AGENDA

General Policy Committee Meeting

November 13, 2024

9:00 AM

Location

San Bernardino County Transportation Authority

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

General Policy Committee Membership

Chair – Vice President
Rick Denison, Council Member
Town of Yucca Valley

President
Ray Marquez, Council Member
City of Chino Hills

Past President
Dawn Rowe, Supervisor
County of San Bernardino

West Valley Representatives
John Dutrey, Mayor
City of Montclair

Alan Wapner, Council Member
City of Ontario

Jesse Armendarez, Supervisor
County of San Bernardino

Mt./Desert Representatives
Debra Jones, Council Member
City of Victorville

Art Bishop, Mayor Pro Tem
Town of Apple Valley

East Valley Representatives
Frank Navarro, Mayor
City of Colton

Larry McCallon, Mayor Pro Tem
City of Highland

Helen Tran, Mayor
City of San Bernardino

Joe Baca, Jr., Supervisor
County of San Bernardino

San Bernardino County Transportation Authority
San Bernardino Council of Governments

AGENDA

General Policy Committee Meeting

November 13, 2024
9:00 AM

Location
SBCTA
First Floor Lobby Board Room
1170 W. 3rd Street, San Bernardino, CA 92410

Items listed on the agenda are intended to give notice to members of the public of a general description of matters to be discussed or acted upon. The posting of the recommended actions does not indicate what action will be taken. The Board may take any action that it deems to be appropriate on the agenda item and is not limited in any way by the notice of the recommended action.

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 Rick Denison)

i. Pledge of Allegiance

ii. Attendance

iii. Announcements

iv. Agenda Notices/Modifications – Mayra Alfaro

Public Comment

Brief Comments from the General Public

Note: Public Comment on items listed on this agenda will be allowed only during this committee meeting. No public comment will be allowed on committee items placed on the Consent Agenda at the Board of Directors meeting. If an item has substantially changed after consideration during the committee meeting, the item will be placed on Discussion for Board and public comment will be allowed.

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** Pg. 11

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

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

INFORMATIONAL ITEMS

Items listed are receive and file items and are expected to be routine and non-controversial. Unlike the Consent Calendar, items listed as Informational Items do not require a vote.

2. **October 2024 Procurement Report** Pg. 12

   Receive the October 2024 Procurement Report.
   Presenter: Alicia Bullock

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

3. **Measure I Revenue** Pg. 19

   Receive report on Measure I receipts for Measure I 2010-2040.
   Presenter: Lisa Lazzar

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

4. **Budget to Actual Report for First Quarter Ending September 30, 2024.** Pg. 21

   Receive and file Budget to Actual Report for the first quarter ending September 30, 2024.
   Presenter: Lisa Lazzar

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

DISCUSSION ITEMS

Discussion - Administrative Matters

5. **2025 General Policy Committee Meeting Schedule** Pg. 30

   Approve the 2025 General Policy Committee meeting schedule.
   Presenter: Ashley Izard

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

6. **Adopt Resolution No. 25-058 and Policy No. 10011 Authorizing Executive Director to Establish and Modify Contract Claims Processes** Pg. 44

   That the General Policy Committee recommend the Board, acting as the San Bernardino County Transportation Authority and the San Bernardino Council of Governments:

A. Adopt Resolution No. 25-058, authorizing the Executive Director to establish and modify contractual claims processes.

B. Adopt Policy No. 10011, codifying the Board's delegation of authority to the Executive Director, or his designee, to establish and modify contractual claims processes.

Presenter: Julianna Tillquist

This item is not scheduled for review by any other policy committee or technical advisory committee. SBCTA/SBCOG General Counsel has reviewed this item, the draft resolution, and the draft policy.

7. Revisions to Measure I Local Street Program Policies No. 40003, 40012, and 40016 Pg. 49

That the General Policy Committee recommend the Board, acting as the San Bernardino County Transportation Authority:

Approve revisions to the Measure I Local Street Program Policies No. 40003, 40012, and 40016, incorporating a remedy to redistribute funds withheld due to an incomplete compliance audit within two years after the expiration of Measure I 2010-2040.

Presenter: Lisa Lazzar

This item is not scheduled for review by any other policy committee or technical advisory committee. SBCTA General Counsel has reviewed this item and the revised policies.

8. Release Request for Proposals No. 25-1003210 for On-Call Audit and Price Review Services Pg. 125

That the General Policy Committee recommend the Board, acting as the San Bernardino County Transportation Authority:

Authorize the release of Request for Proposals (RFP) No. 25-1003210 for On-Call Auditing and Price Review Services.

Presenter: Lisa Lazzar

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

Discussion - Air Quality/Traveler Services

9. Decommissioning and Removal of Call Boxes in San Bernardino County Pg. 130

That the General Policy Committee recommend the Board, acting as the San Bernardino County Transportation Authority:

A. Approve decommissioning and removal of all call boxes on highways within San Bernardino County.

B. Approve termination of Contract No. 23-1003017 with Knightscope, Inc., for cause, as authorized under Section 18.2 of the contract, and in response to the documented deficiencies in contract performance as previously communicated to Knightscope, Inc.

C. Authorize the Executive Director, or his designee, to release an Invitation for Bids for a contractor to remove the call boxes and appropriately dispose of or recycle materials in coordination with California Department of Transportation and the California Highway Patrol.

D. Authorize the Executive Director, or his designee, to award the contract contingent upon the cost not exceeding the Fiscal Year 2024/2025 Budget for the Call Box Program.
Presenter: Steve Smith

This item is not scheduled for review by any other policy committee or technical advisory committee. SBCTA General Counsel has reviewed this item.

Discussion - Project Delivery

10. Request to Discontinue Dry Run Resolution of Necessity Hearings at the Committee Level Pg. 149

That the General Policy Committee recommend the Board, acting as the San Bernardino County Transportation Authority:

Authorize staff to discontinue the presentations for Dry Run Resolutions of Necessity at committee level meetings, and that Resolution of Necessity Hearings be presented directly to the Board of Directors.
Presenter: Kristi Harris

This item is not scheduled for review by any other policy committee or technical advisory committee. SBCTA General Counsel has reviewed this item.

Discussion - Regional/Subregional Planning

11. Transportation Development Act Article 3 Annual Update: Fiscal Year 2023/2024 Pg. 150

That the Board, acting as the San Bernardino County Transportation Authority (SBCTA):

A. Receive an update on the status of active Transportation Development Act (TDA) Article 3 awards.

B. Direct SBCTA staff to work with the City of Rialto to resolve issues associated with TDA Article 3 transit awards that have not progressed within the first year, as required by the adopted guidelines, with a rescission of the awards if progress is not made by January 31, 2025.

C. Extend the deadline for the Town of Apple Valley's Fiscal Year 2021/2022 Bear Valley Road Bridge Connector bicycle/pedestrian improvement award from June 30, 2025 to December 31, 2027.
Presenter: Ginger Koblasz

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

Discussion - Council of Governments

12. Smart County Master Plan Update Pg. 158

Receive a status update on the Smart County Master Plan and provide feedback on the draft document.
Presenter: Monique Reza-Arellano

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

Comments from Board Members

Brief Comments from Board Members

ADJOURNMENT

Additional Information

The next General Policy Committee meeting is scheduled for December 11, 2024.

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 & Language Assistance - The meeting facility is accessible to persons with disabilities. A designated area is reserved with a microphone that is ADA accessible for public speaking. A designated section is available for wheelchairs in the west side of the boardroom gallery. If assistive listening devices, other auxiliary aids or language assistance 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 can be reached by phone at (909) 884-8276 or via email at clerkoftheboard@gosbcta.com and office is located at 1170 W. 3rd Street, 2nd Floor, San Bernardino, CA.

Service animals are permitted on SBCTA's premises. The ADA defines service animals as dogs or miniature horses that are individually trained to do work or perform tasks for people with disabilities. Under the ADA, service animals must be harnessed, leashed, or tethered, unless these devices interfere with the service animal's work, or the individual's disability prevents using these devices. In that case, the individual must maintain control of the animal through voice, signal, or other effective controls.

Accesibilidad y asistencia en otros idiomas - Las personas con discapacidad pueden acceder a la sala de reuniones. Se reserva una zona designada con un micrófono accesible que cumple con los requisitos de la ADA para hablar en público. Una sección designada está disponible para sillas de ruedas en el lado oeste de la galería de la sala de reuniones. Si se necesitan dispositivos de ayuda auditiva, otras ayudas auxiliares o servicios de asistencia en otros idiomas para participar en la reunión pública, las solicitudes deben presentarse al Secretario de la Junta al menos tres (3) días hábiles antes de la fecha de la reunión de la Junta. Puede comunicarse con el Secretario llamando al (909) 884-8276 o enviando un correo electrónico a clerkoftheboard@gosbcta.com. La oficina se encuentra en 1170 W. 3rd Street, 2nd Floor, San Bernardino, CA.

Los animales de servicio están permitidos en las instalaciones de SBCTA. La ADA define a los animales de servicio como perros o caballos miniatura que son entrenados individualmente para hacer trabajo o realizar tareas para personas con discapacidades. Según la ADA, los animales de servicio deben tener un arnés o ser atados, a menos que estos dispositivos interfieran con el trabajo del animal de servicio, o que la discapacidad de la persona impida el uso de estos dispositivos. En ese caso, la persona debe mantener el control del animal a través de su voz, señales u otros controles efectivos.

Agendas – All agendas are posted at www.gosbcta.com/board/meetings-agendas/ at least 72 hours in advance of the meeting. Staff reports related to agenda items may be reviewed online at that web address. Agendas are also posted at 1170 W. 3rd Street, 1st Floor, San Bernardino at least 72 hours in advance of the meeting.

Agenda Actions – Items listed on both the "Consent Calendar" and "Discussion" contain recommended 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 as provided in the Ralph M. Brown Act Government Code Sec. 54954.2(b).

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 President of the Board or Committee Chair ("President") will announce the subject matter of the closed session. If reportable action is taken in closed session, the President shall 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, except Board agenda items that were previously considered at a Policy Committee meeting where there was an opportunity for public comment. Individuals in attendance at SBCTA who desire to speak on an item may complete and turn in a "Request to Speak" form, specifying each item an individual wishes to speak on. Individuals may also indicate their desire to speak on an agenda item when the President asks for public comment. When recognized by the President, speakers should be prepared to step forward and announce their name 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 President 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. Any individual who wishes to share written information with the Board may provide 35 copies to the Clerk of the Board for distribution. If providing written information for distribution to the Board, such information must be emailed to the Clerk of the Board, at clerkoftheboard@gosbcta.com, no later than 5:00 pm the day before the meeting in order to allow sufficient time to distribute the information. Information provided as public testimony is not read into the record by the Clerk. Consent Calendar items can be pulled at Board member request and will be brought up individually at the specified time in the agenda. Any consent item that is pulled for discussion shall be treated as a discussion item, allowing further public comment on those items.

Public Comment –An opportunity is also provided for members of the public to speak on any subject within the Board's jurisdiction. Matters raised under "Public Comment" will not be acted upon at that meeting. See, "Public Testimony on an Item," above.

Disruptive or Prohibited 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 President 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 or prohibited conduct includes without limitation 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, bringing into the meeting any type of object that could be used as a weapon, including without limitation sticks affixed to signs, or otherwise preventing the Board from conducting its meeting in an orderly manner.

Your cooperation is appreciated!

General Practices for Conducting Meetings

of

Board of Directors and Policy Committees

Attendance.

- The President of the Board or Chair of a Policy Committee (Chair) has the option of taking attendance by Roll Call. 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.
- 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.
- Votes at teleconferenced meetings shall be by roll call, pursuant to the Brown Act, or, at any meeting, upon the demand of five official representatives present or at the discretion of the presiding officer.

The Vote as specified in the SBCTA Administrative Code and 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. (Note that Alternates may vote only at meetings of the Board of Directors, Metro Valley Study Session and Mountain/Desert Policy Committee.)

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 Chair shall ask the maker of the original motion if he or 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 voted upon first, and if it fails, then the original motion is considered.
- 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 may require deviation from general practice (but not from the Brown Act or agency policy).
- 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
Revised May 4, 2016
Revised June 7, 2023

Minute Action

AGENDA ITEM: 1

Date: November 13, 2024

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 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
9	23-1003017	Knightscope, Inc. *Mallorie Burak*	None
11	N/A	City of Rialto	None
	N/A	Town of Apple Valley	None

Financial Impact:
This item has no direct impact on the Budget.

Reviewed By:
This item is prepared monthly for review by Board and Committee members.

Responsible Staff:
Carrie Schindler, Deputy Executive Director

Approved
General Policy Committee
Date: November 13, 2024

Witnessed By:

Entity: San Bernardino Council of Governments, San Bernardino County Transportation Authority

Minute Action

AGENDA ITEM: 2

Date: November 13, 2024

Subject:
October 2024 Procurement Report

Recommendation:
Receive the October 2024 Procurement Report.

Background:
The Board of Directors adopted the Contracting and Procurement Policy (Policy No. 11000) on January 3, 1997, and approved the last revision on January 4, 2023. The Board of Directors authorized the Executive Director, or his designee, to approve: a) contracts and purchase orders up to $100,000; b) Contract Task Orders (CTO) up to $500,000 and for CTOs originally $500,000 or more, increasing the CTO amount up to $250,000; c) amendments with a zero dollar value; d) amendments to exercise the option term if the option term was approved by the Board of Directors in the original contract; e) amendments that cumulatively do-not-exceed 50% of the original contract or purchase order value or $100,000, whichever is less; f) amendments that do-not-exceed contingency amounts authorized by the Board of Directors; and g) release Request for Proposals (RFP), Request for Qualifications (RFQ), and Invitation for Bids (IFB) for proposed contracts from which funding has been approved and the solicitation has been listed in the Annual Budget, and are estimated not-to-exceed $1,000,000.

The Board of Directors further authorized General Counsel to award and execute legal services contracts up to $100,000 with outside counsel as needed, and authorized Department Directors to approve and execute Contingency Amendments that do-not-exceed contingency amounts authorized by the Board of Directors.

Lastly, the Board of Directors authorized CityCom Real Estate Services, Inc. (CityCom) to issue contracts and purchase orders.

Below is a summary of the actions taken by SBCTA authorized staff:

- Three new contracts were executed.
- Three contract amendments were executed.
- One CTO was executed.
- Two CTO amendments were executed.
- Two contingency amendments were executed.
- Three purchase orders were executed.
- No purchase order amendments were executed.
- One IFB was released.

Below is a summary of the actions taken by CityCom:

- No new contracts were executed.
- One new purchase order was executed.

Entity: San Bernardino Council of Governments, San Bernardino County Transportation Authority

A list of all Contracts and Purchase Orders that were executed by the Executive Director, Department Director, and/or General Counsel during the month of October 2024 are presented herein as Attachment A, all RFPs and IFBs are presented in Attachment B, and all CityCom's contracts and purchase orders are presented in Attachment C.

Financial Impact:
This item is consistent with the adopted Budget for Fiscal Year 2024/2025. Presentation of the monthly procurement report demonstrates compliance with the Contracting and Procurement Policy.

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

Responsible Staff:
Alicia Bullock, Procurement Manager

Approved
General Policy Committee
Date: November 13, 2024

Witnessed By:

Attachment A - 1
October 2024 Contract/Amendment/CTO Actions

Type	Contract Number	Amendment/CTO	Vendor Name	Contract Description	Original Amount	Prior Amendments	Current Amendment	Total Amount	Total On-Call Contract Amount*
New Agreement	25-1003192		AssureHire, a subsidiary of Mitratech Holdings, Inc.	Customer employment screening and/or background checking services. Starting October 1, 2024 through September 30, 2029.	$ 5,149.05	$ -	$ -	$ 5,149.05	N/A
New Agreement	25-1003197		St. Paul Apostle Catholic Church	Park and Ride lot lease.	$ 18,000.00	$ -	$ -	$ 18,000.00	N/A
New Agreement	25-1003196		Gallagher Benefit Services, Inc.	Executive recruitment services.	$ 25,000.00	$ -	$ -	$ 25,000.00	N/A
Contract Amendment	17-1000603	3	City of Redlands	Design, Right-of-Way and Construction phases of the Interstate 10 Alabama Street Improvement Project, extending the termination date by four years to December 31, 2028, to cover the extended landscape maintenance period and provide sufficient time to complete all required close-out activities.	$ 5,702,190.00	$ 1,480,963.00	$ -	$ 7,183,153.00	N/A
Contract Amendment	23-1002832	1	Gafcon PM-CM LLC (a Delaware Limited Liability Company)	To assign the contract from Gafcon, Inc., to Gafcon PM-CM LLC., for On-Call Labor Compliance Services.	$ 200,000.00	$ -	$ -	$ 200,000.00	N/A
Contract Amendment	23-1002880	1	Emergency Vehicle Specialties, Inc. (EVS)	To increase the not-to-exceed amount, and to amend the scope of work to include all necessary labor to cover the yellow call boxes, along with both of the large blue signs, for specified call boxes throughout the County of San Bernardino.	$ 23,500.00	$ -	$ 44,325.00	$ 67,825.00	N/A
CTO	20-1002320	13	Crowe LLP	Transportation Development Act Audit Services for the City of Chino Hills for Fiscal Year 2021, with a not-to-exceed amount.	$ 10,000.00	$ -	$ -	$ 10,000.00	$1,082,784.23.00 (available $1,072,784.23)
CTO Amendment	23-1002995	CTO No. 5.1	Costin Public Outreach Group	To increase the not-to-exceed amount to provide ongoing construction outreach support for Interstate 10 Express Lanes Contract 1 Project.	$ 350,000.00	$ -	$ 83,000.00	$ 433,000.00	$2,434,350.00 (available $2,351,350.00)
CTO Amendment	23-1002995	CTO No. 21.1	Costin Public Outreach Group	To increase the total task order amount for additional events/services such as ZEMU Arrival Media event not originially planned. Testing period, and outreach events.	$ 165,960.00		$ 81,010.00	$ 246,970.00	$2,351,350.00 (available $2,270,340.00)

*Total amount authorized for the associated on-call services bench which is typically shared with multiple vendors and controlled via contract task orders (CTO).

Attachment A - 2
October 2024 Contingency Released Actions

Contract No. & Contingency No.	Reason for Contingency Amendment (Include a Description of the Contingency Amendment)	Vendor Name	Original Contract Amount	Prior Amendments	Prior Contingencies	Current Contingencies	Amended Contract Amount
22-1002775 No. 0B	US395 Phase 2 PS&E - Additional work identified for the Project. Mapping exhibits requested, including both plan and profile views. Preparation of Right of Way exhibits for Resolution of Necessity Hearing, and Crotch Bumble Bee (CBB) Habitat Assessment Memorandum.	AECOM	$ 7,104,413.13	$ -	$ 66,939.15	$ 36,908.04	$ 7,208,260.32
21-1002658 No. 1B	Arrow Maintenance Facility Hydrogen Fuel Update - Additional Construction Managment Consultant services are required, and the completion date for the Project has been extended to December 2025. The completion date for the Hydrogen Station has been extended to June 2026. Amendment No. 2 is being routed for Board Approval, to increase the not-to-exceed amount and increase the contingency not-to-exceed amount.	CPM Partners, Inc.	$ 1,041,815.21	$ -	$ 20,003.84	$ 80,000.00	$ 1,141,819.05

Attachment A - 3
October 2024 Purchase Order and Purchase Order Amendment Actions

Type	PO No.	PO Posting Date	Vendor Name	Description of Services	Original Purchase Order Amount	Prior Amendments	Current Amendment	Total Purchase Order Amount
New PO	4002552	10/9/24	Blueally Technology Solutions, LLC	Hardware for backup solution.	$ 3,871.50			$ 3,871.50
New PO	4002556	10/25/24	Southern California Edison	SCE Service Meters (Annual PO).	$ 100,000.00			$ 100,000.00
New PO	Q-486080-1	10/29/2024	ChargePoint, Inc.	Replacement of two level 2 charging station heads.	$ 6,318.75			$ 6,318.75

Attachment B
October 2024 RFP's, RFQ's and IFB's

Release Date	RFP/RFQ/IFB No.	Anticipated Dollar Amount	Anticipated Award Date	Description of Overall Program and Program Budget
10/7/2024	IFB No. 24-1003176	$335,000	1/8/2025	SR-60 Central Establish Existing Planting

Attachment C
September 2024 CityCom's Issued Purchase Orders/Contracts

PO/Contract No.	Vendor Name	Description of Services	Total Amount
PO SBCTA50774	Weatherite Corp.	Add secondary drain pans-HVAC Upgrade.	$ 4,259.00

Minute Action

AGENDA ITEM: 3

Date: November 13, 2024

Subject:
Measure I Revenue

Recommendation:
Receive report on Measure I receipts for Measure I 2010-2040.

Background:
Sales tax revenue collections for Measure I 2010 through 2040 began on April 1, 2010. Cumulative total receipts as of September 30, 2024, were $2,571,096,480.

A summary of the current Measure I receipts by quarter and cumulative total since its inception is included. The quarterly receipts represent sales tax collection from the previous quarter's taxable sales. For example, receipts for July through September represent sales tax collections from April through June.

Measure I revenue for the 2024/2025 Fiscal Year Budget was estimated at $251,900,000. Actual Measure I receipts for Fiscal Year 2024/2025 July through September are $63,679,854, in comparison to $64,368,274 received during the quarter ending September 2023/2024, with a decrease of 1.07% due to the reduction in consumer spending in the County of San Bernardino.

Financial Impact:
This item has no financial impact on the adopted Budget for Fiscal Year 2024/2025.

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

Responsible Staff:
Lisa Lazzar, Chief Financial Officer

Approved
General Policy Committee
Date: November 13, 2024

Witnessed By:

Entity: San Bernardino County Transportation Authority

Summary of SBCTA Measure I Receipts 2010-2040

Fiscal Year	July-September	October-December	January-March	April- June	Fiscal Year Total	Cumulative Total To Date
Receipts Prior to FY 2010/11						**$7,158,800**
Fiscal Year 2010/11	28,188,907	29,207,950	28,808,766	29,397,456	115,603,079	**$122,761,879**
Fiscal Year 2011/12	31,027,319	33,547,956	32,757,419	33,476,051	130,808,745	**$253,570,624**
Fiscal Year 2012/13	34,279,449	35,076,980	34,336,570	34,309,171	138,002,171	**$391,572,794**
Fiscal Year 2013/14	35,430,012	35,403,641	36,843,452	35,789,045	143,466,150	**$535,038,944**
Fiscal Year 2014/15	37,253,007	38,007,716	38,225,122	37,132,591	150,618,437	**$685,657,380**
Fiscal Year 2015/16	39,298,056	40,309,825	40,950,261	38,929,588	159,487,730	**$845,145,110**
Fiscal Year 2016/17	41,123,141	40,742,242	41,465,217	39,801,939	163,132,539	**$1,008,277,649**
Fiscal Year 2017/18	43,117,814	42,305,693	44,007,900	39,149,611	168,581,018	**$1,176,858,666**
Fiscal Year 2018/19	41,560,927	49,358,825	46,035,191	43,531,556	180,486,500	**$1,357,345,167**
Fiscal Year 2019/20	46,250,572	46,514,574	49,729,997	35,959,684	178,454,827	**$1,535,799,994**
Fiscal Year 2020/21	48,366,423	51,588,776	52,728,566	56,391,035	209,074,800	**$1,744,874,794**
Fiscal Year 2021/22	64,058,781	61,231,465	64,329,895	63,172,838	252,792,978	**$1,997,667,772**
Fiscal Year 2022/23	64,538,748	66,271,275	66,140,449	60,936,812	257,887,284	**$2,255,555,056**
Fiscal Year 2023/24	64,368,274	62,247,797	65,142,607	60,102,892	251,861,570	**$2,507,416,626**
Fiscal Year 2024/25	63,679,854				63,679,854	**$2,571,096,480**
% Increase Over 23/24	-1.07%				-74.72%	

Minute Action

AGENDA ITEM: 4

Date: November 13, 2024

Subject:
Budget to Actual Report for First Quarter Ending September 30, 2024.

Recommendation:
Receive and file Budget to Actual Report for the first quarter ending September 30, 2024.

Background:
The Fiscal Year 2024/2025 Budget for new activity was adopted by the Board of Directors (Board) on June 5, 2024. Budgetary information includes the original and revised budgets and expenditures as of September 30, 2024.

The report is broken down by Fund group and provides a percentage of the budget received or expended through September 30, 2024.

The following is an explanation for significant percentage changes by Fund type:

General Fund

A. Revenues:

1. Measure I Sales Tax revenue is low since July and August receipts pertain to the prior fiscal year.
2. Interest is distributed to the appropriate funds at year-end based on ending cash balances. The positive balance is partially due to reversing the prior year's negative accruals related to fair value adjustment.

B. Expenditures:

1. Expenditures to date are low mainly due to the timing of capital expenditures or program activities.

C. Other Financing Sources:

1. Operating transfers in represent cash transfers to reimburse expenditures funded by the Local Transportation Fund, State Transit Assistance Fund, and State of Good Repair Fund.
2. Operating transfers out are from cash transfers within the General Fund to fund the Indirect Cost Fund.

Federal Fund

A. Revenues:

1. The timing for revenue collection fluctuates as all federal grants are on a reimbursement basis.

B. Expenditures:

1. Expenditures to date are low mainly due to the timing of capital expenditures, which can take several years.

Entity: San Bernardino Council of Governments, San Bernardino County Transportation Authority

2. The negative balance in Transit is due to the reversal of accruals from the prior year.

C. Other Financing Sources:

1. Operating transfers out are for the repayment of commercial paper.

Federal Transit Administration Fund

A. Revenues:

1. The timing for revenue collection fluctuates as all federal grants are on a reimbursement basis.

B. Expenditures:

1. Expenditures to date are low mainly due to the timing of capital expenditures, which can take several years.

State Fund

A. Revenues:

1. The timing for revenue collection fluctuates as most state grants are on a reimbursement basis.

B. Expenditures:

1. Expenditures to date are low mainly due to the timing of capital expenditures, which can take several years.
2. The negative balance in Project Delivery is due to the reversal of accruals from the prior year.

Proposition 1B Fund

A. Revenues:

1. The revenue recognition for most Proposition 1B Funds is when expenditures are incurred since the funds are received in advance.

B. Expenditures:

1. Expenditures to date are zero mainly due to the timing of capital expenditures, which can take several years.

Local Transportation Fund (LTF)

A. Revenues:

1. LTF revenue is low since July and August receipts pertain to the prior fiscal year.
2. The positive investment earnings balance is due to a reversal of prior year negative accruals related to fair value adjustment.

B. Expenditures:

1. The negative balance in Transit is due to the reversal of accruals from the prior year. This is partially offset by expenditures to date with claims received and paid.

C. Other Financing Sources:

1. Operating transfers out represent cash transfers to the General Fund to fund transit activities, which are on a reimbursement basis.

State Transit Assistance Fund

A. Revenues:

1. The timing for recording of revenues fluctuates based on the period of performance upon distribution from the state.
2. The positive investment earnings balance is due to a reversal of prior year negative accruals related to fair value adjustment.

B. Expenditures:

1. The negative balance in Transit is due to the reversal of accruals from the prior year. This is partially offset by expenditures to date with claims received and paid.

C. Other Financing Sources:

1. Operating transfers out are negative due to a reversal of prior year accrual that represent cash transfers to the General Fund to fund administrative, planning and transit activities, and transit projects. These transfers are on a reimbursement basis.

Senate Bill 1

A. Revenues:

1. The timing for revenue collection fluctuates as most state grants are on a reimbursement basis.

B. Expenditures:

1. Expenditures to date are low mainly due to the timing of capital expenditures, which can take several years.
2. The negative balance in Transit is due to the reversal of accruals from the prior year.

Measure I 1990-2010 Fund

A. Revenues:

1. Measure I 1990-2010 ended on March 31, 2010, and only interest earnings are accrued based on cash balances.
2. The negative investment earnings balance is due to a reversal of prior year accruals.

B. Expenditures:

1. Expenditures to date are low mainly due to the timing of capital expenditures, which can take several years.

Measure I 2010-2040 Fund

A. Revenues:

1. Measure I Sales Tax revenue is low since July and August receipts pertain to the prior fiscal year.
2. The negative investment earnings balance is due to a reversal of prior year accruals.

B. Expenditures:

1. Expenditures to date are low mainly due to the timing of capital expenditures, which can take several years.

2. Funds for the Transit, Project Delivery, and Fund Administration programs are encumbered to ensure they are available to pay for the allocations approved by the Board.

C. Other Financing Sources:

1. Operating transfers in represent cash transfers from the Enterprise Fund for draws on the Transportation Infrastructure Finance and Innovation Act loan and to properly allocate funds for the West Valley Connector Project.
2. Operating transfers out represent cash transfers to the General Fund to fund the Indirect Cost Fund and to the Debt Service Fund to cover debt service expenditures.

Debt Service Fund

A. Revenues:

1. Investment earnings fluctuate with the amount of cash held by the trustee due to the timing of debt service payments.

B. Expenditures:

1. Expenditures to date are low mainly due to the timing of debt service payments.

C. Other Financing Sources:

1. Operating transfers in represent cash transfers from the Measure I funds to cover debt service expenditures.

Capital Projects Fund

A. Revenues:

1. The timing for revenue collection fluctuates as most projects are funded on a reimbursement basis.
2. The negative investment earnings balance is due to a reversal of prior year accruals.

B. Expenditures:

1. Expenditures to date are low mainly due to the timing of capital expenditures, which can take several years.
2. Funds for the Transit and Project Delivery programs are encumbered to ensure they are available to pay for the allocations approved by the Board of Directors.
3. The negative balance in Regional & Subregional Planning is due to the reversal of accruals from the prior year.

C. Other Financing Sources:

1. No commercial paper has been issued in Fiscal Year 2024/2025.
2. Operating transfers in represent cash transfers within the Capital Projects Fund to properly allocate funding for the Monte Vista Grade Separation projects. Also included is the transfer for the repayment of commercial paper from the Federal Fund for the North First Avenue Bridge project.
3. Operating transfers out represent cash transfers within the Capital Projects Fund to properly allocate funding for the Monte Vista Grade Separation projects.

Nonmajor Governmental Funds – Excluding Council of Governments

A. Revenues:

1. The timing for collection of revenue fluctuates as most of the state grants are on a reimbursement basis.
2. The negative investment earnings balance is due to a reversal of prior year accruals.

B. Expenditures:

1. Expenditures to date are low mainly due to the timing of capital expenditures, which can take several years.

C. Other Financing Sources:

1. Operating transfers out represent cash transfers to fund the Indirect Cost Fund and to properly allocate funds for the West Valley Connector Project.

Council of Governments Fund

A. Revenues:

1. The timing for revenue collection fluctuates as this program is mostly funded on a reimbursement basis.
2. The negative investment earnings balance is due to a reversal of prior year accruals.

B. Expenditures:

1. Expenditures to date are low mainly due to the timing of program activities.

C. Other Financing Sources:

1. Operating transfers out represent the cash transfers to fund the Indirect Cost Fund.

Enterprise Fund

A. Revenues:

1. Express Lanes Operations commenced in August 2024.
2. The negative investment earnings balance is due to a reversal of prior year accruals.

B. Expenditures:

1. Expenditures to date are low mainly due to the delay in the start of operations.

Financial Impact:
This item has no financial impact on the adopted Budget for Fiscal Year 2024/2025.

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

Responsible Staff:
Lisa Lazzar, Chief Financial Officer

Approved
General Policy Committee
Date: November 13, 2024

Witnessed By:

Fiscal Year 2024-2025
First Quarter Budget to Actual Report
June 30, 2025

	2024-2025 Original Budget	Amendments	2024-2025 Revised Budget	Actual Revenues & Expenditures to Date	Encumbrances	Balance	% of Budget Remaining for Expenditures
GENERAL FUND							
Revenues							
Sales Tax-MSI	2,519,000	-	2,519,000	194,203	-	2,324,797	
Intergovernmental	-	-	-	757,058	-	(757,058)	
Charges for Services	40,010	-	40,010	417,792	-	(377,782)	
Investment Earnings	460,000	-	460,000	6,601,367	-	(6,141,367)	
Miscellaneous	141	-	141	412	-	(271)	
Total Revenues	3,019,151	-	3,019,151	7,970,832	-	(4,951,681)	
Expenditures							
General Government	13,832,509	331,663	14,164,172	2,031,265	1,469,432	10,663,475	75.28%
Regional & Subregional Planning	1,553,616	(99,024)	1,454,592	98,892	-	1,355,700	93.20%
Transit	70,952,674	2,260,637	73,213,311	13,565,823	219,247	59,428,241	81.17%
Project Delivery	309,967	-	309,967	-	-	309,967	100.00%
Fund Administration	444,094	-	444,094	76,135	2,000	365,959	82.41%
Total Expenditures	87,092,860	2,493,276	89,586,136	15,772,115	1,690,679	72,123,342	80.51%
Other Financing Sources							
Transfers in	84,911,887	-	84,911,887	5,800,265	-	79,111,622	93.17%
Transfers out	(2,514,517)	(9,363)	(2,523,880)	(637,992)	-	(1,885,888)	74.72%
Total Other Financing Sources	82,397,370	(9,363)	82,388,007	5,162,273	-	77,225,734	93.73%
Revenues Over (Under) Expenditures	(1,676,339)	(2,502,639)	(4,178,978)	(2,639,010)	-	150,711	
FEDERAL FUND							
Revenues							
Intergovernmental	131,400,865	-	131,400,865	1,003,519	-	130,397,346	
Total Revenues	131,400,865	-	131,400,865	1,003,519	-	130,397,346	
Expenditures							
Regional & Subregional Planning	700,000	-	700,000	5,917	-	694,083	0.85%
Transit	2,363,732	-	2,363,732	(314,387)	-	2,678,119	113.30%
Project Delivery	128,337,133	(2,882,865)	125,454,268	13,901,873	-	111,552,395	88.92%
Total Expenditures	131,400,865	(2,882,865)	128,518,000	13,593,403	-	114,924,597	89.42%
Other Financing Sources							
Transfers out	-	(2,882,865)	(2,882,865)	(2,882,865)	-	-	0.00%
Total Other Financing Sources	-	(2,882,865)	(2,882,865)	(2,882,865)	-	-	0.00%
Revenues Over (Under) Expenditures	-	-	-	(15,472,749)	-	15,472,749	
FEDERAL TRANSIT ADMINISTRATION FUND							
Revenues							
Intergovernmental	44,789,439	-	44,789,439	-	-	44,789,439	
Total Revenues	44,789,439	-	44,789,439	-	-	44,789,439	
Expenditures							
Transit	44,789,439	-	44,789,439	707,096	-	44,082,343	98.42%
Total Expenditures	44,789,439	-	44,789,439	707,096	-	44,082,343	98.42%
Revenues Over (Under) Expenditures	-	-	-	(707,096)	-	707,096	
STATE FUND							
Revenues							
Intergovernmental	69,673,615	-	69,673,615	26,667,555	-	43006060	
Investment Earnings	-	-	-	23,455	-	(23,455)	
Total Revenues	69,673,615	-	69,673,615	26,691,010	-	42,982,605	
Expenditures							
General Government	9,070	-	9,070	265	-	8,805	0.00%
Regional & Subregional Planning	491,374	-	491,374	41,081	-	450,293	91.64%
Transit	35,578,278	566,510	36,144,788	325,578	20,234	35,798,976	99.04%
Project Delivery	32,591,448	-	32,591,448	(1,086)	-	32,592,534	100.00%
Fund Administration	1,003,077	-	1,003,077	169,220	-	833,857	83.13%
Total Expenditures	69,673,247	566,510	70,239,757	535,058	20,234	69,684,465	99.21%
Revenues Over (Under) Expenditures	368	(566,510)	(566,142)	26,155,952	(20,234)	(26,701,860)	

Note: Transfers in are from LTF, STA, and SGR revenue for budget purposes. The comprehensive annual financial report accounts for the activity in the individual funds of LTF, STA, and SGR, not the general fund.

