,572.70*
Total Project Cost:	**$ 4,702,863.50**

	PI Total
Total M2 Request for PI Phase:	*$ 3,493,170.80*
Total Agency Match for PI Phase:	*$ 873,292.70*
Total PI Cost:	**$ 4,366,463.50**

	O&M Total
Total M2 Request for O&M Phase:	*$ 269,120.00*
Total Agency Match for O&M Phase:	*$ 67,280.00*
Total O&M Cost:	**$ 336,400.00**

SECTION 4: FUNDING NEEDS / COSTS FOR PROPOSED PROJECT BY TASK

b. Summary of Cost by Agency

Brea

	Agency	Caltrans	Offset	Total
Number of Signals:	10	1	0	11

Project Tasks (Brea)	Cost / Int	Total Cost
Task 1: Project Management - PI Phase	$ 2,500.00	$ 27,500.00
Task 2: Data Collection	$ 1,000.00	$ 11,000.00
Task 3: System Design and Construction	-	$ 321,942.50
Task 4: Signal Timing Optimization and Implementation	$ 5,000.00	$ 5,000.00
Task 5: Project Report	$ 1,000.00	$ 11,000.00
Task 6: Project Management - O&M Phase	$ 500.00	$ 5,500.00
Task 7: Continuing Support	$ 5,000.00	$ 55,000.00
Task 8: Final Technical Memorandum	$ 300.00	$ 3,300.00

	M2 Requested	Match	Total Cost
PI	**$ 301,154.00**	**$ 75,288.50**	**$ 376,442.50**
O&M	**$ 51,040.00**	**$ 12,760.00**	**$ 63,800.00**

Fullerton

	Agency	Caltrans	Offset	Total
Number of Signals:	13	0	0	13

Project Tasks (Fullerton)	Cost / Int	Total Cost
Task 1: Project Management - PI Phase	$ 2,500.00	$ 32,500.00
Task 2: Data Collection	$ 1,000.00	$ 13,000.00
Task 3: System Design and Construction	-	$ 879,175.00
Task 4: Signal Timing Optimization and Implementation	$ 5,000.00	$ -
Task 5: Project Report	$ 1,000.00	$ 13,000.00
Task 6: Project Management - O&M Phase	$ 500.00	$ 6,500.00
Task 7: Continuing Support	$ 5,000.00	$ 65,000.00
Task 8: Final Technical Memorandum	$ 300.00	$ 3,900.00

	M2 Requested	Match	Total Cost
PI	**$ 750,140.00**	**$ 187,535.00**	**$ 937,675.00**
O&M	**$ 60,320.00**	**$ 15,080.00**	**$ 75,400.00**

Anaheim

	Agency	Caltrans	Offset	Total
Number of Signals:	21	2	0	23

Project Tasks (Anaheim)	Cost / Int	Total Cost
Task 1: Project Management - PI Phase	$ 2,500.00	$ 57,500.00
Task 2: Data Collection	$ 1,000.00	$ 23,000.00
Task 3: System Design and Construction	-	$ 2,074,540.00
Task 4: Signal Timing Optimization and Implementation	$ 5,000.00	$ 10,000.00
Task 5: Project Report	$ 1,000.00	$ 23,000.00
Task 6: Project Management - O&M Phase	$ 500.00	$ 11,500.00
Task 7: Continuing Support	$ 5,000.00	$ 115,000.00
Task 8: Final Technical Memorandum	$ 300.00	$ 6,900.00

	M2 Requested	Match	Total Cost
PI	**$ 1,750,432.00**	**$ 437,608.00**	**$ 2,188,040.00**
O&M	**$ 106,720.00**	**$ 26,680.00**	**$ 133,400.00**

SECTION 4: FUNDING NEEDS / COSTS FOR PROPOSED PROJECT BY TASK

Orange

	Agency	Caltrans	Offset	Total
Number of Signals:	7	4	0	11

Project Tasks (Orange)	Cost / Int	Total Cost
Task 1: Project Management - PI Phase	$ 2,500.00	$ 27,500.00
Task 2: Data Collection	$ 1,000.00	$ 11,000.00
Task 3: System Design and Construction	-	$ 794,806.00
Task 4: Signal Timing Optimization and Implementation	$ 5,000.00	$ 20,000.00
Task 5: Project Report	$ 1,000.00	$ 11,000.00
Task 6: Project Management - O&M Phase	$ 500.00	$ 5,500.00
Task 7: Continuing Support	$ 5,000.00	$ 55,000.00
Task 8: Final Technical Memorandum	$ 300.00	$ 3,300.00

	M2 Requested	Match	Total Cost
PI	**$ 691,444.80**	**$ 172,861.20**	**$ 864,306.00**
O&M	**$ 51,040.00**	**$ 12,760.00**	**$ 63,800.00**

	Agency	Caltrans	Offset	Total
Number of Signals:				0

Project Tasks ()	Cost / Int	Total Cost
Task 1: Project Management - PI Phase	$ 2,500.00	$ -
Task 2: Data Collection	$ 1,000.00	$ -
Task 3: System Design and Construction	-	$ -
Task 4: Signal Timing Optimization and Implementation	$ 5,000.00	$ -
Task 5: Project Report	$ 1,000.00	$ -
Task 6: Project Management - O&M Phase	$ 500.00	$ -
Task 7: Continuing Support	$ 5,000.00	$ -
Task 8: Final Technical Memorandum	$ 300.00	$ -

	M2 Requested	Match	Total Cost
PI	**$ -**	**$ -**	**$ -**
O&M	**$ -**	**$ -**	**$ -**

	Agency	Caltrans	Offset	Total
Number of Signals:				0

Project Tasks ()	Cost / Int	Total Cost
Task 1: Project Management - PI Phase	$ 2,500.00	$ -
Task 2: Data Collection	$ 1,000.00	$ -
Task 3: System Design and Construction	-	$ -
Task 4: Signal Timing Optimization and Implementation	$ 5,000.00	$ -
Task 5: Project Report	$ 1,000.00	$ -
Task 6: Project Management - O&M Phase	$ 500.00	$ -
Task 7: Continuing Support	$ 5,000.00	$ -
Task 8: Final Technical Memorandum	$ 300.00	$ -

	M2 Requested	Match	Total Cost
PI	**$ -**	**$ -**	**$ -**
O&M	**$ -**	**$ -**	**$ -**

SECTION 4: FUNDING NEEDS / COSTS FOR PROPOSED PROJECT BY TASK

c. Summary of Intersection Improvement Costs

LOC.	AGENCY	PROJECT CROSS STREETS	TASK 3 IMPROVEMENT TOTALS			
			Design	Construction	TOTAL	Average Score
1	Brea	Cliffwood Ave	$ -	$ 27,197.50	**$ 27,197.50**	35.0
2	Brea	Balsa Ave	$ -	$ 14,547.50	**$ 14,547.50**	37.5
3	Brea	Lambert Rd	$ -	$ -	**$ -**	
4	Brea	Avocado St / Tracks	$ -	$ 12,650.00	**$ 12,650.00**	30.0
5	Brea	Corporate	$ -	$ -	**$ -**	
6	Brea	Birch St	$ -	$ 12,650.00	**$ 12,650.00**	30.0
7	Brea	Brea Mall North	$ -	$ 56,925.00	**$ 56,925.00**	30.0
8	Brea	Brea Mall Center	$ -	$ 69,575.00	**$ 69,575.00**	15.0
9	Brea	Brea Mall South	$ -	$ 69,575.00	**$ 69,575.00**	15.0
10	Brea	Imperial Hwy*	$ -	$ -	**$ -**	
11	Brea	Elm St	$ -	$ 27,197.50	**$ 27,197.50**	35.0
12	Fullerton	Rolling Hills Dr	$ -	$ 67,045.00	**$ 67,045.00**	31.3
13	Fullerton	Delicata Dr	$ -	$ 54,395.00	**$ 54,395.00**	31.7
14	Fullerton	Bastanchury Rd	$ -	$ 102,465.00	**$ 102,465.00**	31.0
15	Fullerton	Palmetto Terrace/Mountain Ridge D	$ -	$ 40,480.00	**$ 40,480.00**	37.5
16	Fullerton	Yorbal Linda Bl	$ -	$ 102,465.00	**$ 102,465.00**	31.0
17	Fullerton	Dorothy Ln/Campus Dr	$ -	$ 53,130.00	**$ 53,130.00**	35.0
18	Fullerton	Arts Dr	$ -	$ 40,480.00	**$ 40,480.00**	37.5
19	Fullerton	Nutwood Ave	$ -	$ 88,550.00	**$ 88,550.00**	33.8
20	Fullerton	Chapman Ave (North)	$ -	$ 40,480.00	**$ 40,480.00**	37.5
21	Fullerton	Commonwealth Ave	$ -	$ 54,395.00	**$ 54,395.00**	31.7
22	Fullerton	Walnut Ave (Fender Ave)	$ -	$ 53,130.00	**$ 53,130.00**	35.0
23	Fullerton	Valencia Dr	$ -	$ 40,480.00	**$ 40,480.00**	37.5
24	Fullerton	Orangethorpe Ave	$ -	$ 53,130.00	**$ 53,130.00**	11.7
25	Anaheim	Via Burton St	$ -	$ 35,420.00	**$ 35,420.00**	35.0
26	Anaheim	SR-91WB Off-Ramp*	$ -	$ 2,500.00	**$ 2,500.00**	50.0
27	Anaheim	SR-91 EB Off-Ramp*	$ -	$ 2,500.00	**$ 2,500.00**	50.0
28	Anaheim	Placentia Ave/Romneya Dr	$ -	$ 142,945.00	**$ 142,945.00**	34.2
29	Anaheim	Shopping Center (McDonald's)	$ -	$ 94,875.00	**$ 94,875.00**	31.0
30	Anaheim	La Palma Ave	$ -	$ 98,670.00	**$ 98,670.00**	37.0
31	Anaheim	Underhill Ave	$ -	$ 94,875.00	**$ 94,875.00**	31.0
32	Anaheim	Lincoln Ave	$ -	$ 193,545.00	**$ 193,545.00**	33.3
33	Anaheim	Shopping Center (Anaheim Town Sc	$ -	$ 64,515.00	**$ 64,515.00**	31.3
34	Anaheim	Santa Ana St	$ -	$ 94,875.00	**$ 94,875.00**	31.0
35	Anaheim	South St	$ -	$ 130,295.00	**$ 130,295.00**	32.0
36	Anaheim	Vermont Ave	$ -	$ 127,765.00	**$ 127,765.00**	33.0
37	Anaheim	Wagner Ave	$ -	$ 99,935.00	**$ 99,935.00**	35.8
38	Anaheim	Ball Rd	$ -	$ 193,545.00	**$ 193,545.00**	33.3
39	Anaheim	Winston Rd	$ -	$ 63,250.00	**$ 63,250.00**	31.3
40	Anaheim	Cerritos Ave	$ -	$ 32,890.00	**$ 32,890.00**	31.7
41	Anaheim	Howell Ave	$ -	$ 127,765.00	**$ 127,765.00**	33.0
42	Anaheim	Railroad Crossing	$ -	$ 50,600.00	**$ 50,600.00**	31.7
43	Anaheim	Katella Ave	$ -	$ 86,020.00	**$ 86,020.00**	42.5
44	Anaheim	Gateway	$ -	$ 51,865.00	**$ 51,865.00**	36.7
45	Anaheim	Gene Autry Wy	$ -	$ 73,370.00	**$ 73,370.00**	46.7
46	Anaheim	Artisan Ct	$ -	$ 54,395.00	**$ 54,395.00**	40.0
47	Anaheim	Orangewood Ave	$ -	$ 94,875.00	**$ 94,875.00**	35.0
48	Orange	Orange Center Dr*	$ -	$ 2,500.00	**$ 2,500.00**	50.0
49	Orange	I-5 NB Off-Ramp*	$ -	$ 2,500.00	**$ 2,500.00**	50.0
50	Orange	I-5 SB Off-Ramp*	$ -	$ 2,500.00	**$ 2,500.00**	50.0

SECTION 4: FUNDING NEEDS / COSTS FOR PROPOSED PROJECT BY TASK

c. Summary of Intersection Improvement Costs

LOC.	AGENCY	PROJECT CROSS STREETS	TASK 3 IMPROVEMENT TOTALS			
			Design	Construction	TOTAL	Average Score
51	Orange	Chapman Ave	$ 1,200.00	$ 7,908.00	**$ 9,108.00**	15.0
52	Orange	Medical Center	$ 18,600.00	$ 122,574.00	**$ 141,174.00**	31.3
53	Orange	Dawn Way	$ 18,600.00	$ 122,574.00	**$ 141,174.00**	31.3
54	Orange	Steiner Way/Style St	$ 18,600.00	$ 122,574.00	**$ 141,174.00**	31.3
55	Orange	Outlet Dr	$ 18,600.00	$ 122,574.00	**$ 141,174.00**	31.3
56	Orange	Metropolitan Dr	$ 18,600.00	$ 122,574.00	**$ 141,174.00**	31.3
57	Orange	SR-22 EB Off/On-Ramp*	$ -	$ 2,500.00	**$ 2,500.00**	50.0
58	Orange	Garden Grove Bl	$ 9,200.00	$ 60,628.00	**$ 69,828.00**	22.5
-	Brea	TMC Improvements	$ -	$ 31,625.00	**$ 31,625.00**	30.0
-	Anaheim	TMC Improvements	$ -	$ 63,250.00	**$ 63,250.00**	20.0
-	Fullerton	TMC Improvements	$ -	$ 88,550.00	**$ 88,550.00**	30.0
-	0	TMC Improvements	$ -	$ -	**$ -**	
				SIGNAL IMPROVEMENT TOTAL =	**$ 4,070,463.50**	**33.6**

SECTION 5: DETAILED LOCAL MATCH COMMITMENT

PART 1: AGENCY TOTAL MATCH SUMMARY

Agency	CASH		IN-KIND		TOTAL MATCH	
	PI	OMM	PI	OMM	PI	OMM
Brea	*$75,288.50*	*$12,760.00*	*$0.00*	*$0.00*	*$75,288.50*	*$12,760.00*
	$88,048.50		***$0.00***		***$88,048.50***	
Fullerton	*$187,535.00*	*$15,080.00*	*$0.00*	*$0.00*	*$187,535.00*	*$15,080.00*
	$202,615.00		***$0.00***		***$202,615.00***	
Anaheim	*$437,608.00*	*$26,680.00*	*$0.00*	*$0.00*	*$437,608.00*	*$26,680.00*
	$464,288.00		***$0.00***		***$464,288.00***	
Orange	*$172,861.20*	*$12,760.00*	*$0.00*	*$0.00*	*$172,861.20*	*$12,760.00*
	$185,621.20		***$0.00***		***$185,621.20***	
0	*$0.00*	*$0.00*			*$0.00*	*$0.00*
	$0.00		***$0.00***		***$0.00***	
0	*$0.00*	*$0.00*			*$0.00*	*$0.00*
	$0.00		***$0.00***		***$0.00***	
TOTAL MATCH	***$873,292.70***	***$67,280.00***	***$0.00***	***$0.00***	***$873,292.70***	***$67,280.00***
	$940,572.70		***$0.00***		***$940,572.70***	

PART 2: MATCH BREAKDOWN (CASH vs IN-KIND SERVICES)

A. Cash Match

Agency	Funding Source	Amount of Cash Contribution
Brea	Developer Funds, Measure M, Gas Tax	$88,048.50
Fullerton	Gas Tax	$202,615.00
Anaheim	Gas Tax	$464,288.00
Orange	Gas Tax, Measure M2 Fairshare	$185,621.20
		$0.00
		$0.00
	TOTAL CASH MATCH:	$754,951.50

B. In-Kind Services

i. Specific Improvements (List items and Cost):

Agency	Description	Expenditure
Select a City		
	Total Specific Improvements (i):	$0.00

SECTION 5: DETAILED LOCAL MATCH COMMITMENT

ii. Staffing Commitment:

Agency	Staff Position	Type of Service to Project	No. of Hours	Fully Burdened Hourly Rate	Total*
Select a City					$0.00
					$0.00
					$0.00
					$0.00
				Total for City of Select a City:	*$0.00*
Select a City					$0.00
					$0.00
					$0.00
					$0.00
				Total for City of Select a City:	*$0.00*
Select a City					$0.00
					$0.00
					$0.00
					$0.00
				Total for City of Select a City:	*$0.00*
Select a City					$0.00
					$0.00
					$0.00
					$0.00
				Total for City of Select a City:	*$0.00*
Select a City					$0.00
					$0.00
					$0.00
					$0.00
				Total for City of Select a City:	*$0.00*
Select a City					$0.00
					$0.00
					$0.00
					$0.00
				Total for City of Select a City:	*$0.00*
				Total Staffing Commitment (ii):	*$0.00*

TOTAL IN-KIND MATCH* (i + ii):	$0.00

*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 shall be included with the in-kind report submittals. Records will be subject to auditing. In-kind match can be converted to Cash Match, but Cash Match cannot be converted to in-kind match.

