

AGENDA

Board of Directors Metro Valley Study Session

August 13, 2015

*****Start Time: 10:00 AM*****

Location

SANBAG
First Floor Lobby
1170 W. 3rd Street, San Bernardino, CA 92410

Board of Directors

Valley Representatives

Study Session Chair

Alan Wapner, Mayor Pro Tem
City of Ontario

Study Session Vice-Chair

Janice Rutherford, Supervisor
Second District

Dennis Yates, Mayor
City of Chino

Ed Graham, Mayor Pro Tem
City of Chino Hills

Frank Navarro, Mayor Pro Tem
City of Colton

Michael Tahan, Mayor Pro Tem
City of Fontana

Darcy McNaboe, Mayor
City of Grand Terrace

Larry McCallon, Mayor
City of Highland

Rhodes "Dusty" Rigsby, Mayor
City of Loma Linda

Paul M. Eaton, Mayor
City of Montclair

L. Dennis Michael, Mayor
City of Rancho Cucamonga

Jon Harrison, Mayor Pro Tem
City of Redlands

Deborah Robertson, Mayor
City of Rialto

R. Carey Davis, Mayor
City of San Bernardino

Ray Musser, Mayor
City of Upland

Dick Riddell, Council Member
City of Yucaipa

Mountain/Desert Representatives

Rich Kerr, Mayor
City of Adelanto

Curt Emick, Council Member
Town of Apple Valley

Julie McIntyre, Mayor
City of Barstow

Ryan McEachron, Council Member
City of Victorville

Bill Jahn, Mayor Pro Tem
City of Big Bear Lake

Mike Leonard, Council Member
City of Hesperia

Edward Paget, Mayor
City of Needles

Joel Klink, Mayor
City of Twentynine Palms

George Huntington, Mayor
Town of Yucca Valley

County Board of Supervisors

Robert Lovingood, First District

James Ramos, Third District

Josie Gonzales, Fifth District

Curt Hagman, Fourth District

Ex-Officio Member – John Bulinski, Caltrans Interim District 8 Director
Ray Wolfe, SANBAG Executive Director
Eileen Teichert, SANBAG General Counsel

San Bernardino Associated Governments
County Transportation Commission
County Transportation Authority
County Congestion Management Agency
Service Authority for Freeway Emergencies

AGENDA

Board of Directors Metro Valley Study Session

**August 13, 2015
10:00 AM**

Location

First Floor Lobby

1170 W. 3rd Street, San Bernardino, CA 92410

To obtain additional information on any items, please contact the staff person listed under each item. You are encouraged to obtain any clarifying information prior to the meeting to allow the Board to move expeditiously in its deliberations. Additional *“Meeting Procedures”* and agenda explanations are attached to the end of this agenda.

CALL TO ORDER

(Meeting Chaired by Alan Wapner)

- i. Pledge of Allegiance
- ii. Attendance
- iii. Announcements
- iv. Agenda Notices/Modifications - Melonie Donson

Possible Conflict of Interest Issues

Note agenda item contractors, subcontractors and agents which may require member abstentions due to conflict of interest and financial interests. Board Member abstentions shall be stated under this item for recordation on the appropriate item.

1. Information Relative to Possible Conflict of Interest

Note agenda items and contractors/subcontractors, which may require member abstentions due to possible conflicts of interest.

This item is prepared for review by SANBAG Board and Committee members.

CONSENT CALENDAR

Items listed on the Consent Calendar are expected to be routine and non-controversial. The Consent Calendar will be acted upon as a single motion. Items on the Consent Calendar may be removed for discussion by Board Members.

Consent - Project Delivery

- 2. Construction Contract Change Orders to on-going SANBAG Construction Contracts with Ortiz Enterprises, Inc., Sully-Miller Contracting Company, Skanska USA Civil West, Riverside Construction Company, Inc. and Flatiron West, Inc.**

Receive and file change order report.

Garry Cohoe

This item is not scheduled for review by any other policy committee or technical advisory committee.

DISCUSSION ITEMS

Discussion - Project Delivery

- 3. State Water Conservation Mandate Update**

Receive information concerning the state water conservation mandate impacts to SANBAG's ongoing and proposed landscape projects.

Garry Cohoe

This item is not scheduled for review by any other policy committee or technical advisory committee.

- 4. San Bernardino Valley Coordinated Traffic Signal System**

That the following be reviewed and recommended for approval by the Board of Directors, acting in its capacity as the San Bernardino County Transportation Commission, at a regularly scheduled Board meeting:

A. Authorize Staff to develop Cooperative Agreements between the San Bernardino County Transportation Commission (SANBAG) and local agencies establishing responsibilities to maintain, monitor, assess and fund the San Bernardino Valley Coordinated Traffic Signal System (SBVCTSS).

B. Authorize Staff to prepare a Request for Proposal to Update Coordinated Timing Plans for SBVCTSS Tiers 1 & 2 and Tiers 3 & 4.

C. Authorize Staff to prepare a Request for Proposal for Daily Maintenance, On Call System Support and Assessment of the SBVCTSS.

D. Authorize Staff to prepare an Invitation for Bid and Scope of Work for SBVCTSS On-Call Maintenance Contract.

Garry Cohoe

This item was reviewed by the Transportation Technical Advisory Committee on August 3, 2015. This item is not scheduled for review by any other policy committee.

5. Investment Grade Traffic and Revenue Study Services for the I-10 and I-15 Corridor Projects

That the following be reviewed and recommended for final approval by the Board of Directors, acting in its capacity as the San Bernardino County Transportation Authority, at a regularly scheduled Board meeting:

A. Approve a sole source Contract 16-1001355 with CDM Smith, Inc. to complete the Investment Grade Traffic and Revenue Study Services for the I-10 and I-15 Corridor Projects and provide related support services for an amount still being negotiated.

B. Approve a contingency amount of approximately 10% of the contract amount and authorize the Executive Director, or their designee to release contingency as required for the project.

John Meier

This item is not scheduled for review by any other policy committee or technical advisory committee. SANBAG General Counsel and Procurement Manager have reviewed a draft of the new contract but this item has not received final review by SANBAG General Counsel.

6. On Call Right of Way Legal Services Request for Proposals

That the following be reviewed and recommended for final approval by the Board of Directors, acting in its capacity as the San Bernardino County Transportation Authority, at a regularly scheduled Board meeting:

Approve the release of Request for Proposals No. 15-1001302 for On Call Right of Way Legal Services in support of the Major Projects Program.

Paula Beauchamp

This item is not scheduled for review by any other policy committee or technical advisory committee. SANBAG General Counsel and Procurement Manager have reviewed this item and the RFP.

7. PS&E Funding Agreement Amendment No. 3 for North Vineyard Grade Separation

That the following be reviewed and recommended for final approval by the Board of Directors, acting in its capacity as the San Bernardino County Transportation Authority, at a regularly scheduled Board meeting:

Approve Amendment No. 3 to Project Funding Agreement No. C10094 with the City of Ontario for Plans, Specification and Estimate Services for the North Vineyard UPRR Grade Separation Project to increase the contract by \$150,000, for a revised contract total of \$4,065,000, which increases the Measure I Valley Major Street Bond Fund contribution by \$120,000, for a total contribution of \$3,252,000 with the remainder funded by the City of Ontario.

Paula Beauchamp

This item is not scheduled for review by any other policy committee or technical advisory committee. SANBAG General Counsel and Procurement Manager have reviewed this item and a draft of the amendment.

8. Interstate 215 Barton PS&E and ROW Agreement Amendment 5

That the following be reviewed and recommended for final approval by the Board of Directors, acting in its capacity as the San Bernardino County Transportation Commission, at a regularly scheduled Board meeting:

A. Approval of Amendment No. 5 to Contract No. C12212 (Agreement) with California Department of Transportation (CALTRANS) agreeing to Commission's acquisition of property necessary for the I-215 Barton Road Interchange Project (PROJECT) in Commission's name; agreeing to Commission's exercise of Eminent Domain; agreeing to Commission's conveyance by quit claim deed to CALTRANS of all PROJECT acquired right-of-way (ROW) located within CALTRANS' jurisdictional boundaries; and agreeing to increase the PROJECT funding by \$4,964,457 consisting of \$1,828,401 of Federal Demonstration Funds and \$3,136,056 of Measure I Valley Freeway Funds for an overall total of \$32,395,157; and

B. Authorization of staff to proceed with voluntary acquisition of property necessary for PROJECT from 35 property owners comprised of 59 parcel numbers identified on Attachment "B", in accordance with SANBAG's Policies, and the Agreement, including relocation assistance, demolition of existing structures, property management, disposal of excess property, environmental testing and remediation, and expending a total amount not to exceed \$20,881,751 for ROW acquisition capital expenses; and

C. Authorization of the Director of Project Delivery to add or delete such parcels on Attachment "B" as the Director of Project Delivery determines from time to time are necessary for the PROJECT.

That the following be reviewed and recommended for final approval by the Board of Directors, acting in its capacity as the San Bernardino County Transportation Authority, at a regularly scheduled Board meeting:

D. Approval of Amendment No. 5 to Contract No. C12212 with CALTRANS; and

E. Amend Fiscal Year 2015/2016 budget to add \$1,828,401 of Federal Demonstration Funds and \$3,136,056 of Measure I Valley Freeway Funds to Task 0820.

Paula Beauchamp

This item is not scheduled for review by any other policy committee or technical advisory committee. SANBAG Procurement Manager has reviewed this item and a draft of the amendment. This item has not received final review by SANBAG General Counsel.

9. Interstate 10 (I-10) Monte Vista Avenue Interchange Project

That the following be reviewed and recommended for final approval by the Board of Directors, acting in its capacity as the San Bernardino County Transportation Authority, at a regularly scheduled Board meeting:

A. Approve Memorandum of Understanding No. 15-1001219 with the City of Montclair for the project development of the Interstate 10 (I-10) Monte Vista Avenue Interchange Project.

B. Approve Cooperative Agreement No. 15-1001291 with the City of Montclair for the delivery of the Environmental (PA&ED) phase of the I-10 Monte Vista Avenue Interchange Project with AUTHORITY as the lead agency for a total not-to-exceed cost of \$983,600 consisting of \$237,048 of Development share and \$746,552 of Public Share in accordance with the Nexus Study.

Chad Costello

This item is not scheduled for review by any other policy committee or technical advisory committee. AUTHORITY General Counsel and Procurement Manager have reviewed this item, the draft MOU and the cooperative agreement.

10. Monte Vista Avenue Grade Separation Project

That the following be reviewed and recommended for final approval by the Board of Directors, acting in its capacity as the San Bernardino County Transportation Authority, at a regularly scheduled Board meeting:

A. Approve Cooperative Agreement No. 15-1001297 with the City of Montclair for the construction of the Monte Vista Avenue Grade Separation Project, which defines roles and responsibilities for SANBAG and the City of Montclair for this project including having SANBAG be the lead agency for construction. The Agreement also provides funding responsibilities for each agency based on the public and developer shares from the SANBAG Nexus study, whereby SANBAG would be responsible for 81.1% of project cost, or an estimated \$15,673,386 before project buy downs;

B. Approve amendment to increase the SANBAG Fiscal Year 2015/2016 budget to establish a new project under Task 0840 (Grade Separation Projects) for the Monte Vista Avenue Grade Separation Project in the amount of \$400,000 for preconstruction activities;

C. Authorize release of Request for Proposals (RFP) No. 15-1001298 for Construction Management Services for the Monte Vista Avenue Grade Separation Project;

D. Authorize the Executive Director to execute a purchase order in an amount not to exceed \$50,000 for constructability review and preconstruction services.

Dennis Saylor

This item is not scheduled for review by any other policy committee or technical advisory committee. SANBAG General Counsel and Procurement Manager have reviewed this item, the draft agreement and the RFP.

Discussion - Regional/Subregional Planning

11. SANBAG Countywide Transportation Plan Update

Receive information on the Draft San Bernardino Countywide Transportation Plan.

Timothy Byrne

This item will be presented to the Mountain/Desert Policy Committee on August 21, 2015. Information in this item was reviewed by the Transportation Technical Advisory Committee (TTAC) on June 29, 2015.

Comments from Board Members

Brief Comments from Board Members

Public Comment

Brief Comments by the General Public

ADJOURNMENT

Additional Information

Attendance
SANBAG Entities
Acronym List
Mission Statement

The next Board of Directors Metro Valley Study Session will be September 10, 2015

Meeting Procedures and Rules of Conduct

Meeting Procedures - The Ralph M. Brown Act is the state law which guarantees the public's right to attend and participate in meetings of local legislative bodies. These rules have been adopted by the Board of Directors in accordance with the Brown Act, Government Code 54950 et seq., and shall apply at all meetings of the Board of Directors and Policy Committees.

Accessibility - The SANBAG meeting facility is accessible to persons with disabilities. If assistive listening devices or other auxiliary aids or services are needed in order to participate in the public meeting, requests should be made through the Clerk of the Board at least three (3) business days prior to the Board meeting. The Clerk's telephone number is (909) 884-8276 and office is located at 1170 W. 3rd Street, 2nd Floor, San Bernardino, CA.

Agendas – All agendas are posted at 1170 W. 3rd Street, 2nd Floor, San Bernardino at least 72 hours in advance of the meeting. Complete packages of this agenda are available for public review at the SANBAG offices and our website: www.sanbag.ca.gov. Staff reports for items may be made available upon request. For additional information call (909) 884-8276.

Agenda Actions – Items listed on both the “Consent Calendar” and “Items for Discussion” contain suggested actions. The Board of Directors will generally consider items in the order listed on the agenda. However, items may be considered in any order. New agenda items can be added and action taken by two-thirds vote of the Board of Directors.

Closed Session Agenda Items – Consideration of closed session items *excludes* members of the public. These items include issues related to personnel, pending litigation, labor negotiations and real estate negotiations. Prior to each closed session, the Chair will announce the subject matter of the closed session. If action is taken in closed session, the Chair may report the action to the public at the conclusion of the closed session.

Public Testimony on an Item – Members of the public are afforded an opportunity to speak on any listed item. Individuals wishing to address the Board of Directors or Policy Committee Members should complete a “Request to Speak” form, provided at the rear of the meeting room, and present it to the SANBAG Clerk prior to the Board's consideration of the item. A "Request to Speak" form must be completed for *each* item when an individual wishes to speak on. When recognized by the Chair, speakers should be prepared to step forward and announce their name and address for the record. In the interest of facilitating the business of the Board, speakers are limited to three (3) minutes on each item. Additionally, a twelve (12) minute limitation is established for the total amount of time any one individual may address the Board at any one meeting. The Chair or a majority of the Board may establish a different time limit as appropriate, and parties to agenda items shall not be subject to the time limitations.

The Consent Calendar is considered a single item, thus the three (3) minute rule applies. Consent Calendar items can be pulled at Board member request and will be brought up individually at the specified time in the agenda allowing further public comment on those items.

Agenda Times – The Board is concerned that discussion take place in a timely and efficient manner. Agendas may be prepared with estimated times for categorical areas and certain topics to be discussed. These times may vary according to the length of presentation and amount of resulting discussion on agenda items.

Public Comment – At the end of the agenda, an opportunity is also provided for members of the public to speak on any subject within the Board's authority. *Matters raised under “Public Comment” may not be acted upon at that meeting. The time limits established in “Public Testimony on an Item” still apply.*

Disruptive Conduct – If any meeting of the Board is willfully disrupted by a person or by a group of persons so as to render the orderly conduct of the meeting impossible, the Chair may recess the meeting or order the person, group or groups of person willfully disrupting the meeting to leave the meeting or to be removed from the meeting. Disruptive conduct includes addressing the Board without first being recognized, not addressing the subject before the Board, repetitiously addressing the same subject, failing to relinquish the podium when requested to do so, or otherwise preventing the Board from conducting its meeting in an orderly manner. *Please be aware that a NO SMOKING policy has been established for meetings. Your cooperation is appreciated!*

**SANBAG General Practices for Conducting Meetings
of
Board of Directors and Policy Committees**

Attendance.

- The Chair of the Board or a Policy Committee (Chair) has the option of taking attendance by Roll Call or Self-Introductions. If attendance is taken by Roll Call, the Clerk of the Board will call out by jurisdiction or supervisorial district. The Member or Alternate will respond by stating his/her name. If attendance is by Self-Introduction, the Member or Alternate will state his/her name and jurisdiction or supervisorial district.
- A Member/Alternate, who arrives after attendance is taken, shall announce his/her name prior to voting on any item.
- A Member/Alternate, who wishes to leave the meeting after attendance is taken but before remaining items are voted on, shall announce his/her name and that he/she is leaving the meeting.

Basic Agenda Item Discussion.

- The Chair announces the agenda item number and states the subject.
- The Chair calls upon the appropriate staff member or Board Member to report on the item.
- The Chair asks members of the Board/Committee if they have any questions or comments on the item. General discussion ensues.
- The Chair calls for public comment based on “Request to Speak” forms which may be submitted.
- Following public comment, the Chair announces that public comment is closed and asks if there is any further discussion by members of the Board/Committee.
- The Chair calls for a motion from members of the Board/Committee.
- Upon a motion, the Chair announces the name of the member who makes the motion. Motions require a second by a member of the Board/Committee. Upon a second, the Chair announces the name of the Member who made the second, and the vote is taken.
- The “aye” votes in favor of the motion shall be made collectively. Any Member who wishes to oppose or abstain from voting on the motion, shall individually and orally state the Member’s “nay” vote or abstention. Members present who do not individually and orally state their “nay” vote or abstention shall be deemed, and reported to the public, to have voted “aye” on the motion.

The Vote as specified in the SANBAG Bylaws.

- Each Member of the Board of Directors shall have one vote. In the absence of the official representative, the alternate shall be entitled to vote. (Board of Directors only.)
- Voting may be either by voice or roll call vote. A roll call vote shall be conducted upon the demand of five official representatives present, or at the discretion of the presiding officer.

Amendment or Substitute Motion.

- Occasionally a Board Member offers a substitute motion before the vote on a previous motion. In instances where there is a motion and a second, the maker of the original motion is asked if he/she would like to amend the motion to include the substitution or withdraw the motion on the floor. If the maker of the original motion does not want to amend or withdraw, the substitute motion is not addressed until after a vote on the first motion.
- Occasionally, a motion dies for lack of a second.

Call for the Question.

- At times, a Member of the Board/Committee may “Call for the Question.”
- Upon a “Call for the Question,” the Chair may order that the debate stop or may allow for limited further comment to provide clarity on the proceedings.
- Alternatively and at the Chair’s discretion, the Chair may call for a vote of the Board/Committee to determine whether or not debate is stopped.
- The Chair re-states the motion before the Board/Committee and calls for the vote on the item.

The Chair.

- At all times, meetings are conducted in accordance with the Chair’s direction.
- These general practices provide guidelines for orderly conduct.
- From time-to-time circumstances require deviation from general practice.
- Deviation from general practice is at the discretion of the Chair.

Courtesy and Decorum.

- These general practices provide for business of the Board/Committee to be conducted efficiently, fairly and with full participation.
- It is the responsibility of the Chair and Members to maintain common courtesy and decorum.

*Adopted By SANBAG Board of Directors January 2008
Revised March 2014*

Minute Action

AGENDA ITEM: 1

Date: August 13, 2015

Subject:

Information Relative to Possible Conflict of Interest

Recommendation:

Note agenda items and contractors/subcontractors, which may require member abstentions due to possible conflicts of interest.

Background:

In accordance with California Government Code 84308, members of the SANBAG Board may not participate in any action concerning a contract where they have received a campaign contribution of more than \$250 in the prior twelve months from an entity or individual, except for the initial award of a competitively bid public works contract. This agenda contains recommendations for action relative to the following contractors:

Item No.	Contract No.	Principals & Agents	Subcontractors
2-A	C12224	Ortiz Enterprises, Inc. <i>Patrick A. Ortiz</i>	Alcorn Fence Company Bithell, Inc. Cal-Stripe, Inc. CGO Construction Cooper Engineering, Inc. Coral Construction Company Griffith Compnay Harver Companies, Inc. Hardy & Harper Hydro Sprout Integrity Rebar Placers L. Johnson Lincoln Pacific Mahaffey Companies Rogan Concrete Coring & Sawing SRD Engineering, Inc. Statewide Traffic Safety & Signs Superior Gunite Truesdell Corporation West Coast Welding, Inc.

Entity: CMA, COG, CTA, CTC, SAFE

Board of Directors Metro Valley Study Session Agenda Item

August 13, 2015

Page 2

2-B	C14164	Sully-Miller Contracting Company <i>Raymond Sanchez</i>	A.C. Dike Company ACL Construction Company, Inc. Bravo Sign & Design Cal-Stripe, Inc. Coral Construction Company Diversified Landscaping Company Fencecorp, Inc. Goss Construction Company, Inc. Harber Copanies, Inc. High Light Electric, Inc. Integrity Rebar Placers J.V. Land Clearing Company, Inc. LNA Concrete Structures, Inc. MCM Construction, Inc. Statewide Traffic Safety & Signs
2-C	C11184	Skanska USA Civil West <i>Tim Wilson</i>	Ace Fence Company Anderson Drilling Empire Steel J P Striping, Inc. J.V. Land Clearing Company, Inc. Marina Landscape, Inc. MSL Electric Municon Consultants Reycon Construction, Inc. Statewide Traffic Safety & Signs Tipco Engineering
2-D	C13108	Skanska USA Civil West <i>Jeffrey Langevin</i>	Chrisp Company Dywidag Systems International Fence Corporation, Inc. Hayward Baker Integrity Rebar Placers John S. Meek Company, Inc. Ferreria Construction Company, Inc. R. Dugan Construction, Inc. Rock Structures Construction, Co. Sierra Landscape Development, Inc.
2-E	C13121	Riverside Construction Company <i>Donald Pim</i>	Caliagua Chrisp Company C.P. Construction Crown Fence Griffith Company Golden State

Board of Directors Metro Valley Study Session Agenda Item

August 13, 2015

Page 3

			High Light Electric, Inc. Integrity Rebar Placers J.V. Land Clearing Company, Inc. Malcom Drilling Company Matich Corporation Old Castle Precast, Inc. Pacific Waterproofing Reycon Construction
2-F	C14162	Flatiron West, Inc. <i>Christian M. Peich</i>	Advanced Concrete Sawing & Sealing All American Asphalt Coral Construction D.C. Hubbs Construction Elecnor Belco Electric, Co. Griffith Company Integrity Rebar Placers L. Johnson Construction, Inc. Malcom Drilling Company Old Castle Precast, Inc. Payco Specialties, Inc. Southwest V-Ditch, Inc.
5	16-1001355	CDM Smith <i>Scott Allaire</i>	Resource Systems Economic & Planning Systems, Inc. Arlington Group

Financial Impact:

This item has no direct impact on the SANBAG budget.

Reviewed By:

This item is prepared for review by SANBAG Board and Committee members.

Responsible Staff:

Garry Cohoe, Director of Project Delivery

Approved
 Board of Directors Metro Valley Study Session
 Date: August 13, 2015

Witnessed By:

Minute Action

AGENDA ITEM: 2

Date: August 13, 2015

Subject:

Construction Contract Change Orders to on-going SANBAG Construction Contracts with Ortiz Enterprises, Inc., Sully-Miller Contracting Company, Skanska USA Civil West, Riverside Construction Company, Inc. and Flatiron West, Inc.

Recommendation:

Receive and file change order report.

Background:

Of SANBAG's twelve on-going construction contracts in the Metro Valley, six have had Construction Change Orders (CCO's) approved since the last reporting to the Board Metro Valley Study Session. The CCO's are listed below.

A. Contract Number (CN) C12224 with Ortiz Enterprises, Inc. for construction of the I-10 Cherry Avenue Interchange project: CCO No. 58 Supplement 1 (\$9,664.84 increase in funds for resolution to Notice of Potential Claim (NOPC) No. 013-04-10-15 "Revise Striping Plans Various Locations"), CCO No. 61 (\$30,000.00 increase for replacing 23 electrical pull box covers with vandal proof covers as directed by Caltrans) and CCO No. 62 (\$60,000.00 increase for extending a portion of Drainage System No. 9 to provide for positive drainage).

B. CN C14164 with Sully-Miller Contracting Company for construction of the I-10 Tippecanoe Avenue Interchange Phase II project: CCO No. 14 (no cost/no credit change for clarification of planned work on the Bakers restaurant parking lot), CCO No. 15 (\$5,000.00 increase for use of temporary casing to install soundwall piles due to differing site conditions) and CCO No. 24 (\$8,000.00 increase for providing temporary pavement repairs on west bound on-ramp as requested by Caltrans).

C. CN C11184 with Skanska USA Civil West for construction of the Hunts Lane Grade Separation project: CCO No. 14 Supplement 2 (\$3,455.35 additional funds for maintaining AC walkway and protective fencing along pedestrian access adjacent to UPRR right of way), CCO No. 19 Supplement 4 (\$896.93 additional funds for concrete drainage ditch around utility installation), CCO No. 45 Supplement 2 (\$7,474.25 additional funds for additional SWPPP costs and Field Office rental due to delays associated with Jack and Bore activities), CCO No. 55 Supplement 3 (\$266.81 additional funds for wrought iron fence), CCO No. 62 Supplement 1 (\$15,869.97 additional funds for various safety items required for traffic safety), CCO No. 79 (\$9,474.52 increase to compensate contractor for settlement of NOPC No. 11 related to providing electrical service to an existing street light disconnected during construction), CCO No. 80 (\$6,725.00 increase for settlement of exception to the Proposed Final Estimate (PFE) related to steel reinforcement service splices used for bridge construction), CCO No. 81 (\$5,078.00 increase for settlement of exception to the PFE related to additional irrigation system), CCO No. 82 (\$6,104.48 increase for re-grading of trench for 16 inch water line due to delays imposed by conflict with gas line relocation), CCO No. 83 (\$2,095.16 increase to

Entity: CTA, CTC

Board of Directors Metro Valley Study Session Agenda Item

August 13, 2015

Page 2

compensate contractor for adding red dye to cement slurry backfill of electrical lines as directed by Colton Electric), CCO No. 84 (\$2,191.77 increase for additional work related to electrical bid items), CCO No. 85 (\$25,000.0 increase for relocation of fire hydrant and installing an additional sewer manhole to address flow concerns of the City of San Bernardino) and CCO No. 86 (\$7,888.13 increase to compensate contractor to repair damage as the result of public traffic).

D. CN C13108 with Skanska USA Civil West for construction of the Palm Avenue Grade Separation project: CCO No. 6 Supplement 3 (\$635.26 decrease for deletion of 36 inch water valve and fire hydrant deemed unnecessary by the San Bernardino Municipal Water District and the Engineer), CCO No. 12 Supplement 2 (\$3,000.00 additional funds for payment of landscape irrigation water until project acceptance by City of San Bernardino) and CCO No. 16 Supplement 1 (\$27,850.00 decrease due to the shared cost savings for the elimination of Retaining Wall No. 136 as proposed by the Value Engineering Change Proposal submitted by the contractor).

E. CN C13121 with Riverside Construction Company, Inc. for construction of the Laurel Street Grade Separation project: CCO No. 41 (no cost/no credit change for revisions to the Special Provisions as they pertain to a Manual Double Swing Gate), CCO No. 43 (\$1,483.90 increase to compensate contractor for payment of the annual permit with the State Water Resource Control Board) and CCO No. 48 (\$25,000.00 increase to compensate contractor for an additional mobilization for earthwork to facilitate BNSF track work and thereby shortening the project schedule by 2 months).

F. CN C14162 with Flatiron West, Inc. for the construction of the I-15 Base Line Road Interchange project: CCO No. 21 (\$32,200.00 increase for relocating a Cucamonga Valley Water District 12 inch water line and concrete casing in conflict with new 36 inch water line).

Financial Impact:

This item imposes no financial impact, as all CCOs are within previously approved contingency amounts under Task No's. 0826, 0842, 0870, 0874, 0884 and 0892.

Reviewed By:

This item is not scheduled for review by any other policy committee or technical advisory committee.

Responsible Staff:

Garry Cohoe, Director of Project Delivery

Approved
Board of Directors Metro Valley Study Session
Date: August 13, 2015

Witnessed By:

Board of Directors Metro Valley Study Session
Construction Change Orders Log

I-10 Citrus Interchange - Executed Change Orders		
Number	Description	Amount
001	Traffic Control	\$ 35,000.00
001 S-1	Traffic Control, Additional Funds	\$ 35,000.00
001 S-2	Traffic Control, Additional Funds	\$ 30,000.00
002	Maintain Irrigation and Landscaping	\$ 8,000.00
003	Water Pollution Control Maintenance Sharing	\$ 25,000.00
004	Partnering	\$ 10,000.00
004 S-1	Additional Funds	\$ 10,000.00
005	Dispute Review Board	\$ 15,000.00
005 S-1	Additional Funds	\$ 5,000.00
006	Maintain Existing Electrical Systems	\$ 20,000.00
006 S-1	Additional Funds	\$ 5,000.00
006 S-2	Additional Funds	\$ 8,100.00
007	Graffiti Removal	\$ 5,000.00
008	DS-10 Redesign and Align	\$ (143,397.00)
009	Replace Loop Detection with Video Detection	\$ 18,645.00
010	Sewer Connection on South Citrus	\$ 7,945.48
011	Replace RSC and RSLCB in WB Off-Ramp Termini with Standard JPCP	\$ (164,877.00)
011 S-1	Replace RSC and RSLCB in WB Off-ramp Termini with Standard JPCP Supplement 1	\$ 46,674.75
012	Over-Excavate and Re-Compact Under OH Abutments and WW	\$ 11,483.50
013	Replace RSC and RSLCB in WB Off-Ramp Gore	\$ (41,180.48)
014	Septic System for 76 Gas Station	\$ 36,783.25
015	ROW Delay for Alcorn Fence	\$ 1,500.00
016	DS-15 Connection to DS-1	\$ 2,911.33
017	Revise DWY Approaches and DWYS at Boyle Cul-de-Sac	\$ 11,130.00
017 S-1	Revise DWY Approaches and DWYS at Boyle Cul-de-Sac, Additional Funds	\$ 27,000.00
018	Replace RSC with Standard JPCP - WB On-Ramp Gore	\$ (32,840.80)
019	Replace RSC with Standard JPCP - EB Off-Ramp Gore	\$ (62,956.58)
020	Replace RSC with Standard JPCP - WB Off-Ramp Gore	\$ (21,153.30)
021	Non-Compensable Excusable Delay	\$ 0.00
022	Longitudinal Tining	\$ 8,500.00
023	Payment Adjustments for Price Index Fluctuations	\$ 161,000.00
024	Parapet Headwall Height Change	\$ 4,000.00
025	76 Gas Station Improvements	\$ 38,000.00
026	Non-Compensable Excusable Delay - 4 Days	\$ 0.00
027	Electrical Work	\$ 54,000.00
028	Demo and Grade on Citrus Avenue	\$ (28,022.88)
028 S-1	Additional Funds for Traffic Control	\$ 28,022.88
029	Removal and Disposal of Man-Made Objects	\$ 26,000.00
029 S-1	Additional Funds	\$ 49,800.00
030	Rock Blanket Credit	\$ (74,957.08)
032	Lane Closure Charts Change	\$ 0.00
033	DS-25 Modifications	\$ 38,500.00
034	Adjustment of Item Overruns	\$ 27,111.10
036	Change in Retaining Wall Type	\$ 29,883.70
038	Claim Settlement for Differing Site Conditions	\$ 26,400.00

Bolded - Construction Change Orders approved since the last reporting to the Metro Valley Study Session
Amounts shown in parentheses represent a credit to the Agency

040	DS-1 Modifications	\$ 14,000.00
041	Tree Removal and Water Line	\$ 8,500.00
042	Relocation of Gas and Water Services	\$ 12,200.00
043	ADA Requirements on Bridge	\$ 26,000.00
043 S-1	Time Adjustment	\$ 0.00
044	Eliminate Rapid-Set Concrete on #4 Lanes	\$ 86,614.00
045	Additional Concrete Swale Along RW 795	\$ 9,200.00
046	Fencing and Gates along Residential Properties	\$ 27,247.00
047	Additional Rock Blanket at Bridge Abutment	\$ 27,000.00
048	Curb and Sidewalk at SW Corner Valley/Citrus	\$ 5,200.00
050	Mulberry Channel Access Ramp	\$ 45,778.00
051	Street Light Pole Bases	\$ 8,159.00
052	Revise Curb Ramps, Sidewalks & Ped Buttons for ADA	\$ 15,000.00
054	I-10 Median Paving	\$ 44,500.00
056	Misc. Work Not Covered by Contract Items	\$ 40,000.00
057	Concrete Pavement Just-In-Time Training	\$ 1,500.00
058	NOPC No. 6 Resolution	\$ 63,000.00
059	Traffic Signal Equipment at Slover and Valley	\$ 59,787.00
060	Caltrans Safety Comments EB on Ramp	\$ 35,000.00
061	Remove Pedestrian Crossing Features	\$ 35,000.00
065	Apprentice Training	\$ 3,600.00
065 S-1	Additional Funds	\$ 1,400.00
066	Hot Mixed Asphalt Price Adjustment	\$ 35,141.65
067	Final Adjustment of Various Bid Items at Contract Unit Price	\$ 147,391.52
068	Final Adjustment of Various Bid Items at Contract Unit Price	\$ 104,127.07
CCO TOTAL		\$ 1,152,351.11
TOTAL CONTINGENCY AND SUPPLEMENTAL		\$ 5,726,000.00

I-10 Cherry Interchange - Executed Change Orders		
Number	Description	Amount
1	Additional Traffic Control System	\$ 35,000.00
1 S-1	Additional Funds	\$ 12,000.00
2	Maintain Existing Irrigation System	\$ 5,000.00
2 S-1	Additional Funds	\$ 25,000.00
3	Water Pollution Control Maintenance Sharing	\$ 20,000.00
4	Additional Striping and Temporary Pavement	\$ 30,000.00
4 S-1	Additional Striping – Supplement 1	\$ 15,000.00
4 S-2	Additional Striping – Supplement 1	\$ 30,000.00
5	SWPPP Change of Risk Level	\$ (39,090.00)
6	Dispute Review Board	\$ 15,000.00
6 S-1	Additional Funds	\$ 10,000.00
7	Partnering	\$ 20,000.00
8	Compliance with Right-of-Way Obligations	\$ 60,000.00
8 S-1	Compliance with Right-of-Way Obligations – Supplement 1	\$ 60,000.00
8 S-2	Compliance with Right-of-Way Obligations – Supplement 2	\$ 100,000.00
9	Graffiti Removal	\$ 15,000.00
9 S-1	Graffiti Removal – Supplement 1	\$ 25,000.00
10	Maintain Existing Electrical System	\$ 10,000.00

Bolded - Construction Change Orders approved since the last reporting to the Metro Valley Study Session
Amounts shown in parentheses represent a credit to the Agency

10 S-1	Maintain Existing Electrical System – Supplement 1	\$ 20,000.00
10 S-1	Maintain Existing Electrical System – Supplement 2	\$ 38,000.00
11	Spillway Drainage Connection to DS-1	\$ 25,000.00
11 S-1	Spillway Drainage Connection to DS-1 – Supplement 1	\$ 13,000.00
11 S-2	Additional Funds	\$ 18,000.00
12	Temporary Light Poles	\$ 20,000.00
13	Remove Existing Sign Structure	\$ 10,260.00
14	Compensation for Right-of-Way Obstruction (Leach Tank)	\$ 10,780.00
15	Revision to Contract Special Provisions for Tree Removal	\$ 0.00
16	RW 680 Footing Modifications	\$ (21,490.00)
17	Remove Existing Asbestos Pipe	\$ 10,797.00
19	Regular PCCP in Lieu of Rapid Set Concrete	\$ (152,296.00)
18	Realign 96" RCP	\$ 49,991.01
20	Driveway for Truck Stop Facility	\$ 0.00
21	Remove Tree Item Adjustment	\$ 103,187.55
22	Change in Alignment for SW 697	\$ 0.00
23	Modified Concrete Barrier for Concrete Poles	\$ 25,000.00
23 S-1	Additional Funds	\$ 35,000.00
24	Removal and Disposal of Man-Made Buried Objects	\$ 5,000.00
24 S-1	Additional Funds	\$ 55,000.00
25	Additional Grout at Sound Wall 697	\$ 5,000.00
26	New Drainage System at RW 33	\$ 5,199.50
27	Modifications to Drainage System No. 1 Channel Wall	\$ 21,477.30
28	Just-in-Time Training	\$ 1,110.00
29	Maintain Existing Drainage System	\$ 20,000.00
29 S-1	Additional Funds	\$ 30,000.00
30	Modifications to Drainage System	\$ (115,480.50)
31	Payment to Edison	\$ 10,000.00
32	Various Unforeseen Additional Work	\$ 30,000.00
32 S-1	Additional Funds	\$ 30,000.00
33	Electrical Revisions for MSE Wall	\$ 46,447.28
35	Increase in Various Items	\$ 73,234.66
36	Joint Armor for Bridge Sidewalks	\$ 13,000.00
37	Revisions to Rock Blanket Thickness	\$ (154,335.02)
37 S-1	Replace Rock Blanket with 2 ½" Gravel	\$ (23,100.00)
38	Revise SP's for Payment for Removal of Temporary Striping	\$ 20,000.00
38 S-1	Additional Funds	\$ 14,000.00
40	Rush Truck Center Parking Lot	\$ 45,000.00
42	Pedestrian Access to Bridge	\$ 20,000.00
42 S-1	Additional Funds	\$ 5,000.00
43	Type 60C Barrier and Shotcrete Along W/B Off-Ramp	\$ 35,000.00
45	Lower Fiber Optics and Drainage Systems for Roadway	\$ 60,461.12
45 S-1	Additional Funds	\$ 10,000.00
46	Temp. Electrical Feed for Street Lighting for Stage 1A	\$ 17,000.00
49	Replace Spalled Slabs in Lieu of Patching	\$ 233,882.72
50	Concrete Barrier Anchor Block	\$ 4,825.44
51	Traffic Signal Equipment for Slover and Valley	\$ 71,082.80
52	Railroad OH Modifications	\$ 73,660.00
53	NOPC 003-07-25-13 Resolution	\$ 249,760.84

Bolded - Construction Change Orders approved since the last reporting to the Metro Valley Study Session
Amounts shown in parentheses represent a credit to the Agency

54	Stage 3B Construction Changes	\$ (45,206.82)
54 S-1	Additional Stage Construction Changes	\$ (104,722.20)
55	Modify Drain Inlet	\$ 3,526.18
56	Apprentice Training	\$ 9,600.00
57	Farmer Boy Restaurant Landscaping and Irrigation System	\$ 10,350.00
58	Modify Striping on Cherry	\$ 9,590.50
58 S-1	Resolve NOPC No. 13-04-10-15	\$ 9,664.84
60	Installation of LED Lighting Equipment	\$ 49,269.71
61	Vandal Proof Pull box Lids	\$ 30,000.00
62	Modifications to Drainage System No. 9	\$60,000.00
CCO TOTAL		\$ 1,597,437.91
TOTAL CONTINGENCY AND SUPPLEMENTAL		\$ 5,282,319.79

Palm Avenue Grade Separation – Executed Change Orders		
Number	Description	Amount
1	Delayed Start	\$ 0.00
1 S-1	Partial Suspension of Work Due to Utility Delays	\$ 0.00
2	Additional Hoop Rebar for CIDH Piles	\$ 1,310.00
3	Additional SWPPP Measures and SWPPP Maintenance	\$ 50,000.00
3 S-1	Additional Funds	\$ 11,406.00
4	Additional Traffic Control	\$ 25,000.00
5	Modify Contract Language to Remove Barstow	\$ 0.00
6	Modification to City Water Line	\$ (8,750.00)
6 S-1	Modification to City Water Line	\$ 0.00
6 S-2	Additional Funds	\$ 14,922.00
6 S-3	Deletion of Butterfly Valve and Hydrant	\$ (635.26)
7	Temporary Drainage System	\$ 10,000.00
8	Revisions to Denny's, Cross Slope and Detour	\$ 71,027.00
8 S-1	Additional Funds	\$ 3,500.00
9	Relocate Existing Pole Gate	\$ 4,242.00
10	Various Electrical Changes	\$ 39,600.00
10 S-1	Additional Funds	\$ 10,505.00
11	Wrought Iron Fence Substitution	\$ (5,000.00)
12	Water Meter Installation	\$ 24,514.00
12 S-1	Additional Funds	\$ 2,000.00
12 S-2	Additional Funds for Water Payment	\$ 3,000.00
13	Dispute Resolution Advisor	\$ 15,000.00
14	Cable Railing for Headwalls and Wing-Walls	\$ 3,750.00
15	Electrical Services	\$ 50,000.00
16	VECP for Retaining Wall Elimination	\$ (65,686.51)
16 S-1	VECP Final Savings Determination	\$ (27,850.00)
17	Transition Barrier Railing at BNSF R/W	\$ 5,263.25
18	Curb and Gutter Near Edison Pole	\$ 30,000.00
19	Chain Link Fence Details on Bridge	\$ 1,050.50
20	Bridge Deck Profilograph	\$ 1,540.00
21	Accelerated Weekend Work	\$ 88,279.00
22	Increase in Temporary Striping and Potholing	\$ 16,715.50
23	Modify Existing Industrial Pkwy for Frontage Road	\$ 45,055.50

Bolded - Construction Change Orders approved since the last reporting to the Metro Valley Study Session
Amounts shown in parentheses represent a credit to the Agency

23 S-1	Additional Funds	\$ 71,141.00
23 S-2	Additional Funds	\$ 25,000.00
24	Temporary Electrical	\$ 3,380.00
25	Modifications to Denny's Temporary Driveway	\$ 30,000.00
25 S-1	Additional Funds	\$ 1,620.00
25 S-2	Additional Funds	\$ 32,732.00
26	BNSF Roadway Removals	\$ 40,263.00
26 S-1	Additional Funds	\$ 10,000.00
27	Traffic Signal Loops	\$ 3,025.00
29	DG Walk, Swale and AC Dike changes near UPRR	\$ 3,530.00
30	Pavement Delineation on Industrial Parkway	\$ 4,540.00
31	Apprentice Training	\$ 4,800.00
32	Roadside Signs on Street Light Poles	\$ (230.00)
33	Modify Pole Gate	\$ 527.00
34	Additional Shoulder Stripe	\$ 2,431.00
CCO TOTAL		\$ 652,516.98
TOTAL CONTINGENCY AND SUPPLEMENTAL		\$ 1,254,317.50

I-10 Tippecanoe Avenue Phase 1 – Executed Change Orders		
Number	Description	Amount
1	Maintain Auxiliary Lane	\$ 27,010.00
2	Removal of Trees Along Tippecanoe Avenue	\$ 16,753.74
3	Traffic Control	\$ 10,000.00
3 S-1	Additional Funds	\$ 13,385.35
3 S-2	Additional Funds	\$ 3,934.77
3 S-3	Decrease in Funds	\$ (1,395.92)
4	Partnering	\$ 15,000.00
4 S-1	Decrease in Funds	\$ (2,676.83)
5	Dispute Review Board	\$ 15,000.00
5 S-1	Decrease in Funds	\$ (153.35)
6	Graffiti Removal	\$ 4,000.00
6 S-1	Decrease in Funds	\$ (3,309.76)
7	Removal of Man-Made Buried Object	\$ 10,000.00
7 S-1	Decrease in Funds	\$ (572.40)
8	Expediting Construction of Pier 2 Wall and Channel Invert Per ACOE Direction	\$ 3,000.00
8 S-1	Additional Funds	\$ 4,635.53
8 S-2	Additional Funds	\$ 11,517.60
9	Expediting Modification of RCB Connection to San Timoteo Creek Wall Per ACOE Direction	\$ 19,435.00
9 S-1	Additional Funds	\$ 7,430.43
9 S-2	Additional Funds	\$ 8,584.51
9 S-3	Additional Funds	\$ 851.24
10	Shared Maintenance of SWPPP Components	\$ 15,000.00
10 S-1	Decrease in Funds	\$ (9,598.41)
11	Roadway Repairs Caused by Public Traffic	\$ 5,000.00
11 S-1	Decrease in Funds	\$ (4,150.47)
12	Maintain Existing Planting and Irrigation Systems	\$ 10,000.00

Bolded - Construction Change Orders approved since the last reporting to the Metro Valley Study Session
Amounts shown in parentheses represent a credit to the Agency

12 S-1	Supplement #1 to CCO #12	\$ 16,000.00
12 S-2	Additional Funds	\$ 20,000.00
12 S-3	Additional Funds	\$ (4,975.92)
13	Modify Drainage Detail #11	\$ 4,607.18
14	Restriping Tippecanoe Avenue and Anderson Street	\$ 16,809.40
14 S-1	Traffic Control Plan for Restriping	\$ 1,310.00
14 S-2	Decrease in Funds	\$ (5,200.00)
14 S-3	Decrease in Funds	\$ (852.61)
15	Disposition of ADL Soil	\$ 137,620.00
15 S-1	Traffic Control Plan	\$ 10,000.00
15 S-2	Disposition of ADL Soil –Extra Work at Force Account	\$ 209,580.00
15 S-3	Additional Time Related Overhead for Change Order #15 and Change Order #16	\$ 73,170.00
15 S-4	Additional Funds for SWPPP Maintenance	\$ 10,000.00
15 S-5	Time Extension and TRO Costs	\$ 44,607.30
15 S-6	Final Determination of ADL Costs	\$ 85,000.00
15 S-7	Decrease in Funds	\$ (41,534.47)
16	Increase/Decrease in Retaining Wall Material	\$ 72,240.00
16 S-1	Additional Quantities for Retaining Wall Material	\$ 51,786.28
16 S-2	Additional Quantities for Retaining Wall Material	\$ 14,200.00
17	Temporary Fiber Optic Change	\$ 20,554.27
18	Modify Drainage Detail 18A and 18D	\$ (1,386.69)
18 S-1	Additional Funds	\$ 271.69
18 S-2	Additional Funds	\$ 723.56
19	Differing Site Conditions – San Timoteo Creek Bridge – Abutment #1	\$ 7,000.00
19 S-1	Decrease in Funds	\$ (903.97)
20	Maintain Existing Electrical Systems	\$ 15,000.00
20 S-1	Additional Funds	\$ 29,917.67
20 S-2	Additional Funds	\$ 6,580.62
20 S-3	Additional Funds	\$ 5,467.73
21	Elimination of Item #51	\$ (3,000.00)
23	Removal of Additional Trees – Resolution of NOPC 1-11-02-13	\$ 32,666.76
24	Replacing JPCP and LCB with Rapid Set JPCP and Rapid Set LCB	\$ 20,005.77
25	Revision of Staging Plans	\$ 9,778.20
25 S-1	Decrease in Funds	\$ (2,918.72)
26	Weekend Closures on I-10 Tippecanoe EB Off-Ramp	\$ 0.00
26 S-1	Date Adjustment for Weekend Closure	\$ 0.00
27	Mitigation of Low R-Values Inside ADL Section	\$ 25,000.00
27 S-1	Supplement 1 – Mitigation of Low R-Values Inside ADL Section	\$ 15,000.00
27 S-2	Additional Funds for Cap Soil	\$ 10,332.55
27 S-3	2 Day Increase in Contract Time	\$ 0.00
27 S-4	Cancellation of S-3 due to scope of CCO No. 47	\$ 0.00
27 S-5	Additional Funds	\$ 84,909.69
28	Mitigation of Low R-Values Outside ADL Section	\$ 80,000.00
28 S-1	Additional Funds	\$ 6,826.46
28 S-2	Additional Funds	\$ 1,254.65
29	Rebar Couplers for San Timoteo Creek Bridge Closure Pour	\$ 32,000.00
29 S-1	Decrease in Funds	\$ (8,299.40)
30	Pedestrian Push Button Assembly	\$ 5,000.00

Bolded - Construction Change Orders approved since the last reporting to the Metro Valley Study Session
Amounts shown in parentheses represent a credit to the Agency