Fiscal Year 2024-2025
First Quarter Budget to Actual Report
June 30, 2025

	2024-2025 Original Budget	Amendments	2024-2025 Revised Budget	Actual Revenues & Expenditures to Date	Encumbrances	Balance	% of Budget Remaining for Expenditures
PROPOSITION 1B FUND							
Revenues							
Intergovernmental	12,998	-	12,998	-	-	12,998	
Total Revenues	12,998	-	12,998	-	-	12,998	
Expenditures							
Project Delivery	12,998	-	12,998	-	-	12,998	100.00%
Total Expenditures	12,998	-	12,998	-	-	12,998	100.00%
Revenues Over (Under) Expenditures	-	-	-	-	-	-	
LOCAL TRANSPORTATION FUND							
Revenues							
Sales Tax-LTF	149,568,943	-	149,568,943	11,446,532	-	138,122,411	
Investment Earnings	2,000,000	-	2,000,000	2,541,590	-	(541,590)	
Total Revenues	151,568,943	-	151,568,943	13,988,122	-	137,580,821	
Expenditures							
Transit	120,000,000	-	120,000,000	(31,751,378)	108,885	151,642,493	126.37%
Total Expenditures	120,000,000	-	120,000,000	(31,751,378)	108,885	151,642,493	126.37%
Other Financing Sources							
Transfers out	(44,811,525)		(44,811,525)	(899,163)	-	(43,912,362)	97.99%
Total Other Financing Sources	(44,811,525)	-	(44,811,525)	(899,163)	-	(43,912,362)	97.99%
Revenues Over (Under) Expenditures	(13,242,582)	-	(13,242,582)	44,840,337	(108,885)	(57,974,034)	
STATE TRANSIT ASSISTANCE FUND							
Revenues							
Intergovernmental	30,482,261	-	30,482,261	-	-	30,482,261	
Investment Earnings	840,000	-	840,000	1,000,194	-	(160,194)	
Total Revenues	31,322,261	-	31,322,261	1,000,194	-	30,322,067	
Expenditures							
Transit	24,958,873	-	24,958,873	(8,793,994)	-	33,752,867	135.23%
Total Expenditures	24,958,873	-	24,958,873	(8,793,994)	-	33,752,867	135.23%
Other Financing Sources							
Transfers out	(31,901,792)	-	(31,901,792)	2,930,394	-	(34,832,186)	109.19%
Total Other Financing Sources	(31,901,792)	-	(31,901,792)	2,930,394	-	(34,832,186)	109.19%
Revenues Over (Under) Expenditures	(25,538,404)	-	(25,538,404)	12,724,582	-	(38,262,986)	

Note: Intergovernmental revenue (from State Transit Assistance) is net of the amount allocated to SBCTA and accounted for in the General Fund.

SENATE BILL 1 Fund							
Revenues							
Intergovernmental	91,516,246	-	91,516,246	-	-	91,516,246	
Total Revenues	91,516,246	-	91,516,246	-	-	91,516,246	
Expenditures							
Commuter and Motorist Assistance	1,431,379	-	1,431,379	-	-	1,431,379	0.00%
Regional & Subregional Planning Program	10,400,000	-	10,400,000	13,098	-	10,386,902	0.13%
Transit	37,343,567	-	37,343,567	(51,691)	-	37,395,258	100.14%
Major Project Delivery	42,341,300	-	42,341,300	1,507,424	-	40,833,876	3.56%
Total Expenditures	91,516,246	-	91,516,246	1,468,831	-	90,047,415	98.40%
Revenues Over (Under) Expenditures	-	-	-	(1,468,831)	-	1,468,831	
MEASURE I 1990-2010 FUND							
Revenues							
Investment Earnings	100,000	-	100,000	(19,644)	-	119,644	
Total Revenues	100,000	-	100,000	(19,644)	-	119,644	
Expenditures							
Project Delivery	2,003,400	(100,000)	1,903,400	25,982	-	1,877,418	98.63%
Total Expenditures	2,003,400	(100,000)	1,903,400	25,982	-	1,877,418	98.63%

Fiscal Year 2024-2025
First Quarter Budget to Actual Report
June 30, 2025

	2024-2025 Original Budget	Amendments	2024-2025 Revised Budget	Actual Revenues & Expenditures to Date	Encumbrances	Balance	% of Budget Remaining for Expenditures
MEASURE I 2010-2040 FUND							
Revenues							
Sales Tax-MSI	249,381,000	-	249,381,000	19,226,121	-	230,154,879	
Investment Earnings	15,176,000	-	15,176,000	(2,783,676)	-	17,959,676	
Total Revenues	264,557,000	-	264,557,000	16,442,445	-	248,114,555	
Expenditures							
General Government	1,182,571	-	1,182,571	37,254	-	1,145,317	96.85%
Environment and Energy Conservation	298,449	-	298,449	4,726	-	293,723	98.42%
Commuter and Motorist Assistance	1,285,989	-	1,285,989	612	-	1,285,377	99.95%
Regional & Subregional Planning	1,365,852	49,512	1,415,364	108,997	-	1,306,367	92.30%
Transit	64,448,896	2,296,958	66,745,854	6,281,903	9,407,698	51,056,253	76.49%
Project Delivery	191,598,239	100,000	191,698,239	4,798,988	398,710	186,500,541	97.29%
Fund Administration	134,406,907	-	134,406,907	4,850,859	749,000	128,807,048	95.83%
Total Expenditures	394,586,903	2,446,470	397,033,373	16,083,339	10,555,408	370,394,626	93.29%
Other Financing Sources							
Transfers in	35,262,132	-	35,262,132	10,479,645	-	24,782,487	70.28%
Transfers out	(17,138,434)	-	(17,138,434)	(4,029,577)	-	(13,108,857)	76.49%
Total Other Financing Sources	18,123,698	-	18,123,698	6,450,068	-	11,673,630	64.41%
Revenues Over (Under) Expenditures	(111,906,205)	(2,446,470)	(114,352,675)	6,809,174	(10,555,408)	(110,606,441)	
Note: Sales tax - MSI is net of the 1% for Measure I Administration and accounted for in the General Fund.							
DEBT SERVICE FUND							
Revenues							
Investment Earnings	-	-	-	56,558	-	(56,558)	
Total Revenues	-	-	-	56,558	-	(56,558)	
Expenditures							
Debt Service	12,413,850	-	12,413,850	3,331,925	-	9,081,925	73.16%
Total Expenditures	12,413,850	-	12,413,850	3,331,925	-	9,081,925	73.16%
Other Financing Sources							
Operating Transfers In	12,413,850	-	12,413,850	3,095,963	-	9,317,887	75.06%
Total Other Financing Sources	12,413,850	-	12,413,850	3,095,963	-	9,317,887	75.06%
Revenues Over (Under) Expenditures	-	-	-	(179,404)	-	179,404	
CAPITAL PROJECTS FUND							
Revenues							
Intergovernmental	41,680,437	-	41,680,437	-	-	41,680,437	
Investment Earnings	1,065,000	-	1,065,000	(125,763)	-	1,190,763	
Miscellaneous	10,671,316	-	10,671,316	-	-	10,671,316	
Total Revenues	53,416,753	-	53,416,753	(125,763)	-	53,542,516	
Expenditures							
General Government	150,000	-	150,000	-	-	150,000	100.00%
Regional & Subregional Planning	6,708,337	49,512	6,757,849	(26,000)	-	6,783,849	100.38%
Transit	8,048,046	-	8,048,046	1,443,970	-	6,604,076	82.06%
Project Delivery	35,661,708	-	35,661,708	5,138,269	151,497	30,371,942	85.17%
Fund Administration	2,034,700	-	2,034,700	-	-	2,034,700	100.00%
Total Expenditures	52,602,791	49,512	52,652,303	6,556,239	151,497	45,944,567	87.26%
Other Financing Sources							
Proceeds from commercial paper	20,000,000		20,000,000	-	-	20,000,000	100.00%
Operating Transfers in	1,000,000	-	1,000,000	2,799,826	-	(1,799,826)	-179.98%
Operating Transfers out	(20,000,000)	-	(20,000,000)	(26,308)	-	(19,973,692)	99.87%
Total Other Financing Sources	1,000,000	-	1,000,000	2,773,518	-	(1,773,518)	-177.35%
Revenues Over (Under) Expenditures	1,813,962	(49,512)	1,764,450	(3,908,484)	(151,497)	5,824,431	

Fiscal Year 2024-2025
First Quarter Budget to Actual Report
June 30, 2025

	2024-2025 Original Budget	Amendments	2024-2025 Revised Budget	Actual Revenues & Expenditures to Date	Encumbrances	Balance	% of Budget Remaining for Expenditures
NONMAJOR GOVERNMENTAL FUNDS - EXCLUDING COUNCIL OF GOVERNMENTS FUND							
Revenues							
Intergovernmental	19,710,125	-	19,710,125	-	-	19,710,125	
Charges for Services	12,213	-	12,213	-	-	12,213	
Investment Earnings	105,000	-	105,000	(20,575)	-	125,575	
Miscellaneous	14,676	-	14,676	-	-	14,676	
Total Revenues	19,842,014	-	19,842,014	(20,575)	-	19,862,589	
Expenditures							
General Government	116,884	-	116,884	6,803	1,000	109,081	93.32%
Commuter and Motorist Assistance	5,434,709	-	5,434,709	236,863	37,168	5,160,678	94.96%
Regional & Subregional Planning	700,988	-	700,988	28,163	-	672,825	95.98%
Transit	11,934,322	380,778	12,315,100	75,459	-	12,239,641	99.39%
Total Expenditures	18,186,903	380,778	18,567,681	347,288	38,168	18,182,225	97.92%
Other Financing Sources							
Transfers out	(1,085,366)	(19,222)	(1,104,588)	(290,564)	-	(814,024)	73.69%
Total Other Financing Sources	(1,085,366)	(19,222)	(1,104,588)	(290,564)	-	(814,024)	73.69%
Revenues Over (Under) Expenditures	569,745	(400,000)	169,745	(658,427)	(38,168)	866,340	
COUNCIL OF GOVERNMENTS FUND							
Revenues							
Special Assessments	991,873	-	991,873	-	-	991,873	
Investment Earnings	40,000	-	40,000	(5,539)	-	45,539	
Miscellaneous	825,993	-	825,993	13,125	-	812,868	
Total Revenues	1,857,866	-	1,857,866	7,586	-	1,850,280	
Expenditures							
Council of Governments	5,617,687	100,000	5,717,687	106,502	-	5,611,185	98.14%
Total Expenditures	5,617,687	100,000	5,717,687	106,502	-	5,611,185	98.14%
Other Financing Sources							
Transfers out	(781,437)	-	(781,437)	(195,359)	-	(586,078)	75.00%
Total Other Financing Sources	(781,437)	-	(781,437)	(195,359)	-	(586,078)	75.00%
Revenues Over (Under) Expenditures	(4,541,258)	(100,000)	(4,641,258)	(294,275)	-	(4,346,983)	
ENTERPRISE FUND							
Revenues							
Express Lanes Fees And Charges	13,828,000	-	13,828,000	866,323	-	12,961,677	
Investment Earnings	-	-	-	(23,561)	-	23,561	
Total Revenues	13,828,000	-	13,828,000	842,762	-	12,985,238	
Expenditures							
Express Lanes Operation	17,906,865	1,900	17,908,765	33,213	161,138	17,714,414	98.91%
Total Expenditures	17,906,865	1,900	17,908,765	33,213	161,138	17,714,414	98.91%
Revenues Over (Under) Expenditures	(4,078,865)	(1,900)	(4,080,765)	809,549	(161,138)	(4,729,176)	

Minute Action

AGENDA ITEM: 5

Date: November 13, 2024

Subject:
2025 General Policy Committee Meeting Schedule

Recommendation:
Approve the 2025 General Policy Committee meeting schedule.

Background:
The San Bernardino County Transportation Authority (SBCTA)/San Bernardino Council of Governments (SBCOG) General Policy Committee (GPC) regular meeting schedule is on the Wednesday of the week following the Board of Directors meeting, which is usually the second Wednesday of the month beginning at 9:00 a.m. in the 1st Floor Lobby Board Room at the Santa Fe Depot. Although a monthly schedule is adopted, it is acknowledged that when there are not sufficient business items to require a meeting, the meeting will be cancelled. It has also been the practice to modify the meeting date and time when the meeting has been rescheduled due to conflicts with other meetings or holiday schedules. SBCTA staff, however, has been directed to make every effort to minimize deviation from the regular schedule to ensure continuity of meetings and participation.

A proposed 2025 meeting schedule is identified below for approval. Committee members and staff are urged to calendar these meetings for the coming year. Advance confirmation of meetings or cancellation notices are part of SBCTA's standard procedure for meeting preparation. The proposed meeting schedule does conform to the second Wednesday of each month, the week following the Board of Directors meeting.

The proposed 2025 GPC meeting dates are as follows:

January 15, 2025*
February 12, 2025
March 12, 2025
April 9, 2025
May 14, 2025
June 11, 2025
July 9, 2025 **(DARK)**
August 13, 2025
September 10, 2025
October 8, 2025
November 12, 2025
December 10, 2025

**This date falls on the third Wednesday of the month*

Financial Impact:
This item has no financial impact on the adopted Budget for Fiscal Year 2024/2025.

Reviewed By:
This item is not scheduled for review by any other policy committee or technical advisory committee.
Entity: San Bernardino Council of Governments, San Bernardino County Transportation Authority

Responsible Staff:
Ashley Izard, Deputy Clerk of the Board

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Approved
General Policy Committee
Date: November 13, 2024

Witnessed By:

SBCTA / SBCOG 2025 Master Calendar

~ January 2025 ~

Sun	Mon	Tue	Wed	Thu	Fri	Sat
NOTES: *The Board meeting will be held on the 2nd Wednesday due to Holiday. **The CCMTAC meeting will be held on the 2nd Thursday due to Holiday. ***This meeting falls on the 3rd Wednesday of the month. ****This meeting falls on the 3rd Thursday of the month.			1 New Year's Holiday	2 SCAG Regional Council	3	4
5	6	7 Orthodox Christmas	8 *Board	9 **City/County Manager's TAC	10	11
12	13	14 Orthodox New Year	15 ***General Policy Committee ***Legislative Policy Committee LAFCO Hearing	16 ****Transit Committee ****Metro Valley Study Session	17 Mt/Desert Policy Committee	18
19	20 Martin Luther King Jr. Holiday	21	22	23	24	25
26	27	28	29 League of CA Cities New Mayors & Council Members Academy	30 League of CA Cities New Mayors & Council Members Academy	31 League of CA Cities New Mayors & Council Members Academy	

Board of Directors meetings start at 10:00 a.m.
General Policy Committee starts at 9:00 a.m.

Legislative Policy Committee starts at 9:30 a.m.
Transit Committee starts at 9:00 a.m.

Metro Valley Study Session starts at 9:30 a.m.
Mountain/Desert Committee starts at 9:30 a.m.

SBCTA / SBCOG 2025 Master Calendar

~ February 2025 ~

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5 Board	6 SCAG Regional Council	7	8
9	10	11	12 General Policy Committee Legislative Policy Committee	13 Transit Committee Metro Valley Study Session	14	15
16	17 Presidents' Day Holiday	18	19 LAFCO Hearing	20	21 Mt/Desert Policy Committee	22
23	24	25	26	27	28 Ramadan	

Board of Directors meetings start at 10:00 a.m.
General Policy Committee starts at 9:00 a.m.

Legislative Policy Committee starts at 9:30 a.m.
Transit Committee starts at 9:00 a.m.

Metro Valley Study Session starts at 9:30 a.m.
Mountain/Desert Committee starts at 9:30 a.m.

SBCTA / SBCOG 2025 Master Calendar

~ March 2025 ~

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1 NACo Legislative Conference Ramadan
2 NACo Legislative Conference Ramadan	**3** NACo Legislative Conference Ramadan	**4** NACo Legislative Conference Ramadan	**5** Board Ramadan	**6** City/County Manager's TAC SCAG Regional Council Ramadan	**7** Ramadan	**8** Ramadan
9 Daylight Savings Time Begins Ramadan	**10** Ramadan	**11** Ramadan	**12** General Policy Committee Legislative Policy Committee Ramadan	**13** Transit Committee Metro Valley Study Session Ramadan	**14** Ramadan	**15** Ramadan
16 Ramadan	**17** Ramadan	**18** Ramadan	**19** LAFCO Hearing Ramadan	**20** Ramadan	**21** Mt/Desert Policy Committee Ramadan	**22** Ramadan
23 Ramadan	**24** Ramadan	**25** Ramadan	**26** Ramadan	**27** Laylat al-Qadr Ramadan	**28** Ramadan	**29** Ramadan
30	**31** Cesar Chavez Day					

Board of Directors meetings start at 10:00 a.m.
General Policy Committee starts at 9:00 a.m.

Legislative Policy Committee starts at 9:30 a.m.
Transit Committee starts at 9:00 a.m.

Metro Valley Study Session starts at 9:30 a.m.
Mountain/Desert Committee starts at 9:30 a.m.

Attachment: 2025 Master Meeting Calendar (10946 : 2025 General Policy Committee Meeting Schedule)

SBCTA / SBCOG 2025 Master Calendar

~ April 2025 ~

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2 Board	3 SCAG Regional Council	4	5
6	7	8	9 General Policy Committee Legislative Policy Committee	10 Transit Committee Metro Valley Study Session	11	12 Passover
13 Passover	14 Passover	15 Passover	16 LAFCO Hearing Passover	17 Passover	18 Mt/Desert Policy Committee Good Friday Passover	19 Passover
20 Easter Passover	21	22	23	24	25	26
27	28	29	30			

Board of Directors meetings start at 10:00 a.m.
General Policy Committee starts at 9:00 a.m.

Legislative Policy Committee starts at 9:30 a.m.
Transit Committee starts at 9:00 a.m.

Metro Valley Study Session starts at 9:30 a.m.
Mountain/Desert Committee starts at 9:30 a.m.

SBCTA / SBCOG 2025 Master Calendar

~ May 2025 ~

Sun	Mon	Tue	Wed	Thu	Fri	Sat
NOTES: *City/County Manager's TAC cancelled due to conflict with SCAG General Assembly. **This meeting falls on the 3rd Thursday of the month.				1 *City/County Manager's TAC (CANCELLED) SCAG Regional Council SCAG General Assembly	2 SCAG General Assembly	3
4	5	6	7 Board	8 City/County Conference (Tentative)	9 City/County Conference (Tentative)	10
11	12	13	14 General Policy Committee Legislative Policy Committee	15 **Transit Committee **Metro Valley Study Session	16 Mt/Desert Policy Committee	17
18	19	20	21 LAFCO Hearing	22	23	24
25	26 Memorial Day Holiday	27	28	29	30	31

Board of Directors meetings start at 10:00 a.m.
General Policy Committee starts at 9:00 a.m.

Legislative Policy Committee starts at 9:30 a.m.
Transit Committee starts at 9:00 a.m.

Metro Valley Study Session starts at 9:30 a.m.
Mountain/Desert Committee starts at 9:30 a.m.

SBCTA / SBCOG 2025 Master Calendar

~ June 2025 ~

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1 Shavuot (begins sunset)	**2** Shavuot	**3** Shavuot (ends nightfall)	**4** Board	**5** SCAG Regional Council	**6** Eid al-Adha	**7** Eid al-Adha
8	**9**	**10**	**11** General Policy Committee Legislative Policy Committee	**12** Transit Committee Metro Valley Study Session	**13**	**14**
15	**16**	**17**	**18** LAFCO Hearing	**19** Juneteenth Holiday US Conference of Mayors	**20** Mt/Desert Policy Committee US Conference of Mayors	**21** US Conference of Mayors
22 US Conference of Mayors	**23**	**24**	**25**	**26**	**27** Muharram	**28**
29	**30**					

Board of Directors meetings start at 10:00 a.m.
General Policy Committee starts at 9:00 a.m.

Legislative Policy Committee starts at 9:30 a.m.
Transit Committee starts at 9:00 a.m.

Metro Valley Study Session starts at 9:30 a.m.
Mountain/Desert Committee starts at 9:30 a.m.

SBCTA / SBCOG 2025 Master Calendar

~ July 2025~

Sun	Mon	Tue	Wed	Thu	Fri	Sat
NOTES: *No policy committee meetings.		1	2 Board	3 *City/County Manager's TAC (DARK) SCAG Regional Council	4 Independence Day Holiday	5
6	7	8	9 *General Policy Committee (DARK) *Legislative Policy Committee (DARK)	10 *Transit Committee (DARK) *Metro Valley Study Session (DARK)	11 NACo Annual Meeting	12 NACo Annual Meeting
13 NACo Annual Meeting	14 NACo Annual Meeting	15	16 LAFCO Hearing	17	18 *Mt/Desert Policy Committee (DARK)	19
20	21	22	23	24	25	26
27	28	29	30	31		

Board of Directors meetings start at 10:00 a.m.
General Policy Committee starts at 9:00 a.m.

Legislative Policy Committee starts at 9:30 a.m.
Transit Committee starts at 9:00 a.m.

Metro Valley Study Session starts at 9:30 a.m.
Mountain/Desert Committee starts at 9:30 a.m.

SBCTA / SBCOG 2025 Master Calendar

~ August 2025 ~

Sun	Mon	Tue	Wed	Thu	Fri	Sat
NOTES: *No Board Meeting.					1	2
3	4	5	6 *Board (DARK)	7 SCAG Regional Council (DARK)	8	9
10	11	12	13 General Policy Committee Legislative Policy Committee	14 Transit Committee Metro Valley Study Session	15 Mt/Desert Policy Committee	16 Janmashtami
17	18	19	20 LAFCO Hearing	21	22	23
24	25	26	27	28	29	30
31						

Board of Directors meetings start at 10:00 a.m.
General Policy Committee starts at 9:00 a.m.

Legislative Policy Committee starts at 9:30 a.m.
Transit Committee starts at 9:00 a.m.

Metro Valley Study Session starts at 9:30 a.m.
Mountain/Desert Committee starts at 9:30 a.m.

SBCTA / SBCOG 2025 Master Calendar

~ September 2025 ~

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1 Labor Day Holiday	2	3 Board	4 City/County Manager's TAC SCAG Regional Council	5 Prophet Muhammad's Birthday	6
7	8	9	10 General Policy Committee Legislative Policy Committee	11 Transit Committee Metro Valley Study Session	12 Mobility 21 Summit	13
14	15	16	17 LAFCO Hearing	18	19 Mt/Desert Policy Committee	20
21	22 Navratri Rosh Hashanah (Start)	23 Rosh Hashanah (Cont.)	24 Rosh Hashanah (Ends)	25	26	27
28	29	30				

Board of Directors meetings start at 10:00 a.m.
General Policy Committee starts at 9:00 a.m.

Legislative Policy Committee starts at 9:30 a.m.
Transit Committee starts at 9:00 a.m.

Metro Valley Study Session starts at 9:30 a.m.
Mountain/Desert Committee starts at 9:30 a.m.

SBCTA / SBCOG 2025 Master Calendar

~ October 2025 ~

Sun	Mon	Tue	Wed	Thu	Fri	Sat
NOTES: *This meeting will be held on the 3rd Thursday due to a conflict with the League of CA Cities Annual Conference.			1 Board Yom Kippur	2 SCAG Regional Council Yom Kippur	3	4
5	6 Sukkot	7 Sukkot	8 General Policy Committee Legislative Policy Committee League of CA Cities Annual Conference Sukkot	9 League of CA Cities Annual Conference Sukkot	10 League of CA Cities Annual Conference Sukkot	11 Sukkot
12 Sukkot	13 Columbus Day Sukkot Shemini Atzeret	14 Shemini Atzeret Simchat Torah	15 LAFCO Hearing Simchat Torah	16 *Transit Committee *Metro Valley Study Session	17 Mt/Desert Policy Committee	18
19	20	21 Diwali	22	23	24	25
26	27	28	29	30	31 Halloween	

Board of Directors meetings start at 10:00 a.m.
General Policy Committee starts at 9:00 a.m.
Legislative Policy Committee starts at 9:30 a.m.
Transit Committee starts at 9:00 a.m.
Metro Valley Study Session starts at 9:30 a.m.
Mountain/Desert Committee starts at 9:30 a.m.

SBCTA / SBCOG 2025 Master Calendar

~ November 2025 ~

Sun	Mon	Tue	Wed	Thu	Fri	Sat
NOTES: *This is a tentative date since we do not have any information on when the CSAC Annual Meeting will take place.						1
2 Daylight Savings Time Ends	3	4	5 Board	6 City/County Manager's TAC SCAG Regional Council	7	8
9	10	11 Veteran's Day Holiday	12 General Policy Committee Legislative Policy Committee	13 Transit Committee Metro Valley Study Session	14	15
16	17 *CSAC Annual Meeting (Tentative)	18 *CSAC Annual Meeting (Tentative)	19 LAFCO Hearing *CSAC Annual Meeting (Tentative)	20 *CSAC Annual Meeting (Tentative)	21 Mt/Desert Policy Committee *CSAC Annual Meeting (Tentative)	22
23	24	25	26	27 Thanksgiving Day Holiday	28 Thanksgiving Day After	29
30						

Board of Directors meetings start at 10:00 a.m.
General Policy Committee starts at 9:00 a.m.

Legislative Policy Committee starts at 9:30 a.m.
Transit Committee starts at 9:00 a.m.

Metro Valley Study Session starts at 9:30 a.m.
Mountain/Desert Committee starts at 9:30 a.m.

SBCTA / SBCOG 2025 Master Calendar

~ December 2025 ~

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3 Board	4 SCAG Regional Council	5	6
7	8	9	10 General Policy Committee Legislative Policy Committee	11 Transit Committee Metro Valley Study Session	12 *Mt/Desert Policy Committee	13
14 Hanukkah	15 Hanukkah	16 Hanukkah	17 LAFCO Hearing Hanukkah	18 Hanukkah	19 Hanukkah	20 Hanukkah
21 Hanukkah	22 Hanukkah	23	24 Christmas Eve Holiday	25 Christmas Day Holiday	26 Kwanzaa	27 Kwanzaa
28 Kwanzaa	29 Kwanzaa	30 Kwanzaa	31 New Year's Eve Holiday Kwanzaa	NOTES: *This meeting will be held on the 2nd Friday due to Holidays.		

Board of Directors meetings start at 10:00 a.m.
General Policy Committee starts at 9:00 a.m.

Legislative Policy Committee starts at 9:30 a.m.
Transit Committee starts at 9:00 a.m.

Metro Valley Study Session starts at 9:30 a.m.
Mountain/Desert Committee starts at 9:30 a.m.

Minute Action

AGENDA ITEM: 6

Date: November 13, 2024

Subject:
Adopt Resolution No. 25-058 and Policy No. 10011 Authorizing Executive Director to Establish and Modify Contract Claims Processes

Recommendation:
That the General Policy Committee recommend the Board, acting as the San Bernardino County Transportation Authority and the San Bernardino Council of Governments:

A. Adopt Resolution No. 25-058, authorizing the Executive Director to establish and modify contractual claims processes.

B. Adopt Policy No. 10011, codifying the Board's delegation of authority to the Executive Director, or his designee, to establish and modify contractual claims processes.

Background:
The California Government Claims Act (Government Code Sections 810 et seq.) (the "Act") sets forth procedures and deadlines for presentation of claims, including claims arising from performance of contracts. The Act also permits the governing body of a local public entity to enter agreements providing claims processes that differ from those set forth in the statute (Gov. Code Section 930.2). Section 930.2 restricts such authority to the governing body. However, the governing body can delegate such authority to an employee of the entity by ordinance or resolution (Gov. Code Section 935.4).

San Bernardino County Transportation Authority and San Bernardino Council of Governments contracts frequently provide for alternative claims processes; one example is the provision in construction contracts that requires the contractor to submit claims to a Dispute Resolution Board. On occasion, unforeseen circumstances cause these alternative processes to not work as efficiently and effectively as the parties envisioned. At such times, the parties may agree to waive or modify part or all of such provisions. This item seeks the Board's delegation of authority to the Executive Director, or his designee, to establish and modify such contractual claims processes in order to address and resolve claims without incurring delay by bringing such processes to Committee and the Board of Directors (Board) for approval.

Staff recommends that the Board adopt Resolution No. 25-058 to delegate authority to the Executive Director to establish and modify contractual claims processes. Staff further recommends the Board adopt Policy No. 10011 to codify that delegation of authority.

Financial Impact:
This item has no financial impact on the adopted Budget for Fiscal Year 2024/2025.

Reviewed By:
This item is not scheduled for review by any other policy committee or technical advisory committee. SBCTA/SBCOG General Counsel has reviewed this item, the draft resolution, and the draft policy.

Entity: San Bernardino Council of Governments, San Bernardino County Transportation Authority

Responsible Staff:
Julianna Tillquist, General Counsel

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Approved
General Policy Committee
Date: November 13, 2024

Witnessed By:

RESOLUTION NO. 25-058

RESOLUTION OF THE SAN BERNARDINO COUNTY TRANSPORTATION AUTHORITY AND SAN BERNARDINO COUNCIL OF GOVERNMENTS TO AUTHORIZE EXECUTIVE DIRECTOR TO ESTABLISH AND MODIFY CONTRACT CLAIMS PROCESSES

WHEREAS, the California Government Claims Act, Government Code Sections 810 et seq., sets forth mandatory procedures for the presentation of most monetary claims to local government agencies, including contract-related claims; and

WHEREAS, Government Code Section 935.4 permits a governing body to authorize, by ordinance or resolution, one or more of its employees to perform the governing body's functions under Part 3 of Division 3.5 of Title 1 of the Government Code (sections 900 – 935.9); and

WHEREAS, Government Code Section 930.2 authorizes an agency's governing body to include in contracts claims presentation and resolution processes that differ in one or more respects from the claims presentation procedures set forth in the Government Code; and

WHEREAS, San Bernardino County Transportation Authority (SBCTA) and San Bernardino Council of Governments (SBCOG) frequently enter contracts that set forth a process for the presentation, by one or both parties, and resolution of monetary and other claims, in accordance with Government Code Section 930.2; and

WHEREAS, there are times when the facts and circumstances are such that alternative contractual claims processes may better serve the parties in terms of efficiency, cost savings, and timely resolution; and

WHEREAS, the Board desires to facilitate the efficient and effective resolution of contractual claims.

NOW, THEREFORE BE IT RESOLVED by the San Bernardino County Transportation Authority and San Bernardino Council of Governments:

The Board hereby delegates authority to the Executive Director, or designee, to negotiate and agree to establish and modify contractually-provided claims processes, including authority to negotiate and execute contract amendments to that effect. This delegation of authority shall be codified in SBCTA/SBCOG Policy 10011.

Adopted by the San Bernardino County Transportation Authority and San Bernardino Council of Governments on December 4, 2024, by the following vote:

AYES:	XX
NOES:	XX
ABSTAINED:	XX
ABSENT:	XX

Ray Marquez, Board President
San Bernardino County Transportation Authority, San Bernardino Council of Governments

ATTEST:

Marleana Roman, Clerk of the Board
San Bernardino County Transportation Authority, San Bernardino Council of Governments

San Bernardino County Transportation Authority/San Bernardino Council of Governments	**Policy**	**10011**
Adopted by the Board of Directors December 4, 2024	Revised	
Authorizing the Executive Director to Establish and Modify Contractual Claims Processes	Revision No.	0

Important Notice: A hardcopy of this document may not be the document currently in effect. The current version is always the version on the SBCTA Intranet.

Table of Contents

I. PURPOSE

The purpose of this policy is to delegate authority to the Executive Director, or designee, to establish and modify claims processes in SBCTA and SBCOG contracts.

II. REFERENCES

Government Code sections 930.2, 935.4

III. POLICY

SBCTA and SBCOG frequently enter contracts that set forth a process for the presentation, by one or both parties, and resolution of monetary and other claims. The Board recognizes that there are times when the facts and circumstances are such that alternative contractual claims processes may better serve the parties in terms of efficiency, cost savings, and timely resolution. In order to facilitate the efficient and effective resolution of such claims, the Board hereby delegates authority to the Executive Director, or designee, to negotiate and agree to establish and modify such contractually-provided claims processes, including authority to negotiate and execute contract amendments to that effect.

IV. REVISION HISTORY

Revision No.	Revisions	Adopted
0	Adopted.	12/04/24

Minute Action

AGENDA ITEM: 7

Date: November 13, 2024

Subject:
Revisions to Measure I Local Street Program Policies No. 40003, 40012, and 40016

Recommendation:
That the General Policy Committee recommend the Board, acting as the San Bernardino County Transportation Authority:

Approve revisions to the Measure I Local Street Program Policies No. 40003, 40012, and 40016, incorporating a remedy to redistribute funds withheld due to an incomplete compliance audit within two years after the expiration of Measure I 2010-2040.