SECTION 6: PROJECT SCHEDULE BY TASK

a. Projected Start and End Dates:

Project start date: October 1, 2025

Project end date: December 31, 2029

b. Projected Schedule by Task

Task	Starting Date	Ending Date
Task 1: Project Management - PI Phase	October 1, 2025	December 31, 2027
Task 2: Data Collection	October 1, 2025	May 30, 2026
Task 3: System Design and Construction	October 1, 2025	December 31, 2027
Task 4: Signal Timing Optimization and Implementation	October 1, 2025	December 31, 2027
Task 5: Project Report	August 1, 2027	December 31, 2027
Task 6: Project Management - O&M Phase	January 1, 2027	December 31, 2029
Task 7: Continuing Support	January 1, 2027	December 31, 2029
Task 8: Final Technical Memorandum	September 1, 2029	December 31, 2029

Appendix A

CALCULATIONS AND ESTIMATED POINTS

APPENDIX A: CALCULATIONS AND ESTIMATED POINTS

Criteria (Max Points)	Estimated Points
1. Transportation Significance (25 points) Yes, all agencies are participating in the Countywide Baseline Project Inclusion of offset signals on MPAH w/in 2,700' # of offset signals on project / total # of offset signals: 0 / 35 = 100.0% = 10 Vehicle Miles Traveled (VMT): 280,700 = 15	25
2. Economic Effectiveness (Cost to Benefit Ratio): (10 points) Calculation for Total Project Cost / VMT = $4,702,864 / 280,700 = 16.75	5
3. Project Characteristics: (20 points) Average project improvement score = 33.6	10
4. Project Scale: (20 points) # of signals along entire length of corridor(s): 78 = 10 # of signals being synched / total # of corridor signals: 58 / 78 = 74.4% = 6	16
5. Number of Jurisdictions: (15 points) 5 Participating Jurisdiction(s)	15
6. Current Project Status (5 points) None = 0	0
7. Funding Match: (5 points) $940,572.70 / $4,702,863.50 = 20.00%	0
Total Estimated Points:	**71**

Appendix B

AGENCY IMPROVEMENT CALCULATIONS

TABLE I: AGENCY IMPROVEMENT PREFERENCES ☐ Yes ☑ No

CATEGORIES	ID	ITEM DESCRIPTION	UNIT PRICE (MATERIAL + LABOR)				APPLICABLE DESIGN COST PER UNIT				VENDOR/BRAND & ADDITIONAL NOTES			
			Anaheim	Brea	Fullerton	Orange	Anaheim	Brea	Fullerton	Orange	Anaheim	Brea	Fullerton	Orange
Comm	1	Above ground (e.g. wireless, cellular, etc.)												
	2	Fiber Optic underground	$10,000	$4,000	$24,000	$6,000				$1,200	upgrade fiber optic cable with Etherwan switches with SPF and FDUs	New Etherwan Fiber Switches with SFP Modules.	Corning cables, housing & connectors, jumpers, splice trays & enclosures, switches, power supply, cat6E cables	Fiber Switch & power supply, SFPs, Fiber Patch Panel
	3	All other (e.g. copper, aerial fiber, GPS, etc.)												
Field Elements	4	ATC signal controller	$6,000	$7,500	$8,000	$7,000				$1,400	2070L/2070LN with EOS	Furnish and Install New Cubic Commander ATC NT2 Controller with Scout Software. Convert signal timing (incudling adaptive parameters) to new format and integrate with ATMS/Synchrogreen.	Q-Free	Econolite Cobalt w/ ASC3
	5	Signal cabinet on existing foundation	$24,000	$45,000		$40,000				$8,000	Type P Cabinet w/new service	Cubic NEMA P cabinet with Service and SCE Design Fee.		Use existing foundation as is or modify foundation, Econolite TS Type II P Cabinet, reuse existing SCE service
	6	Signal cabinet on new foundation	$60,000	$55,000	$45,000						Type 333 Cabinet w/new service	Cubic NEMA P cabinet with Service and SCE Design Fee.	Type P or P+, Type 332 and Type 352i cabinets	
	7	BBS/USP (attached)			$11,000								Alpha	
	8	BBS/UPS on existing foundation												
	9	BBS/UPS on new foundation												
	10	CCTV	$10,000	$10,000	$10,000						Axis	Axis Q6000 series (multisensor 360) & Axis PTZ	Axis	
	11	Vehicle detection (ATSPM inputs + counts)												
	12	Vehicle detection (ATSPM inputs)												
	13	Vehicle detection + bicycle detection	$25,000	$35,000	$28,000						Econolite	Iteris Vantage Next System	Iteris Next	
	14	Vehicle detection				$40,000				$8,000				Iteris or Econolite VDS
	15	Bicycle detection												
	16	Pedestrian detection (audible)	$2,000								APS			
	17	Pedestrian detection												
	18	Active transportation/pedestrian safety												
	19	Transit Signal Priority												
	20	EVP (hybrid or GPS)	$12,000								GPS EVP			
	21	EVP (infrared)												
	22	Speed feedback signs (existing post)												
	23	Speed feedback signs (new post)												
	24	Signal Performance Monitoring	$50,000								SPMs and RSUs			
Minor Signal Op Improve	25	Channelization												
	26	Signal phasing improvement												

APPENDIX B: AGENCY IMPROVEMENT CALCULATIONS

TABLE II: DESCRIPTION OF WORK BY INTERSECTION

LOCATION	IMPLEMENTING AGENCY	PROJECT CROSS STREETS	DESCRIPTION OF WORK																													
			Above ground (e.g. wireless, cellular, etc.)	Fiber Optic underground	All other (e.g. copper, aerial fiber, GPS, etc.)	ATC signal controller	Signal cabinet on existing foundation	Signal cabinet on new foundation	BBS/USP (attached)	BBS/UPS on existing foundation	BBS/UPS on new foundation	CCTV	Vehicle detection (ATSPM inputs + counts)	Vehicle detection (ATSPM inputs)	Vehicle detection + bicycle detection	Vehicle detection	Bicycle detection	Pedestrian detection (audible)	Pedestrian detection	Active transportation/pedestrian safety	Transit Signal Priority	EVP (hybrid or GPS)	EVP (infrared)	Speed feedback signs (existing post)	Speed feedback signs (new post)	Signal Performance Monitoring	Channelization	Signal phasing improvement	Central System (server, licenses, workstations)	Display (video wall, VMS, etc.)	UPS for TMC	Caltrans Cooperative Agreement
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	34
1	Brea	Cliffwood Ave		1		1						1																				
2	Brea	Balsa Ave		1		1																										
3	Brea	Lambert Rd																														
4	Brea	Avocado St / Tracks										1																				
5	Brea	Corporate																														
6	Brea	Birch St										1																				
7	Brea	Brea Mall North					1																									
8	Brea	Brea Mall Center						1																								
9	Brea	Brea Mall South						1																								
10	Brea	Imperial Hwy*																														
11	Brea	Elm St		1		1						1																				
12	Fullerton	Rolling Hills Dr		1		1			1			1																				
13	Fullerton	Delicata Dr		1		1			1																							
14	Fullerton	Bastanchury Rd		1		1			1			1			1																	
15	Fullerton	Palmetto Terrace/Mountain Ridge Dr		1		1																										
16	Fullerton	Yorbal Linda Bl		1		1			1			1			1																	
17	Fullerton	Dorothy Ln/Campus Dr		1		1						1																				
18	Fullerton	Arts Dr		1		1																										
19	Fullerton	Nutwood Ave		1		1						1			1																	
20	Fullerton	Chapman Ave (North)		1		1																										
21	Fullerton	Commonwealth Ave		1		1			1																							
22	Fullerton	Walnut Ave (Fender Ave)		1		1						1																				
23	Fullerton	Valencia Dr		1		1																										
24	Fullerton	Orangethorpe Ave		1		1						1																				
25	Anaheim	Via Burton St		1		1																1										
26	Anaheim	SR-91WB Off-Ramp*																														1
27	Anaheim	SR-91 EB Off-Ramp*																														1
28	Anaheim	Placentia Ave/Romneya Dr		1		1						1			1							1				1						
29	Anaheim	Shopping Center (McDonald's)		1		1	1					1			1																	
30	Anaheim	La Palma Ave		1		1						1						1								1						
31	Anaheim	Underhill Ave		1		1	1					1			1																	
32	Anaheim	Lincoln Ave		1		1		1							1			1								1						
33	Anaheim	Shopping Center (Anaheim Town Square)		1		1						1			1																	
34	Anaheim	Santa Ana St		1		1	1					1			1																	
35	Anaheim	South St		1		1		1							1			1														
36	Anaheim	Vermont Ave		1		1						1			1											1						
37	Anaheim	Wagner Ave		1		1	1								1			1				1										
38	Anaheim	Ball Rd		1		1		1							1			1								1						
39	Anaheim	Winston Rd		1		1	1					1																				
40	Anaheim	Cerritos Ave		1		1						1																				

APPENDIX B: AGENCY IMPROVEMENT CALCULATIONS

TABLE II: DESCRIPTION OF WORK BY INTERSECTION

LOCATION	IMPLEMENTING AGENCY	PROJECT CROSS STREETS	DESCRIPTION OF WORK																													
			Above ground (e.g. wireless, cellular, etc.)	Fiber Optic underground	All other (e.g. copper, aerial fiber, GPS, etc.)	ATC signal controller	Signal cabinet on existing foundation	Signal cabinet on new foundation	BBS/USP (attached)	BBS/UPS on existing foundation	BBS/UPS on new foundation	CCTV	Vehicle detection (ATSPM inputs + counts)	Vehicle detection (ATSPM inputs)	Vehicle detection + bicycle detection	Vehicle detection	Bicycle detection	Pedestrian detection (audible)	Pedestrian detection	Active transportation/pedestrian safety	Transit Signal Priority	EVP (hybrid or GPS)	EVP (infrared)	Speed feedback signs (existing post)	Speed feedback signs (new post)	Signal Performance Monitoring	Channelization	Signal phasing improvement	Central System (server, licenses, workstations)	Display (video wall, VMS, etc.)	UPS for TMC	Caltrans Cooperative Agreement
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	34
41	Anaheim	Howell Ave		1		1						1			1											1						
42	Anaheim	Railroad Crossing		1		1	1																									
43	Anaheim	Katella Ave				1						1						1								1						
44	Anaheim	Gateway				1						1			1																	
45	Anaheim	Gene Autry Wy				1												1								1						
46	Anaheim	Artisan Ct				1									1							1										
47	Anaheim	Orangewood Ave													1											1						
48	Orange	Orange Center Dr*																														1
49	Orange	I-5 NB Off-Ramp*																														1
50	Orange	I-5 SB Off-Ramp*																														1
51	Orange	Chapman Ave		1																												
52	Orange	Medical Center		1		1	1									1																
53	Orange	Dawn Way		1		1	1									1																
54	Orange	Steiner Way/Style St		1		1	1									1																
55	Orange	Outlet Dr		1		1	1									1																
56	Orange	Metropolitan Dr		1		1	1									1																
57	Orange	SR-22 EB Off/On-Ramp*																														1
58	Orange	Garden Grove Bl		1												1																
-	Brea	TMC Improvements																											1	1	1	
-	Anaheim	TMC Improvements																											1		1	
-	Fullerton	TMC Improvements																											1	1	1	
-		TMC Improvements																														
		QUANTITY TOTAL =	0	39	0	41	12	5	5	0	0	23	0	0	17	6	0	7	0	0	0	4	0	0	0	9	0	0	3	2	3	6

APPENDIX B: AGENCY IMPROVEMENT CALCULATIONS

TABLE II: DESCRIPTION OF WORK BY INTERSECTION

LOCATION	IMPLEMENTING AGENCY	PROJECT CROSS STREETS	SIGNAL IMPROVEMENT COSTS						NOTES
			Design	Construction	Construction Management & Inspection 15%	Contingency 10%	Caltrans Cooperative Agreement Fees ($2,500)	TOTAL	
1	Brea	Cliffwood Ave	$ -	$ 21,500.00	$ 3,225.00	$ 2,472.50	$ -	**$ 27,197.50**	
2	Brea	Balsa Ave	$ -	$ 11,500.00	$ 1,725.00	$ 1,322.50	$ -	**$ 14,547.50**	
3	Brea	Lambert Rd	$ -	$ -	$ -	$ -	$ -	**$ -**	No improvements included in this project. Included in on-going TSSP project.
4	Brea	Avocado St / Tracks	$ -	$ 10,000.00	$ 1,500.00	$ 1,150.00	$ -	**$ 12,650.00**	
5	Brea	Corporate	$ -	$ -	$ -	$ -	$ -	**$ -**	
6	Brea	Birch St	$ -	$ 10,000.00	$ 1,500.00	$ 1,150.00	$ -	**$ 12,650.00**	
7	Brea	Brea Mall North	$ -	$ 45,000.00	$ 6,750.00	$ 5,175.00	$ -	**$ 56,925.00**	
8	Brea	Brea Mall Center	$ -	$ 55,000.00	$ 8,250.00	$ 6,325.00	$ -	**$ 69,575.00**	
9	Brea	Brea Mall South	$ -	$ 55,000.00	$ 8,250.00	$ 6,325.00	$ -	**$ 69,575.00**	
10	Brea	Imperial Hwy*	$ -	$ -	$ -	$ -	$ -	**$ -**	No improvements included in this project. Included in on-going TSSP project.
11	Brea	Elm St	$ -	$ 21,500.00	$ 3,225.00	$ 2,472.50	$ -	**$ 27,197.50**	
12	Fullerton	Rolling Hills Dr	$ -	$ 53,000.00	$ 7,950.00	$ 6,095.00	$ -	**$ 67,045.00**	
13	Fullerton	Delicata Dr	$ -	$ 43,000.00	$ 6,450.00	$ 4,945.00	$ -	**$ 54,395.00**	
14	Fullerton	Bastanchury Rd	$ -	$ 81,000.00	$ 12,150.00	$ 9,315.00	$ -	**$ 102,465.00**	
15	Fullerton	Palmetto Terrace/Mountain Ridge Dr	$ -	$ 32,000.00	$ 4,800.00	$ 3,680.00	$ -	**$ 40,480.00**	
16	Fullerton	Yorbal Linda Bl	$ -	$ 81,000.00	$ 12,150.00	$ 9,315.00	$ -	**$ 102,465.00**	
17	Fullerton	Dorothy Ln/Campus Dr	$ -	$ 42,000.00	$ 6,300.00	$ 4,830.00	$ -	**$ 53,130.00**	
18	Fullerton	Arts Dr	$ -	$ 32,000.00	$ 4,800.00	$ 3,680.00	$ -	**$ 40,480.00**	
19	Fullerton	Nutwood Ave	$ -	$ 70,000.00	$ 10,500.00	$ 8,050.00	$ -	**$ 88,550.00**	
20	Fullerton	Chapman Ave (North)	$ -	$ 32,000.00	$ 4,800.00	$ 3,680.00	$ -	**$ 40,480.00**	
21	Fullerton	Commonwealth Ave	$ -	$ 43,000.00	$ 6,450.00	$ 4,945.00	$ -	**$ 54,395.00**	
22	Fullerton	Walnut Ave (Fender Ave)	$ -	$ 42,000.00	$ 6,300.00	$ 4,830.00	$ -	**$ 53,130.00**	
23	Fullerton	Valencia Dr	$ -	$ 32,000.00	$ 4,800.00	$ 3,680.00	$ -	**$ 40,480.00**	
24	Fullerton	Orangethorpe Ave	$ -	$ 42,000.00	$ 6,300.00	$ 4,830.00	$ -	**$ 53,130.00**	
25	Anaheim	Via Burton St	$ -	$ 28,000.00	$ 4,200.00	$ 3,220.00	$ -	**$ 35,420.00**	
26	Anaheim	SR-91WB Off-Ramp*	$ -	$ -	$ -	$ -	$ 2,500.00	**$ 2,500.00**	
27	Anaheim	SR-91 EB Off-Ramp*	$ -	$ -	$ -	$ -	$ 2,500.00	**$ 2,500.00**	
28	Anaheim	Placentia Ave/Romneya Dr	$ -	$ 113,000.00	$ 16,950.00	$ 12,995.00	$ -	**$ 142,945.00**	
29	Anaheim	Shopping Center (McDonald's)	$ -	$ 75,000.00	$ 11,250.00	$ 8,625.00	$ -	**$ 94,875.00**	
30	Anaheim	La Palma Ave	$ -	$ 78,000.00	$ 11,700.00	$ 8,970.00	$ -	**$ 98,670.00**	
31	Anaheim	Underhill Ave	$ -	$ 75,000.00	$ 11,250.00	$ 8,625.00	$ -	**$ 94,875.00**	
32	Anaheim	Lincoln Ave	$ -	$ 153,000.00	$ 22,950.00	$ 17,595.00	$ -	**$ 193,545.00**	
33	Anaheim	Shopping Center (Anaheim Town Square)	$ -	$ 51,000.00	$ 7,650.00	$ 5,865.00	$ -	**$ 64,515.00**	
34	Anaheim	Santa Ana St	$ -	$ 75,000.00	$ 11,250.00	$ 8,625.00	$ -	**$ 94,875.00**	
35	Anaheim	South St	$ -	$ 103,000.00	$ 15,450.00	$ 11,845.00	$ -	**$ 130,295.00**	
36	Anaheim	Vermont Ave	$ -	$ 101,000.00	$ 15,150.00	$ 11,615.00	$ -	**$ 127,765.00**	
37	Anaheim	Wagner Ave	$ -	$ 79,000.00	$ 11,850.00	$ 9,085.00	$ -	**$ 99,935.00**	
38	Anaheim	Ball Rd	$ -	$ 153,000.00	$ 22,950.00	$ 17,595.00	$ -	**$ 193,545.00**	
39	Anaheim	Winston Rd	$ -	$ 50,000.00	$ 7,500.00	$ 5,750.00	$ -	**$ 63,250.00**	
40	Anaheim	Cerritos Ave	$ -	$ 26,000.00	$ 3,900.00	$ 2,990.00	$ -	**$ 32,890.00**	

APPENDIX B: AGENCY IMPROVEMENT CALCULATIONS

TABLE II: DESCRIPTION OF WORK BY INTERSECTION

LOCATION	IMPLEMENTING AGENCY	PROJECT CROSS STREETS	SIGNAL IMPROVEMENT COSTS						NOTES
			Design	Construction	Construction Management & Inspection 15%	Contingency 10%	Caltrans Cooperative Agreement Fees ($2,500)	TOTAL	
41	Anaheim	Howell Ave	$ -	$ 101,000.00	$ 15,150.00	$ 11,615.00	$ -	**$ 127,765.00**	
42	Anaheim	Railroad Crossing	$ -	$ 40,000.00	$ 6,000.00	$ 4,600.00	$ -	**$ 50,600.00**	
43	Anaheim	Katella Ave	$ -	$ 68,000.00	$ 10,200.00	$ 7,820.00	$ -	**$ 86,020.00**	
44	Anaheim	Gateway	$ -	$ 41,000.00	$ 6,150.00	$ 4,715.00	$ -	**$ 51,865.00**	
45	Anaheim	Gene Autry Wy	$ -	$ 58,000.00	$ 8,700.00	$ 6,670.00	$ -	**$ 73,370.00**	
46	Anaheim	Artisan Ct	$ -	$ 43,000.00	$ 6,450.00	$ 4,945.00	$ -	**$ 54,395.00**	
47	Anaheim	Orangewood Ave	$ -	$ 75,000.00	$ 11,250.00	$ 8,625.00	$ -	**$ 94,875.00**	
48	Orange	Orange Center Dr*	$ -	$ -	$ -	$ -	$ 2,500.00	**$ 2,500.00**	
49	Orange	I-5 NB Off-Ramp*	$ -	$ -	$ -	$ -	$ 2,500.00	**$ 2,500.00**	
50	Orange	I-5 SB Off-Ramp*	$ -	$ -	$ -	$ -	$ 2,500.00	**$ 2,500.00**	
51	Orange	Chapman Ave	$ 1,200.00	$ 6,000.00	$ 1,080.00	$ 828.00	$ -	**$ 9,108.00**	
52	Orange	Medical Center	$ 18,600.00	$ 93,000.00	$ 16,740.00	$ 12,834.00	$ -	**$ 141,174.00**	
53	Orange	Dawn Way	$ 18,600.00	$ 93,000.00	$ 16,740.00	$ 12,834.00	$ -	**$ 141,174.00**	
54	Orange	Steiner Way/Style St	$ 18,600.00	$ 93,000.00	$ 16,740.00	$ 12,834.00	$ -	**$ 141,174.00**	
55	Orange	Outlet Dr	$ 18,600.00	$ 93,000.00	$ 16,740.00	$ 12,834.00	$ -	**$ 141,174.00**	
56	Orange	Metropolitan Dr	$ 18,600.00	$ 93,000.00	$ 16,740.00	$ 12,834.00	$ -	**$ 141,174.00**	
57	Orange	SR-22 EB Off/On-Ramp*	$ -	$ -	$ -	$ -	$ 2,500.00	**$ 2,500.00**	
58	Orange	Garden Grove Bl	$ 9,200.00	$ 46,000.00	$ 8,280.00	$ 6,348.00	$ -	**$ 69,828.00**	
-	Brea	TMC Improvements	$ -	$ 25,000.00	$ 3,750.00	$ 2,875.00	$ -	**$ 31,625.00**	
-	Anaheim	TMC Improvements	$ -	$ 50,000.00	$ 7,500.00	$ 5,750.00	$ -	**$ 63,250.00**	
-	Fullerton	TMC Improvements	$ -	$ 70,000.00	$ 10,500.00	$ 8,050.00	$ -	**$ 88,550.00**	
-		TMC Improvements	$ -	$ -	$ -	$ -	$ -	**$ -**	
		QUANTITY TOTAL =	**SIGNAL IMPROVEMENT TOTAL =**					**$ 4,070,463.50**	