30 S-1	Decrease in Funds	\$ (789.96)
31	Replacement of Liquid Asphalt (Prime Coat) with Slow Setting Asphaltic Emulsion	\$ 0.00
32	Change from LCB and JPCP to LCB RS and JPCP RS at Ramp Termini	\$ 35,308.60
32 S-1	Decrease in Funds	\$ (1,538.50)
33	Replacement of Concrete Curb on Street and Off-Ramp	\$ 3,684.00
33 S-1	Additional Funds	\$ 1,651.85
34	Modification of DRB Agreement – Position Paper Due Dates	\$ 0.00
35	Placement of Class II Aggregate Base on Tippecanoe Off-Ramp	\$ 38,500.00
35 S-1	Additional Funds	\$ 16,000.00
35 S-2	Additional Funds	\$ 10,331.48
35 S-3	Additional Funds	\$ 3,459.50
35 S-4	Additional Funds	\$ 23,983.20
36	Modify Existing Irrigation System	\$ 0.00
36 S-1	Additional Funds	\$ 14,300.00
37	Additional Material, Equipment, Labor, TC, Etc. Weekend Work	\$ 12,399.45
37 S-1	Additional Funds	\$ 735.48
37 S-2	Additional Funds	\$ 47,550.01
38	Additional Cold Plane AC	\$ 780.00
38 S-1	Additional Funds	\$ 4,000.00
39	Contingency Temporary Striping	\$ 20,638.00
39 S-1	Decrease in Funds	\$ (1,000.00)
40	Drainage Behind RW 220	\$ 5,000.00
40 S-1	Additional Funds	\$ 1,000.00
40 S-2	Decrease in Funds	\$ (589.44)
41	Electrical Work Stage 3	\$ 10,000.00
41 S-1	Specification Changes	\$ 0.00
41 S-2	Additional Funds	\$ 3,931.73
41 S-3	Rescind Time Extension	\$ 0.00
42	Removal of Tree Stump	\$ 2,000.00
42 S-1	Decrease in Funds	\$ (1,700.00)
43	Addition of One Non-Compensable Day	\$ 0.00
44	Barrier Rail Removal	\$ 3,635.21
45	Temporary Delineation Maintenance	\$ 3,500.00
46	Additional Depth of Rock Blanket	\$ 9,402.94
46 S-1	Decrease in Funds	\$ (57.79)
47	Final Resolution Regarding Project Delays, TRO, LD's	\$ 208,318.36
48	NOPC No. 14 Resolution	\$ 10,890.38
49	Bid Item Overrun/Underrun Final Adjustment	\$ (60,546.48)
49 S-1	Additional Adjustments	\$ (2,734.50)
49 S-2	Additional Adjustments	\$ (2,477.81)
50	Extended Rental of RE Office	\$ 11,547.65
51	Apprentice Training	\$ 5,940.40
68	Increase of Bid Item No. 188	\$ 10,074.00
CCO TOTAL		\$ 1,731,956.59
TOTAL CONTINGENCY AND SUPPLEMENTAL		\$ 2,206,154.20

Attachment: MVSS CCO Log (2094 : Construction Contract Change Orders MVSS1508)

Bolded - Construction Change Orders approved since the last reporting to the Metro Valley Study Session
Amounts shown in parentheses represent a credit to the Agency

I-10 Tippecanoe Avenue Phase II – Executed Change Orders		
Number	Description	Amount
1	Delete Paleontological Resources from Special Provisions	\$ 0.00
2	Revise Special Provisions Section “Work Around Parcel”	\$ 0.00
3	Maintain Traffic	\$ 50,000.00
4	Partnering	\$ 35,000.00
5	Dispute Review Board	\$ 15,000.00
7	Landscaping Repairs	\$ 2,300.00
8	Tree Removal	\$ 6,750.00
9	Strom Water Maintenance	\$ 19,400.00
10	Buried Man-made Objects	\$ 10,000.00
12	Placement of Suitable Embankment Material Westbound Off-ramp	\$ 60,000.00
14	Plans & Specs Clarification for Bakers Parking Lot	\$ 0.00
15	Casing for Sound Wall CIDH Pile	\$ 5,000.00
24	Temporary Pavement Repairs W/B On-Ramp	\$ 8,000.00
CCO TOTAL		\$ 211,450.00
TOTAL CONTINGENCY AND SUPPLEMENTAL		\$ 1,583,771.87

Hunts Lane Grade Separation – Executed Change Orders		
Number	Description	Amount
1	Under-Sidewalk Drains and Drainage Call-Outs	\$ (1,100.00)
2	Install Temporary AC Sidewalk South of the RR Tracks	\$ 6,423.00
3	Maintain Existing Electrical	\$ 10,000.00
3 S-1	Maintain Existing Electrical	\$ 20,000.00
4	Man-Made Buried Objects	\$ 80,000.00
4 S-1	Man-Made Buried Objects	\$ 40,000.00
5	Extended Underground Utilities at Oliver Holmes	\$ 15,446.68
6	Maintain Traffic	\$ 20,000.00
6 S-1	Maintain Traffic	\$ 20,000.00
7	Partnering	\$ 5,000.00
8	Dispute Review Board	\$ 10,000.00
8 S-1	Additional Funds	\$ 995.72
9	Trainee	\$ 5,000.00
10	60” Casing Thickness Increase	\$ 16,438.80
11	Substitute Cast-in-Place with Precast Reinforced Concrete Box (RCB)	\$ 0.00
12	Retaining Wall No. 7 Alignment	\$ (2,535.00)
13	Temporary Business Signage	\$ 5,000.00
14	Pedestrian Sidewalk	\$ 10,000.00
14 S-1	Additional Funds	\$ 19,571.63
14 S-2	Additional Funds	\$ 3,455.35
15	MSE Wall Design Methodology	\$ 0.00
16	Additional AT&T Work	\$ 25,500.00
17	16” Waterline Tie-In	\$ 12,700.00
18	SCE Utility Work Deduction	\$ (59,415.80)
19	Drainage Ditch at Club Center Drive	\$ 10,975.00
19 S-1	Additional Funds	\$ 4,298.31
19 S-2	Bypass Channel around Utility Improvements	\$ 9,217.43
19 S-3	Additional Funds	\$ 882.13

Bolded - Construction Change Orders approved since the last reporting to the Metro Valley Study Session
Amounts shown in parentheses represent a credit to the Agency

19 S-4	Additional Funds	\$ 896.93
20	AT&T Shift for Jacking Pit	\$ 20,000.00
21	Combination of Stages	\$ 0.00
22	Temporary Sewer Tie-In	\$ 70,000.00
22 S-1	Temporary Sewer Tie-In	\$ 40,000.00
23	Temporary Sewer Tie-In	\$ 37,000.00
23 S-1	Temporary Sewer Tie-In	\$ 50,000.00
24	Decatur Irrigation Rebuild	\$ 15,000.00
25	Striping Changes	\$ 0.00
26	Moving Jacking Pit	\$ 10,000.00
26 S-1	Moving Jacking Pit	\$ 30,000.00
27	Hunts Lane Drainage Change	\$ 18,462.00
28	Emergency Access Structure Waterproofing	\$ 7,000.00
29	CIDH Lap Splicing	\$ 5,216.10
30	Temporary Traffic Delineation Removal	\$ 2,365.00
31	Reimburse Pilot Bore	\$ 27,680.21
34	Additional Sewer Manhole	\$ 8,900.00
43	Plant Establishment Type Change	\$ 0.00
45	Additional Working Day's for Jack and Bore	\$ 0.00
45 S-1	Additional Working Day's	\$ 0.00
45 S-2	Additional Funds for SWPP & Field Office Rent	\$ 7,474.25
47	Additional Type CF Service Cabinet	\$ 3,520.00
48	Landscaping Reduction	\$ 6,526.20
49	Closure Panels at MSE Wall and Bridge	\$ 0.00
50	Shorter Street Light Under Edison Lines	\$ 3,299.25
51	Profile Bridge Deck	\$ 2,500.00
52	Deletion of Cross Gutter	\$ 0.00
53	Drain Inlet for Adjacent Properties	\$ 6,500.00
54	Additional Potholing of Edison Facilities	\$ 15,000.00
54 S-1	Decrease of Funds	\$ (7,862.82)
55	Additional Chain Link Fence and Gates	\$ 7,150.00
55 S-1	Additional Funds	\$ 19,580.00
55 S-2	Additional Funds	\$ 6,110.17
55 S-3	Additional Funds	\$ 266.81
56	Removal of At-Grade Crossing Equipment	\$ 20,000.00
57	Bollards	\$ 10,000.00
58	Redwood Fence Topper on Masonry Wall	\$ 7,565.80
59	Pavement Markings and Crosswalk Deletion	\$ 3,418.80
61	Thief-Proof Access Panels on Light Standards	\$ 411.72
62	Additional Traffic Safety Items	\$ 10,000.00
62 S-1	Additional Funds	\$ 15,869.97
64	Irrigation System Increase due to Water Meter Locations	\$ 9,780.00
65	Decatur Center Landscaping Payment	\$ 4,002.90
66	Fencing Along UPRR Easement	\$ 7,320.00
69	Superior Truck Company Gate Payment	\$ 5,500.00
71	Settlement of NOPC No. 3	\$ 86,357.51
72	Colton Electric Facility Protection	\$ 3,000.00
74	Settlement of NOPC No. 5	\$ 8,692.46
75	Settlement of NOPC No. 6	\$ 32,929.10

Bolded - Construction Change Orders approved since the last reporting to the Metro Valley Study Session
Amounts shown in parentheses represent a credit to the Agency

76	Settlement of NOPC No. 7	\$40,145.13
77	Settlement of NOPC No. 4	\$ 0.00
78	Settlement of Deferred Time – 79 Additional Working Days	\$ 0.00
79	Settlement of NOPC No. 11	\$ 9,474.52
80	Settlement of Exception to PFE (Service Splices)	\$ 6,725.00
81	Settlement of Exception to PFE (Additional Irrigation)	\$ 5,078.00
82	Re-grading Trench for 16” Water Line	\$ 6,104.48
83	Cement Slurry Red Dye	\$ 2,095.16
84	Additional Electrical Work	\$ 2,191.77
85	Fire Hydrant Relocation & Additional Sewer Manhole	\$ 25,000.00
86	Damage Repairs from Traveling Public	\$ 7,888.13
	CCO TOTAL	\$ 1,029,987.80
	TOTAL CONTINGENCY AND SUPPLEMENTAL	\$ 1,833,947.00

I-10 Riverside Avenue Landscaping - Executed Change Orders		
Number	Description	Amount
1	Additional Roadway Work and Roadside Signs	\$ 26,569.83
1 S-1	Drainage for Nuisance Water on W/B Shoulder	\$ 30,873.47
1 S-2	Returning Unused Funds to Contingency	\$ (18,598.88)
2	Suspension of Work	\$ 0.00
3	Existing Irrigation System Deficiencies Corrections	\$ 5,000.00
3 S-1	Additional Funds	\$ 2,149.31
3 S-2	Returning Unused Funds to Contingency	\$ (128.86)
3 S-3	Additional Funds for Rock Blanket Repairs	\$ 398.33
4	Saw Cut Existing AC Pavement Edge	\$ 4,541.93
4 S-1	Returning Unused Funds to Contingency	\$ (2,270.96)
5	Agency Compensation for Costs and Expenses Incurred AWL Default	\$ (102,000.00)
6	Remove SWPPP Reporting and Inspection Requirements	\$ (653.20)
7	Remove/Replace Existing MBGR, Saw Cut Existing AC Pavement, and Install Vegetation Control	\$ 34,873.11
8	Re-Stripe Riverside Avenue	\$ 29,500.33
9	Delete Contract Item No. 52, 75mm Pressure Relief Valve	\$ (950.00)
10	Install Rigid PVC Risers	\$ 4,250.00
11	Dispose of Rock from Irrigation Trenching Operations	\$ 10,000.00
11 S-1	Returning Unused Funds to Contingency	\$ (7,718.45)
12	Reconstruction of AC Dike/Shoulder Eastbound	\$ 59,012.59
12 S-1	Additional Funds	\$ 6,105.00
13	17 WD Time Extension to Cover Project	\$ 5,000.00
13 S-1	Returning Unused Funds to Contingency	\$ (5,000.00)
14	Added Quantities of Bid Items	\$ 837.40
	CCO TOTAL	\$ 81,790.95
	TOTAL CONTINGENCY AND SUPPLEMENTAL	\$ 204,850.00

Bolded - Construction Change Orders approved since the last reporting to the Metro Valley Study Session
Amounts shown in parentheses represent a credit to the Agency

I-10 Riverside Avenue Landscaping EEP - Executed Change Orders		
Number	Description	Amount
1	Project Deficiencies Repairs	\$ 2,500.00
CCO TOTAL		\$ 2,500.00
TOTAL CONTINGENCY AND SUPPLEMENTAL		\$ 295,226.10

Laurel Street Grade Separation - Executed Change Orders		
Number	Description	Amount
1	Maintain Roadway and Maintain Traffic	\$ 20,000.00
2	Removal and Disposal of Buried Man-Made Object	\$ 10,000.00
3	Revised City of Colton Electrical E-02	\$ 9,476.14
5	RJ&R and TCI Properties	\$ 47,966.00
6	Increase TWC Size of Vault	\$ 4,515.00
7	Compensate Contractor for Payment to AT&T Utility	\$ 109,740.02
7 S-1	Additional Funds	\$ 87,122.00
8	36" Casing - Waterline	\$ 86,535.00
9	Dispute Review Board	\$ 22,500.00
10	Different in Cost 750mm Wire in Lieu of 500mm	\$ 4,000.00
10 S-1	Additional Funds	\$ 4,000.00
10 S-2	Additional Funds	\$ 15,000.0
11	Increase Depth of Colton Vault	\$ 25,000.00
12	Remove Existing SCRRA Materials	\$ 10,000.00
13	Protecting and Repairing Underground Facilities	\$ 5,000.00
13 S-1	Additional Funds	\$ 5,000.00
17	BNSF Shoofly Drainage	\$ 28,228.00
19	Additional Fire Protection Measures	\$ 11,794.62
19 S-1	Additional Funds	\$ 105,100.00
19 S-2	Additional Funds	\$ 3,673.05
21	Miller's Honey Stairs, Ramps and Parking Lot Modifications	\$ 12,160.00
24	Irrigation Back-flow Substitution	\$ 0.00
30	Concrete in Lieu of AC on RJ&R Property	\$ 16,800.00
32	Differing Site Conditions – Piling	\$ 20,000.00
32 S-1	Additional Funds	\$ 90,000.00
33	3' Wide Pavement Transition	\$ 10,800.00
33 S-1	Additional Funds	\$ 5,000.00
35	Revised Hot Mixed Asphalt Specifications	\$ 0.00
36	Crude Oil Price Index Fluctuation	\$ 40,000.00
37	AT&T Relocations Additional Work	\$ 7,000.00
38	Striping and Bumpers in TCI Back lot	\$ 7,470.00
39	Additional Remotes for TCI Automatic Gate	\$ 3,937.64
40	Mobilization Costs due to Relocation Delays of waterline and AT&T	\$ 28,000.00
41	Revisions to Specs for Double Swing Gate	\$ 0.00
43	SWRCB Annual Permit	\$ 1,483.90
44	Retaining Curb on TCI Property	\$ 5,000.00
45	Cost to meet Right of Way Obligations	\$ 20,000.00
46	BNSF Signal Bridge	\$ 14,000.00

Bolded - Construction Change Orders approved since the last reporting to the Metro Valley Study Session
Amounts shown in parentheses represent a credit to the Agency

48	Additional Earthwork Mobilization for BNSF Work	\$ 25,000.00
	CCO TOTAL	\$ 921,301.37
	TOTAL CONTINGENCY AND SUPPLEMENTAL	\$ 2,754,187.72

SR-210 Segment 8 Landscaping EEP – Executed Change Orders		
Number	Description	Amount
1	Slope Erosion Control Measures	\$ 15,000.00
	CCO TOTAL	\$ 15,000.00
	TOTAL CONTINGENCY AND SUPPLEMENTAL	\$ 199,918.60

SR-210 Segment 10 Landscaping – Executed Change Orders		
Number	Description	Amount
1	Revise Irrigation Controller Equipment	\$ 6,248.25
2	Increase Cost for Water Meter	\$ 14,832.70
3	Shared Water Pollution Control Costs	\$ 6,000.00
4	Install ICC Enclosure	\$ 2,500.00
5	Repair Existing Irrigation Facilities	\$ 3,000.00
6	Repair Slope Damage	\$ 35,000.00
6 S-1	Repair Slope Damage – Time Adjustment	\$ 0.00
7	Increase Water Rates	\$ 2,500.00
7 S-1	Increase Water Rates	\$ 1,948.78
8	Time Adjustment – Water Meter Repair by WVWD	\$ 0.00
9	Frost Damage	\$ 7,500.00
10	Wild Flower Seeding	\$ 13,107.58
11	Foliage Protector Removal	\$ 10,000.00
11 S-1	Foliage Protector Removal – Additional Funds	\$ 25,000.00
11 S-2	Foliage Protector Removal – Additional Funds	\$ 20,000.00
11 S-3	Foliage Protector Removal – Additional Funds	\$ 8,834.70
12	Final Item Adjustment	\$ 0.00
13	Detention Basin Clearing	\$ 3,658.41
	CCO TOTAL	\$ 160,130.42
	TOTAL CONTINGENCY AND SUPPLEMENTAL	\$ 239,090.00

SR-210 Segment 11 Landscaping – Executed Change Orders		
Number	Description	Amount
2	Install Roadside Signs	\$ 1,955.96
3	Water Meter Fee Adjustment	\$ 41,729.38
3 S-1	Additional Funds	\$ 6,515.39
4	Locate Existing Crossovers	\$ 30,000.00
5	Install Irrigation Crossovers	\$ 40,000.00
5 S-1	Install Irrigation Crossovers	\$ 5,965.81
6	Traffic Control	\$ 5,000.00
6 S-1	Additional Funds	\$ 1,181.90
7	Install Wireless Communication	\$ 7,237.60

Bolded - Construction Change Orders approved since the last reporting to the Metro Valley Study Session
Amounts shown in parentheses represent a credit to the Agency

7 S-1	Additional Funds	\$ 5,342.31
7 S-2	Additional Funds	\$ 2,944.19
8	Repair Slipped Slope	\$ 64,844.08
8 S-1	Addition of 10 Working Days to Contract Time	\$ 0.00
9	Remove Man-Made Objects	\$ 10,000.00
9 S-1	Additional Funds	\$ 3,829.89
10	Wildflower Seed Change	\$ 0.00
11	Rock Blanket and V-Ditch	\$ 80,000.00
12	Pothole Paving	\$ 33,378.72
13	Additional 1.5" Electrical Conduit	\$ 8,971.96
13 S-1	10% Markup on Subcontractor Electrical work	\$ 987.20
14	Shared Cost for Fiber Optic Repairs	\$ 950.00
15	Slope Paving Repairs	\$ 12,000.00
16	Bid Item Overrun/Underrun Final Adjustment	\$ 36,441.15
17	Replace Frost Damaged Plants	\$ 7,500.00
CCO TOTAL		\$ 406,775.54
TOTAL CONTINGENCY AND SUPPLEMENTAL		\$ 445,031.83

SR-210 Segment 9 & 10 Landscaping EEP – Executed Change Orders		
Number	Description	Amount
1	Irrigation Controller Repair	\$ 616.43
2	Additional Irrigation Controller Repair	\$ 1,019.17
3	Repair Leaking Backflow and Meter	\$ 1,500.00
CCO TOTAL		\$ 3,135.60
TOTAL CONTINGENCY AND SUPPLEMENTAL		\$ 295,226.10

I-215 Segment 1 & 2 Project – Executed Change Orders		
Number	Description	Amount
001	Traffic Control	\$ 100,000.00
001 – S1	Traffic Control – Additional Funds	\$ 100,000.00
001 – S2	Traffic Control – Additional Funds	\$ 150,000.00
001 – S3	Traffic Control – Additional Funds	\$ 100,000.00
001 – S4	Traffic Control – Additional Funds	\$ 125,000.00
001 – S5	Traffic Control – Additional Funds	\$ 250,000.00
001 – S6	Traffic Control – Additional Funds	\$ 205,000.00
001 – S7	Traffic Control – Additional Funds	\$ 7,610.13
001 – S8	Traffic Control – Additional Funds	\$ 15,313.38
001 – S9	Traffic Control – Additional Funds	\$ 3,750.07
002	Establish a Dispute Review Board	\$ 35,000.00
002 – S1	Establish a Dispute Review Board – Additional Funds	\$ 913.78
002 – S2	Establish a Dispute Review Board – Additional Funds	\$ 187.50
003	Establish a Partnering Training Workshop	\$ 50,000.00
004	Hot Mix Asphalt Price Fluctuation Adjustment of Compensation	\$ 230,000.00
004 – S1	Hot Mix Asphalt Price Fluctuation Adjustment of Compensation – Additional Funds	\$ 100,000.00
004 – S2	Hot Mix Asphalt Price Fluctuation Adjustment of Compensation – Additional Funds	\$ 300,000.00

Bolded - Construction Change Orders approved since the last reporting to the Metro Valley Study Session
Amounts shown in parentheses represent a credit to the Agency

004 – S3	Hot Mix Asphalt Price Fluctuation Adjustment of Compensation – Additional Funds	\$ 210,000.00
004 – S4	Hot Mix Asphalt Price Fluctuation Adjustment of Compensation – Additional Funds	\$ 50,000.00
005	Maintain Existing Electrical	\$ 50,000.00
005 – S1	Maintain Existing Electrical – Additional Funds	\$ 50,000.00
005 – S2	Maintain Existing Electrical – Additional Funds	\$ 75,000.00
005 – S3	Maintain Existing Electrical – Additional Funds	\$ 24,000.00
005 – S4	Maintain Existing Electrical – Additional Funds	\$ 95,000.00
005 – S5	Maintain Existing Electrical – Additional Funds	\$ 145,000.00
005 – S6	Maintain Existing Electrical – Time Deferment, 4 Days	\$ 0.00
006	Sound Wall Block Detail Revision	\$ 0.00
007	Architectural Treatment Test Panel Size Revision	\$ 0.00
008	Just-In-Time Training for PCC Pavement and Paving Techniques	\$ 6,000.00
009	SWPPP Maintenance	\$ 100,000.00
009 – S1	SWPPP Maintenance – Additional Funds	\$ 950,000.00
009 – S2	SWPPP Maintenance – Additional Funds	\$ 395,000.00
009 – S3	SWPPP Maintenance – Additional Funds	\$ 250,000.00
009 – S4	SWPPP Maintenance – Additional Funds	\$ 9,100.31
010	Utility Potholing	\$ 10,000.00
010 – S1	Utility Potholing – Additional Funds	\$ 10,000.00
010 – S2	Utility Potholing – Additional Funds	\$ 10,000.00
010 – S3	Utility Potholing – Additional Funds	\$ 10,000.00
010 – S4	Utility Potholing – Additional Funds	\$ 20,000.00
011	Buried Man-Made Object	\$ 20,000.00
011 – S1	Buried Man-Made Object – Additional Funds	\$ 30,000.00
011 – S2	Buried Man-Made Object – Additional Funds	\$ 50,000.00
011 – S3	Buried Man-Made Object – Additional Funds	\$ 50,000.00
011 – S4	Buried Man-Made Object – Additional Funds	\$ 49,000.00
011 – S5	Buried Man-Made Object – Additional Funds	\$ 50,000.00
011 – S6	Buried Man-Made Object – Additional Funds	\$ 95,000.00
011 – S7	Buried Man-Made Object – Time Deferment	\$ 0.00
011 – S8	Buried Man-Made Object – Additional Funds	\$ 2,594.59
012	Provide Access Control Fence	\$ 50,000.00
014	Optional Steel Pipe Pile Specification	\$ 0.00
015	Modify 13 th Street Off-Ramp	\$ 83,325.00
016	Change to Precast Girders at Redlands Loop	\$ 0.00
017	Temporary Fiber Optic	\$ 12,605.00
018	Repair Roadway	\$ 25,000.00
018 – S1	Repair Roadway – Additional Funds	\$ 25,000.00
018 – S2	Repair Roadway – Additional Funds	\$ 50,000.00
018 – S3	Repair Roadway – Additional Funds	\$ 50,000.00
018 – S4	Repair Roadway – Additional Funds	\$ 100,000.00
018 – S5	Repair Roadway – Additional Funds	\$ 125,000.00
018 – S6	Repair Roadway – Additional Funds	\$ 100,000.00
018 – S7	Repair Roadway – Additional Funds	\$ 59,608.04
018 – S8	Repair Roadway – Additional Funds	\$ 17,459.60
018 – S9	Repair Roadway – Additional Funds	\$ 0.00
018 – S10	Repair Roadway – Additional Funds	\$ 190.22

Bolded - Construction Change Orders approved since the last reporting to the Metro Valley Study Session
Amounts shown in parentheses represent a credit to the Agency

019	Change Sound Wall Pile Steel to No. 3 Rebar	\$ 0.00
020	Realign DS #6	\$ 2,398.00
021	Shear Ring Alternate Welding Method	\$ 0.00
022	Temporary Chain Link Fence at Verizon Yard	\$ 9,500.00
023	Revise DS #20	\$ 9,239.00
024	Change Traffic Opening at 9 th Street	\$ 0.00
025	Revise RW 106W and DS #8, 13 and 100	\$ 15,390.02
026	1200mm Casing for 600mm Jack Pipe DS #8 and 14	\$ 0.00
027	Change Traffic Opening at Baseline Street Over Crossing	\$ 0.00
028	Rialto Top Deck Reinforcement	\$ 0.00
029	Tie-In DS #10-0 to Segment 3	\$ 80,000.00
029 – S1	Tie-In DS #10-0 to Segment 3 – Time Deferment Closure	\$ 0.00
029 – S2	Tie-In DS #10-0 to Segment 3 – Additional Funds	\$ 40,000.00
030	Modify Overhead Sign ‘H’ Values	\$ 13,258.64
030 – S1	Sign B New Foundation	\$ 51,297.29
031	Change Bearing Pad Thickness at 5 th / 215 Southbound on Ramp	\$ 0.00
032	Right-of-Way Delay DS #100 2 nd Street	\$ 10,000.00
033	Modify DS #101 and 102 West of 9 th Segment 2	\$ 63,758.60
033 – S1	Modify DS #101 and 102 West of 9 th Segment 2 – Additional Funds	\$ 35,000.00
033 – S2	Modify DS #101 and 102 West of 9 th Segment 2 – Additional Funds	\$ 52,501.94
033 – S3	Modify DS #101 and 102 West of 9 th Segment 2 – Additional Funds	\$ 25,000.00
033 – S4	Modify DS #101 and 102 West of 9 th Segment 2 – Additional Funds	\$ 30,000.00
034	Modify DS #19 Segment 2	\$ 60,000.00
034 – S1	Modify DS #17 and #19 Segment 2	\$ 51,453.50
034 – S2	Modify DS #17 and #19 Segment 2 – Additional Funds	\$ 95,000.00
034 – S3	Modify DS #17 and #19 Segment 2 – Additional Funds	\$ 16,007.92
034 – S4	Modify DS #17 and #19 – Time Deferment	\$ 0.00
035	Change incandescent ‘Meter On’ Sign	\$ 2,547.55
036	Strengthen Outside Shoulder	\$ 29,789.00
037	Protect Arco Station Sign and Greenbelt	\$ 10,000.00
039	Credit for Traffic Screen	\$ (35,715.00)
040	Inlet Guards	\$ 12,455.00
041	Relocate Fiber Optic Conduit at Redlands Loop	\$ 0.00
042	Southbound I-215 Detour North of 16 th Street	\$ 152,770.00
042 – S1	Southbound I-215 Detour North of 16 th Street – Additional Funds	\$ 50,000.00
042 – S2	Southbound I-215 Detour North of 16 th Street – Additional Funds	\$ 27,000.00
042 – S3	Southbound I-215 Detour North of 16 th Street – Time Deferment	\$ 0.00
043	Revise Retaining Wall 242B, Add 242C	\$ 112,324.75
044	Third Street Train Mural	\$ 4,925.49
045	Right-of-Way Delay for DS #100 at 3 rd Street Power Pole	\$ 4,182.99
047	Baseline Abutment 1 Right-of-Way Delays Due to BNSF Cables	\$ 55,000.00
047 – S1	Baseline Mitigation of Critical Path Delay	\$ 60,000.00
048	Revise Structural Section 8 and 13	\$ 19,470.00
049	Frame Roadside Signs	\$ 3,066.90
049 – S1	Additional Framed Signs	\$ 1,482.69
050	Change the Sta. for Abutment 1 and 7 16 th Street	\$ 0.00
051	TCE at ARCO Station at Baseline and H Street	\$ 0.00
052	Changes to Special Provisions for CIDH Payment Clause	\$ 0.00
053	Service Conduits for SCE Service Connections	\$ 23,218.32

Bolded - Construction Change Orders approved since the last reporting to the Metro Valley Study Session
Amounts shown in parentheses represent a credit to the Agency

054	Revise Vertical Drop Connection	\$ 0.00
055	Clean Out Storm Drain at 9 th Street	\$ 4,200.00
056	Revise DS #4, 6 and 84	\$ 5,841.20
057	Graffiti Removal	\$ 20,000.00
057 – S1	Graffiti Removal – Additional Funds	\$ 50,000.00
057 – S2	Graffiti Removal – Additional Funds	\$ 25,000.00
057 – S3	Graffiti Removal – Additional Funds	\$ 75,000.00
058	Salvage Vehicle Detection System	\$ 15,000.00
059	Reduce ADL Quality Bid Item 70 and 71	\$ 0.00
060	3 rd Street Bridge Temporary Retaining Wall Structure Backfill	\$ 25,000.00
061	Additional Drainage Inlet at 3 rd Street	\$ 8,500.00
062	New SWPPP Permit Requirements	\$ 160,665.00
062 – S1	New NPDES Permit – Order No. 2009-0009-DWG	\$ 574,911.32
062 – S2	New NPDES Permit – Order No. 2009-0009-DWG	\$ 55,024.95
062 – S3	New NPDES Permit – Order No. 2009-0009-DWQ – Additional Funds	\$ 113,909.31
062 – S4	New NPDES Permit – Order No. 2009-0009-DWQ – Additional Funds	\$ 332,960.00
063	Additional Bracing for Falsework Bent 2-5 at Baseline Street OC/OH	\$ 15,000.00
064	Right-of-Way Obligations	\$ 25,000.00
064 – S1	Right-of-Way Obligations – Additional Funds	\$ 25,000.00
064 – S2	Right-of-Way Obligations – Additional Funds	\$ 49,000.00
064 – S3	Right-of-Way Obligations – Additional Funds	\$ 86,000.00
064 – S4	Right-of-Way Obligations – Additional Funds	\$ 150,000.00
064 – S5	Right-of-Way Obligations – Additional Funds	\$ 150,000.00
064 – S6	Right-of-Way Obligations – Additional Funds	\$ 90,000.00
064 – S7	Right-of-Way Obligations – Additional Funds	\$ 27,650.95
064 – S8	Right-of-Way Obligations – Additional Funds	\$ 976.41
065	Remove Existing Storm Drain 62A	\$ 6,500.00
066	Repair Deck Opening and Joint on Redlands Loop and Rialto Bridges	\$ 90,105.80
067	5 th Street Southbound Off-Ramp Acceleration	\$ 50,000.00
068	Modify Drainage Systems	\$ 100,000.00
068 – S1	Modify Drainage Systems – Additional Funds	\$ 90,000.00
068 – S2	Modify Drainage Systems – Additional Funds	\$ 85,000.00
068 – S3	Modify Drainage Systems – Additional Funds	\$ 250,000.00
064 – S4	Modify Drainage Systems – Additional Funds	\$ 120,000.00
068 – S5	Modify Drainage Systems – Additional Funds	\$ 60,000.00
068 – S6	Modify Drainage Systems – Additional Funds	\$ 75,000.00
068 – S7	Modify Drainage Systems – Time Deferment	\$ 0.00
069	Stage Construction 4 th Through 6 th	\$ 95,000.00
069 – S1	Stage Construction 4 th Through 6 th – Additional Funds	\$ 50,000.00
069 – S2	Stage Construction 4 th Through 6 th – Additional Funds	\$ 40,625.22
069 – S3	Stage Construction 4 th Through 6 th – Time Deferment	\$ 0.00
070	Temporary Paving Under 259	\$ 145,927.00
071	Repair Fiber Optic Cable at 3 rd Street	\$ 22,000.00
072	Move Gore North for 215/259	\$ 40,000.00
073	Alignment and Temporary Paving Change Sta. 118 to Sta. 121 Median	\$ 0.00
074	Move SCE Connection at 5 th Street	\$ 30,394.56
075	Modify DS #115 at 16 th Street and H Street	\$ 11,530.90
076	Delete Shiner on Retaining Walls, Segment 1	\$ 0.00
077	Modify Drainage Systems G1 to G2 Types	\$ 38,334.30

Bolded - Construction Change Orders approved since the last reporting to the Metro Valley Study Session
Amounts shown in parentheses represent a credit to the Agency

078	Settlement of NOPC No. 1 – Pump House at 6 th Street	\$ 18,890.32
079	Revised Staging Northbound 2 nd Street Off-Ramp – 2 nd Lane Addition	\$ 25,000.00
079 – S1	Revised Staging Northbound 2 nd Street Off-Ramp	\$ 3,059.13
080	Delete Electrical and Cable Conduit Blockout and Casings at 9 th Street Bridge	\$ 2,000.00
081	Increase Quantities for Bid Item #202 – Welded Steel Pipe Casing (Bridge)	\$ 39,480.00
083	Revised SCE Connection Points	\$ 5,358.47
083 – S1	Revised SCE Connection Points – Addition of Trenton Street	\$ 10,646.65
084	Restage North End of Project and Temporary Southbound 3 rd Street Off-Ramp	\$ 1,630,850.00
084 – S1	Restage North End of Project and Temporary Southbound 3 rd Street Off-Ramp – Additional Funds	\$ 75,000.00
084 – S2	Additional Funds for the BAS Rental Property	\$ 1,343.54
085	Revise DS #38 Callouts	\$ 0.00
086	Chain Link Railing Fabric Color Change	\$ 64,003.59
087	Sidewalk Joint Armor at 9 th Street and Baseline Street OC/OH	\$ 25,000.00
088	Remove Contaminated Material at RW136	\$ 50,000.00
089	CIDH Pile Changes S259/S215 Connector	\$ 75,212.00
090	Electrical Change 2 nd and I Street and 9 th and H Street	\$ 9,499.00
091	Southbound Transition Segment 5 into Segment 2	\$ 75,000.00
091 – S1	Southbound Transition Segment 5 into Segment 2 – Additional Funds	\$ 60,000.00
092	Premium Time for Baseline and H Street Intersection	\$ 25,000.00
092 – S1	Additional Funds	\$ 1,306.16
093	Relocate Signal at South East Corner of 2 nd Street and Southbound On-Ramp	\$ 18,350.00
094	Settlement of NOPC No. 3 – Temporary Power Poles (2 nd and 3 rd Street)	\$ 34,345.28
095	Revised Deck Contours for 5 th Street to S215 On-Ramp	\$ 0.00
096	Northbound Transition Segment 2 into Segment 5	\$ 80,145.00
097	Modify Bioswale No. 3, Segment 2	\$ 14,732.00
098	Eliminate BI #184 Prepare and Paint Concrete Median Barrier Surfaces	\$ (65,590.00)
099	DS #100 Verizon Utility Conflict	\$ 24,000.00
099 – S1	DS #100 Verizon Utility Conflict – Additional Funds	\$ 86,394.57
100	Expansion Deflection Couplers at Baseline	\$ 2,415.35
101	Remove PCCP at South End of Project	\$ 85,000.00
102	Eliminate Bid Item No. 143 – Anti-Graffiti Coating	\$ (262,800.00)
103	Traffic Signal Modification at 5 th Street Ramps	\$ 9,375.31
104	Add CTPB Under Approach Slab Type R at Redlands Loop Widen and Rialto Avenue Widen	\$ 88,330.56
104 – S1	Revised Layout for Type R Approach Slab at Redlands Loop	\$ 0.00
105	Changes to Moment Barrier Slab Wall 117W	\$ 77,228.78
106	Revised Pile Layout Abut 1 Baseline Stage 2	\$ 80,476.19
107	Sound Wall No. 1 Extension	\$ 144,330.00
107 – S1	Settlement of NOPC NO. 18 – Addition of Sound Wall No. 122	\$ 50,000.00
108	Underdrain at Wall 116W	\$ 40,540.00
109	Move SE-22 Crossing North for 5 th Street Southbound Off-Ramp	\$ 9,438.14
109 – S1	Power for Service SE-19 for Luminaires 32, 34, 35	\$ 15,346.41
110	Column Casing Specification Changes	\$ 0.00
111	Contour Grading at 5 th Street and BNSF Rail Road	\$ 30,000.00

Bolded - Construction Change Orders approved since the last reporting to the Metro Valley Study Session
Amounts shown in parentheses represent a credit to the Agency

111 – S1	Contour Grading at 5 th Street and BNSF Rail Road – Additional Funds	\$ 20,000.00
111 – S2	Regrade and Concrete Line Earthen Ditches on the West Side of BNSF Right-of-Way	\$ 40,000.00
111 – S3	Regrade and Concrete Line Earthen Ditches on the West Side of BNSF Right-of-Way – Time Deferment	\$ 0.00
112	Install Type ‘D’ Bike Loops	\$ 16,925.08
113	Transition Barrier Between 5 th Street and S215/5 th Street Off-Ramp to Match Existing Bridge	\$ 10,000.00
113 – S1	Retaining Wall 128 Transition Barrier Type 732A	\$ 10,000.00
114	Southbound Baseline On and Off-Ramp Isolation Casing Revisions	\$ 18,848.42
115	Alternative Anchorage Bridge Mounted Signs	\$ 0.00
116	Intentionally Roughening the Bridge Stems	\$ 0.00
117	Modify the 732 Concrete Barriers at DS #8 and 11 Inlets	\$ 5,000.00
117 – S1	Modify the 732 Concrete Barriers at DS #8 and 11 Inlets – Additional Funds	\$ 5,000.00
117 – S2	Modify the 732 Concrete Barriers at DS #8 and 11 Inlets – Additional Funds	\$ 10,000.00
118	Soffit Lighting Layout Changes at 2 nd and 3 rd Street Bridges	\$ 7,916.33
119	Change to Deck Drain Layout at 5 th Street to S215 On-Ramp	\$ 15,000.00
120	Modify and Upgrade Communications Systems	\$ 64,836.00
121	Pull Box Anti-Theft Installation	\$ 40,000.00
121 – S1	Pull Box Anti-Theft Installation – Additional Funds for Caltrans Pull Boxes	\$ 95,000.00
121 – S2	Utility Markers and Installation for Caltrans Pull Boxes – Additional Funds	\$ 10,000.00
121 – S3	Utility Markers and Installation for Caltrans Pull Boxes – Additional Funds	\$ 50,000.00
121 – S4	Utility Markers and Installation for Caltrans Pull Boxes – Additional Funds	\$ 100,000.00
121 – S5	Utility Markers and Installation for Caltrans Pull Boxes – Additional Funds	\$ 22,324.69
121 – S6	Utility Markers and Installation for Caltrans Pull Boxes – Additional Funds	\$ 1,152.98
122	Settlement of NOPC No. 8 – Storm Drain Repair	\$ 120,000.00
123	Relocate SE-09, Add PPB, Revise Highland Ramp Lighting Connection	\$ 27,863.48
124	Temporary Paving for Northbound 2 nd Street Off-Ramp	\$ 30,000.00
124 – S1	Temporary Paving for Northbound 2 nd Street Off-Ramp – Additional Funds	\$ 15,000.00
125	Clearing and Grubbing Not Shown on Plans	\$ 40,000.00
126	Baseline Street Lighting	\$ 766.32
127	Replace Damaged Existing PCCP Slabs	\$ 80,000.00
127 – S1	Replace Damaged Existing PCCP Slabs – Additional Funds	\$ 40,000.00
127 – S2	Replace Damaged Existing PCCP Slabs – Time Deferment	\$ 0.00
128	Drainage at Retaining Wall 242A	\$ 69,122.75
128 – S1	Drainage at Retaining Wall 242A	\$ 16,129.25
129	Polyester Concrete Overlay at Rialto Avenue Bridge	\$ 194,000.45
129 – S1	Polyester Concrete Overlay at Rialto Avenue Bridge – Additional Funds	\$ 63,250.00
129 – S2	Polyester Concrete Overlay at Rialto Avenue Bridge – Time Deferment	\$ 0.00
130	Slope Paving at 16 th Street	\$ 17,118.80

Bolded - Construction Change Orders approved since the last reporting to the Metro Valley Study Session
Amounts shown in parentheses represent a credit to the Agency

130 – S1	Settlement of NOPC No. 29 – Barrier at Trenton	\$ 9,000.00
131	Settlement of NOPC No. 7 – Settlement Embankment	PENDING
132	Settlement of NOPC No. 9 – Importing of K-Rail Compensation Denied	\$ 24,000.00
133	Settlement of NOPC No. 14 – Rejection of Additional Costs Due to Redesign of RW242B	\$ 125,000.00
134	Stage 2B Phase 2 Northbound Transition	\$ 106,387.57
134 – S1	Stage 2B Phase 2 Northbound Transition – Additional Funds	\$ 18,968.36
135	City Work at Baseline Street	\$ 25,000.00
136	Adjustment of Temporary Construction Entrances	\$ 106,000.00
136 – S1	Adjustment of Temporary Construction Entrances – Additional Funds	\$ 77,000.00
136 – S2	Adjustment of Temporary Construction Entrances – Additional Funds	\$ 42,000.00
137	Ramp Metering System Loop Detection Changes	\$ 19,325.87
138	Pillow Wall Removal at Baseline	\$ 18,180.00
139	Drainage Changes as DS #72, Add DS #151 at SR259, Segment 2	\$ 44,353.00
140	Concrete Rubble at RW137 – Settlement of NOPC No. 13	\$ 31,921.00
141	Temporary Bracing for 3 rd Street Over Crossing	\$ 10,000.00
142	Sound Wall No. 126C Barrier Texture	\$ 4,492.00
142 S-1	Add Texture to Concrete Barrier Type 736S at SW126A	\$ 11,823.00
143	Temporary Concrete Barrier at 2 nd Street	\$ 68,000.00
144	Settlement of NOPC No. 16-P30 End Anchors and Transition Slabs	\$ 65,247.50
145	Sound Wall No. 126C Alignment Change	\$ 20,000.00
146	Settlement of NOPC No. 10 – Baseline Street	\$ 137,000.00
147	Removal of Underground Storage Tank at RW109E	\$ 30,000.00
148	Northbound Transition Stage 3B on ‘P’ Line	\$ 89,013.99
148 – S1	Northbound Transition Stage 3B on ‘P’ Line – Adjustment of Compensation	\$ 2,192.49
149	BI #16 Construction Area Signs	\$ (33,120.00)
150	Roadside Signs	\$ 74,290.00
150 – S1	Roadside Signs – Time Deferred	\$ 0.00
151	Temporary Sign Panel Overlay NB BMS 9 th and Baseline	\$ 13,200.00
152	Removal of Asbestos Pipe – Baseline Street to SB215 On-Ramp	\$ 15,000.00
153	Revisions to Bridge Mounted Signs at 9 th and Baseline Street	\$ 228,957.75
154	Revisions to ‘SFR’ and 3 rd Street	\$ 24,330.00
154 – S1	Modify Signalization of ‘SFR’ and 3 rd Street	\$ 5,291.84
155	Replace ‘REACT’ Crash Cushion with Concrete Barrier at ‘5SE’	\$ 172,473.82
156	Install Chain Link Fence on Sound Wall at 9 th Street	\$ 9,250.00
157	16 th Street Bent Cap Reinforcement PT Conflict	\$ 21,066.00
157 – S1	16 th Street Bent Cap Steel, Bents 2, 3, 4 and 5	\$ 30,000.00
158	Drainage Modifications at ‘5SE’ Line	\$ 99,000.00
158 – S1	“5SE” Gore Modification	\$ 20,000.00
158 – S2	“5SE” Gore Modification – Additional Funds	\$ 30,000.00
158 – S3	“5SE” Gore Modification – Time Deferment	\$ 0.00
158 – S4	“5SE” Gore Modification – Additional Funds	\$ 9,629.13
158 – S5	“5SE” Gore Modification – Additional Funds	\$ 4,599.32
159	Modify DS #8(qq) Inlet	\$ 5,461.40
160	Modify Barrier at Retaining Wall 108E	\$ 20,000.00
161	Irrigation Crossover at Northbound Highland Avenue Off-Ramp	\$ 24,000.00
161 – S1	Irrigation Crossover at Northbound Highland Avenue Off-Ramp – Additional Funds	\$ 174.27

Bolded - Construction Change Orders approved since the last reporting to the Metro Valley Study Session
Amounts shown in parentheses represent a credit to the Agency

162	Eliminate Jacking for 2 nd Street UC and 3 rd Street UC for Stage 3B	\$ (10,000.00)
163	City Water Meter Change and Adjustment of Compensation	\$ (145,985.05)
163 – S1	Cost Adjustment to 40mm Water Meters	\$ 7,890.00
163 – S2	Delete Two Water Meters and BPA	\$ (23,072.29)
164	Modify DS #71(a)	\$ 2,775.15
165	Modify DS #103	\$ 13,203.00
166	Settlement of NOPC NO. 17 – Overhead Power Lines	\$ 63,000.00
167	Settlement of NOPC NO. 21 – Pinning of K-Rails	\$ 30,000.00
168	Inefficiencies Due to OH Power Lines at Southbound Baseline On-Ramp	\$ 10,000.00
169	Delete Bid Item 183 – Clean and Paint Structural Steel	\$ (12,000.00)
170	Export Soil with Rubble to 13 th Street and H Street Site	\$ 45,000.00
170 – S1	Export Soil from Old 13 th Street Ramp Off Site	\$ 60,000.00
170 – S2	Additional Funds	\$ 115,965.86
171	Revise 3 rd Street Abutment 2 Footing	\$ 10,118.00
171 – S1	Revise 3 rd Street Abutment 2 Footing – Time Deferment Closure	\$ 0.00
172	Settlement of NOPC No. 23 – Differing Site Conditions at Redlands Loop	\$ 15,531.00
173	Additional Soffit Lighting at 2 nd Street Bridge	\$ 11,519.59
173 – S1	Additional Soffit Lighting at 2 nd Street Bridge – Time Deferment	\$ 0.00
174	Settlement of NOPC NO. 22 – Temporary Lighting	\$ 20,000.00
175	Hubbard State Right-of-Way Adjustment	\$ 10,008.00
175 – S1	Concrete Barrier Right of ‘P’ Line	\$ 75,000.00
175 – S2	Time Deferment – 3 Days	\$ 0.00
175 – S3	Hubbard State Right-of-Way Adjustment – Time Deferment	\$ 0.00
175 – S4	Concrete Barrier Right of ‘P’ Line – Additional Funds	\$ 2,219.07
176	Delete Type 60G Barrier in Segment 1	\$ (7,000.00)
176 – S1	Delete Type 60G Barrier in Segment 1 – Time Deferment	\$ 0.00
177	Paint Sound Wall Cover Plates After Galvanizing	\$ 2,672.13
177 – S1	Paint Sound Wall Cover Plates After Galvanizing – Time Deferment	\$ 0.00
178	Railing at ‘P’ Line and ‘R’ Line	\$ 35,660.00
178 – S1	Railing at ‘P’ Line and ‘R’ Line – Additional Funds	\$ 3,483.84
178 – S2	Railing at ‘P’ Line and ‘R’ Line – Time Deferment	\$ 0.00
179	Strengthen Concrete Barrier Rail on ‘3NO’ Line	\$ 18,698.00
179 – S1	Strengthen Concrete Barrier Rail on ‘3NO’ Line – Time Deferment	\$ 0.00
180	Drainage Improvements at 3 rd Street and ‘3SE’ Line	\$ 15,000.00
180 – S1	Drainage Improvements at 3 rd Street and ‘3SE’ Line – Additional Funds	\$ 10,000.00
180 – S2	Drainage Improvements at 3 rd Street and ‘3SE’ Line – Time Deferment	\$ 0.00
181	New Sign Panels on Existing Sign Structures at 5 th Street OC	\$ 15,000.00
181 – S1	New Sign Panels on Existing Sign Structures at 5 th Street OC – Time Deferment	\$ 0.00
182	Additional 60E Median Concrete Barrier	\$ 11,808.00
182 – S1	Additional 60E Median Concrete Barrier – Time Deferment	\$ 0.00
183	Location Change for Sign ‘H’ Segment 1	\$ 0.00
184	Sound Wall 134 Alignment Change	\$ (16,635.60)
185	Settlement of NOPC No. 12 – Track Monitoring at RW137	\$ 91,041.00
186	Payment for Barrier Mounted Signs	\$ 149,903.59
186 – S1	Payment for Barrier Mounted Signs – Time Deferment	\$ 0.00
187	Adjust Overhead Sign ‘Q’ at Baseline	\$ 45,000.00
187 – S1	Adjust Overhead Sign ‘Q’ at Baseline – Time Deferment	\$ 0.00
188	Block Out Around MBGR Posts Per New Standard	\$ 30,000.00