Background:
Measure I funds are received by San Bernardino County Transportation Authority monthly, and the Local Street Program dollars are passed through to the local jurisdictions for eligible local transportation priorities, as long as the local jurisdiction has submitted an annual Five-Year Capital Improvement Plan and is compliant with audit provisions. The Measure I 2010-2040 Ordinance No. 04-01 requires that each agency receiving an allocation of Measure I revenue shall undergo a compliance audit to ensure that each agency is expending funds in accordance with the provisions and guidelines established for Measure I revenue. Measure I Local Street Program Policies No. 40003, 40012, and 40016 require the compliance audit to be completed by December 31st each year.

Measure I Local Street Program Policies No. 40003, 40012, and 40016 do not address what happens if an agency does not complete annual compliance audits. Approval of this item would recommend the Board of Directors adopt revisions to the Measure I Local Street Program Policies No. 40003, 40012, and 40016 to set forth the consequence when a jurisdiction does not complete a compliance audit within two years after the expiration of Measure I 2010-2040. For those not meeting the sunset date, any withheld funds will be distributed to other compliant jurisdictions within that Subarea. The allocation will be based on the process in Section IV.A of the applicable policy after removing the jurisdiction not meeting the audit requirement.

The proposed revised policies for the three Local Street Programs are attached and include Valley, Victor Valley, and Rural Mountain/Desert.

Financial Impact:
This item has no financial impact on the adopted Budget for Fiscal Year 2024/2025.

Reviewed By:
This item is not scheduled for review by any other policy committee or technical advisory committee. SBCTA General Counsel has reviewed this item and the revised policies.

Responsible Staff:
Lisa Lazzar, Chief Financial Officer

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San Bernardino County Transportation Authority	**Policy**	**40003**
Adopted by the Board of Directors April 1, 2009	Revised	412/04/~~22~~24
Valley Local Street (VLS) Program Measure I 2010-2040 Strategic Plan	Revision No.	~~7~~8

Important Notice: A hardcopy of this document may not be the document currently in effect. The current version is always the version on the SBCTA Intranet.

Table of Contents

I. PURPOSE

The purpose of this policy is to establish requirements relating to adoption of Five Year Plans by local jurisdictions outlining the projects that will be funded under the Measure I 2010-2040 Valley Subarea Local Street Program. Twenty percent of the total Measure I 2010-2040 revenue collected in the San Bernardino Valley Subarea shall be assigned to the Local Street Program. This program will be used by local jurisdictions to fund Local Street Projects.

II. REFERENCES

Ordinance No. 04-01 of the San Bernardino County Transportation Authority, Exhibit A – Transportation Expenditure Plan.

SBCTA Congestion Management Program

III. DEFINITIONS

Local Street Program: Measure I program in all subareas that provides funds through a pass-through mechanism directly to local jurisdictions for expenditure on street and road construction, repair, maintenance and other eligible local transportation priorities. Local Street Program funds can be used flexibly for any eligible transportation purpose determined to be a local priority, including Local Street, major highways, state highway improvements, freeway interchanges, transit, and other improvements/programs to maximize use of transportation facilities.

Allocation: An action by the SBCTA Board of Directors to assign a specific amount of Measure I funds from a Measure I program to a project. Allocations of Local Street Program funds occur monthly as a direct pass-through to local jurisdictions.

Five-Year Plan: A plan of projected local jurisdiction expenditures for the next five years on local projects eligible for Local Street Program funds, updated annually and submitted to SBCTA by local jurisdictions.

Independent Taxpayer Oversight Committee: A "Mandated Taxpayer Safeguard" established by Ordinance 04-01 for Measure I 2010-2040 to provide citizen review and to ensure that all Measure I funds are spent in accordance with provisions of the Measure I Expenditure Plan and Ordinance.

Maintenance of Effort: The requirement that Measure I funding will supplement and not replace the existing local discretionary funding being used for street and highway purposes.

Maintenance of Effort Base Year Level: The amount of General Fund used for street and highway purposes in Fiscal Year 2008/2009, prior to Measure I 2010-2040, as adopted by the SBCTA Board of Directors.

IV. POLICIES FOR THE VALLEY LOCAL STREET PROGRAM

A. Local Street Program Allocation

Policy VLS-1: Each jurisdiction shall receive an allocation from 20% of the Measure I revenue collected in the Valley Subarea on a per capita basis using the population estimate as of January 1 of that year. The population estimate for making the per capita calculation shall be determined by SBCTA each year based on the State Department of Finance population estimate. For the unincorporated areas, the calculation shall be based on the population estimate from the County Land Use Services Department - Planning Division and reconciled with the State Department of Finance population estimate as of January 1 of that year.

Policy VLS-2: Local jurisdictions shall not receive their Local Street Program allocation until they have submitted their annual adopted update of their Five-Year Plan. The due date to submit the Five-Year Plan to SBCTA is September 1 of each year. If the Five-Year Plan has not been received by the due date, the pass-through payments will be withheld. All withheld pass-through payments will be released upon receipt of the local jurisdiction governing body's adopted Five-Year Plan.

Policy VLS-3: The Local Street Program allocation shall be remitted to local jurisdictions monthly.

Policy VLS-4: Local Street Program allocations remitted from January 1 until such time as the State Department of Finance has issued their population figures and SBCTA has made the per capita calculation, shall be based on the prior year's calculation. Once the per capita calculation has been made, the calculation will be applied retroactively to January 1 and amounts received by local jurisdictions will be adjusted to account for the difference in the amount remitted during the retroactive period and the amount that should have been remitted adjusted for the new per capita calculation.

B. Development Fair Share Contribution

Policy VLS-5: A development mitigation fair share contribution is required by Measure I 2010-2040 for all capacity improvement projects on the Nexus Study Network, contained in the most recent Board-adopted version of the Nexus Study approved for jurisdictions in the San Bernardino Valley and funded all or in part with Local Street Program allocations.

Policy VLS-6: Annually as part of its audit of each jurisdictions' use of Measure I funds, SBCTA will specifically review development mitigation contribution records for capacity improvements to Nexus Study Network facilities that were funded all or in part by Local Street Program allocations. If a material finding is made in the audit showing that the development fair share contribution was not made, SBCTA may, as the agency responsible for the Congestion Management Program, withhold Section 2105 Gas Tax funds or Measure I Local Street Program allocations until the jurisdiction shows that they are in compliance with the Congestion Management Program.

Policy VLS-7: Jurisdictions may borrow from other internal accounts (i.e. within their own jurisdiction) to fund the required development fair share. Jurisdictions will maintain a record of borrowing between internal accounts. The internal accounts shall be reimbursed by development mitigation as development occurs.

C. Five-Year Plan

Policy VLS-8: Each local jurisdiction is required to annually adopt a Five-Year Capital Improvement Plan which details the specific projects to be funded using Measure I Local Pass-Through Funds. Expenditures of Measure I Local Pass-Through Funds must be detailed in the Five-Year Capital Improvement Plan and adopted by resolution of the governing body. Expenditures can only be made on projects listed in the current Five-Year Capital Improvement Plan.

Policy VLS-9: Five-Year Capital Improvement Plans shall:

a. Specifically identify projects by either 1) street name, boundaries, and project type, subject to eligibility requirements listed in Section D below, or 2) defining the project as a program of work without any identified streets, such as a pavement management program, transportation system improvements, routine roadway maintenance or other miscellaneous transportation-related expenditures as identified in Policy VLS-12. Projects defined as a program of work shall not include capacity enhancements.

b. Constrain the total amount of planned expenditures to 150% of SBCTA's forecasted revenue for Measure I Local Pass-Through Funds, revenue resulting from bonds secured by Measure I revenue, and remaining balances from previous year allocations.

c. For capacity enhancement projects listed in the Nexus Study, limit the use of Measure I local funds to the Measure I public share of the project cost and identify the required development contribution. Maintenance projects or projects that do not enhance the capacity of a Nexus Study Network roadway do not require a development contribution.

d. Use the SBCTA-approved forms and/or online database. Instructions will be issued to the City Manager annually prior to the deadline.

Policy VLS-10: No longer applicable.

Policy VLS-11: The Five-Year Capital Improvement Plan shall be the basis for the annual audit. Jurisdictions will have flexibility in adding and/or deleting projects in their current Five-Year Capital Improvement Plan based on the necessities of the jurisdiction, and subject to eligibility requirements listed in Section D below. However, in order for a project to be eligible for expenditure of Local Street Program funds, it must be listed in the current Five-Year Capital Improvement Plan. If a revised Capital Improvement Plan is necessary to reflect added projects, it must be adopted by resolution of the governing body and provided to SBCTA by September 1 of each fiscal year for use in the annual audit. If the Capital Improvement Plan is not modified to reflect the changes to the project list, an audit finding will result. If the audit finding is not corrected, the project will not be eligible for expenditures of Local Street Program funds.

D. Eligible Expenditures

Policy VLS-12: Eligible expenditures include construction, maintenance, and overhead for transportation related purposes only. Included below are definitions and types of eligible expenditures by category.

a. Construction

Construction shall be defined as the building or rebuilding of streets, roads, bridges, and acquisition of rights-of-way or their component parts to a degree that improved traffic service is provided and geometric or structural improvements are effected including allocated administration and engineering necessarily incurred and directly related to the above.

Construction work can be separated into four categories:

1) New Construction – A construction that substantially deviates from the existing alignment and provides for an entirely new street or roadbed for the greater parts of its length.

2) Reconstruction – A construction involving realignment or the use of standards well above those of the existing element, whereby the type or the geometric and structural features are significantly changed.

3) Preventative Maintenance – Includes, but is not limited to, roadway activities such as joint and shoulder rehabilitation, heater re-mix, seal coats, corrective grinding of PCC1 pavement, and restoration of drainage systems.

4) 3R Work – All other work that does not fall into the above-defined categories for new construction, reconstruction, or preventative maintenance and typically involves the improvement of highway pavement surfaces through resurfacing, restoration, or rehabilitation. 3R Work is generally regarded as heavy, ~~non- routine~~non-routine maintenance designed to achieve a ten-year service life. Specifically, 3R Work is defined as:

- *Resurfacing* generally consists of placing additional asphalt concrete over a structurally sound highway, street, or bridge that needs treatment to extend its useful service life.
- *Restoration* means returning a road, street, structure, or collateral facility to the condition existing after ~~-~~original construction.
- *Rehabilitation* implies providing some betterments, such as upgrading guardrail or widening shoulders.

The following examples of construction expenditures are grouped by types of work:

Expenditures	*Types of Work*	
Additions	1.	The addition of a frontage street or road
	2.	Addition of auxiliary lanes such as speed change, storage, or climbing lanes
Barriers	3.	Earthwork protective structures within or adjacent to the right-of-way area
	4.	Extensions and new installation of walls
	5.	Replacement of retaining walls to a higher standard
	6.	Extension of new installation of guardrails, fence lines, raised medians, or barriers for traffic safety
Bikeways	7.	Construction of bikeways where they are an integral part of the streets and highway system
	8.	Construction of bicycle or pedestrian underpasses or overhead crossings for the general public use
Bridges	9.	Reconstruction of an existing bridge or installation of a new bridge
	10.	Widening of a bridge
	11.	Replacement of bridge rails and floors to a higher standard
Curbs, etc.	12.	Installation or extension of curbs, gutters, sidewalks, or underdrain (including improvements to handicap ramps to make them ADA compliant).
Drainage	13.	A complete reconstruction or an addition to a culvert including cross culverts regardless of angle of crossing; storm drains, culverts, or drainage channels which are required to be constructed or reconstructed by improvement of the roadway; longitudinal storm drains or other longitudinal culverts, including manholes; cross longitudinal gutters at intersections; and catch basins and related pipes. The term “catch basin” shall include outlet structures or curb openings. An eligible “catch basin” must be located within the road or street system rights-of-way, or as close to the curb return joining the road or street system as practicable, considering the location of obstructions and/or hydraulic considerations.
	14.	Extending old culverts and drains and replacing headwalls
Interagency Projects	15.	Road improvements within an adjoining jurisdiction as long as the improvements are made within the County of San Bernardino
	16.	Road improvements and maintenance on a state highway as long as the appropriate agreement with Caltrans is in place
	17.	Maintenance or construction on alleys that have been formally accepted into the city or county street system
	18.	Development of facilities associated with Metrolink commuter rail operations that are determined to be a local responsibility
Landscaping	19.	Installation or addition to landscape treatment such as sod, shrubs, trees, irrigation, etc. along the street or road right-of-way
	20.	Purchase of land for “greenbelt” if needed to mitigate the environmental impact of a street or road construction project
Layout	21.	Change of alignment, profile, and cross-section
	22.	Reconstruction of an intersection and its approximate approaches to a substantially higher type involving a change in its character and layout including changes from a plain intersection to a major channelized intersection or to a grade separation and ramps
Lighting	23.	Installation, replacement, or expansion of street or road lighting system
Associated Planning and Design	24.	Project development, planning studies, and design for eligible transportation projects

	25.	Expenses incurred in attending or participating in transportation and traffic engineering sponsored programs or training conducted for street or road purposes
	26.	Engineering review of plans for construction of Valley Measure I Major Streets projects
Relocation	27.	The removal of old street and roadbeds and structures, and detour costs when connected with a construction project
	28.	Replacement in kind, when legally required, of structures that are required to be relocated for street and road purposes
Signs and Signals	29.	Installation of original traffic signs and markers on routes
	30.	Replacement of all major signs or traffic control devices on a street or road
	31.	The installation of a new sign or the replacement of an old sign with one of superior design such as increased size, illumination, or overhead installation
	32.	Installation or improvements of traffic signal controls at intersections and protective devices at railroad grade crossings
	33.	Purchase and installation of traffic signal control equipment including traffic actuated equipment, radio or other remote control devices and related computers, software, and that portion of preemption equipment not mounted on motor vehicles
Striping	34.	Painting or rearrangement of pavement striping and markings, or repainting to a higher standard
Surface Work	35.	Original surfacing of shoulders
	36.	Improvement of a surface to a higher type of material
	37.	Placing sufficient new material on soil surface or gravel street or road to substantially improve the quality or the original surface
	38.	Bituminous material of 1” or more placed on bituminous or concrete material - a lesser thickness may be considered construction provided the engineer shall certify that the resulting pavement is structurally adequate to serve anticipated traffic
	39.	Remix existing bituminous surfacing with added materials to provide a total thickness of one inch or more – a lesser thickness may be considered construction provided the engineer certifies that the resulting pavement is structurally adequate to serve anticipated traffic
	40.	Stabilization of street or road base by additive, such as cement, lime, or asphaltic material
Transit	41.	Public transit systems, including rail, and related purposes
Widening	42.	Widening of existing street or roadbed or pavement, with or without resurfacing
	43.	Resurfacing, stabilizing, or widening of shoulders including necessary connections to side streets or road approaches
Other eligible expenditures	44.	Matching funds to federal or state contributions to a roadway project
	45.	Park and ride facilities
	46.	Undergrounding utilities or utility relocation only if part of a new roadway construction or documented as a legal road or street obligation.
	47.	Rubberized railroad grade crossing material or repair of grade crossings
	48.	Preliminary and construction engineering may be claimed on the percentage basis approved in previous years by Caltrans for contract work.
	49.	Relocation expenses necessitated by right-of-way acquisitions in accordance with the applicable government codes on relocation assistance.

b. Maintenance

Maintenance shall be defined as the preservation and upkeep of a street or road to its constructed condition and the operation of a street or road facility and its integral services to provide safe, convenient, and economical highway transportation.

Physical Maintenance is preservation and upkeep of a highway, including all of its elements, in as nearly as practicable its original condition or its subsequently improved condition.

Traffic Services include the operation of a highway facility, and services incidental thereto, to provide safe, convenient, and economic travel.

The following are examples of maintenance expenditures:

1.	Scarifying, reshaping, and restoring material losses
2.	Applying dust palliatives
3.	Patching, repairing, surface treating, and joint filling on bituminous or concrete surfaces
4.	Jacking concrete pavements
5.	Repairing traveled way and shoulders
6.	Adding bituminous material of less than 1" to bituminous material including seal coats
7.	Remixing existing bituminous surfacing with added materials to provide a total thickness of less than 1" (see exception under Construction, example 39)
8.	Patching operations including base restoration
9.	Resealing street or road shoulders and side street and road approaches
10.	Reseeding and resodding shoulders and approaches
11.	Reshaping drainage channels and side slopes
12.	Restoring erosion controls
13.	Cleaning culverts and drains
14.	Removing slides and restoring facilities damaged by slides (additional new facilities shall be considered construction)
15.	Mowing, tree trimming, and watering within the street right-of-way
16.	Replacing topsoil, sod, shrubs, trees, irrigation facilities, etc., on streets and roadsides
17.	Repairing curb, gutter, rip-rap, underdrain, culverts, and drains
18.	Cleaning, painting, and repairing bridges and structures
19.	Performing all snow control operations such as erection of snow fences and the actual removal of snow and ice from the traveled way
20.	Repainting pavements, striping, and markings
21.	Repainting and repairing signs, guard rails, traffic signals, lighting standards, etc.
22.	Adding small numbers of conventional traffic control devices including signs
23.	Servicing street or road lighting and traffic control devices
24.	Furnishing power for street or road lighting and traffic control devices, including payment for the cost of power
25.	Developing and maintaining programs that enhance management of transportation facilities such as travel demand models and pavement management programs
26.	Purchase of street-related equipment used exclusively for road maintenance
27.	Purchase of rubberized railroad grade crossing material for repair of grade crossings

c. Administrative Costs

1) Direct Costs

Direct costs are expenditures incurred solely and specifically for eligible street or road purposes or projects. Direct costs include contract payments, right-of-way acquisition, direct material and forced labor costs, and the salaries, wages, fringe benefits and related costs of employees directly participating on street and road purpose projects. Typical direct costs include:

- Compensation of employees for the time devoted and identified specifically to the performance of the eligible street or road project(s). Direct cost typically includes first level of supervision dedicated to the project. Supervisory activities above the first level of supervision may be recoverable as indirect costs.
- Costs of materials consumed or expended specifically for the purpose in which they were authorized.
- Equipment and other approved capital expenditures.
- Expense items or services contracted, or furnished specifically for the project to carry out the purpose in which they were authorized.

2) Indirect Costs (Overhead)

Indirect costs shall be defined as those elements of costs that are incurred for eligible street or road purposes that cannot be readily identified to a particular project. Cities and counties are allowed to use Measure I local funds to reimburse for indirect costs provided that there is documentation that amounts reimbursed were fairly and equitable allocated.

Overhead will only be allowed via an approved cost allocation plan or an equitable and auditable distribution of overhead among all departments.

Indirect costs typically include:

- Cost of overall supervision of field operations including payroll, facilities, advertising, general government, department or general accounting/finance, procurement, top management, data processing, legal costs and bids
- Cost of shop supplies such as expendable small tools and non-permanent barricades, warning signs, and other devices

E. Ineligible Expenditures

Policy VLS-13: Although many types of work may be referred to as “construction”, this does not make these costs automatically eligible for expenditures of Measure I funds. To be eligible, the work must be for street or road purposes.

Following is a list of the types of expenditures that are not eligible for financing with Measure funds:

1.	Costs of rearranging non-street or road facilities, including utility relocation, when not a legal road or street obligation
2.	New (first installation of) utilities, including water mains, sanitary sewers, and other non-street facilities
3.	Cost of leasing property or right-of-way, except when required for construction work purposes on a temporary basis
4.	Cost of constructing or improving a street or area for parking purposes, except for the width normally required for parking adjacent to the traveled way and within the right-of-way, or when off-street parking facilities are constructed in lieu of widening a street to improve the flow of traffic
5.	Decorative lighting
6.	Park features such as benches, playground equipment and restrooms
7.	Work outside the right-of-way which is not a specific right-of-way obligation

8.	Equestrian under- and overpasses or other similar structures for any other special interest group unless as a part of a right-of-way obligation
9.	Construction, installation, or maintenance of cattle guards
10.	Maintenance or construction on alleys that have not been formally designated as part of a jurisdiction's street and road system
11.	Non-street and road-related salaries and benefits
12.	Driveways outside of the street and road right-of-way
13.	Purchase of electronic speed control devices or other non-highway related equipment
14.	Freeway telephone emergency system
15.	Interest charged for non-highway purposes
16.	Grantwriting consultant fees
17.	Debt service payments for non-voter-approved bonds, including Certificates of Participation
18.	Over-expended funds (deficit fund balance)
19.	Negative interest allocation
20.	The value of park or other city/county owned property rededicated for a street right-of-way.

F. Accounting Requirements

Policy VLS-14: Each local jurisdiction shall establish a Special Measure I 2010-2040 Transportation Sales Tax Fund. This fund is a special revenue fund utilized to account for proceeds of specific revenue sources that are legally restricted to expenditures for street and road purposes. Jurisdictions should use the modified accrual basis of accounting.

Policy VLS-15: The following requirements are to provide guidance on the specific accounting treatment as it relates to the Special Measure I Transportation Sales Tax Fund.

a. All allocations shall be deposited directly into the Special Measure I Transportation Sales Tax Fund.

b. Interest received by a jurisdiction from the investment of money in its Special Measure I Sales Tax Fund shall be deposited in the fund and shall only be used for street and road purposes.

c. Segregation must be maintained within the Special Measure I Transportation Sales Tax Fund to show separate balances for each subarea (County only).

d. If other revenues are commingled in the Special Measure I Transportation Sales Tax Fund, it is the responsibility of the jurisdiction to provide accurate and adequate documentation to support revenue and expenditure allocation, as well as segregated balances.

e. It is allowable to fund prior year expenditures with current year revenues and/or fund balance as long as funded projects are included in the current adopted Five-Year Capital Improvement Plan and accounting clearly identifies the project and other pertinent data to establish a clear audit trail.

f. If a project is deemed ineligible in the annual Compliance Audit, the Measure I funds used on that project must be repaid to the Special Measure I Transportation Sales Tax Fund in accordance with Policy VLS-19.

g. Temporary loans of Measure I local funds can only be made among other Measure I accounts/projects if project and other pertinent data is identified to establish a clear audit trail.

h. If Measure I funds are used to purchase salable excess right-of-way, any unsold portions should be reported to SBCTA including the reasons for holding it and the anticipated date of disposal.

Policy VLS-16: Any interest earned on investment of Measure I Transportation Sales Tax Funds must be deposited in the Special Measure I Transportation Sales Tax Fund. Any jurisdiction not electing to invest its Measure I funds but at the same time investing most of its other available funds should deposit the Measure I funds in a separate account to clearly indicate that no such monies were invested. If Measure I Transportation Sales Tax funds are invested, they must receive their equitable proration of interest earned on the total funds invested. Several methods are available to determine an equitable distribution of interest earned. Whatever method is employed, it will be analyzed during audit to determine reasonableness and confirm distribution to the Special Measure I Transportation Sales Tax Fund. It is recommended that a distribution based on average month-end cash balances be employed. In addition, if the interest distribution methodology allows for negative distributions, they will be disallowed. No interest charges based on negative cash and fund balances will be allowed.

Policy VLS-17: Reimbursements of Measure I Transportation Sales Tax Funds previously expended for street and road construction or right-of-way purposes, from whatever source, must be deposited in the Special Measure I Transportation Sales Tax Fund. This includes but is not limited to:

- Federal Aid Urban projects
- Cooperative agreements
- Equipment use rates for equipment purchased with Measure I funds and used for non-street purposes
- Equipment dispositions
- Right-of-way dispositions
- Federal and safety projects

Policy VLS-18: Records:

a. Source Documentation - On construction or purchase of right-of-way or equipment, all expenditures charged to the Measure I Transportation Sales Tax Fund must be supported by a warrant or other source document (invoice, requisition, time sheet, equipment rental charge, engineering plans, specifications, and other pertinent data) clearly identifying the project and other pertinent data to establish a clear audit trail. If street-related equipment is purchased with Measure I local funds, the jurisdiction must keep accurate records on acquisition cost, use, maintenance, and disposition.

b. Retention Period - All source documents, together with the accounting records, are deemed to be the official records of the jurisdiction and must be retained by the jurisdiction for five (5) years.

Policy VLS-19: Compliance Audit Deadline

a. A jurisdiction's annual Compliance Audit must be completed by December 31st (Compliance Audit Deadline). SBCTA staff shall monitor the scheduling and progress of the audits to ensure prompt communication by the Auditor after information submittals by the jurisdiction and timely completion of the final Measure I audit report.

b. If a jurisdiction is not able to meet the Compliance Audit Deadline, the jurisdiction may submit a letter requesting an extension and specifying the period of the requested extension for consideration by the General Policy Committee at their February meeting and the Board at their March meeting. Letters must be received timely for inclusion in the agenda. If a letter is not submitted and the Compliance Audit has not been completed, notification will be made to the Board at their March meeting that future allocations of Local Pass-Through Funds for the jurisdiction will be withheld until the Compliance Audit has been completed. Upon satisfactory completion of the Compliance Audit, any withheld allocations will be paid to the City including interest determined using the current LAIF rate. The Board may approve Compliance Audit Deadline extensions if the Board finds: (1) the Compliance Audit was not completed timely for reasons outside of the jurisdiction's control, such as federal, state, and GASB reporting requirements, or catastrophic events; or (2) it is in the best interest of SBCTA to grant the extension.

c. SBCTA staff shall be responsible for requesting from the Board any extensions related to Auditor performance.

Policy VLS-20: Remedies

a. If a jurisdiction's annual Compliance Audit determines that the jurisdiction used Measure I Transportation Sales Tax Funds for ineligible expenses, the jurisdiction shall immediately repay the Measure I Transportation Sales Tax Fund in an equal amount through an internal fund transfer from another source. Repayment will include interest that would have been earned in the Special Measure I Transportation Sales Tax Fund from the time of ineligible expenditure to date of repayment.

b. If a jurisdiction's annual Compliance Audit fails to be completed with an unmodified opinion by the Compliance Audit Deadline, which may be extended pursuant to Policy VLS-19, the jurisdiction shall immediately repay the Measure I Transportation Sales Tax Fund through an internal fund transfer from another source in the amount of the Measure I Local Street Program allocation for the subject fiscal year of Compliance Audit findings of unsubstantiated or questioned costs. Repayment will include interest that would have been earned in the Special Measure I Transportation Sales Tax Fund from the time of ineligible expenditure to date of repayment.

c. If the jurisdiction is unable to make such immediate repayment under VLS-20 (a) or (b), the jurisdiction shall not receive its Local Street Program allocation pass-through payments until the repayment amount of ineligible expenses, unsubstantiated costs, or questioned costs, have been withheld by SBCTA. Repayment will include interest that would have been earned in the Special Measure I Transportation Sales Tax Fund from the time of ineligible expenditure to date of repayment.

d. If the jurisdiction enters into a Repayment Agreement with SBCTA, as approved by the jurisdiction and the SBCTA Board of Directors, providing for repayment of the amounts owed under VLS-20 (a) or (b) over a period not to exceed five (5) years, SBCTA will return any pass-through funds withheld. SBCTA will recommence withholding Local Street Program allocation pass-through funds if the jurisdiction fails to comply with the terms of the Repayment Agreement.

e. If a jurisdiction has not completed an annual Compliance Audit within two years after the expiration of Measure I 2010-2040~~by the sunset of the current measure~~, any withheld funds will be distributed to other compliant jurisdictions within that subarea. The allocation will be based on the process in ~~s~~Section IV.A of this ~~p~~Policy after removing the jurisdiction not meeting the audit requirement.

~~A.~~

G. Maintenance of Effort Requirements

Policy VLS-21: The SBCTA Board of Directors shall retain authority over actions related to these Maintenance of Effort (MOE) requirements.

Policy VLS-22: In accordance with California Public Utilities Code 190300 and Ordinance No. 04-01 of the San Bernardino County Transportation Authority, Local Street Program funds shall not be used to supplant existing local discretionary funds being used for street and highway purposes.

Policy VLS-23: SBCTA shall monitor local agency use of General Fund for street and highway purposes relative to their use prior to Measure I 2010-2040, which shall be referred to as the MOE base year level.

Policy VLS-24: The following requirements are to provide guidance on the determination of a MOE base year level.

a. The MOE base year level shall be equivalent to the discretionary General Fund expenditures for transportation-related construction and maintenance activities consistent with Policy VLS-12 in Fiscal Year 2008/2009.

b. Jurisdictions may propose deductions to the recorded expenditures for the following:

   1) Expenditures for unusual circumstances that increased the MOE base year level arbitrarily outside of the normal on-going General Fund expenditures, e.g. General Fund loans to other transportation-related funds, emergency repairs, or special projects.

   2) Administrative/overhead costs that were not project-specific, i.e. staff time for transportation staff was charged to a general "program" budget rather than charged directly to specific projects.

c. The proposed MOE base year level shall be adopted by resolution of the governing body.

d. The Independent Taxpayer Oversight Committee (ITOC) will review the proposed MOE base year levels, including the proposed deductions, as adopted by resolution of the governing body, and provide a recommendation to the SBCTA Board of Directors for approval.

e. The MOE base year level as approved by the SBCTA Board of Directors shall remain in effect until the expiration of Measure I 2010-2040.

Policy VLS-25: Jurisdictions shall annually provide a statement in the resolution of the governing body adopting the Five Year Capital Improvement Plan that acknowledges the jurisdiction will maintain General Fund expenditures for transportation-related construction and maintenance activities at the required MOE base year level in that fiscal year. Jurisdictions whose MOE base year level is determined to be $0 are not required to provide this statement in the resolution.

Policy VLS-26: The MOE requirement shall be tracked and verified as part of the annual Measure I Local Street Program audit. This will be accomplished by comparing the discretionary General Fund expenditures for transportation-related construction and maintenance activities consistent with Policy VLS-12 to the MOE base year level.

Policy VLS-27: General Fund expenditures in excess of the MOE base year level will carry over to subsequent fiscal years and can be applied in a future year to offset the amount the local agency may need to meet the MOE requirement. Carryover balances will be documented in the annual Measure I Local Street Program audit.

Policy VLS-28: If the annual Measure I Local Street Program audit indicates that the required MOE base level is not being met, then the jurisdiction has the following four fiscal years to make up the amount. If the audit following those four fiscal years indicates the jurisdiction is still below the MOE base year level, SBCTA will immediately stop disbursing Measure I Local Street Program funds until an amount equivalent to the MOE base year level shortfall has been withheld. The withheld funds will be disbursed to the jurisdiction upon demonstration that the jurisdiction has met the MOE requirements.

Policy VLS-29: The following provides guidance on resolution of MOE base year level shortfalls at the expiration of Measure I 2010-2040.

a. If the jurisdiction has not resolved a MOE base year level shortfall within two years after the expiration of Measure I 2010-2040, any withheld funds will be distributed to other compliant jurisdictions within that subarea. The allocation will be based on the process in Section IV.A of this Policy after removing the jurisdiction not meeting the audit requirement.

b. If any Measure I Local Street Program audit after Fiscal Year 2033/2034 indicates that the required MOE base year level was not met, then the jurisdiction has until Fiscal Year 2038/2039 to make up the amount. If the audit of Fiscal Year 2038/2039 indicates the jurisdiction is still below the MOE base level, the jurisdiction must pay the MOE base level shortfall to SBCTA for distribution to other compliant jurisdictions within that subarea. -The allocation will be based on the process in Section IV.A of this Policy after removing the jurisdiction not meeting the audit requirement.

Policy VLS-30: Prior to withholding or required repayment of Measure I Local Street Program funds, jurisdictions shall have an opportunity to appeal to the ITOC. The jurisdiction must present evidence to the ITOC demonstrating unusual circumstances or the need for special consideration. The ITOC will be responsible for making a recommendation to the SBCTA Board of Directors to either approve or deny the request for special consideration.

V. REVISION HISTORY

Revision No.	Revisions	Adopted
0	Adopted by the Board of Directors.	04/01/2009
1	Revisions adopted by the Board of Directors on January 8, 2014, Agenda Item 14.	01/08/2014
2	Revisions adopted by the Board of Directors on May 6, 2015, Agenda Items 6 & 8.	05/06/2015
3	Amended list of eligible expenses to be more consistent with the list of eligible expenses in the State Controller's Office Gas Tax Fund Guidelines. Modified remedy language in Policy VLS-20. Approved by the BOD 9/6/17, Agenda Item 11.	09/06/2017
4	Addition of due date of Capital Improvement Plan in VLS-2. Approved by the BOD 7/11/18, Agenda Item 25.	7/11/2018
5	Clarified Capital Improvement Plan requirements, amended eligible expenditures to be consistent with current gas tax guidelines, added requirements for tracking equipment purchased with Measure I funds, and updated Compliance Audit Deadline extension requirements. Approved by the BOD 6/3/20, Agenda Item 25.	06/03/2020
6	Moved transit purposes from the ineligible list of projects to the eligible list of projects for consistency with the Expenditure Plan. Approved by the BOD 3/3/21, Agenda Item 31.	3/3/2021
7	Amended Capital Improvement Plan requirements to remove limit on categorical expenditures, revise due date for amended Capital Improvement Plans, and remove the requirement to revise the list for projects where eligible expenditures exceed the estimate.	4/6/2022
8	Remedy added ~~Amended~~ to address if a jurisdiction does not complete a Compliance Audit within two years of Measure I sunsetting. ~~by the sunset of the current measure.~~	12/4/2024

San Bernardino County Transportation Authority	**Policy**	**40003**
Adopted by the Board of Directors April 1, 2009	Revised	12/04/24
Valley Local Street (VLS) Program Measure I 2010-2040 Strategic Plan	Revision No.	8

Important Notice: A hardcopy of this document may not be the document currently in effect. The current version is always the version on the SBCTA Intranet.

Table of Contents

I. PURPOSE

The purpose of this policy is to establish requirements relating to adoption of Five Year Plans by local jurisdictions outlining the projects that will be funded under the Measure I 2010-2040 Valley Subarea Local Street Program. Twenty percent of the total Measure I 2010-2040 revenue collected in the San Bernardino Valley Subarea shall be assigned to the Local Street Program. This program will be used by local jurisdictions to fund Local Street Projects.

II. REFERENCES

Ordinance No. 04-01 of the San Bernardino County Transportation Authority, Exhibit A – Transportation Expenditure Plan.