TABLE III: PROJECT AVERAGE IMPROVEMENT SCORES

LOCATION	IMPLEMENTING AGENCY	PROJECT CROSS STREETS	DESCRIPTION OF WORK																												
			Above ground (e.g. wireless, cellular, etc.)	Fiber Optic underground	All other (e.g. copper, aerial fiber, GPS, etc.)	ATC signal controller	Signal cabinet on existing foundation	Signal cabinet on new foundation	BBS/USP (attached)	BBS/UPS on existing foundation	BBS/UPS on new foundation	CCTV	Vehicle detection (ATSPM inputs + counts)	Vehicle detection (ATSPM inputs)	Vehicle detection + bicycle detection	Vehicle detection	Bicycle detection	Pedestrian detection (audible)	Pedestrian detection	Active transportation/pedestrian safety	Transit Signal Priority	EVP (hybrid or GPS)	EVP (infrared)	Speed feedback signs (existing post)	Speed feedback signs (new post)	Signal Performance Monitoring	Channelization	Signal phasing improvement	Central System (server, licenses, workstations)	Display (video wall, VMS, etc.)	UPS for TMC
			Time Source			None/5+ Years or Within 5 Years																					0/5+ or <5		0/10+ or < 10		
1	Brea	Cliffwood Ave		25		50						30																			
2	Brea	Balsa Ave		25		50																									
3	Brea	Lambert Rd																													
4	Brea	Avocado St / Tracks										30																			
5	Brea	Corporate																													
6	Brea	Birch St										30																			
7	Brea	Brea Mall North					30																								
8	Brea	Brea Mall Center						15																							
9	Brea	Brea Mall South						15																							
10	Brea	Imperial Hwy*																													
11	Brea	Elm St		25		50						30																			
12	Fullerton	Rolling Hills Dr		25		50			20			30																			
13	Fullerton	Delicata Dr		25		50			20																						
14	Fullerton	Bastanchury Rd		25		50			20			30			30																
15	Fullerton	Palmetto Terrace/Mountain Ridge Dr		25		50																									
16	Fullerton	Yorbal Linda Bl		25		50			20			30			30																
17	Fullerton	Dorothy Ln/Campus Dr		25		50						30																			
18	Fullerton	Arts Dr		25		50																									
19	Fullerton	Nutwood Ave		25		50						30			30																
20	Fullerton	Chapman Ave (North)		25		50																									
21	Fullerton	Commonwealth Ave		25		50			20																						
22	Fullerton	Walnut Ave (Fender Ave)		25		50						30																			
23	Fullerton	Valencia Dr		25		50																									
24	Fullerton	Orangethorpe Ave		15		10						10																			
25	Anaheim	Via Burton St		15		50																40									
26	Anaheim	SR-91WB Off-Ramp*																													
27	Anaheim	SR-91 EB Off-Ramp*																													
28	Anaheim	Placentia Ave/Romneya Dr		15		50						30			30							40				40					
29	Anaheim	Shopping Center (McDonald's)		15		50	30					30			30																
30	Anaheim	La Palma Ave		15		50						30						50								40					
31	Anaheim	Underhill Ave		15		50	30					30			30																
32	Anaheim	Lincoln Ave		15		50		15							30			50								40					
33	Anaheim	Shopping Center (Anaheim Town Square)		15		50						30			30																
34	Anaheim	Santa Ana St		15		50	30					30			30																
35	Anaheim	South St		15		50		15							30			50													
36	Anaheim	Vermont Ave		15		50						30			30											40					
37	Anaheim	Wagner Ave		15		50	30								30			50				40									
38	Anaheim	Ball Rd		15		50		15							30			50								40					
39	Anaheim	Winston Rd		15		50	30					30																			
40	Anaheim	Cerritos Ave		15		50						30																			

TABLE III: PROJECT AVERAGE IMPROVEMENT SCORES

LOCATION	IMPLEMENTING AGENCY	PROJECT CROSS STREETS	DESCRIPTION OF WORK																											
			Above ground (e.g. wireless, cellular, etc.)	Fiber Optic underground	All other (e.g. copper, aerial fiber, GPS, etc.)	ATC signal controller	Signal cabinet on existing foundation	Signal cabinet on new foundation	BBS/USP (attached)	BBS/UPS on existing foundation	BBS/UPS on new foundation	CCTV	Vehicle detection (ATSPM inputs + counts)	Vehicle detection (ATSPM inputs)	Vehicle detection + bicycle detection	Vehicle detection	Bicycle detection	Pedestrian detection (audible)	Pedestrian detection	Active transportation/pedestrian safety	Transit Signal Priority	EVP (hybrid or GPS)	EVP (infrared)	Speed feedback signs (existing post)	Speed feedback signs (new post)	Signal Performance Monitoring	Channelization	Signal phasing improvement	Central System (server, licenses, workstations)	Display (video wall, VMS, etc.)	UPS for TMC
			Time Source			None/5+ Years or Within 5 Years																						0/5+ or <5		0/10+ or < 10		
41	Anaheim	Howell Ave		15		50						30			30											40					
42	Anaheim	Railroad Crossing		15		50	30																								
43	Anaheim	Katella Ave				50						30						50								40					
44	Anaheim	Gateway				50						30			30																
45	Anaheim	Gene Autry Wy				50												50								40					
46	Anaheim	Artisan Ct				50									30							40									
47	Anaheim	Orangewood Ave													30											40					
48	Orange	Orange Center Dr*																													
49	Orange	I-5 NB Off-Ramp*																													
50	Orange	I-5 SB Off-Ramp*																													
51	Orange	Chapman Ave		15																											
52	Orange	Medical Center		15		50	30									30															
53	Orange	Dawn Way		15		50	30									30															
54	Orange	Steiner Way/Style St		15		50	30									30															
55	Orange	Outlet Dr		15		50	30									30															
56	Orange	Metropolitan Dr		15		50	30									30															
57	Orange	SR-22 EB Off/On-Ramp*																													
58	Orange	Garden Grove Bl		15												30															
-	Brea	TMC Improvements																											40	30	20
-	Anaheim	TMC Improvements																											20		20
-	Fullerton	TMC Improvements																											40	30	20
-	0	TMC Improvements																													

TABLE III: PROJECT AVERAGE IMPROVEMENT SCORES

LOCATION	IMPLEMENTING AGENCY	PROJECT CROSS STREETS	Timing Only	Timing + Traffic Responsive (license only)	Timing + Peer-to-Peer (configuration only)	Timing + Traffic Adaptive (license only)	Caltrans Cooperative Agreement	AVERAGE IMPROVEMENT SCORE	NOTES
			Online or Offline				Y/N		
1	Brea	Cliffwood Ave						35.0	
2	Brea	Balsa Ave						37.5	
3	Brea	Lambert Rd							No improvements included in this project. Included in on-going TSSP project.
4	Brea	Avocado St / Tracks						30.0	
5	Brea	Corporate							
6	Brea	Birch St						30.0	
7	Brea	Brea Mall North						30.0	
8	Brea	Brea Mall Center						15.0	
9	Brea	Brea Mall South						15.0	
10	Brea	Imperial Hwy*							No improvements included in this project. Included in on-going TSSP project.
11	Brea	Elm St						35.0	
12	Fullerton	Rolling Hills Dr						31.3	
13	Fullerton	Delicata Dr						31.7	
14	Fullerton	Bastanchury Rd						31.0	
15	Fullerton	Palmetto Terrace/Mountain Ridge Dr						37.5	
16	Fullerton	Yorbal Linda Bl						31.0	
17	Fullerton	Dorothy Ln/Campus Dr						35.0	
18	Fullerton	Arts Dr						37.5	
19	Fullerton	Nutwood Ave						33.8	
20	Fullerton	Chapman Ave (North)						37.5	
21	Fullerton	Commonwealth Ave						31.7	
22	Fullerton	Walnut Ave (Fender Ave)						35.0	
23	Fullerton	Valencia Dr						37.5	
24	Fullerton	Orangethorpe Ave						11.7	
25	Anaheim	Via Burton St						35.0	
26	Anaheim	SR-91WB Off-Ramp*					50	50.0	
27	Anaheim	SR-91 EB Off-Ramp*					50	50.0	
28	Anaheim	Placentia Ave/Romneya Dr						34.2	
29	Anaheim	Shopping Center (McDonald's)						31.0	
30	Anaheim	La Palma Ave						37.0	
31	Anaheim	Underhill Ave						31.0	
32	Anaheim	Lincoln Ave						33.3	
33	Anaheim	Shopping Center (Anaheim Town Square)						31.3	
34	Anaheim	Santa Ana St						31.0	
35	Anaheim	South St						32.0	
36	Anaheim	Vermont Ave						33.0	
37	Anaheim	Wagner Ave						35.8	
38	Anaheim	Ball Rd						33.3	
39	Anaheim	Winston Rd						31.3	
40	Anaheim	Cerritos Ave						31.7	

TABLE III: PROJECT AVERAGE IMPROVEMENT SCORES

LOCATION	IMPLEMENTING AGENCY	PROJECT CROSS STREETS	Timing Only	Timing + Traffic Responsive (license only)	Timing + Peer-to-Peer (configuration only)	Timing + Traffic Adaptive (license only)	Caltrans Cooperative Agreement	AVERAGE IMPROVEMENT SCORE	NOTES
			Online or Offline				Y/N		
41	Anaheim	Howell Ave						33.0	
42	Anaheim	Railroad Crossing						31.7	
43	Anaheim	Katella Ave						42.5	
44	Anaheim	Gateway						36.7	
45	Anaheim	Gene Autry Wy						46.7	
46	Anaheim	Artisan Ct						40.0	
47	Anaheim	Orangewood Ave						35.0	
48	Orange	Orange Center Dr*					50	50.0	
49	Orange	I-5 NB Off-Ramp*					50	50.0	
50	Orange	I-5 SB Off-Ramp*					50	50.0	
51	Orange	Chapman Ave						15.0	
52	Orange	Medical Center						31.3	
53	Orange	Dawn Way						31.3	
54	Orange	Steiner Way/Style St						31.3	
55	Orange	Outlet Dr						31.3	
56	Orange	Metropolitan Dr						31.3	
57	Orange	SR-22 EB Off/On-Ramp*					50	50.0	
58	Orange	Garden Grove Bl						22.5	
-	Brea	TMC Improvements						30.0	
-	Anaheim	TMC Improvements						20.0	
-	Fullerton	TMC Improvements						30.0	
-	0	TMC Improvements							
							AVERAGE SCORE =	33.6	

Appendix C

VEHICLE MILES TRAVELED (VMT)

APPENDIX C: VEHICLE MILES TRAVELED (VMT)

Segment	ADTs	Distance	VMT
State College (Brea NCL to Birch)	13,457	0.98	19,677
State College (Birch to Elm St)	18,145	0.87	15,786
State College (Fullerton NCL to Bastanchury Rd)	22,000	0.76	16,720
State College (Bastanchury Rd to Yorba Linda Blvd)	20,700	0.70	14,490
State College (Yorba Linda Blvd to Dorothy Ln)	29,600	0.45	13,320
State College (Dorothy Ln to Chapman Ave)	29,700	0.50	14,850
State College (Chapman Ave to Commonwealth Ave	24,500	0.25	6,125
State College (Commonwealth Ave to SCL)	29,300	0.88	25,784
State College (Via Burton to La Palma Ave)	35,887	0.71	25,480
State College (La Palma Ave to Lincoln Ave)	28,252	0.50	14,126
State College (Lincoln Ave to South St)	29,508	0.50	14,754
State College (South St to Wagner Ave)	27,242	0.50	13,621
State College (Wagner Ave to Ball Rd)	25,841	0.50	12,921
State College (Ball Rd to Cerritos Ave)	22,186	0.50	11,093
State College (Cerritos Ave to Katella Ave)	24,895	0.50	12,448
State College (Katella Ave to Anaheim SCL)	20,710	0.50	10,355
The City Dr (Orange City Limit to Chapman Ave)	26,800	0.37	9,916
The City Drive (Style St to Chapman Ave)	27,300	0.35	9,555
The City Drive (22 Fwy to Style St)	24,000	0.54	12,960
The City Drive (Garden Grove Bl to 22 Fwy)	16,000	0.42	6,720
	Total Project VMT:	**11.28**	**280,700**

Source:

City of Anaheim - City Traffic Counters 2024
City of Orange - Citywide ADT 2024
City of Brea - NDS 2024
City of Fullerton - Citywide ADT 2024

National Data & Surveying Services

Intersection Turning Movement Count

Location: N State College Blvd & E Lambert Rd
City: Brea
Control: Signalized

Project ID: 19-01101-003
Date: 5/18/2019

Total

NS/EW Streets:	N State College Blvd				N State College Blvd				E Lambert Rd				E Lambert Rd				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	1.5	1.5	0	2	2	0	0	2	3.5	0.5	0	2	3	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
11:00 AM	27	46	46	0	127	65	2	0	3	198	27	1	101	244	140	4	1031
11:15 AM	22	57	69	0	125	65	0	0	6	202	45	0	113	275	139	0	1118
11:30 AM	25	62	75	0	161	86	1	0	1	208	37	0	104	292	142	2	1196
11:45 AM	29	54	65	0	119	89	2	0	3	185	45	0	111	341	137	0	1180
12:00 PM	26	59	55	0	105	81	0	0	3	217	64	0	138	352	154	1	1255
12:15 PM	31	60	90	0	122	87	2	0	4	212	54	0	144	303	148	1	1258
12:30 PM	28	60	76	0	106	73	2	0	6	275	73	0	150	335	171	2	1357
12:45 PM	37	54	76	0	139	91	1	0	4	220	56	0	175	280	183	2	1318
1:00 PM	29	51	66	0	142	76	1	0	4	228	53	0	115	257	163	0	1185
1:15 PM	33	69	84	0	108	73	2	0	2	265	49	0	101	248	148	3	1185
1:30 PM	23	58	95	0	116	75	3	0	4	236	54	1	104	274	157	1	1201
1:45 PM	22	76	84	0	140	84	2	0	6	238	51	0	122	293	173	2	1293
2:00 PM	32	62	88	0	128	60	1	0	2	246	34	0	107	296	164	1	1221
2:15 PM	38	62	84	0	127	61	6	0	3	180	41	0	117	301	161	4	1185
2:30 PM	35	64	100	0	131	62	3	0	2	236	42	0	107	333	158	1	1274
2:45 PM	29	59	91	0	124	84	0	0	6	250	52	0	131	283	176	0	1285
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	466	953	1244	0	2020	1212	28	0	59	3596	777	2	1940	4707	2514	24	19542
APPROACH %'s :	17.50%	35.79%	46.71%	0.00%	61.96%	37.18%	0.86%	0.00%	1.33%	81.10%	17.52%	0.05%	21.12%	51.25%	27.37%	0.26%	
PEAK HR :	12:00 PM - 01:00 PM																TOTAL
PEAK HR VOL :	122	233	297	0	472	332	5	0	17	924	247	0	607	1270	656	6	5188
PEAK HR FACTOR :	0.824	0.971	0.825	0.000	0.849	0.912	0.625	0.000	0.708	0.840	0.846	0.000	0.867	0.902	0.896	0.750	0.956
		0.901				0.876				0.839				0.965			

Prepared by National Data & Surveying Services

N State College Blvd & E Lambert Rd

Peak Hour Turning Movement Count

ID: 19-01101-003
City: Brea

Day: Saturday
Date: 05/18/2019

PEAK HOURS

AM	NONE
NOON	12:00 PM - 01:00 PM
PM	NONE

COUNT PERIODS

AM	NONE
NOON	11:00 AM - 03:00 PM
PM	NONE

N State College Blvd — SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	5	332	472	0	906	NOON
PM	0	0	0	0	0	PM

E Lambert Rd — EASTBOUND

AM	NOON	PM	
0	1397	0	
0	0	0	0
0	17	0	2
0	924	0	3.5
0	247	0	0.5
AM	NOON	PM	

E Lambert Rd — WESTBOUND

PM	NOON	AM	
0	656	0	1
0	1270	0	3
0	607	0	2
0	6	0	0
0	1699	0	
PM	NOON	AM	

N State College Blvd — NORTHBOUND

PM	0	0	0	0	0	PM
NOON	1186	0	122	233	297	NOON
AM	0	0	0	0	0	AM

Turning movements (left, through, right, U-turn):

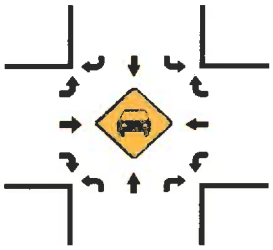
0	2	2	0	
0	2	1.5	1.5	

CONTROL

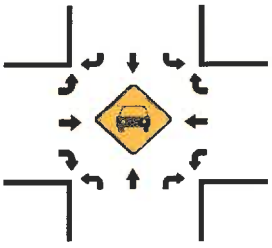
Signalized

	AM	NOON	PM
TEV	0	5188	0
PHF		0.96	

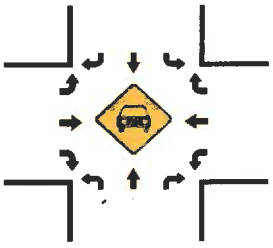
Total Vehicles (AM)



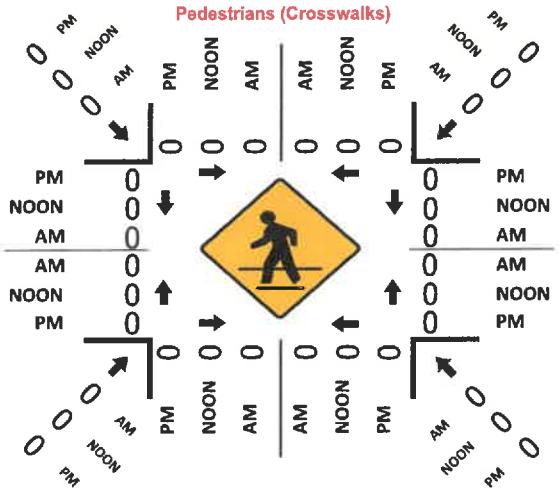
Total Vehicles (NOON)



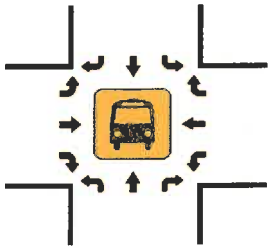
Total Vehicles (PM)



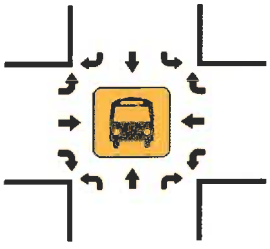
Pedestrians (Crosswalks)



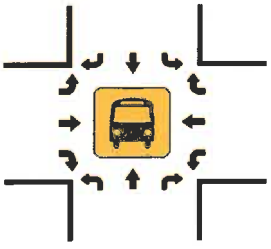
Total Vehicles (AM)



Total Vehicles (NOON)



Total Vehicles (PM)



INTERSECTION TURNING MOVEMENT COUNTS

T418

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:				
Sat, May 18, 19	LOCATION:	Brea	PROJECT #:	SC2213
	NORTH & SOUTH:	State College	LOCATION #:	1
	EAST & WEST:	Birch	CONTROL:	SIGNAL

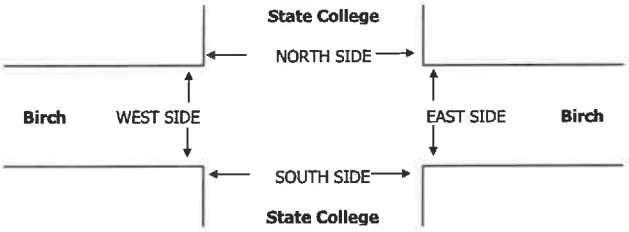
NOTES:

AM PM MD OTHER OTHER

N ▲ ◄ W E ► S ▼

☑ Add U-Turns to Left Turns

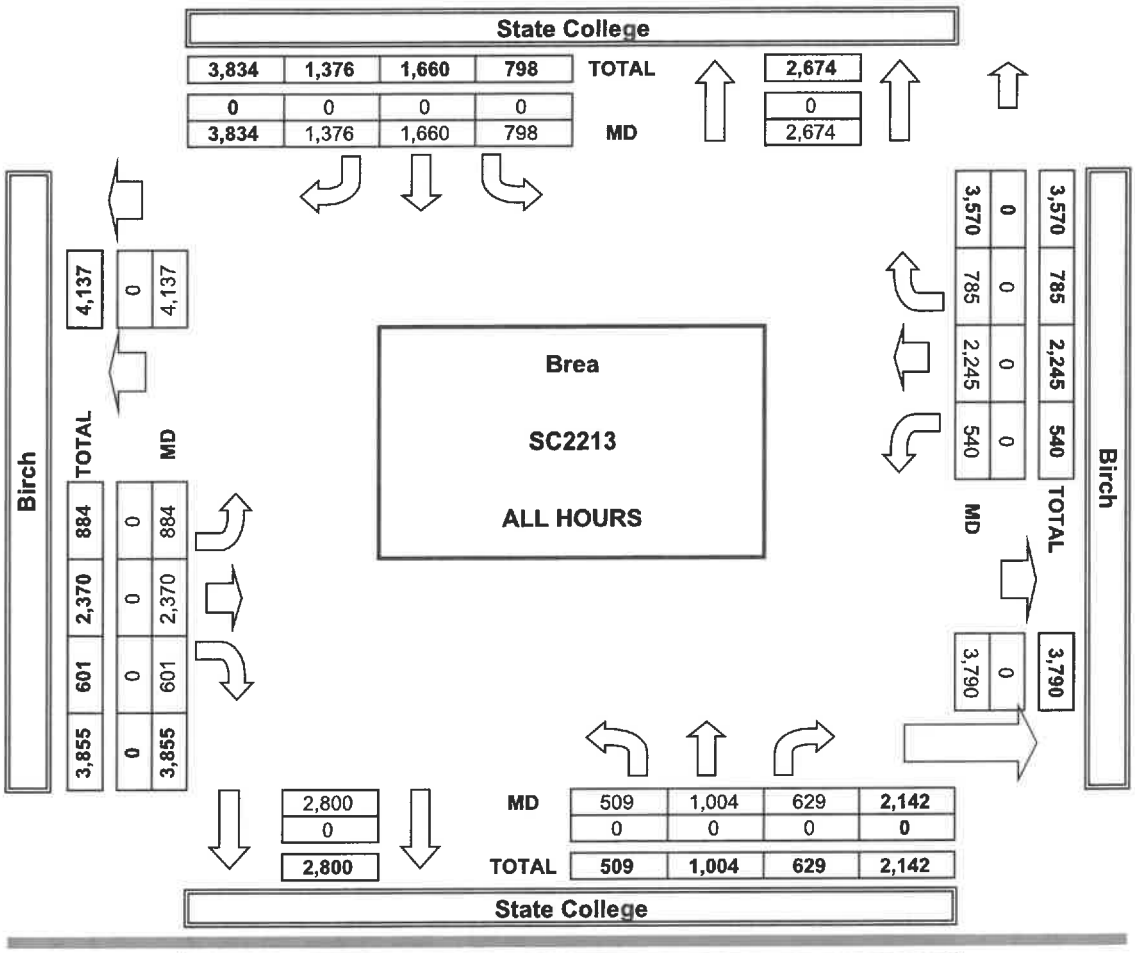
	NORTHBOUND State College			SOUTHBOUND State College			EASTBOUND Birch			WESTBOUND Birch				U-TURNS				
LANES:	NL 2	NT 2	NR 1	SL 2	ST 2	SR 0	EL 2	ET 2	ER 1	WL 2	WT 2	WR 1	TOTAL	NB 0	SB 0	EB 0	WB 0	TTL
MD 11:00 AM	26	36	27	35	83	69	37	117	32	32	147	40	681	0	0	0	0	0
11:15 AM	33	63	22	39	102	78	44	107	35	35	142	44	744	0	0	0	0	0
11:30 AM	30	62	28	41	92	84	54	130	27	35	141	46	770	0	2	1	1	4
11:45 AM	29	52	33	67	98	89	40	154	46	37	175	55	875	0	0	0	0	0
12:00 PM	24	57	37	61	119	95	55	148	40	39	160	46	881	0	1	1	0	2
12:15 PM	37	60	40	73	126	97	51	158	35	40	150	51	918	0	1	0	0	1
12:30 PM	35	59	45	46	125	104	60	180	44	44	170	52	964	0	1	1	0	2
12:45 PM	21	66	44	60	145	113	48	172	35	31	145	57	937	0	0	1	0	1
1:00 PM	40	49	51	55	98	82	62	156	36	32	140	54	855	0	0	0	0	0
1:15 PM	38	78	42	65	101	60	58	153	42	34	127	35	833	0	1	1	0	2
1:30 PM	41	70	37	51	98	71	53	164	46	35	128	50	844	0	2	0	0	2
1:45 PM	25	69	45	56	110	90	76	149	42	26	138	55	881	0	0	1	0	1
2:00 PM	34	69	36	36	74	78	66	140	35	28	117	58	771	0	0	1	0	1
2:15 PM	32	62	52	30	94	95	58	139	30	32	110	57	791	0	0	0	0	0
2:30 PM	28	81	43	33	77	79	65	159	36	37	122	45	805	0	0	0	0	0
2:45 PM	36	71	47	50	118	92	57	144	40	23	133	40	851	0	0	0	0	0
VOLUMES	509	1,004	629	798	1,660	1,376	884	2,370	601	540	2,245	785	13,401	0	8	7	1	16
APPROACH %	24%	47%	29%	21%	43%	36%	23%	61%	16%	15%	63%	22%						
APP/DEPART	2,142	/	2,674	3,834	/	2,800	3,855	/	3,790	3,570	/	4,137	0					
BEGIN PEAK HR		12:00 PM																
VOLUMES	117	242	166	240	515	409	214	658	154	154	625	206	3,700					
APPROACH %	22%	46%	32%	21%	44%	35%	21%	64%	15%	16%	63%	21%						
PEAK HR FACTOR		0.944			0.915			0.903			0.926		0.960					
APP/DEPART	525	/	662	1,164	/	823	1,026	/	1,061	985	/	1,154	0					

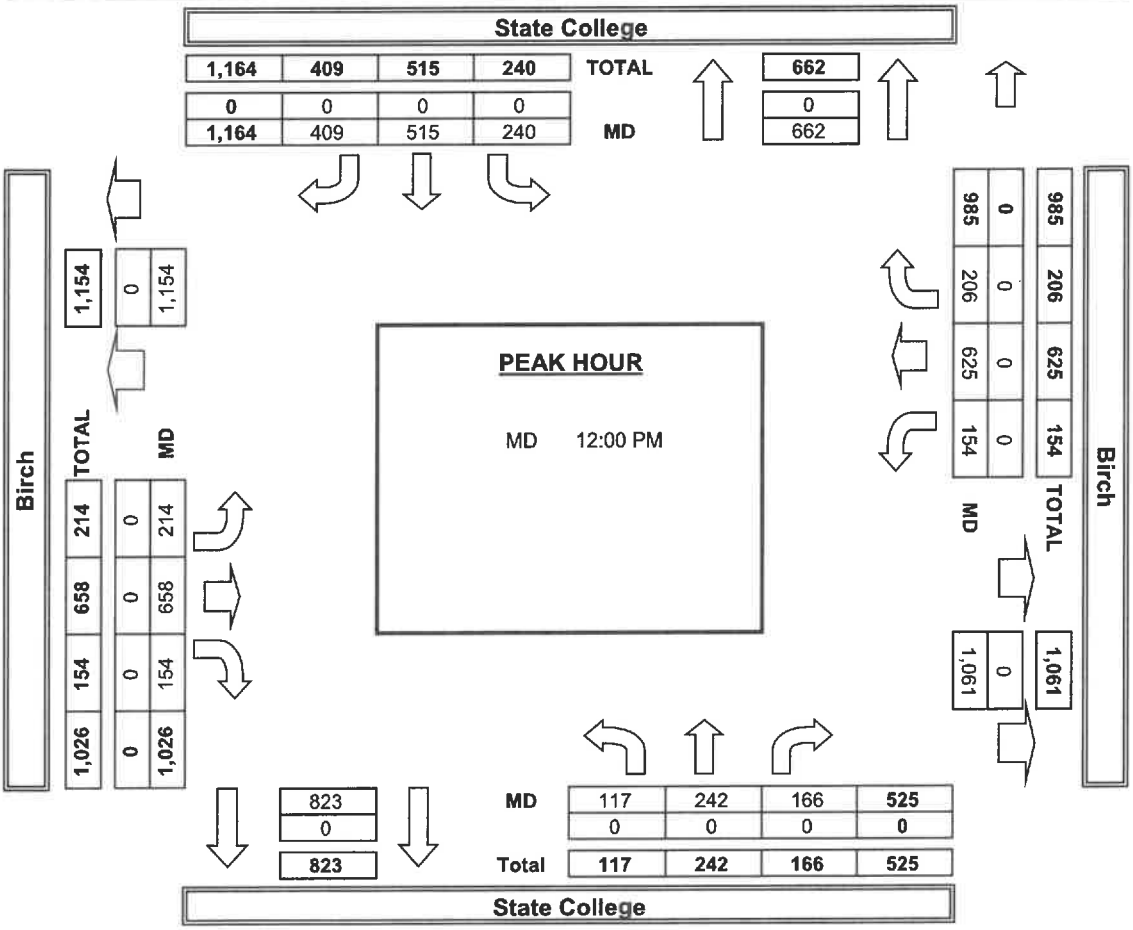


	PEDESTRIAN + BIKE CROSSINGS					PEDESTRIAN CROSSINGS					BICYCLE CROSSINGS				
	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	NS	SS	ES	WS	TOTAL
MD 11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM BEGIN PEAK HR	12:00 PM					0	0	0	0	0					

AimTD LLC

TURNING MOVEMENT COUNTS





National Data & Surveying Services

Intersection Turning Movement Count

Location: State College Blvd & Birch St
City: Brea
Control: Signalized

Project ID: 18-01231-005
Date: 11/13/2018

Total

NS/EW Streets:	State College Blvd				State College Blvd				Birch St				Birch St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	2	1	0	2	2	0	0	2	2	1	0	2	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	12	23	11	0	116	168	22	0	16	95	7	0	20	76	40	0	606
7:15 AM	21	19	19	0	131	235	13	0	9	89	10	0	20	85	43	0	694
7:30 AM	14	22	24	0	160	220	30	0	20	137	14	0	10	114	58	0	823
7:45 AM	20	34	27	0	184	144	49	0	23	121	8	0	19	172	88	0	889
8:00 AM	16	37	20	0	117	134	45	0	18	126	13	0	23	153	68	0	770
8:15 AM	17	35	17	0	99	104	44	0	27	84	10	0	34	137	55	0	663
8:30 AM	11	39	15	0	64	81	51	0	28	65	11	0	18	127	43	0	553
8:45 AM	20	33	9	0	73	84	59	0	12	82	17	0	23	117	43	0	572
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	131	242	142	0	944	1170	313	0	153	799	90	0	167	981	438	0	5570
APPROACH %'s :	25.44%	46.99%	27.57%	0.00%	38.90%	48.21%	12.90%	0.00%	14.68%	76.68%	8.64%	0.00%	10.53%	61.85%	27.62%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	71	112	90	0	592	733	137	0	70	473	45	0	72	524	257	0	3176
PEAK HR FACTOR :	0.845	0.757	0.833	0.000	0.804	0.780	0.699	0.000	0.761	0.863	0.804	0.000	0.783	0.762	0.730	0.000	0.893
	0.843				0.891				0.860				0.764				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	2	1	0	2	2	0	0	2	2	1	0	2	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	27	67	34	0	62	71	55	0	54	139	44	0	28	163	82	0	826
4:15 PM	33	83	36	0	67	65	64	0	43	153	29	0	33	150	102	0	858
4:30 PM	33	71	47	0	70	79	58	0	32	138	31	0	27	200	116	0	902
4:45 PM	31	75	35	0	87	72	58	0	35	161	29	0	33	238	145	0	999
5:00 PM	24	75	43	0	62	72	65	0	48	170	46	0	33	231	153	0	1022
5:15 PM	31	85	41	0	70	83	56	0	43	184	30	0	29	223	146	0	1021
5:30 PM	45	92	27	0	72	73	64	1	57	184	41	0	36	203	123	0	1018
5:45 PM	34	84	34	0	54	71	77	2	48	158	39	0	46	168	101	0	916
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	258	632	297	0	544	586	497	3	360	1287	289	0	265	1576	968	0	7562
APPROACH %'s :	21.74%	53.24%	25.02%	0.00%	33.37%	35.95%	30.49%	0.18%	18.60%	66.48%	14.93%	0.00%	9.43%	56.11%	34.46%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	131	327	146	0	291	300	243	1	183	699	146	0	131	895	567	0	4060
PEAK HR FACTOR :	0.728	0.889	0.849	0.000	0.836	0.904	0.935	0.250	0.803	0.950	0.793	0.000	0.910	0.940	0.926	0.000	0.993
	0.921				0.962				0.911				0.955				

Prepared by National Data & Surveying Services

State College Blvd & Birch St

Peak Hour Turning Movement Count

ID: 18-01231-005
City: Brea

Day: Tuesday
Date: 11/13/2018

PEAK HOURS	COUNT PERIODS
07:15 AM - 08:15 AM	07:00 AM - 09:00 AM
NONE	NONE
04:45 PM - 05:45 PM	04:00 PM - 06:00 PM

State College Blvd — SOUTHBOUND

AM	137	733	592	0	439	AM
NOON	0	0	0	0	0	NOON
PM	243	300	291	1	1078	PM
	0	2	2	0		

Birch St — EASTBOUND

AM	NOON	PM	
732	0	1269	
0	0	0	0
70	0	183	2
473	0	699	2
45	0	146	1
AM	NOON	PM	

Birch St — WESTBOUND

	PM	NOON	AM
1	567	0	257
2	895	0	524
2	131	0	72
0	0	0	0
	1136	0	1155
	PM	NOON	AM

CONTROL

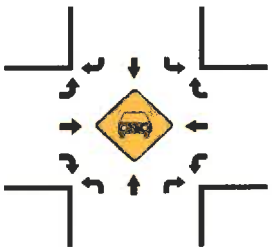
Signalized

	AM	NOON	PM
TEV	3176	0	4060
PHF	0.89		0.99

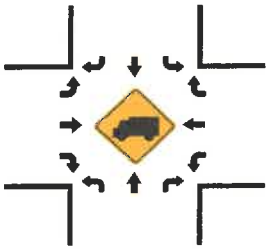
State College Blvd — NORTHBOUND

	0	2	2	1		
PM	577	0	131	327	146	PM
NOON	0	0	0	0	0	NOON
AM	850	0	71	112	90	AM

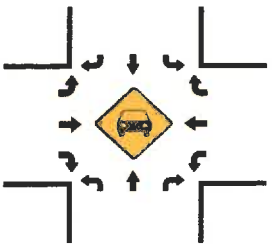
Total Vehicles (AM)



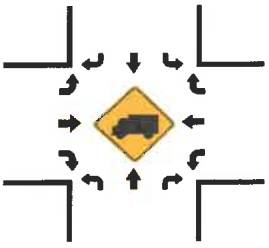
2axle (AM)



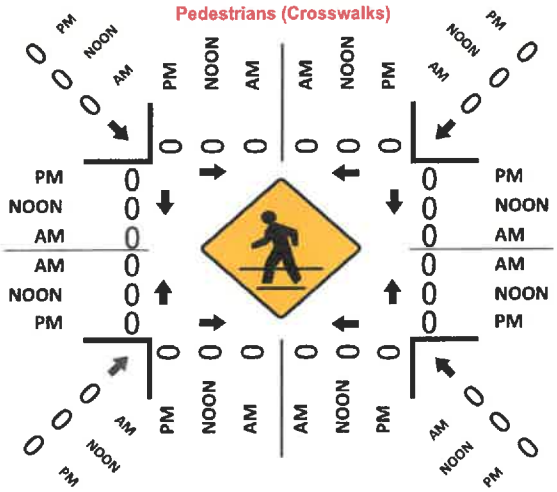
Total Vehicles (Noon)



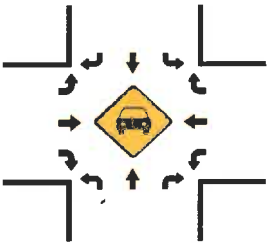
2axle (NOON)



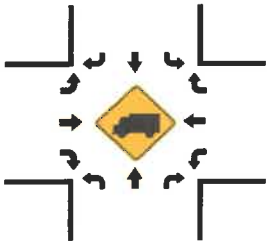
Pedestrians (Crosswalks)



Total Vehicles (PM)



2axle (PM)



Prepared by NDS/ATD

VOLUME

State College Blvd S/O Birch St

Day: Thursday
Date: 5/16/2019

City: Brea
Project #: CA19_1100_003

DAILY TOTALS	NB	SB	EB	WB	Total
	6,005	7,452	0	0	13,457

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	10		7						17		12:00	80		105						185	
00:15	7		5						12		12:15	79		142						221	
00:30	4		7						11		12:30	106		129						235	
00:45	9	30	4	23					13	53	12:45	124	389	117	493					241	882
01:00	3		1						4		13:00	127		118						245	
01:15	0		1						1		13:15	139		111						250	
01:30	6		3						9		13:30	123		122						245	
01:45	5	14	2	7					7	21	13:45	119	508	125	476					244	984
02:00	2		1						3		14:00	121		109						230	
02:15	1		4						5		14:15	104		102						206	
02:30	2		5						7		14:30	104		109						213	
02:45	2	7	3	13					5	20	14:45	101	430	127	447					228	877
03:00	1		1						2		15:00	99		142						241	
03:15	2		4						6		15:15	123		120						243	
03:30	3		2						5		15:30	131		128						259	
03:45	1	7	5	12					6	19	15:45	133	486	122	512					255	998
04:00	4		1						5		16:00	107		137						244	
04:15	5		6						11		16:15	132		105						237	
04:30	4		9						13		16:30	123		140						263	
04:45	2	15	10	26					12	41	16:45	140	502	126	508					266	1010
05:00	9		9						18		17:00	129		127						256	
05:15	7		8						15		17:15	146		130						276	
05:30	10		22						32		17:30	138		126						264	
05:45	19	45	39	78					58	123	17:45	133	546	143	526					276	1072
06:00	8		44						52		18:00	131		131						262	
06:15	14		59						73		18:15	140		113						253	
06:30	27		100						127		18:30	123		131						254	
06:45	45	94	137	340					182	434	18:45	114	508	108	483					222	991
07:00	42		109						151		19:00	132		115						247	
07:15	46		119						165		19:15	100		95						195	
07:30	54		148						202		19:30	94		124						218	
07:45	44	186	146	522					190	708	19:45	94	420	66	400					160	820
08:00	61		147						208		20:00	89		91						180	
08:15	57		152						209		20:15	92		73						165	
08:30	58		122						180		20:30	90		62						152	
08:45	52	228	137	558					189	786	20:45	90	361	67	293					157	654
09:00	48		124						172		21:00	113		60						173	
09:15	60		103						163		21:15	72		53						125	
09:30	41		116						157		21:30	58		30						88	
09:45	51	200	116	459					167	659	21:45	33	276	37	180					70	456
10:00	55		119						174		22:00	49		32						81	
10:15	54		105						159		22:15	27		18						45	
10:30	52		117						169		22:30	22		16						38	
10:45	86	247	126	467					212	714	22:45	23	121	19	85					42	206
11:00	64		124						188		23:00	21		18						39	
11:15	75		122						197		23:15	22		11						33	
11:30	81		124						205		23:30	17		7						24	
11:45	94	314	133	503					227	817	23:45	11	71	5	41					16	112
TOTALS		1387		3008						4395	TOTALS		4618		4444						9062
SPLIT %		31.6%		68.4%						32.7%	SPLIT %		51.0%		49.0%						67.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	6,005	7,452	0	0	13,457

AM Peak Hour	11:45	07:30	11:45	PM Peak Hour	16:45	17:15	17:15
AM Pk Volume	359	593	868	PM Pk Volume	553	530	1078
Pk Hr Factor	0.847	0.975	0.923	Pk Hr Factor	0.947	0.927	0.976
7 - 9 Volume	414	1080	1494	4 - 6 Volume	1048	1034	2082
7 - 9 Peak Hour	08:00	07:30	07:30	4 - 6 Peak Hour	16:45	17:00	17:00
7 - 9 Pk Volume	228	593	809	4 - 6 Pk Volume	553	526	1072
Pk Hr Factor	0.934	0.975	0.968	Pk Hr Factor	0.947	0.920	0.971