Bolded - Construction Change Orders approved since the last reporting to the Metro Valley Study Session
Amounts shown in parentheses represent a credit to the Agency

188 – S1	Block Out Around MBGR Posts Per New Standard – Additional Funds	\$ 70,000.00
188 – S2	Block Out Around MBGR Posts Per New Standard – Time Deferment	\$ 0.00
189	SR259 Median Removal and Tie-In	\$ 45,000.00
189 – S1	SR259 Median Removal and Tie-In – Additional Funds	\$ 14,333.28
189 – S2	SR259 Median Removal and Tie-In – Time Deferment	\$ 0.00
189 – S3	SR259 Median Removal and Tie-In – Additional Funds	\$ 10,293.26
190	Decrease Bid Item No. 110 – Grind Existing Concrete Pavement	\$ (78,867.60)
191	Seal Joints in Existing Concrete Pavement	\$ 30,000.00
191 – S1	Seal Joints in Existing Concrete Pavement – Time Deferment	\$ 0.00
192	Additional Drainage Swale Along BNSF Right-of-Way	\$ 113,234.71
192 – S1	Additional Drainage Swale Along BNSF Right-of-Way – Time Deferment	\$ 0.00
193	Payment for Fence, Barrier Surface, Sound Wall Mounted Signs	\$ 34,339.00
193 – S1	Payment for Laminated Box Beam Sign 2-20-5 and 6	\$ 28,489.18
193 – S2	Payment for Laminated Box Beam Sign 2-20-5 and 6 – Time Deferment	\$ 0.00
194	Modifications to Existing Electrical Systems due to Contract Work	PENDING
195	Add Drainage Inlet Type G-2 at Sta. 133+45	\$ 15,000.00
195 – S1	Add Drainage Inlet Type G-2 at Sta. 133+45 – Time Deferment	\$ 0.00
196	Spandrel, Curb and Gutter North Side of 9 th and J Street	\$ 15,000.00
196 – S1	Spandrel, Curb and Gutter North Side of 9 th and J Street – Time Deferment	\$ 0.00
196 – S2	Spandrel, Curb and Gutter North Side of 9 th and J Street – Additional Funds	\$ 6,158.27
197	ADA Requirements for Curb Ramps	\$ 30,000.00
197 – S1	ADA Requirements for Curb Ramps – Time Deferment	\$ 0.00
198	Delete Slope Paving at 16 th Street Bridge, Abut 7	\$ (26,152.50)
199	SR259 Cross Sections	\$ 75,000.00
199 – S1	SR259 Cross Sections – Time Deferment, 114 Days	\$ 0.00
199 – S2	Additional Funds	\$ 56,141.50
200	Adjust Bid Item No. 49 – Adjust Water Values to Grade	\$ (3,850.11)
201	Adjust Final Pay Items Nos. 137 and 216	\$ 20,506.90
202	Adjust Bid Item No. 53 – Remove Concrete Barrie (Type K)	\$ 267.75
202 – S1	Additional Funds	\$ 401.46
203	Adjust Bid Item No. 9 – Temporary Concrete Washout	\$ 12,815.50
204	Adjust Bid Item No. 50 – Adjust Sewer Manhole	\$ 3,205.03
205	Adjust Bid Item No. 246 – Concrete Barrier (Type 60E)	\$ 32,011.20
206	HMA QC/QA Incentive Adjustment	\$ 135,114.79
207	Increase Bid Item No. 8 – Temporary Gravel Bag Berm	\$ 34,065.60
208	Adjust Bid Item No. 46 – Remove Base and Surfacing	\$ (85,031.34)
209	Increase Bid Item No. 2 – Temporary Fence	\$ 8,403.75
210	Increase Bid Item No. 27 – Remove Chain Link Fence	\$ 33,914.64
211	Decrease Bid Item Nos. 28, 191 and 252(F)	\$ (9,097.00)
212	Mulch Remedy	\$ 10,000.00
212 – S1	Mulch Remedy – Time Deferment, 4 Days	\$ 0.00
213	Increase Bid Item No. 254 and 255	\$ 119,505.75
214	Increase Bid Item No. 236; Decrease Bid Item No. 237	\$ 10,400.00
215	Adjust Bid Item No. 99 – Aggregate Base (Approach Slab)	\$ 4,701.38
216	Adjust Bid Item No. 109 – Seal Longitudinal Isolation Joint	\$ (48.91)
217	Adjust Bid Item No. 19 – Type III Barricade	\$ (466.40)
217 – S1		\$ 466.40
218	Adjust Bid Item No. 182 – Install Sign (Strap and Saddle Bracket Meth.)	\$ (80,296.64)

Bolded - Construction Change Orders approved since the last reporting to the Metro Valley Study Session
Amounts shown in parentheses represent a credit to the Agency

219	Adjust Bid Item No. 52 – Remove Concrete (Sidewalk and Cross Gutter)	\$ 19,220.68
223	NOPC No. 19 Settlement	\$ 175,000.00
CCO TOTAL		\$ 17,421,489.27
TOTAL CONTINGENCY AND SUPPLEMENTAL		\$ 18,871,980.00

I-15 Baseline Interchange – Executed Change Orders		
Number	Description	Amount
1	Maintain Traffic	\$ 50,000.00
1 S-1	Provide for Contractors Signature	\$ 0.00
2	Partnering	\$ 22,000.00
3	Dispute Review Board	\$ 15,000.00
4	Maintain and Repair Existing/Temporary Electrical	\$ 10,000.00
4 S-1	Provide for Contractors Signature	\$ 0.00
6	Repairs to Existing Irrigation System	\$ 26,247.00
7	Storm Water Pollution Prevention – Cost Sharing	\$ 50,000.00
8	Existing Landscaping & Irrigation Changes	\$ 10,000.00
10	Shotcrete Strength Change	\$ 0.00
11	Concrete Slurry behind Anchor Wall No. 2	\$ 12,000.00
12	Fire Plan	\$ 27,693.00
13	Apprentice Training	\$ 16,800.00
14	Buried Man-made Objects	\$ 15,000.00
15	Replace Bid Item 69 with Geocomposite Drain	\$ 0.00
16	Additional K-rail and Crash Cushion Array	\$ 17,970.00
21	Relocate 12” CVWD Line	\$ 32,200.00
CCO TOTAL		\$ 304,910.00
TOTAL CONTINGENCY AND SUPPLEMENTAL		\$ 2,235,012.00

Attachment: MVSS CCO Log (2094 : Construction Contract Change Orders MVSS1508)

Bolded - Construction Change Orders approved since the last reporting to the Metro Valley Study Session
Amounts shown in parentheses represent a credit to the Agency

Minute Action

AGENDA ITEM: 3

Date: August 13, 2015

Subject:

State Water Conservation Mandate Update

Recommendation:

Receive information concerning the state water conservation mandate impacts to SANBAG's ongoing and proposed landscape projects.

Background:

State Water Conservation Mandates and Caltrans Drought Action Plan 2015.

On April 1, 2015, to address the worst drought in recorded California history, Governor Brown by Executive Order mandated a 25% water use reduction for cities and towns across California. The Executive Order required, for the first time in the state's history, mandatory conservation for all residents and directed several state agencies, including the State Water Board, to take immediate action to safeguard the state's remaining potable urban water supplies in preparation for a possible fifth year of drought.

In May 2015, the State Water Board adopted an emergency regulation requiring an immediate 25% reduction in overall potable urban water use statewide, beginning in June 2015 through February 2016. Each month, the State Water Board will compare every urban water supplier's water use with their use for the same month in 2013 to determine if they are on track for meeting their conservation standard. Per the State Water Board, local water agencies will determine the most cost effective and locally appropriate way to achieve their standard. This has driven each of SANBAG's water suppliers to issue directives to our landscape contractors to reduce water consumption. The reductions that impact our landscape projects are between 25% to 34% from 2013 levels. Although most of our contracts began after 2013, and therefore will have no corresponding month to compare to, SANBAG is required to comply with the water suppliers' requests and reduced water use. The most significant impact to SANBAG projects is the requirements which reduce watering days and durations.

Caltrans is also focused on protecting the state's \$1.4 billion investment in highway planting while at the same time exploring methods for efficient water use for transportation needs. At this time we are awaiting Caltrans' release of its "Drought Action Plan for 2015" and its proposed efforts to continue progress toward achieving Caltrans' reduction goal of 50% of 2013 water use. While the plan has not been finalized, Caltrans has set some goals and shared them with us. Two of the Caltrans goals that have a direct effect on SANBAG projects are listed below along with a brief summary of the effect:

Entity: CTA

1) Caltrans continue to repair and modernize roadside irrigation infrastructure with a goal of Caltrans' 100% conversion to "smart" technology components, including training and improved field equipment for Maintenance.

Recently Caltrans administered a separate contract to upgrade irrigation controllers using "smart" technology components on four (4) of SANBAG's landscape maintenance projects on SR-210. All of SANBAG's projects, with the exception of I-10 Riverside Interchange (IC) now use "smart" technology. I-10 Riverside IC is on the list to be upgraded. Note, the I-10 Riverside IC uses reclaimed water.

2) Caltrans direction to delay the installation of most planned planting work sponsored by Caltrans or our partners until late fall of 2015, or a later date when the drought emergency abates, with full commitment to meet our environmental mitigation requirements as soon as prudent.

In April 2015 Caltrans requested we delay the landscaping projects on I-215 until late fall of 2015 or a later date until the drought emergency abates.

For projects on the State Highway System (SHS), SANBAG is responsible for administering the construction of landscape projects which also includes one year of plant establishment. After this, SANBAG is also required to provide four (4) years of extended landscape maintenance, which includes the cost of water for the first two of the four years, and to deliver at the end of the maintenance period healthy and well established landscaping to Caltrans. One exception to the requirement of the extended landscape maintenance is the Interstate 15 (I-15) Base Line Interchange project where the respective Cities will be responsible for the landscape maintenance.

For projects off the State Highway System, landscape maintenance is turned over to the local agency with the completion of a 30 to 60 day plant establishment period.

SANBAG administered landscape projects, both current and future, incorporate high efficient irrigation systems with "smart" technology and drought tolerant plant material as well as hardscapes and gravel mulch.

Attachment A provides a list of these ongoing projects along with expected completion dates, water providers, and estimated cost of plant material and maintenance. All of these projects are affected by the state mandates currently in place as well as possible future mandates issued if the drought continues.

SANBAG Projects Affected by State Mandate and Caltrans Drought Action Plan Goals. SANBAG must comply with current State and Caltrans water conservation measures while at the same time maintaining and protecting our investment in the landscape projects. This may prove to be challenging in the years ahead. We have separated the affected projects into three categories as noted below.

1. Ongoing Landscaping Projects

Currently there are eight (8) projects in either the one (1) year plant establishment period or the four (4) year landscape maintenance phase. These include State Route 210 (SR-210) Segments 8, 9, 10 and 11, covering 7.1 miles from Sierra Avenue in Fontana to the I-215/SR-210 Interchange in San Bernardino; the I-10 Riverside Interchange; I-10 Citrus Avenue Interchange; I-10 Cherry Avenue Interchanges, and the I-10 Tippecanoe Interchange (Phase 1). Landscaping on these projects will be turned over to Caltrans at the end of the 4 -year maintenance periods.

Since these projects utilize water efficient systems, Staff has requested variances from the water suppliers as it would be difficult to further reduce water usage without damage to existing planting. While we are awaiting responses from many of the suppliers, one supplier has advised that while we have efficient irrigation systems, we must still reduce water consumption by 25% or we may be assessed fines.

Staff is currently working with our contractors, water suppliers and our Landscape Architects to evaluate how ongoing landscape maintenance projects can best obtain the specified reduction in water use and possible additional water conservation measures.

We are currently in compliance with the mandated water use reductions; however, following these mandates may have significant adverse effect to these landscaping projects. These impacts include:

- The potential increases in the cost of water now and in the future (surcharges).
- Reduced watering will stress plant materials which will cause slower growth and increase susceptibility to diseases and pests.
- Reduced watering will effect plantings and appearance will suffer.
- Additional cost to replace stressed or dead plant materials once drought has ended.
- Additional cost to install additional mulch as needed to reduce moisture loss from soil.
- Additional cost to help plantings to recover to acceptable conditions to turn over to Caltrans at end of 4-year maintenance period.
- Possible fines from water providers for alleged noncompliance.

Staff will first utilize contingencies to address any cost increases, but may need to return to the Board for additional funding should these impacts exceed the current contingencies.

2. On-Going Construction Projects – Include Landscaping

SANBAG has four ongoing construction projects which include landscaping. These include I-10 Tippecanoe Avenue Interchange Phase 2, Laurel Street Grade Separation, I-15 Baseline Interchange and Lenwood Avenue Grade Separation projects. The landscaping was included as part of the roadway construction contract due to funding requirements.

Caltrans has not informed us if their direction to delay the installation of landscaping will apply to the two interchange projects. If they do direct us to delay the installation, it has not been determined how to implement this direction without losing funding. At this time, we are planning on proceeding with the landscaping of the two grade separations.

3. Future Landscaping Projects

SANBAG has five upcoming landscape projects that are to be constructed separate of the roadway construction. These include the four segments on the I-215 through the City of San Bernardino and the I-215 Bi-County project.

I-215 San Bernardino - The landscaping for this section of I-215, Orange Show Road to the I-215/SR-210 Interchange, will be installed under four (4) separate contracts. A concept for landscaping I-215 North through the City of San Bernardino was presented to the Metro Valley Study Session in October 2012. This landscaping concept incorporated water efficient irrigation systems with drought tolerant plant material focused near interchanges with over 90% of the landscaped areas covered with gravel mulch and rock blanket.

In April 2015 Caltrans requested we delay the landscaping projects on I-215 until late fall of 2015 or a later date until the drought emergency abates, with full commitment to meet their environmental mitigation requirements as soon as prudent. During this period, Caltrans will continue to be responsible for maintenance of these areas. However, this delay may increase the cost of future construction, construction support, and the four-year maintenance. Staff estimates a 3% increase in costs for every year of delay.

Recent on-going discussion with Caltrans has indicated that based on the proposed I-215 landscape plans they may be open to proceeding with Segment 3 as “demonstration” of a water efficient landscaping project. Staff will return to the Board after we get more information from these discussions with Caltrans.

I-215 Bi-County - Caltrans is currently developing landscape concepts for the I-215 Bi-County project. The landscaping will incorporate high efficient irrigation systems with “smart” technology and drought tolerant plant material as well as hardscapes and gravel mulch. The current schedule is to start the landscape construction in 2017. Of course, the start date is dependent on the drought conditions.

Financial Impact:

This item has no impact on the SANBAG budget at this time.

Reviewed By:

This item is not scheduled for review by any other policy committee or technical advisory committee.

Responsible Staff:

Garry Cohoe, Director of Project Delivery

Approved
Board of Directors Metro Valley Study Session
Date: August 13, 2015

Witnessed By:

CURRENT SANBAG LANDSCAPING PROJECTS

LANDSCAPE PLANT MATERIAL AND MAINTENANCE COSTS AND WATER SUPPLIERS

Project	Irrigation System	Water	Provider	End Date SANBAG Commitment	Landscaping Costs
I-10 Riverside IC	Overhead Spray	Reclaimed	City of Rialto Water Department	December, 2018	\$ 879,500.00
SR-210 Segment 8	Drip/Bubblers	Potable	Fontana Water Company	May, 2017	\$ 4,459,600.00
SR-210 Segment 9	Drip/Bubblers	Potable	West Valley Water District	January, 2018	\$ 2,986,000.00
			Fontana Water Company		
			City of Rialto Water Department		
SR-210 Segment 10	Drip/Bubblers	Potable	West Valley Water District	December, 2017	\$ 1,774,500.00
SR-210 Segment 11	Drip/Bubblers	Potable	Muscoy Mutual Water Company	August, 2019	\$ 4,070,500.00
			San Bernardino Municipal Water District		
I-10 Citrus Interchange	Overhead Spray	Potable	Fontana Water Company	July, 2019	\$ 120,000.00
	Bubblers				
I-10 Cherry Interchange	Overhead Spray	Potable	Fontana Water Company	May, 2020	\$ 160,000.00
	Bubblers				
I-10 Tippecanoe Interchange Phase I	Drip	Potable	City of Loma Linda	February, 2021	\$ 40,000.00
I-10 Tippecanoe Interchange Phase II	Overhead Spray	Potable	San Bernardino Municipal Water District		\$ 265,900.00
	Bubblers				

TOTAL LANDSCAPING COSTS \$ 14,756,000.00

* TOTAL PLANT MATERIAL AND MAINTENANCE COSTS \$ 1,647,900

Attachment: Attachment A (2122 : State Water Mandate)

Fontana Water Company

- 28% Reduction in water usage required
- Stage II as of June 22, 2015
- Water limited to 2 days per week, maximum 10 minutes per station per day,
- Watering limited to between hours 5:00 pm to 9:00 am
- No irrigation of ornamental turf with potable water on public streets
- No watering of outdoor landscapes that causes excessive runoff
- No irrigation for 48 hours after measurable rainfall
- Non- residential customers will see a 10% Drought Emergency Surcharge on their total water usage.
- Residential customers will see a \$2.88 surcharge per ccf for water usage above 20 ccf per month (Note One CCF =100 cubic feet, or one unit, is equivalent to 748.5 gallons of water.)

West Valley Water Company

- 32% Reduction in water usage required. Achieved 11% May 2015
- Stage III as of May 14, 2015. Proposed to go to Stage IIIA – Public hearing August 6, 20-15
- Water limited to 3 days per week, maximum 10 minutes per station per day,
- Watering limited to between 8:00 pm to 6:00 am
- No watering of outdoor landscapes that causes excessive runoff
- No irrigation of ornamental turf with potable water on public streets
- No irrigation for 48 hours after measurable rainfall

San Bernardino Municipal Water District

- 28% Reduction in water usage required. Achieved for June 2015
- Stage IIA as of June 1, 2015
- Irrigation is permitted only before 8:00 a.m. and after 6:00 p.m.
- Irrigation will only be allowed on Mondays, Wednesdays, and Fridays of each week
- No watering of outdoor landscapes that causes excessive runoff
- No irrigation for 48 hours after measurable rainfall

City of Loma Linda

- 34% Reduction in water usage required.
- Stage II as of June 1, 2015
- Irrigation is permitted only before 8:00 a.m. and after 6:00 p.m.
- Irrigation will only be allowed three days per week.
- No watering of outdoor landscapes that causes excessive runoff
- No irrigation for 48 hours after measurable rainfall

City of Rialto

- The I-10 Riverside Ave landscape is watered with reclaimed water. There are no restrictions.

Minute Action

AGENDA ITEM: 4

Date: August 13, 2015

Subject:

San Bernardino Valley Coordinated Traffic Signal System

Recommendation:

That the following be reviewed and recommended for approval by the Board of Directors, acting in its capacity as the San Bernardino County Transportation Commission, at a regularly scheduled Board meeting:

- A. Authorize Staff to develop Cooperative Agreements between the San Bernardino County Transportation Commission (SANBAG) and local agencies establishing responsibilities to maintain, monitor, assess and fund the San Bernardino Valley Coordinated Traffic Signal System (SBVCTSS).
- B. Authorize Staff to prepare a Request for Proposal to Update Coordinated Timing Plans for SBVCTSS Tiers 1 & 2 and Tiers 3 & 4.
- C. Authorize Staff to prepare a Request for Proposal for Daily Maintenance, On Call System Support and Assessment of the SBVCTSS.
- D. Authorize Staff to prepare an Invitation for Bid and Scope of Work for SBVCTSS On-Call Maintenance Contract.

Background:

Starting in 2002 with the San Bernardino Valley Traffic Signal Coordination System Master Plan, SANBAG, in conjunction with the local agencies, implemented signal coordination on major arterial corridors on a valley-wide scale with an investment of over \$15 million. Implementation of signal coordination occurred in various phases designated as Tiers 1, 2, 3 and 4, and included approximately 1,250 signalized intersections controlled by sixteen (16) separate local agencies and Caltrans. Both the Tiers 1 & 2 Project (completed in 2008) and Tiers 3 & 4 Project (completed in 2012), at system “turn-on”, showed significant improvements in arterial travel times and reductions in stops and delays as shown in Exhibit A.

In July 2011, the Board approved the Memorandum of Understanding (MOU) C11223 between SANBAG and the Valley Jurisdictions providing direction for the operation and maintenance of the San Bernardino Valley Coordinated Traffic Signal System (SBVCTSS). The terms of the MOU defined the responsibilities of the parties which included the requirement that the local agencies and Caltrans maintain and monitor the synchronized traffic signal timing within their respective jurisdictions and for SANBAG to retain the service of a consultant to provide assistance for more elaborate maintenance and timing services that the local agencies could not provide. This MOU will expire September 30, 2016.

Entity: CTC

In January 2015, an assessment of the SBVCTSS operation was conducted by SANBAG. The assessment revealed only 44% of the traffic signals were on-line. That puts over 50% of the signals out of communication with the respective central systems at the Traffic Management Centers. The assessment found that the disruption of signal communication was the result of various issues including failed modems, disconnected phone lines, damaged signal interconnect conduits/cables, failed signal controllers replaced with non-compatible signal controllers, weak radio signals and cellphone and wireless systems requiring additional configuration and integration. With the breakdown of communications between traffic signals and central systems, the traffic signal coordination is impacted, resulting in additional stops and delays on many arterials.

In March 2015, staff presented the assessment findings to the local agencies and discussed the findings at the Transportation Technical Advisory Committee (TTAC) and the City/County Managers Technical Advisory Committee (CCMTAC).

In April 2015, based on TTAC and CCMTAC meetings and discussions, a survey was presented to the local agencies providing possible solutions with the goal of developing a strategy for on-going maintenance and operations of the system that could be further developed into guidelines that would be recommended for adoption by the SANBAG Board. The guidelines would address how the system should be managed and secondly, how these efforts could be funded. The findings of the survey are shown in Exhibit B.

The sixteen local agencies involved with the program were surveyed to determine their view on how best to maintain and operate the SBVCTSS, with all but one responding. The survey found of the 15 agencies responding, 11 agencies (73%) expressed interest in providing the routine monitoring and updating of timing plans and the maintenance of the coordination and communication equipment themselves. The remaining 4 (27%) responding agencies requested SANBAG provide these services while they provided the funding. Funding options included in the survey were Local Funds, Measure I Local Street Program and Measure I Major Street (Arterial) Program. The responses varied widely with most agencies selecting a mixture of funds. Four agencies suggested the use of Measure I Traffic Management System (TMS) funds as well.

Staff developed a five-year program with a goal of maintaining the \$15 million investment in the traffic signal coordination system so they continue to provide benefits to the traveling public. The components of the plan included and the estimated cost for five years is:

- Updated coordinated timing plans - \$4,600,000
- On-going maintenance of signal coordination equipment and timing plans - \$5,225,000
- Assessment of Systems and On-Call Systems Support - \$1,000,000
- Total cost for five years - \$10,825,000

To implement the five-year plan, staff is requesting direction from the Board on the four following recommendations:

Recommendation A: Develop a Cooperative Agreement.

Staff is requesting direction to develop a new agreement with each local agency, which would address the following items:

- SANBAG will be the lead agency for updating the timing plans. Local agency will be responsible for funding 50% of the signals updated within their jurisdiction. SANBAG, through grants, is responsible for the remaining cost. If sufficient grant funds are not obtained, the updating would be implemented to match available funding.
- Local agency responsible for the on-going monitoring, maintenance and timing adjustments. Local agency responsible for funding the on-going services, with SANBAG providing a \$500 annual reimbursement for signals found to be operational and coordinated during SANBAG's semi-annual assessment. For signals found not performing properly, it is proposed to provide a grace period of 6 months for local agencies to bring signals back into operational status and still receive reimbursement. Proposed reimbursement funding would be through Traffic Management System (TMS) funds with a maximum estimated total cost of \$500,000 per year.

If the local agency requests SANBAG to maintain their system for them, the agreement would include a commitment from the local agency to reimburse SANBAG for their cost to provide these services.

- SANBAG will be responsible for on-call support and assessment of traffic signal coordination systems. It is proposed that the system be assessed semi-annually to verify operation and provide the basis for issuance of the coordinated signal reimbursement.

It is proposed that the agreement be for three years with an option to extend for two years.

Staff would work with TTAC and CCMTAC to finalize the terms of the proposed Cooperative Agreement and bring this back to Board for consideration.

Recommendation B: Develop Request for Proposals (RFP) to Update Coordinated Timing Plans for Tiers 1 & 2 and Tiers 3 & 4. The coordinated timing for the Tiers 1 & 2 portions of the SBVCTSS was completed in 2008 with Tiers 3 & 4 completed in 2012. Industry standards recommend timing to be updated every 3 to 5 years depending on changes in traffic volumes and patterns and roadway geometric improvements. Without updating the coordinated timing, the benefits of SBVCTSS diminish. It is recommended an RFP be released to have the Tiers 1 & 2 signals updated with project completion anticipated in 2016 at the estimated cost of \$2.4 million. We also recommend releasing an RFP in 2017 for signal retiming for Tiers 3 & 4 at an estimated cost of \$2.2 million. However, the amount of timing updates could be reduced if it is demonstrated through SANBAG's new Congestion Management Program (CMP) monitoring tool that certain corridors are still operating effectively.

It is proposed that 50% of the funding be provided by sources at the discretion of the local agency such as Local Funds, Measure I Valley Major Street, or Measure I Local Street and 50% from grants secured by SANBAG such as Mobile Source Air Pollution Reduction Review Committee (MSRC). If the Board provides the requested direction, staff will bring back the RFP to Board for authorization to circulate.

Recommendation C: Develop RFP for On-Call System Support and Assessment for SBVCTSS. The SBVCTSS is an intricate system requiring constant monitoring and maintenance. A maintenance program, which consists of two components, is needed in order to ensure maximum benefits of the SBVCTSS. The first component is the daily maintenance of the system. Four local agencies have requested SANBAG provide this service for them on a reimbursement basis. The subject RFP scope will include providing these on-going services.

The other component is providing on-call support to assist on a case-by-case basis to address major system issues that cannot be resolved by the local jurisdiction and to perform a periodic assessment of the coordination systems. As previously stated, SANBAG will be responsible for administrating and funding these services. The estimated cost to provide these services is \$200,000 annually. The RFP scope will include providing these on-call services. SANBAG currently has a contract with Albert Grover & Associates to provide these services.

Staff will bring back the RFP to Board for authorization to circulate.

Recommendation D: Develop Invitation for Bid (IFB) for On Call Maintenance Contract. This contract would provide ongoing maintenance of the signal coordination hardware and communication equipment for local jurisdictions requesting that SANBAG provide this service. Based on the recent survey, there are currently four local agencies requesting this service with a total of 138 signals. The local agency will reimburse SANBAG all costs for providing these services.

Staff will bring back the IFB to Board for authorization to advertise.

Financial Impact:

This item has no impact on the SANBAG Fiscal Year 2015/2016 budget. Future actions related to this item could result in budget amendments.

Reviewed By:

This item was reviewed by the Transportation Technical Advisory Committee on August 3, 2015. This item is not scheduled for review by any other policy committee.

Responsible Staff:

Garry Cohoe, Director of Project Delivery

Approved
Board of Directors Metro Valley Study Session
Date: August 13, 2015

Witnessed By:

Benefits of SBVCTSS Signal Coordination

Tiers 1 and 2

Tiers 1 and 2 Final Report dated September 2009 prepared by Albert Grover & Associates stated that improvements varied on an arterial-by-arterial basis, but system-wide averages amounted to the following benefits based on performance measures for the “after” conditions as compared with those for “before” conditions:

- 22% reduction in travel time
- 47% reduction in number of stops
- 27% improvement in travel speed during the AM and PM peak periods
- 15% reduction in mobile source emission
- 12% reduction in fuel consumption

Tiers 3 and 4

Tiers 3 and 4 Final Report dated March 2014 prepared by Advantec Consulting Engineers reported the following benefits during the first year of implementation as compared with the “before” conditions.

- 15% reduction in travel time
- 35% reduction in number of stops
- 19% improvement in travel speed during the AM and PM peak periods
- \$706,200 in emissions reductions
- \$9,666,000 in fuel savings
- \$15,069,000 in overall vehicle travel time reduction

SAN BERNARDINO VALLEY TRAFFIC SIGNAL COORDINATION SYSTEM (SBVTSCS)

TABULATION OF LOCAL AGENCY SURVEY RESULTS

Agency	Response	Maintenance and Operations Options				Funding Options			
		Routine Monitoring and Updating of Timing Plans		Maintaining Coordination and Communication Equipment		Local Funds	Measure I Local Street Program Funds	Measure I Major Streets (Arterial) Program Funds	Measure I Traffic Management Systems Fund
		Local agency provides the services and funding	SANBAG provides the service and is reimbursed by the local agency	Local agency provides the service and funding	SANBAG provides the service and is reimbursed by the local agency				
Chino	X	X		X					
Chino Hills	X	X		X		X	X	X	
Colton	X	X		X		X	X		
Fontana	X	X		X					X
Grand Terrace	X		X	X				X	
Highland	X		X		X	X		X	
Loma Linda	X		X		X	X	X		
Montclair	X	X		X					X
Ontario	X	X		X		X			X
Rancho Cucamonga	X	X		X		X	X	X	
Redlands	no response								
Rialto	X	X		X		X		X	X
San Bernardino City	X	X		X		X			
San Bernardino County	X		X	X		X			
Upland	X	X			X			X	
Yucaipa	X	X			X	X	X		
Count		11	4	11	4	10	5	6	4
Response Percentage		73%	27%	73%	27%	67%	33%	40%	27%

Attachment: Exhibit B (2119 : San Bernardino Valley Traffic Signal System (SBVTSS))

Minute Action

AGENDA ITEM: 5

Date: August 13, 2015

Subject:

Investment Grade Traffic and Revenue Study Services for the I-10 and I-15 Corridor Projects

Recommendation:

That the following be reviewed and recommended for final approval by the Board of Directors, acting in its capacity as the San Bernardino County Transportation Authority, at a regularly scheduled Board meeting:

- A. Approve a sole source Contract 16-1001355 with CDM Smith, Inc. to complete the Investment Grade Traffic and Revenue Study Services for the I-10 and I-15 Corridor Projects and provide related support services for an amount still being negotiated.
- B. Approve a contingency amount of approximately 10% of the contract amount and authorize the Executive Director, or their designee to release contingency as required for the project.

Background:

This is a new sole source contract. A revised agenda item will be presented at the Metro Valley Study Session (MVSS) meeting.

In August 2011, SANBAG entered into an agreement with CDM Smith, Inc. (formerly known as Wilbur Smith Associates) to complete Intermediate-Level Traffic and Revenue Studies for the I-10 and I-15 Corridor Projects. After successfully completing this work in coordination with the financial consultant, SANBAG received positive results confirming financial viability for both the I-10 and I-15 Corridor Projects. Confirming financial viability was an important step in the overall project delivery process, as it enabled continued progress on the design and environmental tasks necessary for the preparation of the Draft Environmental Document on both corridors.

As the Project Approval/Environmental Document (PA/ED) activities continue, staff has continued to review and refine the financial activities needed to support the projects. Should Express Lanes be selected as the Preferred Alternative for the I-10 Corridor Project, a Transportation Infrastructure Finance and Innovation Act (TIFIA) loan would represent a significant portion of the overall funding plan. As discussed at the July 1, 2015 Board meeting, recent discussions with DOT management identified significant benefits related to accelerating the TIFIA process including (1) securing earlier TIFIA fund commitment and (2) positioning SANBAG to negotiate the loan terms sooner to potentially take advantage of historically low interest rates. Since the TIFIA funds comprise approximately 33 percent of the eligible costs for the I-10 and I-15 Corridor Projects, accelerating the supporting financial activities could provide a significant overall benefit and project cost savings.

Entity: CTA

Board of Directors Metro Valley Study Session Agenda Item

August 13, 2015

Page 2

After discussion on this item at the July 1, 2015 meeting, the Board approved moving forward with an accelerated TIFIA schedule, which requires the acceleration of certain financial activities including development of the Investment Grade Traffic and Revenue Report (IGTR). The Board directed staff to negotiate a sole source amendment to the existing Contract C11070 or develop a new contract with CDM Smith to develop the IGTR for the I-10 and I-15 Corridor Projects and provide related support. After discussing the item with the Procurement Manager, it was recommended to develop a new contract with CDM Smith. After several meetings with CDM Smith, staff is continuing to finalize a detailed scope of work and associated cost required to complete the IGTR work activities for the I-10 and I-15 Corridor Projects. A draft scope and cost will be included in the MVSS revised agenda, with the final scope of work and cost being finalized prior to the September Board meeting.

The new CDM Smith contract to perform the IGTR services for the I-10 and I-15 Corridor Projects will be funded by the Measure I Valley Freeway Program. The services provided by this new CDM Smith contract will be coordinated with the development of an updated Plan of Finance, which will be developed under a separate Financial Advisor contract.

Financial Impact:

This item is consistent with the adopted SANBAG Fiscal year 2015/2016 budget under Task No. 0850. The funding source is Measure I Valley Freeway Funds.

Reviewed By:

This item is not scheduled for review by any other policy committee or technical advisory committee. SANBAG General Counsel and Procurement Manager have reviewed a draft of the new contract but this item has not received final review by SANBAG General Counsel.

Responsible Staff:

John Meier, Project Manager

Approved
Board of Directors Metro Valley Study Session
Date: August 13, 2015

Witnessed By:

Minute Action

AGENDA ITEM: 6

Date: August 13, 2015

Subject:

On Call Right of Way Legal Services Request for Proposals

Recommendation:

That the following be reviewed and recommended for final approval by the Board of Directors, acting in its capacity as the San Bernardino County Transportation Authority, at a regularly scheduled Board meeting:

Approve the release of Request for Proposals No. 15-1001302 for On Call Right of Way Legal Services in support of the Major Projects Program.

Background:

Presently Right-of-Way Legal Services are provided to the Major Projects Program by an On-Call legal team whose contract term will be expiring. This legal team has provided a number of legal services to SANBAG to assist in successful property acquisitions and utility relocations including coordinating with and advising right-of-way consultants, appraisers, and engineers and, when necessary, the team provided assistance with property owners' negotiations. The assistance includes advising staff and conducting negotiations directly with property owners who were represented by legal counsel. The team assisted in the preparation of offer packages, purchase and sale agreements and supporting documentation for legal and administrative settlements, and resolutions of necessity. For more complicated acquisitions, the team assisted staff by preparing and evaluating studies, reports and documentation regarding valuation and impacts to particular properties and businesses. When voluntary acquisition was not possible, the team prepared all pleadings and filed condemnation lawsuits to acquire necessary property. They participated in mediations and represented SANBAG in all aspects of litigation through final resolution. In conjunction with the activities related to acquisition, the team also supported the activities related to utility coordination including direct negotiations with attorneys for the utilities. Involvement by the team was critical in encouraging timely relocation of facilities by utility owners. The legal team was essential in assisting SANBAG's efforts to acquire all necessary property in a timely fashion to secure funding and allow certification of the right-of-way.

It is anticipated that some of these services will continue to be necessary for the upcoming projects:

State Route 60 Archibald Interchange
 State Route 60 Central Interchange
 I-215 Barton Rd Interchange
 U.S. 395 Corridor
 Interstate 10 Corridor

Entity: CTA

Board of Directors Metro Valley Study Session Agenda Item

August 13, 2015

Page 2

I-10 Mount Vernon Avenue Interchange
I-10 University Street Interchange
State Route 210 Lane Addition
State Route 210 Base Line Interchange
I-215 University Parkway Interchange

Staff recommends approval to release the RFP for On-Call Right of Way Legal Services.

Financial Impact:

There is no financial impact to the current approved Fiscal Year 2015-2016 budget.

Reviewed By:

This item is not scheduled for review by any other policy committee or technical advisory committee. SANBAG General Counsel and Procurement Manager have reviewed this item and the RFP.

Responsible Staff:

Paula Beauchamp, Project Delivery Manager

Approved
Board of Directors Metro Valley Study Session
Date: August 13, 2015

Witnessed By:

ATTACHMENT A – SCOPE OF SERVICES

ATTACHMENT A
SCOPE OF SERVICES

Provide right-of-way legal services on an as needed basis in support of SANBAG's Major Projects Program. Such legal services shall include pre-litigation advice, representation in litigation and any project related tasks as may be requested by SANBAG.

Legal services to be provided include, but are not limited to the following:

- Assist in negotiations to acquire property
- Coordinate with other right-of-way consultants, appraisers, engineers, etc.
- Assist in preparing offer packages made to owners of property being acquired for project implementation
- Assist in preparing documentation to support Legal and Administrative settlements
- Assist in preparing resolutions of necessity and supporting documents
- Assist in preparing any studies, reports or documentation necessary to justify acquisitions
- Prepare all pleadings and represent SANBAG through final resolution, whether by settlement, trial, or appeal in condemnation actions, inverse condemnation actions and any other litigation or proceedings (including administrative proceedings concerning relocation claims) relating to the acquisition of any property needed for project implementation

Minute Action

AGENDA ITEM: 7

Date: August 13, 2015

Subject:

PS&E Funding Agreement Amendment No. 3 for North Vineyard Grade Separation

Recommendation:

That the following be reviewed and recommended for final approval by the Board of Directors, acting in its capacity as the San Bernardino County Transportation Authority, at a regularly scheduled Board meeting:

Approve Amendment No. 3 to Project Funding Agreement No. C10094 with the City of Ontario for Plans, Specification and Estimate Services for the North Vineyard UPRR Grade Separation Project to increase the contract by \$150,000, for a revised contract total of \$4,065,000, which increases the Measure I Valley Major Street Bond Fund contribution by \$120,000, for a total contribution of \$3,252,000 with the remainder funded by the City of Ontario.

Background:

North Vineyard Avenue is a north/south corridor running from north of Ontario International Airport to I-10, is part of the Ontario Foreign Trade Zone No. 50-1, and is a key location along the Alameda Corridor East. Payment for additional design services related to North Vineyard Avenue project is the subject matter of C10094, Amendment No. 3.

On June 4, 2008, San Bernardino Associated Governments (SANBAG) Board of Directors (Board) approved Cooperative Agreement Contract No. C08194 with the City of Ontario for funding Project Approval and Environmental Document (PA&ED) Services. The agreement provides that SANBAG and the City will share in the funding responsibility with SANBAG contributing eighty percent (80%) and the City of Ontario contributing twenty percent (20%), and the City of Ontario serving as the lead agency.

On June 2, 2010, the Board approved Cooperative Agreement No. C10094 for funding of the Plans, Specifications and Estimate (PS&E) phase. On November 6, 2013, the Board approved Amendment No. 1 for an additional \$650,000 to incorporate design changes to accommodate an additional rail shoofly, Los Angeles World Airport building demolition plans, and environmental document support. On July 2, 2014, the Board approved Amendment No. 2 for an additional \$220,000 to provide Construction Support Services to respond to Requests for Information (RFI), review shop drawings, and prepare as-built drawings after construction is completed.

The City entered into a Pipeline Engineering Agreement with Kinder Morgan in February 2011 and issued the Notice to Proceed to begin the pipeline relocation design in March 2011. The relocation involved three (3) Kinder Morgan fuel lines: 6", 16" and 20". The pipeline relocation had several iterations due to the uncertainty of UPRR requiring a single shoofly or double shoofly for the project. The pipeline relocation construction plans were finalized in

Entity: CTA

April 2013. The City received the sole invoice for the pipeline engineering in December 2014, which indicated the fees exceed the deposit and a payment was due. The City and Kinder Morgan negotiated and discussed the contents of the invoice and concluded that additional payment was justified in March 2015.

Staff recommends the approval of Amendment No. 3 for the additional engineering fees for Kinder Morgan's pipeline relocation design due to various modifications to the original Kinder Morgan pipeline relocation design. Even with this increase, the total cost of the design for this project is consistent with that of other grade separation projects. Below, the table shows the North Vineyard funding summaries for PS&E.

N. Vineyard PS&E Funding Summary			
Task 0877 Contract No. C10094			
	City 20%	Measure I 80%	Total
Original Contract	\$609,000	\$2,436,000	\$3,045,000
Amendment No. 1	\$130,000	\$520,000	\$650,000
Amendment No. 2	\$44,000	\$176,000	\$220,000
Amendment No. 3	\$30,000	\$120,000	\$150,000
Total	\$813,000	\$3,252,000	\$4,065,000

Financial Impact:

This item is consistent with the Fiscal Year 2015/2016 SANBAG approved budget.

Reviewed By:

This item is not scheduled for review by any other policy committee or technical advisory committee. SANBAG General Counsel and Procurement Manager have reviewed this item and a draft of the amendment.

Responsible Staff:

Paula Beauchamp, Project Delivery Manager

Approved
 Board of Directors Metro Valley Study Session
 Date: August 13, 2015

Witnessed By:

Contract Summary Sheet

General Contract Information

Contract No: 00-100317-C10094 Amendment No.: 03 Vendor No.: 01571
 Vendor/Customer Name: City Of Ontario Sole Source? Yes No
 Description: Agreement for PS&E phase for N. Vineyard Grade Separation
 Start Date: 1-Jun-10 Expiration Date: 30-Jun-16 Revised Expiration Date: _____
 Has Contract Term Been Amended? No Yes - Please Explain _____
 List Any Related Contracts Nos.: C08194, C11168

Dollar Amount			
Original Contract	\$2,436,000.00	Original Contingency	\$0.00
Revised Contract (Inclusive of Prior Amendments)	\$3,132,000.00	Revised Contingency (Inclusive of Prior Amendments)	\$0.00
Current Amendment	\$120,000.00	Contingency Amendment	\$0.00
TOTAL CONTRACT VALUE	\$3,252,000.00	TOTAL CONTINGENCY VALUE	\$0.00
		TOTAL DOLLAR AUTHORITY (Contract Value and Contingency)	\$ 3,252,000.00

Contract Authorization

Executive Director Date: _____
 Executive Director Action: _____
 Board of Directors Date: 2-Sep-15
 Board of Directors Action: Approve Amend. 3 to increase SANBAG contribution to \$3,252,000

Contract Management: Payable/Miscellaneous

Invoice Warning: 20% Renewals: _____ Type: Capital PAA Other
 Retention: _____ % Maximum Retention: \$ _____
 Services: Construction Intrgrnt/MOU/COOP A & E Services Other Professional Services
 Disadvantaged Business Enterprise (DBE) Goal _____ %

Contract Management: Receivable

E-76 and/or CTC Date _____ (Attach Copy) Program Supplement No.: _____
 Finance Letter Reversion Date: _____ EA No.: _____

All of the above MUST be submitted to FINANCE including originals, amendments and miscellaneous transaction changes

Additional Information

Project Manager: Andrea Nieto

Attachment: C10094-03 CSS N. Vineyard PSE [Revision 2] (2082 : N. Vineyard PS&E Agreement Amendment No. 3)

AMENDMENT NO. 3 TO**CONTRACT NO. C10094****BY AND BETWEEN****SAN BERNARDINO COUNTY TRANSPORTATION AUTHORITY****AND****CITY OF ONTARIO****FOR****PLANS, SPECIFICATIONS & ESTIMATES SERVICES FOR THE NORTH VINEYARD AVENUE AND UNION PACIFIC RAILROAD GRADE SEPARATION PROJECT**

This AMENDMENT No. 3 to Project Funding Agreement No. C10094 (hereinafter referred to as "AGREEMENT") is made by and between the San Bernardino County Transportation Authority (referred to hereafter as "SANBAG"), whose address is 1170 W. 3rd Street, 2nd Floor, San Bernardino, California 92410-1715, and City of Ontario (hereinafter referred to as "CITY"), whose address is 303 East B Street, Ontario CA 91764. SANBAG and CITY are each a "Party" and collectively the "Parties" herein.

RECITALS:

WHEREAS, SANBAG and CITY, previously executed Project Funding Agreement No. C10094, dated June 2, 2010, to jointly fund the Plans, Specifications and Estimates (PS&E) Services for the N. Vineyard Avenue and Union Pacific Railroad Alhambra Line Grade Separation Project, in the City of Ontario (hereinafter referred to as "PROJECT"); and

WHEREAS, SANBAG and CITY executed Contract C10094 Amendment No. 1 in the amount of \$650,000 on November 14, 2013, for additional PS&E services associated with obtaining the California Transportation Commission Right of Way Certificate and design impacts due to Southern California Edison easement requirements; and

WHEREAS, SANBAG and CITY executed Contract C10094 Amendment No. 2 in the amount of \$220,000 on July 2, 2014, to provide Construction Support Services to respond to requests for information (RFI), review shop drawings, and prepare as-built drawings after construction is completed; and

WHEREAS, CITY has identified \$150,000 of additional PS&E costs for engineering fees for Kinder Morgan's pipeline relocation design changes; and

WHEREAS, SANBAG’s share of the PROJECT cost is 80%, as defined by the provisions of AGREEMENT, which would result in an increase to SANBAG’s share of \$120,000 for a total SANBAG contribution of \$3,252,000; and

WHEREAS, SANBAG and CITY desire to amend the AGREEMENT by this AMENDMENT No. 3 to include the additional PS&E services needed for the PROJECT, as identified in Attachment A.3 to AMENDMENT No. 3.

NOW, THEREFORE, the Parties agree to amend the AGREEMENT as follows:

1. SECTION I, Article 1 of the AGREEMENT is deleted and replaced with the following:

“To reimburse CITY for those eligible PROJECT expenses that are incurred by CITY for the PROJECT-specific work activities, as set forth in Attachment A.3 to this Agreement as governed by the policies in the Measure I 2010-2040 Strategic Plan. Said reimbursement amount shall not exceed \$3,252,000, which represents 80% of the revised estimated costs for the PROJECT as stated in Attachment B – Summary Project Costs.”

2. Attachment A.3 to this AMENDMENT No. 3 amends Attachment A.2. Attachment A.3 and Attachment B are attached to and incorporated into this AMENDMENT No. 3. All references in the AGREEMENT to Attachment A shall mean Attachment A.3 and all references in the AGREEMENT to Attachment B shall mean Attachment B to this AMENDMENT No. 3.
3. Except as amended by this AMENDMENT No. 3, all other provisions of the AGREEMENT shall remain in full force and effect.
4. The AGREEMENT is incorporated into this AMENDMENT No. 3.
5. The Recitals to this AMENDMENT No. 3 are incorporated into this AMENDMENT No. 3.

The Effective Date of this AMENDMENT No. 3 is the date is it approved and signed by SANBAG.

SIGNATURES ON FOLLOWING PAGE:

IN WITNESS WHEREOF, this AMENDMENT No. 3 has been executed by the Parties on the dates below.