SBCTA Congestion Management Program

III. DEFINITIONS

Local Street Program: Measure I program in all subareas that provides funds through a pass-through mechanism directly to local jurisdictions for expenditure on street and road construction, repair, maintenance and other eligible local transportation priorities. Local Street Program funds can be used flexibly for any eligible transportation purpose determined to be a local priority, including Local Street, major highways, state highway improvements, freeway interchanges, transit, and other improvements/programs to maximize use of transportation facilities.

Allocation: An action by the SBCTA Board of Directors to assign a specific amount of Measure I funds from a Measure I program to a project. Allocations of Local Street Program funds occur monthly as a direct pass-through to local jurisdictions.

Five-Year Plan: A plan of projected local jurisdiction expenditures for the next five years on local projects eligible for Local Street Program funds, updated annually and submitted to SBCTA by local jurisdictions.

Independent Taxpayer Oversight Committee: A "Mandated Taxpayer Safeguard" established by Ordinance 04-01 for Measure I 2010-2040 to provide citizen review and to ensure that all Measure I funds are spent in accordance with provisions of the Measure I Expenditure Plan and Ordinance.

Maintenance of Effort: The requirement that Measure I funding will supplement and not replace the existing local discretionary funding being used for street and highway purposes.

Maintenance of Effort Base Year Level: The amount of General Fund used for street and highway purposes in Fiscal Year 2008/2009, prior to Measure I 2010-2040, as adopted by the SBCTA Board of Directors.

IV. POLICIES FOR THE VALLEY LOCAL STREET PROGRAM

A. Local Street Program Allocation

Policy VLS-1: Each jurisdiction shall receive an allocation from 20% of the Measure I revenue collected in the Valley Subarea on a per capita basis using the population estimate as of January 1 of that year. The population estimate for making the per capita calculation shall be determined by SBCTA each year based on the State Department of Finance population estimate. For the unincorporated areas, the calculation shall be based on the population estimate from the County Land Use Services Department - Planning Division and reconciled with the State Department of Finance population estimate as of January 1 of that year.

Policy VLS-2: Local jurisdictions shall not receive their Local Street Program allocation until they have submitted their annual adopted update of their Five-Year Plan. The due date to submit the Five-Year Plan to SBCTA is September 1 of each year. If the Five-Year Plan has not been received by the due date, the pass-through payments will be withheld. All withheld pass-through payments will be released upon receipt of the local jurisdiction governing body's adopted Five-Year Plan.

Policy VLS-3: The Local Street Program allocation shall be remitted to local jurisdictions monthly.

Policy VLS-4: Local Street Program allocations remitted from January 1 until such time as the State Department of Finance has issued their population figures and SBCTA has made the per capita calculation, shall be based on the prior year's calculation. Once the per capita calculation has been made, the calculation will be applied retroactively to January 1 and amounts received by local jurisdictions will be adjusted to account for the difference in the amount remitted during the retroactive period and the amount that should have been remitted adjusted for the new per capita calculation.

B. Development Fair Share Contribution

Policy VLS-5: A development mitigation fair share contribution is required by Measure I 2010-2040 for all capacity improvement projects on the Nexus Study Network, contained in the most recent Board-adopted version of the Nexus Study approved for jurisdictions in the San Bernardino Valley and funded all or in part with Local Street Program allocations.

Policy VLS-6: Annually as part of its audit of each jurisdictions' use of Measure I funds, SBCTA will specifically review development mitigation contribution records for capacity improvements to Nexus Study Network facilities that were funded all or in part by Local Street Program allocations. If a material finding is made in the audit showing that the development fair share contribution was not made, SBCTA may, as the agency responsible for the Congestion Management Program, withhold Section 2105 Gas Tax funds or Measure I Local Street Program allocations until the jurisdiction shows that they are in compliance with the Congestion Management Program.

Policy VLS-7: Jurisdictions may borrow from other internal accounts (i.e. within their own jurisdiction) to fund the required development fair share. Jurisdictions will maintain a record of borrowing between internal accounts. The internal accounts shall be reimbursed by development mitigation as development occurs.

C. Five-Year Plan

Policy VLS-8: Each local jurisdiction is required to annually adopt a Five-Year Capital Improvement Plan which details the specific projects to be funded using Measure I Local Pass-Through Funds. Expenditures of Measure I Local Pass-Through Funds must be detailed in the Five-Year Capital Improvement Plan and adopted by resolution of the governing body. Expenditures can only be made on projects listed in the current Five-Year Capital Improvement Plan.

Policy VLS-9: Five-Year Capital Improvement Plans shall:

a. Specifically identify projects by either 1) street name, boundaries, and project type, subject to eligibility requirements listed in Section D below, or 2) defining the project as a program of work without any identified streets, such as a pavement management program, transportation system improvements, routine roadway maintenance or other miscellaneous transportation-related expenditures as identified in Policy VLS-12. Projects defined as a program of work shall not include capacity enhancements.

b. Constrain the total amount of planned expenditures to 150% of SBCTA's forecasted revenue for Measure I Local Pass-Through Funds, revenue resulting from bonds secured by Measure I revenue, and remaining balances from previous year allocations.

c. For capacity enhancement projects listed in the Nexus Study, limit the use of Measure I local funds to the Measure I public share of the project cost and identify the required development contribution. Maintenance projects or projects that do not enhance the capacity of a Nexus Study Network roadway do not require a development contribution.

d. Use the SBCTA-approved forms and/or online database. Instructions will be issued to the City Manager annually prior to the deadline.

Policy VLS-10: No longer applicable.

Policy VLS-11: The Five-Year Capital Improvement Plan shall be the basis for the annual audit. Jurisdictions will have flexibility in adding and/or deleting projects in their current Five-Year Capital Improvement Plan based on the necessities of the jurisdiction, and subject to eligibility requirements listed in Section D below. However, in order for a project to be eligible for expenditure of Local Street Program funds, it must be listed in the current Five-Year Capital Improvement Plan. If a revised Capital Improvement Plan is necessary to reflect added projects, it must be adopted by resolution of the governing body and provided to SBCTA by September 1 of each fiscal year for use in the annual audit. If the Capital Improvement Plan is not modified to reflect the changes to the project list, an audit finding will result. If the audit finding is not corrected, the project will not be eligible for expenditures of Local Street Program funds.

D. Eligible Expenditures

Policy VLS-12: Eligible expenditures include construction, maintenance, and overhead for transportation related purposes only. Included below are definitions and types of eligible expenditures by category.

a. Construction

Construction shall be defined as the building or rebuilding of streets, roads, bridges, and acquisition of rights-of-way or their component parts to a degree that improved traffic service is provided and geometric or structural improvements are effected including allocated administration and engineering necessarily incurred and directly related to the above.

Construction work can be separated into four categories:

1) New Construction – A construction that substantially deviates from the existing alignment and provides for an entirely new street or roadbed for the greater parts of its length.

2) Reconstruction – A construction involving realignment or the use of standards well above those of the existing element, whereby the type or the geometric and structural features are significantly changed.

3) Preventative Maintenance – Includes, but is not limited to, roadway activities such as joint and shoulder rehabilitation, heater re-mix, seal coats, corrective grinding of PCC1 pavement, and restoration of drainage systems.

4) 3R Work – All other work that does not fall into the above-defined categories for new construction, reconstruction, or preventative maintenance and typically involves the improvement of highway pavement surfaces through resurfacing, restoration, or rehabilitation. 3R Work is generally regarded as heavy, non-routine maintenance designed to achieve a ten-year service life. Specifically, 3R Work is defined as:

- *Resurfacing* generally consists of placing additional asphalt concrete over a structurally sound highway, street, or bridge that needs treatment to extend its useful service life.
- *Restoration* means returning a road, street, structure, or collateral facility to the condition existing after original construction.
- *Rehabilitation* implies providing some betterments, such as upgrading guardrail or widening shoulders.

The following examples of construction expenditures are grouped by types of work:

Expenditures	*Types of Work*	
Additions	1.	The addition of a frontage street or road
	2.	Addition of auxiliary lanes such as speed change, storage, or climbing lanes
Barriers	3.	Earthwork protective structures within or adjacent to the right-of-way area
	4.	Extensions and new installation of walls
	5.	Replacement of retaining walls to a higher standard
	6.	Extension of new installation of guardrails, fence lines, raised medians, or barriers for traffic safety
Bikeways	7.	Construction of bikeways where they are an integral part of the streets and highway system
	8.	Construction of bicycle or pedestrian underpasses or overhead crossings for the general public use
Bridges	9.	Reconstruction of an existing bridge or installation of a new bridge
	10.	Widening of a bridge
	11.	Replacement of bridge rails and floors to a higher standard
Curbs, etc.	12.	Installation or extension of curbs, gutters, sidewalks, or underdrain (including improvements to handicap ramps to make them ADA compliant).
Drainage	13.	A complete reconstruction or an addition to a culvert including cross culverts regardless of angle of crossing; storm drains, culverts, or drainage channels which are required to be constructed or reconstructed by improvement of the roadway; longitudinal storm drains or other longitudinal culverts, including manholes; cross longitudinal gutters at intersections; and catch basins and related pipes. The term “catch basin” shall include outlet structures or curb openings. An eligible “catch basin” must be located within the road or street system rights-of-way, or as close to the curb return joining the road or street system as practicable, considering the location of obstructions and/or hydraulic considerations.
	14.	Extending old culverts and drains and replacing headwalls
Interagency Projects	15.	Road improvements within an adjoining jurisdiction as long as the improvements are made within the County of San Bernardino
	16.	Road improvements and maintenance on a state highway as long as the appropriate agreement with Caltrans is in place
	17.	Maintenance or construction on alleys that have been formally accepted into the city or county street system
	18.	Development of facilities associated with Metrolink commuter rail operations that are determined to be a local responsibility
Landscaping	19.	Installation or addition to landscape treatment such as sod, shrubs, trees, irrigation, etc. along the street or road right-of-way
	20.	Purchase of land for “greenbelt” if needed to mitigate the environmental impact of a street or road construction project
Layout	21.	Change of alignment, profile, and cross-section
	22.	Reconstruction of an intersection and its approximate approaches to a substantially higher type involving a change in its character and layout including changes from a plain intersection to a major channelized intersection or to a grade separation and ramps
Lighting	23.	Installation, replacement, or expansion of street or road lighting system
Associated Planning and Design	24.	Project development, planning studies, and design for eligible transportation projects

	25.	Expenses incurred in attending or participating in transportation and traffic engineering sponsored programs or training conducted for street or road purposes
	26.	Engineering review of plans for construction of Valley Measure I Major Streets projects
Relocation	27.	The removal of old street and roadbeds and structures, and detour costs when connected with a construction project
	28.	Replacement in kind, when legally required, of structures that are required to be relocated for street and road purposes
Signs and Signals	29.	Installation of original traffic signs and markers on routes
	30.	Replacement of all major signs or traffic control devices on a street or road
	31.	The installation of a new sign or the replacement of an old sign with one of superior design such as increased size, illumination, or overhead installation
	32.	Installation or improvements of traffic signal controls at intersections and protective devices at railroad grade crossings
	33.	Purchase and installation of traffic signal control equipment including traffic actuated equipment, radio or other remote control devices and related computers, software, and that portion of preemption equipment not mounted on motor vehicles
Striping	34.	Painting or rearrangement of pavement striping and markings, or repainting to a higher standard
Surface Work	35.	Original surfacing of shoulders
	36.	Improvement of a surface to a higher type of material
	37.	Placing sufficient new material on soil surface or gravel street or road to substantially improve the quality or the original surface
	38.	Bituminous material of 1” or more placed on bituminous or concrete material - a lesser thickness may be considered construction provided the engineer shall certify that the resulting pavement is structurally adequate to serve anticipated traffic
	39.	Remix existing bituminous surfacing with added materials to provide a total thickness of one inch or more – a lesser thickness may be considered construction provided the engineer certifies that the resulting pavement is structurally adequate to serve anticipated traffic
	40.	Stabilization of street or road base by additive, such as cement, lime, or asphaltic material
Transit	41.	Public transit systems, including rail, and related purposes
Widening	42.	Widening of existing street or roadbed or pavement, with or without resurfacing
	43.	Resurfacing, stabilizing, or widening of shoulders including necessary connections to side streets or road approaches
Other eligible expenditures	44.	Matching funds to federal or state contributions to a roadway project
	45.	Park and ride facilities
	46.	Undergrounding utilities or utility relocation only if part of a new roadway construction or documented as a legal road or street obligation.
	47.	Rubberized railroad grade crossing material or repair of grade crossings
	48.	Preliminary and construction engineering may be claimed on the percentage basis approved in previous years by Caltrans for contract work.
	49.	Relocation expenses necessitated by right-of-way acquisitions in accordance with the applicable government codes on relocation assistance.

b. Maintenance

Maintenance shall be defined as the preservation and upkeep of a street or road to its constructed condition and the operation of a street or road facility and its integral services to provide safe, convenient, and economical highway transportation.

Physical Maintenance is preservation and upkeep of a highway, including all of its elements, in as nearly as practicable its original condition or its subsequently improved condition.

Traffic Services include the operation of a highway facility, and services incidental thereto, to provide safe, convenient, and economic travel.

The following are examples of maintenance expenditures:

1.	Scarifying, reshaping, and restoring material losses
2.	Applying dust palliatives
3.	Patching, repairing, surface treating, and joint filling on bituminous or concrete surfaces
4.	Jacking concrete pavements
5.	Repairing traveled way and shoulders
6.	Adding bituminous material of less than 1" to bituminous material including seal coats
7.	Remixing existing bituminous surfacing with added materials to provide a total thickness of less than 1" (see exception under Construction, example 39)
8.	Patching operations including base restoration
9.	Resealing street or road shoulders and side street and road approaches
10.	Reseeding and resodding shoulders and approaches
11.	Reshaping drainage channels and side slopes
12.	Restoring erosion controls
13.	Cleaning culverts and drains
14.	Removing slides and restoring facilities damaged by slides (additional new facilities shall be considered construction)
15.	Mowing, tree trimming, and watering within the street right-of-way
16.	Replacing topsoil, sod, shrubs, trees, irrigation facilities, etc., on streets and roadsides
17.	Repairing curb, gutter, rip-rap, underdrain, culverts, and drains
18.	Cleaning, painting, and repairing bridges and structures
19.	Performing all snow control operations such as erection of snow fences and the actual removal of snow and ice from the traveled way
20.	Repainting pavements, striping, and markings
21.	Repainting and repairing signs, guard rails, traffic signals, lighting standards, etc.
22.	Adding small numbers of conventional traffic control devices including signs
23.	Servicing street or road lighting and traffic control devices
24.	Furnishing power for street or road lighting and traffic control devices, including payment for the cost of power
25.	Developing and maintaining programs that enhance management of transportation facilities such as travel demand models and pavement management programs
26.	Purchase of street-related equipment used exclusively for road maintenance
27.	Purchase of rubberized railroad grade crossing material for repair of grade crossings

c. Administrative Costs

1) Direct Costs

Direct costs are expenditures incurred solely and specifically for eligible street or road purposes or projects. Direct costs include contract payments, right-of-way acquisition, direct material and forced labor costs, and the salaries, wages, fringe benefits and related costs of employees directly participating on street and road purpose projects. Typical direct costs include:

- Compensation of employees for the time devoted and identified specifically to the performance of the eligible street or road project(s). Direct cost typically includes first level of supervision dedicated to the project. Supervisory activities above the first level of supervision may be recoverable as indirect costs.
- Costs of materials consumed or expended specifically for the purpose in which they were authorized.
- Equipment and other approved capital expenditures.
- Expense items or services contracted, or furnished specifically for the project to carry out the purpose in which they were authorized.

2) Indirect Costs (Overhead)

Indirect costs shall be defined as those elements of costs that are incurred for eligible street or road purposes that cannot be readily identified to a particular project. Cities and counties are allowed to use Measure I local funds to reimburse for indirect costs provided that there is documentation that amounts reimbursed were fairly and equitable allocated.

Overhead will only be allowed via an approved cost allocation plan or an equitable and auditable distribution of overhead among all departments.

Indirect costs typically include:

- Cost of overall supervision of field operations including payroll, facilities, advertising, general government, department or general accounting/finance, procurement, top management, data processing, legal costs and bids
- Cost of shop supplies such as expendable small tools and non-permanent barricades, warning signs, and other devices

E. Ineligible Expenditures

Policy VLS-13: Although many types of work may be referred to as “construction”, this does not make these costs automatically eligible for expenditures of Measure I funds. To be eligible, the work must be for street or road purposes.

Following is a list of the types of expenditures that are not eligible for financing with Measure funds:

1.	Costs of rearranging non-street or road facilities, including utility relocation, when not a legal road or street obligation
2.	New (first installation of) utilities, including water mains, sanitary sewers, and other non-street facilities
3.	Cost of leasing property or right-of-way, except when required for construction work purposes on a temporary basis
4.	Cost of constructing or improving a street or area for parking purposes, except for the width normally required for parking adjacent to the traveled way and within the right-of-way, or when off-street parking facilities are constructed in lieu of widening a street to improve the flow of traffic
5.	Decorative lighting
6.	Park features such as benches, playground equipment and restrooms
7.	Work outside the right-of-way which is not a specific right-of-way obligation

8.	Equestrian under- and overpasses or other similar structures for any other special interest group unless as a part of a right-of-way obligation
9.	Construction, installation, or maintenance of cattle guards
10.	Maintenance or construction on alleys that have not been formally designated as part of a jurisdiction's street and road system
11.	Non-street and road-related salaries and benefits
12.	Driveways outside of the street and road right-of-way
13.	Purchase of electronic speed control devices or other non-highway related equipment
14.	Freeway telephone emergency system
15.	Interest charged for non-highway purposes
16.	Grantwriting consultant fees
17.	Debt service payments for non-voter-approved bonds, including Certificates of Participation
18.	Over-expended funds (deficit fund balance)
19.	Negative interest allocation
20.	The value of park or other city/county owned property rededicated for a street right-of-way.

F. Accounting Requirements

Policy VLS-14: Each local jurisdiction shall establish a Special Measure I 2010-2040 Transportation Sales Tax Fund. This fund is a special revenue fund utilized to account for proceeds of specific revenue sources that are legally restricted to expenditures for street and road purposes. Jurisdictions should use the modified accrual basis of accounting.

Policy VLS-15: The following requirements are to provide guidance on the specific accounting treatment as it relates to the Special Measure I Transportation Sales Tax Fund.

a. All allocations shall be deposited directly into the Special Measure I Transportation Sales Tax Fund.

b. Interest received by a jurisdiction from the investment of money in its Special Measure I Sales Tax Fund shall be deposited in the fund and shall only be used for street and road purposes.

c. Segregation must be maintained within the Special Measure I Transportation Sales Tax Fund to show separate balances for each subarea (County only).

d. If other revenues are commingled in the Special Measure I Transportation Sales Tax Fund, it is the responsibility of the jurisdiction to provide accurate and adequate documentation to support revenue and expenditure allocation, as well as segregated balances.

e. It is allowable to fund prior year expenditures with current year revenues and/or fund balance as long as funded projects are included in the current adopted Five-Year Capital Improvement Plan and accounting clearly identifies the project and other pertinent data to establish a clear audit trail.

f. If a project is deemed ineligible in the annual Compliance Audit, the Measure I funds used on that project must be repaid to the Special Measure I Transportation Sales Tax Fund in accordance with Policy VLS-19.

g. Temporary loans of Measure I local funds can only be made among other Measure I accounts/projects if project and other pertinent data is identified to establish a clear audit trail.

h. If Measure I funds are used to purchase salable excess right-of-way, any unsold portions should be reported to SBCTA including the reasons for holding it and the anticipated date of disposal.

Policy VLS-16: Any interest earned on investment of Measure I Transportation Sales Tax Funds must be deposited in the Special Measure I Transportation Sales Tax Fund. Any jurisdiction not electing to invest its Measure I funds but at the same time investing most of its other available funds should deposit the Measure I funds in a separate account to clearly indicate that no such monies were invested. If Measure I Transportation Sales Tax funds are invested, they must receive their equitable proration of interest earned on the total funds invested. Several methods are available to determine an equitable distribution of interest earned. Whatever method is employed, it will be analyzed during audit to determine reasonableness and confirm distribution to the Special Measure I Transportation Sales Tax Fund. It is recommended that a distribution based on average month-end cash balances be employed. In addition, if the interest distribution methodology allows for negative distributions, they will be disallowed. No interest charges based on negative cash and fund balances will be allowed.

Policy VLS-17: Reimbursements of Measure I Transportation Sales Tax Funds previously expended for street and road construction or right-of-way purposes, from whatever source, must be deposited in the Special Measure I Transportation Sales Tax Fund. This includes but is not limited to:

- Federal Aid Urban projects
- Cooperative agreements
- Equipment use rates for equipment purchased with Measure I funds and used for non-street purposes
- Equipment dispositions
- Right-of-way dispositions
- Federal and safety projects

Policy VLS-18: Records:

a. Source Documentation - On construction or purchase of right-of-way or equipment, all expenditures charged to the Measure I Transportation Sales Tax Fund must be supported by a warrant or other source document (invoice, requisition, time sheet, equipment rental charge, engineering plans, specifications, and other pertinent data) clearly identifying the project and other pertinent data to establish a clear audit trail. If street-related equipment is purchased with Measure I local funds, the jurisdiction must keep accurate records on acquisition cost, use, maintenance, and disposition.

b. Retention Period - All source documents, together with the accounting records, are deemed to be the official records of the jurisdiction and must be retained by the jurisdiction for five (5) years.

Policy VLS-19: Compliance Audit Deadline

a. A jurisdiction's annual Compliance Audit must be completed by December 31st (Compliance Audit Deadline). SBCTA staff shall monitor the scheduling and progress of the audits to ensure prompt communication by the Auditor after information submittals by the jurisdiction and timely completion of the final Measure I audit report.

b. If a jurisdiction is not able to meet the Compliance Audit Deadline, the jurisdiction may submit a letter requesting an extension and specifying the period of the requested extension for consideration by the General Policy Committee at their February meeting and the Board at their March meeting. Letters must be received timely for inclusion in the agenda. If a letter is not submitted and the Compliance Audit has not been completed, notification will be made to the Board at their March meeting that future allocations of Local Pass-Through Funds for the jurisdiction will be withheld until the Compliance Audit has been completed. Upon satisfactory completion of the Compliance Audit, any withheld allocations will be paid to the City including interest determined using the current LAIF rate. The Board may approve Compliance Audit Deadline extensions if the Board finds: (1) the Compliance Audit was not completed timely for reasons outside of the jurisdiction's control, such as federal, state, and GASB reporting requirements, or catastrophic events; or (2) it is in the best interest of SBCTA to grant the extension.

c. SBCTA staff shall be responsible for requesting from the Board any extensions related to Auditor performance.

Policy VLS-20: Remedies

a. If a jurisdiction's annual Compliance Audit determines that the jurisdiction used Measure I Transportation Sales Tax Funds for ineligible expenses, the jurisdiction shall immediately repay the Measure I Transportation Sales Tax Fund in an equal amount through an internal fund transfer from another source. Repayment will include interest that would have been earned in the Special Measure I Transportation Sales Tax Fund from the time of ineligible expenditure to date of repayment.

b. If a jurisdiction's annual Compliance Audit fails to be completed with an unmodified opinion by the Compliance Audit Deadline, which may be extended pursuant to Policy VLS-19, the jurisdiction shall immediately repay the Measure I Transportation Sales Tax Fund through an internal fund transfer from another source in the amount of the Measure I Local Street Program allocation for the subject fiscal year of Compliance Audit findings of unsubstantiated or questioned costs. Repayment will include interest that would have been earned in the Special Measure I Transportation Sales Tax Fund from the time of ineligible expenditure to date of repayment.

c. If the jurisdiction is unable to make such immediate repayment under VLS-20 (a) or (b), the jurisdiction shall not receive its Local Street Program allocation pass-through payments until the repayment amount of ineligible expenses, unsubstantiated costs, or questioned costs, have been withheld by SBCTA. Repayment will include interest that would have been earned in the Special Measure I Transportation Sales Tax Fund from the time of ineligible expenditure to date of repayment.

d. If the jurisdiction enters into a Repayment Agreement with SBCTA, as approved by the jurisdiction and the SBCTA Board of Directors, providing for repayment of the amounts owed under VLS-20 (a) or (b) over a period not to exceed five (5) years, SBCTA will return any pass-through funds withheld. SBCTA will recommence withholding Local Street Program allocation pass-through funds if the jurisdiction fails to comply with the terms of the Repayment Agreement.

e. If a jurisdiction has not completed an annual Compliance Audit within two years after the expiration of Measure I 2010-2040, any withheld funds will be distributed to other compliant jurisdictions within that subarea. The allocation will be based on the process in Section IV.A of this Policy after removing the jurisdiction not meeting the audit requirement.

G. Maintenance of Effort Requirements

Policy VLS-21: The SBCTA Board of Directors shall retain authority over actions related to these Maintenance of Effort (MOE) requirements.

Policy VLS-22: In accordance with California Public Utilities Code 190300 and Ordinance No. 04-01 of the San Bernardino County Transportation Authority, Local Street Program funds shall not be used to supplant existing local discretionary funds being used for street and highway purposes.

Policy VLS-23: SBCTA shall monitor local agency use of General Fund for street and highway purposes relative to their use prior to Measure I 2010-2040, which shall be referred to as the MOE base year level.

Policy VLS-24: The following requirements are to provide guidance on the determination of a MOE base year level.

a. The MOE base year level shall be equivalent to the discretionary General Fund expenditures for transportation-related construction and maintenance activities consistent with Policy VLS-12 in Fiscal Year 2008/2009.

b. Jurisdictions may propose deductions to the recorded expenditures for the following:

   1) Expenditures for unusual circumstances that increased the MOE base year level arbitrarily outside of the normal on-going General Fund expenditures, e.g. General Fund loans to other transportation-related funds, emergency repairs, or special projects.

   2) Administrative/overhead costs that were not project-specific, i.e. staff time for transportation staff was charged to a general "program" budget rather than charged directly to specific projects.

c. The proposed MOE base year level shall be adopted by resolution of the governing body.

d. The Independent Taxpayer Oversight Committee (ITOC) will review the proposed MOE base year levels, including the proposed deductions, as adopted by resolution of the governing body, and provide a recommendation to the SBCTA Board of Directors for approval.

e. The MOE base year level as approved by the SBCTA Board of Directors shall remain in effect until the expiration of Measure I 2010-2040.

Policy VLS-25: Jurisdictions shall annually provide a statement in the resolution of the governing body adopting the Five Year Capital Improvement Plan that acknowledges the jurisdiction will maintain General Fund expenditures for transportation-related construction and maintenance activities at the required MOE base year level in that fiscal year. Jurisdictions whose MOE base year level is determined to be $0 are not required to provide this statement in the resolution.

Policy VLS-26: The MOE requirement shall be tracked and verified as part of the annual Measure I Local Street Program audit. This will be accomplished by comparing the discretionary General Fund expenditures for transportation-related construction and maintenance activities consistent with Policy VLS-12 to the MOE base year level.

Policy VLS-27: General Fund expenditures in excess of the MOE base year level will carry over to subsequent fiscal years and can be applied in a future year to offset the amount the local agency may need to meet the MOE requirement. Carryover balances will be documented in the annual Measure I Local Street Program audit.

Policy VLS-28: If the annual Measure I Local Street Program audit indicates that the required MOE base level is not being met, then the jurisdiction has the following four fiscal years to make up the amount. If the audit following those four fiscal years indicates the jurisdiction is still below the MOE base year level, SBCTA will immediately stop disbursing Measure I Local Street Program funds until an amount equivalent to the MOE base year level shortfall has been withheld. The withheld funds will be disbursed to the jurisdiction upon demonstration that the jurisdiction has met the MOE requirements.

Policy VLS-29: The following provides guidance on resolution of MOE base year level shortfalls at the expiration of Measure I 2010-2040.

a. If the jurisdiction has not resolved a MOE base year level shortfall within two years after the expiration of Measure I 2010-2040, any withheld funds will be distributed to other compliant jurisdictions within that subarea. The allocation will be based on the process in Section IV.A of this Policy after removing the jurisdiction not meeting the audit requirement.

b. If any Measure I Local Street Program audit after Fiscal Year 2033/2034 indicates that the required MOE base year level was not met, then the jurisdiction has until Fiscal Year 2038/2039 to make up the amount. If the audit of Fiscal Year 2038/2039 indicates the jurisdiction is still below the MOE base level, the jurisdiction must pay the MOE base level shortfall to SBCTA for distribution to other compliant jurisdictions within that subarea. The allocation will be based on the process in Section IV.A of this Policy after removing the jurisdiction not meeting the audit requirement.

Policy VLS-30: Prior to withholding or required repayment of Measure I Local Street Program funds, jurisdictions shall have an opportunity to appeal to the ITOC. The jurisdiction must present evidence to the ITOC demonstrating unusual circumstances or the need for special consideration. The ITOC will be responsible for making a recommendation to the SBCTA Board of Directors to either approve or deny the request for special consideration.

V. REVISION HISTORY

Revision No.	Revisions	Adopted
0	Adopted by the Board of Directors.	04/01/2009
1	Revisions adopted by the Board of Directors on January 8, 2014, Agenda Item 14.	01/08/2014
2	Revisions adopted by the Board of Directors on May 6, 2015, Agenda Items 6 & 8.	05/06/2015
3	Amended list of eligible expenses to be more consistent with the list of eligible expenses in the State Controller's Office Gas Tax Fund Guidelines. Modified remedy language in Policy VLS-20. Approved by the BOD 9/6/17, Agenda Item 11.	09/06/2017
4	Addition of due date of Capital Improvement Plan in VLS-2. Approved by the BOD 7/11/18, Agenda Item 25.	7/11/2018
5	Clarified Capital Improvement Plan requirements, amended eligible expenditures to be consistent with current gas tax guidelines, added requirements for tracking equipment purchased with Measure I funds, and updated Compliance Audit Deadline extension requirements. Approved by the BOD 6/3/20, Agenda Item 25.	06/03/2020
6	Moved transit purposes from the ineligible list of projects to the eligible list of projects for consistency with the Expenditure Plan. Approved by the BOD 3/3/21, Agenda Item 31.	3/3/2021
7	Amended Capital Improvement Plan requirements to remove limit on categorical expenditures, revise due date for amended Capital Improvement Plans, and remove the requirement to revise the list for projects where eligible expenditures exceed the estimate.	4/6/2022
8	Remedy added to address if a jurisdiction does not complete a Compliance Audit within two years of Measure I sunsetting.	12/4/2024

San Bernardino County Transportation Authority		Policy	40012
Adopted by the Board of Directors	April 1, 2009	Revised	412/04/2224
Victor Valley Local Street (VVLS) Program Measure I 2010-2040 Strategic Plan		Revision No.	~~7~~8

Important Notice: A hardcopy of this document may not be the document currently in effect. The current version is always the version on the SBCTA website.

Table of Contents

I. PURPOSE

The purpose of this policy is to establish requirements for the Victor Valley Local Street Program, including project eligibility, adoption of Five Year Plans by local jurisdictions, accounting requirements, and development mitigation requirements.

II. REFERENCES

Ordinance No. 04-01 of the San Bernardino County Transportation Authority, Exhibit A – Transportation Expenditure Plan.

SBCTA Congestion Management Program

III. DEFINITIONS

Local Street Program: Measure I program in all subareas that provides funds through a pass-through mechanism directly to local jurisdictions for expenditure on street and road construction, repair, maintenance and other eligible local transportation priorities. Local Street Program funds can be used flexibly for any eligible transportation purpose determined to be a local priority, including Local Street, major highways, state highway improvements, freeway interchanges, transit, and other improvements/programs to maximize use of transportation facilities.

Allocation: An action by the SBCTA Board of Directors to assign a specific amount of Measure I funds from a Measure I program to a project. Allocations of Local Street Program funds occur monthly as a direct pass-through to local jurisdictions.

Five-Year Plan: A plan of projected local jurisdiction expenditures for the next five years on local projects eligible for Local Street Program funds, updated annually and submitted to SBCTA by local jurisdictions.

Independent Taxpayer Oversight Committee: A "Mandated Taxpayer Safeguard" established by Ordinance 04-01 for Measure I 2010-2040 to provide citizen review and to ensure that all Measure I funds are spent in accordance with provisions of the Measure I Expenditure Plan and Ordinance.

Maintenance of Effort: The requirement that Measure I funding will supplement and not replace the existing local discretionary funding being used for street and highway purposes.

Maintenance of Effort Base Year Level: The amount of General Fund used for street and highway purposes in Fiscal Year 2008/2009,prior to Measure I 2010-2040 as adopted by the SBCTA Board of Directors.

IV. POLICIES FOR THE VICTOR VALLEY LOCAL STREET PROGRAM

A. Local Street Allocation

Policy VVLS-1 70% of revenue collected in the Victor Valley subarea shall be apportioned for Local Street Projects. After reservation of 2% collected in the subarea for Project Development and Traffic Management Systems, each jurisdiction shall receive an allocation from 68% of the Measure I revenue. The allocation methodology is determined based on:

- 50% population. The population estimate for making the per capita calculation shall be determined by SBCTA each year based on the State Department of Finance population estimate. Annual adjustments to the population estimates are made mid-year, based on availability of DOF estimates. Following approval of the population estimates by the Board, adjustments will be made to the local pass-through fund allocations retroactive to January 1 of the year.
- 50% return to source. The sales tax estimates provided by the State Board of Equalization, updated quarterly based on the prior quarter's financial data, shall be used as the basis for making the return to source calculations.

Policy VVLS-2: Local jurisdictions shall not receive their Local Street allocation until they have submitted their annual adopted update of their Five-Year Plan. The due date to submit the Five-Year Plan to SBCTA is September 1 of each year. If the Five-Year Plan has not been received by the due date, the pass-through payments will be withheld. All withheld pass-through payments will be released upon receipt of the local jurisdiction governing body's adopted Five-Year Plan.

Policy VVLS-3: The Local Street allocation shall be remitted to local jurisdictions monthly.

Policy VVLS-4: Local Street Allocations remitted from January 1 until such time as the State Department of Finance has issued their population figures and SBCTA has made the per capita calculation, shall be based on the prior year's calculation. Once the per capita calculation has been made, the calculation will be applied retroactively to January 1 and amounts received by local jurisdictions will be adjusted to account for the difference in the amount remitted during the retroactive period and the amount that should have been remitted adjusted for the new per capita calculation.