Prepared by NDS/ATD

VOLUME

State College Blvd S/O Birch St

Day: Saturday
Date: 5/18/2019

City: Brea
Project #: CA19_1100_003

DAILY TOTALS	NB	SB	EB	WB	Total
	6,548	7,440	0	0	13,988

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	22		12						34		12:00	106		195						301	
00:15	15		14						29		12:15	139		180						319	
00:30	19		12						31		12:30	144		218						362	
00:45	18	74	8	46					26	120	12:45	131	520	201	794					332	1314
01:00	16		4						20		13:00	134		146						280	
01:15	9		7						16		13:15	154		165						319	
01:30	6		7						13		13:30	151		177						328	
01:45	5	36	1	19					6	55	13:45	137	576	186	674					323	1250
02:00	5		6						11		14:00	141		132						273	
02:15	4		1						5		14:15	137		154						291	
02:30	0		4						4		14:30	162		138						300	
02:45	2	11	6	17					8	28	14:45	148	588	177	601					325	1189
03:00	3		2						5		15:00	131		152						283	
03:15	7		0						7		15:15	163		154						317	
03:30	1		2						3		15:30	137		163						300	
03:45	2	13	5	9					7	22	15:45	144	575	186	655					330	1230
04:00	2		5						7		16:00	154		151						305	
04:15	7		7						14		16:15	146		159						305	
04:30	2		2						4		16:30	134		161						295	
04:45	1	12	4	18					5	30	16:45	115	549	163	634					278	1183
05:00	6		7						13		17:00	119		170						289	
05:15	2		8						10		17:15	128		137						265	
05:30	1		6						7		17:30	128		145						273	
05:45	5	14	11	32					16	46	17:45	136	511	123	575					259	1086
06:00	8		9						17		18:00	125		148						273	
06:15	9		15						24		18:15	113		130						243	
06:30	15		15						30		18:30	102		141						243	
06:45	17	49	15	54					32	103	18:45	128	468	139	558					267	1026
07:00	10		25						35		19:00	131		124						255	
07:15	18		32						50		19:15	111		81						192	
07:30	10		39						49		19:30	114		76						190	
07:45	32	70	34	130					66	200	19:45	112	468	72	353					184	821
08:00	18		60						78		20:00	103		88						191	
08:15	26		46						72		20:15	128		61						189	
08:30	19		71						90		20:30	114		57						171	
08:45	36	99	54	231					90	330	20:45	107	452	47	253					154	705
09:00	34		64						98		21:00	92		56						148	
09:15	41		58						99		21:15	77		53						130	
09:30	46		70						116		21:30	74		31						105	
09:45	51	172	103	295					154	467	21:45	47	290	40	180					87	470
10:00	61		101						162		22:00	42		44						86	
10:15	67		117						184		22:15	67		37						104	
10:30	64		125						189		22:30	39		29						68	
10:45	79	271	135	478					214	749	22:45	36	184	25	135					61	319
11:00	90		148						238		23:00	34		26						60	
11:15	110		156						266		23:15	28		14						42	
11:30	123		153						276		23:30	22		24						46	
11:45	115	438	165	622					280	1060	23:45	24	108	13	77					37	185
TOTALS		1259		1951						3210	TOTALS		5289		5489						10778
SPLIT %		39.2%		60.8%						22.9%	SPLIT %		49.1%		50.9%						77.1%

DAILY TOTALS	NB	SB	EB	WB	Total
	6,548	7,440	0	0	13,988

AM Peak Hour	11:45	11:45			11:45	PM Peak Hour	14:30	12:00			12:00
AM Pk Volume	504	758			1262	PM Pk Volume	604	794			1314
Pk Hr Factor	0.875	0.869			0.872	Pk Hr Factor	0.926	0.911			0.907
7 - 9 Volume	169	361	0	0	530	4 - 6 Volume	1060	1209	0	0	2269
7 - 9 Peak Hour	08:00	08:00			08:00	4 - 6 Peak Hour	16:00	16:15			16:00
7 - 9 Pk Volume	99	231	0	0	330	4 - 6 Pk Volume	549	653	0	0	1183
Pk Hr Factor	0.688	0.813	0.000	0.000	0.917	Pk Hr Factor	0.891	0.960	0.000	0.000	0.970

National Data & Surveying Services

Intersection Turning Movement Count

Location: Brea Mall S Dwy & S State College Blvd
City: Brea
Control: Signalized

Project ID: 19-01152-003
Date: 8/3/2019

Total

NS/EW Streets:	Brea Mall S Dwy				Brea Mall S Dwy				S State College Blvd				S State College Blvd				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1.5	0.5	1	0	0.5	1.5	1	0	2	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
11:00 AM	30	5	22	0	4	7	51	1	107	92	10	1	25	81	6	0	442
11:15 AM	30	6	9	0	5	1	46	1	110	80	4	2	17	87	6	0	404
11:30 AM	34	5	18	0	3	7	65	0	126	80	5	1	31	84	7	0	466
11:45 AM	37	6	18	0	4	4	63	0	148	96	11	1	25	87	5	0	505
12:00 PM	37	10	22	0	4	8	60	0	137	96	11	0	24	112	9	0	530
12:15 PM	59	9	17	0	4	4	76	0	109	88	15	1	25	113	7	1	528
12:30 PM	35	12	21	0	8	6	70	0	143	92	6	1	23	143	6	0	566
12:45 PM	42	9	26	0	8	4	92	0	122	80	6	1	27	98	6	1	522
1:00 PM	44	9	20	0	9	3	84	0	133	79	7	0	20	125	6	0	539
1:15 PM	33	6	15	0	3	4	83	0	115	97	6	0	18	100	5	0	485
1:30 PM	37	6	24	0	11	5	95	0	133	79	11	1	19	138	6	0	565
1:45 PM	54	8	19	0	15	7	110	0	148	90	4	0	16	115	7	1	594
2:00 PM	38	8	21	0	9	7	93	0	134	87	9	0	24	124	2	0	556
2:15 PM	38	2	16	0	8	3	123	0	136	84	5	4	19	161	5	1	605
2:30 PM	30	5	30	0	9	1	96	0	124	79	10	0	20	156	7	1	568
2:45 PM	43	2	9	0	12	4	99	0	128	85	3	1	21	119	8	0	534
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	621	108	307	0	116	75	1306	2	2053	1384	123	14	354	1843	98	5	8409
APPROACH %'s :	59.94%	10.42%	29.63%	0.00%	7.74%	5.00%	87.12%	0.13%	57.44%	38.72%	3.44%	0.39%	15.39%	80.13%	4.26%	0.22%	
PEAK HR :	01:45 PM - 02:45 PM																TOTAL
PEAK HR VOL :	160	23	86	0	41	18	422	0	542	340	28	4	79	556	21	3	2323
PEAK HR FACTOR :	0.741	0.719	0.717	0.000	0.683	0.643	0.858	0.000	0.916	0.944	0.700	0.250	0.823	0.863	0.750	0.750	0.960
		0.830				0.897				0.944				0.886			

Prepared by National Data & Surveying Services

Brea Mall S Dwy & S State College Blvd

Peak Hour Turning Movement Count

ID: 19-01152-003
City: Brea

Day: Saturday
Date: 08/03/2019

PEAK HOURS	COUNT PERIODS
NONE	NONE
01:45 PM - 02:45 PM	11:00 AM - 03:00 PM
NONE	NONE

SOUTHBOUND (Brea Mall S Dwy)

AM	0	0	0	0	0	AM
NOON	422	18	41	0	586	NOON
PM	0	0	0	0	0	PM
	1	1.5	0.5	0		

EASTBOUND (S State College Blvd)

AM	NOON	PM	
0	1142	0	
0	4	0	0
0	542	0	2
0	340	0	2
0	28	0	0

WESTBOUND (S State College Blvd)

	PM	NOON	AM
	0	21	0
0	0	556	0
1	0	79	0
0	0	3	0
	0	470	0

NORTHBOUND (Brea Mall S Dwy)

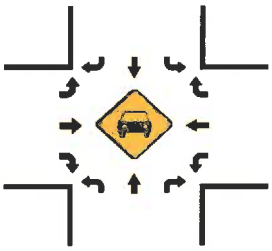
PM	0	0	0	0	0	PM
NOON	125	0	160	23	86	NOON
AM	0	0	0	0	0	AM
	0	1.5	0.5	1		

CONTROL

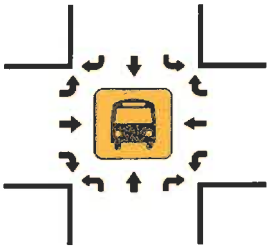
Signalized

	AM	NOON	PM
TEV	0	2323	0
PHF		0.96	

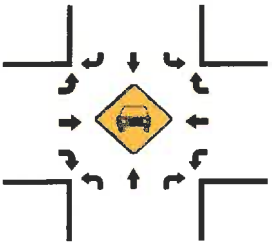
Total Vehicles (AM)



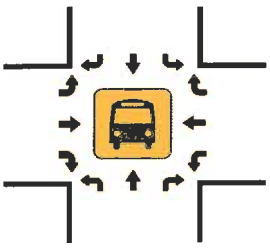
Total Vehicles (AM)



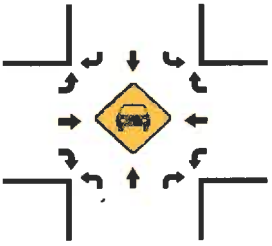
Total Vehicles (NOON)



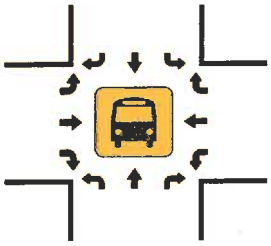
Total Vehicles (NOON)



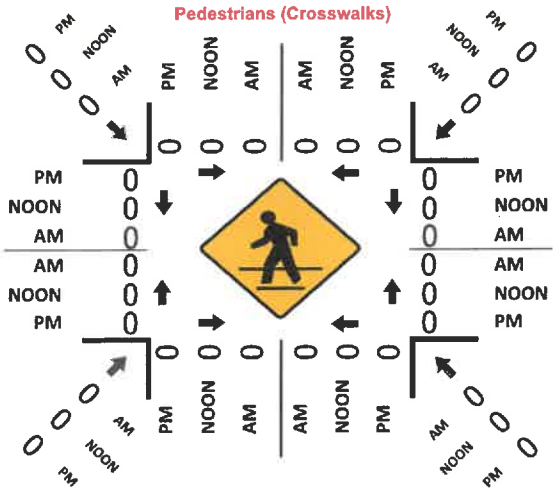
Total Vehicles (PM)



Total Vehicles (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services

Intersection Turning Movement Count

Location: S State College Blvd & Imperial Hwy
City: Brea
Control: Signalized

Project ID: 19-01101-014
Date: 5/18/2019

Total

NS/EW Streets:	S State College Blvd				S State College Blvd				Imperial Hwy				Imperial Hwy				
NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	2	1	0	2	1.5	0.5	0	2	3.5	0.5	0	2	3	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
11:00 AM	48	68	94	1	86	39	32	0	29	362	27	1	97	368	178	10	1440
11:15 AM	53	89	119	3	79	63	24	0	21	375	32	2	94	365	212	16	1547
11:30 AM	64	105	128	3	88	44	44	0	40	368	37	2	98	385	165	13	1584
11:45 AM	59	110	146	3	105	65	31	0	22	330	31	0	137	440	241	24	1744
12:00 PM	70	106	137	1	120	78	45	0	29	349	50	1	129	399	183	24	1721
12:15 PM	54	110	138	4	124	93	38	0	41	359	39	0	124	414	200	17	1755
12:30 PM	56	133	114	5	138	107	55	0	33	382	48	0	135	426	203	13	1848
12:45 PM	55	94	99	1	129	111	41	0	37	340	44	1	108	382	185	19	1646
1:00 PM	47	84	93	4	123	78	38	0	29	396	36	0	139	432	198	17	1714
1:15 PM	47	67	88	1	138	99	40	0	36	394	42	1	125	403	217	13	1711
1:30 PM	58	82	99	3	147	90	46	0	32	403	39	0	129	392	189	13	1722
1:45 PM	55	77	101	1	150	94	42	0	36	420	43	1	145	423	188	17	1793
2:00 PM	39	76	92	1	155	110	37	0	32	416	41	3	112	414	188	23	1739
2:15 PM	43	73	86	0	118	89	53	0	34	373	34	0	115	368	168	18	1572
2:30 PM	43	77	83	2	156	99	46	0	23	375	40	0	117	392	179	14	1646
2:45 PM	37	68	79	2	145	108	41	0	33	375	34	0	112	388	188	19	1629
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	828	1419	1696	35	2001	1367	653	0	507	6017	617	12	1916	6391	3082	270	26811
APPROACH %'s :	20.81%	35.67%	42.63%	0.88%	49.76%	34.00%	16.24%	0.00%	7.09%	84.12%	8.63%	0.17%	16.43%	54.82%	26.43%	2.32%	
PEAK HR :	11:45 AM - 12:45 PM																TOTAL
PEAK HR VOL :	239	459	535	13	487	343	169	0	125	1420	168	1	525	1679	827	78	7068
PEAK HR FACTOR :	0.854	0.863	0.916	0.650	0.882	0.801	0.768	0.000	0.762	0.929	0.840	0.250	0.958	0.954	0.858	0.813	0.956
		0.980				0.833				0.925				0.923			

Prepared by National Data & Surveying Services

S State College Blvd & Imperial Hwy

Peak Hour Turning Movement Count

ID: 19-01101-014
City: Brea

Day: Saturday
Date: 05/18/2019

PEAK HOURS

NONE
11:45 AM - 12:45 PM
NONE

COUNT PERIODS

NONE
11:00 AM - 03:00 PM
NONE

S State College Blvd — SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	169	343	487	0	1411	NOON
PM	0	0	0	0	0	PM

0.5 1.5 2 0

Imperial Hwy — EASTBOUND

AM	NOON	PM	
0	2088	0	
0	1	0	0
0	125	0	2
0	1420	0	3.5
0	168	0	0.5
AM	NOON	PM	

Imperial Hwy — WESTBOUND

PM	NOON	AM	
0	827	0	1
0	1679	0	3
0	525	0	2
0	78	0	0
0	2520	0	
PM	NOON	AM	

CONTROL

Signalized

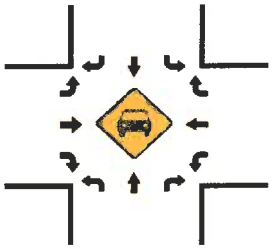
	AM	NOON	PM
TEV	0	7068	0
PHF		0.96	

0 2 2 1

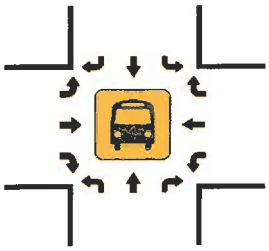
S State College Blvd — NORTHBOUND

PM	0	0	0	0	0	PM
NOON	1049	13	239	459	535	NOON
AM	0	0	0	0	0	AM

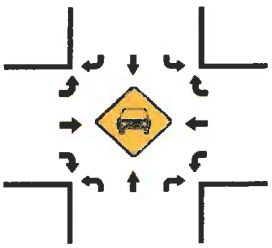
Total Vehicles (AM)



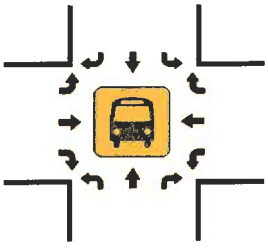
Total Vehicles (AM)



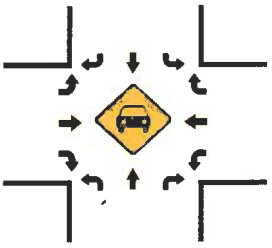
Total Vehicles (NOON)



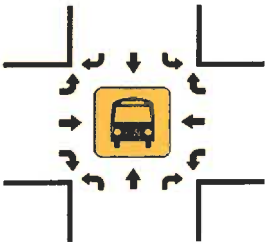
Total Vehicles (NOON)



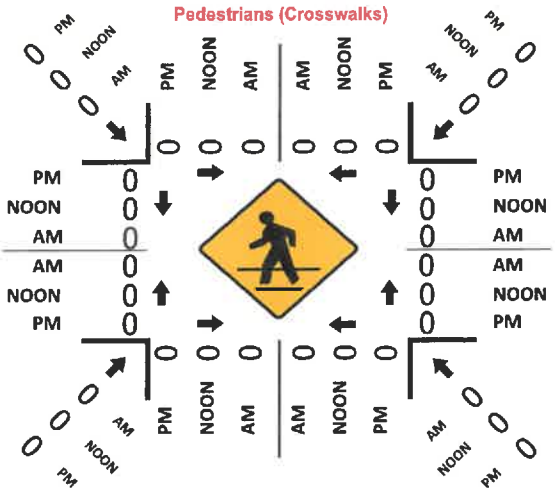
Total Vehicles (PM)



Total Vehicles (PM)



Pedestrians (Crosswalks)



Transportation Studies, Inc.

2640 Walnut Avenue, Suite L
Tustin, CA. 92780

Location : N. STATE COLLEGE BOULEVARD
Segment : BASTANCHURY RD TO N.C.L.
Client : CITY FULLERTON

Site: FULLERTON
Date: 02/15/24

Interval	NB				SB				Combined				Day: Thursday
Begin	AM		PM		AM		PM		AM		PM		
12:00	23	60	174	680	25	67	126	558	48	127	300	1.238	
12:15	15		176		12		138		27		314		
12:30	13		162		18		154		31		316		
12:45	9		168		12		140		21		308		
01:00	12	33	202	624	11	30	152	673	23	63	354	1.297	
01:15	4		164		4		173		8		337		
01:30	11		134		7		160		18		294		
01:45	6		124		8		188		14		312		
02:00	5	26	150	765	5	19	167	703	10	45	317	1.468	
02:15	13		168		2		176		15		344		
02:30	6		220		6		172		12		392		
02:45	2		227		6		188		8		415		
03:00	5	29	197	907	4	26	216	898	9	55	413	1.805	
03:15	8		232		3		216		11		448		
03:30	7		224		9		262		16		486		
03:45	9		254		10		204		19		458		
04:00	4	24	258	976	8	69	180	746	12	93	438	1.722	
04:15	5		256		11		194		16		450		
04:30	8		228		28		188		36		416		
04:45	7		234		22		184		29		418		
05:00	14	100	244	1.005	26	136	215	777	40	236	459	1.782	
05:15	20		278		20		204		40		482		
05:30	30		242		36		174		66		416		
05:45	36		241		54		184		90		425		
06:00	26	181	223	738	64	439	176	642	90	620	399	1.380	
06:15	32		190		66		170		98		360		
06:30	41		151		126		156		167		307		
06:45	82		174		183		140		265		314		
07:00	74	467	166	516	296	1.407	112	389	370	1.874	278	905	
07:15	122		127		356		114		478		241		
07:30	131		127		354		78		485		205		
07:45	140		96		401		85		541		181		
08:00	131	664	96	363	371	1.278	96	328	502	1.942	192	691	
08:15	170		96		320		78		490		174		
08:30	201		77		256		80		457		157		
08:45	162		94		331		74		493		168		
09:00	122	484	76	298	226	784	68	235	348	1.268	144	533	
09:15	112		86		206		70		318		156		
09:30	132		70		186		53		318		123		
09:45	118		66		166		44		284		110		
10:00	122	500	48	165	146	582	36	161	268	1.082	84	326	
10:15	120		39		158		42		278		81		
10:30	124		44		144		47		268		91		
10:45	134		34		134		36		268		70		
11:00	146	625	24	104	144	566	28	82	290	1.191	52	186	
11:15	161		24		137		22		298		46		
11:30	152		26		135		18		287		44		
11:45	166		30		150		14		316		44		
Totals	3.193		7.141		5.403		6.192		8.596		13.333		
Split%	37.1		53.6		62.9		46.4						
Day Totals		10.334				11.595				21.929			
Day Splits		47.1				52.9							
Peak Hour	08:00		05:00		07:15		03:00		07:30		03:30		
Volume	664		1.005		1.482		898		2.018		1.832		
Factor	0.83		0.90		0.92		0.86		0.93		0.94		

* Data File : D2402104

Transportation Studies, Inc.