**SAN BERNARDINO COUNTY
TRANSPORTATION AUTHORITY**

CITY OF ONTARIO

By: _____
Ryan McEachron
President, Board of Directors

By: _____
Al C. Boling
City Manager

Date: _____

Date: _____

APPROVED AS TO FORM:

APPROVED AS TO FORM:

By: _____
Eileen Monaghan Teichert
General Counsel

By: _____
John Brown
City Attorney

Date: _____

Date: _____

Attachment: C10094-03 N Vineyard PSE Agreement Amen 3-c2 (2082 : N. Vineyard PS&E Agreement Amendment No. 3)

**Attachment A.3 (Amendment No. 3)
North Vineyard Avenue Grade Separation
Plans, Specifications and Estimates Services
Amendment Detail**

Proposed Project Work:

Preparation of Plans, Specifications and Estimates for the rail-highway grade separation at N. Vineyard Avenue and the Union Pacific Railroad Alhambra Line in the City of Ontario. Original PS&E services. **\$3,045,000**

Amendment No. 1:

Incorporate design changes to accommodate an additional rail shoofly, LAWA building demolition plans and Environmental Document support. **\$650,000**

Amendment No. 2:

Provide Construction Support Services to:

- Respond to Requests for Information
- Review shop drawings
- Prepare record drawings at the conclusion of the project **\$220,000**

Amendment No. 3:

Additional engineering fees for Kinder Morgan's pipeline relocation design. **\$150,000**

Summary of Project Schedule:

ROW, PS&E and Construction Support: July 5, 2011 – June 30, 2016

Construction: January 2014 – December 2015

**Attachment B (Amendment No. 3)
North Vineyard Avenue Grade Separation
Plans, Specifications and Estimates Services
Summary of Project Costs**

Original Contract	\$3,045,000.00
Amendment No. 1 PS&E Services	\$ 650,000.00
Amendment No. 2 Construction Support	\$ 220,000.00
Amendment No. 3 Kinder Morgan Re-design	<u>\$ 150,000.00</u>
Total PS&E Services	\$4,065,000.00
SANBAG Share	\$2,436,000.00
Amendment No. 1	\$ 520,000.00
Amendment No. 2	\$ 176,000.00
Amendment No. 3	<u>\$ 120,000.00</u>
Total SANBAG Share (80%)	\$3,252,000.00
City of Ontario Share	\$ 609,000.00
Amendment No. 1	\$ 130,000.00
Amendment No. 2	\$ 44,000.00
Amendment No. 3	<u>\$ 30,000.00</u>
Total City of Ontario Share (20%)	\$ 813,000.00

Attachment: C10094-03 N Vineyard PSE Agreement Amen 3-c2 (2082 : N. Vineyard PS&E Agreement Amendment No. 3)

Minute Action

AGENDA ITEM: 8

Date: August 13, 2015

Subject:

Interstate 215 Barton PS&E and ROW Agreement Amendment 5

Recommendation:

That the following be reviewed and recommended for final approval by the Board of Directors, acting in its capacity as the San Bernardino County Transportation Commission, at a regularly scheduled Board meeting:

A. Approval of Amendment No. 5 to Contract No. C12212 (Agreement) with California Department of Transportation (CALTRANS) agreeing to Commission's acquisition of property necessary for the I-215 Barton Road Interchange Project (PROJECT) in Commission's name; agreeing to Commission's exercise of Eminent Domain; agreeing to Commission's conveyance by quit claim deed to CALTRANS of all PROJECT acquired right-of-way (ROW) located within CALTRANS' jurisdictional boundaries; and agreeing to increase the PROJECT funding by \$4,964,457 consisting of \$1,828,401 of Federal Demonstration Funds and \$3,136,056 of Measure I Valley Freeway Funds for an overall total of \$32,395,157; and

B. Authorization of staff to proceed with voluntary acquisition of property necessary for PROJECT from 35 property owners comprised of 59 parcel numbers identified on Attachment "B", in accordance with SANBAG's Policies, and the Agreement, including relocation assistance, demolition of existing structures, property management, disposal of excess property, environmental testing and remediation, and expending a total amount not to exceed \$20,881,751 for ROW acquisition capital expenses; and

C. Authorization of the Director of Project Delivery to add or delete such parcels on Attachment "B" as the Director of Project Delivery determines from time to time are necessary for the PROJECT.

That the following be reviewed and recommended for final approval by the Board of Directors, acting in its capacity as the San Bernardino County Transportation Authority, at a regularly scheduled Board meeting:

D. Approval of Amendment No. 5 to Contract No. C12212 with CALTRANS; and

E. Amend Fiscal Year 2015/2016 budget to add \$1,828,401 of Federal Demonstration Funds and \$3,136,056 of Measure I Valley Freeway Funds to Task 0820.

Background:

The purpose of this agenda item is to address changing roles and responsibilities, obtain authority to proceed with acquisition of property, establish a process for updating the acquisition parcel listing, and to amend the current fiscal year budget. The I-215 Barton Road Interchange Project proposes to improve traffic operations and reduce traffic congestion on Barton Road and ramp intersections. The Project improvements include replacement of Barton Road

Entity: CTA, CTC

overcrossing, reconstruction and widening of Barton Road, realignment of the existing entrance and exit ramps, and traffic signal modifications. The Environmental Phase was concluded in March 2014. However, the SANBAG Board desired to advance the design and right of way (ROW) phases, so in May 2012 the Board approved Cooperative Agreement No. C12212 (Caltrans No. 08-1537) with Caltrans for the design and ROW phases of the Project. Under the cooperative agreement, Caltrans would perform the final design work, the California Transportation Commission (CTC) would hear Resolutions of Necessity, and SANBAG would be responsible for the activities within the ROW phase and for funding the Project. Subsequently, this agreement was amended three times. The first amendment only revised the funding plan with no cost or scope increase. The second amendment added \$100,000 to begin ROW engineering. The third amendment (entitled Amendment No. 4) revised the funding plan and added \$1,162,653 to fund Construction Management/General Contractor (CM/GC) delivery method, ROW engineering, preparation for and adoption of two Resolutions of Necessity by the CTC, and to cover an increase in the estimate for utility coordination and relocation. Further details regarding these amendments are outlined on Attachment C.

Recommendations A and D

During the ROW Phase, staff was informed that Caltrans would authorize adoption of Resolutions of Necessity (RONs) by local agencies for projects located on the State Highway System. In anticipation of an increase in workload due to the High Speed Rail Project which is to be supported by Caltrans' current ROW and legal resources, Caltrans drafted standard language into new ROW cooperative agreements to allow local agencies to adopt RONs for necessary property on projects located within the State Highway System. With this allowance comes the responsibility for directly purchasing property by the subject agency for the Project. After construction is complete the portions of property acquired for the Project would be conveyed to Caltrans by quit claim deed and excess property would be sold by SANBAG. Without this change in roles, the influx of RONs and resultant workload increase at Caltrans would adversely affect project schedules for local agencies and result in increased project costs.

Meanwhile, SANBAG's I-215 Barton Road Interchange Project team was preparing ROW contracts for property owners and questioning which agency would acquire the property. Together, staff at Caltrans and SANBAG reviewed the executed cooperative agreement and identified that the language was ambiguous regarding vesting. In addition, while staff believes that acquisition by the Commission was previously authorized by the Board, staff recognized that the authorization may be considered assumed as opposed to specifically stated. As a result of these conversations, staff halted purchase of property until explicit authorization is provided by the Board to voluntarily acquire property in the name of Commission and to adopt RONs for this Project when necessary.

Changing Roles and Responsibilities

This amendment specifically identifies SANBAG as the responsible party for acquiring property in the Commission's name, exercising Eminent Domain, and conveying property, under the jurisdiction of Caltrans, to Caltrans as the conclusion of the project. While eminent domain is already exercised by SANBAG, as necessary, on grade separation and transit projects, SANBAG has not done so for projects located on the State Highway System (SHS) because Caltrans required that RONs be heard before the CTC. Since the CTC has the power to exercise eminent domain proceedings for property to be acquired in the State's name, all property for SHS projects was acquired in its name.

Due to Caltrans' change in direction on RON hearings staff evaluated the advantages and disadvantages of RON hearings at the CTC versus the SANBAG Board of Directors. A comparison of project schedules for projects whose RON packages were prepared by Caltrans ROW and legal staff and heard at the CTC versus those prepared by SANBAG staff and presented to the SANBAG Board ascertained that project schedules can be controlled and maintained by using SANBAG's Board in lieu of the CTC for the adoption of RONs. The overall savings to a project would be between six and nine months when looking at a single RON cycle as depicted in Attachment A. While good faith negotiations remain ongoing through the RON period, SANBAG has the ability to streamline the RON appearance process considerably while still adhering to State Law. This is due to the fact that SANBAG's reviews are simplified, meetings are conducted with local participants, RON schedules are firm, and activities are running concurrently. SANBAG's review of RON packages is performed by the SANBAG ROW Advisor rather than a district and headquarters review process. SANBAG's RON review is concurrent with the 1st and 2nd level review meetings which are conducted early in the acquisition process rather than held at the end. At SANBAG, if a property owner would like to speak at the hearing, then staff arranges for this discussion.

Within the Caltrans process a property owner can request to be heard at the hearing at any point up to and including the day of the RON hearing. Immediately upon notification from the property owner, Caltrans cancels the RON hearing and schedules the 1st level review meeting followed by a 2nd level review if requested by the property owner. Next, the RON hearing is rescheduled. The scheduling and conducting of these two meetings can take up to six months because high level participants representing Caltrans and the property owner must travel from various parts of the State. In addition, rescheduling the RON can be time consuming as the CTC assembles only seven times per year. In short, there are many more sequential variables involved in the RON process through CTC and Caltrans.

The second area where SANBAG can better control the schedule compared to Caltrans involves the time between the RON hearing and filing suit with the court. After the adoption of a RON eminent domain lawsuits and motions for possession are filed with the court for an order of prejudgment possession that allows construction to begin. For SANBAG that average time period is 24 days with a range of 21 to 114 days, while for Caltrans on the Interstate 10/Tippecanoe Avenue Interchange project, the average period was 91 days with a range of 28 to 245 days. Another benefit of SANBAG processing the eminent domain lawsuits is its ability to procure the condemnation deposit in a timely manner (usually 7-14 days). This allows for the Notice of Deposit to be filed with the superior court which is a statutory requirement for obtaining legal and physical possession of the property. Adversely, Caltrans Accounting requires the lawsuit be filed prior to requesting the deposit. Caltrans loses 4-6 weeks in this process alone.

Despite the significant schedule advantages there are risks to SANBAG in property ownership. Primarily the risks are due to hazardous waste, accidents, and maintenance, although a majority of this liability has already been accepted by SANBAG within the various cooperative agreements with Caltrans. These risks are identical to the risks SANBAG currently assumes for grade separation and transit projects where property is acquired in SANBAG's name. To minimize risk on property with hazardous material an environmental attorney and an environmental specialist are utilized for legal advice and action that serves to secure state and

federal protections where available. By employing the use of California Land Reuse and Revitalization Act (2004) financial liability for remediation is managed because the law allows the prediction of the level of effort, cost, and time required to gain regulatory closure in advance. In addition, by employing Environmental Protection Agency due diligence protocols, federal protections can be gained under the Federal Superfund Law. Compliance with these laws coupled with Pollution Liability Insurance where appropriate, adds protection against potential third party risks. For the construction phase, many of the property ownership risks are transferred to the contractor and their insurance company through the construction contract and requirements for appropriate insurance. Maintenance of property typically involves weed abatement, graffiti removal, and litter abatement. This is already a requirement and a cost for our projects handled through property management consultants or the contractor so no new costs are incurred by changing the lead agency. In conclusion, because of the advantage of maintaining control of a project's schedule, local control of litigation, and SANBAG's ability to minimize risk, it is recommended to approve the ROW cooperative agreement with Caltrans for this project for the purchase of property in the Commission's name, exercise of Eminent Domain for involuntary acquisition, and conveyance of property to Caltrans.

Cost Increase

Cost increases are anticipated due to utilizing the new CM/GC delivery method, having updated right of way acquisitions costs, and the inclusion of support costs for RONs. Because the CM/GC process is new to Caltrans, costs for independent cost estimating, cost evaluations, and partnering were mistakenly missed. The increase to design costs is \$455,586.

As ROW engineering progressed, information became available regarding particular parcels and actual square footage of necessary property. Together the CM/GC and Caltrans looked at work areas and anticipated construction operations relative to the design. The effect was that 5 new parcels were affected and several other parcels experienced reductions. This required the redrafting of right of way maps and updating of appraisals. In addition, as the project has progressed, appraisers have been able to visit properties, understand the current uses and improvements, and value the acquisition needs accordingly. However, with the design refinement, some of the right of way requirements have changed to minimize impacts to owners, but increase costs to the support team for updating appraisals. In short, the capital and support cost estimates have been updated from a concept level estimate to appraisal-based estimate with consideration given to design changes. The increase to ROW acquisition costs is \$2,981,751.

Also changing are costs for condemnation. The original cost estimate was based on two RONs to be heard at the CTC. Since the development of the original agreement both Caltrans and SANBAG have experienced a high percentage of acquisitions that are unresolved, resulting in extensive negotiation and RON Hearings. While the vast majority of these acquisitions for which RONs have been adopted are settled, the preparation of materials for RONs and lawsuits, meditations, and extended negotiations is costly. Overall, the increase to right of way support is \$1,527,120.

These cost increases are to be funded with additional Federal Demonstration Funds (DEMO) in the amount of \$1,828,401. Measure I is the other source in the amount of \$3,136,056. Because the benefit of CM/GC delivery method is the reduction in construction costs, construction funding will be reduced in an amount equal to the increase of the right of way and design cost increases. The resulting total project cost shown in the 2014 10-Year Delivery Plan

Board of Directors Metro Valley Study Session Agenda Item

August 13, 2015

Page 5

will remain unchanged at \$80.396M, however, the Construction Phase Measure I will be reduced by \$4,464,457.

Recommendation B and C

To construct the interchange improvements, ROW is required from 35 property owners comprised of 59 parcel numbers at an estimated ROW acquisition capital cost of \$20,881,751 million. The necessary ROW includes full property acquisition, partial property acquisition, permanent easements, and temporary easements. Included in this cost is ROW acquisition, relocation assistance, demolition of existing structures, and environmental testing and remediation. Staff is seeking authority to proceed with the acquisition of the required ROW.

From time to time, as the design is developed the ROW needs change. As a result, this listing will change. For the purposes of streamlining the process, staff recommends that updates to the listing be authorized by the Director of Project Delivery and published in the next Metro Valley Study Session Agenda as an informational item.

Recommendation E

To expend the additional funds on this project this fiscal year, staff recommends amendment to the current approved budget to add \$1,828,401 of Demo and \$3,136,056 of Measure I.

Conclusion

Staff is recommending the approval of the five recommendations which will allow the acquisition of the property necessary for the Project to proceed in an efficient manner.

Financial Impact:

This item is not consistent with the adopted SANBAG Fiscal Year 2015/2016 budget. A budget amendment is required to increase Task No. 0820 budget to add the federal DEMO funds in the amount of \$1,828,401 and Measure I funds in the amount of \$3,136,056.

Reviewed By:

This item is not scheduled for review by any other policy committee or technical advisory committee. SANBAG Procurement Manager has reviewed this item and a draft of the amendment. This item has not received final review by SANBAG General Counsel.

Responsible Staff:

Paula Beauchamp, Project Delivery Manager

Approved
Board of Directors Metro Valley Study Session
Date: August 13, 2015

Witnessed By:

Contract Summary Sheet

General Contract Information

Contract No: 00-1000665-C12212 Amendment No.: 5 Vendor No.: 0450
 Vendor/Customer Name: California Department of Transportation Sole Source? Yes No
 Description: I-215 Barton Road PS&E and ROW Cooperative Agreement
 Start Date: 05/02/2012 Expiration Date: 12/31/2018 Revised Expiration Date: N/A
 Has Contract Term Been Amended? No Yes - Please Explain _____
 List Any Related Contracts Nos.: 15-1001044 , 15-1001045 Admin Contracts for ROW Services

Dollar Amount			
Original Contract	\$ 2,332,047.00	Original Contingency	\$ -
Revised Contract (Inclusive of Prior Amendments)	\$ 250,000.00	Revised Contingency (Inclusive of Prior Amendments)	\$ -
Current Amendment	\$ -	Contingency Amendment	\$ -
TOTAL CONTRACT VALUE	\$ 250,000.00	TOTAL CONTINGENCY VALUE	\$ -
		TOTAL DOLLAR AUTHORITY (Contract Value and Contingency)	\$ 250,000.00

Contract Authorization

Executive Director Date: _____
 Executive Director Action: _____
 Board of Directors Date: 09/07/2015
 Board of Directors Action: Approve amendment 5 to PS&E ROW Agreement with Caltrans

Contract Management: Payable/Miscellaneous

Invoice Warning: 20% Renewals: _____ Type: Capital PAA Other
 Retention: % Maximum Retention: \$ -
 Services: Construction Intrgrnt/MOU/COOP A & E Services Other Professional Services
 Disadvantaged Business Enterprise (DBE) Goal _____ %

Contract Management: Receivable

E-76 and/or CTC Date _____ (Attach Copy) Program Supplement No.: _____
 Finance Letter Reversion Date: _____ EA No.: _____

All of the above MUST be submitted to FINANCE including originals, amendments and miscellaneous transaction changes

Additional Information

Project Manager: Paula Beauchamp

Attachment: C12212-05 CSS [Revision 1] (2135 : Barton Rd ROW COOP Amendment 5)

I-215 Barton Rd IC Funding Summary 5 (Amendment No 5)

FUNDING SUMMARY

Funding Source	Funding Partner	Fund Type	PS&E Support	R/W Capital	R/W Support	Totals by Fund Type
STATE	SANBAG	STIP/RIP	\$0	\$17,400,000	\$0	\$17,400,000
FEDERAL	SANBAG	Demo*	\$2,256,987	\$3,666,645	\$557,000	\$6,480,632
FEDERAL	SANBAG	Section 115	\$500,646	\$0	\$0	\$500,646
FEDERAL	SANBAG	Section 112	\$1,980,000	\$0	\$0	\$1,980,000
LOCAL	SANBAG	Measure	\$150,000	\$2,108,936	\$3,774,943	\$6,033,879
		Totals by Component	\$4,887,633	\$23,175,581	\$4,331,943	\$32,395,157

*Toll Credit to match DEMO funds in each component: \$2,257 PSE DEMO (\$452k toll credit). \$4,224 ROW DEMO (\$845k toll credit)

I-215 Barton Rd IC Funding Summary 5 (Amendment No. 5)

SPENDING SUMMARY

Funding Source	Funding Partner	Fund Type	PS&E SUPPORT		R/W SUPPORT		R/W CAPITAL		Totals by Fund Type
			CALTRANS	SANBAG	CALTRANS	SANBAG	CALTRANS	SANBAG	
AGENCY EXPENDING FUNDS									
STATE	SANBAG	STIP/RIP	\$0	\$0	\$0	\$0	\$0	\$17,400,000	\$17,400,000
FEDERAL	SANBAG	Demo*	\$2,256,987	\$0	\$557,000	\$0	\$0	\$3,666,645	\$6,480,632
FEDERAL	SANBAG	Section 115	\$500,646	\$0	\$0	\$0	\$0	\$0	\$500,646
FEDERAL	SANBAG	Section 112	\$1,980,000	\$0	\$0	\$0	\$0	\$0	\$1,980,000
LOCAL	SANBAG	Measure	\$150,000	\$0	\$100,000	\$3,674,943	\$0	\$2,108,936	\$6,033,879
		Totals by Component	\$4,887,633	\$0	\$657,000	\$3,674,943	\$0	\$23,175,581	\$32,395,157

Attachment: C12212-05 Funding Summary 07.17.15 (2135 : Barton Rd ROW COOP Amendment 5)

DRAFT AGREEMENT

08-SBD-215-0.58/1.95

EA: 0J070

Project Number: 0800000282

Federal Funds

CALTRANS Agreement 08-1537 A/5

C12212

AMENDMENT NO. 5 TO AGREEMENT 08-1537

THIS AMENDMENT No. 5 (AMENDMENT), entered into and effective on _____, is between the State of California, acting through its Department of Transportation, referred to as CALTRANS, and

San Bernardino County Transportation Authority, a public agency, referred to hereinafter as SANBAG; and

San Bernardino County Transportation Commission, a public agency, referred to hereinafter as COMMISSION.

RECITALS

1. CALTRANS and SANBAG, collectively referred to as PARTNERS, entered into Agreement No. 08-1537 (AGREEMENT) on May 30, 2012, defining the terms and conditions to reconstruct the interchange on Interstate 215 at Barton Road in Grand Terrace, referred to as PROJECT.
2. PARTNERS entered into Amendment Funding Summary No. 2 to AGREEMENT on November 30, 2012, to move \$1,500,000 DEMO funds from PS&E to R/W capital; reduce \$20,739.00 STIP/RIP capital funds to \$17,400,000; add \$500,646 Section 115 and \$1,980,000 Section 112 funds for PS&E; reduce \$2,332,047 Measure funds to \$1,351.40 for PS&E; and add \$1,839,000 Measure funds for R/W capital.
3. PARTNERS entered into Amendment Funding Summary No. 3 to AGREEMENT on July 23, 2014, to add \$100,000 Measure funds for CALTRANS to perform the R/W support activities.
4. PARTNERS entered into Amendment No. 4 to AGREEMENT on October 30, 2014, to add Construction Manager/General Contractor provisions; designate CALTRANS as the implementing agency for R/W engineering activities; increase DEMO R/W Capital funds from \$1,500,000 to \$2,293,830, add \$557,000 DEMO funds for R/W Support and \$1,801,401 for PS&E Support; decrease Measure funds for PS&E from \$1,351,401 to \$150,000, decrease Measure funds for R/W

Capital from \$1,839,000 to \$500,000 and increase Measure R/W Support funds from \$1,697,000 to \$2,247,823.

5. PARTNERS now seek to amend the AGREEMENT for the following reasons:
 - a.) To add San Bernardino County Transportation Commission as a new party to this AGREEMENT;
 - b.) To allow COMMISSION to provide all necessary R/W services to acquire R/W;
 - c.) COMMISSION will exercise its existing power of Eminent Domain to acquire any necessary property for the PROJECT in accordance with California Code of Civil Procedure, Section 1245.235;
 - d.) COMMISSION will convey by quitclaim deed to CALTRANS all PROJECT acquired right-of-way located within CALTRANS' jurisdictional boundaries within thirty (30) days COMMISSION's request to CALTRANS to accept such acquired property and at no expense to CALTRANS; and
 - e.) A revised FUNDING SUMMARY Number 5 and a SCOPE SUMMARY, dated July 16, 2015, is attached and made part of this AMENDMENT.

IT IS THEREFORE MUTUALLY AGREED:

1. Article 54a is added to the AGREEMENT to read as follows:

“54a. COMMISSION agrees to first acquire any necessary rights-of-way in its own name. Prior to the closeout of this Agreement, COMMISSION shall transfer title to said rights-of-way, free and clear of all encumbrances and liens adverse to CALTRANS' use for highway purposes, to the State. CALTRANS' acceptance of right-of-way title is subject to review of an Updated Preliminary Title Report provided by COMMISSION. The parties shall cooperate and use their best efforts to ensure the transfer of title of properties incorporated into the SHS right of way is accomplished no more than 90 days after presentation of properties for acceptance. Upon acceptance, COMMISSION will provide CALTRANS with a Policy of Title Insurance in CALTRANS' name.

2. Articles 57 and 57a in the AGREEMENT are replaced in their entirety to read as follows:

“57. COMMISSION certifies that it is authorized to hear and, if appropriate, adopt Resolutions of Necessity for the PROJECT. COMMISSION agrees to be responsible for hearing and adopting Resolutions of Necessity for the

PROJECT. COMMISSION is responsible for all work associated with hearing and adopting Resolutions of Necessity.”

- “57a. COMMISSION is responsible for conducting and documenting the functional equivalent of the CALTRANS’ District Condemnation Evaluation Meeting and the CALTRANS’ Condemnation Panel Review Meetings. CALTRANS’ Right of Way staff will be invited in any functional equivalent of a Condemnation Panel Review Meeting." CALTRANS’ concurrence is required, in advance, for any exception to CALTRANS’ or FHWA’s right-of-way policies, procedures, or standards.”
3. A revised FUNDING SUMMARY Number 5 and a SCOPE SUMMARY, dated July 16, 2015, are attached and made part of the AGREEMENT. Any reference to the SCOPE SUMMARY and FUNDING SUMMARY (FS) Number 1, FS Number 2, FS Number 3, FS Number 4, and in the AGREEMENT are deemed to refer to the revised FUNDING SUMMARY Number 5 and SCOPE SUMMARY, dated July 16, 2015 attached herein
 4. This AMENDMENT is deemed to be included and made part of the AGREEMENT.
 5. Except as to funding obligations, the parties agree that COMMISSION is subject to the same obligations and rights under the AGREEMENT as SANBAG.
 6. All other terms and conditions of the AGREEMENT shall remain in full force and effect.

SIGNATURES

PARTNERS declare that:

- 1. Each partner is an authorized legal entity under California state law.
- 2. Each partner has the authority to enter into this agreement.
- 3. The people signing this agreement have the authority to do so on behalf of their public agencies.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

SAN BERNARDINO COUNTY
TRANSPORTATION AUTHORITY

APPROVED

APPROVED

By: _____
John Bulinski
Interim District 8 Director

By: _____
Ryan McEachron
Board President

APPROVED AS TO FORM

SAN BERNARDINO COUNTY
TRANSPORTATION COMMISSION

By: _____
Attorney
Department of Transportation

APPROVED

By: _____
Ryan McEachron
Board President

CERTIFIED AS TO FINANCIAL TERMS:

ATTEST

By: _____
Accounting Administrator

By: _____
Vicki Watson
SANBAG's and COMMISSION's Board
Clerk

CERTIFIED AS TO FUNDS:

By: _____
Lisa Pacheco
District Budget Manager

APPROVED AS TO FORM:

By: _____
Eileen Monaghan Teichert
SANBAG's and COMMISSION's Counsel

Attachment: C12212-05 Agreement 1537 A-5 07.16.15 [Revision 2] (2135 : Barton Rd ROW COOP Amendment 5)

CALTRANS Agreement 08-1537 A/5

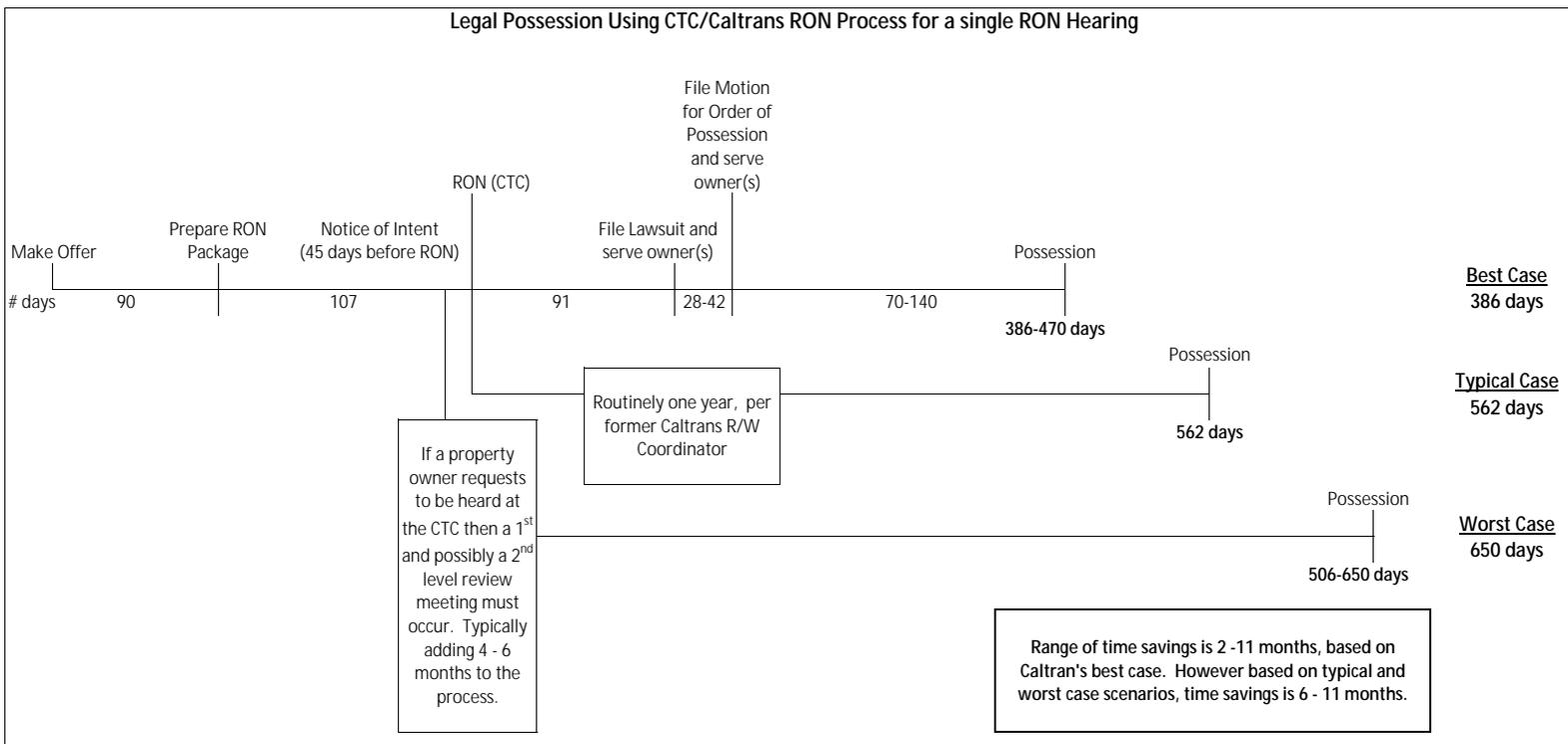
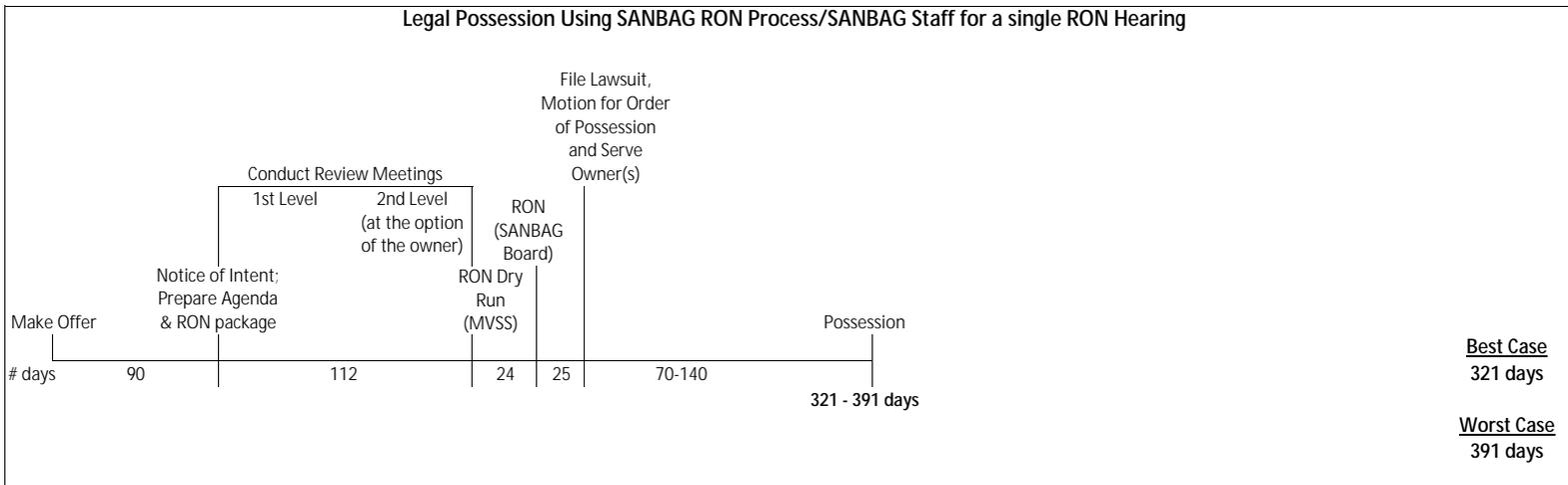
CONCURRENCE:

By: _____

Jeffery Hill
SANBAG's & COMMISSION's Procurement
Manager

Attachment: C12212-05 Agreement 1537 A-5 07.16.15 [Revision 2] (2135 : Barton Rd ROW COOP Amendment 5)

Time Line Comparison of Resolution of Necessity (RON) Processes



Attachment: Compensation CT vs SANBAG RONS (2135 : Barton Rd ROW COOP Amendment 5)

Attachment B

**I-215 Barton Road Interchange Improvement -
San Bernardino Associated Governments**

**PROPERTY MATRIX
(Updated August 5, 2015)**

CPN	APN Numbers	Owner Reference	Property Type
23319	0275-231-25	Simon	Residential
23320	0275-231-46	Clark Revoc Trust	Commercial
23321	0275-232-05	Lugo	Residential
23322	1167-141-05	Hyrosen Properties Inc.	Commercial
23323	0275-231-68	Hadjiconstantis	Commercial
23324	1167-231-10	Curatolo Family Trust	Commercial
23332	1167-151-01, 1167-161-01	Georgia Capital, LLC	Vacant Land
23333	1167-141-10, 1167-141-11	C-Y Development Co	Commercial
23334	1167-141-03, 1167-141-04	Circle P Holdings LLC (formerly "IE Rollersports")	Commercial
23335	1167-141-02	Yasin	Commercial
23336	1167-141-09	Adcock	Commercial
23337	1167-141-01	Tanios	Commercial
23339	1167-141-08	City of Grand Terrace	Vacant Land
23340	1167-231-22 1167-231-22 1167-231-23, 1167-231-24 1167-231-25 1167-231-26 1167-231-27 1167-231-28	Stater Bros Markets	Commercial
23341	1167-231-20	SDG Investments LLC	Commercial
23343	1167-231-24	Autozone Development Corporation	Commercial
23344	1167-231-11	Yasin	Commercial
23345	0275-232-04	Terrace Union School District S.B. Co.	Public Land
23362	1167-121-08; 1167-131-13	City of Riverside	Vacant Land
23363	1167-121-11	Lambert Family Trust	Industrial

Attachment: C12212-05 Att B Property Matrix 08.05.15 [Revision 2] (2135 : Barton Rd ROW COOP Amendment 5)

CPN	APN Numbers	Owner Reference	Property Type
23364	1167-121-10	Adams Revocable Living Trust	Vacant Land
23365	1167-121-01	McDuffee Trust	Vacant Land
23366	1167-121-09	Furnas Family Trust	Commercial
23367	1167-121-02	Tilley	Industrial
23369	0275-223-16	2881 Hulen Place LLC	Industrial
23370	0275-223-27	Hughes	Vacant Land
23371	0275-231-27, 0275-231-28	57th Saga LLC	Residential
23372	0275-231-47	Clark	Vacant Land
23373	0275-231-69	Terrace Village RV Park LLC	Commercial
23375	0275-232-10	Gutierrez	Residential
23378	0275-231-57 0275-231-58 0275-231-59 0275-231-60 0275-231-61 0275-231-62 0275-231-63 0275-231-64 0275-231-65 0275-231-66	City of Grand Terrace	Vacant Land
23379	0275-231-11	Macias	Residential
23380	0275-231-12	Llewellyn	Residential
23763	1167-151-09	Mark & J Pierce Family Trust	Vacant Land
23764	1167-151-08	SCE	Vacant Land
23765	1167-151-14	City of Riverside	Vacant Land
23813	0275-232-09	Elwar	Residential
23938	1167-151-07	Colton Industrial Properties	Commercial

TOTAL: \$20,881,751

Attachment C

Caltrans Cooperative Agreement No. C12212 History:**Original Agreement-** Board Approved May 2012

Amount (Funding Summary 1): \$3,929,047 Measure I Valley Fund-Freeway (MSI) Projects and \$22,239,000 State and Federal Funds for a total of \$26,168,047.

Scope: Plans, Specifications and Estimate (PS&E) and ROW phases roles and responsibilities defined.

Amendment 1- Board Approved November 2012

Amount (Funding Summary 2): Add Federal transportation earmark funding from Section 112 of \$1,980,000 and Section 115 of \$500,646; reduce \$3,339,000 STIP/RIP funds to the programmed amount; add \$858,354 in MSI funds to replace the balance of STIP/RIP funds not sufficiently replaced with the Federal funding. Total State and Federal Funds are \$21,380,646 and MSI funding is \$4,787,401 for a total of \$26,168,047.

Scope: No change.

CM/GC Delivery Method Adoption: Board Approved October 2013

Amount: No change

Scope: Employ the Construction Manager during design to facilitate design, reduce cost and improve schedule.

Amendment 2 – Request for Executive Director Approval June 2014

Amount (Funding Summary 3): Add \$100,000 MSI funds for a total of \$4,887,401. Total MSI, State and Federal funds is \$26,268,047.

Scope: Start ROW engineering appraisal maps to reduce impact to ROW Certification schedule while additional funding is secured.

Amendment 3 – Not used**Amendment 4 –** Board Approved October 2014

Amount (Funding Summary 4): Reduce MSI by \$1,989,578 to a new total of \$2,897,823 and increase State and Federal funds by \$3,152,231 for a new total of \$24,532,877. Total funding for this amendment is \$27,430,700. The increase of \$1,162,653 is to fund the CM/GC delivery method, ROW engineering, two Resolutions of Necessity, and increased estimate for utility coordination.

Scope: Add CM/GC delivery method. Update Caltrans' and SANBAG's roles for preparing and presenting Resolutions of Necessity to the California Transportation Commission.

Amendment 5 – Current Amendment and Funding Summary under consideration

Minute Action

AGENDA ITEM: 9

Date: August 13, 2015

Subject:

Interstate 10 (I-10) Monte Vista Avenue Interchange Project

Recommendation:

That the following be reviewed and recommended for final approval by the Board of Directors, acting in its capacity as the San Bernardino County Transportation Authority, at a regularly scheduled Board meeting:

A. Approve Memorandum of Understanding No. 15-1001219 with the City of Montclair for the project development of the Interstate 10 (I-10) Monte Vista Avenue Interchange Project.

B. Approve Cooperative Agreement No. 15-1001291 with the City of Montclair for the delivery of the Environmental (PA&ED) phase of the I-10 Monte Vista Avenue Interchange Project with AUTHORITY as the lead agency for a total not-to-exceed cost of \$983,600 consisting of \$237,048 of Development share and \$746,552 of Public Share in accordance with the Nexus Study.

Background:

The I-10 Monte Vista Avenue Interchange Project is the tenth highest priority project in the Measure I 2010-2040 Freeway Interchange Program. Monte Vista Avenue is a primary, north-south arterial in the City of Montclair that serves the Montclair mall and adjacent shopping centers, Montclair Transit Facility, and the local business and residential communities. Due to the project's high priority and the current level of traffic congestion, the City of Montclair has requested that the I-10 Monte Vista Avenue Interchange Project move forward. Staff has coordinated closely with the City to understand the existing operational concerns and traffic delay issues, and has also obtained concurrence on the interchange concept plan from the City. The proposed project will widen the existing ramps, widen Monte Vista Avenue and Palo Verde Street, reconstruct the Monte Vista Avenue Undercrossing structure, and provide additional turn lanes to accommodate the interchange, ramp and local street movements.

Simultaneously, San Bernardino County Transportation Authority (AUTHORITY) staff has been leading the efforts of the I-10 Corridor project with three alternatives, "No Build," "High Occupancy Vehicle" (HOV), and "Express Lanes." The HOV Alternative begins at Haven Avenue in Ontario and ends at Ford Street in Redlands. Alternative 3, Express Lanes, begins at the Los Angeles/San Bernardino County Line, overlapping at I-10 Monte Vista Avenue, and continuing to Ford Street in Redlands. Because of the geographic overlap, it is efficient to perform the project development and construction of both projects together. If either the "No Build" or "HOV" alternatives, which does not include Monte Vista Avenue within their limits, are selected as the preferred alternative on the I-10 Corridor project, Monte Vista Avenue Interchange project would proceed through project development and construction as a separate project.

Entity: CTA

Board of Directors Metro Valley Study Session Agenda Item

August 13, 2015

Page 2

The purpose of this Memorandum of Understanding (MOU) No. 15-1001219 between the AUTHORITY and the City of Montclair is to document the terms and conditions of cooperation required to complete the Project with respect to cost, funding shares, schedule, and scope. The MOU does not commit AUTHORITY or the City to perform work or provide funding for the Project but provides the overall framework necessary to complete all phases of the Project. Cooperative Agreements will be developed for each phase of the Project that will identify the specific roles and funding responsibilities. The City has asked that AUTHORITY be the lead agency for project development through the environmental phase. The termination date of the MOU is the earlier of the Project notice of completion recordation date or June 30, 2025.

In addition, Cooperative Agreement No. 15-1001291 was jointly developed by the City and AUTHORITY to address the specific roles and funding responsibilities for the planning and environmental phase of the I-10 Monte Vista Avenue Interchange Project. These project costs assume that the environmental document work will be completed concurrently with the I-10 Corridor Project, scheduled for approval in late 2017. The Public Share of \$746,552 will be funded by Measure I Valley Freeway Interchange Funds. Additionally, staff has estimated \$100,000 for AUTHORITY Project Management costs required to facilitate project approval. These costs will be shared and distributed per the Nexus share and funded by both AUTHORITY and the City in accordance with Measure I Strategic Plan Policy 40005/VFI-33. As the I-10 Corridor Project continues to progress through the environmental phase and the selected alternative is ultimately chosen, the I-10 Monte Vista Avenue Interchange Project concept plan will be reviewed again with the City and if any related project costs appear to exceed the current funding plan, then the Cooperative Agreement will be amended.

A separate agreement and/or an amendment will follow for the next phases of the project including: right of way, design, and construction.

Staff is recommending Board approval of Memorandum of Understanding (MOU) No. 15-1001219 for project development and Cooperative Agreement No. 15-1001291 for PA&ED with the City of Montclair for the I-10 Monte Vista Avenue Interchange Improvement Project.

Financial Impact:

This item is consistent with the adopted SANBAG Fiscal Year 2015/2016 budget under Task No. 0851. The funding source is Measure I Valley Freeway Interchange Funds and Local Funds.

Reviewed By:

This item is not scheduled for review by any other policy committee or technical advisory committee. AUTHORITY General Counsel and Procurement Manager have reviewed this item, the draft MOU and the cooperative agreement.

Responsible Staff:

Chad Costello, Project Manager

Approved
Board of Directors Metro Valley Study Session
Date: August 13, 2015

Witnessed By:

Contract Summary Sheet

General Contract Information

Contract No: 15-1001219 Amendment No.: Vendor No.: 1455
Vendor/Customer Name: City of Montclair Sole Source? Yes No
Description: I-10 Monte Vista Avenue Interchange Project MOU
Start Date: 09/02/2015 Expiration Date: 06/30/2025 Revised Expiration Date:
Has Contract Term Been Amended? x No Yes - Please Explain
List Any Related Contracts Nos.: 15-1001291

Table with 4 columns: Contract Type, Amount, Contingency, and Total Value. Rows include Original Contract, Revised Contract, Current Amendment, and TOTAL CONTRACT VALUE.

Contract Authorization

Executive Director Date:
Executive Director Action:
x Board of Directors Date: 09/02/2015
Board of Directors Action: Approve Coop Agreement

Contract Management: Payable/Miscellaneous

Invoice Warning: 20% Renewals: Type: Capital PAA Other
Retention: % Maximum Retention: \$ -
Services: Construction x Intrgrnt/MOU/COOP A & E Services Other Professional Services
Disadvantaged Business Enterprise (DBE) Goal %

Contract Management: Receivable

E-76 and/or CTC Date (Attach Copy) Program Supplement No.:
Finance Letter Reversion Date: EA No.:

All of the above MUST be submitted to FINANCE including originals, amendments and miscellaneous transaction changes

Additional Information

Project Manager: Chad Costello

Attachment: CSS-MOU-15-1001219 [Revision 2] (1674 : I-10 Monte Vista Interchange Project)

CONTRACT 15-1001219

MEMORANDUM OF UNDERSTANDING

BETWEEN THE

SAN BERNARDINO COUNTY TRANSPORTATION AUTHORITY

AND THE CITY OF MONTCLAIR

FOR THE DEVELOPMENT OF

THE INTERSTATE 10 MONTE VISTA AVENUE INTERCHANGE PROJECT

I. PARTIES AND TERM

- A. This Memorandum of Understanding (“MOU”) is entered by and between the SAN BERNARDINO COUNTY TRANSPORTATION AUTHORITY (“AUTHORITY” or “SANBAG”) and the CITY OF MONTCLAIR (“PROJECT SPONSOR”) (and together the “PARTIES”) on the Effective Date defined later herein.
- B. The Term of this MOU will commence on the Effective Date and, unless terminated early as provided in Section V, Paragraph D, terminate upon the date a notice of completion is recorded for the Interstate 10 Monte Vista Avenue Interchange (PROJECT) or June 30, 2025, whichever is earlier.

II. RECITALS

- A. WHEREAS, the PROJECT is included in the approved SANBAG 10-Year Delivery Plan and SANBAG Development Mitigation Nexus Study and is eligible to receive funds from the Measure I 2010-2040 Valley Freeway Interchange Program.
- B. WHEREAS, the PARTIES desire to proceed with development of the PROJECT.
- C. WHEREAS, the PARTIES are entering into this PROJECT MOU for the purpose of documenting the terms and conditions of cooperation between the PARTIES required to complete the PROJECT with respect to cost, funding, schedule, and scope, as detailed in Exhibit A, attached hereto and incorporated herein by this reference.
- D. WHEREAS, a conceptual layout of the PROJECT is shown in Exhibit B, attached hereto and incorporated herein by this reference.
- E. WHEREAS, the PARTIES acknowledge the intent to move forward with the PROJECT, the Public and Local Agency funding shares required to complete the PROJECT, and the reasonable expectation of funding availability.

Attachment: 15-1001219 MOU 10-MonteVista Montclair [Revision 4] (1674 : I-10 Monte Vista Interchange Project)

- F. WHEREAS, the Public Share is defined as the share of project cost calculated as the total cost of the project minus the development share (or Local Agency share) and the Local Agency share is the percentage share of the project cost assigned as the development contribution percentage as listed in the SANBAG Development Mitigation Nexus Study.
- G. WHEREAS, the PARTIES understand that the purpose of the MOU is to outline the steps and funds necessary to complete the PROJECT, but the MOU does not commit the PARTIES to perform work or provide funding for the PROJECT, and imposes no enforceable obligations upon the PARTIES and does not grant any rights.
- H. WHEREAS, the PARTIES desire to memorialize in this MOU the framework and funding necessary for completion of the PROJECT to assist the PARTIES in their decision-making and budgeting for this PROJECT.
- I. WHEREAS, the PARTIES understand that each phase of the PROJECT will be addressed in a Cooperative Agreement that will identify the specific roles and responsibilities of AUTHORITY and PROJECT SPONSOR including specific funding commitments.

III. AUTHORITY'S RESPONSIBILITIES

- A. AUTHORITY will be responsible for the Public Share of PROJECT costs in accordance with Measure I 2010-2040 Valley Freeway Interchange Program Strategic Plan Policy 40005 and subsequent Cooperative Agreements.
- B. AUTHORITY will consider the development of a Loan Agreement(s) for a portion of the Local Share of PROJECT costs, if requested by the PROJECT SPONSOR, in accordance with Measure I 2010-2040 Valley Freeway Interchange Program Strategic Plan Policy 40005/VFI-23.
- C. AUTHORITY will assign a qualified member of its staff to coordinate with the PROJECT SPONSOR, as determined reasonably necessary by AUTHORITY to facilitate the delivery of the PROJECT.
- D. PROJECT SPONSOR and AUTHORITY shall consult on a funding strategy for PROJECT completion at least six months prior to completion of the design phase.