Policy VVLS-5: Local Street Allocations sales tax generation portion will be based on the prior quarter's data. Because of the lag in receiving sales tax data from the Board of Equalization, the Sales Tax Generation calculations for that portion of the Local Street Allocation will be calculated using the data from the prior quarter. (Example: During the months of January, February and March SBCTA will use the local sales tax generation figure derived from the fourth quarter of the previous calendar year.)

Policy VVLS-6: SBCTA will make the monthly allocations using the following procedure:

a. Determine total amount of Measure I Sales Tax generated in the subarea from information submitted by the State Board of Equalization.

b. Multiply the total Measure I Sales Tax received for the month by 0.68 to arrive at the total amount of Local Street Program funds available for distribution to local jurisdictions.

c. Divide the Local Street Program fund into two 50% pools of funding: Allocate the two pools of funding based on:

   1) a jurisdiction's population share of the entire subarea population.
   2) jurisdiction's share of sales tax generation within the total subarea.

d. Add the population based component and the sales tax based component of each jurisdiction's allocation to arrive at the total Local Street Allocation for each jurisdiction.

e. Remit payment of Local Street Program fund to local jurisdiction.

Policy VVLS-7: The Local Street program allocation will be decreased by 0.5% beginning in 2015 with additional decreases of 0.5% every five years thereafter to a maximum of 2.5% to be allocated to the Senior and Disabled Transit Service Program. This change in allocation will occur automatically unless each jurisdiction in the subarea makes a finding that such increase in Senior and Disabled Transit Service Program is not needed to address unmet transit needs of senior and disabled transit users.

B. Development Fair Share Contribution

Policy VVLS-8: A development mitigation fair share contribution is required by Measure I 2010-2040 for all capacity improvement projects on the Nexus Study Network contained in the most recent Board-adopted version of the Nexus Study approved for jurisdictions in the urbanized Victor Valley and funded all or in part with Local Street Program allocations The urbanized Victor Valley is defined as the cities of Adelanto, Hesperia, Victorville, Town of Apple Valley and their spheres of influence.

Policy VVLS-9: A development mitigation fair share contribution is required by Measure I 2010-2040 for all capacity improvement projects funded all or in part with Local Street Program allocations as identified by Traffic Impact Analysis (TIA) reports as required by the Congestion Management Program in the non-urban areas. The amount of the Development Fair Share Contribution for each project is defined by the traffic mitigation measures identified in the related TIA reports.

Policy VVLS-10: Annually as part of its audit of each jurisdictions' use of Measure I funds, SBCTA will specifically review development mitigation contribution records for capacity improvements to Nexus Study Network facilities that were funded all or in part by Local Street Program allocations. If a material finding is made in the audit showing that the development fair share contribution was not made, SBCTA may, as the agency responsible for the Congestion Management Program, withhold Section 2105 Gas Tax funds or Measure I Local Street allocations until the jurisdiction shows that they are in compliance with the Congestion Management Program.

Policy VVLS-11: Jurisdictions may borrow from other internal accounts (i.e. within their own jurisdictions) to fund the required development fair share. Jurisdictions will maintain a record of borrowing between internal accounts. The internal accounts shall be reimbursed by development mitigation as development occurs.

C. Five-Year Plan

Policy VVLS-12: Each local jurisdiction is required to annually adopt a Five-Year Capital Improvement Plan which details the specific projects to be funded using Measure I Local Pass-Through Funds. Expenditures of Measure I Local Pass-Through Funds must be detailed in the Five-Year Capital Improvement Plan and adopted by resolution of the governing body. Expenditures can only be made on projects listed in the current Five Year Capital Improvement Plan.

Policy VVLS-13: Five-Year Capital Improvement Plans shall:

a. Specifically identify projects by either 1) street name, boundaries, and project type, subject to eligibility requirements listed in Section D below, or 2) defining the project as a program of work without any identified streets, such as a pavement management program, transportation system improvements, routine roadway maintenance or other miscellaneous transportation-related expenditures as identified in Policy VVLS-16. Projects defined as a program of work shall not include capacity enhancements.

b. Constrain the total amount of planned expenditures to 150% of SBCTA's forecasted revenue for Measure I Local Pass-Through Funds, revenue resulting from bonds secured by Measure I revenue, and remaining balances from previous year allocations.

c. For capacity enhancement projects listed in the Nexus Study, limit the use of Measure I local funds to the Measure I public share of the project cost and identify the required development contribution. Maintenance projects or projects that do not enhance the capacity of a Nexus Study Network roadway do not require a development contribution.

d. Use the SBCTA-approved forms and/or online database. Instructions will be issued to the City Manager annually prior to the deadline.

Policy VVLS-14: No longer applicable.

Policy VVLS-15: The Five-Year Capital Improvement Plan shall be the basis for the annual audit. Jurisdictions will have flexibility in adding and/or deleting projects in their current Five-Year Capital Improvement Plan based on the necessities of the jurisdiction, and subject to eligibility requirements listed in Section D below. However, in order for a project to be eligible for expenditure of Local Street Program funds, it must be listed in the current Five-Year Capital Improvement Plan. If a revised Capital Improvement Plan is necessary to reflect added projects, it must be adopted by resolution of the governing body and provided to SBCTA by September 1 of each fiscal year for use in the annual audit. If the Capital Improvement Plan is not modified to reflect the changes to the project list, an

audit finding will result. If the audit finding is not corrected, the project will not be eligible for expenditures of Local Street Program funds.

D. Eligible Expenditures

Policy VVLS-16: Eligible expenditures include construction, maintenance, and overhead for transportation related purposes only. Included below are definitions and types of eligible expenditures by category.

a. Construction

Construction shall be defined as the building or rebuilding of streets, roads, bridges, and acquisition of rights-of-way or their component parts to a degree that improved traffic service is provided and geometric or structural improvements are effected including allocated administration and engineering necessarily incurred and directly related to the above.

Construction work can be separated into four categories:

1) New Construction – A construction that substantially deviates from the existing alignment and provides for an entirely new street or roadbed for the greater parts of its length.

2) Reconstruction – A construction involving realignment or the use of standards well above those of the existing element, whereby the type or the geometric and structural features are significantly changed.

3) Preventative Maintenance – Includes, but is not limited to, roadway activities such as joint and shoulder rehabilitation, heater re-mix, seal coats, corrective grinding of PCC1 pavement, and restoration of drainage systems.

4) 3R Work – All other work that does not fall into the above-defined categories for new construction, reconstruction, or preventative maintenance and typically involves the improvement of highway pavement surfaces through resurfacing, restoration, or rehabilitation. 3R Work is generally regarded as heavy, non-routine maintenance designed to achieve a ten-year service life. Specifically, 3R Work is defined as the following:

- *Resurfacing* generally consists of placing additional asphalt concrete over a structurally sound highway, street, or bridge that needs treatment to extend its useful service life.
- *Restoration* means returning a road, street, structure, or collateral facility to the condition existing after original construction.
- *Rehabilitation* implies providing some betterments, such as upgrading guardrail or widening shoulders.

The following examples of construction expenditures are grouped by types of work:

Expenditures	*Types of Work*	
Additions	1.	The addition of a frontage street or road
	2.	Addition of auxiliary lanes such as speed change, storage, or climbing lanes
Barriers	3.	Earthwork protective structures within or adjacent to the right-of-way area
	4.	Extensions and new installation of walls
	5.	Replacement of retaining walls to a higher standard
	6.	Extension of new installation of guardrails, fence lines, raised medians, or barriers for traffic safety
Bikeways	7.	Construction of bikeways where they are an integral part of the streets and highway system
	8.	Construction of bicycle or pedestrian underpasses or overhead crossings for the general public use
Bridges	9.	Reconstruction of an existing bridge or installation of a new bridge
	10.	Widening of a bridge
	11.	Replacement of bridge rails and floors to a higher standard

Curbs, etc.	12.	Installation or extension of curbs, gutters, sidewalks, or underdrain (including improvements to handicap ramps to make them ADA compliant).
Drainage	13.	A complete reconstruction or an addition to a culvert including cross culverts regardless of angle of crossing; storm drains, culverts, or drainage channels which are required to be constructed or reconstructed by improvement of the roadway; longitudinal storm drains or other longitudinal culverts, including manholes; cross longitudinal gutters at intersections; and catch basins and related pipes. The term "catch basin" shall include outlet structures or curb openings. An eligible "catch basin" must be located within the road or street system rights-of-way, or as close to the curb return joining the road or street system as practicable, considering the location of obstructions and/or hydraulic considerations.
	14.	Extending old culverts and drains and replacing headwalls
Interagency Projects	15.	Road improvements within an adjoining jurisdiction as long as the improvements are made within the County of San Bernardino
	16.	Road improvements and maintenance on a state highway as long as the appropriate agreement with Caltrans is in place
	17.	Maintenance or construction on alleys that have been formally accepted into the city or county street system
	18.	Development of facilities associated with Metrolink commuter rail operations that are determined to be a local responsibility
Landscaping	19.	Installation or addition to landscape treatment such as sod, shrubs, trees, irrigation, etc. along the street or road right-of-way
	20.	Purchase of land for "greenbelt" if needed to mitigate the environmental impact of a street or road construction project
Layout	21.	Change of alignment, profile, and cross-section
	22.	Reconstruction of an intersection and its approximate approaches to a substantially higher type involving a change in its character and layout including changes from a plain intersection to a major channelized intersection or to a grade separation and ramps
Lighting	23.	Installation, replacement, or expansion of street or road lighting system
Associated Planning and Design	24.	Project development, planning studies, and design for eligible transportation projects
	25.	Expenses incurred in attending or participating in transportation and traffic engineering sponsored programs or training conducted for street or road purposes
	26.	Engineering review of plans for construction of Valley Measure I Major Streets projects
Relocation	27.	The removal of old street and roadbeds and structures, and detour costs when connected with a construction project
	28.	Replacement in kind, when legally required, of structures that are required to be relocated for street and road purposes
Signs and Signals	29.	Installation of original traffic signs and markers on routes
	30.	Replacement of all major signs or traffic control devices on a street or road
	31.	The installation of a new sign or the replacement of an old sign with one of superior design such as increased size, illumination, or overhead installation
	32.	Installation or improvements of traffic signal controls at intersections and protective devices at railroad grade crossings

	33.	Purchase and installation of traffic signal control equipment including traffic actuated equipment, radio or other remote control devices and related computers, software, and that portion of preemption equipment not mounted on motor vehicles
Striping	34.	Painting or rearrangement of pavement striping and markings, or repainting to a higher standard
Surface Work	35.	Original surfacing of shoulders
	36.	Improvement of a surface to a higher type of material
	37.	Placing sufficient new material on soil surface or gravel street or road to substantially improve the quality or the original surface
	38.	Bituminous material of 1" or more placed on bituminous or concrete material - a lesser thickness may be considered construction provided the engineer shall certify that the resulting pavement is structurally adequate to serve anticipated traffic
	39.	Remix existing bituminous surfacing with added materials to provide a total thickness of one inch or more – a lesser thickness may be considered construction provided the engineer certifies that the resulting pavement is structurally adequate to serve anticipated traffic
	40.	Stabilization of street or road base by additive, such as cement, lime, or asphaltic material
Transit	41.	Public transit systems, including rail, and related purposes
Widening	42.	Widening of existing street or roadbed or pavement, with or without resurfacing
	43.	Resurfacing, stabilizing, or widening of shoulders including necessary connections to side streets or road approaches
Other eligible expenditures	44.	Matching funds to federal or state contributions to a roadway project
	45.	Park and ride facilities
	46.	Undergrounding utilities or utility relocation only if part of a new roadway construction or documented as a legal road or street obligation
	47.	Rubberized railroad grade crossing material or repair of grade crossings
	48.	Preliminary and construction engineering may be claimed on the percentage basis approved in previous years by Caltrans for contract work
	49.	Relocation expenses necessitated by right-of-way acquisitions in accordance with the applicable government codes on relocation assistance

b. Maintenance

Maintenance shall be defined as the preservation and upkeep of a street or road to its constructed condition and the operation of a street or road facility and its integral services to provide safe, convenient, and economical highway transportation.

Physical Maintenance is preservation and upkeep of a highway, including all of its elements, in as nearly as practicable its original condition or its subsequently improved condition.

Traffic Services include the operation of a highway facility, and services incidental thereto, to provide safe, convenient, and economic travel.

The following are examples of maintenance expenditures:

1.	Scarifying, reshaping, and restoring material losses
2.	Applying dust palliatives
3.	Patching, repairing, surface treating, and joint filling on bituminous or concrete surfaces
4.	Jacking concrete pavements
5.	Repairing traveled way and shoulders
6.	Adding bituminous material of less than 1" to bituminous material including seal coats
7.	Remixing existing bituminous surfacing with added materials to provide a total thickness of less than 1" (see exception under Construction, example 39)
8.	Patching operations including base restoration
9.	Resealing street or road shoulders and side street and road approaches
10.	Reseeding and resodding shoulders and approaches
11.	Reshaping drainage channels and side slopes
12.	Restoring erosion controls
13.	Cleaning culverts and drains
14.	Removing slides and restoring facilities damaged by slides (additional new facilities shall be considered construction)
15.	Mowing, tree trimming, and watering within the street right-of-way
16.	Replacing topsoil, sod, shrubs, trees, irrigation facilities, etc., on streets and roadsides
17.	Repairing curb, gutter, rip-rap, underdrain, culverts, and drains
18.	Cleaning, painting, and repairing bridges and structures
19.	Performing all snow control operations such as erection of snow fences and the actual removal of snow and ice from the traveled way
20.	Repainting pavements, striping, and markings
21.	Repainting and repairing signs, guard rails, traffic signals, lighting standards, etc.
22.	Adding small numbers of conventional traffic control devices including signs
23.	Servicing street or road lighting and traffic control devices
24.	Furnishing power for street or road lighting and traffic control devices including payment for the cost of power
25.	Developing and maintaining programs that enhance management of transportation facilities such as travel demand models and pavement management programs
26.	Purchase of street-related equipment used exclusively for road maintenance
27.	Purchase of rubberized railroad grade crossing material for repair of grade crossings

c. Administrative Costs

1) Direct Costs

Direct costs are expenditures incurred solely and specifically for eligible street or road purposes or projects. Direct costs include contract payments, right-of-way acquisition, direct material and forced labor costs, and the salaries, wages, fringe benefits and related costs of employees directly participating on street and road purpose projects. Typical direct costs include:

- Compensation of employees for the time devoted and identified specifically to the performance of the eligible street or road project(s). Direct cost typically includes first level of supervision dedicated to the project. Supervisory activities above the first level of supervision may be recoverable as indirect costs.
- Costs of materials consumed or expended specifically for the purpose in which they were authorized.
- Equipment and other approved capital expenditures.
- Expense items or services contracted, or furnished specifically for the project to carry out the purpose in which they were authorized.

2) Indirect Costs (Overhead)

Indirect costs shall be defined as those elements of costs that are incurred for eligible street or road purposes that cannot be readily identified to a particular project. Cities and counties are allowed to use Measure I local funds to reimburse for indirect costs provided that there is documentation that amounts reimbursed were fairly and equitable allocated.

Overhead will only be allowed via an approved cost allocation plan or an equitable and auditable distribution of overhead among all departments.

Indirect costs typically include:

- Cost of overall supervision of field operations including payroll, facilities, advertising, general government, department or general accounting/finance, procurement, top management, data processing, legal costs and bids
- Cost of shop supplies such as expendable small tools and non-permanent barricades, warning signs, and other devices

E. Ineligible Expenditures

Policy VVLS-17: Although many types of work may be referred to as “construction”, this does not make these costs automatically eligible for expenditures of Measure I funds. To be eligible, the work must be for street or road purposes.

Following is a list of the types of expenditures that are not eligible for financing with Measure funds:

1.	Costs of rearranging non-street or road facilities, including utility relocation, when not a legal road or street obligation
2.	New (first installation of) utilities, including water mains, sanitary sewers, and other non-street facilities
3.	Cost of leasing property or right-of-way, except when required for construction work purposes on a temporary basis
4.	Cost of constructing or improving a street or area for parking purposes, except for the width normally required for parking adjacent to the traveled way and within the right-of-way, or when off-street parking facilities are constructed in lieu of widening a street to improve the flow of traffic
5.	Decorative lighting
6.	Park features such as benches, playground equipment and restrooms
7.	Work outside the right-of-way which is not a specific right-of-way obligation

8.	Equestrian under- and overpasses or other similar structures for any other special interest group unless as a part of a right-of-way obligation
9.	Construction, installation, or maintenance of cattle guards
10.	Maintenance or construction on alleys that have not been formally designated as part of a jurisdiction's street and road system
11.	Non-street and road-related salaries and benefits
12.	Driveways outside of the street and road right-of-way
13.	Purchase of electronic speed control devices or other non-highway related equipment
14.	Freeway telephone emergency system
15.	Interest charged for non-highway purposes
16.	Grantwriting consultant fees
17.	Debt service payments for non-voter-approved bonds, including Certificates of Participation
18.	Over-expended funds (deficit fund balance)
19.	Negative interest allocation
20.	The value of park or other city/county owned property rededicated for a street right-of-way

F. Accounting Requirements

Policy VVLS-18:

Each local jurisdiction shall establish a Special Measure I 2010-2040 Transportation Sales Tax Fund. This fund is a special revenue fund utilized to account for proceeds of specific revenue sources that are legally restricted to expenditures for street and road purposes. Jurisdictions should use the modified accrual basis of accounting.

Policy VVLS-19: The following requirements are to provide guidance on the specific accounting treatment as it relates to the Special Measure I Transportation Sales Tax Fund.

a. All allocations shall be deposited directly into the Special Measure I Transportation Sales Tax Fund.

b. Interest received by a jurisdiction from the investment of money in its Special Measure I Sales Tax Fund shall be deposited in the fund and shall be used only for street and road purposes.

c. Segregation must be maintained within the Special Measure I Transportation Sales Tax Fund to show separate balances for each subarea (County only).

d. If other revenues are commingled in the Special Measure I Transportation Sales Tax Fund, it is the responsibility of the jurisdiction to provide accurate and adequate documentation to support revenue and expenditure allocation, as well as segregated balances.

e. It is allowable to fund prior year expenditures with current year revenues and/or fund balance as long as funded projects are included in the current adopted Five-Year Capital Improvement Plan and accounting clearly identifies the project and other pertinent data to establish a clear audit trail.

f. If a project is deemed ineligible in the annual Compliance Audit, the Measure I funds used on that project must be repaid to the Special Measure I Transportation Sales Tax Fund in accordance with Policy VVLS-23.

g. Temporary loans of Measure I local funds can only be made among other Measure I accounts/projects if project and other pertinent data is identified to establish a clear audit trail.

h. If Measure I funds are used to purchase salable excess right-of-way, any unsold portions should be reported to SBCTA including the reasons for holding it and the anticipated date of disposal.

Policy VVLS-20: Any interest earned on investment of Measure I Transportation Sales Tax Funds must be deposited in the Special Measure I Transportation Sales Tax Fund. Any jurisdiction not electing to invest its Measure I funds but at the same time investing most of its other available funds should deposit the Measure I funds in a separate account to clearly indicate that no such monies were invested. If Measure I Transportation Sales Tax funds are invested, they must receive their equitable proration of interest earned on the total funds invested. Several methods are available to determine an equitable distribution of interest earned. Whatever method is employed, it will be analyzed during audit to determine reasonableness and confirm distribution to the Special Measure I Transportation Sales Tax Fund. It is recommended that a distribution based on average month-end cash balances be employed. In addition, if the interest distribution methodology allows for negative distributions, they will be disallowed. No interest charges based on negative cash and fund balances will be allowed.

Policy VVLS-21:

Reimbursements of Measure I Transportation Sales Tax Funds previously expended for street and road construction or right-of-way purposes, from whatever source, must be deposited in the Special Measure I Transportation Sales Tax Fund. This includes but is not limited to:

- Federal Aid Urban projects
- Redevelopment agencies
- Cooperative agreements
- Equipment use rates for equipment purchased with Measure I funds and used for non-street purposes
- Equipment dispositions
- Right-of-way dispositions
- Federal and safety projects

Policy VVLS-22: Records

a. Source Documentation - On construction or purchase of right-of-way or equipment, all expenditures charged to the Measure I Transportation Sales Tax Fund must be supported by a warrant or other source document (invoice, requisition, time sheet, equipment rental charge, engineering plans, specifications and other pertinent data) clearly identifying the project and other pertinent data to establish a clear audit trail. If street-related equipment is purchased with Measure I local funds, the jurisdiction must keep accurate records on acquisition cost, use, maintenance, and disposition.

b. Retention Period - All source documents, together with the accounting records, are deemed to be the official records of the jurisdiction and must be retained by the jurisdiction for five (5) years.

Policy VVLS-23: Compliance Audit Deadline

a. A jurisdiction's annual Compliance Audit must be completed by December 31st (Compliance Audit Deadline). SBCTA staff shall monitor the scheduling and progress of the audits to ensure prompt communication by the Auditor after information submittals by jurisdiction, and timely completion of the final MSI audit report.

b. If a jurisdiction is not able to meet the Compliance Audit Deadline, the jurisdiction may submit a letter requesting an extension and specifying the period of the requested extension for consideration by the General Policy Committee at their February meeting and the Board at their March meeting. Letters must be received timely for inclusion in the agenda. If a letter is not submitted and the Compliance Audit has not been completed, notification will be made to the Board at their March meeting that future allocations of Local Pass-Through Funds for the jurisdiction will be withheld until the Compliance Audit has been completed. Upon satisfactory completion of the Compliance Audit, any withheld allocations will be paid to the City including interest determined using the current LAIF rate. The Board may approve Compliance Audit Deadline extensions, if the Board finds: (1) the Compliance Audit was not completed timely for reasons outside of the jurisdiction's control, such as federal, state, and GASB reporting

requirements, or catastrophic events; or (2) it is in the best interests of SBCTA to grant the extension.

c. SBCTA staff shall be responsible for requesting from the Board any extensions related to Auditor performance.

Policy VVLS-24 Remedies

a. If a jurisdiction's annual Compliance Audit determines that the jurisdiction used Measure I Transportation Sales Tax Funds for ineligible expenses, the jurisdiction shall immediately repay the Measure I Transportation Sales Tax Fund in an equal amount through an internal fund transfer from another source. Repayment will include interest that would have been earned in the Special Measure I Transportation Sales Tax Fund from the time of ineligible expenditure to date of repayment.

b. If a jurisdiction's annual Compliance Audit fails to be completed with an unmodified opinion by the Compliance Audit Deadline, which may be extended pursuant to Policy VVLS-23, the jurisdiction shall immediately repay the Measure I Transportation Sales Tax Fund through an internal fund transfer from another source, in the amount of the Measure I Local Street allocation for the subject fiscal year of annual Compliance Audit findings of unsubstantiated or questioned costs. Repayment will include interest that would have been earned in the Special Measure I Transportation Sales Tax Fund from the time of ineligible expenditure to date of repayment.

c. If the jurisdiction is unable to make such immediate repayment under VVLS-24 (a) or (b), the jurisdiction shall not receive its Local Street allocation pass-through payments until the repayment amount of ineligible expenses, unsubstantiated costs, or questioned costs, have been withheld by SBCTA. Repayment will include interest that would have been earned in the Special Measure I Transportation Sales Tax Fund from the time of ineligible expenditure to date of repayment.

d. If the jurisdiction enters into a Repayment Agreement with SBCTA, as approved by the jurisdiction and the SBCTA Board of Directors, providing for repayment of the amounts owed under VVLS-24 (a) or (b) over a period not to exceed five (5) years, SBCTA will return any pass-through funds withheld. SBCTA will recommence withholding Local Street Allocation pass-through funds if the jurisdiction fails to comply with the terms of the Repayment Agreement.

e. If a jurisdiction has not completed an annual Compliance Audit within two years after the expiration of Measure I 2010-2040~~by the sunset of the current measure~~, any withheld funds will be distributed to other compliant jurisdictions within that subarea. The allocation will be based on the process in ~~s~~Section IV.A. of this ~~p~~Policy after removing the jurisdiction not meeting the audit requirement.

G. Maintenance of Effort Requirements

Policy VVLS-25: The SBCTA Board of Directors shall retain authority over actions related to these Maintenance of Effort (MOE) requirements.

Policy VVLS-26: In accordance with California Public Utilities Code 190300 and Ordinance No. 04-01 of the San Bernardino County Transportation Authority, Local Street Program funds shall not be used to supplant existing local discretionary funds being used for street and highway purposes.

Policy VVLS-27: SBCTA shall monitor local agency use of General Fund for street and highway purposes relative to their use prior to Measure I 2010-2040, which shall be referred to as the MOE base year level.

Policy VVLS-28: The following requirements are to provide guidance on the determination of a MOE base year level.

a. The MOE base year level shall be equivalent to the discretionary General Fund expenditures for transportation-related construction and maintenance activities consistent with Policy VVLS-16 in Fiscal Year 2008/2009.

b. Jurisdictions may propose deductions to the recorded expenditures for the following:

1) Expenditures for unusual circumstances that increased the MOE base year level arbitrarily outside of the normal on-going General Fund expenditures, e.g. General Fund loans to other transportation-related funds, emergency repairs, or special projects.

2) Administrative/overhead costs that were not project-specific, i.e. staff time for transportation staff was charged to a general "program" budget rather than charged directly to specific projects.

c. The proposed MOE base year level shall be adopted by resolution of the governing body.

d. The Independent Taxpayer Oversight Committee (ITOC) will review the proposed MOE base year levels, including the proposed deductions, as adopted by resolution of the governing body, and provide a recommendation to the SBCTA Board of Directors for approval.

e. The MOE base year level as approved by the SBCTA Board of Directors shall remain in effect until the expiration of Measure I 2010-2040.

Policy VVLS-29: Jurisdictions shall annually provide a statement in the resolution of the governing body adopting the Five Year Capital Improvement Plan that acknowledges the jurisdiction will maintain General Fund expenditures for transportation-related construction and maintenance activities at the required MOE base year level in that fiscal year. Jurisdictions whose MOE base year level is determined to be $0 are not required to provide this statement in the resolution.

Policy VVLS-30: The MOE requirement shall be tracked and verified as part of the annual Measure I Local Street Program audit. This will be accomplished by comparing the discretionary General Fund expenditures for transportation-related construction and maintenance activities consistent with Policy VVLS-16 to the MOE base year level.

Policy VVLS-31: General Fund expenditures in excess of the MOE base year level will carry over to subsequent fiscal years and can be applied in a future year to offset the amount the local agency may need to meet the MOE requirement. Carryover balances will be documented in the annual Measure I Local Street Program audit.

Policy VVLS-32: If the annual Measure I Local Street Program audit indicates that the required MOE base level is not being met, then the jurisdiction has the following four fiscal years to make up the amount. If the audit following those four fiscal years indicates the jurisdiction is still below the MOE base year level, SBCTA will immediately stop disbursing Measure I Local Street Program funds until an amount equivalent to the MOE base year level shortfall has been withheld. The withheld funds will be disbursed to the jurisdiction upon demonstration that the jurisdiction has met the MOE requirements.

Policy VVLS-33: The following provides guidance on resolution of MOE base year level shortfalls at the expiration of Measure I 2010-2040.

a. If the jurisdiction has not resolved a MOE base year level shortfall within two years after the expiration of Measure I 2010-2040, any withheld funds will be distributed to other compliant jurisdictions within that subarea. The allocation will be based on the process in Section IV.A of this Policy after removing the jurisdiction not meeting the audit requirement.

b. If any Measure I Local Street Program audit after Fiscal Year 2033/2034 indicates that the required MOE base year level was not met, then the jurisdiction has until Fiscal Year 2038/2039 to make up the amount. If the audit of Fiscal Year 2038/2039 indicates the jurisdiction is still below the MOE base level, the jurisdiction must pay the MOE base level shortfall to SBCTA for distribution to other compliant jurisdictions within that subarea. The allocation will be based on the process in Section IV.A of this Policy after removing the jurisdiction not meeting the audit requirement.

Policy VVLS-34: Prior to withholding or required repayment of Measure I Local Street Program funds, jurisdictions shall have an opportunity to appeal to the ITOC. The jurisdiction must present evidence to the ITOC demonstrating unusual circumstances or the need for special consideration. The ITOC will be responsible for making a recommendation to the SBCTA Board of Directors to either approve or deny the request for special consideration.

V. REVISION HISTORY

Revision No.	Revisions	Adopted
0	Adopted by the Board of Directors.	04/01/2009
1	Revisions adopted by the Board of Directors on Jan. 8, 2014, Agenda Item 14.	01/08/2014
2	Revisions adopted by the Board of Directors on May 6, 2014, Agenda Items 6 & 18.	05/06/2015
3	Amended list of eligible expenses to be more consistent with the list of eligible expenses in the State Controller's Office Gas Tax Fund Guidelines. Modified remedy language in Policy VVLS-24. BOD approved changes 9/6/17, Agenda Item 11.	9/6/2017
4	Addition of due date of Capital Improvement Plan in VVLS-2. BOD approved changes 7/11/18, Agenda Item 25.	7/11/2018
5	Clarified Capital Improvement Plan requirements, amended eligible expenditures to be consistent with current gas tax guidelines, added requirements for tracking equipment purchased with Measure I funds, and updated Compliance Audit Deadline extension requirements. Approved by the BOD 6/3/20, Agenda Item 23.	6/3/2020
6	Moved transit purposes from the ineligible list of projects to the eligible list of projects for consistency with the Expenditure Plan. Approved by the BOD 3/3/21, Agenda Item 32.	3/3/2021
7	Amended Capital Improvement Plan requirements to remove limit on categorical expenditures, revise due date for amended Capital Improvement Plans, and remove the requirement to revise the list for projects where eligible expenditures exceed the estimate.	4/6/2022
8	Remedy~~Amended~~ added to address if a jurisdiction does not complete the required ~~a~~ Compliance Audit within two years of Measure I sunsetting. ~~by the sunset of the current measure~~.	12/4/2024

San Bernardino County Transportation Authority	Policy	40012
Adopted by the Board of Directors April 1, 2009	Revised	12/04/24
Victor Valley Local Street (VVLS) Program Measure I 2010-2040 Strategic Plan	Revision No.	8

Important Notice: A hardcopy of this document may not be the document currently in effect. The current version is always the version on the SBCTA website.

Table of Contents

I. PURPOSE

The purpose of this policy is to establish requirements for the Victor Valley Local Street Program, including project eligibility, adoption of Five Year Plans by local jurisdictions, accounting requirements, and development mitigation requirements.

II. REFERENCES

Ordinance No. 04-01 of the San Bernardino County Transportation Authority, Exhibit A – Transportation Expenditure Plan.

SBCTA Congestion Management Program

III. DEFINITIONS

Local Street Program: Measure I program in all subareas that provides funds through a pass-through mechanism directly to local jurisdictions for expenditure on street and road construction, repair, maintenance and other eligible local transportation priorities. Local Street Program funds can be used flexibly for any eligible transportation purpose determined to be a local priority, including Local Street, major highways, state highway improvements, freeway interchanges, transit, and other improvements/programs to maximize use of transportation facilities.

Allocation: An action by the SBCTA Board of Directors to assign a specific amount of Measure I funds from a Measure I program to a project. Allocations of Local Street Program funds occur monthly as a direct pass-through to local jurisdictions.

Five-Year Plan: A plan of projected local jurisdiction expenditures for the next five years on local projects eligible for Local Street Program funds, updated annually and submitted to SBCTA by local jurisdictions.

Independent Taxpayer Oversight Committee: A "Mandated Taxpayer Safeguard" established by Ordinance 04-01 for Measure I 2010-2040 to provide citizen review and to ensure that all Measure I funds are spent in accordance with provisions of the Measure I Expenditure Plan and Ordinance.

Maintenance of Effort: The requirement that Measure I funding will supplement and not replace the existing local discretionary funding being used for street and highway purposes.

Maintenance of Effort Base Year Level: The amount of General Fund used for street and highway purposes in Fiscal Year 2008/2009,prior to Measure I 2010-2040 as adopted by the SBCTA Board of Directors.

IV. POLICIES FOR THE VICTOR VALLEY LOCAL STREET PROGRAM

A. Local Street Allocation

Policy VVLS-1 70% of revenue collected in the Victor Valley subarea shall be apportioned for Local Street Projects. After reservation of 2% collected in the subarea for Project Development and Traffic Management Systems, each jurisdiction shall receive an allocation from 68% of the Measure I revenue. The allocation methodology is determined based on:

- 50% population. The population estimate for making the per capita calculation shall be determined by SBCTA each year based on the State Department of Finance population estimate. Annual adjustments to the population estimates are made mid-year, based on availability of DOF estimates. Following approval of the population estimates by the Board, adjustments will be made to the local pass-through fund allocations retroactive to January 1 of the year.
- 50% return to source. The sales tax estimates provided by the State Board of Equalization, updated quarterly based on the prior quarter's financial data, shall be used as the basis for making the return to source calculations.

Policy VVLS-2: Local jurisdictions shall not receive their Local Street allocation until they have submitted their annual adopted update of their Five-Year Plan. The due date to submit the Five-Year Plan to SBCTA is September 1 of each year. If the Five-Year Plan has not been received by the due date, the pass-through payments will be withheld. All withheld pass-through payments will be released upon receipt of the local jurisdiction governing body's adopted Five-Year Plan.

Policy VVLS-3: The Local Street allocation shall be remitted to local jurisdictions monthly.

Policy VVLS-4: Local Street Allocations remitted from January 1 until such time as the State Department of Finance has issued their population figures and SBCTA has made the per capita calculation, shall be based on the prior year's calculation. Once the per capita calculation has been made, the calculation will be applied retroactively to January 1 and amounts received by local jurisdictions will be adjusted to account for the difference in the amount remitted during the retroactive period and the amount that should have been remitted adjusted for the new per capita calculation.

Policy VVLS-5: Local Street Allocations sales tax generation portion will be based on the prior quarter's data. Because of the lag in receiving sales tax data from the Board of Equalization, the Sales Tax Generation calculations for that portion of the Local Street Allocation will be calculated using the data from the prior quarter. (Example: During the months of January, February and March SBCTA will use the local sales tax generation figure derived from the fourth quarter of the previous calendar year.)