2640 Walnut Avenue, Suite L
Tustin, CA. 92780

Location : N. STATE COLLEGE BOULEVARD
Segment : YORBA LINDA BVD TO BASTANCHURY
Client : CITY FULLERTON

Site: FULLERTON
Date: 02/15/24

Interval	NB				SB				Combined				Day: Thursday
Begin	AM		PM		AM		PM		AM		PM		
12:00	9	38	130	534	20	55	126	598	29	93	256	1.132	
12:15	9		125		16		156		25		281		
12:30	10		115		12		166		22		281		
12:45	10		164		7		150		17		314		
01:00	8	29	188	507	2	22	142	595	10	51	330	1.102	
01:15	10		108		4		136		14		244		
01:30	4		114		9		145		13		259		
01:45	7		97		7		172		14		269		
02:00	1	11	144	649	2	11	176	732	3	22	320	1.381	
02:15	3		148		3		191		6		339		
02:30	5		197		1		183		6		380		
02:45	2		160		5		182		7		342		
03:00	2	10	156	744	2	13	206	914	4	23	362	1.658	
03:15	5		130		4		214		9		344		
03:30	1		216		2		253		3		469		
03:45	2		242		5		241		7		483		
04:00	1	26	259	893	8	51	174	770	9	77	433	1.663	
04:15	3		234		5		180		8		414		
04:30	11		202		18		214		29		416		
04:45	11		198		20		202		31		400		
05:00	12	63	248	957	10	92	198	755	22	155	446	1.712	
05:15	6		256		22		211		28		467		
05:30	15		246		24		176		39		422		
05:45	30		207		36		170		66		377		
06:00	28	158	162	670	46	409	142	530	74	567	304	1.200	
06:15	34		172		58		137		92		309		
06:30	28		144		117		125		145		269		
06:45	68		192		188		126		256		318		
07:00	87	450	164	504	310	1.636	97	358	397	2.086	261	862	
07:15	129		120		438		101		567		221		
07:30	128		120		406		96		534		216		
07:45	106		100		482		64		588		164		
08:00	118	520	68	270	463	1.529	78	288	581	2.049	146	558	
08:15	162		70		444		78		606		148		
08:30	141		49		290		74		431		123		
08:45	99		83		332		58		431		141		
09:00	98	397	91	301	216	889	80	236	314	1.286	171	537	
09:15	97		58		214		68		311		126		
09:30	82		66		244		48		326		114		
09:45	120		86		215		40		335		126		
10:00	82	379	56	144	148	557	30	124	230	936	86	268	
10:15	91		32		133		36		224		68		
10:30	96		26		138		32		234		58		
10:45	110		30		138		26		248		56		
11:00	128	525	24	99	138	551	18	61	266	1.076	42	160	
11:15	128		18		140		18		268		36		
11:30	143		16		133		16		276		32		
11:45	126		41		140		9		266		50		
Totals	2.606		6.272		5.815		5.961		8.421		12.233		
Split%	30.9		51.3		69.1		48.7						
Day Totals		8.878				11.776				20.654			
Day Splits		43.0				57.0							
Peak Hour	07:45		05:00		07:30		03:00		07:30		03:30		
Volume	527		957		1.795		914		2.309		1.799		
Factor	0.81		0.93		0.93		0.90		0.95		0.93		

* Data File : D2402103

Transportation Studies, Inc.

2640 Walnut Avenue, Suite L
Tustin, CA. 92780

Location : N. STATE COLLEGE BOULEVARD
Segment : DOROTHY LN TO YORBA LINDA BV
Client : CITY FULLERTON

Site: FULLERTON
Date: 02/15/24

Day: Thursday

Interval	NB				SB				Combined			
Begin	AM		PM		AM		PM		AM		PM	
12:00	27	68	221	939	19	70	211	895	46	138	432	1.834
12:15	16		220		19		212		35		432	
12:30	12		198		18		228		30		426	
12:45	13		300		14		244		27		544	
01:00	18	65	314	923	10	36	213	856	28	101	527	1.779
01:15	24		204		6		206		30		410	
01:30	10		219		12		227		22		446	
01:45	13		186		8		210		21		396	
02:00	5	22	249	1.199	8	19	222	987	13	41	471	2.186
02:15	6		303		4		274		10		577	
02:30	6		384		3		282		9		666	
02:45	5		263		4		209		9		472	
03:00	3	18	250	1.349	1	15	257	1.209	4	33	507	2.558
03:15	7		226		5		297		12		523	
03:30	3		384		5		326		8		710	
03:45	5		489		4		329		9		818	
04:00	8	40	444	1,386	7	62	259	1,019	15	102	703	2,405
04:15	2		332		5		236		7		568	
04:30	15		322		21		254		36		576	
04:45	15		288		29		270		44		558	
05:00	16	87	361	1,412	15	99	270	1,106	31	186	631	2,518
05:15	16		399		16		285		32		684	
05:30	23		380		28		267		51		647	
05:45	32		272		40		284		72		556	
06:00	27	204	286	1,083	53	390	220	845	80	594	506	1.928
06:15	42		249		60		226		102		475	
06:30	39		256		113		200		152		456	
06:45	96		292		164		199		260		491	
07:00	133	673	285	843	336	1.558	144	491	469	2.231	429	1.334
07:15	231		212		354		126		585		338	
07:30	177		179		376		116		553		295	
07:45	132		167		492		105		624		272	
08:00	169	699	142	520	502	1.570	98	380	671	2.269	240	900
08:15	208		128		418		104		626		232	
08:30	193		122		304		96		497		218	
08:45	129		128		346		82		475		210	
09:00	111	559	240	673	259	1,108	92	295	370	1,667	332	968
09:15	126		163		244		83		370		246	
09:30	134		120		310		62		444		182	
09:45	188		150		295		58		483		208	
10:00	166	625	100	273	208	828	60	191	374	1.453	160	464
10:15	136		80		220		49		356		129	
10:30	140		48		209		42		349		90	
10:45	183		45		191		40		374		85	
11:00	160	856	35	134	228	854	28	85	388	1.710	63	219
11:15	238		33		220		19		458		52	
11:30	260		38		203		22		463		60	
11:45	198		28		203		16		401		44	
Totals	3.916		10.734		6.609		8.359		10.525		19.093	
Split%	37.2		56.2		62.8		43.8					
Day Totals		14.650				14.968				29.618		
Day Splits		49.5				50.5						
Peak Hour	11:00		03:30		07:30		03:15		07:30		03:30	
Volume	856		1.649		1.788		1.211		2.474		2.799	
Factor	0.82		0.84		0.89		0.92		0.92		0.86	

* Data File : D2402102

Transportation Studies, Inc.

2640 Walnut Avenue, Suite L
Tustin, CA. 92780

Location : N. STATE COLLEGE BOULEVARD
Segment : CHAPMAN AVE TO DOROTHY LN.
Client : CITY FULLERTON

Site: FULLERTON
Date: 02/15/24

Interval	NB				SB				Combined				Day: Thursday
Begin	AM		PM		AM		PM		AM		PM		
12:00	35	87	233	988	19	57	198	964	54	144	431	1.952	
12:15	19		255		14		222		33		477		
12:30	18		246		16		244		34		490		
12:45	15		254		8		300		23		554		
01:00	20	72	236	930	8	22	343	1.086	28	94	579	2.016	
01:15	28		234		4		226		32		460		
01:30	8		224		4		260		12		484		
01:45	16		236		6		257		22		493		
02:00	4	26	277	923	10	21	273	1.188	14	47	550	2.111	
02:15	7		230		6		322		13		552		
02:30	6		196		1		303		7		499		
02:45	9		220		4		290		13		510		
03:00	4	20	244	1.121	3	31	276	1.152	7	51	520	2.273	
03:15	10		258		8		246		18		504		
03:30	2		320		4		316		6		636		
03:45	4		299		16		314		20		613		
04:00	4	40	270	1,096	10	73	230	932	14	113	500	2,028	
04:15	2		288		6		242		8		530		
04:30	16		254		19		216		35		470		
04:45	18		284		38		244		56		528		
05:00	24	102	278	1,170	32	163	291	1.074	56	265	569	2,244	
05:15	18		300		24		278		42		578		
05:30	24		294		41		271		65		565		
05:45	36		298		66		234		102		532		
06:00	44	280	294	1.030	52	438	240	960	96	718	534	1.990	
06:15	50		230		86		216		136		446		
06:30	60		256		116		218		176		474		
06:45	126		250		184		286		310		536		
07:00	129	819	211	729	274	1.246	250	637	403	2.065	461	1.366	
07:15	180		202		338		156		518		358		
07:30	232		166		300		113		532		279		
07:45	278		150		334		118		612		268		
08:00	353	1.280	130	498	318	1.247	112	449	671	2.527	242	947	
08:15	426		130		316		116		742		246		
08:30	296		116		344		119		640		235		
08:45	205		122		269		102		474		224		
09:00	194	944	124	382	235	909	121	467	429	1,853	245	849	
09:15	219		94		210		106		429		200		
09:30	272		84		204		114		476		198		
09:45	259		80		260		126		519		206		
10:00	156	685	80	241	236	834	75	203	392	1.519	155	444	
10:15	142		66		206		36		348		102		
10:30	170		51		184		56		354		107		
10:45	217		44		208		36		425		80		
11:00	230	826	39	148	244	1.018	34	115	474	1.844	73	263	
11:15	224		41		266		30		490		71		
11:30	184		34		242		31		426		65		
11:45	188		34		266		20		454		54		
Totals	5.181		9.256		6.059		9.227		11.240		18.483		
Split%	46.1		50.1		53.9		49.9						
Day Totals		14.437				15.286				29.723			
Day Splits		48.6				51.4							
Peak Hour	07:45		05:15		07:45		02:15		07:45		03:30		
Volume	1.353		1.186		1.312		1.191		2.665		2.279		
Factor	0.79		0.99		0.95		0.92		0.90		0.90		

* Data File : D2402101

Transportation Studies, Inc.

2640 Walnut Avenue, Suite L
Tustin, CA. 92780

Location : N. STATE COLLEGE BOULEVARD
Segment : COMMONWEALTH TO CHAPMAN AVE
Client : CITY FULLERTON

Site: FULLERTON
Date: 02/15/24

Interval	NB				SB				Combined				Day: Thursday
Begin	AM		PM		AM		PM		AM		PM		
12:00	25	76	168	697	25	79	178	809	50	155	346	1.506	
12:15	21		182		24		180		45		362		
12:30	20		173		16		203		36		376		
12:45	10		174		14		248		24		422		
01:00	16	54	136	591	10	53	284	938	26	107	420	1.529	
01:15	20		126		13		227		33		353		
01:30	8		160		14		219		22		379		
01:45	10		169		16		208		26		377		
02:00	6	30	180	677	8	24	182	989	14	54	362	1.666	
02:15	6		136		5		249		11		385		
02:30	12		171		5		282		17		453		
02:45	6		190		6		276		12		466		
03:00	4	23	158	766	1	38	204	961	5	61	362	1.727	
03:15	7		170		9		228		16		398		
03:30	6		240		16		232		22		472		
03:45	6		198		12		297		18		495		
04:00	8	73	202	836	10	79	302	1,070	18	152	504	1.906	
04:15	10		212		9		266		19		478		
04:30	29		200		22		272		51		472		
04:45	26		222		38		230		64		452		
05:00	34	155	238	929	31	160	243	1,084	65	315	481	2.013	
05:15	28		246		30		292		58		538		
05:30	39		218		51		282		90		500		
05:45	54		227		48		267		102		494		
06:00	36	253	208	788	74	435	230	863	110	688	438	1.651	
06:15	52		192		74		199		126		391		
06:30	81		198		127		224		208		422		
06:45	84		190		160		210		244		400		
07:00	110	596	160	569	222	1.084	198	613	332	1.680	358	1.182	
07:15	125		154		278		166		403		320		
07:30	163		141		312		129		475		270		
07:45	198		114		272		120		470		234		
08:00	234	808	118	383	264	1.032	136	457	498	1.840	254	840	
08:15	232		103		264		122		496		225		
08:30	182		86		274		116		456		202		
08:45	160		76		230		83		390		159		
09:00	164	743	84	259	153	705	131	451	317	1,448	215	710	
09:15	168		66		175		122		343		188		
09:30	218		53		180		88		398		141		
09:45	193		56		197		110		390		166		
10:00	118	511	50	188	200	676	76	253	318	1,187	126	441	
10:15	117		54		168		68		285		122		
10:30	130		42		160		60		290		102		
10:45	146		42		148		49		294		91		
11:00	158	639	36	126	170	768	35	154	328	1,407	71	280	
11:15	156		27		208		44		364		71		
11:30	155		36		208		40		363		76		
11:45	170		27		182		35		352		62		
Totals	3,961		6,809		5,133		8,642		9,094		15,451		
Split%	43.6		44.1		56.4		55.9						
Day Totals		10,770				13,775				24,545			
Day Splits		43.9				56.1							
Peak Hour	07:45		05:00		07:15		03:45		07:30		05:00		
Volume	846		929		1,126		1,137		1,939		2,013		
Factor	0.90		0.94		0.90		0.94		0.97		0.94		

* Data File : D2402100

Transportation Studies, Inc.

2640 Walnut Avenue, Suite L
Tustin, CA. 92780

Location : N. STATE COLLEGE BOULEVARD
Segment : ORANGETHORPE TO COMMONWEALTH
Client : CITY FULLERTON

Site: FULLERTON
Date: 02/15/24

Day: Thursday

Interval	NB				SB				Combined			
Begin	AM		PM		AM		PM		AM		PM	
12:00	24	78	144	625	24	78	167	714	48	156	311	1.339
12:15	21		164		14		170		35		334	
12:30	17		158		26		162		43		320	
12:45	16		159		14		215		30		374	
01:00	19	58	124	555	12	47	234	789	31	105	358	1.344
01:15	18		134		12		183		30		317	
01:30	12		150		12		180		24		330	
01:45	9		147		11		192		20		339	
02:00	7	39	168	626	16	33	170	961	23	72	338	1.587
02:15	10		140		4		242		14		382	
02:30	10		142		8		294		18		436	
02:45	12		176		5		255		17		431	
03:00	5	22	146	691	4	46	208	894	9	68	354	1.585
03:15	5		157		9		192		14		349	
03:30	6		216		14		216		20		432	
03:45	6		172		19		278		25		450	
04:00	8	73	202	789	14	96	284	953	22	169	486	1.742
04:15	13		198		19		249		32		447	
04:30	18		191		24		210		42		401	
04:45	34		198		39		210		73		408	
05:00	48	184	212	801	32	163	212	911	80	347	424	1.712
05:15	32		214		38		248		70		462	
05:30	56		182		53		252		109		434	
05:45	48		193		40		199		88		392	
06:00	52	299	196	736	64	402	180	709	116	701	376	1.445
06:15	62		174		64		184		126		358	
06:30	82		174		102		183		184		357	
06:45	103		192		172		162		275		354	
07:00	104	572	144	470	222	1.036	198	550	326	1.608	342	1.020
07:15	110		130		254		136		364		266	
07:30	160		98		306		112		466		210	
07:45	198		98		254		104		452		202	
08:00	248	782	94	335	228	916	107	354	476	1.698	201	689
08:15	226		82		236		98		462		180	
08:30	156		70		236		82		392		152	
08:45	152		89		216		67		368		156	
09:00	152	735	64	239	149	675	106	388	301	1.410	170	627
09:15	161		65		166		96		327		161	
09:30	232		64		180		78		412		142	
09:45	190		46		180		108		370		154	
10:00	128	518	70	220	158	580	61	233	286	1.098	131	453
10:15	124		65		165		64		289		129	
10:30	118		53		135		66		253		119	
10:45	148		32		122		42		270		74	
11:00	133	609	52	143	155	679	36	132	288	1.288	88	275
11:15	166		32		180		32		346		64	
11:30	158		38		188		36		346		74	
11:45	152		21		156		28		308		49	
Totals	3.969		6.230		4.751		7.588		8.720		13.818	
Split%	45.5		45.1		54.5		54.9					
Day Totals		10.199				12.339				22.538		
Day Splits		45.3				54.7						
Peak Hour	07:30		04:30		07:15		03:30		07:30		03:30	
Volume	832		815		1.042		1.027		1.856		1.815	
Factor	0.84		0.95		0.85		0.90		0.97		0.93	

Data File : D2402099

Transportation Studies, Inc.

2640 Walnut Avenue, Suite L
Tustin, CA. 92780

Location : N. STATE COLLEGE BLVD
Segment : S.C.L. TO ORANGETHORPE AVE
Client : CITY FULLERTON

Site: FULLERTON
Date: 02/15/24

Day: Thursday

Interval	NB				SB				Combined			
Begin	AM		PM		AM		PM		AM		PM	
12:00	18	84	164	760	46	124	197	894	64	208	361	1.654
12:15	24		212		30		230		54		442	
12:30	20		168		22		211		42		379	
12:45	22		216		26		256		48		472	
01:00	15	63	162	749	22	71	302	1.078	37	134	464	1.827
01:15	22		203		18		258		40		461	
01:30	12		172		16		260		28		432	
01:45	14		212		15		258		29		470	
02:00	16	62	175	730	21	65	296	1.261	37	127	471	1.991
02:15	10		176		8		265		18		441	
02:30	12		177		22		368		34		545	
02:45	24		202		14		332		38		534	
03:00	20	116	186	805	9	66	280	1.282	29	182	466	2.087
03:15	18		187		14		286		32		473	
03:30	30		226		21		354		51		580	
03:45	48		206		22		362		70		568	
04:00	36	301	210	833	20	116	397	1.294	56	417	607	2.127
04:15	35		190		20		313		55		503	
04:30	88		218		38		306		126		524	
04:45	142		215		38		278		180		493	
05:00	100	408	208	870	40	230	354	1.245	140	638	562	2.115
05:15	79		216		42		327		121		543	
05:30	105		216		72		306		177		522	
05:45	124		230		76		258		200		488	
06:00	99	567	210	773	84	538	252	938	183	1.105	462	1.711
06:15	134		187		100		252		234		439	
06:30	146		208		138		206		284		414	
06:45	188		168		216		228		404		396	
07:00	196	862	165	540	254	1.176	226	710	450	2.038	391	1.250
07:15	192		150		269		177		461		327	
07:30	220		111		365		156		585		267	
07:45	254		114		288		151		542		265	
08:00	324	1.037	103	397	276	1.047	125	476	600	2.084	228	873
08:15	269		115		255		130		524		245	
08:30	230		79		274		116		504		195	
08:45	214		100		242		105		456		205	
09:00	205	929	78	296	206	833	120	478	411	1.762	198	774
09:15	232		82		199		126		431		208	
09:30	265		68		200		120		465		188	
09:45	227		68		228		112		455		180	
10:00	160	704	62	234	226	823	94	352	386	1.527	156	586
10:15	176		81		214		96		390		177	
10:30	167		47		199		98		366		145	
10:45	201		44		184		64		385		108	
11:00	175	779	47	157	210	876	78	248	385	1.655	125	405
11:15	210		38		236		52		446		90	
11:30	204		40		226		78		430		118	
11:45	190		32		204		40		394		72	
Totals	5.912		7.144		5.965		10.256		11.877		17.400	
Split%	49.8		41.1		50.2		58.9					
Day Totals		13.056				16.221				29.277		
Day Splits		44.6				55.4						
Peak Hour	07:45		05:15		07:15		03:30		07:30		03:30	
Volume	1.077		872		1.198		1.426		2.251		2.258	
Factor	0.83		0.95		0.82		0.90		0.94		0.93	