IV. PROJECT SPONSOR'S RESPONSIBILITIES

- A. PROJECT SPONSOR will be responsible for the Local Share of the PROJECT costs in accordance with Measure I 2010-2040 Valley Freeway Interchange Program Strategic Plan Policy and subsequent agreements, including Loan Agreements.
- B. PROJECT SPONSOR will assign a qualified member of its staff to coordinate with AUTHORITY, as determined reasonably necessary by PROJECT SPONSOR to facilitate the delivery of the PROJECT.
- C. PROJECT SPONSOR and AUTHORITY shall consult on a funding strategy for PROJECT completion at least six months prior to completion of the design phase.

V. MISCELLANEOUS

- A. The PARTIES acknowledge that should federal funds be used in the environmental or design phases of work, Federal Highway Administration (FHWA) requires that the PROJECT must move to a capital phase (right-of-way or construction) within ten years or the federal funds may be required to be repaid to FHWA. Responsibilities related to the federal funding will be outlined in the funding cooperative agreement(s).
- B. The PARTIES acknowledge that in accordance with Measure I 2010-2040 Valley Freeway Interchange Program Strategic Plan Policy 40005/VFI-33 project management costs will be included as part of the project cost and the cost will be distributed per the Public Share and Local Agency Share.
- C. Recitals. The Recitals stated above are integral parts of this MOU and are hereby incorporated into the terms of this MOU.
- D. Termination. Both AUTHORITY and PROJECT SPONSOR shall have the right at any time, to terminate this MOU, with or without cause, by giving thirty (30) calendar days written notice to the other party, specifying the date of termination. Termination of the MOU will not terminate the PARTIES' continuing obligations under any Cooperative Agreements generally referenced in Section III, Paragraph A. Termination of the MOU by request of the PROJECT SPONSOR will be understood by the AUTHORITY that PROJECT SPONSOR wishes to discontinue work on the PROJECT, unless otherwise stated in an active Cooperative Agreement or in a subsequent MOU or agreement.
- E. Notification. Each Party will designate a person to be responsible for day-to-day communications regarding work under the PROJECT. For PROJECT SPONSOR, that person will be Michael Hudson, City Engineer for CITY OF MONTCLAIR. For AUTHORITY, that person shall be Paula Beauchamp, Project Delivery Manager. All notices and communications regarding this MOU, interpretation of the terms of this MOU, or changes thereto will be provided as follows:

<p>CITY OF MONTCLAIR City of Montclair 5111 Benito Street Montclair, CA 91763 ATTN: Edward C. Starr, City Manager</p>	<p>AUTHORITY San Bernardino Associated Governments 1170 W. 3rd Street San Bernardino, CA 92410-1715 ATTN: Executive Director CC: Andrea Zureick</p>
--	---

- F. Amendment. In the event that the PARTIES determine that the provisions of this MOU should be altered, the PARTIES may execute an amendment to add, delete, or amend any provision of this MOU. All such amendments must be in the form of a written instrument signed by the authorized representatives of the PARTIES.

-----Signatures on the Following Page-----

In witness whereof the PARTIES have executed this MOU on the dates written below and this MOU is effective upon execution of this MOU by both AUTHORITY and PROJECT SPONSOR (“Effective Date”).

**SAN BERNARDINO COUNTY
TRANSPORTATION AUTHORITY**

CITY OF MONTCLAIR

By: _____
Ryan McEachron
Board President

By: _____
Paul M. Eaton
Mayor

Date: _____

Date: _____

APPROVED AS TO FORM:

APPROVED AS TO FORM AND PROCEDURE:

By: _____
Eileen Monaghan Teichert
General Counsel

By: _____
Diane Robbins
City Attorney

CONCURRENCE:

ATTEST:

By: _____
Jeffery Hill
Procurement Manager

By: _____
Andrea Phillips, Deputy City Clerk

Date: _____

Attachment: 15-1001219 MOU 10-MonteVista Montclair [Revision 4] (1674 : I-10 Monte Vista Interchange Project)

Exhibit A

Project Scope:

The CITY of Montclair and AUTHORITY propose to widen the existing eastbound and westbound on-/off-ramps, Monte Vista Avenue, Palo Verde Street and the existing Interstate 10 (I-10) / Monte Vista Avenue Bridge undercrossing as shown on the concept plan (Attachment B). The Planning and Environmental work is included as part of the Interstate 10 (I-10) Corridor Project. The estimate for full construction and project delivery is approximately \$37 million.

Project Cost Estimate and Funding Shares:

Public Share: 75.9% and Development Share or Local Share: 24.1%

Phase	Estimated Cost ¹	Public Share	Development Share
Project Approval and Environmental	\$883,600	\$670,652	\$212,948
Design (PS&E)	\$1,891,000	\$1,435,269	\$455,731
Right-of-Way	\$6,914,000	\$5,247,726	\$1,666,274
Construction (Includes Construction Management & Plant Establishment)	\$25,695,000	\$19,502,505	\$6,192,495
Landscape Maintenance	\$465,400	\$353,239	\$112,161
AUTHORITY Oversight	\$880,000	\$667,920	\$212,080
Total	\$36,729,000	\$27,877,311	\$8,851,689

¹Estimated Costs are based on May 2015 preliminary project cost estimate which includes a 3.5% escalation rate compounded annually.

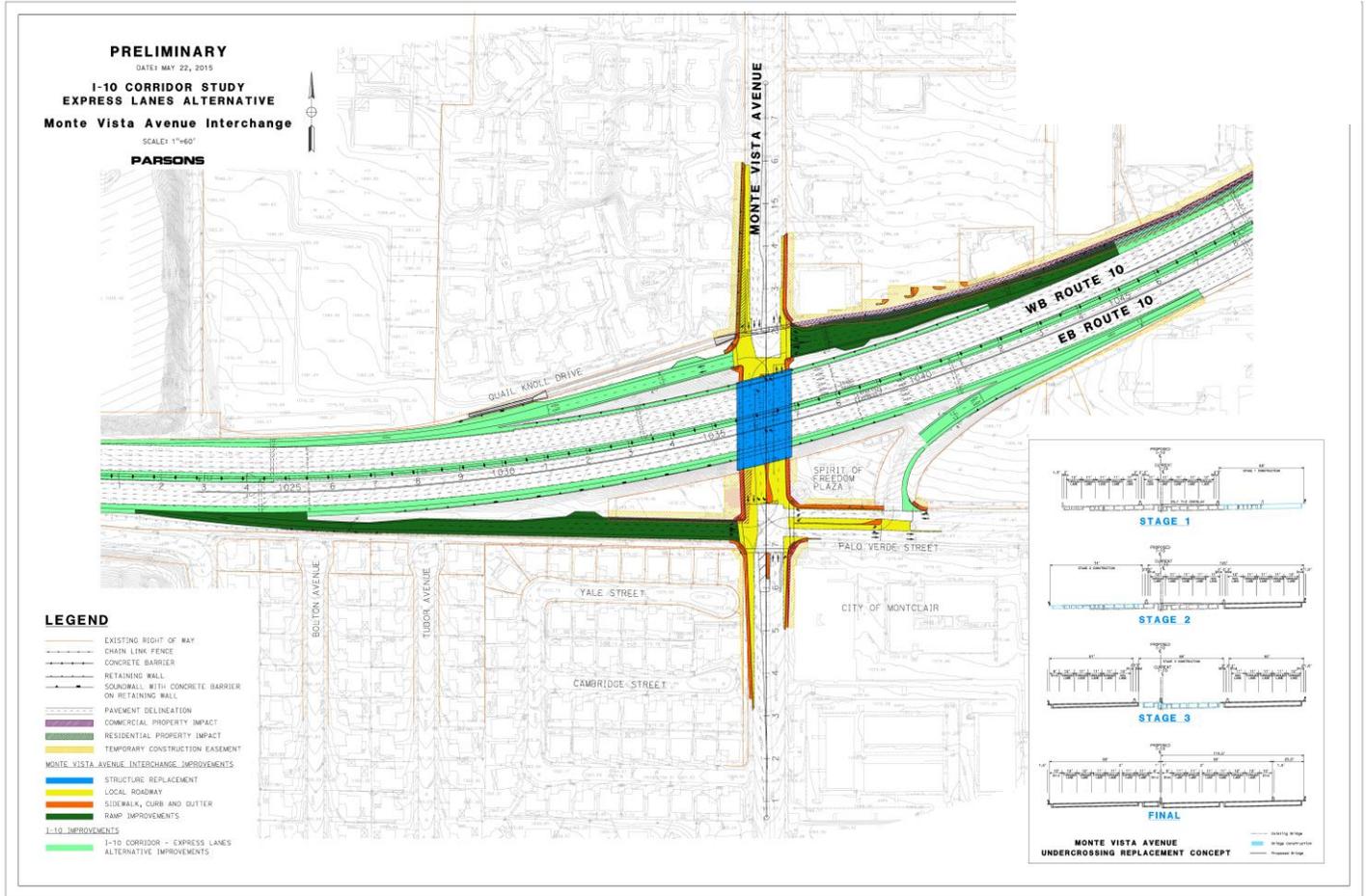
² In accordance with the 2013 Nexus Study, the development share is 73.5% Montclair, 24.3% County – Upland Sphere, and 2.2% Upland.

Project Milestones:

Milestone	Actual (Forecast)
Start of Project	(9/2015)
Environmental Approval	(11/2017)
Design Approved/ROW Certified	(12/2018)
Construction Notice to Proceed	(3/2019)
Completed for Beneficial Use	(12/2021)

Exhibit B Interstate 10 at Monte Vista Avenue Interchange Modifications

Conceptual Layout



Attachment: 15-1001219 MOU 10-MonteVista Montclair [Revision 4] (1674 : I-10 Monte Vista Interchange Project)

Contract Summary Sheet

General Contract Information

Contract No: 15-1001291 Amendment No.: Vendor No.: 1455
Vendor/Customer Name: City of Montclair Sole Source? Yes No
Description: I-10 Monte Vista Avenue Interchange Project PA&ED Cooperative Agreement
Start Date: 09/02/2015 Expiration Date: 12/31/2018 Revised Expiration Date:
Has Contract Term Been Amended? No Yes - Please Explain
List Any Related Contracts Nos.: 15-1001219

Table with 4 columns: Dollar Amount, Original Contract, Revised Contract, Current Amendment, TOTAL CONTRACT VALUE, Original Contingency, Revised Contingency, Contingency Amendment, TOTAL CONTINGENCY VALUE, TOTAL DOLLAR AUTHORITY. Values include \$237,048.00 and \$-.

Contract Authorization

Executive Director Date:
Executive Director Action:
Board of Directors Date: 09/02/2015
Board of Directors Action: Approve Coop Agreement

Contract Management: Payable/Miscellaneous

Invoice Warning: 20% Renewals: Type: Capital PAA Other
Retention: % Maximum Retention: \$-
Services: Construction Intragnt/MOU/COOP A & E Services Other Professional Services
Disadvantaged Business Enterprise (DBE) Goal %

Contract Management: Receivable

E-76 and/or CTC Date (Attach Copy) Program Supplement No.:
Finance Letter Reversion Date: EA No.:

All of the above MUST be submitted to FINANCE including originals, amendments and miscellaneous transaction changes

Additional Information

Project Manager: Chad Costello

Attachment: SANBAG Contract Summary Sheet [Revision 1] (1674 : I-10 Monte Vista Interchange Project)

COOPERATIVE AGREEMENT NO. 15-1001291

BETWEEN

SAN BERNARDINO COUNTY TRANSPORTATION AUTHORITY

AND

CITY OF MONTCLAIR

FOR

**PLANNING, PROJECT REPORT AND ENVIRONMENTAL DOCUMENT (PA/ED)
PHASE FOR THE INTERSTATE 10 (I-10) MONTE VISTA AVENUE INTERCHANGE
IN THE CITY OF MONTCLAIR**

I. PARTIES AND TERM

- A. THIS COOPERATIVE AGREEMENT (“Agreement”) is made and entered into by and between the San Bernardino County Transportation Authority (hereinafter referred to as “AUTHORITY”) and the City of Montclair (CITY), (AUTHORITY and CITY may be referred to herein as a “Party” and collectively “Parties”).
- B. This Agreement shall terminate upon completion of the AUTHORITY’s management of the project report and environmental document (PA/ED) phase, or December 31, 2018, whichever is earlier in time, except that the indemnification provisions shall remain in effect until terminated or modified, in writing, by mutual agreement. Should any claims arising out of this Agreement be asserted against one of the Parties, the Parties agree to extend the fixed termination date of this Agreement, until such time as the claims are settled, dismissed or paid.

II. RECITALS

- A. WHEREAS, CITY intends to widen Monte Vista Avenue at the I-10/Monte Vista Avenue Interchange in the City of MONTCLAIR; and
- B. WHEREAS, planned improvements necessarily include modifications to the existing eastbound and westbound on- and off-ramps, reconstruction of the Monte Vista Avenue undercrossing bridge structure, possible widening of Palo Verde Street between the eastbound on-ramp and Monte Vista Avenue, and the addition of various turn lanes as shown in Attachment A, (“PROJECT”); and
- C. WHEREAS, the PROJECT is identified in the Measure I 2010-2040 Expenditure Plan and SANBAG Nexus Study (Nexus Study) prepared by the San Bernardino Associated Governments (SANBAG), and approved by the SANBAG Board of Directors on November 6, 2013; and

- D. WHEREAS, the Parties consider PROJECT to be high priority and are willing to participate in funding the PROJECT pursuant to the provisions of the Nexus Study; and
- E. WHEREAS, the Parties wish to enter into this Agreement to delineate roles, responsibilities, and funding commitments relative to the Project Management, Planning, and Environmental activities of the PROJECT; and
- F. WHEREAS, should the PROJECT proceed beyond PA/ED phase, a new cooperative Agreement or an amendment to this agreement will be required; and
- G. WHEREAS, the Interstate 10 (I-10) Corridor Project is considering two build alternatives including (1) an express lane alternative, where the existing HOV lane would be combined with an additional I-10 lane widening to implement a total of two Express Lanes in each direction and (2) a high-occupancy vehicle (HOV) alternative that would not include any work at the I-10 Monte Vista Avenue Interchange; and
- H. WHEREAS, the Interstate 10 (I-10) Corridor Project express lane alternative requires additional interchange work at Monte Vista Avenue to accommodate the I-10 project improvements including modifications to the existing eastbound and westbound on- and off-ramps and the Monte Vista Avenue Bridge Undercrossing as described in Attachment A and shown in Attachment B; and
- I. WHEREAS, the I-10 Corridor Project has included preliminary engineering and environmental studies related with the Monte Vista Avenue Interchange improvements concurrently and is scheduled to have the preferred alternative selected in Summer 2016, and obtain environmental clearance in late 2017; and
- J. WHEREAS, if the express lane alternative is selected as the preferred alternative for the I-10 Corridor Project, planned improvements for this alternative include modifications to the existing eastbound and westbound on- and off-ramps and reconstruction of the Monte Vista Avenue Bridge Undercrossing as further described in Attachment A and shown in Attachment B; and
- K. WHEREAS, if the high occupancy vehicle (HOV) alternative is selected as the preferred alternative for the I-10 Corridor Project, a new separate Monte Vista Interchange environmental document for the "PROJECT" would need to be prepared and an amendment to this agreement revising the total cost for the PA/ED phase will be required; and
- L. WHEREAS, the PA/ED phase is extremely difficult to ascertain and determine the actual cost since the interchange studies are being completed concurrently with the I-10 Corridor Project; and
- M. WHEREAS, due to this difficulty, the total cost for the PA/ED phase is estimated to be \$883,600 based on a typical standard practice of estimated PA/ED to be four percent (4%) of the current estimated construction cost of \$22,090,000; and this is to be a shared cost funded

with 24.1% Development Share funds and 75.9% Public Share funds, as defined by the Nexus Study and the SANBAG Measure I 2010-2014 Strategic Plan; and

- N. WHEREAS, the CITY desires the AUTHORITY to provide project management services for the PA/ED phase, estimated at \$100,000; which is to be a shared cost funded with 24.1% Development Share funds (CITY responsibility) and 75.9% Public Share funds (AUTHORITY responsibility), as defined by the Nexus Study and the SANBAG Measure I 2010-2014 Strategic Plan in accordance with AUTHORITY Policy 40005/VFI-33; and
- O. NOW, THEREFORE, the Parties agree to the following:

III. AUTHORITY RESPONSIBILITIES

AUTHORITY agrees:

- A. To be lead agency on Project Management, PA/ED work and to diligently undertake and complete the PA/ED work on PROJECT, including the selection and retention of consultants. Performance of services under these consultant contracts shall be subject to the technical direction of the AUTHORITY's Director of Project Delivery, or his designee, with input and consultation from CITY.
- B. To contribute towards the PA/ED phase of the PROJECT costs a lump sum of \$670,652 and a lump sum of \$75,900 for SANBAG management for a total amount of \$746,552 as shown in Attachment A.
- C. To include CITY in Project Development Team (PDT) meetings and related communications on PROJECT progress as well as to provide CITY with copies of PDT meeting minutes and action items.
- D. To provide CITY an opportunity to review and comment on the Planning and Environmental project documents.

IV. CITY RESPONSIBILITIES

CITY agrees:

- A. To reimburse AUTHORITY, following the PA/ED phase, a lump sum of \$212,948 towards the PA/ED phase of the PROJECT cost and a lump sum of \$24,100 for SANBAG management for a total amount of \$237,048 as shown in Attachment A. This reimbursement shall be paid to AUTHORITY according to the following payment schedule: 50% of total amount paid within 60 days of execution of this Agreement, remaining 50% within 60 days of the Record of Decision following PA/ED approval.
- B. To designate a responsible staff member that will be CITY's representative in attending the PDT meetings, receiving day-to-day communication and reviewing the project documents.

- C. To complete review and provide comments on the PA/ED documents within one month of receiving the review request from AUTHORITY.
- D. CITY's Director of the Department of Public Works is authorized to act on behalf of CITY under this Section of the Agreement.

V. **MUTUAL RESPONSIBILITIES**

The Parties agree:

- A. To abide by all applicable Federal, State and Local laws and regulations pertaining to the PROJECT, including policies in the applicable program in the Measure I 2010-2040 Strategic Plan, as amended, as of the Effective Date of this Agreement.
- B. In the event that federal funds are used in the PA/ED phase of work, the PARTIES acknowledge Federal Highway Administration (FHWA) requires that the PROJECT must progress to a capital phase (ROW or construction) within ten years or the federal funds may be required to be repaid to FHWA. Should repayment be required, and is a result of the PROJECT not progressing by choice, repayment it shall be the responsibility of the PARTY that determines it is unable to move forward with the PROJECT. If it is mutually decided that the project will not move forward then repayment of any federal funds used for Public Share will be the responsibility of the AUTHORITY and any federal funds used for the Local Share will be the responsibility of the CITY.
- C. Neither AUTHORITY nor any officer, director, employee or agent thereof is responsible for any injury, damage or liability occurring or arising by reason of anything done or omitted to be done by CITY under or in connection with any work, authority or jurisdiction delegated to CITY under this Agreement. It is understood and agreed that, pursuant to Government Code Section 895.4, CITY shall fully defend, indemnify and save harmless AUTHORITY, its officers, directors, employees or agents from all claims, suits or actions of every name, kind and description brought for or on account of injury (as defined by Government Code Section 810.8) occurring by reason of anything done or omitted to be done by CITY under or in connection with any work, authority or jurisdiction delegated to CITY under this Agreement.
- D. Neither CITY nor any officer, director, employee or agent thereof is responsible for any injury, damage or liability occurring or arising by reason of anything done or omitted to be done by AUTHORITY and under or in connection with any work, authority or jurisdiction delegated to AUTHORITY under this Agreement. It is understood and agreed that, pursuant to Government Code Section 895.4, AUTHORITY shall fully defend, indemnify and save harmless CITY, its officers, directors, employees or agents from all claims, suits or actions of every name, kind and description brought for or on account of injury (as defined by Government Code Section 810.8) occurring by reason of anything done or omitted to be done by AUTHORITY under or in connection with any work, authority or jurisdiction delegated to AUTHORITY under this Agreement.
- E. The Recitals to this Agreement are true and correct and are incorporated into this Agreement.

- F. All signatories hereto warrant that they are duly authorized to execute this Agreement on behalf of said Parties and that by executing this Agreement, the Parties hereto are formally bound to this Agreement.
- G. Except on subjects preempted by federal law, this Agreement shall be governed by and construed in accordance with the laws of the State of California. All Parties agree to follow all local, state, county and federal laws and ordinances with respect to performance under this Agreement.
- H. The Parties agree that each Party and any authorized representative, designated in writing to the Parties, and upon reasonable notice, shall have the right during normal business hours to examine all Parties' financial books and records with respect to this Agreement. The Parties agree to retain their books and records for a period of five (5) years from the later of: a) the date on which this Agreement terminates; or b) the date on which such book or record was created.
- I. If any clause or provisions of this Agreement is illegal, invalid or unenforceable under applicable present or future laws, then it is the intention of the Parties that the remainder of this Agreement shall not be affected but shall remain in full force and effect.
- J. This Agreement cannot be amended or modified in any way except in writing, signed by all Parties hereto.
- K. Neither this Agreement, nor any of the Parties rights, obligations, duties, or authority hereunder may be assigned in whole or in part by either Party without the prior written consent of the other Party in its sole, and absolute, discretion. Any such attempt of assignment shall be deemed void and of no force and effect.
- L. No waiver of any default shall constitute a waiver of any other default whether of the same or other covenant or condition. No waiver, benefit, privilege, or service voluntarily given or performed by a Party shall give the other Party any contractual rights by custom, estoppel, or otherwise.
- M. In the event of litigation arising from this Agreement, each Party to this Agreement shall bear its own costs, including attorney(s) fees. This paragraph shall not apply to the costs or attorney(s) fees relative to paragraphs C and D of this Section.
- N. This Agreement may be signed in counterparts, each of which shall constitute an original. This Agreement is effective upon the date executed by AUTHORITY.
- O. Any notice required, authorized or permitted to be given hereunder or any other communications between the Parties provided for under the terms of this Agreement shall be in writing, unless otherwise provided for herein, and shall be served personally or by reputable courier addressed to the relevant party at the address/fax number stated below:

If to AUTHORITY: Garry Cohoe
Director of Project Delivery
1170 West Third Street, Second Floor
San Bernardino, CA 92410-1715
Telephone: (909) 884-8276

If to CITY: Michael C. Hudson
Public Works Director (City Engineer)
5111 Benito Street
Montclair, CA 91763-2808
Telephone: (909) 625-9441

- P. There are no third party beneficiaries, and this Agreement is not intended, and shall not be construed to be for the benefit of, or be enforceable by, any other person or entity whatsoever.
- Q. Attachments A and B are attached to and incorporated into this Agreement by this reference.

SIGNATURES ON FOLLOWING PAGE:

**SIGNATURE PAGE TO
COOPERATIVE AGREEMENT NO. 151001291
BETWEEN
SAN BERNARDINO COUNTY TRANSPORTATION AUTHORITY
and CITY OF MONTCLAIR**

**SAN BERNARDINO COUNTY
TRANSPORTATION AUTHORITY**

CITY OF MONTCLAIR

By: _____
Ryan McEachron
President, Board of Directors

By: _____
Paul M. Eaton
Mayor, City of Montclair

Date: _____

Date: _____

APPROVED AS TO FORM

ATTEST:

By: _____
Eileen Monaghan Teichert
General Counsel

By: _____
Andrea M. Phillips
Deputy City Clerk

By: _____
Jeffery Hill
Procurement Manager

APPROVED AS TO FORM:

By: _____
Diane E. Robbins
City Attorney

Attachment: 151001291-Monte Vista CA [Revision 2] (1674 : I-10 Monte Vista Interchange Project)

Attachment A

PROJECT DESCRIPTION

The CITY of Montclair and AUTHORITY propose to widen the existing eastbound and westbound on- and off-ramps, Monte Vista Avenue, Palo Verde Street and reconstruct the existing Interstate 10 (I-10) Monte Vista Avenue Bridge undercrossing as shown in the concept plan (Attachment B). The Planning and Environmental work is included as part of the Interstate 10 (I-10) Corridor Project. The estimate for full construction and project delivery is approximately \$37 million.

PROJECT FUNDING TABLE

Public Share: 75.9%

Nexus Development Impact Fee Share (DIF, "Development Share" or "Local Share"): 24.1%

Phase	Estimated Cost ¹	Shares per Nexus Study		Actual Contribution ²	
		Public Share	Development Share	Public Share	Development Share
Project Report and Environmental Approval	\$883,600	\$670,652	\$212,948	\$670,652	\$212,948
AUTHORITY Oversight ³	\$100,000	\$75,900	\$24,100	\$75,900	\$24,100
Total	\$983,600	\$746,552	\$237,048	\$746,552	\$237,048

¹Estimated Costs are based on May 2015 estimates.

²AUTHORITY and CITY agree to pay the lump sum costs in accordance with this cooperative agreement.

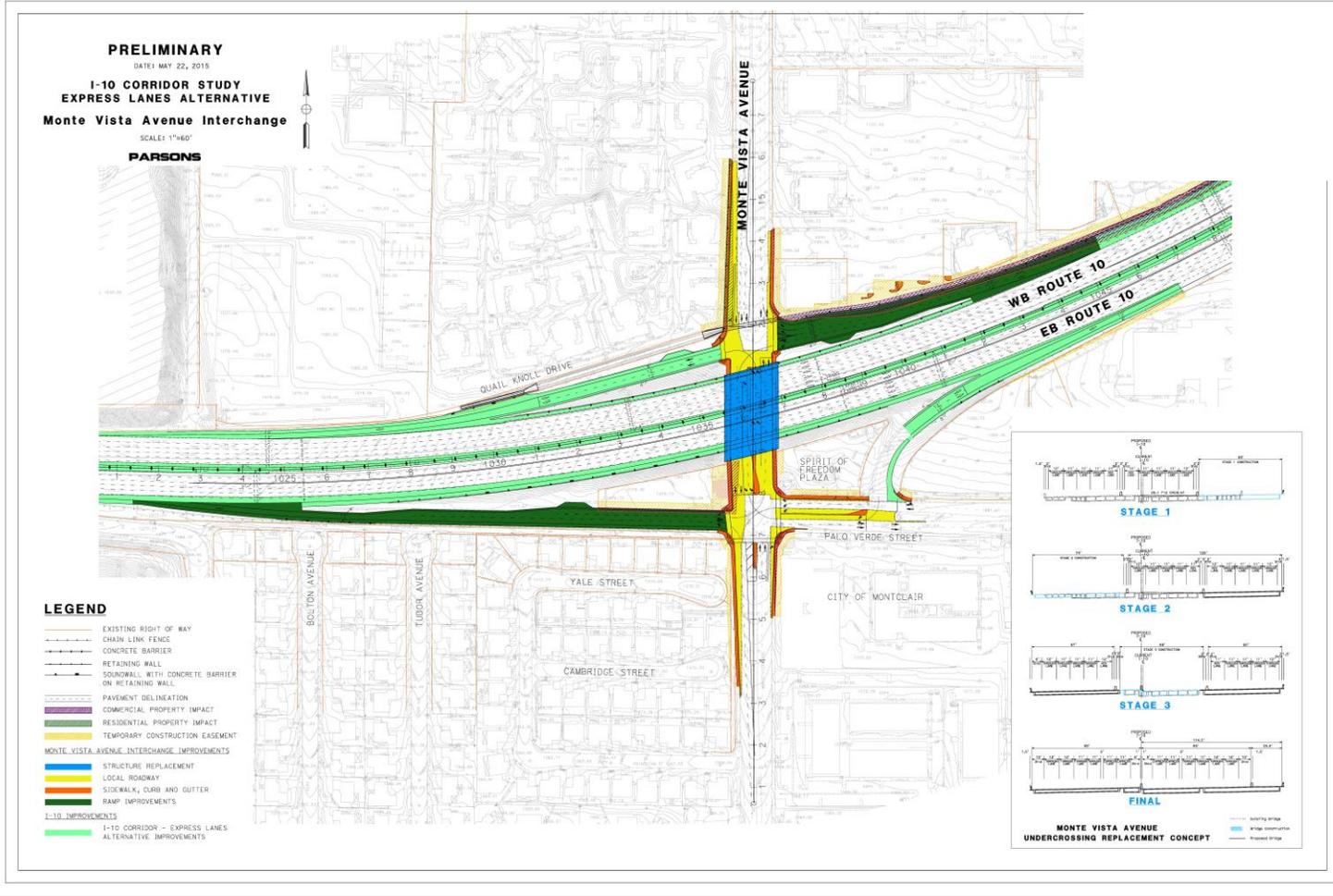
³ In accordance with Measure I Strategic Plan Policy [40005/VFI-33](#) AUTHORITY Oversight costs are to be distributed per the Public and DIF shares established in the Nexus Study.

PROJECT SCHEDULE

Currently the I-10 Monte Vista Interchange schedule is similar to the I-10 Corridor delivery schedule as shown here below with approximately milestones:

Milestones	Estimated Completion Date
Environmental Approval	Winter 2017
Plans, Specifications & Estimate (PSE)	Winter 2018
Right of Way (ROW)	Winter 2018
Construction Start	Spring 2019
Completion for Beneficial Use	Winter 2021

Attachment B CONCEPTUAL LAYOUT



Minute Action

AGENDA ITEM: 10

Date: August 13, 2015

Subject:

Monte Vista Avenue Grade Separation Project

Recommendation:

That the following be reviewed and recommended for final approval by the Board of Directors, acting in its capacity as the San Bernardino County Transportation Authority, at a regularly scheduled Board meeting:

- A. Approve Cooperative Agreement No. 15-1001297 with the City of Montclair for the construction of the Monte Vista Avenue Grade Separation Project, which defines roles and responsibilities for SANBAG and the City of Montclair for this project including having SANBAG be the lead agency for construction. The Agreement also provides funding responsibilities for each agency based on the public and developer shares from the SANBAG Nexus study, whereby SANBAG would be responsible for 81.1% of project cost, or an estimated \$15,673,386 before project buy downs;
- B. Approve amendment to increase the SANBAG Fiscal Year 2015/2016 budget to establish a new project under Task 0840 (Grade Separation Projects) for the Monte Vista Avenue Grade Separation Project in the amount of \$400,000 for preconstruction activities;
- C. Authorize release of Request for Proposals (RFP) No. 15-1001298 for Construction Management Services for the Monte Vista Avenue Grade Separation Project;
- D. Authorize the Executive Director to execute a purchase order in an amount not to exceed \$50,000 for constructability review and preconstruction services.

Background:

In 2000, the Monte Vista Avenue Grade Separation over the Union Pacific Railroad (UPRR) in the City of Montclair was one of five prioritized grade separation projects identified for funding allocations by SANBAG as part of the Traffic Congestion Relief Program (TCRP). The City of Montclair, acting as lead agency, initiated project development in 2001. Due to various funding constraints, the project has been placed on hold multiple times. The project had Federal and State environmental clearance, a completed design, and all right of way had been acquired for the project by 2014. Due to the project schedule delays, the construction and maintenance agreement with Union Pacific Railroad (UPRR) had lapsed. Based on new criteria from the railroad, the City is currently executing the design of a revised bridge structure as required by UPRR which is anticipated to be finished in early 2016. Prior to this year, all project costs have been funded by SANBAG TCRP funds and City of Montclair funds.

Recommendation A: The City of Montclair has requested that SANBAG act as the lead agency during the construction phase of the project. This Cooperative Agreement is needed to advance the project to the construction phase and will define roles and responsibilities as well as the

Entity: CTA

Board of Directors Metro Valley Study Session Agenda Item

August 13, 2015

Page 2

project funding plan. Funding for the estimated \$19,326,000 in construction costs is subject to the Nexus Study with a public share of 81.1% (\$15,673,386) and a development share of 18.9% (\$3,652,614). Project buy down funds are anticipated from the UPRR required project contribution. In addition, an allocation request for Public Utilities Commission Section 190 funds is anticipated to be submitted in 2016. All buy down funds will reduce the public share and development share proportionally. The public share is anticipated to be funded with \$12,460,000 of Projects of National and Regional Significance (PNRS) funds, \$1,848,770 of Trade Corridor Improvement Fund (TCIF) funds and \$1,364,616 of Measure I Valley Major Street Program (Grade Separations) funds. If UPRR and Section 190 funds are obtained, the Measure I funds will be reduced according to the public share of the total buy down. With the City request to have SANBAG lead the construction phase, SANBAG project management costs are to be solely paid by development share per Measure I Strategic Plan Policy 40006/VMS-29 and VMS-30.

Staff is recommending approval of Cooperative Agreement No. 15-1001297 with the City of Montclair for the construction of the Monte Vista Avenue Grade Separation Project

Recommendation B: The Monte Vista Avenue Grade Separation project is currently not in the SANBAG budget. Staff is recommending an amendment to the SANBAG Fiscal Year 2015/2016 budget to establish a new project under Task 840 for the Monte Vista Avenue Grade Separation Project with a budget of \$400,000 for preconstruction activities. The funding source will be \$125,000 in Developer Share from the City of Montclair per Agreement 15-1001297 and \$275,000 from Measure I Valley Major Street Program (Grade Separations) funds.

Recommendation C: SANBAG is requesting authorization to solicit proposals from qualified firms to assist SANBAG with Construction Management Services for the Monte Vista Avenue Grade Separation Project. The total estimated construction capital cost is \$16.805 million. The final design is currently led by the City of Montclair and is scheduled for completion in early 2016. Selection of a Construction Management firm by the end of 2015 will allow a constructability review to be completed prior to completion of the final design. This RFP will follow federal guidelines and the award of the contract is contingent upon Caltrans' issuance of a Conformance Letter and correction of any noted deficiencies, as required by Caltrans' Local Assistance Procedures Manual. An agenda item for the Board to consider approving a contract with the selected firm will be brought forward after completion of the selection process, contract negotiations, and completion of a pre award audit.

Staff is recommending authorization for advertisement of Request for Proposals (RFP) No. 15-1001298 for Construction Management Services for the Monte Vista Avenue Grade Separation Project.

Recommendation D: State or Federally funded Architectural/Engineering contracts are subject to audit. Because federal funds are programmed on this anticipated construction management contract, a pre-award audit is required. This audit process can be lengthy. The purpose of the requested purchase order would allow the selected consultant to perform a constructability review and preconstruction services prior to the execution of the contract between the consultant firm and SANBAG. The services performed by the firm under the purchase order will not be provided or compensated under the contract, once executed.

Board of Directors Metro Valley Study Session Agenda Item

August 13, 2015

Page 3

The required pre-award audit takes place after SANBAG's audit of the firm's indirect cost rate and entails providing documentation that support certification of the accuracy of the consultant and sub-consultant indirect cost rates and the adequacy of their financial management systems. In addition, SANBAG must submit copies of the proposed contract and additional supporting documentation to Caltrans Audits and Investigations for review in conformance with requirements outlined in the Local Assistance Procedures Manual. After a consultant and agency documentation submittal, Caltrans will review and issue a Conformance Letter within 30 days, noting deficiencies, if any. The construction management contract cannot be executed until the Conformance Letter is issued. This purchase order is important because it allows necessary preconstruction activity to occur and avoids delay to the advertisement and award of the project construction contract.

Staff is recommending authorization by the Executive Director to execute a purchase order in an amount not to exceed \$50,000 for constructability review and preconstruction services.

Financial Impact:

This item increases the Fiscal Year 2015/2016 budget to establish a new project under Task 840 for the Monte Vista Avenue Grade Separation Project in the amount of \$400,000 for preconstruction activities. The funding source will be \$125,000 in Developer Share from the City of Montclair per Agreement 15-1001297 and \$275,000 from Measure I Valley Major Street Program (Grade Separations) funds.

Reviewed By:

This item is not scheduled for review by any other policy committee or technical advisory committee. SANBAG General Counsel and Procurement Manager have reviewed this item, the draft agreement and the RFP.

Responsible Staff:

Dennis Saylor, Project Manager

Approved
Board of Directors Metro Valley Study Session
Date: August 13, 2015

Witnessed By:

Contract Summary Sheet

General Contract Information

Contract No: 15-1001297 Amendment No.: 0 Vendor No.: 01455
 Vendor/Customer Name: City of Montclair Sole Source? Yes No
 Description: Monte Vista Grade Separation Cooperative Agreement
 Start Date: 09/02/2015 Expiration Date: 08/31/2020 Revised Expiration Date: _____
 Has Contract Term Been Amended? No Yes - Please Explain _____
 List Any Related Contracts Nos.: _____

Dollar Amount			
Original Contract	\$ 3,927,614.00	Original Contingency	\$ -
Revised Contract (Inclusive of Prior Amendments)	\$ -	Revised Contingency (Inclusive of Prior Amendments)	\$ -
Current Amendment	\$ -	Contingency Amendment	\$ -
TOTAL CONTRACT VALUE	\$ 3,927,614.00	TOTAL CONTINGENCY VALUE	\$ -
		TOTAL DOLLAR AUTHORITY (Contract Value and Contingency)	\$ 3,927,614.00

Contract Authorization

Executive Director Date: _____
 Executive Director Action: _____
 Board of Directors Date: 09/02/2015
 Board of Directors Action: Approve Agreement 15-1001297

Contract Management: Payable/Miscellaneous

Invoice Warning: 20% Renewals: _____ Type: Capital PAA Other
 Retention: _____% Maximum Retention: \$ _____
 Services: Construction Intrgrnt/MOU/COOP A & E Services Other Professional Services
 Disadvantaged Business Enterprise (DBE) Goal _____%

Contract Management: Receivable

E-76 and/or CTC Date _____ (Attach Copy) Program Supplement No.: _____
 Finance Letter Reversion Date: _____ EA No.: _____

All of the above MUST be submitted to FINANCE including originals, amendments and miscellaneous transaction changes

Additional Information

Project Manager: Brian Smith

Attachment: 15-1001297 CSS (1752 : Monte Vista Ave. Grade Separation - Coop Agmt, RFP, Budget Amend)

COOPERATIVE AGREEMENT NO. 15-1001297

BETWEEN

SAN BERNARDINO COUNTY TRANSPORTATION AUTHORITY

AND

CITY OF MONTCLAIR

FOR

**CONSTRUCTION PHASES FOR THE GRADE SEPARATION AT
MONTE VISTA AVENUE/UPRR IN THE CITY OF MONTCLAIR**

I. PARTIES AND TERM

- A. THIS COOPERATIVE AGREEMENT (“Agreement”) is made and entered into by and between the San Bernardino County Transportation Authority (hereinafter referred to as “AUTHORITY”) and the City of MONTCLAIR (CITY), (AUTHORITY and CITY may be referred to herein as a “Party” and collectively “Parties”).
- B. This Agreement shall terminate upon completion of AUTHORITY’s project management of the construction, or August 31, 2020, whichever is earlier in time, except that the indemnification provisions shall remain in effect until terminated or modified, in writing, by mutual agreement. Should any claims arising out of this Agreement be asserted against one of the Parties, the Parties agree to extend the fixed termination date of this Agreement until such time as the claims are settled, dismissed, or paid.

II. RECITALS

- A. WHEREAS, CITY intends to grade separate the Union Pacific Railroad (UPRR) crossing at Monte Vista Avenue in the City of MONTCLAIR by constructing a bridge to carry the Monte Vista Avenue traffic over the Union Pacific Railroad; and
- B. WHEREAS, planned improvements also include improvements to existing streets, sewers, storm drains, water mains, traffic signals, and related work necessitated by the grade separation and is defined as the “PROJECT”; and
- C. WHEREAS, the PROJECT is identified in the Measure I 2010-2040 Expenditure Plan and SANBAG Nexus Study (Nexus Study) prepared by the San Bernardino Associated Governments (SANBAG), and approved by the SANBAG Board of Directors on November 6, 2013; and
- D. WHEREAS, the Parties consider PROJECT to be high priority and are willing to participate in funding the PROJECT pursuant to the provisions of the Nexus Study; and

- E. WHEREAS, the Parties wish to enter into this Agreement to delineate roles, responsibilities, and funding commitments relative to the Construction activities of the PROJECT.
- F. WHEREAS, the project Construction phase is estimated to cost a total of \$19,601,000, which includes \$275,000 for the AUTHORITY to provide Project Management services for the Project; and
- G. WHEREAS, Project Management services for the Project includes coordination and involvement in final design, preconstruction, construction, and project closeout phases.
- H. WHEREAS, the CITY is the lead on completing the Environmental, Right of Way (ROW), and Final Design Phases of the project; and
- I. WHEREAS, the CITY desires AUTHORITY to provide project management services, estimated at \$275,000, for the Project, and understands it is the CITY's sole responsibility to pay 100% of actual AUTHORITY Project Management costs in accordance with AUTHORITY Measure I Strategic Plan Policy 40006/VMS-29 and -30; and
- J. WHEREAS, the Parties agree that AUTHORITY will act as the lead agency for the Construction phase of the Project; and
- K. WHEREAS, the remaining PROJECT cost, aside from AUTHORITY Project Management costs, for the Planning, Environmental, PS&E, ROW, and Construction phases is estimated at \$19,326,000, which shall be funded with 18.9% Development Share funds and 81.1% Public Share funds as defined by the Nexus Study and the SANBAG Measure I 2010-2014 Strategic Plan after application of any buy downs, as noted in Paragraphs "H" and "I" in Section V, in accordance with AUTHORITY Measure I Strategic Plan Policy 40001/VS-30.

NOW, THEREFORE, the Parties agree to the following:

III. AUTHORITY RESPONSIBILITIES

AUTHORITY agrees:

- A. To be lead agency on Project Management and Construction work on PROJECT, including the selection and retention of consultants. Performance of services under these consultant contracts shall be subject to the technical direction of the AUTHORITY's Director of Project Delivery, or his designee, with input and consultation from CITY.
- B. To contribute towards the Construction phase of the PROJECT cost an amount not to exceed \$15,673,386 as shown in Attachment A. The actual cost of a specific contract may ultimately vary from the estimates provided in Attachment A, however, under no circumstances is the total combined AUTHORITY contribution to exceed \$15,673,386 without an amendment to this Agreement.
- C. To prepare and submit to CITY an original and one copy of signed invoices for reimbursement of eligible PROJECT expenses. Invoices may be submitted to CITY as frequently as monthly.

- D. To establish and maintain an accounting system conforming to Generally Accepted Accounting Principles (GAAP) to support AUTHORITY's request for reimbursement, payment vouchers, or invoices which segregate and accumulate costs of PROJECT Management and Construction work elements, and produce monthly reports which clearly identify reimbursable costs, matching fund costs, indirect cost allocation, and other allowable expenditures by AUTHORITY.
- E. To prepare a final accounting of expenditures, including a final invoice for the actual PROJECT Management and Construction costs. The final accounting and invoice shall be submitted no later than one hundred and twenty (120) calendar days following the completion of work and shall be submitted to CITY. The invoice shall include a statement that these PROJECT funds were used in conformance with this Agreement and for those PROJECT-specific Construction work activities.
- F. To cooperate in having a PROJECT-specific audit completed by CITY, at its option, upon completion of the PROJECT Construction work. The audit should justify and validate that all funds expended on the PROJECT were used in conformance with this Agreement.
- G. To reimburse CITY for costs that are determined by subsequent audit to be unallowable within ninety (90) calendar days of AUTHORITY receiving notice of audit findings, which time shall include an opportunity for AUTHORITY to respond to and/or resolve the finding. Should the finding not be otherwise resolved and AUTHORITY fails to reimburse monies due CITY within ninety (90) calendar days of audit finding, or within such other period as may be agreed between both Parties hereto, the CITY's Council reserves the right to withhold future payments due AUTHORITY from any source under CITY's control.
- H. To obtain the federal funding obligation (i.e., FNM-76/E-76), as needed, from Caltrans Local Assistance.
- I. To include CITY in Weekly Construction progress meetings and related communications on PROJECT progress as well as to provide CITY with copies of progress meeting minutes and action items.
- J. To cooperate in securing and fully complying with its obligations in a Public Highway Overpass Crossing Agreement ("UPRR Overpass Agreement"), by and among UPRR, CITY, and AUTHORITY.
- K. To provide CITY an opportunity to review and comment on the Construction documents.
- L. To serve as the Legally Responsible Person (LRP) for the PROJECT per the statewide Construction General Permit Order No. 2009-009-DWQ, NPDES No. CAS000002, Appendix 5. As the construction of the PROJECT is being administered by AUTHORITY the control of the contract by AUTHORITY does not make CITY eligible to be the LRP to sign the Notice of Intent or their related documents identified in the General Construction Permit (GCP). This Condition qualifies as a special circumstance under the GCP and CITY may authorize the controlling agency to be the LRP for the PROJECT. The CITY's LRP authorizes a representative of AUTHORITY to be designated the "Legally Responsible Person" as noticed in Appendix 5 of the General Construction Permit.

- M. Through its consultants, to administer and inspect all construction work for compliance with the PROJECT plans and specifications.
- N. To be responsible for providing all information to the public regarding the PROJECT's construction in accordance with a mutually acceptable Public Outreach Program established for construction of PROJECT. AUTHORITY will provide the necessary information as needed to keep the public informed of the status, progress, and closures, with coordination with CITY.
- O. To provide written notice to CITY upon AUTHORITY's determination that the Project is substantially completed in accordance with the plans and specifications. For the purposes of this Agreement, "substantially completed" shall mean that the Project can be reasonably used for its intended purposes, notwithstanding that certain nonmaterial work remains to be completed, it being understood that AUTHORITY shall promptly pursue the completion of said nonmaterial work.
- P. Upon completion of construction of PROJECT, AUTHORITY shall deliver to CITY a complete set of redline "as-built" plans of the PROJECT for final preparation of "as-built" plans by CITY.

IV. CITY RESPONSIBILITIES

CITY agrees:

- A. To provide the PROJECT construction bid package and Resident Engineer Files, including the PS&E to AUTHORITY. CITY to provide approval of the PS&E by means of a signature and stamp of approval on the PS&E package. CITY design consultants shall be responsible for the professional quality, technical accuracy, and coordination of all PS&E services. Design consultants may be liable for PROJECT costs resulting from errors or deficiencies, fines, penalties, and damages in services furnished.
 - 1. When a modification to a construction contract is required because of an error or deficiency in the PS&E services provided by CITY, AUTHORITY (with the advice of technical personnel and legal counsel) shall consider the extent to which the design consultant is responsible.
 - 2. CITY shall enforce the liability and collect the amount due, if the recoverable cost will exceed the administrative cost involved or is otherwise in the PROJECT's interest.
- B. To provide and be responsible for all design and environmental consultant(s) Construction Support services required for PROJECT construction. CITY to provide AUTHORITY with final "as-built" plans of PROJECT for AUTHORITY's records.
- C. To participate in consultant selection for construction management services for this PROJECT.

- D. To secure all right-of-way (fee, permanent easements, temporary construction easements, and/or rights of entry) necessary for construction and to allow access to such acquired property to AUTHORITY and its designees for PROJECT construction purposes.
- E. To secure all utility agreements for relocations necessary for construction of PROJECT.
- F. To secure and fully comply with its obligations in a UPRR Overpass Agreement, by and among UPRR, CITY, and AUTHORITY.
- G. To include AUTHORITY in Project Development Team (PDT) meetings and related communications on PROJECT progress as well as to provide AUTHORITY with copies of PDT meeting minutes and action items.
- H. To secure all design, right-of-way and environmental certifications and permits, and other permits as appropriate to satisfy requirements of said permits in accordance with the terms outlined in the respective permits. The contractor(s) shall obtain and pay fees for all other non-environmental and non-City permits required for the construction of the PROJECT.
- I. To approve AUTHORITY to serve as the LRP for the PROJECT per the Statewide Construction General Permit Order No. 2009-009-DWQ, NPDES No. CAS000002, Appendix 5.
- J. To reimburse AUTHORITY for the Development Share of actual costs incurred for the Construction phase of the PROJECT and up to \$275,000 for SANBAG Project Management as shown in Attachment A. The actual cost of a specific contract may ultimately vary from the estimates provided in Attachment A, however, under no circumstances is the total combined CITY contribution to exceed \$3,927,614 without an amendment to this Agreement.
- K. To reimburse AUTHORITY within 30 days after AUTHORITY submits an original and one copy of the signed invoices in the proper form covering those actual allowable PROJECT expenditures and SANBAG management that were incurred by AUTHORITY. Invoices may be submitted to CITY as frequently as monthly.
- L. When conducting an audit of the costs claimed under the provisions of this Agreement, to rely to the maximum extent possible on any prior audit of AUTHORITY performed pursuant to the provisions of State and Federal laws. In the absence of such an audit, work of other auditors will be relied upon to the extent that work is acceptable to CITY when planning on conducting additional audits.
- M. To designate a responsible staff member that will be CITY's representative in attending the PDT meetings, receiving day-to-day communication and reviewing the project documents.
- N. To pay all costs of additional work that is requested by CITY and that is beyond the scope of the original PROJECT.
- O. To seek California Public Utilities Commission (PUC) Section 190 fund allocation for PROJECT.