Policy VVLS-6: SBCTA will make the monthly allocations using the following procedure:

a. Determine total amount of Measure I Sales Tax generated in the subarea from information submitted by the State Board of Equalization.

b. Multiply the total Measure I Sales Tax received for the month by 0.68 to arrive at the total amount of Local Street Program funds available for distribution to local jurisdictions.

c. Divide the Local Street Program fund into two 50% pools of funding: Allocate the two pools of funding based on:

   1) a jurisdiction's population share of the entire subarea population.
   2) jurisdiction's share of sales tax generation within the total subarea.

d. Add the population based component and the sales tax based component of each jurisdiction's allocation to arrive at the total Local Street Allocation for each jurisdiction.

e. Remit payment of Local Street Program fund to local jurisdiction.

Policy VVLS-7: The Local Street program allocation will be decreased by 0.5% beginning in 2015 with additional decreases of 0.5% every five years thereafter to a maximum of 2.5% to be allocated to the Senior and Disabled Transit Service Program. This change in allocation will occur automatically unless each jurisdiction in the subarea makes a finding that such increase in Senior and Disabled Transit Service Program is not needed to address unmet transit needs of senior and disabled transit users.

B. Development Fair Share Contribution

Policy VVLS-8: A development mitigation fair share contribution is required by Measure I 2010-2040 for all capacity improvement projects on the Nexus Study Network contained in the most recent Board-adopted version of the Nexus Study approved for jurisdictions in the urbanized Victor Valley and funded all or in part with Local Street Program allocations The urbanized Victor Valley is defined as the cities of Adelanto, Hesperia, Victorville, Town of Apple Valley and their spheres of influence.

Policy VVLS-9: A development mitigation fair share contribution is required by Measure I 2010-2040 for all capacity improvement projects funded all or in part with Local Street Program allocations as identified by Traffic Impact Analysis (TIA) reports as required by the Congestion Management Program in the non-urban areas. The amount of the Development Fair Share Contribution for each project is defined by the traffic mitigation measures identified in the related TIA reports.

Policy VVLS-10: Annually as part of its audit of each jurisdictions' use of Measure I funds, SBCTA will specifically review development mitigation contribution records for capacity improvements to Nexus Study Network facilities that were funded all or in part by Local Street Program allocations. If a material finding is made in the audit showing that the development fair share contribution was not made, SBCTA may, as the agency responsible for the Congestion Management Program, withhold Section 2105 Gas Tax funds or Measure I Local Street allocations until the jurisdiction shows that they are in compliance with the Congestion Management Program.

Policy VVLS-11: Jurisdictions may borrow from other internal accounts (i.e. within their own jurisdictions) to fund the required development fair share. Jurisdictions will maintain a record of borrowing between internal accounts. The internal accounts shall be reimbursed by development mitigation as development occurs.

C. Five-Year Plan

Policy VVLS-12: Each local jurisdiction is required to annually adopt a Five-Year Capital Improvement Plan which details the specific projects to be funded using Measure I Local Pass-Through Funds. Expenditures of Measure I Local Pass-Through Funds must be detailed in the Five-Year Capital Improvement Plan and adopted by resolution of the governing body. Expenditures can only be made on projects listed in the current Five Year Capital Improvement Plan.

Policy VVLS-13: Five-Year Capital Improvement Plans shall:

a. Specifically identify projects by either 1) street name, boundaries, and project type, subject to eligibility requirements listed in Section D below, or 2) defining the project as a program of work without any identified streets, such as a pavement management program, transportation system improvements, routine roadway maintenance or other miscellaneous transportation-related expenditures as identified in Policy VVLS-16. Projects defined as a program of work shall not include capacity enhancements.

b. Constrain the total amount of planned expenditures to 150% of SBCTA's forecasted revenue for Measure I Local Pass-Through Funds, revenue resulting from bonds secured by Measure I revenue, and remaining balances from previous year allocations.

c. For capacity enhancement projects listed in the Nexus Study, limit the use of Measure I local funds to the Measure I public share of the project cost and identify the required development contribution. Maintenance projects or projects that do not enhance the capacity of a Nexus Study Network roadway do not require a development contribution.

d. Use the SBCTA-approved forms and/or online database. Instructions will be issued to the City Manager annually prior to the deadline.

Policy VVLS-14: No longer applicable.

Policy VVLS-15: The Five-Year Capital Improvement Plan shall be the basis for the annual audit. Jurisdictions will have flexibility in adding and/or deleting projects in their current Five-Year Capital Improvement Plan based on the necessities of the jurisdiction, and subject to eligibility requirements listed in Section D below. However, in order for a project to be eligible for expenditure of Local Street Program funds, it must be listed in the current Five-Year Capital Improvement Plan. If a revised Capital Improvement Plan is necessary to reflect added projects, it must be adopted by resolution of the governing body and provided to SBCTA by September 1 of each fiscal year for use in the annual audit. If the Capital Improvement Plan is not modified to reflect the changes to the project list, an

audit finding will result. If the audit finding is not corrected, the project will not be eligible for expenditures of Local Street Program funds.

D. Eligible Expenditures

Policy VVLS-16: Eligible expenditures include construction, maintenance, and overhead for transportation related purposes only. Included below are definitions and types of eligible expenditures by category.

a. Construction

Construction shall be defined as the building or rebuilding of streets, roads, bridges, and acquisition of rights-of-way or their component parts to a degree that improved traffic service is provided and geometric or structural improvements are effected including allocated administration and engineering necessarily incurred and directly related to the above.

Construction work can be separated into four categories:

1) New Construction – A construction that substantially deviates from the existing alignment and provides for an entirely new street or roadbed for the greater parts of its length.

2) Reconstruction – A construction involving realignment or the use of standards well above those of the existing element, whereby the type or the geometric and structural features are significantly changed.

3) Preventative Maintenance – Includes, but is not limited to, roadway activities such as joint and shoulder rehabilitation, heater re-mix, seal coats, corrective grinding of PCC1 pavement, and restoration of drainage systems.

4) 3R Work – All other work that does not fall into the above-defined categories for new construction, reconstruction, or preventative maintenance and typically involves the improvement of highway pavement surfaces through resurfacing, restoration, or rehabilitation. 3R Work is generally regarded as heavy, non-routine maintenance designed to achieve a ten-year service life. Specifically, 3R Work is defined as the following:

- *Resurfacing* generally consists of placing additional asphalt concrete over a structurally sound highway, street, or bridge that needs treatment to extend its useful service life.
- *Restoration* means returning a road, street, structure, or collateral facility to the condition existing after original construction.
- *Rehabilitation* implies providing some betterments, such as upgrading guardrail or widening shoulders.

The following examples of construction expenditures are grouped by types of work:

Expenditures	*Types of Work*	
Additions	1.	The addition of a frontage street or road
	2.	Addition of auxiliary lanes such as speed change, storage, or climbing lanes
Barriers	3.	Earthwork protective structures within or adjacent to the right-of-way area
	4.	Extensions and new installation of walls
	5.	Replacement of retaining walls to a higher standard
	6.	Extension of new installation of guardrails, fence lines, raised medians, or barriers for traffic safety
Bikeways	7.	Construction of bikeways where they are an integral part of the streets and highway system
	8.	Construction of bicycle or pedestrian underpasses or overhead crossings for the general public use
Bridges	9.	Reconstruction of an existing bridge or installation of a new bridge
	10.	Widening of a bridge
	11.	Replacement of bridge rails and floors to a higher standard

Curbs, etc.	12.	Installation or extension of curbs, gutters, sidewalks, or underdrain (including improvements to handicap ramps to make them ADA compliant).
Drainage	13.	A complete reconstruction or an addition to a culvert including cross culverts regardless of angle of crossing; storm drains, culverts, or drainage channels which are required to be constructed or reconstructed by improvement of the roadway; longitudinal storm drains or other longitudinal culverts, including manholes; cross longitudinal gutters at intersections; and catch basins and related pipes. The term "catch basin" shall include outlet structures or curb openings. An eligible "catch basin" must be located within the road or street system rights-of-way, or as close to the curb return joining the road or street system as practicable, considering the location of obstructions and/or hydraulic considerations.
	14.	Extending old culverts and drains and replacing headwalls
Interagency Projects	15.	Road improvements within an adjoining jurisdiction as long as the improvements are made within the County of San Bernardino
	16.	Road improvements and maintenance on a state highway as long as the appropriate agreement with Caltrans is in place
	17.	Maintenance or construction on alleys that have been formally accepted into the city or county street system
	18.	Development of facilities associated with Metrolink commuter rail operations that are determined to be a local responsibility
Landscaping	19.	Installation or addition to landscape treatment such as sod, shrubs, trees, irrigation, etc. along the street or road right-of-way
	20.	Purchase of land for "greenbelt" if needed to mitigate the environmental impact of a street or road construction project
Layout	21.	Change of alignment, profile, and cross-section
	22.	Reconstruction of an intersection and its approximate approaches to a substantially higher type involving a change in its character and layout including changes from a plain intersection to a major channelized intersection or to a grade separation and ramps
Lighting	23.	Installation, replacement, or expansion of street or road lighting system
Associated Planning and Design	24.	Project development, planning studies, and design for eligible transportation projects
	25.	Expenses incurred in attending or participating in transportation and traffic engineering sponsored programs or training conducted for street or road purposes
	26.	Engineering review of plans for construction of Valley Measure I Major Streets projects
Relocation	27.	The removal of old street and roadbeds and structures, and detour costs when connected with a construction project
	28.	Replacement in kind, when legally required, of structures that are required to be relocated for street and road purposes
Signs and Signals	29.	Installation of original traffic signs and markers on routes
	30.	Replacement of all major signs or traffic control devices on a street or road
	31.	The installation of a new sign or the replacement of an old sign with one of superior design such as increased size, illumination, or overhead installation
	32.	Installation or improvements of traffic signal controls at intersections and protective devices at railroad grade crossings

	33.	Purchase and installation of traffic signal control equipment including traffic actuated equipment, radio or other remote control devices and related computers, software, and that portion of preemption equipment not mounted on motor vehicles
Striping	34.	Painting or rearrangement of pavement striping and markings, or repainting to a higher standard
Surface Work	35.	Original surfacing of shoulders
	36.	Improvement of a surface to a higher type of material
	37.	Placing sufficient new material on soil surface or gravel street or road to substantially improve the quality or the original surface
	38.	Bituminous material of 1" or more placed on bituminous or concrete material - a lesser thickness may be considered construction provided the engineer shall certify that the resulting pavement is structurally adequate to serve anticipated traffic
	39.	Remix existing bituminous surfacing with added materials to provide a total thickness of one inch or more – a lesser thickness may be considered construction provided the engineer certifies that the resulting pavement is structurally adequate to serve anticipated traffic
	40.	Stabilization of street or road base by additive, such as cement, lime, or asphaltic material
Transit	41.	Public transit systems, including rail, and related purposes
Widening	42.	Widening of existing street or roadbed or pavement, with or without resurfacing
	43.	Resurfacing, stabilizing, or widening of shoulders including necessary connections to side streets or road approaches
Other eligible expenditures	44.	Matching funds to federal or state contributions to a roadway project
	45.	Park and ride facilities
	46.	Undergrounding utilities or utility relocation only if part of a new roadway construction or documented as a legal road or street obligation
	47.	Rubberized railroad grade crossing material or repair of grade crossings
	48.	Preliminary and construction engineering may be claimed on the percentage basis approved in previous years by Caltrans for contract work
	49.	Relocation expenses necessitated by right-of-way acquisitions in accordance with the applicable government codes on relocation assistance

b. Maintenance

Maintenance shall be defined as the preservation and upkeep of a street or road to its constructed condition and the operation of a street or road facility and its integral services to provide safe, convenient, and economical highway transportation.

Physical Maintenance is preservation and upkeep of a highway, including all of its elements, in as nearly as practicable its original condition or its subsequently improved condition.

Traffic Services include the operation of a highway facility, and services incidental thereto, to provide safe, convenient, and economic travel.

The following are examples of maintenance expenditures:

1.	Scarifying, reshaping, and restoring material losses
2.	Applying dust palliatives
3.	Patching, repairing, surface treating, and joint filling on bituminous or concrete surfaces
4.	Jacking concrete pavements
5.	Repairing traveled way and shoulders
6.	Adding bituminous material of less than 1" to bituminous material including seal coats
7.	Remixing existing bituminous surfacing with added materials to provide a total thickness of less than 1" (see exception under Construction, example 39)
8.	Patching operations including base restoration
9.	Resealing street or road shoulders and side street and road approaches
10.	Reseeding and resodding shoulders and approaches
11.	Reshaping drainage channels and side slopes
12.	Restoring erosion controls
13.	Cleaning culverts and drains
14.	Removing slides and restoring facilities damaged by slides (additional new facilities shall be considered construction)
15.	Mowing, tree trimming, and watering within the street right-of-way
16.	Replacing topsoil, sod, shrubs, trees, irrigation facilities, etc., on streets and roadsides
17.	Repairing curb, gutter, rip-rap, underdrain, culverts, and drains
18.	Cleaning, painting, and repairing bridges and structures
19.	Performing all snow control operations such as erection of snow fences and the actual removal of snow and ice from the traveled way
20.	Repainting pavements, striping, and markings
21.	Repainting and repairing signs, guard rails, traffic signals, lighting standards, etc.
22.	Adding small numbers of conventional traffic control devices including signs
23.	Servicing street or road lighting and traffic control devices
24.	Furnishing power for street or road lighting and traffic control devices including payment for the cost of power
25.	Developing and maintaining programs that enhance management of transportation facilities such as travel demand models and pavement management programs
26.	Purchase of street-related equipment used exclusively for road maintenance
27.	Purchase of rubberized railroad grade crossing material for repair of grade crossings

c. Administrative Costs

1) Direct Costs

Direct costs are expenditures incurred solely and specifically for eligible street or road purposes or projects. Direct costs include contract payments, right-of-way acquisition, direct material and forced labor costs, and the salaries, wages, fringe benefits and related costs of employees directly participating on street and road purpose projects. Typical direct costs include:

- Compensation of employees for the time devoted and identified specifically to the performance of the eligible street or road project(s). Direct cost typically includes first level of supervision dedicated to the project. Supervisory activities above the first level of supervision may be recoverable as indirect costs.
- Costs of materials consumed or expended specifically for the purpose in which they were authorized.
- Equipment and other approved capital expenditures.
- Expense items or services contracted, or furnished specifically for the project to carry out the purpose in which they were authorized.

2) Indirect Costs (Overhead)

Indirect costs shall be defined as those elements of costs that are incurred for eligible street or road purposes that cannot be readily identified to a particular project. Cities and counties are allowed to use Measure I local funds to reimburse for indirect costs provided that there is documentation that amounts reimbursed were fairly and equitable allocated.

Overhead will only be allowed via an approved cost allocation plan or an equitable and auditable distribution of overhead among all departments.

Indirect costs typically include:

- Cost of overall supervision of field operations including payroll, facilities, advertising, general government, department or general accounting/finance, procurement, top management, data processing, legal costs and bids
- Cost of shop supplies such as expendable small tools and non-permanent barricades, warning signs, and other devices

E. Ineligible Expenditures

Policy VVLS-17: Although many types of work may be referred to as “construction”, this does not make these costs automatically eligible for expenditures of Measure I funds. To be eligible, the work must be for street or road purposes.

Following is a list of the types of expenditures that are not eligible for financing with Measure funds:

1.	Costs of rearranging non-street or road facilities, including utility relocation, when not a legal road or street obligation
2.	New (first installation of) utilities, including water mains, sanitary sewers, and other non-street facilities
3.	Cost of leasing property or right-of-way, except when required for construction work purposes on a temporary basis
4.	Cost of constructing or improving a street or area for parking purposes, except for the width normally required for parking adjacent to the traveled way and within the right-of-way, or when off-street parking facilities are constructed in lieu of widening a street to improve the flow of traffic
5.	Decorative lighting
6.	Park features such as benches, playground equipment and restrooms
7.	Work outside the right-of-way which is not a specific right-of-way obligation

8.	Equestrian under- and overpasses or other similar structures for any other special interest group unless as a part of a right-of-way obligation
9.	Construction, installation, or maintenance of cattle guards
10.	Maintenance or construction on alleys that have not been formally designated as part of a jurisdiction's street and road system
11.	Non-street and road-related salaries and benefits
12.	Driveways outside of the street and road right-of-way
13.	Purchase of electronic speed control devices or other non-highway related equipment
14.	Freeway telephone emergency system
15.	Interest charged for non-highway purposes
16.	Grantwriting consultant fees
17.	Debt service payments for non-voter-approved bonds, including Certificates of Participation
18.	Over-expended funds (deficit fund balance)
19.	Negative interest allocation
20.	The value of park or other city/county owned property rededicated for a street right-of-way

F. Accounting Requirements

Policy VVLS-18:

Each local jurisdiction shall establish a Special Measure I 2010-2040 Transportation Sales Tax Fund. This fund is a special revenue fund utilized to account for proceeds of specific revenue sources that are legally restricted to expenditures for street and road purposes. Jurisdictions should use the modified accrual basis of accounting.

Policy VVLS-19: The following requirements are to provide guidance on the specific accounting treatment as it relates to the Special Measure I Transportation Sales Tax Fund.

a. All allocations shall be deposited directly into the Special Measure I Transportation Sales Tax Fund.

b. Interest received by a jurisdiction from the investment of money in its Special Measure I Sales Tax Fund shall be deposited in the fund and shall be used only for street and road purposes.

c. Segregation must be maintained within the Special Measure I Transportation Sales Tax Fund to show separate balances for each subarea (County only).

d. If other revenues are commingled in the Special Measure I Transportation Sales Tax Fund, it is the responsibility of the jurisdiction to provide accurate and adequate documentation to support revenue and expenditure allocation, as well as segregated balances.

e. It is allowable to fund prior year expenditures with current year revenues and/or fund balance as long as funded projects are included in the current adopted Five-Year Capital Improvement Plan and accounting clearly identifies the project and other pertinent data to establish a clear audit trail.

f. If a project is deemed ineligible in the annual Compliance Audit, the Measure I funds used on that project must be repaid to the Special Measure I Transportation Sales Tax Fund in accordance with Policy VVLS-23.

g. Temporary loans of Measure I local funds can only be made among other Measure I accounts/projects if project and other pertinent data is identified to establish a clear audit trail.

h. If Measure I funds are used to purchase salable excess right-of-way, any unsold portions should be reported to SBCTA including the reasons for holding it and the anticipated date of disposal.

Policy VVLS-20: Any interest earned on investment of Measure I Transportation Sales Tax Funds must be deposited in the Special Measure I Transportation Sales Tax Fund. Any jurisdiction not electing to invest its Measure I funds but at the same time investing most of its other available funds should deposit the Measure I funds in a separate account to clearly indicate that no such monies were invested. If Measure I Transportation Sales Tax funds are invested, they must receive their equitable proration of interest earned on the total funds invested. Several methods are available to determine an equitable distribution of interest earned. Whatever method is employed, it will be analyzed during audit to determine reasonableness and confirm distribution to the Special Measure I Transportation Sales Tax Fund. It is recommended that a distribution based on average month-end cash balances be employed. In addition, if the interest distribution methodology allows for negative distributions, they will be disallowed. No interest charges based on negative cash and fund balances will be allowed.

Policy VVLS-21:

Reimbursements of Measure I Transportation Sales Tax Funds previously expended for street and road construction or right-of-way purposes, from whatever source, must be deposited in the Special Measure I Transportation Sales Tax Fund. This includes but is not limited to:

- Federal Aid Urban projects
- Redevelopment agencies
- Cooperative agreements
- Equipment use rates for equipment purchased with Measure I funds and used for non-street purposes
- Equipment dispositions
- Right-of-way dispositions
- Federal and safety projects

Policy VVLS-22: Records

a. Source Documentation - On construction or purchase of right-of-way or equipment, all expenditures charged to the Measure I Transportation Sales Tax Fund must be supported by a warrant or other source document (invoice, requisition, time sheet, equipment rental charge, engineering plans, specifications and other pertinent data) clearly identifying the project and other pertinent data to establish a clear audit trail. If street-related equipment is purchased with Measure I local funds, the jurisdiction must keep accurate records on acquisition cost, use, maintenance, and disposition.

b. Retention Period - All source documents, together with the accounting records, are deemed to be the official records of the jurisdiction and must be retained by the jurisdiction for five (5) years.

Policy VVLS-23: Compliance Audit Deadline

a. A jurisdiction's annual Compliance Audit must be completed by December 31st (Compliance Audit Deadline). SBCTA staff shall monitor the scheduling and progress of the audits to ensure prompt communication by the Auditor after information submittals by jurisdiction, and timely completion of the final MSI audit report.

b. If a jurisdiction is not able to meet the Compliance Audit Deadline, the jurisdiction may submit a letter requesting an extension and specifying the period of the requested extension for consideration by the General Policy Committee at their February meeting and the Board at their March meeting. Letters must be received timely for inclusion in the agenda. If a letter is not submitted and the Compliance Audit has not been completed, notification will be made to the Board at their March meeting that future allocations of Local Pass-Through Funds for the jurisdiction will be withheld until the Compliance Audit has been completed. Upon satisfactory completion of the Compliance Audit, any withheld allocations will be paid to the City including interest determined using the current LAIF rate. The Board may approve Compliance Audit Deadline extensions, if the Board finds: (1) the Compliance Audit was not completed timely for reasons outside of the jurisdiction's control, such as federal, state, and GASB reporting

requirements, or catastrophic events; or (2) it is in the best interests of SBCTA to grant the extension.

c. SBCTA staff shall be responsible for requesting from the Board any extensions related to Auditor performance.

Policy VVLS-24 Remedies

a. If a jurisdiction's annual Compliance Audit determines that the jurisdiction used Measure I Transportation Sales Tax Funds for ineligible expenses, the jurisdiction shall immediately repay the Measure I Transportation Sales Tax Fund in an equal amount through an internal fund transfer from another source. Repayment will include interest that would have been earned in the Special Measure I Transportation Sales Tax Fund from the time of ineligible expenditure to date of repayment.

b. If a jurisdiction's annual Compliance Audit fails to be completed with an unmodified opinion by the Compliance Audit Deadline, which may be extended pursuant to Policy VVLS-23, the jurisdiction shall immediately repay the Measure I Transportation Sales Tax Fund through an internal fund transfer from another source, in the amount of the Measure I Local Street allocation for the subject fiscal year of annual Compliance Audit findings of unsubstantiated or questioned costs. Repayment will include interest that would have been earned in the Special Measure I Transportation Sales Tax Fund from the time of ineligible expenditure to date of repayment.

c. If the jurisdiction is unable to make such immediate repayment under VVLS-24 (a) or (b), the jurisdiction shall not receive its Local Street allocation pass-through payments until the repayment amount of ineligible expenses, unsubstantiated costs, or questioned costs, have been withheld by SBCTA. Repayment will include interest that would have been earned in the Special Measure I Transportation Sales Tax Fund from the time of ineligible expenditure to date of repayment.

d. If the jurisdiction enters into a Repayment Agreement with SBCTA, as approved by the jurisdiction and the SBCTA Board of Directors, providing for repayment of the amounts owed under VVLS-24 (a) or (b) over a period not to exceed five (5) years, SBCTA will return any pass-through funds withheld. SBCTA will recommence withholding Local Street Allocation pass-through funds if the jurisdiction fails to comply with the terms of the Repayment Agreement.

e. If a jurisdiction has not completed an annual Compliance Audit within two years after the expiration of Measure I 2010-2040, any withheld funds will be distributed to other compliant jurisdictions within that subarea. The allocation will be based on the process in Section IV.A. of this Policy after removing the jurisdiction not meeting the audit requirement.

G. Maintenance of Effort Requirements

Policy VVLS-25: The SBCTA Board of Directors shall retain authority over actions related to these Maintenance of Effort (MOE) requirements.

Policy VVLS-26: In accordance with California Public Utilities Code 190300 and Ordinance No. 04-01 of the San Bernardino County Transportation Authority, Local Street Program funds shall not be used to supplant existing local discretionary funds being used for street and highway purposes.

Policy VVLS-27: SBCTA shall monitor local agency use of General Fund for street and highway purposes relative to their use prior to Measure I 2010-2040, which shall be referred to as the MOE base year level.

Policy VVLS-28: The following requirements are to provide guidance on the determination of a MOE base year level.

a. The MOE base year level shall be equivalent to the discretionary General Fund expenditures for transportation-related construction and maintenance activities consistent with Policy VVLS-16 in Fiscal Year 2008/2009.

b. Jurisdictions may propose deductions to the recorded expenditures for the following:

1) Expenditures for unusual circumstances that increased the MOE base year level arbitrarily outside of the normal on-going General Fund expenditures, e.g. General Fund loans to other transportation-related funds, emergency repairs, or special projects.

2) Administrative/overhead costs that were not project-specific, i.e. staff time for transportation staff was charged to a general "program" budget rather than charged directly to specific projects.

c. The proposed MOE base year level shall be adopted by resolution of the governing body.

d. The Independent Taxpayer Oversight Committee (ITOC) will review the proposed MOE base year levels, including the proposed deductions, as adopted by resolution of the governing body, and provide a recommendation to the SBCTA Board of Directors for approval.

e. The MOE base year level as approved by the SBCTA Board of Directors shall remain in effect until the expiration of Measure I 2010-2040.

Policy VVLS-29: Jurisdictions shall annually provide a statement in the resolution of the governing body adopting the Five Year Capital Improvement Plan that acknowledges the jurisdiction will maintain General Fund expenditures for transportation-related construction and maintenance activities at the required MOE base year level in that fiscal year. Jurisdictions whose MOE base year level is determined to be $0 are not required to provide this statement in the resolution.

Policy VVLS-30: The MOE requirement shall be tracked and verified as part of the annual Measure I Local Street Program audit. This will be accomplished by comparing the discretionary General Fund expenditures for transportation-related construction and maintenance activities consistent with Policy VVLS-16 to the MOE base year level.

Policy VVLS-31: General Fund expenditures in excess of the MOE base year level will carry over to subsequent fiscal years and can be applied in a future year to offset the amount the local agency may need to meet the MOE requirement. Carryover balances will be documented in the annual Measure I Local Street Program audit.

Policy VVLS-32: If the annual Measure I Local Street Program audit indicates that the required MOE base level is not being met, then the jurisdiction has the following four fiscal years to make up the amount. If the audit following those four fiscal years indicates the jurisdiction is still below the MOE base year level, SBCTA will immediately stop disbursing Measure I Local Street Program funds until an amount equivalent to the MOE base year level shortfall has been withheld. The withheld funds will be disbursed to the jurisdiction upon demonstration that the jurisdiction has met the MOE requirements.

Policy VVLS-33: The following provides guidance on resolution of MOE base year level shortfalls at the expiration of Measure I 2010-2040.

a. If the jurisdiction has not resolved a MOE base year level shortfall within two years after the expiration of Measure I 2010-2040, any withheld funds will be distributed to other compliant jurisdictions within that subarea. The allocation will be based on the process in Section IV.A of this Policy after removing the jurisdiction not meeting the audit requirement.

b. If any Measure I Local Street Program audit after Fiscal Year 2033/2034 indicates that the required MOE base year level was not met, then the jurisdiction has until Fiscal Year 2038/2039 to make up the amount. If the audit of Fiscal Year 2038/2039 indicates the jurisdiction is still below the MOE base level, the jurisdiction must pay the MOE base level shortfall to SBCTA for distribution to other compliant jurisdictions within that subarea. The allocation will be based on the process in Section IV.A of this Policy after removing the jurisdiction not meeting the audit requirement.

Policy VVLS-34: Prior to withholding or required repayment of Measure I Local Street Program funds, jurisdictions shall have an opportunity to appeal to the ITOC. The jurisdiction must present evidence to the ITOC demonstrating unusual circumstances or the need for special consideration. The ITOC will be responsible for making a recommendation to the SBCTA Board of Directors to either approve or deny the request for special consideration.

V. REVISION HISTORY

Revision No.	Revisions	Adopted
0	Adopted by the Board of Directors.	04/01/2009
1	Revisions adopted by the Board of Directors on Jan. 8, 2014, Agenda Item 14.	01/08/2014
2	Revisions adopted by the Board of Directors on May 6, 2014, Agenda Items 6 & 18.	05/06/2015
3	Amended list of eligible expenses to be more consistent with the list of eligible expenses in the State Controller's Office Gas Tax Fund Guidelines. Modified remedy language in Policy VVLS-24. BOD approved changes 9/6/17, Agenda Item 11.	9/6/2017
4	Addition of due date of Capital Improvement Plan in VVLS-2. BOD approved changes 7/11/18, Agenda Item 25.	7/11/2018
5	Clarified Capital Improvement Plan requirements, amended eligible expenditures to be consistent with current gas tax guidelines, added requirements for tracking equipment purchased with Measure I funds, and updated Compliance Audit Deadline extension requirements. Approved by the BOD 6/3/20, Agenda Item 23.	6/3/2020
6	Moved transit purposes from the ineligible list of projects to the eligible list of projects for consistency with the Expenditure Plan. Approved by the BOD 3/3/21, Agenda Item 32.	3/3/2021
7	Amended Capital Improvement Plan requirements to remove limit on categorical expenditures, revise due date for amended Capital Improvement Plans, and remove the requirement to revise the list for projects where eligible expenditures exceed the estimate.	4/6/2022
8	Remedy added to address if a jurisdiction does not complete the required Compliance Audit within two years of Measure I sunsetting. .	12/4/2024

San Bernardino County Transportation Authority		Policy	40016
Adopted by the Board of Directors	April 1, 2009	Revised	~~11~~12/0~~42~~424
Rural Mountain/Desert Subareas Local Street Program (MDLS) Measure I 2010-2040 Strategic Plan		Revision No.	~~8~~7

Important Notice: A hardcopy of this document may not be the document currently in effect. The current version is always the version on the SBCTA Intranet.

Table of Contents

I. PURPOSE

The purpose of this policy is to establish requirements for the Local Street Programs for the Colorado River, Morongo Basin, Mountains, and North Desert subareas, including project eligibility, adoption of Five Year Plans by local jurisdictions, accounting requirements, and development mitigation requirements.

II. REFERENCES

Ordinance No. 04-01 of the San Bernardino County Transportation Authority, Exhibit A – Transportation Expenditure Plan

SBCTA Congestion Management Program

III. DEFINITIONS

Local Street Program: Measure I program in all subareas that provides funds through a pass-through mechanism directly to local jurisdictions for expenditure on street and road construction, repair, maintenance and other eligible local transportation priorities. Local Street Program funds can be used flexibly for any eligible transportation purpose determined to be a local priority, including Local Street, major highways, state highway improvements, freeway interchanges, transit, and other improvements/programs to maximize use of transportation facilities.

Allocation: An action by the SBCTA Board of Directors to assign a specific amount of Measure I funds from a Measure I program to a project. The allocation decision is made annually by the Board of Directors by March of each year. Allocation of Local Street Program funds occur monthly as a direct pass-through to local jurisdictions.

Five-Year Plan: A plan of projected local jurisdiction expenditures for the next five years on local projects eligible for Local Street Program funds, updated annually and submitted to SBCTA by local jurisdictions.

Independent Taxpayer Oversight Committee: A "Mandated Taxpayer Safeguard" established by Ordinance 04-01 for Measure I 2010-2040 to provide citizen review and to ensure that all Measure I funds are spent in accordance with provisions of the Measure I Expenditure Plan and Ordinance.

Maintenance of Effort: The requirement that Measure I funding will supplement and not replace the existing local discretionary funding being used for street and highway purposes.

Maintenance of Effort Base Year Level: The amount of General Fund used for street and highway purposes in Fiscal Year 2008/2009 prior to Measure I 2010-2040 as adopted by the SBCTA Board of Directors.

IV. POLICIES FOR THE RURAL MOUNTAIN/DESERT SUBAREAS LOCAL STREET PROGRAM

A. Local Street Allocation

Policy MDLS-1: 70% of revenue collected in a subarea shall be apportioned for Local Street Projects. After reservation of 2% collected in the subarea for Project Development and Traffic Management Systems, each jurisdiction shall receive an allocation from 68% of the Measure I revenue. The allocation methodology is determined based on:

- 50% population. The population estimate for making the per capita calculation shall be determined by SBCTA each year based on the State Department of Finance population estimate. Annual adjustments to the population estimates are made mid-year, based on availability of DOF estimates. Following approval of the population estimates by the Board, adjustments will be made to the local pass through fund allocations retroactive to January 1 of the year.
- 50% return to source. The sales tax estimates provided by the State Board of Equalization, updated quarterly based on the prior quarter's financial data, shall be used as the basis for making the return to source calculations.

Policy MDLS-2: Local jurisdictions shall not receive their Local Street Program allocation until they have submitted their annual adopted update of their Five-Year Plan. The due date to submit the Five-Year Plan to SBCTA is September 1 of each year. If the Five-Year Plan has not been received by the due date, the pass through payments will be withheld. All withheld pass through payments will be released upon receipt of the local jurisdiction governing body's adopted Five-Year Plan.

Policy MDLS-3: The Local Street Allocation shall be remitted to local jurisdictions monthly.

Policy MDLS-4: Local Street Allocations remitted from January 1 until such time as the State Department of Finance has issued their population figures and SBCTA has made the per capita calculation, shall be based on the prior year's calculation. Once the per capita calculation has been made, the calculation will be applied retroactively to January 1 and amounts received by local jurisdictions will be adjusted to account for the difference in the amount remitted during the retroactive period and the amount that should have been remitted adjusted for the new per capita calculation.

Policy MDLS-5: Local Street Allocations sales tax generation portion will be based on the prior quarter's data. Because of the lag in receiving sales tax data from the Board of Equalization, the Sales Tax Generation calculations for that portion of the Local Street Allocation will be calculated using the data from the prior quarter. (Example: During the months of January, February and March SBCTA will use the local sales tax generation figure derived from the fourth quarter of the previous calendar year.)

Policy MDLS-6: SBCTA will make the monthly allocations using the following procedure:

a. Determine total amount of Measure I Sales Tax generated in the subarea from information submitted by the State Board of Equalization.

b. Mutiply the total Measure I Sales Tax received for the month by 0.68 to arrive at the total subarea Local Street Allocation.

c. Divide the Local Street Program fund into two 50% pools of funding: Allocate the two pools of funding based on:

   1) a jurisdiction's population share of the entire subarea population.