* Data File : D2402098

CITY TRAFFIC COUNTERS

WWW.CTCOUNTERS.COM

State College Boulevard Btwn
North City Limit & La Palma Avenue

Start Time	3/7/2024 Thu	North Morning	North Afternoon	Hour Totals Morning	Hour Totals Afternoon	South Morning	South Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		41	254			44	292				
12:15		28	239			32	271				
12:30		32	270			20	268				
12:45		33	298	134	1061	21	291	117	1122	251	2183
01:00		15	277			30	289				
01:15		20	272			25	307				
01:30		18	272			20	294				
01:45		26	274	79	1095	12	288	87	1178	166	2273
02:00		13	287			12	315				
02:15		15	287			15	299				
02:30		9	269			23	336				
02:45		17	355	54	1198	8	332	58	1282	112	2480
03:00		15	336			14	324				
03:15		10	304			24	326				
03:30		21	326			19	373				
03:45		23	344	69	1310	26	340	83	1363	152	2673
04:00		22	347			24	396				
04:15		23	308			23	396				
04:30		47	329			39	389				
04:45		80	335	172	1319	42	363	128	1544	300	2863
05:00		60	400			62	385				
05:15		79	360			64	378				
05:30		103	339			88	349				
05:45		91	363	333	1462	123	302	337	1414	670	2876
06:00		97	334			142	325				
06:15		129	330			140	303				
06:30		143	311			156	301				
06:45		153	237	522	1212	200	267	638	1196	1160	2408
07:00		156	237			220	261				
07:15		198	212			294	250				
07:30		220	171			318	238				
07:45		273	152	847	772	321	202	1153	951	2000	1723
08:00		272	150			332	158				
08:15		291	130			303	168				
08:30		215	140			357	169				
08:45		276	122	1054	542	287	151	1279	646	2333	1188
09:00		227	141			274	155				
09:15		212	131			220	136				
09:30		209	129			253	122				
09:45		192	158	840	559	262	117	1009	530	1849	1089
10:00		195	131			249	122				
10:15		234	110			211	105				
10:30		233	96			225	104				
10:45		259	87	921	424	241	65	926	396	1847	820
11:00		225	74			241	66				
11:15		225	81			256	90				
11:30		225	53			265	69				
11:45		272	42	947	250	236	51	998	276	1945	526
Total		5972	11204			6813	11898			12785	23102
Percent		34.8%	65.2%			36.4%	63.6%			35.6%	64.4%
Grand Total		5972	11204			6813	11898			12785	23102
Percent		34.8%	65.2%			36.4%	63.6%			35.6%	64.4%

ADT ADT 35,887 AADT 35,887

CITY TRAFFIC COUNTERS

WWW.CTCOUNTERS.COM

State College Boulevard Btwn
La Palma Avenue & Lincoln Avenue

Start Time	3/7/2024 Thu	North Morning	North Afternoon	Hour Totals Morning	Hour Totals Afternoon	South Morning	South Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		43	265			18	158				
12:15		33	243			14	179				
12:30		29	272			9	164				
12:45		27	282	132	1062	6	145	47	646	179	1708
01:00		18	271			13	147				
01:15		10	286			6	194				
01:30		10	280			4	190				
01:45		24	287	62	1124	3	173	26	704	88	1828
02:00		8	282			4	160				
02:15		13	326			12	208				
02:30		11	352			6	274				
02:45		18	371	50	1331	5	220	27	862	77	2193
03:00		10	327			0	227				
03:15		7	333			13	195				
03:30		31	343			8	210				
03:45		22	341	70	1344	12	203	33	835	103	2179
04:00		30	373			16	226				
04:15		29	340			13	213				
04:30		41	345			14	240				
04:45		74	390	174	1448	18	249	61	928	235	2376
05:00		35	401			27	247				
05:15		74	367			34	225				
05:30		79	377			33	245				
05:45		84	386	272	1531	50	171	144	888	416	2419
06:00		59	337			46	189				
06:15		84	348			55	171				
06:30		125	289			66	165				
06:45		138	265	406	1239	109	164	276	689	682	1928
07:00		150	210			115	133				
07:15		175	234			191	157				
07:30		241	187			191	110				
07:45		260	183	826	814	131	106	628	506	1454	1320
08:00		256	222			154	91				
08:15		250	194			172	92				
08:30		252	149			218	64				
08:45		271	128	1029	693	218	99	762	346	1791	1039
09:00		236	148			162	98				
09:15		213	142			127	67				
09:30		243	135			119	73				
09:45		204	183	896	608	136	100	544	338	1440	946
10:00		182	134			100	66				
10:15		219	106			126	62				
10:30		206	96			123	50				
10:45		251	110	858	446	128	36	477	214	1335	660
11:00		243	94			124	31				
11:15		217	85			114	30				
11:30		236	54			157	24				
11:45		244	54	940	287	126	23	521	108	1461	395
Total		5715	11927			3546	7064			9261	18991
Percent		32.4%	67.6%			33.4%	66.6%			32.8%	67.2%
Grand Total		5715	11927			3546	7064			9261	18991
Percent		32.4%	67.6%			33.4%	66.6%			32.8%	67.2%

ADT ADT 28,252 AADT 28,252

CITY TRAFFIC COUNTERS

WWW.CTCOUNTERS.COM

State College Boulevard Btwn
Lincoln Avenue & South Street

Start Time	3/7/2024 Thu	North Morning	North Afternoon	Hour Totals Morning	Hour Totals Afternoon	South Morning	South Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		28	205			23	235				
12:15		16	202			28	239				
12:30		24	222			22	247				
12:45		14	216	82	845	20	270	93	991	175	1836
01:00		13	205			12	273				
01:15		12	220			15	298				
01:30		7	210			8	226				
01:45		12	230	44	865	16	304	51	1101	95	1966
02:00		6	227			9	289				
02:15		14	223			14	321				
02:30		5	270			14	309				
02:45		9	289	34	1009	10	305	47	1224	81	2233
03:00		10	244			9	315				
03:15		4	277			12	298				
03:30		13	311			19	305				
03:45		14	260	41	1092	13	312	53	1230	94	2322
04:00		19	285			12	350				
04:15		18	282			12	391				
04:30		22	292			27	298				
04:45		53	319	112	1178	42	325	93	1364	205	2542
05:00		31	312			35	348				
05:15		34	294			44	331				
05:30		51	273			48	343				
05:45		45	287	161	1166	72	266	199	1288	360	2454
06:00		60	254			70	260				
06:15		67	253			95	306				
06:30		94	257			102	265				
06:45		103	193	324	957	162	231	429	1062	753	2019
07:00		113	181			214	208				
07:15		126	145			339	231				
07:30		167	114			319	214				
07:45		206	119	612	559	245	162	1117	815	1729	1374
08:00		204	138			262	142				
08:15		201	120			274	146				
08:30		162	110			270	133				
08:45		207	102	774	470	289	134	1095	555	1869	1025
09:00		181	97			295	121				
09:15		239	95			186	120				
09:30		178	81			195	109				
09:45		149	93	747	366	198	113	874	463	1621	829
10:00		123	73			204	88				
10:15		133	76			197	88				
10:30		166	63			188	77				
10:45		155	54	577	266	178	57	767	310	1344	576
11:00		178	64			205	60				
11:15		178	48			221	53				
11:30		178	35			255	45				
11:45		192	29	726	176	227	38	908	196	1634	372
Total		4234	8949			5726	10599			9960	19548
Percent		32.1%	67.9%			35.1%	64.9%			33.8%	66.2%
Grand Total		4234	8949			5726	10599			9960	19548
Percent		32.1%	67.9%			35.1%	64.9%			33.8%	66.2%
ADT		ADT 29,508		AADT 29,508							

CITY TRAFFIC COUNTERS

WWW.CTCOUNTERS.COM

State College Boulevard Btwn
South Street & Wagner Avenue

Start Time	3/7/2024 Thu	North Morning	North Afternoon	Hour Totals Morning	Hour Totals Afternoon	South Morning	South Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		28	193			19	180				
12:15		26	156			25	193				
12:30		40	191			15	207				
12:45		23	172	117	712	14	224	73	804	190	1516
01:00		13	188			16	207				
01:15		20	184			17	232				
01:30		18	206			6	225				
01:45		12	171	63	749	5	184	44	848	107	1597
02:00		7	182			5	215				
02:15		7	169			9	247				
02:30		9	274			17	278				
02:45		11	254	34	879	8	245	39	985	73	1864
03:00		10	222			4	277				
03:15		11	261			16	256				
03:30		5	268			17	263				
03:45		17	332	43	1083	15	257	52	1053	95	2136
04:00		11	266			21	292				
04:15		12	323			17	302				
04:30		33	332			28	266				
04:45		40	286	96	1207	29	249	95	1109	191	2316
05:00		19	367			39	282				
05:15		26	324			39	239				
05:30		44	315			64	243				
05:45		40	310	129	1316	88	235	230	999	359	2315
06:00		54	308			57	197				
06:15		57	239			97	222				
06:30		53	264			107	232				
06:45		72	247	236	1058	179	194	440	845	676	1903
07:00		121	190			204	176				
07:15		177	175			303	172				
07:30		252	171			275	177				
07:45		293	141	843	677	249	156	1031	681	1874	1358
08:00		243	153			236	140				
08:15		295	115			224	145				
08:30		157	119			241	110				
08:45		119	117	814	504	271	105	972	500	1786	1004
09:00		113	108			324	124				
09:15		136	124			197	126				
09:30		136	127			165	98				
09:45		133	115	518	474	179	103	865	451	1383	925
10:00		128	99			170	96				
10:15		102	75			138	81				
10:30		122	95			140	82				
10:45		139	54	491	323	148	74	596	333	1087	656
11:00		151	61			171	56				
11:15		166	60			184	60				
11:30		156	63			194	47				
11:45		176	33	649	217	208	45	757	208	1406	425
Total		4033	9199			5194	8816			9227	18015
Percent		30.5%	69.5%			37.1%	62.9%			33.9%	66.1%
Grand Total		4033	9199			5194	8816			9227	18015
Percent		30.5%	69.5%			37.1%	62.9%			33.9%	66.1%

ADT ADT 27,242 AADT 27,242

CITY TRAFFIC COUNTERS

WWW.CTCOUNTERS.COM

State College Boulevard Btwn
Wagner Avenue & Ball Road

Start Time	3/7/2024 Thu	North Morning	North Afternoon	Hour Totals Morning	Hour Totals Afternoon	South Morning	South Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		44	190			38	178				
12:15		38	191			29	188				
12:30		30	166			18	196				
12:45		27	182	139	729	18	198	103	760	242	1489
01:00		16	189			11	219				
01:15		16	191			15	210				
01:30		10	187			7	211				
01:45		10	186	52	753	5	193	38	833	90	1586
02:00		9	191			7	199				
02:15		12	202			13	178				
02:30		7	208			20	261				
02:45		17	225	45	826	12	260	52	898	97	1724
03:00		12	239			13	216				
03:15		7	244			14	208				
03:30		11	252			25	252				
03:45		12	249	42	984	27	223	79	899	121	1883
04:00		9	262			32	227				
04:15		19	289			30	253				
04:30		19	284			47	232				
04:45		29	298	76	1133	45	212	154	924	230	2057
05:00		16	317			43	237				
05:15		23	332			62	231				
05:30		34	314			83	239				
05:45		31	312	104	1275	82	228	270	935	374	2210
06:00		53	268			87	194				
06:15		47	265			113	184				
06:30		63	245			135	208				
06:45		65	234	228	1012	200	183	535	769	763	1781
07:00		91	188			219	151				
07:15		135	176			294	148				
07:30		122	180			320	142				
07:45		152	148	500	692	273	154	1106	595	1606	1287
08:00		146	147			229	139				
08:15		149	139			205	126				
08:30		162	127			220	110				
08:45		209	130	666	543	210	95	864	470	1530	1013
09:00		222	112			220	122				
09:15		172	130			185	128				
09:30		126	105			162	68				
09:45		119	91	639	438	166	90	733	408	1372	846
10:00		111	101			155	93				
10:15		115	88			142	65				
10:30		145	87			157	69				
10:45		129	84	500	360	142	58	596	285	1096	645
11:00		154	84			148	53				
11:15		157	62			189	57				
11:30		194	50			210	40				
11:45		149	45	654	241	165	42	712	192	1366	433
Total		3645	8986			5242	7968			8887	16954
Percent		28.9%	71.1%			39.7%	60.3%			34.4%	65.6%
Grand Total		3645	8986			5242	7968			8887	16954
Percent		28.9%	71.1%			39.7%	60.3%			34.4%	65.6%

ADT ADT 25,841 AADT 25,841

CITY TRAFFIC COUNTERS

WWW.CTCOUNTERS.COM

State College Boulevard Btwn
Ball Road & Cerritos Avenue

Start Time	3/7/2024 Thu	North Morning	North Afternoon	Hour Totals Morning	Hour Totals Afternoon	South Morning	South Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		29	173			22	193				
12:15		18	146			16	175				
12:30		23	144			22	227				
12:45		18	146	88	609	19	210	79	805	167	1414
01:00		13	178			12	268				
01:15		14	148			16	196				
01:30		9	151			11	206				
01:45		8	162	44	639	10	217	49	887	93	1526
02:00		14	172			7	200				
02:15		6	155			8	216				
02:30		4	152			23	271				
02:45		8	167	32	646	19	251	57	938	89	1584
03:00		7	190			7	259				
03:15		9	171			17	257				
03:30		7	198			19	265				
03:45		9	188	32	747	21	211	64	992	96	1739
04:00		9	202			20	268				
04:15		10	211			27	282				
04:30		21	221			47	260				
04:45		35	270	75	904	48	226	142	1036	217	1940
05:00		20	283			28	266				
05:15		24	288			34	238				
05:30		42	250			52	215				
05:45		44	264	130	1085	53	201	167	920	297	2005
06:00		54	239			46	181				
06:15		44	206			83	147				
06:30		79	185			90	150				
06:45		66	173	243	803	142	135	361	613	604	1416
07:00		84	148			165	111				
07:15		90	102			210	118				
07:30		115	112			256	98				
07:45		147	118	436	480	233	98	864	425	1300	905
08:00		118	81			209	83				
08:15		131	94			198	77				
08:30		140	69			178	73				
08:45		139	75	528	319	214	74	799	307	1327	626
09:00		161	67			158	72				
09:15		125	80			223	76				
09:30		107	60			190	48				
09:45		106	52	499	259	148	67	719	263	1218	522
10:00		100	66			180	48				
10:15		104	50			171	50				
10:30		117	42			155	38				
10:45		122	46	443	204	183	43	689	179	1132	383
11:00		134	42			157	36				
11:15		128	34			176	43				
11:30		147	21			232	28				
11:45		142	35	551	132	197	34	762	141	1313	273
Total		3101	6827			4752	7506			7853	14333
Percent		31.2%	68.8%			38.8%	61.2%			35.4%	64.6%
Grand Total		3101	6827			4752	7506			7853	14333
Percent		31.2%	68.8%			38.8%	61.2%			35.4%	64.6%

ADT ADT 22,186 AADT 22,186

CITY TRAFFIC COUNTERS

WWW.CTCOUNTERS.COM

State College Boulevard Btwn
Cerritos Avenue & Katella Avenue

Start Time	3/7/2024 Thu	North Morning	North Afternoon	Hour Totals Morning	Hour Totals Afternoon	South Morning	South Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		24	157			25	245				
12:15		14	134			17	247				
12:30		17	127			22	254				
12:45		16	140	71	558	19	232	83	978	154	1536
01:00		8	145			12	304				
01:15		10	132			17	290				
01:30		9	138			11	230				
01:45		5	149	32	564	5	252	45	1076	77	1640
02:00		4	167			6	261				
02:15		7	149			4	291				
02:30		5	142			13	372				
02:45		10	150	26	608	8	320	31	1244	57	1852
03:00		8	134			10	338				
03:15		11	162			6	338				
03:30		6	176			12	377				
03:45		10	167	35	639	4	300	32	1353	67	1992
04:00		10	180			13	382				
04:15		20	185			17	397				
04:30		30	189			18	403				
04:45		29	215	89	769	23	374	71	1556	160	2325
05:00		30	234			26	418				
05:15		34	271			26	347				
05:30		57	274			44	353				
05:45		50	195	171	974	47	296	143	1414	314	2388
06:00		58	214			45	266				
06:15		59	158			70	230				
06:30		84	157			100	194				
06:45		86	170	287	699	150	170	365	860	652	1559
07:00		110	129			171	203				
07:15		107	85			260	140				
07:30		147	113			283	121				
07:45		170	90	534	417	309	125	1023	589	1557	1006
08:00		138	71			254	103				
08:15		132	93			225	81				
08:30		145	72			242	104				
08:45		132	65	547	301	255	82	976	370	1523	671
09:00		170	61			240	93				
09:15		135	75			248	92				
09:30		93	60			243	61				
09:45		115	50	513	246	176	56	907	302	1420	548
10:00		94	60			228	58				
10:15		115	41			179	49				
10:30		118	33			223	51				
10:45		121	46	448	180	229	52	859	210	1307	390
11:00		107	41			211	51				
11:15		109	30			213	49				
11:30		149	20			236	34				
11:45		144	24	509	115	239	43	899	177	1408	292
Total		3262	6070			5434	10129			8696	16199
Percent		35.0%	65.0%			34.9%	65.1%			34.9%	65.1%
Grand Total		3262	6070			5434	10129			8696	16199
Percent		35.0%	65.0%			34.9%	65.1%			34.9%	65.1%

ADT ADT 24,895 AADT 24,895

CITY TRAFFIC COUNTERS

WWW.CTCOUNTERS.COM

State College Boulevard Btwn
Katella Avenue & South City Limit

Start Time	3/7/2024 Thu	North Morning	North Afternoon	Hour Totals Morning	Hour Totals Afternoon	South Morning	South Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		41	155			15	106				
12:15		29	142			6	147				
12:30		24	134			11	143				
12:45		22	160	116	591	11	132	43	528	159	1119
01:00		27	167			12	139				
01:15		15	138			14	149				
01:30		18	155			9	116				
01:45		10	143	70	603	7	107	42	511	112	1114
02:00		7	161			6	141				
02:15		16	163			5	145				
02:30		10	153			10	152				
02:45		15	185	48	662	4	175	25	613	73	1275
03:00		10	164			4	181				
03:15		10	169			3	173				
03:30		9	208			3	186				
03:45		16	222	45	763	4	169	14	709	59	1472
04:00		12	229			4	206				
04:15		16	273			11	236				
04:30		31	273			13	225				
04:45		36	311	95	1086	15	235	43	902	138	1988
05:00		31	344			19	207				
05:15		42	353			13	242				
05:30		43	375			32	228				
05:45		59	311	175	1383	29	209	93	886	268	2269
06:00		48	267			38	169				
06:15		92	252			49	164				
06:30		87	226			82	135				
06:45		99	211	326	956	84	154	253	622	579	1578
07:00		99	192			114	126				
07:15		136	176			154	118				
07:30		142	140			183	107				
07:45		190	123	567	631	174	102	625	453	1192	1084
08:00		118	127			179	93				
08:15		144	131			123	71				
08:30		161	105			142	89				
08:45		135	114	558	477	134	63	578	316	1136	793
09:00		153	128			99	66				
09:15		121	129			119	75				
09:30		123	81			126	57				
09:45		90	100	487	438	97	56	441	254	928	692
10:00		105	65			112	67				
10:15		142	64			83	51				
10:30		95	48			102	63				
10:45		105	62	447	239	94	40	391	221	838	460
11:00		125	58			123	34				
11:15		116	48			110	47				
11:30		140	32			138	43				
11:45		164	48	545	186	123	35	494	159	1039	345
Total		3479	8015			3042	6174			6521	14189
Percent		30.3%	69.7%			33.0%	67.0%			31.5%	68.5%
Grand Total		3479	8015			3042	6174			6521	14189
Percent		30.3%	69.7%			33.0%	67.0%			31.5%	68.5%
ADT	ADT 20,710		AADT 20,710								