- P. To accept in writing the PROJECT within thirty (30) days of receipt of written notice from AUTHORITY that the PROJECT is substantially completed as described by Paragraph “O” in Section III, which acceptance shall not be unreasonably withheld or delayed. Withholding or delaying acceptance because of nonmaterial work remaining to be completing shall be deemed unreasonable.
- Q. CITY’s Director of Public Works is authorized to act on behalf of CITY under this Section of the Agreement.
- R. CITY shall provide all City permits and shall waive City fees required to construct the PROJECT. The contractors shall obtain and pay the fees for all other non-City permits required for the construction of the PROJECT.

V. MUTUAL RESPONSIBILITIES

The Parties agree:

- A. To abide by all applicable Federal, State, and Local laws and regulations pertaining to the PROJECT, including policies in the applicable program in the Measure I 2010-2040 Strategic Plan, as amended, as of the Effective Date of this Agreement.
- B. AUTHORITY shall notify CITY of the bids received and the amounts thereof. Within ten (10) days thereafter, AUTHORITY shall determine the construction cost of the PROJECT. If the construction cost is over the capital costs shown in Attachment A, Project Funding Table for the Construction Phase, the Parties agree to meet and confer in good faith to determine how to resolve any potential cost overruns beyond the respective program funding limits.
- C. In the event AUTHORITY determines Project Management costs may exceed the amounts identified in Attachment A of this Agreement, AUTHORITY shall inform CITY of this determination and thereafter the Parties shall work together in an attempt to agree upon an amendment to the amounts identified this Agreement. In no event, however, shall any of the Parties be responsible for PROJECT costs in excess of the amounts identified in this Agreement absent a written amendment that is approved by all Parties.
- D. Eligible PROJECT reimbursements shall include only those costs incurred by AUTHORITY for PROJECT-specific work activities that are described in this Agreement and shall not include escalation or interest.
- E. All contract change orders for the PROJECT shall be approved by AUTHORITY. With respect to a change order exceeding \$210,000, AUTHORITY agrees to first provide such change order to CITY to review and reasonably concur prior to AUTHORITY approval of change orders. Such CITY concurrence shall not be unreasonably withheld or delayed. Claims from the contractor will be resolved using AUTHORITY’s procedures. AUTHORITY will consult with CITY prior to settling any claims, and CITY shall be responsible for funding its share of all settled claims and change orders for the PROJECT.

- F. AUTHORITY is not responsible for maintenance of any facilities constructed as part of this Agreement upon completion of the construction contract.
- G. This Agreement is expressly subordinated to any bonds, notes, certificates, or other evidences of indebtedness involved in bond financings as are now outstanding or as may hereafter be issued by AUTHORITY.
- H. The PROJECT construction is funded by a variety of private, federal, state, and local sources. AUTHORITY will request obligation for all federal funds and request allocations for state funds for the construction phase of the PROJECT. The following fund types are anticipated to be utilized by AUTHORITY on the project:
1. State and Federal
 - i. SAFETEA-LU – Projects of National and Regional Significance (PNRS) funds are anticipated to be used as Public Share.
 - ii. Trade Corridors Improvement Funds (TCIF) funds are anticipated to be used as Public Share.
 2. Local
 - i. Measure I Valley Major Street Program (Grade Separations) funds are anticipated to be used as Public Share.
 - ii. City Development Impact Fee funds are anticipated to be used as Development Share.
 3. Private
 - i. Union Pacific Railroad (UPRR) funds are anticipated to be used to buy down Project costs.
- I. CITY has applied to be on the priority list for a Project allocation from the PUC. CITY will diligently seek to comply with all requirements to submit an allocation request for a \$5 million allocation from the PUC. Should such funding be secured for the project, CITY will request payment from Caltrans. All PUC funds will buy down Project costs.
- J. CITY, independent of PROJECT, is responsible for any hazardous material (including but not limited to hazardous waste) found within PROJECT limits that may require removal and disposal pursuant to federal or state law. AUTHORITY will undertake hazardous material management activities with minimum impact to PROJECT schedule. CITY will pay all costs associated with hazardous material activities including management costs of AUTHORITY.
- K. Neither AUTHORITY nor any officer, director, employee or agent thereof is responsible for any injury, damage or liability occurring or arising by reason of anything done or omitted to be done by CITY under or in connection with any work, authority or jurisdiction delegated to CITY under this Agreement. It is understood and agreed that, pursuant to Government Code Section 895.4, CITY shall fully defend, indemnify and save harmless AUTHORITY, its officers, directors, employees or agents from all claims, suits or actions of every name, kind and description brought for or on account of injury (as defined by Government Code Section 810.8) occurring by reason of anything done or omitted to be done by CITY under or in connection with any work, authority or jurisdiction delegated to CITY under this Agreement.

- L. Neither CITY nor any officer, director, employee or agent thereof is responsible for any injury, damage or liability occurring or arising by reason of anything done or omitted to be done by AUTHORITY and under or in connection with any work, authority or jurisdiction delegated to AUTHORITY under this Agreement. It is understood and agreed that, pursuant to Government Code Section 895.4, AUTHORITY shall fully defend, indemnify and save harmless CITY, its officers, directors, employees or agents from all claims, suits or actions of every name, kind and description brought for or on account of injury (as defined by Government Code Section 810.8) occurring by reason of anything done or omitted to be done by AUTHORITY under or in connection with any work, authority or jurisdiction delegated to AUTHORITY under this Agreement.
- M. This Agreement will be considered terminated upon reimbursement of eligible costs by CITY. Notwithstanding any other provision herein, to the extent consistent with the terms and obligations hereof, any Party may terminate this Agreement at any time, with or without cause, by giving thirty (30) calendar days written notice to all the other Parties. In the event of a termination, the Party terminating this Agreement shall be liable for: 1) any costs or other obligations it or the other Party may have incurred under the terms of the Agreement prior to termination; and 2) the costs of returning the Project site to a mutually acceptable condition.
- N. The Recitals to this Agreement are true and correct and are incorporated into this Agreement.
- O. All signatories hereto warrant that they are duly authorized to execute this Agreement on behalf of said Parties and that by executing this Agreement, the Parties hereto are formally bound to this Agreement.
- P. Except on subjects preempted by federal law, this Agreement shall be governed by and construed in accordance with the laws of the State of California. All Parties agree to follow all local, state, county and federal laws and ordinances with respect to performance under this Agreement.
- Q. The Parties agree that each Party and any authorized representative, designated in writing to the Parties, and upon reasonable notice, shall have the right during normal business hours to examine all Parties' financial books and records with respect to this Agreement. The Parties agree to retain their books and records for a period of five (5) years from the later of: a) the date on which this Agreement terminates; or b) the date on which such book or record was created.
- R. If any clause or provisions of this Agreement is illegal, invalid, or unenforceable under applicable present or future laws, then it is the intention of the Parties that the remainder of this Agreement shall not be affected but shall remain in full force and effect.
- S. This Agreement cannot be amended or modified in any way except in writing, signed by all Parties hereto.
- T. Neither this Agreement, nor any of the Parties' rights, obligations, duties, or authority hereunder may be assigned in whole or in part by either Party without the prior written

consent of the other Party in its sole, and absolute, discretion. Any such attempt of assignment shall be deemed void and of no force and effect.

- U. No waiver of any default shall constitute a waiver of any other default whether of the same or other covenant or condition. No waiver, benefit, privilege, or service voluntarily given or performed by a Party shall give the other Party any contractual rights by custom, estoppel, or otherwise.
- V. In the event of litigation arising from this Agreement, each Party to this Agreement shall bear its own costs, including attorney(s) fees. This paragraph shall not apply to the costs or attorney(s) fees relative to paragraphs J and K of this Section.
- W. This Agreement may be signed in counterparts, each of which shall constitute an original. This Agreement is effective and shall be dated on the date executed by AUTHORITY.
- X. Any notice required, authorized or permitted to be given hereunder or any other communications between the Parties provided for under the terms of this Agreement shall be in writing, unless otherwise provided for herein, and shall be served personally or by reputable courier addressed to the relevant party at the address/fax number stated below:

If to AUTHORITY: Garry Cohoe
 Director of Project Delivery
 1170 West Third Street, Second Floor
 San Bernardino, CA 92410-1715
 Telephone: (909) 884-8276

If to CITY: Michael C. Hudson
 Public Works Director
 5111 Benito Street
 Montclair, CA 91763
 909-625-9441

- Y. There are no third party beneficiaries, and this Agreement is not intended, and shall not be construed to be for the benefit of, or be enforceable by, any other person or entity whatsoever.
- Z. Attachment A is attached to and incorporated herein by this reference.

SIGNATURES ON FOLLOWING PAGE:

**SIGNATURE PAGE TO
COOPERATIVE AGREEMENT NO. 15-1001297
BETWEEN
SAN BERNARDINO COUNTY TRANSPORTATION AUTHORITY
and CITY OF MONTCLAIR**

**SAN BERNARDINO COUNTY
TRANSPORTATION AUTHORITY**

CITY OF MONTCLAIR

By: _____
Ryan McEachron
President, Board of Directors

By: _____
Paul M. Eaton
Mayor

Date: _____

Date: _____

APPROVED AS TO FORM

APPROVED AS TO FORM:

By: _____
Eileen Monaghan Teichert
General Counsel

By: _____
Diane Robbins
City Attorney

ATTEST

By: _____
Jeffery Hill
Procurement Manager

By: _____
Andrea M. Phillips
Deputy City Clerk

Attachment: 15-1001297 Coop with Montclair [Revision 3] (1752 : Monte Vista Ave. Grade Separation - Coop Agmt, RFP, Budget Amend)

Attachment A

PROJECT DESCRIPTION

The CITY of Montclair and SANBAG propose to construct a grade separation crossing at Monte Vista Avenue Union Pacific Railroad Crossing. The cost estimate for the construction phase of the project is approximately \$19,601,000.

PROJECT FUNDING TABLE

Public Share: 81.1% - \$15,673,386 before buy downs

Nexus Development Impact Fee Share (DIF, "Development Share" or "Local Share"): 18.9% - \$3,927,614 before buy downs

Phase	Estimated Cost ¹	Shares per Nexus Study Before Buy Downs ²	
		Public Share	Development Share
Construction Management	\$2,521,000	\$2,044,531	\$476,469
Construction Capital	\$16,805,000	\$13,628,855	\$3,176,145
SANBAG Project Management ³	\$275,000	\$0	\$275,000
TOTAL	\$19,601,000	\$15,673,386	\$3,927,614

¹ Estimated Costs are based on April 2015 estimates.

² Any future UPRR project contribution or PUC allocation will buy down total project cost in accordance with Measure I Strategic Plan Policy 40001/VS-30. Buy down amounts will cause proportional adjustment of Public and Development Shares.

³ In accordance with Measure I Strategic Plan Policy VMS-29 and VMS-30 SANBAG Project Management costs are to be paid solely by Development Share.

PROJECT SCHEDULE

Currently the Monte Vista Avenue Grade Separation schedule is as shown here below with approximate milestones:

Milestones	Estimated Completion Date
Environmental Approval	Summer 2013
Plans, Specifications & Estimate (PSE)	Winter 2016
Right of Way (ROW)	Winter 2013
Construction Start	Winter 2017
Completion for Beneficial Use	Summer 2018

ATTACHMENT A - SCOPE OF WORK

INDEX

- A. DESCRIPTION OF SERVICES
- B. PERFORMANCE REQUIREMENTS
- C. DUTIES AND RESPONSIBILITIES
 - 1. Pre-construction Services
 - 2. Bid Process
 - 3. Project Administration
 - 4. Construction Coordination
 - 5. Construction Inspection
 - 6. Project Support
 - 7. Cost and Schedule
 - 8. Change Orders and Claims
 - 9. Safety
 - 10. Project Close Out
- D. DELIVERABLES
- E. EQUIPMENT AND MATERIALS TO BE PROVIDED BY CONSULTANT
- F. MATERIALS TO BE FURNISHED BY SANBAG
- G. STANDARDS
- H. AVAILABILITY AND WORK HOURS
- I. LIMITATIONS TO AUTHORITY
- J. THIRD PARTY RELATIONSHIPS
- K. CONSTRUCTION SITE SAFETY
- L. BASIS FOR SURVEY AND MONUMENT MARKING
- M. PERSONNEL QUALIFICATIONS

A. DESCRIPTION OF SERVICES

The San Bernardino County Transportation Authority (SANBAG) will utilize the services of CONSULTANT to support the construction activities for the Project. The CONSULTANT will provide construction management, materials testing, construction surveying and public outreach for the Project. A description of the Project is given below.

Monte Vista Grade Separation Project

The construction project is located near the intersection of Monte Vista Avenue and the UPRR railroad tracks in the City of Montclair. This project proposes to construct a new grade separation to improve access for the area. The construction project includes the following work elements:

- Construction of:
 - Railroad bridge
 - Retaining walls
 - Traffic Signals and other electrical improvements

The project will also include paving, utility relocations, drainage modifications, signing and striping, traffic handling, and erosion control.

SANBAG intends to advertise, award and administer one construction contract for this project. The successful consultant firm will provide the construction management and support services.

Services

Services are anticipated to generally include, but are not limited to the following: participation in the evaluation of scheduling of the proposed project; constructability review; construction project advertising, bid analysis, and award; construction inspection; construction surveying, materials testing, landscape inspection, contractor interface and contract administration; office engineering; public outreach services and other assorted duties as appropriate in managing construction of a capital railroad grade separation improvement project.

It is expected that the Consultant will assign a full-time Resident Engineer to coordinate all contract and personnel activities for all phases of construction. Other Resident Engineer(s) and inspection personnel may be assigned to direct and coordinate all project specific field activities and responsibilities as needed for satisfactory performance on the project. The Resident Engineer and every Resident Engineer assigned for this project shall be licensed as a Professional Civil Engineer in the State of California at the time of proposal submittal through the duration of the contract. The Consultant is expected to provide a Survey Project Manager, Materials Testing and Project Manager to administer the construction support services requested herein and to assign qualified field personnel to perform the requested services. Furthermore, the Consultant shall provide a public outreach liaison to assist the Authority's Public Information Office in implementing the Public Outreach Program established for this project.

Insofar as the Consultant's approach described in the Proposal, the scope of responsibility and the total number of personnel assigned to each phase is left to the discretion of the Consultant. The Proposal shall include a staffing plan, an organization chart and a resource loaded schedule that establish the firm's ability to adequately and appropriately staff and manage the project.

SANBAG anticipates that the total contract will be approximately 20 months in duration, with preconstruction services starting in January 2016, advertise construction contract in August 2016, award construction contract in November 2016, and construction starting in January 2017 and ending in July 2018. Project closeout activities not exceeding two months. The estimated construction capital cost of the project is about \$16.805 million.

CONSULTANT shall provide qualified construction management and inspection, materials testing, construction surveying and public relations personnel to perform a wide variety of construction management, support and contract administration duties as outlined in this Scope of Services for the Project.

The SANBAG Director of Project Delivery has designated a Project Manager to coordinate all construction activities.

Mr. Mike Barnum, Construction Manager

The CONSULTANT shall report to and receive direction from SANBAG through the Project Manager, or his designees. The SANBAG Project Manager is responsible for coordination of all SANBAG construction activities and for coordinating the efforts of the total construction team. The SANBAG Project Manager will be the main contact and primary source of information between SANBAG, cities, outside agencies, supporting consultants and the public for the construction projects.

B. PERFORMANCE REQUIREMENTS

Construction Management: CONSULTANT shall furnish a Project Manager to coordinate CONSULTANT operations with SANBAG. The Project Manager shall be responsible for all matters related to CONSULTANT personnel and operations. The Project Manager may also serve as the Resident Engineer.

CONSULTANT shall also furnish a Resident Engineer. The Resident Engineer shall be assigned to direct and coordinate construction activities under this contract. Other Assistant Resident Engineers may be assigned to each specific project responsibilities as needed. The Resident Engineer shall be a Civil Engineer registered in the State of California and shall be in responsible charge of construction management and construction activity within the Project.

The number of CONSULTANT personnel assigned to the Project will vary throughout the duration of the contract. CONSULTANT personnel will be assigned, in varying levels of responsibility, as needed by the CONSULTANT to meet the Project schedule, Project requirements, and construction activities.

Resumes of personnel must be submitted to SANBAG for review and approval prior to assignment to the Project. SANBAG and CONSULTANT will jointly determine the quality and quantity of services that are required by CONSULTANT personnel. Personnel selected for assignment by CONSULTANT shall be made available for personal interviews prior to acceptance by SANBAG. If, in the opinion of SANBAG, an individual lacks adequate experience, the individual may be rejected or may be accepted on a trial basis until such time the individual's ability to perform the required services has been demonstrated. If, at any time, the performance of CONSULTANT personnel is unsatisfactory to SANBAG, SANBAG may release him/her by written notice and may request another qualified person be assigned.

If CONSULTANT personnel are on leave of absence, the Project Manager shall provide equally

qualified replacement personnel until the assigned personnel returns to the Project approved by SANBAG.

The typical workday includes all hours worked by the construction Contractor. If necessary, overtime for CONSULTANT personnel may be required. The construction Contractor's operations may be restricted to specific hours during the week, which shall become the normal workday for CONSULTANT personnel. The Project Manager, with prior concurrence from SANBAG, shall have the authority to increase, decrease, or eliminate CONSULTANT personnel work hours dependent on the schedule and requirements of the construction Contractor. All overtime required by CONSULTANT personnel shall be approved and authorized by SANBAG prior to each occurrence.

CONSULTANT personnel shall be knowledgeable of and comply with all applicable local, state, and federal regulations. CONSULTANT personnel shall cooperate and consult with SANBAG, State, and City officials during the course of the Project. CONSULTANT personnel shall perform duties as may be required to assure that construction is being performed in accordance with the Project plans and specifications. CONSULTANT personnel shall keep accurate and timely records and document all work performed by the Contractor and CONSULTANT.

CONSULTANT shall monitor for Contractor's compliance with the labor standards provisions of the projects and the related wage determination decisions of the Secretary of Labor.

CONSULTANT personnel shall assist SANBAG and local agencies in obtaining compliance with the safety and accident prevention provisions of the Project. Local agencies will retain jurisdictional control for traffic control.

All services required herein shall be performed in accordance with California Department of Transportation guidelines, regulations, policies, procedures, manuals, and standards, except as noted in the special provisions.

Materials Testing & Source Inspection: The number of field testing and source inspection personnel assigned to the Project will vary throughout the duration of the construction contract. CONSULTANT certified materials testing and source inspection personnel will be assigned as needed by the Resident Engineer to meet the required numbers and frequencies of testing based on schedule of the construction contractor.

Materials Testing /Source Inspection Services will be provided on an on-call basis. The duration of assignments could vary from a minimum of a few hours to the full term of the Project. CONSULTANT personnel will be available within one (1) day of written notification by SANBAG.

It is the intent of SANBAG to maintain a consistency of material testing/source inspection quality throughout each phase of each project. CONSULTANT is therefore encouraged to provide, where ever and whenever possible, the same personnel for the duration of construction of each project.

On days when work is not performed by the construction contractor, such as rainy or unsuitable weather days, CONSULTANT will not provide services unless authorized by the SANBAG Project Manager.

Consultant shall be responsible for finalizing a Source Inspection Quality Management Plan (SIQMP) to match the project requirements, assist SANBAG in gaining Caltrans approval, and manage the SIQMP. The SIQMP shall meet SANBAG and Caltrans requirements. Consultant

shall provide Structural Materials Representative (SMR), Steel inspectors, Non-destructive Steel Inspectors, Coating Inspectors, Precast Concrete Inspectors and other source inspectors as needed.

All CONSULTANT personnel will be knowledgeable of, and comply with, all applicable local, state, and federal regulations. All personnel shall cooperate and consult with SANBAG during the course of the contract; and perform other duties as may be required to assure that the construction is being performed in accordance with the Project plans and specifications. CONSULTANT's personnel will keep records and document the work as directed by the Resident Engineer.

All services required herein will be performed in accordance with Caltrans regulations, policies, procedures, manuals, and standards.

Construction Surveying: CONSULTANT will furnish surveying crew(s) to perform construction surveys for the Project. The number of survey crew(s) assigned to the Project may vary throughout the duration of the construction contract to meet the Project needs. CONSULTANT personnel will be assigned as needed by the Resident Engineer to meet the schedule of the construction contractor.

Construction surveying services will be provided on an on-call basis. It is the intent of SANBAG to maintain a consistency of construction survey quality throughout each phase of each project. Therefore, CONSULTANT is encouraged to provide the same field personnel for the duration of construction. It is important that the Field Party Chief(s) assigned to a project be completely familiar with the survey requirements and the assignments for the Project.

Construction surveying will not be performed when conditions such as weather, traffic, and other factors prevent safe and efficient operation.

CONSULTANT personnel will:

- Be knowledgeable of, and comply with all, applicable local, Caltrans, state, and federal regulations.
- Cooperate and consult with SANBAG officials during the course of the contract.
- Perform duties as may be required to assure construction is performed in accordance with the Project plans and specifications.
- Keep records and document work as directed by SANBAG Project Manager.

All services required herein will be performed in accordance with Caltrans regulations, policies, procedures, manuals, and standards.

C. DUTIES AND RESPONSIBILITIES

1. Pre-construction Services

a. Schedule

CONSULTANT shall review the proposed Project schedule, compare it to the Project plans and specifications, and provide recommendations to SANBAG, as appropriate, to ensure efficiency of Contractor and CONSULTANT operations and safe and expeditious completion of the Project.

b. Budget

CONSULTANT shall review the Project estimate, quantities and provide recommendations to SANBAG, as appropriate, to ensure efficient utilization of funds and control of project costs.

c. Constructability Review

CONSULTANT shall review Project plans and special provisions for possible errors and deficiencies and report such findings to SANBAG in a format provide by SANBAG.

2. Bid Process

a. Bid Documents

CONSULTANT shall assist SANBAG, as requested, with the following tasks:

- 1) Review of bid documents
- 2) Preparation of bid tabulations

b. Pre-construction Meetings

CONSULTANT shall assist SANBAG in conducting one, or more, pre-construction meetings with all involved parties on the Project. Parties may include, but are not limited to, the Contractor, design engineer, Caltrans, County and City staff, utility companies, and developers.

c. Contract Award

CONSULTANT shall assist SANBAG, as requested, with the following tasks:

- 1) Review of bid for completeness and responsiveness
- 2) Perform bid analysis
- 3) Development of contractor payment schedules, and other procedural items.
- 4) Checking Contractor references, licenses, insurance, and sureties.
- 5) Coordination with prospective Contractor for award of construction contract(s).

All processes will be consistent with procedures outlined by the California Department of Transportation for Special Funded Programs and Local Assistance Procedure Manuals.

3. Project Administration

a. CONSULTANT shall administer Project construction contracts using Caltrans Construction Manual as a guideline.

b. CONSULTANT shall conduct regular Project coordination meetings with Contractor, SANBAG, local agencies, and design engineer, as appropriate.

- c. CONSULTANT shall prepare Contractor progress payments and maintain payment records and supporting documentation. All progress payments shall be reviewed by SANBAG for approval.
- d. CONSULTANT shall provide reports as needed to comply with specific funding requirements.
- e. CONSULTANT shall establish and maintain Project records in accordance with the Caltrans Construction Manual. Project record keeping shall include, but are not limited to, correspondence, memoranda, contract documents, change orders, claims, SANBAG and engineer directives, meeting minutes, shop drawings, supplementary drawings, and requests for payment. CONSULTANT shall maintain a record of the names, addresses, and telephone and fax numbers of the Contractors, subcontractors, and principal material suppliers.
- f. CONSULTANT shall establish and maintain a filing system in hard copies files and in electronic forms for each Project using the Caltrans Construction Manual as a guideline. Electronic data documentation will be required to be uploaded weekly to the SANBAG Major Projects Portal
- g. CONSULTANT shall monitor Contractors' construction schedules on an ongoing basis and alert SANBAG to conditions that may lead to delays in completion of the Project.
- h. CONSULTANT shall prepare and submit a monthly Activity Summary Report for the Project in a format approved by SANBAG. The activity report shall include among other items status of SWPPP issues, RFIs, contract change orders, and notice of potential claims; construction activities completed, ongoing, and upcoming; status of Project budget and schedule, and other highlights and critical issues.
- i. CONSULTANT shall review and ensure compliance with environmental requirements.
- j. CONSULTANT shall participate in partnering sessions with the Contractor, SANBAG, and Local Agencies, as required.
- k. CONSULTANT shall ensure that the Project meets all provisions of the SANBAG Construction Materials Quality Assurance Program and Caltrans Quality Assurance Program Manual.
- l. CONSULTANT shall review Contractors' certified payroll records and ensure compliance with the requirements of the construction contract.
- m. CONSULTANT shall ensure that the Project meets all provisions of the Storm Water Pollution Prevention Plan (SWPPP).
- n. CONSULTANT shall assure that the Project meets all applicable regulations of the Air Quality Management District (AQMD) and State Water Recourse Control Board (SWRCB).
- o. CONSULTANT shall maintain redlined as-built plans on an ongoing basis throughout the duration of the Project. Redlined plans shall show all changes made to the original contract plans, each change identified with the name of the

approver, date of change approval , and CCO number, if applicable

4. Construction Coordination

- a. CONSULTANT shall provide a minimum of one qualified Resident Engineer to effectively manage the Project.
- b. CONSULTANT Resident Engineer shall act as a prime point of contact between Contractor, SANBAG, CONSULTANT's construction surveyor, CONSULTANT's materials inspector, and utility companies. CONSULTANT may, when requested by SANBAG, act as point of contact between design engineers, cities, and the public. CONSULTANT shall ensure coordination with property owners adjacent to Project right-of-way to ensure timely communication regarding property-condition survey and construction activities and scheduling.
- c. CONSULTANT shall maintain regular contact with SANBAG's Project Manager.
- d. CONSULTANT shall coordinate utility relocations with utility companies and their designees, as well as the utility inspector.
- e. CONSULTANT shall proactively review Project plans and special provisions for possible errors and deficiencies prior to construction of any specific element and report such findings to SANBAG. Should SANBAG determine that changes are necessary, CONSULTANT shall assist in implementation and processing of change orders in accordance with contract documents.
- f. CONSULTANT shall proactively review Project plans and special provisions; monitor, coordinate, and track construction progress schedule and RFIs; and communicate with various agencies prior to construction of any specific elements to ensure the Project proceeds on schedule and according to the order of work in the plans and special provisions. CONSULTANT shall expedite work, as required, to maintain schedule in conjunction with the overall construction staging program.
- g. CONSULTANT shall coordinate review of shop drawings and Requests for Information (RFI) with the SANBAG Project Manager. CONSULTANT shall log and track all submittals and requests.
- h. CONSULTANT shall provide a qualified SWPPP Coordinator who along with the Resident Engineer shall review and certify contractor prepared Storm Water Pollution Prevention Plans (SWPPP) and coordinate approval with SANBAG and the State Water Resource Control Board. The SWPPP Coordinator shall be at a minimum a Qualified Storm Water Pollution Prevention Plan (SWPPP) Developer (QSD) and a Qualified SWPPP Practitioner (QSP). CONSULTANT shall provide at a minimum weekly SWPPP monitoring and shall cooperate with all monitoring agency inspections and field reviews.
- i. CONSULTANT shall coordinate the implementation of any changes with the SANBAG Project Manager and the design engineer.
- j. CONSULTANT shall review and approve falsework and shoring plans.
- k. CONSULTANT shall review and approve Traffic Control Plans and forward to

SANBAG for Caltrans/City/County approvals, as necessary.

1. CONSULTANT shall coordinate all Project construction activities with other on-going projects within and adjacent to the Project limits.
5. Construction Inspection
- a. CONSULTANT shall coordinate all required inspections necessary for the Project. CONSULTANT shall ensure that appropriate City and local agencies are notified and present as required throughout the Project. CONSULTANT shall notify SANBAG immediately regarding any directives, recommendations, notices, etc. received from agencies other than SANBAG.
 - b. CONSULTANT shall perform daily on-site observations of the progress and quality of construction to determine if the work being performed is in general conformance with the contract documents, all applicable laws, codes, and ordinances.
 - c. CONSULTANT shall exercise reasonable care and diligence to discover and promptly report to SANBAG any and all defects or deficiencies in the materials or workmanship used in the Project.
 - d. CONSULTANT personnel assigned to the Project shall be thoroughly familiar with Caltrans Standard Specifications, Caltrans Standard Plans, Caltrans Erosion Control and Highway Planting requirements, safety standards and State Water Resources Control Board requirements. CONSULTANT personnel shall have the ability to read and interpret construction plans and specifications. CONSULTANT personnel shall also have knowledge of State of California Construction Safety Orders (CalOSHA) and traffic control practices as specified in the Work Area Traffic Control Handbook (WATCH). In addition, CONSULTANT personnel shall be thoroughly familiar with the construction requirements of Caltrans' Storm Water Pollution Prevention Program.
 - e. Assignments to be performed by CONSULTANT personnel shall include, but are not limited to, the following:
 - 1) Paving and subgrade inspection, sub-surface & finish surface drainage inspection, structures and foundation inspection, electrical inspection for traffic, ramp meter and irrigation control equipment, signing and striping inspection, quantity calculations, checking grade and alignment, construction traffic control, soil amendments and plant material identification & quality control, hardscape inspection, trenching & irrigation inspection and duties that may be required to determine that construction of the Project is being performed in accordance with the contract documents.
 - 2) Identifying actual and potential problems associated with the Project and recommending sound engineering solutions.
 - 3) Identifying common plant diseases and/or pests together with their respective eradication techniques, directing of plant adaptability requirements along with proper planting & pruning techniques, and avoiding potential problems associated with the Project by

recommending sound engineering solutions.

- 4) Perform basic sampling of construction materials in the field per California Test Method 105 and 125 by both the prime and subconsultant personnel.
- 5) Maintaining awareness of safety and health requirements. Monitoring Contractors' compliance with applicable regulations and construction contract provisions for the protection of the public and Project personnel.
- 6) Preparing complete and accurate daily reports, calculations, project records, payment quantity documents, reports, and correspondence related to Project activities.
- 7) Preparing construction sketches, drawings, and cross-sections, as necessary.
- 8) Assisting in the preparation of as-built plans.
- 9) Providing inspections for environmental compliance.
- 10) Maintaining awareness of water discharge requirements. Monitoring Contractors' compliance with applicable regulations and construction contract provisions.
- 11) Monitoring Contractors' compliance with applicable regulations required by AQMD.
- 12) Other duties as may be required or reasonably requested.

6. Project Support

a. Construction Surveys

CONSULTANT shall perform construction surveying services, field calculations, and home office calculations to support construction of the Project. CONSULTANT may be requested to review available survey data, construction plans, and right-of-way plans to confirm compatibility and to identify discrepancies prior to and during construction of proposed projects. The Resident Engineer will assign survey work to the CONSULTANT as needed by issuing a "Request for Survey Services". Requests may include, but not be limited to, the following types of surveys and related services:

1) Construction Surveys

CONSULTANT shall perform construction staking and calculations as needed.

- a) Survey calculations and adjustments shall be performed with established and computed coordinates based on the California Coordinate System.

- b) Cross-section data collection shall be performed by conventional and terrain line interpolation survey methods.
- c) Survey data will include topography, cross-section, and other survey data in computer formats compatible with the Caltrans computer survey and design systems.
- d) Prepare and maintain survey documents. Survey documents include survey field notes, maps, drawings, and other survey documents.
- e) Perform construction staking, including but not limited to:
 - i. Utility relocations
 - ii. Clearing limits
 - iii. Slope staking
 - iv. Storm drain, sanitary sewer, and irrigation systems
 - v. Drainage structures
 - vi. Curbs, gutters, and sidewalk
 - vii. Horizontal and vertical control for structures and portions of structures (bents, abutments, wingwalls, etc.)
 - viii. Rough grade
 - ix. Finish grade
- f) Monitor for settlement, if required.
- g) Global Positioning Satellite (GPS) equipment shall be made available if required by SANBAG

2) Grid Grades

Grid grade data shall provide pavement elevations at the station line, the left edge of pavement, the right edge of pavement, and the right edge of travel way at 25 foot intervals for travel lanes.

3) Open Ended Traverses and Profile Data Sheets

Separate open-ended traverse calculations and point maps shall depict plan data for station lines, utility lines, wall layout lines, and abutment/bent alignment. Specific information to be shown will be part numbers, coordinates, bearings, and curve data.

Profile data sheets are required for all profiles shown on the plans identifying vertical design elements such as grade, point of intersection (PI) location, beginning of vertical curve (BVC) location, end of vertical curve (EVC) location, and curve length.

4) Three Line Profiles

Separate profile plots are required for the left edge of pavement, the right edge of pavement, and the edge of shoulder for all travel lanes.

5) Right of Way Lines

Existing right of way and easements will be established from Local Agency's record information and existing monumentation.

- a) Right of way monumentation shall be renewed and restored in accordance with Section 10.4 of the Caltrans "Survey Manual" and the State of California Land Surveyor's Act.
- b) Corner records and records of surveys shall be prepared and filed in accordance with the applicable standards and the State of California Land Surveyor's Act and the California Subdivision Map Act.
- c) Perpetuate existing monumentation, which includes restoring, renewing, referencing, and resetting existing boundary related monumentation. In addition, stake areas where construction disturbs the existing right of way, preparing and filing required maps and records.

New right of way and easements will be established from plans, right of way maps, utility drawings, and Local Agency record information, and existing monumentation.

- a) Right of Way Surveys, which includes research and preparation filing of required maps and records. In addition, locate and set monuments for right of way and easement lines, staking for right of way and easement fences.
 - b) Final monumentation, which includes setting of centerline points of control upon completion of construction.
- 6) Special Design – Data Surveys
Includes drainage, utility, and surveys required for special field studies.

7) Control Survey

Includes Project control surveys, aerial mapping control surveys, horizontal and vertical control surveys. In addition control surveys will include restoration, renewal, reference, relocation, and resetting of existing control monumentation. The CONSULTANT will be required to provide horizontal and vertical control at the end of each bridge.

8) Topographic Surveys

Topographic surveys will normally be compiled by ground survey methods only.

CONSULTANT will provide all necessary Project related surveys and construction staking, including horizontal and vertical control, right of way, and easements. CONSULTANT shall coordinate all staking and verify accuracy. CONSULTANT shall ensure timely coordination of all staking requests from the Contractor.

- b. Materials Testing, Source Inspection and Geotechnical Services

- 1) CONSULTANT will provide experienced personnel, equipment, and facilities to perform various construction materials sampling and testing. Laboratory and field materials testing will be used to ensure that structure and roadway construction work conforms to California State Department of Transportation (Caltrans) standards, specifications, and special provisions for material quality and workmanship.
- 2) All field and laboratory testing is to be performed in accordance with California Test Methods.
- 3) CONSULTANT will be responsible for the accuracy and completeness of all test data compilation and results.

c. Public Outreach

- 1) General Public Outreach Plan
 - a) SANBAG's primary goal is to assure the public that SANBAG is a public agency that delivers quality transportation projects and trustworthy, accurate and timely public information.
 - b) SANBAG will provide the primary outreach effort with supplemental support as requested from CONSULTANT. This will be a targeted approach with incremental outreach based on construction schedule and staging. The primary target audiences identified for this Project include, but are not limited to:
 - i. LOCAL AGENCY
 - ii. SANBAG Board
 - iii. LOCAL AGENCY and area Emergency Service Providers
 - iv. School Transportation Coordinator(s)
 - v. Local Business Community
 - i) Specific businesses with expanding priority based on proximity to work zone and detours
 - ii) Chamber of Commerce
 - vi. Commuters
 - vii. Recreational Travelers
 - viii. Trucking Industry
 - ix. Local media
 - i) Print
 - ii) Radio
 - iii) Television
 - c) In the weeks prior to the selection of a construction contractor, SANBAG may coordinate an Emergency Responders Project Briefing to highlight the Project details and possible access challenges for consideration by the Project team.
 - d) Following the emergency responders briefing, SANBAG may coordinate a Chamber of Commerce Project Briefing to highlight the Project benefits, possible construction schedule and traffic management plan.

- f) Just prior to the start of field construction activities, SANBAG and CONSULTANT (includes all PR subs) may coordinate a groundbreaking media event with the LOCAL AGENCY to ceremoniously open the Project. CONSULTANT will be called up on to develop (with input from SANBAG) and maintain a task list of deliverables for this event. CONSULTANT will acquire the necessary items authorized for the event. CONSULTANT will be responsible for set up and breakdown of the event site.
- g) Prior to construction beginning, SANBAG and CONSULTANT may coordinate a community meeting to share Project information, construction scheduling, detour information and expected challenges with the general public. CONSULTANT will be called up on to develop (with input from SANBAG) and maintain a task list of deliverables for this event. CONSULTANT will acquire the necessary items authorized for the event. CONSULTANT will be responsible for set up and breakdown of the event site. Staffing this event will be determined based on availability.
- h) Near the completion of the construction Project, SANBAG and CONSULTANT will coordinate a ribbon-cutting media event. CONSULTANT will be called upon in a similar fashion to the groundbreaking event.
- i) At various stages throughout the Project, SANBAG will request support from CONSULTANT for the following items:
 - i. Establish and maintain stakeholder and/or ‘interested parties’ list(s) – used for sharing Project updates during Project construction. May need to be filtered to specific audiences (i.e. emergency responders, city government, etc.)
 - ii. Development of a Project fact sheet (include Project description, Project budget, Project schedule, SANBAG contact information, LOCAL AGENCY contact information, photos, logos, etc.)
 - iii. Weekly media advisories (use SANBAG template). CONSULTANT (or sub) will make weekly contact with Project team to establish what road or lane closures (and associated detours if applicable) will be taking place, develop the advisory, send to SANBAG Public Information Office for approval, submit to webmaster for posting, distribute to appropriate media and stakeholder list.
 - iv. Emergency notices – when needed.
 - v. Develop web content for project tab on SANBAG website. This page should include same elements of fact sheet with expanded detail when possible. If the information is dynamic, please provide updates to

SANBAG Public Information Office for approval prior to submitting to webmaster.

- 2) All requests for speaking to government councils, boards, chambers of commerce or similar business or social groups shall be directed to the SANBAG Public Information Office before agreeing to appear.
- 3) All media inquiries shall be directed to the SANBAG Public Information Office.

d. Permits

CONSULTANT shall review the Project for permit compliance and coordinate with SANBAG and the design engineer to ensure that necessary permits are obtained. CONSULTANT shall assist SANBAG in the coordination, timely processing and verification of approval for all permits. CONSULTANT shall maintain permits and permit documentation on site.

7. Cost and Schedule

a. CONSULTANT shall monitor and track the following:

- 1) Contract pay item quantities and payments
- 2) Contract change orders
- 3) Supplemental work items
- 4) Agency furnished materials
- 5) Contingency balance
- 6) Project budget

b. CONSULTANT shall review and monitor Contractor's schedule and inform SANBAG of any significant changes or deviations in the schedule.

c. CONSULTANT shall provide and maintain a Project staffing plan of field office personnel based on the Contractor submitted baseline schedule update. In cooperation with SANBAG, the staffing plan shall be periodically updated to reflect Project progress and needs.

8. Contract Change Orders and Claims

a. CONSULTANT shall receive and evaluate requests for changes and/or substitutions by the Contractor. Contract Change Orders submitted to SANBAG shall be accompanied by CONSULTANT recommendations. Where applicable, CONSULTANT shall convey proposed changes to design engineer, or other Project consultants. If the requested changes are accepted, CONSULTANT shall negotiate and prepare appropriate Contract Change Orders.

b. CONSULTANT shall attempt to avoid unnecessary Contract Change Orders. When a Contract Change Order is necessary, CONSULTANT shall consult with SANBAG prior to its preparation. Unless directed otherwise by SANBAG, the preferred method of payment for Contract Change Orders should be as follows

- 1) Agreed Price
- 2) Adjustment in compensation to a bid item
- 3) Time and materials or Force Account

CONSULTANT shall perform force account analysis to validate cost submitted

by the Contractor for contract change orders with agreed unit price, lump sum price, and adjustment in components. Analysis shall be based on realistic production and resource needs to complete the work.

- c. CONSULTANT shall attempt to identify all potential claims, track and monitor unresolved claims. The CONSULTANT shall implement appropriate claims avoidance processes where in the best interests of SANBAG as determined by SANBAG's Project Manager.
- d. CONSULTANT shall assist SANBAG, as requested, in the identification, resolution, and final disposition of claims filed by the Contractor or third parties against SANBAG or the Project.

9. Safety

In addition to the requirements specified elsewhere in this contract, the following shall also apply:

- a. CONSULTANT shall implement and conduct a comprehensive safety program including regular tail-gate safety meetings for CONSULTANT personnel. CONSULTANT shall provide SANBAG with monthly status of safety reports.
- b. CONSULTANT shall comply with State of California Construction Safety Orders and provisions of the Caltrans Construction Manual.
- c. CONSULTANT shall provide appropriate safety training for all CONSULTANT field personnel.
- d. CONSULTANT shall provide all necessary safety equipment as required for CONSULTANT personnel.

10. Project Close Out

- a. CONSULTANT shall prepare a list of items to be completed and/or corrected by the Contractor for final completion of the Project.
- b. CONSULTANT shall collect and furnish as-built information to the design engineer for preparation of as-built drawings including pre-stress drawings and pile logs, as applicable.
- c. CONSULTANT shall review and verify completeness of as-built drawings.
- d. CONSULTANT shall conduct a final walk-through with SANBAG, Local Agencies, Contractors, and design engineers.
- e. CONSULTANT shall prepare final construction reports including the Project Completion Report.
- f. CONSULTANT shall prepare and deliver to SANBAG all Project files.
- g. CONSULTANT shall assist SANBAG and Contractor in obtaining final release of all Project permits.

- h. Project closeout services will be completed within two months of project acceptance.

D. DELIVERABLES

1. Inspector daily reports, extra work diaries and Resident Engineers' daily diaries.
2. Monthly Project Summary Reports and SIQMP Monthly Reports.
3. Monthly update of all files to SANBAG Portal.
4. Monthly Contractor progress payments, back-up documentation, and Contractor payment records.
5. Contractor final payment documents, delivered to SANBAG no later than ten (10) working days after Acceptance by SANBAG of the completed construction Project.
6. Project Completion Report documents per Local Assistance Procedure Manual and Caltrans Construction Manual.
7. All Project files, Project reports, Record As-builts, correspondence, memoranda, shop drawings, Project logs, schedule updates, change order data, claims and claim reports, and Contractor payment records per Caltrans Construction Manual.
8. Certified payrolls and fringe benefit statements for all employees, CONSULTANT and Contractor, who are subject to the State and/or Federal prevailing wage rates.
9. American For Disabilities Act certification of project per Caltrans Standards.
10. All material test results will be provided in accordance with the applicable Standard Specifications and Special Provisions, and test methods. Failing tests will be immediately reported to the Resident Engineer or Structures Representative. All test results will be recorded on the appropriate forms. The test documents will be legible and show the identity of the tester where appropriate. A notebook containing all test results and reports will be maintained by CONSULTANT throughout the duration of the Project and delivered to SANBAG with the Project files.
10. Record of Survey and Right of Way Monumentations and recoding with County.
11. Unless otherwise specified in the survey request, the deliverables shall conform to the following:
 - a. Survey points, lines, and monuments shall be established, marked, identified, and referenced as required by survey request and requirements herein.
 - b. Survey notes, drawings, calculations, and other survey documents and information shall be completed as required by the survey request and the requirements herein.
 - c. All original survey documents resulting from this contract, including original field notes, adjustment calculations, final results, and appropriate intermediate documents, shall be delivered to the Resident Engineer and shall become the property of SANBAG. A copy of all survey documents furnished by SANBAG shall be retained by CONSULTANT for future reference.

When the survey is performed with a total station survey system, the original field

notes shall be a hard copy in a readable format of the data (observations) as originally collected and submitted by the survey party. The hard copy shall be signed by the Party Chief. If the Party Chief is not licensed, the person in “responsible charge” will be required to sign.

- d. Deliverables to the Resident Engineer shall follow the format specified below:
 - 1) Horizontal Control
 - 2) Alpha numeric hard copy point listing with adjusted California Coordinate System northing and eastings and the appropriate descriptions.
 - 3) Vertical Control
 - 4) Alpha numeric hard copy benchmark listing with adjusted elevations compatible with the design datum.
 - 5) Topography
 - 6) Alpha numeric hard copy listing, hard copy drawing, and computer aided drawing and design (CADD) digital drawing. The CADD drawing shall be compatible with the systems utilized by Caltrans.

- e. Data collection method used to collect cross-section data and the coding (feature description) of terrain data for cross-sections shall conform to the survey request requirements. Deliverables shall depend on the data collection method as follows:
 - 1) Conventional Cross – Sections (each cross – section):
For each cross - section and alpha numeric listing, a hard copy drawing, and a computer formatted file compatible with the systems utilized by Caltrans.
 - 2) Terrain Line Interpolation Cross – Section Data (each terrain line interpolation survey):
Terrain line interpolation cross – sections shall include an alpha numeric listing, a hard copy plan view drawing of the terrain lines, and a computer input file. The computer input file shall be provided in a format compatible with the systems utilized by Caltrans.
 - 3) Data Collector Data
If specified in the survey request, the raw data from the data collector shall be provided in a format conforming to the survey request requirements.
 - 4) Other—As specified in the survey request.

E. EQUIPMENT AND MATERIALS TO BE PROVIDED BY CONSULTANT

1. CONSULTANT shall provide all necessary equipment including software, materials, supplies, miscellaneous tools, phones, vehicles, and safety equipment required for its personnel to perform the services accurately, efficiently, and safely. The above noted items are not to be included in Attachment B of Consultants Cost Proposal and are part of the consultants overhead. Only those items authorized by SANBAG in Attachment B, CONSULTANT Cost Proposal, shall be reimbursed by SANBAG.
2. CONSULTANT personnel shall be provided with vehicles suitable for the location and nature of the work involved. Vehicles shall be equipped with flashing yellow lights,

either permanently or temporarily affixed.