   2) jurisdiction's share of sales tax generation within the total subarea.

d. Add the population based component and the sales tax based component of each jurisdiction's allocation to arrive at the total Local Street Allocation for each jurisdiction.

e. Remit payment of Local Street Program fund to local jurisdiction.

Policy MDLS-7: Upon each jurisdiction in a particular subarea making a finding that an increase in Senior and Disabled Transit Service is needed to meet the unmet transit needs of senior and disabled users, the Local Street allocation may be reduced and that allocation may be shifted to the Senior and Disabled Transit Service Program for that subarea.

B. Development Fair Share Contribution

Policy MDLS-8: A development mitigation fair share contribution is required by Measure I 2010-2040 for all capacity improvement projects in the Rural Mountain/Desert subarea for transportation facilities funded all or in part with Local Street Program allocations as identified by a Traffic Impact Analysis (TIA) report as required by the Congestion Management Program. The amount of the development mitigation for each project is defined by the traffic mitigation measures identified in the related TIA reports.

Policy MDLS-9: Annually as part of its audit of each jurisdictions' use of Measure I funds, SBCTA will specifically look to make sure that the development mitigation towards capacity improvements identified in TIAs is accounted for. If a material finding is made in the audit showing that a contribution of development mitigation was not made as identified by a TIA, then SBCTA may, as the agency responsible for the Congestion Management Program, withhold Section 2105 Gas Tax funds or Measure I Local Street Allocations until the jurisdiction shows that they are in compliance with the Congestion Management Plan.

C. Five-Year Plan

Policy MDLS-10: Each local jurisdiction is required to annually adopt and submit to SBCTA by September 1 of each year a Five-Year Capital Improvement Plan which details the specific projects to be funded using Measure I Local Pass-Through Funds. Expenditures of Measure I Local Pass-Through Funds must be detailed in the Five-Year Capital Improvement Plan and adopted by resolution of the governing body. Expenditures can only be made on projects listed in the current Five Year Capital Improvement Plan.

Policy MDLS-11: Five-Year Capital Improvement Plans shall:

a. Specifically identify projects by either 1) street name, boundaries, and project type, subject to eligibility requirements listed in Section D below, or 2) defining the project as a program of work without any identified streets, such as a pavement management program, transportation system improvements, routine roadway maintenance or other miscellaneous transportation-related expenditures as identified in Policy MDLS-14. Projects defined as a program of work shall not include capacity enhancements.

b. Constrain the total annual amount of planned expenditures to 150% of SBCTA's forecasted revenue for Measure I Local Pass-Through Funds, revenue resulting from bonds secured by Measure I revenue, and remaining balances from previous year allocations.

c. Use the SBCTA-approved forms and/or online database. Instructions will be issued to the City Manager annually prior to the deadline.

Policy MDLS-12: No longer applicable.

Policy MDLS-13: The Five-Year Capital Improvement Plan shall be the basis for the annual audit. Jurisdictions will have flexibility in adding and/or deleting projects in their current Five-Year Capital Improvement Plan based on the necessities of the jurisdiction, and subject to eligibility requirements listed in Section D below. However, in order for a project to be eligible for expenditure of Local Street funds, it must be listed in the current Five-Year Capital Improvement Plan. If a revised Capital Improvement Plan is necessary to reflect added projects, it must be adopted by resolution of the governing body and provided to SBCTA by September 1 of each fiscal year for use in the annual audit. If the Capital Improvement Plan is not modified to reflect the changes to the project list, an audit finding will result. If the audit finding is not corrected, the project will not be eligible for expenditures of Local Street funds.

D. Eligible Expenditures

Policy MDLS-14: Eligible expenditures include construction, maintenance, and overhead for transportation related purposes only. Included below are definitions and types of eligible expenditures by category.

a. Construction

Construction shall be defined as the building or rebuilding of streets, roads, bridges, and acquisition of rights-of-way or their component parts to a degree that improved traffic service is

provided and geometric or structural improvements are effected including allocated administration and engineering necessarily incurred and directly related to the above.

Construction work can be separated into four categories:

1) New Construction – A construction that substantially deviates from the existing alignment and provides for an entirely new street or roadbed for the greater parts of its length.

2) Reconstruction – A construction involving realignment or the use of standards well above those of the existing element, whereby the type or the geometric and structural features are significantly changed.

3) Preventative Maintenance – Includes, but is not limited to, roadway activities such as joint and shoulder rehabilitation, heater re-mix, seal coats, corrective grinding of PCC1 pavement, and restoration of drainage systems.

4) 3R Work – All other work that does not fall into the above-defined categories for new construction, reconstruction, or preventative maintenance and typically involves the improvement of highway pavement surfaces through resurfacing, restoration, or rehabilitation. 3R Work is generally regarded as heavy, non-routine maintenance designed to achieve a ten-year service life. Specifically, 3R Work is defined as the following:

   - *Resurfacing* generally consists of placing additional asphalt concrete over a structurally sound highway, street, or bridge that needs treatment to extend its useful service life.
   - *Restoration* means returning a road, street, structure, or collateral facility to the condition existing after original construction.
   - *Rehabilitation* implies providing some betterments, such as upgrading guardrail or widening shoulders.

   The following examples of construction expenditures are grouped by types of work:

Expenditures	*Types of Work*	
Additions	1.	The addition of a frontage street or road
	2.	Addition of auxiliary lanes such as speed change, storage, or climbing lanes
Barriers	3.	Earthwork protective structures within or adjacent to the right-of-way area
	4.	Extensions and new installation of walls
	5.	Replacement of retaining walls to a higher standard
	6.	Extension of new installation of guardrails, fence lines, raised medians, or barriers for traffic safety
Bikeways	7.	Construction of bikeways where they are an integral part of the streets and highway system
	8.	Construction of bicycle or pedestrian underpasses or overhead crossings for the general public use
Bridges	9.	Reconstruction of an existing bridge or installation of a new bridge
	10.	Widening of a bridge
	11.	Replacement of bridge rails and floors to a higher standard
Curbs, etc.	12.	Installation or extension of curbs, gutters, sidewalks, or underdrain (including improvements to handicap ramps to make them ADA compliant).
Drainage	13.	A complete reconstruction or an addition to a culvert including cross culverts regardless of angle of crossing; storm drains, culverts, or drainage channels which are required to be constructed or reconstructed by improvement of the roadway; longitudinal storm drains or other longitudinal culverts, including manholes; cross longitudinal gutters at intersections; and catch basins and related pipes. The term “catch basin” shall include outlet structures or curb openings. An eligible “catch basin” must

		be located within the road or street system rights-of-way, or as close to the curb return joining the road or street system as practicable, considering the location of obstructions and/or hydraulic considerations.
	14.	Extending old culverts and drains and replacing headwalls
Interagency Projects	15.	Road improvements within an adjoining jurisdiction as long as the improvements are made within the County of San Bernardino
	16.	Road improvements and maintenance on a state highway as long as the appropriate agreement with Caltrans is in place
	17.	Maintenance or construction on alleys that have been formally accepted into the city or county street system
	18.	Development of facilities associated with Metrolink commuter rail operations that are determined to be a local responsibility
Landscaping	19.	Installation or addition to landscape treatment such as sod, shrubs, trees, irrigation, etc. along the street or road right-of-way
	20.	Purchase of land for “greenbelt” if needed to mitigate the environmental impact of a street or road construction project
Layout	21.	Change of alignment, profile, and cross-section
	22.	Reconstruction of an intersection and its approximate approaches to a substantially higher type involving a change in its character and layout including changes from a plain intersection to a major channelized intersection or to a grade separation and ramps
Lighting	23.	Installation, replacement, or expansion of street or road lighting system
Associated Planning and Design	24.	Project development, planning studies, and design for eligible transportation projects
	25.	Expenses incurred in attending or participating in transportation and traffic engineering sponsored programs or training conducted for street or road purposes
	26.	Engineering review of plans for construction of Valley Measure I Major Streets projects
Relocation	27.	The removal of old street and roadbeds and structures, and detour costs when connected with a construction project
	28.	Replacement in kind, when legally required, of structures that are required to be relocated for street and road purposes
Signs and Signals	29.	Installation of original traffic signs and markers on routes
	30.	Replacement of all major signs or traffic control devices on a street or road
	31.	The installation of a new sign or the replacement of an old sign with one of superior design such as increased size, illumination, or overhead installation
	32.	Installation or improvements of traffic signal controls at intersections and protective devices at railroad grade crossings
	33.	Purchase and installation of traffic signal control equipment including traffic actuated equipment, radio or other remote control devices and related computers, software, and that portion of preemption equipment not mounted on motor vehicles
Striping	34.	Painting or rearrangement of pavement striping and markings, or repainting to a higher standard
Surface Work	35.	Original surfacing of shoulders
	36.	Improvement of a surface to a higher type of material
	37.	Placing sufficient new material on soil surface or gravel street or road to substantially improve the quality or the original surface

	38.	Bituminous material of 1” or more placed on bituminous or concrete material - a lesser thickness may be considered construction provided the engineer shall certify that the resulting pavement is structurally adequate to serve anticipated traffic
	39.	Remix existing bituminous surfacing with added materials to provide a total thickness of one inch or more – a lesser thickness may be considered construction provided the engineer certifies that the resulting pavement is structurally adequate to serve anticipated traffic
	40.	Stabilization of street or road base by additive, such as cement, lime, or asphaltic material
Transit	41.	Public transit systems, including rail, and related purposes
Widening	42.	Widening of existing street or roadbed or pavement, with or without resurfacing
	43.	Resurfacing, stabilizing, or widening of shoulders including necessary connections to side streets or road approaches
Other eligible expenditures	44.	Matching funds to federal or state contributions to a roadway project
	45.	Park and ride facilities
	46.	Undergrounding utilities or utility relocation only if part of a new roadway construction or documented as a legal road or street obligation.
	47.	Rubberized railroad grade crossing material or repair of grade crossings
	48.	Preliminary and construction engineering may be claimed on the percentage basis approved in previous years by Caltrans for contract work.
	49.	Relocation expenses necessitated by right-of-way acquisitions in accordance with the applicable government codes on relocation assistance.

b. Maintenance

Maintenance shall be defined as the preservation and upkeep of a street or road to its constructed condition and the operation of a street or road facility and its integral services to provide safe, convenient, and economical highway transportation.

Physical Maintenance is preservation and upkeep of a highway, including all of its elements, in as nearly as practicable its original condition or its subsequently improved condition.

Traffic Services include the operation of a highway facility, and services incidental thereto, to provide safe, convenient, and economic travel.

The following are examples of maintenance expenditures:

1.	Scarifying, reshaping, and restoring material losses
2.	Applying dust palliatives
3.	Patching, repairing, surface treating, and joint filling on bituminous or concrete surfaces
4.	Jacking concrete pavements
5.	Repairing traveled way and shoulders
6.	Adding bituminous material of less than 1” to bituminous material including seal coats
7.	Remixing existing bituminous surfacing with added materials to provide a total thickness of less than 1” (see exception under Construction, example 39)
8.	Patching operations including base restoration

9.	Resealing street or road shoulders and side street and road approaches
10.	Reseeding and resodding shoulders and approaches
11.	Reshaping drainage channels and side slopes
12.	Restoring erosion controls
13.	Cleaning culverts and drains
14.	Removing slides and restoring facilities damaged by slides (additional new facilities shall be considered construction)
15.	Mowing, tree trimming, and watering within the street right-of-way
16.	Replacing topsoil, sod, shrubs, trees, irrigation facilities, etc., on streets and roadsides
17.	Repairing curb, gutter, rip-rap, underdrain, culverts, and drains
18.	Cleaning, painting, and repairing bridges and structures
19.	Performing all snow control operations such as erection of snow fences and the actual removal of snow and ice from the traveled way
20.	Repainting pavements, striping, and markings
21.	Repainting and repairing signs, guard rails, traffic signals, lighting standards, etc.
22.	Adding small numbers of conventional traffic control devices including signs
23.	Servicing street or road lighting and traffic control devices
24.	Furnishing power for street or road lighting and traffic control devices including payment for the cost of power
25.	Developing and maintaining programs that enhance management of transportation facilities such as travel demand models and pavement management programs
26.	Purchase of street-related equipment used exclusively for road maintenance
27.	Purchase of rubberized railroad grade crossing material for repair of grade crossings

c. Administrative Costs

1) Direct Costs

Direct costs are expenditures incurred solely and specifically for eligible street or road purposes or projects. Direct costs include contract payments, right-of-way acquisition, direct material and forced labor costs, and the salaries, wages, fringe benefits and related costs of employees directly participating on street and road purpose projects. Typical direct costs include:

- Compensation of employees for the time devoted and identified specifically to the performance of the eligible street or road project(s). Direct cost typically includes first level of supervision dedicated to the project. Supervisory activities above the first level of supervision may be recoverable as indirect costs.
- Costs of materials consumed or expended specifically for the purpose in which they were authorized.
- Equipment and other approved capital expenditures.
- Expense items or services contracted, or furnished specifically for the project to carry out the purpose in which they were authorized.

2) Indirect Costs (Overhead)

Indirect costs shall be defined as those elements of costs that are incurred for eligible street or road purposes that cannot be readily identified to a particular project. Cities and counties are allowed to use Measure I local funds to reimburse for indirect costs provided that there is documentation that amounts reimbursed were fairly and equitable allocated.

Overhead will only be allowed via an approved cost allocation plan or an equitable and auditable distribution of overhead among all departments.

Indirect costs typically include:

- Cost of overall supervision of field operations including payroll, facilities, advertising, general government, department or general accounting/finance, procurement, top management, data processing, legal costs and bids
- Cost of shop supplies such as expendable small tools and non-permanent barricades, warning signs, and other devices

E. Ineligible Expenditures

Policy MDLS-15: Although many types of work may be referred to as "construction", this does not make these costs automatically eligible for expenditures of Measure I funds. To be eligible, the work must be for street or road purposes.

Following is a list of the types of expenditures that are not eligible for financing with Measure funds:

1.	Costs of rearranging non-street or road facilities, including utility relocation, when not a legal road or street obligation
2.	New (first installation of) utilities, including water mains, sanitary sewers, and other non-street facilities
3.	Cost of leasing property or right-of-way, except when required for construction work purposes on a temporary basis
4.	Cost of constructing or improving a street or area for parking purposes, except for the width normally required for parking adjacent to the traveled way and within the right-of-way, or when off-street parking facilities are constructed in lieu of widening a street to improve the flow of traffic
5.	Decorative lighting
6.	Park features such as benches, playground equipment and restrooms
7.	Work outside the right-of-way which is not a specific right-of-way obligation
8.	Equestrian under- and overpasses or other similar structures for any other special interest group unless as a part of a right-of-way obligation
9.	Construction, installation, or maintenance of cattle guards
10.	Maintenance or construction on alleys that have not been formally designated as part of a jurisdiction's street and road system
11.	Non-street and road-related salaries and benefits
12.	Driveways outside of the street and road right-of-way
13.	Purchase of electronic speed control devices or other non-highway related equipment
14.	Freeway telephone emergency system
15.	Interest charged for non-highway purposes
16.	Grantwriting consultant fees
17.	Debt service payments for non-voter-approved bonds, including Certificates of Participation
18.	Over-expended funds (deficit fund balance)
19.	Negative interest allocation
20.	The value of park or other city/county owned property rededicated for a street right-of-way.

F. Accounting Requirements

Policy MDLS-16: Each local jurisdiction shall establish a Special Measure I 2010-2040 Transportation Sales Tax Fund. This fund is a special revenue fund utilized to account for proceeds of specific revenue sources that are legally restricted to expenditures for street purposes. Jurisdictions should use the modified accrual basis of accounting.

Policy MDLS-17: The following requirements are to provide guidance on the specific accounting treatment as it relates to the Special Measure I Transportation Sales Tax Fund.

a. All allocations shall be deposited directly into the Special Measure I Transportation Sales Tax Fund.

b. Interest received by a jurisdiction from the investment of money in its Special Measure I Sales Tax Fund shall be deposited in the fund and shall only be used for street and road purposes.

c. Segregation must be maintained within the Special Measure I Transportation Sales Tax Fund to show separate balances for each subarea (County only).

d. If other revenues are commingled in the Special Measure I Transportation Sales Tax Fund, it is the responsibility of the jurisdiction to provide accurate and adequate documentation to support revenue and expenditure allocation, as well as segregated balances.

e. It is allowable to fund prior year expenditures with current year revenues and/or fund balance as long as funded projects are included in the current adopted Five-Year Capital Improvement Plan and accounting clearly identifies the project and other pertinent data to establish a clear audit trail.

f. If a project is deemed ineligible in the annual Compliance Audit, the Measure I funds used on that project must be repaid to the Special Measure I Transportation Sales Tax Fund in accordance with Policy MDLS-21.

g. Temporary loans of Measure I local funds can only be made among other Measure I accounts/projects if project and other pertinent data is identified to establish a clear audit trail.

h. If Measure I funds are used to purchase salable excess right-of-way, any unsold portions should be reported to SBCTA including the reasons for holding it and the anticipated date of disposal.

Policy MDLS-18: Any interest earned on investment of Measure I Transportation Sales Tax Funds must be deposited in the Special Measure I Transportation Sales Tax Fund. Any jurisdiction not electing to invest its Measure I funds but at the same time investing most of its other available funds should deposit the Measure I funds in a separate account to clearly indicate that no such monies were invested. If Measure I Transportation Sales Tax funds are invested, they must receive their equitable proration of interest earned on the total funds invested. Several methods are available to determine an equitable distribution of interest earned. Whatever method is employed, it will be analyzed during audit to determine reasonableness and confirm distribution to the Special Measure I Transportation Sales Tax Fund. It is recommended that a distribution based on average monthend cash balances be employed. In addition, if the interest distribution methodology allows for negative distributions, they will be disallowed. No interest charges based on negative cash and fund balances will be allowed.

Policy MDLS-19: Reimbursements of Measure I Transportation Sales Tax Funds previously expended for street and road construction or right-of-way purposes, from whatever source, must be deposited in the Special Measure I Transportation Sales Tax Fund. This includes but is not limited to:

- Federal Aid Urban projects
- Redevelopment agencies
- Cooperative agreements
- Equipment use rates for equipment purchased with Measure I funds and used for non-street purposes
- Equipment dispositions
- Right-of-way dispositions
- Federal and safety projects

Policy MDLS-20: Records

a. Source Documentation - On construction or purchase of right-of-way or equipment, all expenditures charged to the Measure I Transportation Sales Tax Fund must be supported by a warrant or other source document (invoice, requisition, time sheet, equipment rental charge, engineering plans, specifications and other pertinent data) clearly identifying the project and other pertinent data to establish a clear audit trail. If street-related equipment is purchased with Measure I local funds, the jurisdiction must keep accurate records on acquisition cost, use, maintenance, and disposition.

b. Retention Period - All source documents, together with the accounting records, are deemed to be the official records of the jurisdiction and must be retained by the jurisdiction for five (5) years.

Policy MDLS-21: Compliance Audit Deadline

a. A jurisdiction's annual Compliance Audit must be completed by December 31st (Compliance Audit Deadline). SBCTA staff shall monitor the scheduling and progress of the audits to ensure prompt communication by the Auditor after information submittals by jurisdiction, and timely completion of the final MSI audit report.

b. If a jurisdiction is not able to meet the Compliance Audit Deadline, the jurisdiction may submit a letter requesting an extension and specifying the period of the requested extension for consideration by the General Policy Committee at their February meeting and the Board at their March meeting. Letters must be received timely for inclusion in the agenda. If a letter is not submitted and the Compliance Audit has not been completed, notification will be made to the Board at their March meeting that future allocations of Local Pass-Through Funds for the jurisdiction will be withheld until the Compliance Audit has been completed. Upon satisfactory completion of the Compliance Audit, any withheld allocations will be paid to the City including interest determined using the current LAIF rate. The Board may approve Compliance Audit Deadline extensions, if the Board finds: (1) the Compliance Audit was not completed timely for reasons outside of the jurisdiction's control, such as federal, state, and GASB reporting requirements, or catastrophic events; or (2) it is in the best interests of SBCTA to grant the extension.

c. SBCTA staff shall be responsible for requesting from the Board any extensions related to Auditor performance.

Policy MDLS-22 Remedies

a. If a jurisdiction's annual Compliance Audit determines that the jurisdiction used Measure I Transportation Sales Tax Funds for ineligible expenses, the jurisdiction shall immediately repay the Measure I Transportation Sales Tax Fund in an equal amount through an internal fund transfer from another source. Repayment will include interest that would have been earned in the Measure I Transportation Sales Tax Fund from the time of ineligible expenditure to date of repayment.

b. If a jurisdiction's annual Compliance Audit fails to be completed with an unmodified opinion by the Compliance Audit Deadline, which may be extended pursuant to Policy MDLS-21, the jurisdiction shall immediately repay the Measure I Transportation Sales Tax Fund through an internal fund transfer from another source, in the amount of the Measure I Local Street allocation for the subject fiscal year of annual Compliance Audit findings of unsubstantiated or questioned costs. Repayment will include interest that would have been earned in the Special Measure I Transportation Sales Tax Fund from the time of ineligible expenditure to date of repayment.

c. If the jurisdiction is unable to make such immediate repayment under MDLS-22 (a) or (b), the jurisdiction shall not receive its Local Street Allocation pass-through payments until the repayment amount of ineligible expenses, unsubstantiated costs, or questioned costs, have been withheld by SBCTA. Repayment will include interest that would have been earned in the Special Measure I Transportation Sales Tax Fund from the time of ineligible expenditure to date of repayment.

d. If the jurisdiction enters into a Repayment Agreement with SBCTA, as approved by the jurisdiction and the SBCTA Board of Directors, providing for repayment of the amounts owed under MDLS-22 (a) or (b) over a period not to exceed five (5) years, SBCTA will return any pass-

through funds withheld. SBCTA will recommence withholding Local Street Allocation pass-through funds if the jurisdiction fails to comply with the terms of the Repayment Agreement.

e. If a jurisdiction has not completed an annual Compliance Audit within two years after the expiration of Measure I 2010-2040~~by the sunset of the current measure~~, any withheld funds will be distributed to other compliant jurisdictions within that subarea. The allocation will be based on the process in ~~s~~Section IV.A. of this ~~p~~Policy after removing the jurisdiction not meeting the audit requirement.

G. Maintenance of Effort Requirements

Policy MDLS-23: The SBCTA Board of Directors shall retain authority over actions related to these Maintenance of Effort (MOE) requirements.

Policy MDLS-24: In accordance with California Public Utilities Code 190300 and Ordinance No. 04-01 of the San Bernardino County Transportation Authority, Local Street Program funds shall not be used to supplant existing local discretionary funds being used for street and highway purposes.

Policy MDLS-25: SBCTA shall monitor local agency use of General Fund for street and highway purposes relative to their use prior to Measure I 2010-2040, which shall be referred to as the MOE base year level.

Policy MDLS-26: The following requirements are to provide guidance on the determination of a MOE base year level.

a. The MOE base year level shall be equivalent to the discretionary General Fund expenditures for transportation-related construction and maintenance activities consistent with Policy MDLS-14 in Fiscal Year 2008/2009.

b. Jurisdictions may propose deductions to the recorded expenditures for the following:

   1) Expenditures for unusual circumstances that increased the MOE base year level arbitrarily outside of the normal on-going General Fund expenditures, e.g. General Fund loans to other transportation-related funds, emergency repairs, or special projects.

   2) Administrative/overhead costs that were not project-specific, i.e. staff time for transportation staff was charged to a general “program” budget rather than charged directly to specific projects.

c. The proposed MOE base year level shall be adopted by resolution of the governing body.

d. The Independent Taxpayer Oversight Committee (ITOC) will review the proposed MOE base year levels, including the proposed deductions, as adopted by resolution of the governing body, and provide a recommendation to the SBCTA Board of Directors for approval.

e. The MOE base year level as approved by the SBCTA Board of Directors shall remain in effect until the expiration of Measure I 2010-2040.

Policy MDLS-27: Jurisdictions shall annually provide a statement in the resolution of the governing body adopting the Five Year Capital Improvement Plan that acknowledges the jurisdiction will maintain General Fund expenditures for transportation-related construction and maintenance activities at the required MOE base year level in that fiscal year. Jurisdictions whose MOE base year level is determined to be $0 are not required to provide this statement in the resolution.

Policy MDLS-28: The MOE requirement shall be tracked and verified as part of the annual Measure I Local Street Program audit. This will be accomplished by comparing the discretionary General Fund expenditures for transportation-related construction and maintenance activities consistent with Policy MDLS-14 to the MOE base year level.

Policy MDLS-29: General Fund expenditures in excess of the MOE base year level will carry over to subsequent fiscal years and can be applied in a future year to offset the amount the local agency may need to meet the MOE requirement. Carryover balances will be documented in the annual Measure I Local Street Program audit.

Policy MDLS-30: If the annual Measure I Local Street Program audit indicates that the required MOE base level is not being met, then the jurisdiction has the following four fiscal years to make up the amount. If the audit following those four fiscal years indicates the jurisdiction is still below the MOE

base year level, SBCTA will immediately stop disbursing Measure I Local Street Program funds until an amount equivalent to the MOE base year level shortfall has been withheld. The withheld funds will be disbursed to the jurisdiction upon demonstration that the jurisdiction has met the MOE requirements.

Policy MDLS-31: The following provides guidance on resolution of MOE base year level shortfalls at the expiration of Measure I 2010-2040.

a. If the jurisdiction has not resolved a MOE base year level shortfall within two years after the expiration of Measure I 2010-2040, any withheld funds will be distributed to other compliant jurisdictions within that subarea. The allocation will be based on the process in Section IV.A of this Policy after removing the jurisdiction not meeting the audit requirement.

b. If any Measure I Local Street Program audit after Fiscal Year 2033/2034 indicates that the required MOE base year level was not met, then the jurisdiction has until Fiscal Year 2038/2039 to make up the amount. If the audit of Fiscal Year 2038/2039 indicates the jurisdiction is still below the MOE base level, the jurisdiction must pay the MOE base level shortfall to SBCTA for distribution to other compliant jurisdictions within that subarea. The allocation will be based on the process in Section IV.A of this Policy after removing the jurisdiction not meeting the audit requirement.

Policy MDLS-32: Prior to withholding or required repayment of Measure I Local Street Program funds, jurisdictions shall have an opportunity to appeal to the ITOC. The jurisdiction must present evidence to the ITOC demonstrating unusal circumstances or the need for special consideration. The ITOC will be responsible for making a recommendation to the SBCTA Board of Directors to either approve or deny the request for special consideration.

V. REVISION HISTORY

Revision No.	*Revisions*	*Adopted*
0	*Adopted by the Board of Directors.*	*04/01/2009*
1	Revisions adopted by the Board of Directors on January 8, 2014, Agenda Item 14.	01/08/2014
2	Revisions adopted by the Board of Directors on May 6, 2015, Agenda Items 6 & 18.	05/06/2015
3	Amended list of eligible expenses to be more consistent with the list of eligible expenses in the State Controller's Office Gas Tax Fund Guidelines. Modified remedy language in Policy MDLS-22. Approved by the BOD 9/6/17, Agenda Item 11.	09/06/2017
4	Addition of due date of Capital Improvement Plan in MDLS-2. BOD approved changes 7/11/18, Agenda Item 25.	07/11/2018
5	Clarified Capital Improvement Plan requirements, amended eligible expenditures to be consistent with current gas tax guidelines, added requirements for tracking equipment purchased with Measure I funds, and updated Compliance Audit Deadline extension requirements.	6/3/2020
6	Moved transit purposes from the ineligible list of projects to the eligible list of projects for consistency with the Expenditure Plan. BOD approved changes 3/3/21, Agenda Item 32.	3/3/2021
7	Amended Capital Improvement Plan requirements to remove limit on categorical expenditures, revise due date for amended Capital Improvement Plans, and remove the requirement to revise the list for projects where eligible expenditures exceed the estimate.	4/6/2022
8	Remedy added ~~Amended~~ to address if a jurisdiction does not complete a Compliance Audit within two years of Measure I sunsetting. ~~by the sunset of the current measure.~~	12/4/2024

San Bernardino County Transportation Authority		Policy	40016
Adopted by the Board of Directors	April 1, 2009	Revised	12/0424
Rural Mountain/Desert Subareas Local Street Program (MDLS) Measure I 2010-2040 Strategic Plan		Revision No.	8

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Table of Contents

I. PURPOSE

The purpose of this policy is to establish requirements for the Local Street Programs for the Colorado River, Morongo Basin, Mountains, and North Desert subareas, including project eligibility, adoption of Five Year Plans by local jurisdictions, accounting requirements, and development mitigation requirements.

II. REFERENCES

Ordinance No. 04-01 of the San Bernardino County Transportation Authority, Exhibit A – Transportation Expenditure Plan

SBCTA Congestion Management Program

III. DEFINITIONS

Local Street Program: Measure I program in all subareas that provides funds through a pass-through mechanism directly to local jurisdictions for expenditure on street and road construction, repair, maintenance and other eligible local transportation priorities. Local Street Program funds can be used flexibly for any eligible transportation purpose determined to be a local priority, including Local Street, major highways, state highway improvements, freeway interchanges, transit, and other improvements/programs to maximize use of transportation facilities.

Allocation: An action by the SBCTA Board of Directors to assign a specific amount of Measure I funds from a Measure I program to a project. The allocation decision is made annually by the Board of Directors by March of each year. Allocation of Local Street Program funds occur monthly as a direct pass-through to local jurisdictions.

Five-Year Plan: A plan of projected local jurisdiction expenditures for the next five years on local projects eligible for Local Street Program funds, updated annually and submitted to SBCTA by local jurisdictions.

Independent Taxpayer Oversight Committee: A "Mandated Taxpayer Safeguard" established by Ordinance 04-01 for Measure I 2010-2040 to provide citizen review and to ensure that all Measure I funds are spent in accordance with provisions of the Measure I Expenditure Plan and Ordinance.

Maintenance of Effort: The requirement that Measure I funding will supplement and not replace the existing local discretionary funding being used for street and highway purposes.

Maintenance of Effort Base Year Level: The amount of General Fund used for street and highway purposes in Fiscal Year 2008/2009 prior to Measure I 2010-2040 as adopted by the SBCTA Board of Directors.

IV. POLICIES FOR THE RURAL MOUNTAIN/DESERT SUBAREAS LOCAL STREET PROGRAM

A. Local Street Allocation

Policy MDLS-1: 70% of revenue collected in a subarea shall be apportioned for Local Street Projects. After reservation of 2% collected in the subarea for Project Development and Traffic Management Systems, each jurisdiction shall receive an allocation from 68% of the Measure I revenue. The allocation methodology is determined based on:

- 50% population. The population estimate for making the per capita calculation shall be determined by SBCTA each year based on the State Department of Finance population estimate. Annual adjustments to the population estimates are made mid-year, based on availability of DOF estimates. Following approval of the population estimates by the Board, adjustments will be made to the local pass through fund allocations retroactive to January 1 of the year.
- 50% return to source. The sales tax estimates provided by the State Board of Equalization, updated quarterly based on the prior quarter's financial data, shall be used as the basis for making the return to source calculations.

Policy MDLS-2: Local jurisdictions shall not receive their Local Street Program allocation until they have submitted their annual adopted update of their Five-Year Plan. The due date to submit the Five-Year Plan to SBCTA is September 1 of each year. If the Five-Year Plan has not been received by the due date, the pass through payments will be withheld. All withheld pass through payments will be released upon receipt of the local jurisdiction governing body's adopted Five-Year Plan.

Policy MDLS-3: The Local Street Allocation shall be remitted to local jurisdictions monthly.

Policy MDLS-4: Local Street Allocations remitted from January 1 until such time as the State Department of Finance has issued their population figures and SBCTA has made the per capita calculation, shall be based on the prior year's calculation. Once the per capita calculation has been made, the calculation will be applied retroactively to January 1 and amounts received by local jurisdictions will be adjusted to account for the difference in the amount remitted during the retroactive period and the amount that should have been remitted adjusted for the new per capita calculation.

Policy MDLS-5: Local Street Allocations sales tax generation portion will be based on the prior quarter's data. Because of the lag in receiving sales tax data from the Board of Equalization, the Sales Tax Generation calculations for that portion of the Local Street Allocation will be calculated using the data from the prior quarter. (Example: During the months of January, February and March SBCTA will use the local sales tax generation figure derived from the fourth quarter of the previous calendar year.)

Policy MDLS-6: SBCTA will make the monthly allocations using the following procedure:

a. Determine total amount of Measure I Sales Tax generated in the subarea from information submitted by the State Board of Equalization.

b. Mutiply the total Measure I Sales Tax received for the month by 0.68 to arrive at the total subarea Local Street Allocation.

c. Divide the Local Street Program fund into two 50% pools of funding: Allocate the two pools of funding based on:

   1) a jurisdiction's population share of the entire subarea population.

   2) jurisdiction's share of sales tax generation within the total subarea.

d. Add the population based component and the sales tax based component of each jurisdiction's allocation to arrive at the total Local Street Allocation for each jurisdiction.

e. Remit payment of Local Street Program fund to local jurisdiction.

Policy MDLS-7: Upon each jurisdiction in a particular subarea making a finding that an increase in Senior and Disabled Transit Service is needed to meet the unmet transit needs of senior and disabled users, the Local Street allocation may be reduced and that allocation may be shifted to the Senior and Disabled Transit Service Program for that subarea.

B. Development Fair Share Contribution

Policy MDLS-8: A development mitigation fair share contribution is required by Measure I 2010-2040 for all capacity improvement projects in the Rural Mountain/Desert subarea for transportation facilities funded all or in part with Local Street Program allocations as identified by a Traffic Impact Analysis (TIA) report as required by the Congestion Management Program. The amount of the development mitigation for each project is defined by the traffic mitigation measures identified in the related TIA reports.

Policy MDLS-9: Annually as part of its audit of each jurisdictions' use of Measure I funds, SBCTA will specifically look to make sure that the development mitigation towards capacity improvements identified in TIAs is accounted for. If a material finding is made in the audit showing that a contribution of development mitigation was not made as identified by a TIA, then SBCTA may, as the agency responsible for the Congestion Management Program, withhold Section 2105 Gas Tax funds or Measure I Local Street Allocations until the jurisdiction shows that they are in compliance with the Congestion Management Plan.