2024 Average Daily Traffic Volume

Site #	Street Name	Segment	2024 ADT
	The City Drive		
191		Garden Grove Blvd. - 22 Fwy	**16,000**
192		22 Fwy - Style Street	**24,000**
193		Style Street- Chapman Ave.	**27,300**
194		Chapman Ave. - North City Limits	**26,800**

Appendix D

AGENCY RESOLUTIONS AND LETTERS OF SUPPORT

RESOLUTION NO. 2024-130

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ANAHEIM AUTHORIZING THE PUBLIC WORKS DIRECTOR OR HIS DESIGNEE TO SUBMIT A GRANT APPLICATION ON BEHALF OF THE CITY OF ANAHEIM TO THE ORANGE COUNTY TRANSPORTATION AUTHORITY FOR FUNDING UNDER THE M2 REGIONAL TRAFFIC SIGNAL SYNCHRONIZATION PROGRAM FOR STATE COLLEGE BOULEVARD/ THE CITY DRIVE REGIONAL TRAFFIC SIGNAL SYNCHRONIZATION PROGRAM (RTSSP) PROJECT, AND IF AWARDED, AUTHORIZING THE ACCEPTANCE OF SUCH GRANT FUNDS ON BEHALF OF THE CITY AND AMENDING THE BUDGET ACCORDINGLY, AND DETERMINE THE ACTION IS EXEMPT FROM THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) PURSUANT TO REGULATION NO. 15301(B) CLASS 1

WHEREAS, the City of Anaheim ("City") wishes to submit funding application to Orange County Transportation Authority ("OCTA") for the Measure M2 Traffic Signal Synchronization Program (the "Grant") to implement signal coordination and upgrade traffic signal communications; and

WHEREAS, if selected, the City will fund the upgrade of signal improvements and synchronize signals on State College Boulevard in the City of Anaheim; and

WHEREAS, the City of Anaheim is the lead agency, in partnership with the cities of Brea, Fullerton, Orange and Caltrans, for the State College Boulevard/ the City Drive Regional Traffic Signal Synchronization Program (RTSSP) Project to synchronize 58 total signals on State College Boulevard/ the City Drive (the "Project"); and

WHEREAS, the City of Anaheim 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 Council finds that the acceptance of Measure M2 grant funds and upgrading the signal improvements and synchronizing signals along State College Boulevard in the City of Anaheim is exempt from the California Environmental Quality Act (CEQA) pursuant to Regulation No. 15301(b) Class 1, incorporated herein by this reference which provides CEQA applies only to projects which have the potential for causing a significant effect on the environment; and

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

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

WHEREAS, Measure M2 Regional Traffic 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

WHEREAS, the City of Anaheim will provide matching funds for the Project as required by the Comprehensive Transportation Funding Program Procedures Manual; and

WHEREAS, the City of Anaheim desires to implement signal coordination and upgrade traffic signal communications on State College Boulevard in the City of Anaheim.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Anaheim as follows:

1. The Anaheim Public Works Director, or his designee, is hereby authorized to submit a grant application for and on behalf of the City of Anaheim, a public entity established under the laws of the State of California, and is further authorized to execute any actions necessary for the purpose of obtaining the Grant funds, including any extensions and amendments thereof. Said funds shall be matched by funds from City as required and shall be used as supplemental funding to aid the City in the signal improvements and synchronize signals on State College Boulevard in the City of Anaheim.

2. The Anaheim Public Works Director, or his/her designee, is hereby authorized to co-sign the funding application including the commitment of matching funds or in-kind services and is authorized and directed to execute any agreements, assurances, or other documents as may be necessary in connection with the acceptance of said Grant as may be required by the OCTA.

3. Contingent upon the award of said Grant, the annual budget of the City of Anaheim is hereby amended, in the year in which the Grant is awarded, by increasing revenue and expenditures in an amount equal to the amount of the Grant Funds awarded.

THE FOREGOING RESOLUTION is approved and adopted by the City Council of the City of Anaheim this 17th day of December, 2024, by the following roll call vote:

AYES: Mayor Aitken and Council Members Kurtz, Balius, Leon, Rubalcava, Maahs and Meeks

NOES: None

ABSENT: None

ABSTAIN: None

CITY OF ANAHEIM

MAYOR OF THE CITY OF ANAHEIM

ATTEST:

CITY CLERK OF THE CITY OF ANAHEIM

153939.1/bmorley

CLERK'S CERTIFICATE

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

I, THERESA BASS, City Clerk of the City of Anaheim, do hereby certify that the foregoing is the original Resolution No. 2024-130 adopted at a regular meeting provided by law, of the Anaheim City Council held on the 17th day of December, 2024 by the following vote of the members thereof:

AYES: Mayor Aitken and Council Members Kurtz, Balius, Leon, Rubalcava, Maahs and Meeks

NOES: None

ABSTAIN: None

ABSENT: None

IN WITNESS WHEREOF, I have hereunto set my hand this 18th day of December, 2024.

CITY CLERK OF THE CITY OF ANAHEIM

(SEAL)

CITY of BREA

October 17, 2024

John Thai, PE
Principal Traffic Engineer
City of Anaheim
200 South Anaheim Boulevard
2nd Floor, Suite 276
Anaheim, CA 92805

Subject: Letter of Support for the Regional Traffic Signal Synchronization Application – State College Boulevard Corridor

Dear Mr. Thai:

The Orange County Transportation Authority recently issued the 2025 Comprehensive Transportation Funding Program (CTFP) Call for Projects for the Regional Traffic Signal Synchronization Program (RTSSP) to coordinate traffic signals across jurisdictional boundaries in the county.

The City of Brea is excited to team with the City of Anaheim, the City of Fullerton, and the City of Orange to submit an RTSSP funding application for the State College Boulevard Corridor. We recognize that revised traffic signal synchronization patterns and improvements to traffic signal control and communications equipment along State College Boulevard between Garden Grove Boulevard in the City of Orange, through the City of Anaheim and the City of Fullerton, to Cliffwood Avenue in the City of Brea will significantly improve traffic operations and safety along this important regional corridor.

The City of Brea is hereby in support of City of Anaheim's effort in pursuing Measure M funds for this project. It is also our intent to provide the required 20% matching funds utilizing a combination of developer funds, Measure M funds, and gas tax funds for work completed within the City of Brea, and to seek City Council adoption of a resolution before the end of the year in support of implementing and funding our portion of this multi-agency project. We will forward the adopted resolution as soon as it is available.

Sincerely,

Ryan Chapman
City Engineer
City of Brea

RESOLUTION NO. 2024-067

A RESOLUTION OF THE CITY OF BREA CITY COUNCIL APPROVING THE SUBMITTAL OF AN APPLICATION FOR THE STATE COLLEGE BOULEVARD/THE CITY DRIVE REGIONAL TRAFFIC SIGNAL SYNCHRONIZATION PROGRAM IMPROVEMENT PROJECT TO THE ORANGE COUNTY TRANSPORTATION AUTHORITY FOR FUNDING UNDER THE COMPETITIVE MEASURE M2 REGIONAL TRAFFIC SIGNAL SYNCHRONIZATION PROGRAM

A. RECITALS:

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

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

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

c) WHEREAS, the CITY 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.

d) 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 Board of Directors, if necessary.

e) WHEREAS, the City of Brea 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 synchronizing traffic signals across local agencies' boundaries; and

f) WHEREAS, the City of Brea will provide matching funds for each project as required by the Comprehensive Transportation Funding Programs Procedures Manual; and

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

h) Whereas, the City of Brea desires to implement multi-jurisdictional signal synchronization listed below; and

B. <u>RESOLUTION:</u>

NOW, THEREFORE, BE IT RESOLVED THAT:

The City Council of the City of Brea hereby requests the Orange County Transportation Authority allocate funds in the amounts specified in the City's application to said City from the Regional Traffic 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 in signal synchronization along the following street(s):

State College Boulevard / The City Drive

Regional Traffic Signal Synchronization Program Project

APPROVED AND ADOPTED this 3rd day of December 2024.

Blair Stewart, Mayor

ATTEST:

Lillian Harris-Neal, City Clerk

I, Lillian Harris-Neal, City Clerk of the City of Brea, do hereby certify that the foregoing Resolution was adopted at a regular meeting of the City Council of the City of Brea, held on the 3rd day of December 2024 by the following vote:

AYES: COUNCIL MEMBERS: Stewart, Hupp, Marick, Simonoff, Vargas

NOES: COUNCIL MEMBERS: None

ABSENT: COUNCIL MEMBERS: None

ABSTAIN: COUNCIL MEMBERS: None

DATED: 12/09/2024

Lillian Harris-Neal, City Clerk

CITY OF FULLERTON

Public Works Department – *Engineering Division*

October 18, 2024

John Thai, PE
Principal Traffic Engineer
City of Anaheim
200 South Anaheim Boulevard
2nd Floor, Suite 276
Anaheim, CA 92805

Subject: Letter of Support for the Regional Traffic Signal Synchronization Application – State College Boulevard Corridor

Dear Mr. Thai:

The Orange County Transportation Authority recently issued the 2025 Comprehensive Transportation Funding Program (CTFP) Call for Projects for the Regional Traffic Signal Synchronization Program (RTSSP) to coordinate traffic signals across jurisdictional boundaries in the County.

The City of Fullerton, in coordination with the City of Anaheim, identified the State College Boulevard Corridor for Project P application. Signal synchronization and upgraded traffic signal operational equipment and communication at locations between the intersection of Central Avenue & Cliffwood Avenue in the City of Brea; through the City of Fullerton; and, terminating at the intersection of The City Drive & Garden Grove Boulevard/Memory Lane in the City of Orange will improve the traffic operations along this corridor.

The City of Fullerton is in support of the City of Anaheim's effort in pursuing Renewed Measure M funds for this project. The City is committed to provide the required matching funds (Gas Tax) and will be seeking City Council's adoption of a resolution by December 3, 2024 in support of implementing and funding this project. We will forward the adopted resolution as soon as it is available.

Sincerely,

CITY OF FULLERTON

Michael Plotnik, PE, TE
City Traffic Engineer

2024-10-18 - State College RTSSP - Fullerton Letter of Support

RESOLUTION NO. 2024-053

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF FULLERTON, CALIFORNIA, AUTHORIZING PARTICIPATION IN AN APPLICATION FOR FUNDS FOR THE STATE COLLEGE BOULEVARD REGIONAL TRAFFIC SIGNAL SYNCHRONIZATION PROGRAM TO THE ORANGE COUNTY TRANSPORTATION AUTHORITY UNDER THE COMPETITIVE MEASURE M2 REGIONAL TRANSPORTATION SIGNAL SYNCHRONIZATION PROGRAM

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

WHEREAS, the City of Anaheim is the lead agency, in partnership with the cities of Brea, Fullerton and Orange and Caltrans for the State College Boulevard Regional Traffic Signal Synchronization Program (RTSSP) Project to synchronize 58 total signals on State College Boulevard (the "Project").

WHEREAS, The Orange County Transportation Authority has declared the City of Fullerton met eligibility requirements to receive revenues as part of Measure M2.

WHEREAS, the City of Fullerton has adopted Local 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.

WHEREAS, the City of Fullerton will provide matching funds for each project as required by the Orange County Comprehensive Transportation Funding Programs Manual.

WHEREAS, the City of Fullerton will not use Measure M funds to supplement Developer Fees or other commitments.

WHEREAS, the City of Fullerton desires to implement multi-jurisdictional signal synchronization listed in this resolution.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF FULLERTON RESOLVES AS FOLLOWS:

1. The City Council of the City of Fullerton requests the Orange County Transportation Authority allocate funds in the amounts specified in the project application to said City from the Regional Transportation Signal Synchronization Program to implement regional signal synchronization along the State College Boulevard Corridor.

ADOPTED BY THE FULLERTON CITY COUNCIL ON NOVEMBER 19, 2024.

Nicholas Dunlap
Mayor

ATTEST:

Lucinda Williams, MMC
City Clerk

November 27, 2024
Date

CITY OF FULLERTON

RESOLUTION CERTIFICATION

STATE OF CALIFORNIA)
COUNTY OF ORANGE) SS
CITY OF FULLERTON)

RESOLUTION NO. 2024-053

I, Lucinda Williams, City Clerk and ex-officio Clerk of the City Council of the City of Fullerton, California, hereby certify that the whole number of the members of the City Council of the City of Fullerton is five and that City Council adopted the above and foregoing Resolution No. 2024-053 at a regular meeting of the City Council held November 19, 2024 by the following vote:

COUNCIL MEMBERS IN FAVOR:	Dunlap, Whitaker, Zahra
COUNCIL MEMBERS OPPOSED:	None
COUNCIL MEMBERS ABSTAINED:	None
COUNCIL MEMBERS ABSENT:	Charles, Jung

Lucinda Williams, MMC
City Clerk

City of Orange
Public Works Department
300 E. Chapman Ave.
Orange, CA 92866

October 18, 2024

Mr. John Thai
Principal Traffic Engineer
City of Anaheim
Traffic Management Center
200 S. Anaheim Boulevard
Anaheim, CA 92805

Subject: Letter of Intent for Regional Traffic Signal Synchronization Program Application – State College Boulevard/The City Drive Corridor

Dear Mr. Thai:

The Orange County Transportation Authority recently issued the 2025 Comprehensive Transportation Funding Program Call for Projects for Regional Traffic Signal Synchronization Program (Project P) to coordinate traffic signals across jurisdictional boundaries in the County.

The City of Orange, in coordination with the cities of Anaheim, Brea and Fullerton, identified the State College Boulevard/The City Drive corridor for Project P application. Signal synchronization on this corridor between Cliffwood Avenue in the City of Brea and Garden Grove Boulevard in the City of Orange will improve the signal coordination along this heavily traveled corridor.

The City of Orange is in support of the City of Anaheim's effort in pursuing Renewed Measure M funds for this project.

The City of Orange is committed to providing the required matching funds (cash match only) and will be seeking City Council adoption of a resolution on December 10, 2024, in support of implementing and funding this project. The source of the cash match will be a combination of Gas Tax (local funding) and Measure M2 Fair Share. We will forward the adopted resolution as soon as it is available.

Sincerely,

Christopher S. Cash
Director of Public Works
City of Orange

(714) 744-5525 www.cityoforange.org pwinfo@cityoforange.org

RESOLUTION NO. 11590

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

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

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

WHEREAS, the City of Orange 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

WHEREAS, the City of Orange 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, if necessary; and

WHEREAS, the City of Orange 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 synchronizing traffic signals across local agencies' boundaries; and

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

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

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

WHEREAS, the City Council delegates signature authority to the Public Works Director or his designee to facilitate delivery of the project.

NOW, THEREFORE, BE IT RESOLVED, the City Council of the City of Orange hereby requests the Orange County Transportation Authority allocate funds in the amounts

specified in the City's application to said City from the Regional Traffic 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 in signal synchronization along the State College Boulevard/The City Drive Corridor.

ADOPTED this 14th day of January 2025

Daniel R. Slater, Mayor, City of Orange

ATTEST:

Pamela Coleman, City Clerk, City of Orange

APPROVED AS TO FORM:

Mike Vigliotta, City Attorney, City of Orange

STATE OF CALIFORNIA)
COUNTY OF ORANGE)
CITY OF ORANGE)

I, PAMELA COLEMAN, City Clerk of the City of Orange, California, do hereby certify that the foregoing Resolution was duly and regularly adopted by the City Council of the City of Orange at a regular meeting thereof held on the 14th day of January 2025 by the following vote:

AYES:	COUNCILMEMBERS: Bilodeau, Barrios, Tavoularis, Gutierrez, Gyllenhammer, Slater
NOES:	COUNCILMEMBERS: None
ABSENT:	COUNCILMEMBERS: None
ABSTAIN:	COUNCILMEMBERS: Dumitru

Pamela Coleman, City Clerk, City of Orange

California Department of Transportation

DISTRICT 12
1750 East 4th Street, Suite 100 | SANTA ANA, CA 92705
(657) 328-6000 | FAX (657) 328-6522 TTY 711
https://dot.ca.gov/caltrans-near-me/district-12

October 18, 2024

John Thai
Principal Civil Engineer
City of Anaheim
201 South Anaheim Boulevard, Suite #502
Anaheim, CA 92805

Subject: Letter of Support for Regional Traffic Signal Synchronization Program Application –State College Boulevard Corridor

Dear Mr. Thai:

The Orange County Transportation Authority recently issued the 2025 Comprehensive Transportation Funding Program Call for Projects for the 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 Anaheim's submittal of the Call for the Projects application for signal synchronization on the State College Boulevard Corridor from the City of Brea to the City of Orange.

If you have any questions or require additional information, please contact Mr. Mason Nguyen at (949) 279-9175 or by email at Mason.Nguyen@dot.ca.gov

Sincerely,

Peter Ngo

Peter Ngo, P.E.
Branch Chief, Traffic Signals/Ramp Metering/Census
Caltrans District 12
6681 Marine Way
Irvine, CA 92618
Mobile: (949) 285-4262

Appendix E

ADDITIONAL INFORMATION

Implenting Agency	TMC Improvements
Brea	1. Furnish and Install 2 New Work Stations for TMC/Remote TMC, New Cubic ATMS/Synchrogreen Server & Econolite Centracs Server and 2-year maintenance agreement renewal. 2. Two 65" Industrial Monitors for TMC/Remote TMC
Anaheim	1. Server/RAID for central system 2. UPS for TMC Servers
Fullerton	Kinetic Server; Monitor – Samsung or Planar VMS – Milestone Laptop (field hardened) – Panasonic or Dell Layer 3 Switch – Cisco VMS Server (Milestone) – Dell or HP Traffic Server (Kinetic) – Dell or HP Trafficware Synchro - Cubic

ELIGIBLE IMPROVEMENTS	SCORE BASED ON STATUS	
Signal Timing (No Capital)	**Online**	**Offline**
Timing Only	50	30
Timing + Traffic Responsive (license only)	50	15
Timing + Peer-to-Peer (configuration only)	50	40
Timing + Traffic Adaptive (license only)	40	1
Signal Communication	**No Time Source**	**Time Source**
Above ground (e.g. wireless, cellular, etc.)	50	30
Fiber Optic underground	25	15
All other (e.g. copper, aerial fiber, GPS, etc.)	5	1
Field Elements	**None/5+ Years**	**Within 5 Years**
ATC signal controller	50	10
Signal cabinet on existing foundation	30	10
Signal cabinet on new foundation	15	5
BBS/USP (attached)	20	10
BBS/UPS on existing foundation	10	5
BBS/UPS on new foundation	5	1
CCTV	30	10
Vehicle detection (ATSPM inputs + counts)	50	30
Vehicle detection (ATSPM inputs)	40	20
Vehicle detection + bicycle detection	30	15
Vehicle detection	30	15
Bicycle detection	30	15
Pedestrian detection (audible)	50	30
Pedestrian detection	30	15
Active transportation/pedestrian safety	50	30
Transit Signal Priority	50	25
EVP (hybrid or GPS)	40	10
EVP (infrared)	30	10
Speed feedback signs (existing post)	40	10
Speed feedback signs (new post)	20	10
Signal Performance Monitoring	40	10
Minor Signal Operational Improvements	**None/5+ Years**	**Within 5 Years**
Channelization	40	20
Signal phasing improvement	50	25
TMC/TOC	**None/10+ Years**	**Within 10 Years**
Central System (server, licenses, workstations)	40	20
Display (video wall, VMS, etc.)	30	10
UPS for TMC	20	5
Caltrans Participation	**With Coop**	**Without Coop**
Caltrans Cooperative Agreement	50	25