3. CONSULTANT personnel shall be provided with a mobile radio, cellular phone, or other means to assure full-time communication. If a radio system is to be used, CONSULTANT shall provide a base station at the field office.
4. CONSULTANT personnel shall be provided with all applicable standard plans, specifications, and other standards as appropriate (see item G below).
5. For Materials Testing, CONSULTANT and its staff will be fully equipped at all times to perform the services required, including but not limited to the following:
 - a. An on-site mobile laboratory or laboratory in close proximity to the Project will be required. The type and location of the lab should be such that it can meet the needs of the Project in an efficient, time effective manner. The laboratory is to be fully staffed, equipped, and supplied to conduct all required soils, materials, and concrete breaking tests in a timely manner.
 - b. Field personnel will be provided with all necessary safety equipment to permit work to be performed safely and efficiently within operating highway and construction zone environments.
 - c. All equipment to be calibrated as per Section 3-10 and 3-11 of Caltrans' Quality Assurance Program Manual.
6. For construction surveying, CONSULTANT and staff shall have adequate equipment and supplies to complete the required survey work. Equipment and supplies shall, include, but not be limited to:
 - a. Survey vehicles:
Survey vehicles will be suitable to perform the required work in varying terrain and conditions encountered on the Project. Vehicles shall be fully equipped with all necessary tools, instruments, supplies, and safety equipment required to perform the work accurately, efficiently, and safely. Vehicles shall be equipped with a flashing yellow beacon light.
 - b. Data Processing Systems:
Data processing systems shall include hardware and software to:
 - 1) Performing survey and staking calculations from the design plans and specifications;
 - 2) Reduce survey data collected with conventional and total station survey systems;
 - 3) Perform network adjustments for horizontal and vertical control surveys;
 - 4) Format survey data to be compatible with the Caltrans computer survey and data system.
 - c. Drafting equipment and supplies.
 - d. Digital calculators.
 - e. Hand tools as appropriate for the requested survey work.
 - f. Traffic cones (minimum 25). Traffic cones shall be 28 inches in height (minimum).

- g. Traffic control devices as required to perform the requested survey work. Traffic control devices include signs, sign bases, flags, and hand held signs.
- h. Leveling instruments and equipment:
 - 1) Self-leveling level. Precision: standard deviation in one mile of double run leveling 0.005 feet or less.
 - 2) Suitable level rods for the work to be performed.
- i. Distance measuring instruments and equipment:
 - 1) Electronic distance measurer (EDM). Precision: standard deviation 3 mm plus 3 PPM, or less; Range: Minimum one mile under average atmospheric conditions.
 - 2) Prisms, sufficient to perform the required work.
 - 3) Tapes; steel, cloth.
- j. Angle measuring instruments and equipment:
 - 1) Theodolite for non-control surveys; Precision: direct circle reading to three seconds, or equivalent, horizontal and vertical.
 - 2) Targets as required to perform the work.
- k. When required for efficient survey operations, total station survey systems consisting of an electronic angle measuring instrument, EDM, and electronic data collector shall be provided. The angle measuring instruments and EDM shall conform to the requirements for the equipment previously listed.
- l. Radio or cellular communications equipment for communication between field office and field crews.
- m. Caltrans manuals, standards, forms, and other policies and procedures to be followed to perform the required work.

F. MATERIALS TO BE FURNISHED BY SANBAG

- 1. SANBAG will provide three (3) copies of all Project construction documents including plans, and special provisions, and one (1) copy of all other reports, designer prepared resident engineer files, and contracts. In addition, SANBAG will provide one (1) full size (24" x 36") sets of plans for use in the construction field office as record documents.
- 2. SANBAG will provide copies of all previously secured permits and Project authorizations.
- 3. SANBAG Construction Management Forms including SANBAG Construction Materials Quality Assurance Program, sample SIQMP and appropriate forms for recording test data in accordance with Caltrans practices and procedures outlined in the "Manual of Test".

G. STANDARDS

All construction inspection, surveys, materials sampling and testing, and contract administration shall be in accordance with the Project bid documents, special provisions, plans, and current Caltrans Manuals including:

1. Construction Manual and its revisions
2. Bridge Construction Records and Procedures Manual
3. Quality Assurance Program Manual
4. Manual of Traffic Controls for Construction and Maintenance Work Zones
5. Caltrans Standard Specifications and Standard Plans
6. Caltrans Storm Water Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual
7. Manual of Test (3 volumes)
8. Survey Manual
9. District 8 Standard Staking Procedures Manual

Work not covered by the manuals shall be performed in accordance with accepted professional standards.

Surveys performed by CONSULTANT shall conform to the requirements of the Land Surveyor's Act. In accordance with the Land Surveyor's Act, "responsible charge" for the work shall reside with the Licensed Land Surveyor or a pre-January 1, 1982, Registered Professional Civil Engineer in the State of California.

Unless otherwise specified in the survey request, control surveys shall conform to second order (modified) accuracy standards as specified in the Caltrans "Survey Manual".

Additional standards for specific survey work may be included in the applicable request for survey. Such standards supplement the standards specified herein. If additional standards conflict with the standards specified herein, the "Survey Request's" standard shall govern.

The Resident Engineer and SANBAG will decide all questions, which may arise as to the quality or acceptability of deliverables furnished and work performed for this contract. Any CONSULTANT employee who does not perform adequately will be replaced if directed by the SANBAG Project Manager.

H. AVAILABILITY AND WORK HOURS

The typical workday includes all hours worked by SANBAG's construction Contractor including nights and weekends. The construction Contractor's operations may be restricted to specific hours during the week, which will become the normal workday for CONSULTANT's personnel. On days when work is not performed by the construction contractor, such as rainy or unsuitable weather days, CONSULTANT services will not be provided unless authorized by the SANBAG Project Manager.

Unless otherwise directed by SANBAG, the normal work week will consist of 40 hours. From time to time, overtime may be required. However, overtime will be worked only when approved in writing by SANBAG.

I. LIMITATIONS TO AUTHORITY

CONSULTANT does not have the authority to:

1. Authorize deviations from the contract documents.
2. Approve substitute materials or equipment; except as authorized in writing by SANBAG.
3. Conduct or participate in tests or third party inspections; except as authorized in writing by SANBAG.
4. Assume any of the responsibilities of the Contractors, Contractors' Superintendent, or subcontractors.
5. Exercise control over or be responsible for construction means, methods, techniques,

- sequences, procedures, or safety precautions.
6. Communicate directly with subcontractors or material suppliers without the prior consent of the Contractor.
7. Verbally authorize or approve change orders or extra work for the Project.
8. Offer or receive incentives, inducements, or other forms of enumeration to or from the Contractor to perform services or work outside the terms of any executed contracts for this Project.

J. THIRD PARTY RELATIONSHIPS

This Contract is intended to provide unique services for a specific project. In the development of the Project, SANBAG has worked closely with various professional consultants, agencies, and others in the preparation of the construction documents and other Project related materials. SANBAG, however, is solely responsible for and will be the sole point of contact for all contractual matters related to the Project. CONSULTANT shall take direction **only** from SANBAG and shall regularly inform **only** SANBAG of Project progress, outstanding issues, and all Project related matters.

During the course of the Project, CONSULTANT may find occasion to meet with Caltrans, City or County representatives, the design engineer, Project consultants, or other third parties who have assisted with the Project. These entities may, from time to time, offer suggestions and/or recommendations regarding the Project or elements of the Project. While SANBAG enjoys a close relationship with and has considerable confidence in the capabilities of these other parties, CONSULTANT shall not act on any suggestions, solicited or unsolicited, without obtaining specific direction from SANBAG. All oral and written communication with outside agencies or consultants related to the Project shall be directed only to SANBAG. Distribution of Project related communication and information shall be at the sole discretion of SANBAG representatives.

K. CONSTRUCTION SITE SAFETY

In addition to the requirements specified elsewhere in this contract, the following also will apply.

1. CONSULTANT will conform to the safety provisions of the Caltrans Construction Manual.
2. CONSULTANT's field personnel will wear white hard hats with proper suspension, orange vests with reflective tape, sleeved shirt, long pants, and leather boots with ankle support and rubber soled shoes at all times while working in the field.
3. CONSULTANT will provide appropriate safety training for all CONSULTANT's personnel, including work on and near highways.
4. All safety equipment will be provided by CONSULTANT.

L. BASIS FOR SURVEY AND MONUMENT STAKING

SANBAG will designate the existing horizontal and vertical control monuments that are the basis of CONSULTANT performed surveys. SANBAG will provide the California Coordinate System values and/or elevation values for these monuments. CONSULTANT shall adjust CONSULTANT performed surveys to be the designated control monuments and the values.

Monuments established by CONSULTANT shall be marked by CONSULTANT with furnished disks, plugs, tags. In addition, CONSULTANT shall identify CONSULTANT established monuments by tagging or stamping the monuments with the license or registration number of

CONSULTANT’S surveyor who is in “responsible charge” of the work.

M. PERSONNEL QUALIFICATIONS AND RESPONSIBILITIES

The quantity and qualifications of field personnel to be assigned will be determined by the scope of the Project and the degree of difficulty of required tasks to be performed. Again, all personnel and personnel assignments are subject to approval by SANBAG. While some areas of responsibility may overlap, as a guideline, CONSULTANT personnel assigned to the Project should have the following qualifications:

1. Project Manager

- a. A minimum of six (6) years' project management experience on similar construction projects is desired.
- b. Accessible to SANBAG at all times during normal working hours.
- c. A thorough understanding of Caltrans construction practices and procedures.
- d. A thorough understanding of Cal-OSHA practices and procedures.
- e. The Project Manager will assume the following functional responsibilities:
 - 1) Review, monitor, train, and provide general direction for CONSULTANT personnel.
 - 2) Assign personnel to projects on an as-needed basis.
 - 3) Administer personal leave.
 - 4) Prepare monthly reports for delivery to SANBAG.

2. Resident Engineer

- a. A minimum of eight (8) years' resident engineer experience on similar construction projects is desired.
- b. Licensed Professional Civil Engineer in the State of California.
- c. Ability to work independently, make effective decisions concerning construction work in progress, and solve field problems.
- d. Accessible to SANBAG at all times including weekends and holidays.
- e. Certified as a Qualified SWPPP Developer or Practitioner is desired.
- f. A thorough understanding of Cal-OSHA practices and procedures.
- g. A thorough understanding of Caltrans field methods, practices, and construction office procedures. The Resident Engineer will assume the following functional responsibilities:
 - 1) Monitor and provide daily direction to CONSULTANT Resident Engineers and inspection personnel.
 - 2) Assign field personnel to specific project tasks.
 - 3) Monitor and track Contractor progress.
 - 4) Prepare daily, weekly and monthly reports as required.
 - 5) Coordinate utility relocations with appropriate agencies and the utility inspector.

- 6) Act as prime field contact between various project Contractors and SANBAG's Project Manager.

3. Assistant Resident Engineer

- a. A minimum of four (4) years' experience on similar construction projects is desired.
- b. Licensed Professional Civil Engineer in the State of California.
- c. Ability to work independently, make effective decisions concerning construction work in progress, and solve field problems.
- d. Accessible to SANBAG at all times including weekends and holidays.
- e. Certified as a Qualified SWPPP Developer or Practitioner is desired.
- f. A thorough understanding of Cal-OSHA practices and procedures.
- g. Thorough understanding of Caltrans field methods, practices, and construction office procedures. The Assistant Resident Engineer shall act under the direction of the Resident Engineer and will assume the following functional responsibilities:
 - 1) Monitor and provide daily direction to CONSULTANT inspection personnel.
 - 2) Assign field personnel to specific project tasks.
 - 3) Monitor and track Contractor progress.
 - 4) Prepare daily, weekly and monthly reports as required.
 - 5) Coordinate utility relocations with appropriate agencies.

4. Lead Field Inspector

- a. A minimum of six (6) years' construction inspection experience in public works or similar projects or a four-year degree in the field of civil engineering, transportation and four years of similar construction experience is desired.
- b. A thorough understanding of Cal-OSHA practices and procedures.
- c. Knowledge of Caltrans construction practices, physical characteristics and properties of highway construction materials, and approved methods and equipment used in making physical tests of construction materials.
- d. Ability to work independently, make effective decisions concerning construction work in progress, and solve field problems.
- e. Ability to direct the efforts of subordinate inspectors.
- f. Ability to use an automatic level and transit for the purpose of verifying line and grade.
- g. Certified as a Qualified SWPPP Developer or Practitioner is desired.
- h. Understanding of Caltrans field and construction office procedures. The Lead Field Inspector will assume the following functional responsibilities:

- 1) Assist in inspections to assure compliance with contract plans, specifications, and special provisions on all phases of construction.
- 2) Assist in the preparation of contract change orders, contract estimates, progress pay estimates, and other documents or reports required for the Project.
- 3) Coordinate field testing of materials to monitor compliance with Project specifications and Caltrans Quality Assurance Program.
- 4) Maintain accurate and timely Project records. Perform quantity calculations for progress pay estimates.
- 5) Perform analytical calculations such as basic earthwork, grading, profiles, and special staking procedures.
- 6) Provide input for the redesign of facilities to fit existing field conditions.
- 7) Monitor and track Contractor progress. Prepare daily, weekly, and monthly reports as required.

5. Field Inspector

- a. Two (2) years' construction inspection experience in public works or similar projects or a four-year degree in the field of civil transportation engineering is desired.
- b. A thorough understanding of Cal-OSHA practices and procedures.
- c. Knowledge of construction practices, physical characteristics and properties of construction materials, and approved methods and equipment used in making physical tests of construction materials.
- d. Ability to work independently. Ability to make minor decisions concerning construction work in progress and to solve field and office problems.
- e. Ability to use an automatic level and transit for the purpose of verifying line and grade.
- f. Certified as a Qualified SWPPP Developer or Practitioner is desired.
- g. Understanding of Caltrans construction methods and practices. The Field Inspector will assume the following functional responsibilities:
 - 1) Assist in inspections to assure compliance with contract plans, specifications, and special provisions on all phases of project construction.
 - 2) Assist in preparation of contract change orders, contract estimates, progress pay estimates, and other documents or reports required for the Project.
 - 3) Coordinate field testing of materials to monitor compliance with Project specifications and Caltrans Quality Assurance Program.
 - 4) Perform quantity calculations for progress pay estimates and maintain Project records.
 - 5) Perform analytical calculations such as basic earthwork, grading, profiles, and special staking procedures.
 - 6) Provide input for the redesign of facilities to fit existing field conditions.
 - 7) Perform construction materials sampling.
 - 8) Perform labor compliance interviews of the Contractors' personnel.

6. Structural Representative

- a. A minimum of six (6) years' of bridge or structural construction inspection as related to major public works projects and a four-year degree in civil engineering is desired.
- b. A minimum of four (4) years as a Structural Representative on major public works projects associated with railroad bridges.
- c. Licensed Professional Civil Engineer in the State of California.
- d. Knowledge of stress analysis, structural mechanics, and strength of materials.
- e. A thorough understanding of Cal-OSHA practices and procedures.
- f. Knowledge of Caltrans and UPRR/BNSF construction practices and the physical characteristics and properties of various bridge construction materials including concrete.
- g. Experience in the following areas: foundations, pile driving, concrete prestressing, bridge deck construction, cast-in-place wall construction, falsework, and shoring.
- h. Ability to work independently. Ability to perform duties in the construction field office and effectively make decisions concerning construction work in progress and solving field problems.
- i. Ability to direct the efforts of subordinate inspectors.
- j. Ability to use an automatic level and transit for the purpose of verifying line and grade.
- k. Thorough understanding of Caltrans field methods, practices, and construction office procedures. The Structural Representative shall assume the following functional responsibilities:
 - 1) Assist in inspections to assure compliance with contract plans, specifications, and special provisions on all phases of structural construction such as bridges, foundations, walls, falsework, shoring, and drainage structures.
 - 2) Make grade, alignment, quantity, falsework, and shoring calculations.
 - 3) Assist in the preparation of contract change orders, contract estimates, progress pay estimates, and other documents or reports required for the Project. Coordinate the sampling and testing of construction materials to monitor compliance with contract specifications.
 - 4) Monitor and track Contractor progress. Prepare daily, weekly, and monthly reports as required.
 - 5) Coordinate with Resident Engineer, as well as the Construction Staking and Material Testing consultants.
 - 6) Direct the daily activities of subordinate inspectors.

7. Structural Inspector

- a. A minimum of four (4) years' of bridge design or structural construction

inspection as related to Caltrans or major public works projects and a four-year degree in civil or structural engineering is desired.

- b. Knowledge of stress analysis, structural mechanics, and strength of materials.
- c. A thorough understanding of Cal-OSHA practices and procedures.
- d. Knowledge of construction practices and the physical characteristics and properties of various highway bridge construction materials including concrete.
- e. Experience in one or more of the following areas: pile driving, concrete prestressing, bridge deck construction, retaining wall construction, falsework, and shoring.
- f. Ability to work independently and make minor decisions concerning construction work in progress and to solve field and office problems.
- g. Ability to use an automatic level and transit for the purpose of verifying line and grade.
- h. Understanding of Caltrans construction methods and practices. The Structural Inspector will assume the following functional responsibilities:
 - 1) Assist in inspections to assure compliance with contract plans, specifications, and special provisions on all phases of structural construction such as bridges, foundation, walls, falsework, shoring, and drainage structures.
 - 2) Make grade, alignment, quantity, falsework, and shoring calculations.
 - 3) Assist in the preparation of contract change orders, contract estimates, progress pay estimates, and other documents or reports required for the Project.
 - 4) Sampling and testing of construction materials to monitor compliance with contract specifications and Caltrans Quality Assurance Program.

8. Office Engineer

- a. A minimum of two (2) years' experience as an office engineer on similar construction projects is desired.
- b. Knowledge of Caltrans Office of Highway Construction forms used to administer construction projects.
- c. Knowledge of Caltrans system of document organization.
- d. Knowledge of construction records and accounting procedures.
- e. Knowledge of documentation, procedures, and reporting for federally funded projects.
- f. Knowledge of laws and regulations governing the payment of prevailing wages.
- g. The Office Engineer will assume the following functional responsibilities:

- 1) Process monthly progress pay estimates, monthly status reports, extra work reports, and weekly statements of working days.
- 2) Prepare and process contract change orders.
- 3) Monitor construction budget and schedule.
- 4) Prepare, maintain, and/or file project documents including labor and equipment records, correspondence, memoranda, meeting minutes, claims, personnel records, labor compliance reports, and daily, weekly, and monthly reports.
- 5) Perform routine calculations and checking of quantities.
- 6) Coordinate all office activities and functions with SANBAG representatives.

9. Materials Testing/Source Inspection Project Manager

- a. A minimum four (4) years' project management experience on a similar highway/bridge construction project is desired.
- b. Licensed Civil Engineer in the State of California.
- c. Ability to use typical computer programs including word processing and spreadsheets.
- d. The Materials Testing/Source Inspection Project Manager will assume the following functional responsibilities:
 - 1) Review, monitor, train, and provide general direction for CONSULTANT's laboratory, field and source inspection personnel.
 - 2) Assign personnel to projects on an as-needed basis in coordination with the Resident Engineer.
 - 3) Administer personal leave, subject to approval of the Resident Engineer.
 - 4) Prepare monthly reports for delivery to the Resident Engineer.
 - 5) Provide direction, administration, and responsibility for Materials Certification per Caltrans Construction Manual, Section 8-01.
 - 6) Assist SANBAG and Resident Engineer in preparing the project specific Source Inspection Quality Management Plan (SIQMP) for Caltrans review and approval. (Reference Caltrans "Source Inspection Quality Management Plan (SIQMP Outline dated 04/17/12).
 - 7) Provide direction, administration, and responsibility for implementation of the approved SIQMP per Caltrans Construction Procedures Directive (CPD) 08-5 and FHWA Title 23 requirements.

Material testing/source inspection personnel will be certified by a California Registered Civil Engineer as being experienced and competent in the test procedures required for the work involved (and possess a current certificate of proficiency (Form MR-0111) in accordance with Quality Assurance Program Manual (Section 3-5). Independent certification of Caltrans test procedures may be performed at the discretion of the SANBAG Project Manager.

10. Materials Technicians

CONSULTANT personnel provided under this contract will have a variety of skills and experience appropriate for the level of tasks to be assigned. Field personnel shall be certified by Caltrans and should have a minimum of two (2) years' experience in

conducting material sampling and testing of the type required for the projects involved and possess the following additional capabilities:

- a. Have the ability to establish specific locations for appropriate tests when construction contract administration personnel are not available.
- b. Be familiar with construction practices and be fully aware of construction activities at the Project site.
- c. Have knowledge of and comply with safety and health regulations and requirements applicable to the Project.
- d. Specific qualifications for technicians are as follows:

1) CONSTRUCTION TECHNICIAN I

- a) Performs a variety of semi-skilled activities. Examples of duties assigned to this classification are:
 - i. Conducting quality control tests such as soil densities, sieve analysis tests, operation scales and inspecting spread operations.
 - ii. Sampling and transporting produced construction materials from point of application or production to testing laboratory.
- b) Knowledge and Skills Required
 - i. Knowledge of tools, equipment and vehicles utilized in construction.
 - ii. Knowledge of standard equipment and materials used for the sampling and testing of construction material.
 - iii. Knowledge of basic mathematics used in the computation of a variety of construction items.
 - iv. Knowledge of record keeping, preparing of documents and reports.

2) CONSTRUCTION TECHNICIAN II

- a) Performs a variety of skilled activities. Examples of duties assigned to this classification are:
 - i. Inspecting minor construction items, sampling and inspection of steel reinforcement, sampling and inspection of concrete placing operation.
 - ii. Collect and analyze soil samples of construction materials to determine compaction and moisture content.
 - iii. Inspection and sampling of all phases of asphalt concrete and PCC paving operation, including plant inspection.
 - iv. Confers with construction engineers and contractors regarding construction in progress and is conformance to specifications and construction plans.

- v. Answers questions and resolves problems.
- vi. Inspects construction in progress to ensure conformance with specification, agreements, and established requirements.
- vii. Keeps daily diary of work progress.
- viii. Prepares reports on all field inspections and submits project quantities on a daily basis.
- ix. Keeps accurate documentation for force accounts and possible claims.

b) Knowledge and Skills Required

- i. All knowledge and skills required of lower classification.
- ii. Knowledge of currently accepted methods, procedures and techniques used in highway construction inspection, survey, materials testing, and quality control equipment.
- iii. Skill in interpersonal relations as applied to contact with contractors, representatives of other governmental jurisdictions, and other SANBAG/Caltrans staff.

3) CONSTRUCTION TECHNICIAN III

a) Exercises considerable independent judgment within general Caltrans standards and guidelines. Examples of duties assigned to this classification are:

- i. Inspect Project construction on an ongoing basis to assure compliance with contract and in accordance with State and local standards.
- ii. Perform a variety of structural material tests and inspections.
- iii. Reviews construction plans and verified that these are in accordance with designated specifications and other requirements.
- iv. Participates in the preparation of completed work estimates, to calculate compensation due contractor.
- v. Examines and verifies numeric data and material specifications on project cost source documents, utilizing geometry and trigonometry calculations.
- vi. Supervises all work activities involved in construction projects, laboratory, and quality control work.
- vii. Recommends approval of proposed Project changes.

b) Knowledge and Skills Required

- i. All knowledge and skills required of lower classifications.
- ii. Knowledge of the principles and practices of Civil Engineering as applied to the construction of state highways.
- iii. Skill in analyzing and evaluating a wide variety of highly technical engineering data, including construction plans, field survey and quality control documents.

- iv. Skill in interpreting and implementing Caltrans standards, policies, procedures and regulations.
- v. Skill in interpersonal relations, as applied to contacts with contractors, representatives of other governmental jurisdictions, and other SANBAG/Caltrans staff.

11. Construction Surveying Project Manager

- a. A minimum four (4) years' project management experience on similar construction projects is desired.
- b. Licensed Surveyor or pre-January 1, 1982 Registered Professional Engineer in the State of California.
- c. Accessible to the Resident Engineer and SANBAG at all times during normal working hours as specified in this Scope of Services.
- d. Under the direction of the Resident Engineer, the Survey Project Manager will be responsible for:
 - 1) Review, monitor, train, and provide general direction for CONSULTANT survey personnel.
 - 2) Assign personnel to projects on an as-needed basis.
 - 3) Administer personal leave, subject to approval of the Resident Engineer.
 - 4) Prepare monthly reports for delivery to the Resident Engineer.

12. Field Party Chief(s)

- a. The person(s) holding the position of Party Chief shall meet at least one of the following licensing requirements:
 - 1) A licensed Land Surveyor in the State of California.
 - 2) A pre-January 1, 1982, Registered Professional Civil Engineer in the State of California.
 - 3) An experienced surveyor who serves as chief under the direction or supervision of a person who is a licensed Land Surveyor or pre-January 1, 1982 Registered Professional Civil Engineer in the State of California. The direction or supervision shall place the supervisor in "responsible charge" of the work. "Responsible Charge" is defined in Chapter 15 of the Business and Professions Code (the Land Surveyor's Act) and Title 16, Chapter 5, of the California Administrative Code (regulations adopted by the Board of Registration for Professional Engineers and Land Surveyors).
- b. The Party Chief(s) should have a minimum two (2) years' survey experience on similar construction projects and possess the following additional capabilities:
 - 1) Thorough knowledge of construction survey practices and the ability to read and interpret plans and specifications.
 - 2) Ability to make effective decisions concerning field problems and work in progress.
 - 3) Familiarity with typical coordinate geometry computer programs.
 - 4) Familiarity with safety requirements for surveying near traffic.

- c. The Party Chief(s) will assume the following responsibilities:
- 1) Perform construction staking services for Project construction.
 - 2) Administer day to day activities for the survey party.
 - 3) Perform analytical survey calculations for items such as grading, horizontal and vertical control, right of way, and minor in-field design.
 - 4) Maintain continuous communication with the Resident Engineer, field personnel, and construction administration staff.

13. Survey Crews

- a. Qualifications for survey crew members should include the following:
- 1) A minimum of one (1) year of survey experience on similar construction projects is desired.
 - 2) Fundamental knowledge of construction survey practices and the ability to read and interpret plans and specifications.
 - 3) Ability to assist Party Chiefs and office personnel in all required surveying work.
 - 4) One survey crew member must have the ability to assume temporary leadership of the survey party in the absence of the Party Chief.
- b. Under the direction of the Resident Engineer and the Party Chief, the survey crew members will assume the following responsibilities:
- 1) Perform basic calculations to support construction staking.
 - 2) Maintain continuous communication with Party Chiefs and office personnel.

Minute Action

AGENDA ITEM: 11

Date: August 13, 2015

Subject:

SANBAG Countywide Transportation Plan Update

Recommendation:

Receive information on the Draft San Bernardino Countywide Transportation Plan.

Background:

SANBAG currently collaborates with the Southern California Association of Governments (SCAG) on a broad range of transportation and sustainability initiatives. As part of these collaborative efforts, SANBAG was directly involved in the development of the 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and is currently involved in development of the 2016-2040 RTP/SCS. The 2012-2035 RTP/SCS was adopted by SCAG's Regional Council on April 4, 2012.

While SCAG develops the RTP/SCS, the land use and transportation changes within it are largely driven by the respective actions of local governments, transit agencies, Caltrans, and County Transportation Commissions. It is therefore critical that the Transportation Commissions be engaged in the implementation of the Plan in order for its benefits to be realized. In addition, progress toward the implementation of the RTP/SCS needs to be reflected in each subsequent RTP/SCS cycle.

The RTP portion of the RTP/SCS is a long-range transportation plan that is developed and updated by SCAG every four years. The RTP provides a vision for transportation investments throughout the region. Using growth forecasts and economic trends that project out over a 25-year period, the RTP considers the role of transportation in the broader context of economic, environmental, and quality-of-life goals for the future, identifying regional transportation strategies to address our mobility needs.

The SCS was required by Senate Bill 375 to better integrate land use and transportation strategies that will achieve Greenhouse Gas (GHG) reduction targets set by the California Air Resources Board (CARB). The focus of the SCS is on GHG reductions from automobiles and light trucks through integrated transportation, land use, housing and environmental planning.

The purpose of the SANBAG Countywide Transportation Plan (CTP) is to lay out a strategy for long term investment in and management of San Bernardino County's transportation assets. It is serving as input to the SCAG 2016-2040 RTP/SCS. On December 3, 2014, the SANBAG Board of Directors received information on the Draft San Bernardino County Project List that SANBAG submitted to SCAG as initial input into the 2016-2040 RTP/SCS. The list was prepared as part of the CTP development process. Initial growth forecasts (estimates of

Entity: CTC

employment, households, and population through 2040) were also developed collaboratively by SANBAG and local jurisdictions and were presented to the Board of Directors Metro Valley Study Session and Mountain/Desert Policy Committee in May 2014 and were subsequently transmitted to SCAG.

A draft 2016-2040 RTP/SCS is anticipated to be released in October 2015 with the public outreach and comment period lasting through January 2016. The SCAG Regional Council is expected to adopt the 2016-2040 RTP/SCS in April 2016.

The Executive Summary of the Draft SANBAG CTP is provided as Attachment 1 to this agenda item, and the full Draft CTP can be accessed at:

http://www.sanbag.ca.gov/planning2/plan_county-wide-transit.html.

The CTP recognizes that the transportation landscape is changing. As we look back over the trends and accomplishments of the last 25 years, we see a gradual shift at the state level from a principal focus on mobility and congestion relief to a principal focus on sustainability. We see this even in the titles of key propositions and legislation. Sustainability has certainly not been ignored in prior decades, and need for congestion relief remains in the decades to come, but clearly the emphasis has shifted. This shift is a significant consideration in how San Bernardino County plans its transportation system going forward.

As highlighted in the CTP, the following key transportation-related issues will need to be addressed as we move forward. These are not the only ones, but represent key areas where SANBAG should consider taking action or advocating positions.

1. **Transportation funding** – It is well known that State and federal funding levels are not keeping up with operations and maintenance needs and requirements for new or expanded infrastructure. The purchasing power of the state gas tax has declined over time. In the meantime, the population of the Inland Empire increased 63% in the 20 years from 1990 to 2010, a growth rate of 2.5% per year. Local funds now represent over 50% of transportation infrastructure revenue in San Bernardino County.
2. **Congestion relief and economic competitiveness** – Although the statewide emphasis has shifted to sustainability, the need for congestion relief cannot be ignored. We live in a globally competitive environment, in which the speed and cost of doing business still matters a great deal. It is essential that San Bernardino County maintain the transportation advantages that we currently enjoy with our robust freeway and interchange network to support the logistics industry. Some 20% of our jobs are now related to logistics, and logistics hubs will continue to play a major role in bringing business and employment to our area.
3. **System preservation and operations** – The tens of billions of dollars in street and highway infrastructure investment must be preserved. Although Caltrans and local jurisdictions are the owners and operators of our freeways and arterial streets, SANBAG can be a partner with them to ensure that these roadways and structures are maintained and that the operations are optimized. Likewise, the need for operating funds for transit is a major emerging issue and will limit transit network expansion if it is not addressed.

- 4. Land use** – SANBAG and local jurisdictions are aggressively promoting transit oriented development (TOD) as part of a strategy for economic growth and for achieving the regional SB 375 targets. An example is the study for the Advanced Regional Rail Integrated Vision East (ARRIVE) Corridor along the San Bernardino Metrolink line, which is exploring achievable strategies for TOD for each of the six stations along this line in San Bernardino County. The challenge with TOD in San Bernardino County has to do with market readiness. Jurisdictions cannot impose development types and densities that the market cannot yet afford. The strategy must be one of preparing for TOD, while also being patient and demonstrating commitment to rail/transit infrastructure that will attract TOD developers. Most jurisdictions with rail station assets are ready to support TOD, and some have had recent success, but they may need assistance with infrastructure investment, which was dealt a serious blow with the State’s dissolution of redevelopment agencies.
- 5. Transit system interconnectivity** – The transit network is growing, both regionally and in the Inland Empire and in terms of both rail and bus. Improved coordination is needed across transit (rail, fixed route bus, and demand responsive) and ridesharing modes (carpool and vanpool) to provide a high level of customer service at an affordable cost. The telecommunications industry reminds us that successful communications is all about the network. The same is true in building the transit and ridesharing system, and we need to think in terms of interconnectivity, not independent systems.
- 6. Attainment of air quality standards** – Ozone attainment in the South Coast Air Basin is at a critical juncture. As the Basin gets closer to background ozone concentrations (estimated by SCAQMD at 48 parts per billion), the path to attainment will require adoption of technologies and fleet turnover rates that are acknowledged by many as not feasible within the timelines prescribed by EPA. We need to push forward on air quality improvements, but at a rate that our local economy and industry can absorb, based on technologies that can be cost-effectively incorporated into the marketplace. A balanced approach is needed.
- 7. Sustainability and GHG reduction** – SANBAG and our local agency partners have been leaders in regional planning for GHG reduction. The lofty goals of AB 32 and GHG-related Executive Orders now need to be translated into an approach that can achieve those goals without damaging the economy or our region’s competitiveness. Recent analysis in the California Transportation Plan has indicated that land use change and expansion of transit services will produce a relatively small portion of the GHG reductions needed. The analysis indicated that radical transformation in vehicle and fuels technology will need to be the primary mechanism to produce the 80% reduction in GHGs from the transportation fleet targeted for 2050 and 40% by 2030. As with attainment for criteria pollutants, GHG reductions need to be approached in a balanced way.

The CTP is San Bernardino County's long-term plan for transportation. It is focused on several over-arching goals that build on the SANBAG Mission Statement. The goals of the CTP are to:

- Improve safety and mobility for all modes of travel in San Bernardino County by residents, businesses, employees, students and visitors.
- Integrate countywide transportation plans and initiatives, to better serve the needs of the county, and to coordinate transportation systems with other counties through the Regional Transportation Plan/Sustainable Communities Strategy.
- Plan and deliver transportation projects and services in a manner that promotes the County's economic competitiveness, affordable housing, environmental quality, overall sustainability, and access by the full spectrum of system users.
- Promote stewardship of the public resources entrusted to SANBAG and other transportation agencies in the County through analysis and application of the most cost-effective approaches to delivering transportation projects and programs.
- Promote the funding of transportation needs through collaboration with local, state, federal, and private stakeholders.
- Support state, regional, and local environmental and sustainability goals.

The CTP goals are supported by an underlying set of objectives which represent the measureable means to achieve the goals. Objectives include:

- Reduce travel times for both highway and transit travel
- Maximize the efficiency and reliability of the transportation system
- Reduce vehicle hours traveled
- Reduce vehicle emissions, both criteria pollutants and GHG emissions
- Increase the share of people carpooling, bicycling, walking and taking transit
- Reduce accidents
- Preserve existing infrastructure in a cost-effective manner
- Encourage development around existing and planned transit stations and hubs

San Bernardino County is home to a world class network of freeways, arterials, freight rail lines, airports, and transit routes. This network, together with our proximity to the Ports of Los Angeles and Long Beach, is one of the primary reasons that the County has become a strategic location for logistics. However, this network must be maintained and built upon to satisfy the needs of both existing operations and future growth.

Significant growth is anticipated in San Bernardino County through 2040. Annualized growth rates from 2012 to 2040 are 1.0 percent for population and 1.6 percent for employment, or total growth rates of 32 percent and 56 percent, respectively, over the full 28-year period.

The CTP tested two scenarios based on different levels of transportation service and forecast funding. The Baseline Scenario includes projects that can be funded with traditionally available local, Measure I, State, and federal revenue sources through 2040. The Aggressive Scenario is a needs-based scenario assuming additional sources of revenue. However, the Aggressive

Scenario is also consistent with the RTP/SCS “financially constrained” plan. This includes SCAG’s “innovative revenue sources” contained in the 2012-2035 RTP/SCS, a substantial increase over traditionally available funding streams. This CTP does not recommend one scenario over the other, but delineates both to illustrate the transportation projects that could be implemented and maintained in each case.

The Aggressive Scenario includes all projects in the Baseline Scenario plus the additional projects listed. The funding assumptions include some of the major “innovative sources” included in the SCAG RTP/SCS. The Aggressive Scenario excludes certain projects that are included in the SCAG RTP/SCS that are regional in nature, such as the SCAG dedicated truck lanes on State Route 60 (SR-60). The Draft CTP presents a summary of the projects included in the Baseline and Aggressive Scenarios. The Baseline Scenario includes projects contained in the 10-Year Delivery Plan plus those additional projects viewed to be affordable in the forecast of traditionally available funding levels.

In order to obtain the maximum level of feedback and input on the draft CTP, the document has been widely distributed for review and comment. The objective is to ensure that the document is reviewed by as many stakeholders as possible to ensure that all issues are identified and addressed appropriately. The initial step in rolling out the draft CTP was to present to the Transportation Technical Advisory Committee on June 29, 2015. Subsequently, links to the document have been forwarded to the following groups to ensure maximum exposure to stakeholders throughout the county:

- SANBAG Planning and Development Technical Forum
- SANBAG City/County Managers Technical Advisory Committee
- SANBAG Board of Directors and Board of Directors Interested Parties
- San Bernardino County Active Transportation Network
- The Riverside San Bernardino Institute of Transportation Engineers
- Inland Empire Women’s Transportation Seminar
- Public and Specialized Transportation Advisory and Coordination Council
- Caltrans
- Building Industry Association
- Southern California Association of Governments Technical Working Group, representing a cross-section of stakeholders from throughout the SCAG region
- South Coast Air Quality Management District
- California Air Resources Board

The draft document has also been posted on the SANBAG website with a request to review and submit comments. Announcements of the availability of the draft document for public review and comment have also been disseminated via SANBAG social media outlets. In addition, workshops held by SCAG in May and June 2015 were an added opportunity for the public to provide input to the RTP/SCS, including input on the projects and growth forecasts being considered for San Bernardino County.

The CTP is a living document that will be updated in concert with future RTP/SCS updates. Future versions of the CTP will monitor the performance of the various strategies and refine the

Board of Directors Metro Valley Study Session Agenda Item

August 13, 2015

Page 6

financial outlook, project lists and future actions necessary to ensure safe and efficient movement of people and goods throughout San Bernardino County.

Financial Impact:

This item has no impact on the Fiscal Year 2015/2016 budget.

Reviewed By:

This item will be presented to the Mountain/Desert Policy Committee on August 21, 2015. Information in this item was reviewed by the Transportation Technical Advisory Committee (TTAC) on June 29, 2015.

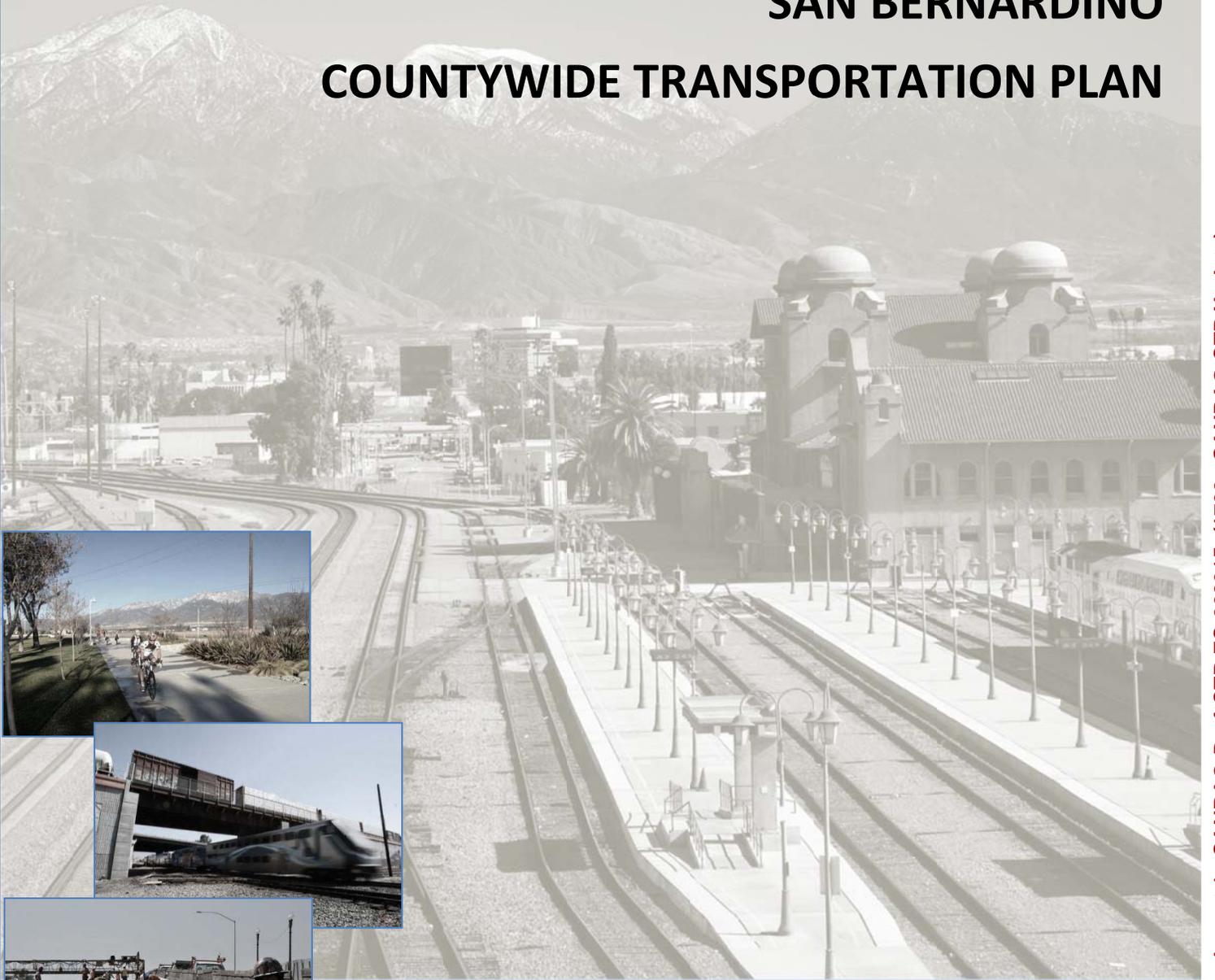
Responsible Staff:

Timothy Byrne, Chief of Planning

Approved
Board of Directors Metro Valley Study Session
Date: August 13, 2015

Witnessed By:

DRAFT SAN BERNARDINO COUNTYWIDE TRANSPORTATION PLAN



Prepared by:



San Bernardino Associated Governments
1170 West Third Street, 2nd Floor
San Bernardino, CA 92410-1715

SANBAG Mission Statement

To enhance the quality of life for all residents, SANBAG will:

- Improve cooperative regional planning
- Develop an accessible, efficient, multi-modal transportation system
- Strengthen development efforts
- Exert leadership in creative problem solving

To successfully accomplish this mission, SANBAG will foster enhanced relationships among all of its stakeholders while adding to the value of local governments.

SANBAG Member Jurisdictions

- City of Adelanto
- Town of Apple Valley
- City of Barstow
- City of Big Bear Lake
- City of Chino
- City of Chino Hills
- City of Colton
- City of Fontana
- City of Grand Terrace
- City of Hesperia
- City of Highland
- City of Loma Linda
- City of Montclair
- City of Needles
- City of Ontario
- City of Rancho Cucamonga
- City of Redlands
- City of Rialto
- City of San Bernardino
- County of San Bernardino
- City of Twentynine Palms
- City of Upland
- City of Victorville
- City of Yucaipa
- Town of Yucca Valley

SANBAG Board of Directors

President

Ryan McEachron, Council Member
City of Victorville

Darcy McNaboe, Mayor
City of Grand Terrace

Joel Klink, Mayor
City of Twentynine Palms

Vice-President

Robert A. Lovingood, Supervisor
County of San Bernardino

Mike Leonard, Council Member
City of Hesperia

Ray Musser, Mayor
City of Upland

Rich Kerr, Mayor
City of Adelanto

Larry McCallon, Mayor
City of Highland

Dick Riddell, Council Member
City of Yucaipa

Curt Emick, Council Member
Town of Apple Valley

Rhodes "Dusty" Rigsby, Mayor
City of Lorna Linda

George Huntington, Mayor
Town of Yucca Valley

Julie McIntyre, Mayor
City of Barstow

Paul Eaton, Mayor
City of Montclair

Janice Rutherford, Supervisor
County of San Bernardino

Bill Jahn, Mayor Pro Tem
City of Big Bear Lake

Edward Paget, Mayor
City of Needles

James Ramos, Supervisor
County of San Bernardino

Dennis Yates, Mayor
City of Chino

Alan Wapner, Mayor Pro Tem
City of Ontario

Curt Hagman, Supervisor
County of San Bernardino

Ed Graham, Council Member
City of Chino Hills

L. Dennis Michael, Mayor
City of Rancho Cucamonga

Josie Gonzales, Supervisor
County of San Bernardino

Frank Navarro, Council Member
City of Colton

Jon Harrison, Mayor Pro Tem
City of Redlands

John Bulinski, Caltrans
Ex-Officio Member

Michael Tahan, Mayor Pro Tem
City of Fontana

Deborah Robertson, Mayor
City of Rialto

Ray Wolfe, *Executive Director*

Eileen Teichert, *SANBAG Counsel*

Table of Contents

- ES Executive Summary..... ES-1
- I. Introduction I-1
 - SANBAG Background..... I-1
 - SANBAG Responsibilities..... I-1
 - Countywide Transportation Plan (CTP) Development I-4
 - CTP Goals I-5
 - CTP Relationship to Countywide/Regional Planning Efforts I-6
- II. State of the Subregion II-2
 - Physical Environment..... II-2
 - Environmental Setting II-3
 - Demographic Environment..... II-4
 - Highways..... II-9
 - Arterial System..... II-12
 - Modeling Analysis of Highway System II-12
 - Transit II-14
 - Goods Movement/Freight II-21
 - Freight and Air Quality..... II-28
 - Airports II-30
 - Active Transportation II-31
 - Travel Demand Management II-36
- III. Financial Forecast III-1
 - Background III-1
 - Baseline and Aggressive Scenario Revenue Forecasts..... III-2
- IV. Future of the Subregion..... IV-1
 - Growth Forecasts..... IV-1
 - Sustainability..... IV-5
 - SANBAG’s Role in Sustainability..... IV-8
- V. Transportation Investments V-1
 - The Mobility Pyramid..... V-1
 - Highway V-4
 - Transit V-5
 - Airports V-16
 - Goods Movement/Freight V-16
 - Active Transportation V-20
- VI. Transportation Strategy..... VI-1
 - Overarching Principles VI-1
 - CTP Key Strategic Issues..... VI-2
 - Individual Strategies VI-3
- VII. Acronym List VII-1
- VIII. Appendices
 - Appendix A - Baseline Scenario Project Listing
 - Appendix B - Aggressive Scenario Project Listing

Attachment: Attachment 1 - SANBAG-DraftCTP-ES-062915 (1733 : SANBAG CTP Update)

List of Tables

Table ES-1: Ten-Year Delivery Plan Projects ES-7

Table ES-2: CTP Scenarios ES-9

Table ES-3: Forecast 2040 San Bernardino County Daily Performance Statistics..... ES-10

Table ES-4: Summary of Long-Term Transportation and Sustainability Strategies ES-11

Table II-1: San Bernardino County 2012 Population/Employment..... II-5

Table II-2: SBTAM County to County Person Trip Summaries II-12

Table II-3: SBTAM San Bernardino County Performance Statistics II-13

Table II-4: Existing San Bernardino Transit Service Provider Summary II-15

Table II-5: Non-Motorized Trips to Work..... II-32

Table II-6: City Bike Path Mileage by Class..... II-35

Table III-1: Estimate of Uncommitted Revenue Beyond the Ten-Year Delivery Plan III-4

Table III-2: Ten-Year Delivery Plan Projects III-5

Table III-3: New Revenue Sources and Innovative Financing Strategies for 2012 RTP/SCS III-6

Table IV-1: San Bernardino County Forecast Population and Employment Growth IV-2

Table IV-2: Forecast 2040 County to County Person Trip Growth..... IV-10

Table IV-3: Forecast 2040 San Bernardino County Performance Statistics IV-11

Table V-1: CTP Scenarios..... V-3

Table V-2: Forecast 2040 San Bernardino County Baseline Scenario Performance Statistics V-10

Table V-3: Forecast 2040 San Bernardino County Aggressive Scenario Performance Statistics V-13

Table VI-1: Summary of Long-Term Transportation and Sustainability Strategies..... VI-4

List of Figures

Figure ES-1: Existing and Planned Regional Rail Network..... ES-2

Figure ES-2: Decline in State Gas Tax Purchasing Power ES-4

Figure ES-3: San Bernardino County Forecast Population and Employment Growth ES-8

Figure I-1: San Bernardino County and SANBAG Subregion I-2

Figure I-2: SANBAG Range of Activities I-3

Figure II-1: San Bernardino Historic Population..... II-2

Figure II-2: Percentage of 2011 Greenhouse Gas Emissions in California II-3

Figure II-3: PM 2.5 Days above National 24-Hour Standard in Southern California II-4

Figure II-4: San Bernardino County Existing Land Uses II-6

Figure II-5: Existing Population Density II-7

Figure II-6: Median Household Income..... II-8

Figure II-7: Employment by Clusters with Greater than 20,000 Jobs II-8

Figure II-8: Existing Employment Density II-9

Figure II-9: San Bernardino County Freeway/Arterial System II-10

Figure II-10: Historical AM Peak Period PeMS Delay II-11

Figure II-11: Historical PM Peak Period PeMS Delay II-11

Figure II-12: Base Year 2012 AM Peak Period Transportation System Performance II-13

Attachment: Attachment 1 - SANBAG-DraftCTP-ES-062915 (1733 : SANBAG CTP Update)

Figure II-13: Base Year 2012 PM Peak Period Transportation System Performance..... II-14

Figure II-14: San Bernardino County Transit System II-16

Figure II-15: Regional Rail Network..... II-20

Figure II-16: Weekday Railway Utilization II-23

Figure II-17: Developed Industrial/Warehousing Land Use II-24

Figure II-18: Railroad Crossing Locations II-25

Figure II-19: Freeway, Rail Lines and Intermodal Facilities II-26

Figure II-20: Existing San Bernardino County Daily Truck Volumes II-27

Figure II-21: San Bernardino County Air Districts II-28

Figure II-22: NOx Emission Reductions Needed to Meet Federal Ozone Standards II-29

Figure II-23: Ontario International Passengers II-30

Figure II-24: San Bernardino County Bicycle Facilities II-32

Figure III-1: Measure I Historical Revenue III-1

Figure III-2: Measure I Revenue Allocation by Subarea III-2

Figure III-3: Decline in State Gas Tax Purchasing Power III-3

Figure IV-1: Population Growth Density IV-3

Figure IV-2: Employment Growth Density IV-4

Figure IV-3: San Bernardino County Person Trip Distribution IV-11

Figure IV-4: Daily Traffic Volume Growth 2012-2040 IV-12

Figure IV-5: AM Peak Period Forecast 2040 No Build Congestion IV-13

Figure IV-6: PM Peak Period Forecast 2040 No Build Congestion IV-14

Figure V-1: Mobility Pyramid V-1

Figure V-2: Aggressive Scenario Projects V-4

Figure V-3: Baseline Scenario Transit Projects V-6

Figure V-4: Aggressive Scenario Transit Projects V-7

Figure V-5: AM Peak Period Forecast 2040 Baseline Scenario Congestion V-11

Figure V-6: PM Peak Period Forecast 2040 Baseline Scenario Congestion V-12

Figure V-7: AM Peak Period Forecast 2040 Aggressive Scenario Congestion V-14

Figure V-8: PM Peak Period Forecast 2040 Aggressive Scenario Congestion V-15

Attachment: Attachment 1 - SANBAG-DraftCTP-ES-062915 (1733 : SANBAG CTP Update)

ES Executive Summary

The transportation landscape is changing. As we look back over the trends and accomplishments of the last 25 years, we see a gradual shift at the state level from a principal focus on mobility and congestion relief to a principal focus on sustainability. We see this even in the titles of key propositions and legislation. Sustainability has certainly not been ignored in prior decades, and need for congestion relief remains in the decades to come, but clearly the emphasis has shifted. This shift is a significant consideration in how San Bernardino County plans its transportation system going forward.

The purpose of this Countywide Transportation Plan (CTP) is to lay out a strategy for long term investment in and management of San Bernardino County's transportation assets. Before describing the strategy, however, it is important to understand some of the history behind these changes in emphasis to properly set the stage for a number of challenging issues that need to be addressed in the CTP.

Transportation Funding in the Last 30 Years - A Brief History

The emphasis on mobility and congestion relief in California can be seen in legislation dating back to the mid-1980s, when the state legislature began authorizing sales taxes for transportation projects in individual counties. Under this legislation, counties and cities could cooperatively establish new "transportation authorities" to administer the tax proceeds in keeping with voter-approved expenditure programs. In 1984, voters in Santa Clara County approved the first such sales tax in California. The legislature soon gave all counties the power to adopt these taxes, prompting 17 counties, including San Bernardino County, to adopt these voter-approved taxes by 1990.

The voter-approved San Bernardino County half-cent sales tax began generating funds in April, 1990. Some of the cornerstone projects in the first Measure I Expenditure Plan included construction of the SR-71 and SR-210 freeways and initiation of service for the regional Metrolink commuter rail system in 1991. The SR-60 and I-10 freeways underwent major upgrades to 4 mixed flow lanes plus 1 High-Occupancy Vehicle (HOV) lane in the West Valley, and a truck climbing lane was added on eastbound I-10 through Redlands.

At the regional level, the sales tax measures have enabled Southern California to go from virtually no passenger rail service in 1990 to over 500 miles of commuter rail and over 100 miles of heavy rail and light rail today. This has been an important element in transforming downtown Los Angeles into a much more vibrant center of activity than it was 20 years ago, with greatly increased transit connectivity region wide. **Figure ES-1** shows the current extent of the regional rail network. San Bernardino County is a vital part of this growing network.

Mobility needs were further highlighted in Proposition 111, titled The Traffic Congestion Relief and Spending Limitation Act Of 1990, passed by the voters of California in June 1990. The official proposition summary stated, in part:

"This measure would enact a statewide traffic congestion relief program and update the spending limit on state and local government to better reflect the needs of a growing California population. It would provide new revenues to be used to reduce traffic congestion by building state highways, local streets and roads, and public mass transit facilities. This measure would enact a 55% increase in truck weight fees and a five-cent-per-gallon increase in the fuel tax on August 1, 1990, and an additional one cent on January 1 of each of the next four years."

with commitments to initiating passenger rail service to Redlands, extension of the Gold Line to Montclair, and improvements to Metrolink service. It also set in motion the approval of a development mitigation program that all the cities in the Valley and Victor Valley implemented through development impact fees (DIFs) for partial funding of interchanges, arterials, and rail/highway grade separations.

Assembly Bill 32 (AB 32), passed in 2006, introduced a new focus on growing California in a sustainable way. As indicated on the California Air Resources Board website, *“The passage of AB 32, the California Global Warming Solutions Act of 2006, marked a watershed moment in California’s history. By requiring in law a sharp reduction of greenhouse gas (GHG) emissions, California set the stage for its transition to a sustainable, low-carbon future. AB 32 was the first program in the country to take a comprehensive, long-term approach to addressing climate change, and does so in a way that aims to improve the environment and natural resources while maintaining a robust economy. AB 32 requires California to reduce its GHG emissions to 1990 levels by 2020 — a reduction of approximately 15 percent below emissions expected under a ‘business as usual’ scenario.”* Subsequent Executive Orders by Governors Schwarzenegger and Brown have stated the need for dramatic reductions of 80% in GHG emissions from the transportation sector by 2050 and 40% by 2030.

Senate Bill 375 further increased the focus on sustainability for regions as they grow, requiring that each region, including SCAG, prepare a Sustainable Communities Strategy. As part of the six-county SCAG region, SANBAG and its local jurisdictions were partners with SCAG in crafting the first SCS, incorporated into the 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy or RTP/SCS.

SANBAG is also a partner with two Air Quality Management Districts (South Coast and Mojave Desert) to attain air quality standards set by the Environmental Protection Agency. Both air basins are designated as non-attainment and the South Coast air basin is designated an “extreme” non-attainment area. Although tremendous progress has been made in cleaning the air over the last several decades, the South Coast air basin is still well short of what is needed to attain federal ozone standards by 2023 and a subsequent stricter attainment goal by 2032. This is of concern to San Bernardino County, because the path to attainment falls heavily on the transportation sector.

The County of San Bernardino and SANBAG adopted the Countywide Vision in 2011, setting in motion initiatives spanning across 10 Vision elements as described later in the CTP: Education, Environment, Housing, Image, Infrastructure, Jobs/Economy, Public Safety, Quality of Life, Water, and Wellness. This has established San Bernardino County as a sustainability leader in the region and helps guide county and city agencies in establishing and attaining sustainability goals.

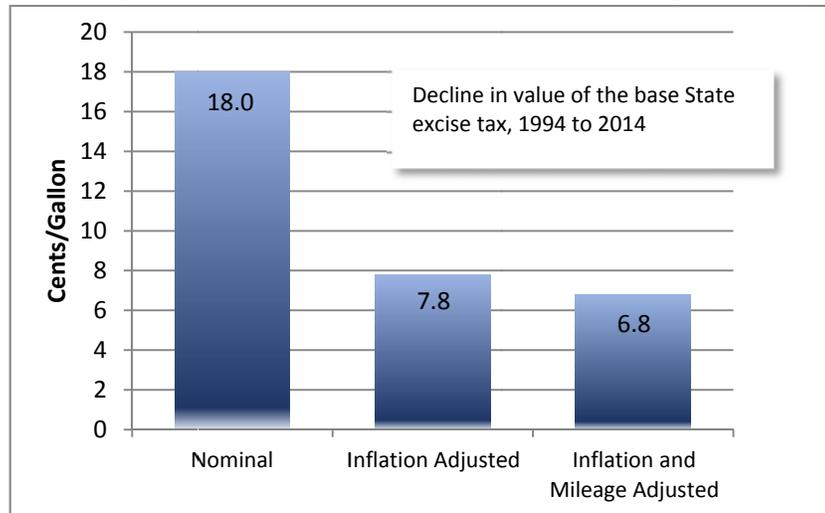
Framing the Issues

With the above as context, what types of issues will SANBAG and our partner agencies face over the horizon of this Countywide Transportation Plan, through 2040? This section highlights several of the core transportation-related issues that will need to be addressed as we move forward. These are not the only ones, but represent key areas where SANBAG should consider taking action or advocating positions.

1. **Transportation funding** – It is well known that State and federal funding levels are not keeping up with operations and maintenance needs and requirements for new or expanded infrastructure. **Figure ES-2** presents the decline in purchasing power of the state gas tax in cents per gallon. In the meantime, the population of the Inland Empire increased 63% in the 20 years from 1990 to 2010, a growth rate of 2.5% per year. Local funds now represent over 50% of transportation infrastructure revenue in San Bernardino County.

2. **Congestion relief and economic competitiveness** – Although the statewide emphasis has shifted to sustainability, the need for congestion relief cannot be ignored. We live in a globally competitive environment, in which the speed and cost of doing business still matters a great deal. It is essential that San Bernardino County maintain the transportation advantages that we currently enjoy with our robust freeway and interchange network to support the logistics industry. Some 20% of our jobs are now related to logistics, and logistics hubs will continue to play a major role in bringing business and employment to our area.

Figure ES-2: Decline in State Gas Tax Purchasing Power



Source: Caltrans

3. **System preservation and operations** – The tens of billions of dollars in street and highway infrastructure investment must be preserved. Although Caltrans and local jurisdictions are the owners and operators of our freeways and arterial streets, SANBAG can be a partner with them to ensure that these roadways and structures are maintained and that the operations are optimized. Routine maintenance can avoid the much larger expenditures that will be incurred from neglect. Likewise, the need for operating funds for transit is a major emerging issue and will limit transit network expansion if it is not addressed.
4. **Land use** – SANBAG and local jurisdictions are aggressively promoting transit oriented development (TOD) as part of a strategy for economic growth and for achieving the regional SB 375 targets. An example is the study for the ARRIVE Corridor along the San Bernardino Metrolink line, which is exploring achievable strategies for TOD for each of the six stations along this line in San Bernardino County. The challenge with TOD in San Bernardino County has to do with market readiness. Jurisdictions cannot impose development types and densities that the market cannot yet afford. The strategy must be one of preparing for TOD, while also being patient and demonstrating commitment to rail/transit infrastructure that will attract TOD developers. Most jurisdictions with rail station assets are ready to support TOD, and some have had recent success, but they may need assistance with infrastructure investment, which was dealt a serious blow with the State's dissolution of redevelopment agencies.
5. **Transit system interconnectivity** – The transit network is growing, both regionally and in the Inland Empire and in terms of both rail and bus. Improved coordination is needed across transit (rail, fixed route bus, and demand responsive) and ridesharing modes (carpool and vanpool) to provide a high level of customer service at an affordable cost. The telecommunications industry reminds us that successful communications is all about the network. The same is true in building the transit and ridesharing system, and we need to think in terms of interconnectivity, not independent systems.



6. **Attainment of air quality standards** – Ozone attainment in the South Coast Air Basin is at a critical juncture. As the Basin gets closer to background ozone concentrations (estimated by SCAQMD at 48 ppb), the path to attainment will require adoption of technologies and fleet turnover rates that are acknowledged by many as not feasible within the timelines prescribed by EPA. We need to push forward on air quality improvements, but at a rate that our local economy and industry can absorb, based on technologies that can be cost-effectively incorporated into the marketplace. A balanced approach is needed.
7. **Sustainability and GHG reduction** – SANBAG and our local agency partners have been leaders in regional planning for GHG reduction. The lofty goals of AB 32 and GHG-related Executive Orders now need to be translated into an approach that can achieve those goals without damaging the economy or our region's competitiveness. Recent analysis in the California Transportation Plan has indicated that land use change and expansion of transit services will produce a relatively small portion of the GHG reductions needed. The analysis indicated that radical transformation in vehicle and fuels technology will need to be the primary mechanism to produce the 80% reduction in GHGs from the transportation fleet targeted for 2050 and 40% by 2030. As with attainment for criteria pollutants, GHG reductions need to be approached in a balanced way.

CTP Key Issues

- Transportation funding
- Congestion relief and economic competitiveness
- System preservation and operations
- Land use
- Transit system interconnectivity
- Attainment of air quality standards
- Sustainability and GHG reduction

CTP Goals and Objectives

The CTP is San Bernardino County's long-term plan for transportation. It is focused on several overarching goals that build on the SANBAG Mission Statement. The goals of the CTP are to:

- Improve safety and mobility for all modes of travel in San Bernardino County by residents, businesses, employees, students and visitors.
- Integrate countywide transportation plans and initiatives, to better serve the needs of the county, and to coordinate transportation systems with other counties through the Regional Transportation Plan/Sustainable Communities Strategy.
- Plan and deliver transportation projects and services in a manner that promotes the County's economic competitiveness, affordable housing, environmental quality, overall sustainability, and access by the full spectrum of system users.
- Promote stewardship of the public resources entrusted to SANBAG and other transportation agencies in the County through analysis and application of the most cost-effective approaches to delivering transportation projects and programs.
- Promote the funding of transportation needs through collaboration with local, state, federal, and private stakeholders.
- Support state, regional, and local environmental and sustainability goals.

The CTP goals are supported by an underlying set of objectives which represent the measureable means to achieve the goals. Objectives include:

- Reduce travel times for both highway and transit travel

- Maximize the efficiency and reliability of the transportation system
- Reduce vehicle hours traveled
- Reduce vehicle emissions, both criteria pollutants and GHG emissions
- Increase the share of people carpooling, bicycling, walking and taking transit
- Reduce accidents
- Preserve existing infrastructure in a cost-effective manner
- Encourage development around existing and planned transit stations and hubs

The CTP and Its Relationship to Other Plans

The CTP needs to be understood in the context of several other plans and programs managed by SANBAG.

- The Measure I 2010-2040 Ordinance and Expenditure Plan extended the half-cent sales tax for transportation for an additional 30 years to 2040. The Expenditure Plan identifies how the Measure I revenue is to be allocated by subarea and program. The Expenditure Plan is provided in Appendix A of the Measure I Strategic Plan at http://www.sanbag.ca.gov/planning2/plan_measure-i.html.
- The Measure I 2010-2040 Strategic Plan, approved by the SANBAG Board in April 2009, specifies the policies by which the funds are to be managed. It also provides an overall funding and management strategy for Measure I. The Plan can be reviewed at the link above.
- The Measure I Strategic Plan required the development of a Ten-Year Delivery Plan. The purpose of the Delivery Plan is to define the scope, schedule and budget for projects to be developed and delivered in the early years of Measure I 2010-2040. The Delivery Plan was first approved by the Board in early 2012 and was updated in early 2014. The Delivery Plan can be found under Publications at the SANBAG home page at <http://www.sanbag.ca.gov/>. **Table ES-1** presents the projects included in the Delivery Plan.
- The Development Mitigation Nexus Study, approved by the SANBAG Board in 2005, identifies funding forecast to be generated from new development over the course of Measure I 2010-2040. These funds, generated primarily from transportation fees on new development, are used as part of the funding package for three types of projects in the Valley and Victor Valley: freeway interchanges, arterials, and rail/highway grade separations. The Nexus Study identifies the shares of funding for which local jurisdictions are responsible. The Nexus Study (Appendix K of the CMP) can be accessed at <http://www.sanbag.ca.gov/planning2/congestion-mgmt.html>.
- The Federal Transportation Improvement Program (FTIP) is a short-term listing of all transportation projects proposed over a six-year period for the SCAG region. SANBAG submits the San Bernardino County portion of the FTIP to SCAG, with major updates scheduled every even year. See the link to the FTIP at <http://ftip.scag.ca.gov/Pages/2015/adopted.aspx>.
- The Regional Transportation Plan/Sustainable Communities Strategy is prepared by SCAG every four years, with substantial input from County Transportation Commissions and local governments. The San Bernardino CTP is one of the primary sources of input to the RTP/SCS. The current RTP/SCS was prepared for the 2012-2035 timeframe. An update for 2016 through 2040 is scheduled for adoption by SCAG in April 2016. See <http://rtpscs.scag.ca.gov/Pages/default.aspx>.

Table ES-1: Ten-Year Delivery Plan Projects

Measure I Programs	
Cajon Pass Subarea Program	
I-15/I-215 (Devore) Interchange	
San Bernardino Valley Freeway Program	
I-10 Widening (HOV or Express Lanes) from LA County Line to Ford Street	
I-15 Express Lanes from Riverside County Line to I-215	
I-215 Widening from Riverside County Line to I-10	
I-10 Truck Climbing Lane from Live Oak to Riverside County Line	
SR-210 Widening from Highland Avenue to I-10	
San Bernardino Valley Freeway Interchange Program	
I-10/Cherry Avenue	I-10/Alabama Street
I-10/Citrus Avenue	I-15/Baseline Road
I-10/Tippecanoe Avenue Phase 1 & 2	I-10/Mount Vernon Avenue
I-10/Cedar Avenue	SR-60/Archibald Avenue
SR-210/Baseline Road	I-10/Monte Vista Avenue
SR-60/Central Avenue	I-10/Pepper Avenue Phase 2
I-10/University Avenue	I-10/Riverside Avenue Phase 2
I-215/University Parkway	
San Bernardino Valley Major Street Program	
North Vineyard Avenue Grade Separation (Union Pacific)	
South Milliken Avenue Grade Separation (Union Pacific)	
Glen Helen Parkway Grade Separation (Burlington Northern-Santa Fe)	
Palm Avenue Grade Separation (Burlington Northern-Santa Fe)	
Laurel Avenue Grade Separation (Burlington Northern-Santa Fe)	
San Bernardino Valley Metrolink/Passenger Rail Program	
Downtown San Bernardino Rail	
Redlands Passenger Rail	
San Bernardino Line Double Track (Preliminary Engineering)	
Gold Line to Montclair (Environmental Documentation/Preliminary Engineering)	
Valley Express Bus & Bus Rapid Transit Program	
E Street Bus Rapid Transit	
Victor Valley Major Local Highway Program	
Yucca Loma Corridor – Yucca Loma Bridge and Yates Road	
I-15/Ranchero Road Interchange	
Yucca Loma Corridor – Green Tree Boulevard Extension	
US-395 Widening from SR-18 to Chamberlaine Way	
Ranchero Road Corridor	
North Desert Major Local Highway Program	
Lenwood Road Grade Separation	

Source: SANBAG Measure I 2010-2040 Ten-Year Delivery Plan, March 2014

Attachment: Attachment 1 - SANBAG-DraftCTP-ES-062915 (1733 : SANBAG CTP Update)

Summary of the CTP Analysis of Future Transportation Needs and Funding

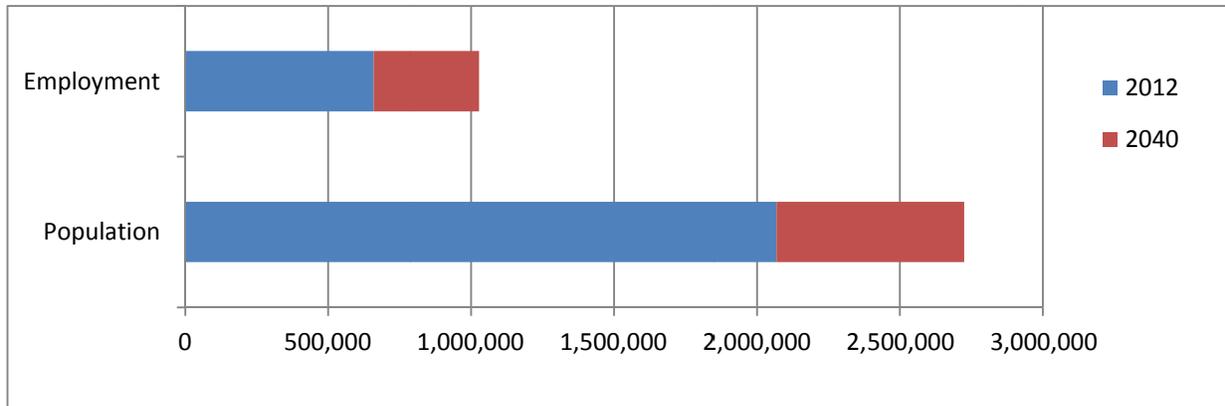
San Bernardino County is home to a world class network of freeways, arterials, freight rail lines, airports, and transit routes. This network, together with our proximity to the Ports of Los Angeles and Long Beach, is one of the primary reasons that the County has become a strategic location for logistics. However, this network must be maintained and built upon to satisfy the needs of both existing operations and future growth.

As indicated in **Figure ES-3** significant growth is anticipated in San Bernardino County through 2040. Annualized growth rates from 2012 to 2040 are 1.0 percent for population and 1.6 percent for employment, or total growth rates of 32 percent and 56 percent, respectively, over the full 28-year period.

Approximately \$5.4 billion (in 2015 dollars) is forecast to be collected through the life of Measure I 2010-2040

The CTP tested two scenarios based on different levels of transportation service and forecast funding. The Baseline Scenario includes projects that can be funded with traditionally available local, Measure I, State, and federal revenue sources through 2040. The Aggressive Scenario is a needs-based scenario assuming additional sources of revenue. However, the Aggressive Scenario is also consistent with the RTP/SCS “financially constrained” plan. This includes SCAG’s “innovative revenue sources” contained in the 2012-2035 RTP/SCS, a substantial increase over traditionally available funding streams. This CTP does not recommend one scenario over the other, but delineates both to illustrate the transportation projects that could be implemented and maintained in each case.

Figure ES-3: San Bernardino County Forecast Population and Employment Growth



The Aggressive Scenario includes all projects in the Baseline Scenario plus the additional projects listed. The funding assumptions include some of the major “innovative sources” included in the SCAG RTP/SCS. The Aggressive Scenario excludes certain projects that are included in the SCAG RTP/SCS that are regional in nature, such as the SCAG dedicated truck lanes on SR-60. **Table ES-2** presents a summary of the projects included in the Baseline and Aggressive Scenarios. The Baseline Scenario includes projects contained in the 10-Year Delivery Plan plus those additional projects viewed to be affordable in the forecast of traditionally available funding levels. The funding assumptions are listed on the right side of the table.

Attachment: Attachment 1 - SANBAG-DraftCTP-ES-062915 (1733 : SANBAG CTP Update)

Table ES-2: CTP Scenarios

		Projects	Funding
CTP Scenarios	Baseline	<p>10-Year Delivery Plan Plus Constrained Projects through 2040:</p> <ul style="list-style-type: none"> • Freeway/Interchange Program (10-YDP Projects only) • I-15 Express Lanes to US-395 • I-215 North HOV lane (SR-210 to I-15) • Valley Interchange Phasing Program (constrained to revenue) or Priority 11-18 interchanges (note that priorities are being re-evaluated in 2015) • Arterial Program (constrained to revenue) • No additional grade separations • Redlands Passenger Rail Project • Gold Line to Montclair • Metrolink double track (CP Lilac to CP Rancho) • Metrolink expansion (50 daily trains) • Active Transportation Projects supportable by grants and Transportation Development Act funds • West Valley Connector Express Bus • Foothill/5th Express Bus 	<p>Core Revenues, Financially Constrained Traditional sources:</p> <ul style="list-style-type: none"> • Measure I Forecast revenue in 10-YDP • State revenues constrained to gas tax collections • Federal revenues constrained to gas tax collections • Tolls for express lane scenario • Transit revenue adequate to cover current operations held at 3% • Mitigation fees
	Aggressive	<p>Baseline Projects Plus the Following:</p> <ul style="list-style-type: none"> • Freeway Improvements <ul style="list-style-type: none"> ○ Full Buildout of I-215 from I-10 to SR-60 (including I-215/Washington-Mt Vernon interchange) ○ I-215 mixed flow lane from SR-210 to I-15 ○ Completion of I-10 to Riverside Co. Line with HOV or Express Lanes ○ SR-210 HOV lane from I-215 to I-10 ○ I-10/I-15 Express Lane Connectors • Interchange Program Buildout • Arterial Program Buildout • All Nexus Study Grade Separations • Additional Alameda Corridor East Grade Separations • Additional rail projects (i.e. Redlands Rail Phase 2) • Additional Metrolink double track segments • BRT (West Valley Connector, Foothill-5th) • Express Bus (Remaining key transit corridors) • Non-Motorized Transportation Plan buildout (Secondary Active Transportation Projects) • Goods movement projects (truck climbing lanes, Intermodal access improvements) • East-West Freight Corridor (regional project) • High Desert Corridor (public and/or private funding) • Passenger Rail to Ontario Airport 	<p>Match Funding to Infrastructure Need Potential options:</p> <ul style="list-style-type: none"> • Tolls for express lane scenario • Supplemental Measure I • State and Federal gas taxes indexed to be on par with current authorizations with inflation • Regional/State/Federal VMT fee (or equivalent) • Aggressive assumptions for State Bonds/Federal Stimulus • Prop 1B-type infusion every 10 years • Federal freight dollars

Attachment: Attachment 1 - SANBAG-DraftCTP-ES-062915 (1733 : SANBAG CTP Update)

The performance of the transportation system is presented in **Table ES-3**. This analysis was generated using the San Bernardino Transportation Analysis Model (SBTAM), which is a focused sub-model derived from the SCAG regional model. SBTAM includes the same network as in the 6-county SCAG region, but with additional detail in San Bernardino County. The results show a substantial reduction in vehicle hours of travel and savings in delay within San Bernardino County for the Baseline Scenario. A savings of 100,000 vehicle hours per weekday would equate to over \$400 million in delay savings per year, based on the value of time alone (typically in the range of \$15 per hour).

Table ES-3: Forecast 2040 San Bernardino County Daily Performance Statistics

Measure of Effectiveness	2012	2040 No Build	2040 Baseline	Percent Change from 2040 No Build	2040 Aggressive	Percent Change from 2040 No Build
Vehicle Miles Traveled	56,462,829	81,122,010	82,051,483	1.1%	82,945,126	2.2%
Vehicle Hours Traveled	1,203,423	2,029,243	1,884,948	-7.1%	1,886,904	-7.0%
Vehicle Hours of Delay	140,982	476,229	342,267	-28.1%	274,436	-42.4%
Average Speed (mph)	46.9	40.0	43.5	8.8%	44.0	9.9%

Source: SBTAM

Summary of the CTP Transportation Strategy

There are two parts to SANBAG’s transportation strategy: a set of overarching principles, coupled with individual strategies by geographic area, mode, and function.

Overarching Principles

- **Customer focus** – SANBAG and other public agencies exist to serve their traveling “customers.” Customers extend across all auto, transit, truck, and non-motorized modes.
- **Partnership-building** – SANBAG is part of a multi-agency team to deliver mobility and safety improvements to our customers. Other important parts of the team include Caltrans, transit agencies, local jurisdictions, SCAG, air quality management districts, and the private sector. Good communication and collaboration is essential for each agency to accomplish its part of the overall mission.
- **Stewardship** – The public has entrusted resources to SANBAG and other transportation-related agencies. We must be good stewards of both the limited financial resources available and the environmental resources we need to preserve as the system is built.
- **Cost-effectiveness** – Investments should be made in a way that maximizes the benefits derived from the available resources, with due attention given to geographic equity.
- **Economic competitiveness** – The transportation system exists to enable the businesses and residents of San Bernardino County to thrive. Our continued investment in transportation efficiency will enhance San Bernardino County as a business location.
- **Delivering on commitments** – Commitments are made at multiple levels, but major ones include: delivering the range of projects reflected in the Measure I Expenditure Plan; equitably distributing State, federal, and Measure I funding to the county’s transit agencies and local jurisdictions; supporting implementation of the San Bernardino Countywide Vision; fulfilling commitments in the Sustainability MOU with SCAG; and supporting other statewide sustainability goals while fostering economic growth.
- **System preservation** – SANBAG and its agency partners need to work together to estimate maintenance needs and seek the funding needed to preserve/operate capital investment in highways and transit systems.

Attachment: Attachment 1 - SANBAG-DraftCTP-ES-062915 (1733 : SANBAG CTP Update)

Individual Strategies

Individual strategies can be grouped into three primary categories:

- Geographic
- Modal
- Functional

Table ES-4 presents proposed SANBAG strategies for the modal, functional and geographic categories incorporated into the Strategic Plan. Modal categories have been nested into the primary geographic subareas of the Measure I Strategic Plan. The primary challenge or challenges associated with each component are identified, along with corresponding strategies that address the challenges.

Table ES-4: Summary of Long-Term Transportation and Sustainability Strategies

Category	Challenge	Strategy
Valley Categories by Mode		
Freeway system	Forecasts show that the system will be highly congested by 2040. Funding for capacity and operational enhancements to the system is expected to be constrained.	Position the freeway system to adapt to future demands by using a managed lane approach and improved traffic management and information systems across all freeways.
Freeway interchanges	Projected Measure I, state, and federal funds will be insufficient to meet all the interchange improvement needs.	Spread Measure I funds across interchange hot-spots using both a phased approach and right-sizing of full interchange improvements. Look to a future Measure I, state, and federal funds to complete the freeway interchange program.
Rail/highway grade separations	Projected Measure I, state, and federal funds will be insufficient to build all the grade separations identified.	Prioritize additional grade separations and proceed with project development on at least two projects, to take advantage of potential future freight funding opportunities.
Arterials	Arterial project construction has lagged original expectations.	Encourage jurisdictions to accelerate arterial improvement projects and continue policy flexibility for funding development shares. SANBAG will identify arterial improvements that are particularly important to route continuity.
Passenger Rail	Stations along the Metrolink San Bernardino Line and the Redlands Rail corridor are our most significant opportunities for transit oriented development and transit-related economic growth. Funds for rail services are limited, and Metrolink costs are increasing faster than available funding.	To encourage investment, jurisdictions along these corridors need assurances from SANBAG/Metrolink that service can be maintained and, ideally, expanded. Develop a sustainable funding plan, and integrate operations for these corridors wherever possible. Position Metrolink capacity-enhancement projects for future implementation funding.
Gold Line	Timing of extension of Gold Line to Montclair and beyond is uncertain, and issue of overlapping Metrolink/Gold Line/ONT corridors needs to be resolved.	Develop an integrated operational/funding solution for Gold Line and Metrolink in coordination with LA Metro, Metrolink, and local jurisdictions.

Attachment: Attachment 1 - SANBAG-DraftCTP-ES-062915 (1733 : SANBAG CTP Update)

Table ES-4: Summary of Long-Term Transportation and Sustainability Strategies, Continued

Category	Challenge	Strategy
Valley Categories by Mode, Continued		
Transit Connection to ONT	The City of Ontario is negotiating for the transfer of control of Ontario International Airport to the City. The region would benefit from improved transit access for passengers and employees.	Take a phased approach to transit access to ONT, beginning with shuttle service from the Metrolink Rancho Cucamonga station, with a possible longer term solution emerging from corridor-level analysis.
Bus Rapid Transit (BRT)	The cost of building all the BRT corridors in the Long Range Transit Plan far exceeds available funding. The proper technology solution to carry across future express bus/BRT corridors also needs to be resolved.	Develop an Express Bus/BRT strategic plan, to determine how premium transit should be staged and funded across the Valley. The plan should address corridor priorities, phasing, technology, and funding options, providing information for the Board to decide on the appropriate BRT/Arterial funding split by 2020.
Fixed-route bus service	Sustainable funding for operations is the biggest challenge.	Study the challenges of the trajectory of transit operations funding, and jointly develop solutions between SANBAG and Omnitrans.
Airports	Passenger service has declined significantly at ONT over the past decade, attributed in part to current management policies.	Support Ontario and the region in the effort to regain local control of ONT, and make ONT, SBIA, and SCLA more competitive as destinations for passengers and freight.
Active Transportation	Large funding needs for building out the cycling/walking network	Continue to submit competitive grant applications to support implementation of the Non-motorized Transportation Plan (NMTP). <ul style="list-style-type: none"> • Maintain and update the NMTP • Identify and pursue grant funding opportunities to expand cycling and walking infrastructure
Demand-responsive bus service	Demand-responsive service is the highest cost form of transit, but important in serving certain senior and disabled transit riders.	Continue assistance programs, such as helping demand-responsive riders use fixed-route systems and coordination with non-profit entities while also maintaining demand-responsive service.
Transit integration and inter-connectivity	Transit services could be better coordinated across systems in terms of ease of transfers, fare media, and first/last mile connections. This will be even more important as the system grows.	Take a more integrated, customer-focused approach to the provision of transit services. Facilitate seamless ticketing and better connection at existing transit centers and connection points.
Mountain/Desert Strategies		
Victor Valley highway projects	Growth forecasts show a near doubling in traffic volume by 2040.	Prioritize projects that will provide the most cost-effective congestion reduction benefit, designating projects for Major Local Highway funding through the subarea process. Continue to advocate the High Desert Corridor as a P3 project.
Mountain/Desert fixed route transit	Funds are limited for route expansion and adjustment as the Victor Valley grows.	Study the challenges of the trajectory of transit operations funding, and jointly develop solutions between SANBAG and the Mountain/Desert transit agencies.

Attachment: Attachment 1 - SANBAG-DraftCTP-ES-062915 (1733 : SANBAG CTP Update)

Table ES-4: Summary of Long-Term Transportation and Sustainability Strategies, Continued

Category	Challenge	Strategy
Mountain/Desert Strategies, Continued		
Mountain/Desert demand-responsive bus service	Demand-responsive service is the highest cost form of transit, but important in serving certain senior and disabled transit riders.	Continue assistance programs, such as helping demand-responsive riders use fixed-route systems and coordination with non-profit entities while also maintaining demand-responsive service.
Mountain Subarea	Though baseline population is small, major congestion occurs on weekends, particularly winter weekends, limiting economic growth.	Conduct a study of bottleneck locations and lower-cost improvements that could reduce weekend congestion levels and prioritize funding for those projects.
Morongo Basin	The Basin is steadily growing, and SR-62 is the only viable transportation route through Yucca Valley and Twentynine Palms.	Implement improvement projects identified through the Morongo Basin Area Transportation Study (MBATS).
North Desert	The North Desert has major highway needs, but limited funding.	Evaluate long-term priorities for project investments in the subarea.
Colorado River	Funds are extremely limited for improvements in this subarea.	Smaller-scale, affordable improvements should be investigated and prioritized by the subarea.
Functional Categories		
Highway Maintenance and Operations	Highways are facing serious future maintenance funding shortfalls. Local jurisdictions are responsible for arterial maintenance while Caltrans is responsible for freeway and state highway maintenance.	Conduct a strategic planning study with Caltrans and regional agencies to assess maintenance/operations funding needs and approaches to managing costs.
Transit System Maintenance and Operations	Existing transit systems are facing potentially serious future operations funding shortfalls.	Optimize transit operations and identify mechanisms to fund future system operations and expansion.
Air Quality	Although air quality has dramatically improved over the last several decades, attainment of the next set of ozone standards will be extraordinarily challenging and costly.	Work with regional and state agencies and the private sector to meet attainment standards on an achievable timeline that does not adversely impact the economy. Advocate for state/federal investment that facilitates this progress. Focus on market-based mobile source technology improvements and fleet turnover as a win-win approach.
Sustainable Growth	The state's GHG reduction goal of 80% by 2050 is an enormous challenge. If not done carefully, it may undermine the economy to the point where it will be impossible to afford the technology improvements needed to achieve this goal.	Assist state/regional agencies and the private sector in technology research and implementation strategies that are technologically feasible and cost-effective (per AB 32) for San Bernardino County. Implementation should follow the natural course of vehicle life cycles and fleet turnover, to the extent possible.
Habitat Conservation	Habitat conservation currently occurs on a project-by-project basis, generally without a comprehensive approach.	Continue with development of the Habitat Preservation/Conservation Framework as a win-win approach for selected geographic areas.

Attachment: Attachment 1 - SANBAG-DraftCTP-ES-062915 (1733 : SANBAG CTP Update)

Table ES-4: Summary of Long-Term Transportation and Sustainability Strategies, Continued

Category	Challenge	Strategy
Functional Categories, Continued		
Freight	Forecasts show freight volume through the ports tripling by 2040, placing extreme demands on the transportation system.	Continue building out the freeway system, interchanges, and grade separations. Work closely with the private sector to understand changes in technology and freight operations and how the transportation system can best accommodate those changes. Construct all the freight projects in the California Freight Mobility Plan, to the extent funding allows.
Health	Public health is being integrated into policy frameworks throughout state, regional, and local governments. The challenge in the transportation arena is to determine how to incorporate health considerations into decision-making frameworks.	Continue to build on health partnerships already established. Continue focus on transit mobility and developing the active transportation network to promote cycling and walking.
Transportation revenue	The federal Highway Trust Fund and state gasoline/diesel taxes continue to lose purchasing power, resulting in lower revenues for transportation agencies and local jurisdictions.	Provide input to regional and statewide discussions and pilot projects on the generation of additional revenue for transportation. Construct a set of revenue generation options that can be evaluated by the SANBAG Board, with input from a wide range of stakeholders.

The CTP is a living document that will be updated in concert with future RTP/SCS updates. Future versions of the CTP will monitor the performance of the various strategies and refine the financial outlook, projects lists and future actions necessary to ensure safe and efficient of people and goods throughout San Bernardino County.

Attachment: Attachment 1 - SANBAG-DraftCTP-ES-062915 (1733 : SANBAG CTP Update)

BOARD OF DIRECTORS METRO VALLEY STUDY SESSION ATTENDANCE RECORD – 2015

Name	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Curt Hagman Board of Supervisors	X	X	X	X	X	X						
James Ramos Board of Supervisors		X		X	X	X						
Janice Rutherford Board of Supervisors	X	X		X		X						
Josie Gonzales Board of Supervisors	X	X	X	X	X	X						
Robert Lovingood Board of Supervisors				X								
Rich Kerr City of Adelanto		X*	X*		X*							
Curt Emick Town of Apple Valley												
Julie McIntyre City of Barstow												
Bill Jahn City of Big Bear Lake	X	X	X	X	X	X						
Dennis Yates City of Chino	X	X		X								
Ed Graham City of Chino Hills	X	X	X	X	X	X						
Frank Navarro City of Colton	X	X	X	X	X	X						
Michael Tahan City of Fontana	X	X	X	X	X	X						
Darcy McNaboe City of Grand Terrace		X		X	X	X						
Mike Leonard City of Hesperia												
Larry McCallon City of Highland	X			X								

Communication: Attendance (Additional Information)

X = member attended meeting. * = alternate member attended meeting. Empty box = Did not attend meeting. Crossed out box = not a Board Member at the time.

MVSSatt15 Shaded box = No meeting

BOARD OF DIRECTORS METRO VALLEY STUDY SESSION ATTENDANCE RECORD – 2015

Name	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Rhodes ‘Dusty’ Rigsby City of Loma Linda	X			X	X							
Paul Eaton City of Montclair	X	X	X	X	X	X						
Edward Paget City of Needles												
Alan Wapner City of Ontario		X	X	X	X							
L. Dennis Michael City of Rancho Cucamonga	X		X	X	X							
Jon Harrison City of Redlands	X	X	X	X*	X	X						
Deborah Robertson City of Rialto	X	X		X	X	X						
R. Carey Davis City of San Bernardino	X	X	X	X	X	X						
Joel Klink City of Twentynine Palms												
Ray Musser City of Upland		X	X	X	X	X						
Ryan McEachron City of Victorville	X	X	X	X		X						
Dick Riddell City of Yucaipa	X	X	X	X	X	X						
George Huntington Town of Yucca Valley												

Communication: Attendance (Additional Information)

X = member attended meeting. * = alternate member attended meeting. Empty box = Did not attend meeting. Crossed out box = not a Board Member at the time.

MVSSatt15 Shaded box = No meeting

San Bernardino Associated Governments (SANBAG) is a council of governments formed in 1973 by joint powers agreement of the cities and the County of San Bernardino. SANBAG is governed by a Board of Directors consisting of a mayor or designated council member from each of the twenty-four cities in San Bernardino County and the five members of the San Bernardino County Board of Supervisors.

In addition to SANBAG, the composition of the SANBAG Board of Directors also serves as the governing board for several separate legal entities listed below:

***The San Bernardino County Transportation Commission**, which is responsible for short and long range transportation planning within San Bernardino County, including coordination and approval of all public mass transit service, approval of all capital development projects for public transit and highway projects, and determination of staging and scheduling of construction relative to all transportation improvement projects in the Transportation Improvement Program.*

***The San Bernardino County Transportation Authority**, which is responsible for administration of the voter-approved half-cent transportation transactions and use tax levied in the County of San Bernardino.*

***The Service Authority for Freeway Emergencies**, which is responsible for the administration and operation of a motorist aid system of call boxes on State freeways and highways within San Bernardino County.*

***The Congestion Management Agency**, which analyzes the performance level of the regional transportation system in a manner which ensures consideration of the impacts from new development and promotes air quality through implementation of strategies in the adopted air quality plans.*

*As a **Subregional Planning Agency**, SANBAG represents the San Bernardino County subregion and assists the Southern California Association of Governments in carrying out its functions as the metropolitan planning organization. SANBAG performs studies and develops consensus relative to regional growth forecasts, regional transportation plans, and mobile source components of the air quality plans.*

Items which appear on the monthly Board of Directors agenda are subjects of one or more of the listed legal authorities. For ease of understanding and timeliness, the agenda items for all of these entities are consolidated on one agenda. Documents contained in the agenda package are clearly marked with the appropriate legal entity.

This list provides information on acronyms commonly used by transportation planning professionals. This information is provided in an effort to assist SANBAG Board Members and partners as they participate in deliberations at SANBAG Board meetings. While a complete list of all acronyms which may arise at any given time is not possible, this list attempts to provide the most commonly-used terms. SANBAG staff makes every effort to minimize use of acronyms to ensure good communication and understanding of complex transportation processes.

AB	Assembly Bill
ACE	Alameda Corridor East
ACT	Association for Commuter Transportation
ADA	Americans with Disabilities Act
ADT	Average Daily Traffic
APTA	American Public Transportation Association
AQMP	Air Quality Management Plan
ARRA	American Recovery and Reinvestment Act
ATMIS	Advanced Transportation Management Information Systems
BAT	Barstow Area Transit
CALACT	California Association for Coordination Transportation
CALCOG	California Association of Councils of Governments
CALSAFE	California Committee for Service Authorities for Freeway Emergencies
CARB	California Air Resources Board
CEQA	California Environmental Quality Act
CMAQ	Congestion Mitigation and Air Quality
CMIA	Corridor Mobility Improvement Account
CMP	Congestion Management Program
CNG	Compressed Natural Gas
COG	Council of Governments
CPUC	California Public Utilities Commission
CSAC	California State Association of Counties
CTA	California Transit Association
CTC	California Transportation Commission
CTC	County Transportation Commission
CTP	Comprehensive Transportation Plan
DBE	Disadvantaged Business Enterprise
DEMO	Federal Demonstration Funds
DOT	Department of Transportation
EA	Environmental Assessment
E&D	Elderly and Disabled
E&H	Elderly and Handicapped
EIR	Environmental Impact Report (California)
EIS	Environmental Impact Statement (Federal)
EPA	Environmental Protection Agency
FHWA	Federal Highway Administration
FSP	Freeway Service Patrol
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
FTIP	Federal Transportation Improvement Program
GFOA	Government Finance Officers Association
GIS	Geographic Information Systems
HOV	High-Occupancy Vehicle
ICTC	Interstate Clean Transportation Corridor
IEEP	Inland Empire Economic Partnership
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991
IIP/ITIP	Interregional Transportation Improvement Program
ITS	Intelligent Transportation Systems
IVDA	Inland Valley Development Agency
JARC	Job Access Reverse Commute
LACMTA	Los Angeles County Metropolitan Transportation Authority
LNG	Liquefied Natural Gas
LTF	Local Transportation Funds

MAGLEV	Magnetic Levitation
MARTA	Mountain Area Regional Transportation Authority
MBTA	Morongo Basin Transit Authority
MDAB	Mojave Desert Air Basin
MDAQMD	Mojave Desert Air Quality Management District
MOU	Memorandum of Understanding
MPO	Metropolitan Planning Organization
MSRC	Mobile Source Air Pollution Reduction Review Committee
NAT	Needles Area Transit
NEPA	National Environmental Policy Act
OA	Obligation Authority
OCTA	Orange County Transportation Authority
PA&ED	Project Approval and Environmental Document
PASTACC	Public and Specialized Transportation Advisory and Coordinating Council
PDT	Project Development Team
PNRS	Projects of National and Regional Significance
PPM	Planning, Programming and Monitoring Funds
PSE	Plans, Specifications and Estimates
PSR	Project Study Report
PTA	Public Transportation Account
PTC	Positive Train Control
PTMISEA	Public Transportation Modernization, Improvement and Service Enhancement Account
RCTC	Riverside County Transportation Commission
RDA	Redevelopment Agency
RFP	Request for Proposal
RIP	Regional Improvement Program
RSTIS	Regionally Significant Transportation Investment Study
RTIP	Regional Transportation Improvement Program
RTP	Regional Transportation Plan
RTPA	Regional Transportation Planning Agencies
SB	Senate Bill
SAFE	Service Authority for Freeway Emergencies
SAFETEA-LU	Safe Accountable Flexible Efficient Transportation Equity Act – A Legacy for Users
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCRRA	Southern California Regional Rail Authority
SHA	State Highway Account
SHOPP	State Highway Operations and Protection Program
SOV	Single-Occupant Vehicle
S RTP	Short Range Transit Plan
STAF	State Transit Assistance Funds
STIP	State Transportation Improvement Program
STP	Surface Transportation Program
TAC	Technical Advisory Committee
TCIF	Trade Corridor Improvement Fund
TCM	Transportation Control Measure
TCRP	Traffic Congestion Relief Program
TDA	Transportation Development Act
TEA	Transportation Enhancement Activities
TEA-21	Transportation Equity Act for the 21 st Century
TMC	Transportation Management Center
TMEE	Traffic Management and Environmental Enhancement
TSM	Transportation Systems Management
TSSDRA	Transit System Safety, Security and Disaster Response Account
USFWS	United States Fish and Wildlife Service
VCTC	Ventura County Transportation Commission
VVTA	Victor Valley Transit Authority
WRCOG	Western Riverside Council of Governments

San Bernardino Associated Governments



MISSION STATEMENT

To enhance the quality of life for all residents, San Bernardino Associated Governments (SANBAG) will:

- Improve cooperative regional planning
- Develop an accessible, efficient, multi-modal transportation system
- Strengthen economic development efforts
- Exert leadership in creative problem solving

To successfully accomplish this mission, SANBAG will foster enhanced relationships among all of its stakeholders while adding to the value of local governments.

Approved June 2, 1993
Reaffirmed March 6, 1996