C. Five-Year Plan

Policy MDLS-10: Each local jurisdiction is required to annually adopt and submit to SBCTA by September 1 of each year a Five-Year Capital Improvement Plan which details the specific projects to be funded using Measure I Local Pass-Through Funds. Expenditures of Measure I Local Pass-Through Funds must be detailed in the Five-Year Capital Improvement Plan and adopted by resolution of the governing body. Expenditures can only be made on projects listed in the current Five Year Capital Improvement Plan.

Policy MDLS-11: Five-Year Capital Improvement Plans shall:

a. Specifically identify projects by either 1) street name, boundaries, and project type, subject to eligibility requirements listed in Section D below, or 2) defining the project as a program of work without any identified streets, such as a pavement management program, transportation system improvements, routine roadway maintenance or other miscellaneous transportation-related expenditures as identified in Policy MDLS-14. Projects defined as a program of work shall not include capacity enhancements.

b. Constrain the total annual amount of planned expenditures to 150% of SBCTA's forecasted revenue for Measure I Local Pass-Through Funds, revenue resulting from bonds secured by Measure I revenue, and remaining balances from previous year allocations.

c. Use the SBCTA-approved forms and/or online database. Instructions will be issued to the City Manager annually prior to the deadline.

Policy MDLS-12: No longer applicable.

Policy MDLS-13: The Five-Year Capital Improvement Plan shall be the basis for the annual audit. Jurisdictions will have flexibility in adding and/or deleting projects in their current Five-Year Capital Improvement Plan based on the necessities of the jurisdiction, and subject to eligibility requirements listed in Section D below. However, in order for a project to be eligible for expenditure of Local Street funds, it must be listed in the current Five-Year Capital Improvement Plan. If a revised Capital Improvement Plan is necessary to reflect added projects, it must be adopted by resolution of the governing body and provided to SBCTA by September 1 of each fiscal year for use in the annual audit. If the Capital Improvement Plan is not modified to reflect the changes to the project list, an audit finding will result. If the audit finding is not corrected, the project will not be eligible for expenditures of Local Street funds.

D. Eligible Expenditures

Policy MDLS-14: Eligible expenditures include construction, maintenance, and overhead for transportation related purposes only. Included below are definitions and types of eligible expenditures by category.

a. Construction

Construction shall be defined as the building or rebuilding of streets, roads, bridges, and acquisition of rights-of-way or their component parts to a degree that improved traffic service is

provided and geometric or structural improvements are effected including allocated administration and engineering necessarily incurred and directly related to the above.

Construction work can be separated into four categories:

1) New Construction – A construction that substantially deviates from the existing alignment and provides for an entirely new street or roadbed for the greater parts of its length.

2) Reconstruction – A construction involving realignment or the use of standards well above those of the existing element, whereby the type or the geometric and structural features are significantly changed.

3) Preventative Maintenance – Includes, but is not limited to, roadway activities such as joint and shoulder rehabilitation, heater re-mix, seal coats, corrective grinding of PCC1 pavement, and restoration of drainage systems.

4) 3R Work – All other work that does not fall into the above-defined categories for new construction, reconstruction, or preventative maintenance and typically involves the improvement of highway pavement surfaces through resurfacing, restoration, or rehabilitation. 3R Work is generally regarded as heavy, non-routine maintenance designed to achieve a ten-year service life. Specifically, 3R Work is defined as the following:

   - *Resurfacing* generally consists of placing additional asphalt concrete over a structurally sound highway, street, or bridge that needs treatment to extend its useful service life.
   - *Restoration* means returning a road, street, structure, or collateral facility to the condition existing after original construction.
   - *Rehabilitation* implies providing some betterments, such as upgrading guardrail or widening shoulders.

   The following examples of construction expenditures are grouped by types of work:

Expenditures	*Types of Work*	
Additions	1.	The addition of a frontage street or road
	2.	Addition of auxiliary lanes such as speed change, storage, or climbing lanes
Barriers	3.	Earthwork protective structures within or adjacent to the right-of-way area
	4.	Extensions and new installation of walls
	5.	Replacement of retaining walls to a higher standard
	6.	Extension of new installation of guardrails, fence lines, raised medians, or barriers for traffic safety
Bikeways	7.	Construction of bikeways where they are an integral part of the streets and highway system
	8.	Construction of bicycle or pedestrian underpasses or overhead crossings for the general public use
Bridges	9.	Reconstruction of an existing bridge or installation of a new bridge
	10.	Widening of a bridge
	11.	Replacement of bridge rails and floors to a higher standard
Curbs, etc.	12.	Installation or extension of curbs, gutters, sidewalks, or underdrain (including improvements to handicap ramps to make them ADA compliant).
Drainage	13.	A complete reconstruction or an addition to a culvert including cross culverts regardless of angle of crossing; storm drains, culverts, or drainage channels which are required to be constructed or reconstructed by improvement of the roadway; longitudinal storm drains or other longitudinal culverts, including manholes; cross longitudinal gutters at intersections; and catch basins and related pipes. The term “catch basin” shall include outlet structures or curb openings. An eligible “catch basin” must

		be located within the road or street system rights-of-way, or as close to the curb return joining the road or street system as practicable, considering the location of obstructions and/or hydraulic considerations.
	14.	Extending old culverts and drains and replacing headwalls
Interagency Projects	15.	Road improvements within an adjoining jurisdiction as long as the improvements are made within the County of San Bernardino
	16.	Road improvements and maintenance on a state highway as long as the appropriate agreement with Caltrans is in place
	17.	Maintenance or construction on alleys that have been formally accepted into the city or county street system
	18.	Development of facilities associated with Metrolink commuter rail operations that are determined to be a local responsibility
Landscaping	19.	Installation or addition to landscape treatment such as sod, shrubs, trees, irrigation, etc. along the street or road right-of-way
	20.	Purchase of land for “greenbelt” if needed to mitigate the environmental impact of a street or road construction project
Layout	21.	Change of alignment, profile, and cross-section
	22.	Reconstruction of an intersection and its approximate approaches to a substantially higher type involving a change in its character and layout including changes from a plain intersection to a major channelized intersection or to a grade separation and ramps
Lighting	23.	Installation, replacement, or expansion of street or road lighting system
Associated Planning and Design	24.	Project development, planning studies, and design for eligible transportation projects
	25.	Expenses incurred in attending or participating in transportation and traffic engineering sponsored programs or training conducted for street or road purposes
	26.	Engineering review of plans for construction of Valley Measure I Major Streets projects
Relocation	27.	The removal of old street and roadbeds and structures, and detour costs when connected with a construction project
	28.	Replacement in kind, when legally required, of structures that are required to be relocated for street and road purposes
Signs and Signals	29.	Installation of original traffic signs and markers on routes
	30.	Replacement of all major signs or traffic control devices on a street or road
	31.	The installation of a new sign or the replacement of an old sign with one of superior design such as increased size, illumination, or overhead installation
	32.	Installation or improvements of traffic signal controls at intersections and protective devices at railroad grade crossings
	33.	Purchase and installation of traffic signal control equipment including traffic actuated equipment, radio or other remote control devices and related computers, software, and that portion of preemption equipment not mounted on motor vehicles
Striping	34.	Painting or rearrangement of pavement striping and markings, or repainting to a higher standard
Surface Work	35.	Original surfacing of shoulders
	36.	Improvement of a surface to a higher type of material
	37.	Placing sufficient new material on soil surface or gravel street or road to substantially improve the quality or the original surface

	38.	Bituminous material of 1” or more placed on bituminous or concrete material - a lesser thickness may be considered construction provided the engineer shall certify that the resulting pavement is structurally adequate to serve anticipated traffic
	39.	Remix existing bituminous surfacing with added materials to provide a total thickness of one inch or more – a lesser thickness may be considered construction provided the engineer certifies that the resulting pavement is structurally adequate to serve anticipated traffic
	40.	Stabilization of street or road base by additive, such as cement, lime, or asphaltic material
Transit	41.	Public transit systems, including rail, and related purposes
Widening	42.	Widening of existing street or roadbed or pavement, with or without resurfacing
	43.	Resurfacing, stabilizing, or widening of shoulders including necessary connections to side streets or road approaches
Other eligible expenditures	44.	Matching funds to federal or state contributions to a roadway project
	45.	Park and ride facilities
	46.	Undergrounding utilities or utility relocation only if part of a new roadway construction or documented as a legal road or street obligation.
	47.	Rubberized railroad grade crossing material or repair of grade crossings
	48.	Preliminary and construction engineering may be claimed on the percentage basis approved in previous years by Caltrans for contract work.
	49.	Relocation expenses necessitated by right-of-way acquisitions in accordance with the applicable government codes on relocation assistance.

b. Maintenance

Maintenance shall be defined as the preservation and upkeep of a street or road to its constructed condition and the operation of a street or road facility and its integral services to provide safe, convenient, and economical highway transportation.

Physical Maintenance is preservation and upkeep of a highway, including all of its elements, in as nearly as practicable its original condition or its subsequently improved condition.

Traffic Services include the operation of a highway facility, and services incidental thereto, to provide safe, convenient, and economic travel.

The following are examples of maintenance expenditures:

1.	Scarifying, reshaping, and restoring material losses
2.	Applying dust palliatives
3.	Patching, repairing, surface treating, and joint filling on bituminous or concrete surfaces
4.	Jacking concrete pavements
5.	Repairing traveled way and shoulders
6.	Adding bituminous material of less than 1” to bituminous material including seal coats
7.	Remixing existing bituminous surfacing with added materials to provide a total thickness of less than 1” (see exception under Construction, example 39)
8.	Patching operations including base restoration

9.	Resealing street or road shoulders and side street and road approaches
10.	Reseeding and resodding shoulders and approaches
11.	Reshaping drainage channels and side slopes
12.	Restoring erosion controls
13.	Cleaning culverts and drains
14.	Removing slides and restoring facilities damaged by slides (additional new facilities shall be considered construction)
15.	Mowing, tree trimming, and watering within the street right-of-way
16.	Replacing topsoil, sod, shrubs, trees, irrigation facilities, etc., on streets and roadsides
17.	Repairing curb, gutter, rip-rap, underdrain, culverts, and drains
18.	Cleaning, painting, and repairing bridges and structures
19.	Performing all snow control operations such as erection of snow fences and the actual removal of snow and ice from the traveled way
20.	Repainting pavements, striping, and markings
21.	Repainting and repairing signs, guard rails, traffic signals, lighting standards, etc.
22.	Adding small numbers of conventional traffic control devices including signs
23.	Servicing street or road lighting and traffic control devices
24.	Furnishing power for street or road lighting and traffic control devices including payment for the cost of power
25.	Developing and maintaining programs that enhance management of transportation facilities such as travel demand models and pavement management programs
26.	Purchase of street-related equipment used exclusively for road maintenance
27.	Purchase of rubberized railroad grade crossing material for repair of grade crossings

c. Administrative Costs

1) Direct Costs

Direct costs are expenditures incurred solely and specifically for eligible street or road purposes or projects. Direct costs include contract payments, right-of-way acquisition, direct material and forced labor costs, and the salaries, wages, fringe benefits and related costs of employees directly participating on street and road purpose projects. Typical direct costs include:

- Compensation of employees for the time devoted and identified specifically to the performance of the eligible street or road project(s). Direct cost typically includes first level of supervision dedicated to the project. Supervisory activities above the first level of supervision may be recoverable as indirect costs.
- Costs of materials consumed or expended specifically for the purpose in which they were authorized.
- Equipment and other approved capital expenditures.
- Expense items or services contracted, or furnished specifically for the project to carry out the purpose in which they were authorized.

2) Indirect Costs (Overhead)

Indirect costs shall be defined as those elements of costs that are incurred for eligible street or road purposes that cannot be readily identified to a particular project. Cities and counties are allowed to use Measure I local funds to reimburse for indirect costs provided that there is documentation that amounts reimbursed were fairly and equitable allocated.

Overhead will only be allowed via an approved cost allocation plan or an equitable and auditable distribution of overhead among all departments.

Indirect costs typically include:

- Cost of overall supervision of field operations including payroll, facilities, advertising, general government, department or general accounting/finance, procurement, top management, data processing, legal costs and bids
- Cost of shop supplies such as expendable small tools and non-permanent barricades, warning signs, and other devices

E. Ineligible Expenditures

Policy MDLS-15: Although many types of work may be referred to as "construction", this does not make these costs automatically eligible for expenditures of Measure I funds. To be eligible, the work must be for street or road purposes.

Following is a list of the types of expenditures that are not eligible for financing with Measure funds:

1.	Costs of rearranging non-street or road facilities, including utility relocation, when not a legal road or street obligation
2.	New (first installation of) utilities, including water mains, sanitary sewers, and other non-street facilities
3.	Cost of leasing property or right-of-way, except when required for construction work purposes on a temporary basis
4.	Cost of constructing or improving a street or area for parking purposes, except for the width normally required for parking adjacent to the traveled way and within the right-of-way, or when off-street parking facilities are constructed in lieu of widening a street to improve the flow of traffic
5.	Decorative lighting
6.	Park features such as benches, playground equipment and restrooms
7.	Work outside the right-of-way which is not a specific right-of-way obligation
8.	Equestrian under- and overpasses or other similar structures for any other special interest group unless as a part of a right-of-way obligation
9.	Construction, installation, or maintenance of cattle guards
10.	Maintenance or construction on alleys that have not been formally designated as part of a jurisdiction's street and road system
11.	Non-street and road-related salaries and benefits
12.	Driveways outside of the street and road right-of-way
13.	Purchase of electronic speed control devices or other non-highway related equipment
14.	Freeway telephone emergency system
15.	Interest charged for non-highway purposes
16.	Grantwriting consultant fees
17.	Debt service payments for non-voter-approved bonds, including Certificates of Participation
18.	Over-expended funds (deficit fund balance)
19.	Negative interest allocation
20.	The value of park or other city/county owned property rededicated for a street right-of-way.

F. Accounting Requirements

Policy MDLS-16: Each local jurisdiction shall establish a Special Measure I 2010-2040 Transportation Sales Tax Fund. This fund is a special revenue fund utilized to account for proceeds of specific revenue sources that are legally restricted to expenditures for street purposes. Jurisdictions should use the modified accrual basis of accounting.

Policy MDLS-17: The following requirements are to provide guidance on the specific accounting treatment as it relates to the Special Measure I Transportation Sales Tax Fund.

a. All allocations shall be deposited directly into the Special Measure I Transportation Sales Tax Fund.

b. Interest received by a jurisdiction from the investment of money in its Special Measure I Sales Tax Fund shall be deposited in the fund and shall only be used for street and road purposes.

c. Segregation must be maintained within the Special Measure I Transportation Sales Tax Fund to show separate balances for each subarea (County only).

d. If other revenues are commingled in the Special Measure I Transportation Sales Tax Fund, it is the responsibility of the jurisdiction to provide accurate and adequate documentation to support revenue and expenditure allocation, as well as segregated balances.

e. It is allowable to fund prior year expenditures with current year revenues and/or fund balance as long as funded projects are included in the current adopted Five-Year Capital Improvement Plan and accounting clearly identifies the project and other pertinent data to establish a clear audit trail.

f. If a project is deemed ineligible in the annual Compliance Audit, the Measure I funds used on that project must be repaid to the Special Measure I Transportation Sales Tax Fund in accordance with Policy MDLS-21.

g. Temporary loans of Measure I local funds can only be made among other Measure I accounts/projects if project and other pertinent data is identified to establish a clear audit trail.

h. If Measure I funds are used to purchase salable excess right-of-way, any unsold portions should be reported to SBCTA including the reasons for holding it and the anticipated date of disposal.

Policy MDLS-18: Any interest earned on investment of Measure I Transportation Sales Tax Funds must be deposited in the Special Measure I Transportation Sales Tax Fund. Any jurisdiction not electing to invest its Measure I funds but at the same time investing most of its other available funds should deposit the Measure I funds in a separate account to clearly indicate that no such monies were invested. If Measure I Transportation Sales Tax funds are invested, they must receive their equitable proration of interest earned on the total funds invested. Several methods are available to determine an equitable distribution of interest earned. Whatever method is employed, it will be analyzed during audit to determine reasonableness and confirm distribution to the Special Measure I Transportation Sales Tax Fund. It is recommended that a distribution based on average monthend cash balances be employed. In addition, if the interest distribution methodology allows for negative distributions, they will be disallowed. No interest charges based on negative cash and fund balances will be allowed.

Policy MDLS-19: Reimbursements of Measure I Transportation Sales Tax Funds previously expended for street and road construction or right-of-way purposes, from whatever source, must be deposited in the Special Measure I Transportation Sales Tax Fund. This includes but is not limited to:

- Federal Aid Urban projects
- Redevelopment agencies
- Cooperative agreements
- Equipment use rates for equipment purchased with Measure I funds and used for non-street purposes
- Equipment dispositions
- Right-of-way dispositions
- Federal and safety projects

Policy MDLS-20: Records

a. Source Documentation - On construction or purchase of right-of-way or equipment, all expenditures charged to the Measure I Transportation Sales Tax Fund must be supported by a warrant or other source document (invoice, requisition, time sheet, equipment rental charge, engineering plans, specifications and other pertinent data) clearly identifying the project and other pertinent data to establish a clear audit trail. If street-related equipment is purchased with Measure I local funds, the jurisdiction must keep accurate records on acquisition cost, use, maintenance, and disposition.

b. Retention Period - All source documents, together with the accounting records, are deemed to be the official records of the jurisdiction and must be retained by the jurisdiction for five (5) years.

Policy MDLS-21: Compliance Audit Deadline

a. A jurisdiction's annual Compliance Audit must be completed by December 31st (Compliance Audit Deadline). SBCTA staff shall monitor the scheduling and progress of the audits to ensure prompt communication by the Auditor after information submittals by jurisdiction, and timely completion of the final MSI audit report.

b. If a jurisdiction is not able to meet the Compliance Audit Deadline, the jurisdiction may submit a letter requesting an extension and specifying the period of the requested extension for consideration by the General Policy Committee at their February meeting and the Board at their March meeting. Letters must be received timely for inclusion in the agenda. If a letter is not submitted and the Compliance Audit has not been completed, notification will be made to the Board at their March meeting that future allocations of Local Pass-Through Funds for the jurisdiction will be withheld until the Compliance Audit has been completed. Upon satisfactory completion of the Compliance Audit, any withheld allocations will be paid to the City including interest determined using the current LAIF rate. The Board may approve Compliance Audit Deadline extensions, if the Board finds: (1) the Compliance Audit was not completed timely for reasons outside of the jurisdiction's control, such as federal, state, and GASB reporting requirements, or catastrophic events; or (2) it is in the best interests of SBCTA to grant the extension.

c. SBCTA staff shall be responsible for requesting from the Board any extensions related to Auditor performance.

Policy MDLS-22 Remedies

a. If a jurisdiction's annual Compliance Audit determines that the jurisdiction used Measure I Transportation Sales Tax Funds for ineligible expenses, the jurisdiction shall immediately repay the Measure I Transportation Sales Tax Fund in an equal amount through an internal fund transfer from another source. Repayment will include interest that would have been earned in the Measure I Transportation Sales Tax Fund from the time of ineligible expenditure to date of repayment.

b. If a jurisdiction's annual Compliance Audit fails to be completed with an unmodified opinion by the Compliance Audit Deadline, which may be extended pursuant to Policy MDLS-21, the jurisdiction shall immediately repay the Measure I Transportation Sales Tax Fund through an internal fund transfer from another source, in the amount of the Measure I Local Street allocation for the subject fiscal year of annual Compliance Audit findings of unsubstantiated or questioned costs. Repayment will include interest that would have been earned in the Special Measure I Transportation Sales Tax Fund from the time of ineligible expenditure to date of repayment.

c. If the jurisdiction is unable to make such immediate repayment under MDLS-22 (a) or (b), the jurisdiction shall not receive its Local Street Allocation pass-through payments until the repayment amount of ineligible expenses, unsubstantiated costs, or questioned costs, have been withheld by SBCTA. Repayment will include interest that would have been earned in the Special Measure I Transportation Sales Tax Fund from the time of ineligible expenditure to date of repayment.

d. If the jurisdiction enters into a Repayment Agreement with SBCTA, as approved by the jurisdiction and the SBCTA Board of Directors, providing for repayment of the amounts owed under MDLS-22 (a) or (b) over a period not to exceed five (5) years, SBCTA will return any pass-

through funds withheld. SBCTA will recommence withholding Local Street Allocation pass-through funds if the jurisdiction fails to comply with the terms of the Repayment Agreement.

e. If a jurisdiction has not completed an annual Compliance Audit within two years after the expiration of Measure I 2010-2040, any withheld funds will be distributed to other compliant jurisdictions within that subarea. The allocation will be based on the process in Section IV.A. of this Policy after removing the jurisdiction not meeting the audit requirement.

G. Maintenance of Effort Requirements

Policy MDLS-23: The SBCTA Board of Directors shall retain authority over actions related to these Maintenance of Effort (MOE) requirements.

Policy MDLS-24: In accordance with California Public Utilities Code 190300 and Ordinance No. 04-01 of the San Bernardino County Transportation Authority, Local Street Program funds shall not be used to supplant existing local discretionary funds being used for street and highway purposes.

Policy MDLS-25: SBCTA shall monitor local agency use of General Fund for street and highway purposes relative to their use prior to Measure I 2010-2040, which shall be referred to as the MOE base year level.

Policy MDLS-26: The following requirements are to provide guidance on the determination of a MOE base year level.

a. The MOE base year level shall be equivalent to the discretionary General Fund expenditures for transportation-related construction and maintenance activities consistent with Policy MDLS-14 in Fiscal Year 2008/2009.

b. Jurisdictions may propose deductions to the recorded expenditures for the following:

   1) Expenditures for unusual circumstances that increased the MOE base year level arbitrarily outside of the normal on-going General Fund expenditures, e.g. General Fund loans to other transportation-related funds, emergency repairs, or special projects.

   2) Administrative/overhead costs that were not project-specific, i.e. staff time for transportation staff was charged to a general “program” budget rather than charged directly to specific projects.

c. The proposed MOE base year level shall be adopted by resolution of the governing body.

d. The Independent Taxpayer Oversight Committee (ITOC) will review the proposed MOE base year levels, including the proposed deductions, as adopted by resolution of the governing body, and provide a recommendation to the SBCTA Board of Directors for approval.

e. The MOE base year level as approved by the SBCTA Board of Directors shall remain in effect until the expiration of Measure I 2010-2040.

Policy MDLS-27: Jurisdictions shall annually provide a statement in the resolution of the governing body adopting the Five Year Capital Improvement Plan that acknowledges the jurisdiction will maintain General Fund expenditures for transportation-related construction and maintenance activities at the required MOE base year level in that fiscal year. Jurisdictions whose MOE base year level is determined to be $0 are not required to provide this statement in the resolution.

Policy MDLS-28: The MOE requirement shall be tracked and verified as part of the annual Measure I Local Street Program audit. This will be accomplished by comparing the discretionary General Fund expenditures for transportation-related construction and maintenance activities consistent with Policy MDLS-14 to the MOE base year level.

Policy MDLS-29: General Fund expenditures in excess of the MOE base year level will carry over to subsequent fiscal years and can be applied in a future year to offset the amount the local agency may need to meet the MOE requirement. Carryover balances will be documented in the annual Measure I Local Street Program audit.

Policy MDLS-30: If the annual Measure I Local Street Program audit indicates that the required MOE base level is not being met, then the jurisdiction has the following four fiscal years to make up the amount. If the audit following those four fiscal years indicates the jurisdiction is still below the MOE base year level, SBCTA will immediately stop disbursing Measure I Local Street Program funds until

an amount equivalent to the MOE base year level shortfall has been withheld. The withheld funds will be disbursed to the jurisdiction upon demonstration that the jurisdiction has met the MOE requirements.

Policy MDLS-31: The following provides guidance on resolution of MOE base year level shortfalls at the expiration of Measure I 2010-2040.

a. If the jurisdiction has not resolved a MOE base year level shortfall within two years after the expiration of Measure I 2010-2040, any withheld funds will be distributed to other compliant jurisdictions within that subarea. The allocation will be based on the process in Section IV.A of this Policy after removing the jurisdiction not meeting the audit requirement.

b. If any Measure I Local Street Program audit after Fiscal Year 2033/2034 indicates that the required MOE base year level was not met, then the jurisdiction has until Fiscal Year 2038/2039 to make up the amount. If the audit of Fiscal Year 2038/2039 indicates the jurisdiction is still below the MOE base level, the jurisdiction must pay the MOE base level shortfall to SBCTA for distribution to other compliant jurisdictions within that subarea. The allocation will be based on the process in Section IV.A of this Policy after removing the jurisdiction not meeting the audit requirement.

Policy MDLS-32: Prior to withholding or required repayment of Measure I Local Street Program funds, jurisdictions shall have an opportunity to appeal to the ITOC. The jurisdiction must present evidence to the ITOC demonstrating unusal circumstances or the need for special consideration. The ITOC will be responsible for making a recommendation to the SBCTA Board of Directors to either approve or deny the request for special consideration.

V. REVISION HISTORY

Revision No.	*Revisions*	*Adopted*
0	*Adopted by the Board of Directors.*	*04/01/2009*
1	Revisions adopted by the Board of Directors on January 8, 2014, Agenda Item 14.	01/08/2014
2	Revisions adopted by the Board of Directors on May 6, 2015, Agenda Items 6 & 18.	05/06/2015
3	Amended list of eligible expenses to be more consistent with the list of eligible expenses in the State Controller's Office Gas Tax Fund Guidelines. Modified remedy language in Policy MDLS-22. Approved by the BOD 9/6/17, Agenda Item 11.	09/06/2017
4	Addition of due date of Capital Improvement Plan in MDLS-2. BOD approved changes 7/11/18, Agenda Item 25.	07/11/2018
5	Clarified Capital Improvement Plan requirements, amended eligible expenditures to be consistent with current gas tax guidelines, added requirements for tracking equipment purchased with Measure I funds, and updated Compliance Audit Deadline extension requirements.	6/3/2020
6	Moved transit purposes from the ineligible list of projects to the eligible list of projects for consistency with the Expenditure Plan. BOD approved changes 3/3/21, Agenda Item 32.	3/3/2021
7	Amended Capital Improvement Plan requirements to remove limit on categorical expenditures, revise due date for amended Capital Improvement Plans, and remove the requirement to revise the list for projects where eligible expenditures exceed the estimate.	4/6/2022
8	Remedy added to address if a jurisdiction does not complete a Compliance Audit within two years of Measure I sunsetting.	12/4/2024

Minute Action

AGENDA ITEM: 8

Date: November 13, 2024

Subject:
Release Request for Proposals No. 25-1003210 for On-Call Audit and Price Review Services

Recommendation:
That the General Policy Committee recommend the Board, acting as the San Bernardino County Transportation Authority:

Authorize the release of Request for Proposals (RFP) No. 25-1003210 for On-Call Auditing and Price Review Services.

Background:
San Bernardino County Transportation Authority (SBCTA) staff requests the release of a Request for Proposals (RFP) No. 25-1003210 for a Consultant to provide on-call auditing and price review services.

SBCTA is looking for one or more qualified firms to provide on-call support to help staff implement Board of Director adopted policies and Federal regulations concerning the procurement of goods and services.

Pre-Award Price Review Requirements: 1) Ensuring that the proposed labor rates, overhead rate (home and field), other direct costs, and fixed fees are reasonable, allowable, allocable, and compliant with the Federal Acquisition Regulations Part 31. 2) Evaluating if the pricing or cost data is up-to-date, accurate, and complete. 3) Requesting the California Department of Transportation Local Assistance Procedures Manual Consultant Annual Certification of Indirect Costs and Financial Management System (form 10K) from Prime contractors and subcontractors.

Architectural and Engineering Services: Additionally, SBCTA may conduct pre-award price reviews of the following types of procurements: Single bid procurements and sole source procurements.

SBCTA may request, on an as-needed basis, other auditing services relative to the finance and procurement functions, such as closeout audits for capital construction projects or other service contracts.

Staff recommends approval to release the RFP.

Financial Impact:
The recommended action was included in the adopted Budget for Fiscal Year 2024/2025 and funded with Measure I Administration and Transportation Development Act Administration funds in Program 01, Financial Management.

Reviewed By:
This item is not scheduled for review by any other policy committee or technical advisory committee. SBCTA General Counsel, Procurement Manager, and Enterprise Risk Manager have reviewed this item and the draft RFP.

Responsible Staff:
Lisa Lazzar, Chief Financial Officer

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RFP 25-1003210
SCOPE OF WORK

ON-CALL INTERNAL AUDIT AND PRICE REVIEW SERVICES

BACKGROUND

The San Bernardino County Transportation Authority (SBCTA) is the transportation planning agency for San Bernardino County. SBCTA manages joint regional planning efforts and works to develop an efficient multi-modal transportation system across the county.

SBCTA supports freeway construction projects, regional and local road improvements, train and bus transportation, railroad crossings, call boxes, ridesharing, congestion management efforts, and long-term planning studies. SBCTA administers major programs funded by Measure I, the half-cent sales tax collected throughout San Bernardino County to fund transportation upgrades. Voters approved the measure in 1989 and in 2004 overwhelmingly voted to extend it until 2040.

SERVICES

SBCTA is looking for one or more qualified firms to provide on-call support to help staff implement Board-adopted policies and Federal regulations concerning the procurement of goods and services.

Pre-Award Price Review Requirements

1) Ensuring that the proposed labor rates, overhead rate (home and field), other direct costs, and fixed fees are reasonable, allowable, allocable, and compliant with the Federal Acquisition Regulations (FAR) Part 31.2;

- A California Department of Transportation (Caltrans) Acceptance ID is acceptable if it matches the proposed rate. Documentation from Caltrans showing the accepted rate is required.

2) Evaluating if the pricing or cost data is up-to-date, accurate, and complete. Additionally, assess whether the Contractor's accounting system is sufficient for identifying, recording, and tracking costs; separating direct and indirect costs; and ensuring consistent accounting practices.

3) Requesting Caltrans Local Assistance Procedures Manual (LAPM) Consultant Annual Certification of Indirect Costs and Financial Management System (form 10K) from Prime contractors and Subcontractors.

SBCTA will perform pre-award price reviews for competitive procurements exceeding $150,000 when the proposal is assessed based on technical merit rather than cost. These procurements generally are for:

- Architectural and Engineering Services

Additionally, SBCTA may conduct pre-award price reviews of the following types of procurements:

- Single bid procurements
- Sole source procurements

Approximately 5 - 10 pre-award price reviews are required to be performed each fiscal year.

Other services may include audits and agreed-upon procedures to review reimbursement requests for programs, such as Project Advance Agreements and other pre-expenditures.

Audits Conforming to LAPM
LAPM Chapter 10 Consultant Selection
10.1.3 A&E Consultant Audit and Review Process, page 12, January 2024 or current equivalent.

This section outlines the audit and review process for A&E contracts that at any time use state or federal funds. All proposed A&E contracts and supporting documents are subject to audit or review by Caltrans' Independent Office of Audits and Investigations (IOAI), other state audit organizations, or the federal government.

Applicable Standards
State and federal requirements listed below, and specific contract requirements, serve as the standards for audits and reviews performed.

Local agencies, consultants, and subconsultants are responsible for complying with state, federal, and specific contract requirements. Local agencies are responsible for determining the eligibility of costs to be reimbursed to consultants.

Applicable standards include, but are not limited to:

- LAPM
- State and Federal agreements between local agencies and Caltrans, (i.e., Master Agreements);
- Project Program Supplemental Agreements;
- 23 United States Code (U.S.C.), Section 112 – Letting of Contracts;
- 40 U.S.C., Chapter 11-- the Brooks Act;
- 23 CFR, Chapter 1, Part 172 - Procurement, Management, and Administration of Engineering and Design Related Services;
- 23 CFR, Chapter 1 - Federal Highway Administration, Department of Transportation;
- 48 CFR, Federal Acquisition Regulation (FAR), Chapter 1, Part 31 - Contract Cost Principles and Procedures;
- 48 CFR, Chapter 99 – Cost Accounting Standards (CAS);
- 2 CFR, Part 200 – Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards;
- United States Government Accountability Office, Government Auditing Standards - Generally Accepted Government Auditing Standards (GAGAS);
- California Government Code sections 4525-4529;
- Proposed contract terms and conditions; and
- American Association of State Highway and Transportation Officials Audit Guide

Pre-Award Price Reviews

All pre-award price reviews shall be conducted following Government Auditing Standards issued by the Comptroller General of the United States as well as the cost principles identified in 48 CFR part 31. Auditing Firms will be selected from a pre-established or on-call list of firms to perform the pre-award price reviews on a sequential basis. Each of the pre-award price reviews should include some or all of the following objectives:

a. To ensure that the proposer's proposed labor rates, overhead rates, other direct costs, and fixed fee are reasonable, allowable, and allocable and in conformity with the Federal Acquisition Regulations;
b. To ensure the proposer(s) complied with applicable prevailing wage rates;
c. To ascertain that the pricing or cost data are current, accurate, and complete;
d. To determine whether the proposer(s) is financially sound and stable; and
e. To determine the adequacy of the proposer's accounting systems in order to identify, account for, record, and accumulate costs; to identify and segregate direct and indirect costs; and to determine consistency in accounting treatment of costs.

Written Reports

Independent Accountant's Report for Applying Agreed-Upon Procedures (AUP) will be issued for each pre-award price review performed. In addition to AUP exceptions, all issues or concerns arising while performing the AUPs, such as internal control issues, should be provided in the report. Reports will be submitted to SBCTA's Chief Financial Officer.

Other Services

SBCTA may request, on an as-needed basis, other auditing services relative to the finance and procurement functions, such as closeout audits for capital construction projects or other service contracts. For example, review of expenditures covered by Measure I revenue for compliance with the expenditure plan and program policies. Also, a review of internal control procedures and policies based on criteria outlined in Internal Control-Integrated Framework published by the Committee of Sponsoring Organizations of the Treadway Committee (the COSO Report), as well as the criteria for effective financial management systems established by the DTA, based on 49 CFR Part 18, Uniform Administrative Requirements for Grants and Cooperative Agreements on State and Local Governments (which was superseded by 2 CFR Part 200 and 2 CFR Part 1201 (for exceptions that the Department of Transportation received), Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards).

********** END OF SCOPE OF WORK **********

Minute Action

AGENDA ITEM: 9

Date: November 13, 2024

Subject:
Decommissioning and Removal of Call Boxes in San Bernardino County

Recommendation:
That the General Policy Committee recommend the Board, acting as the San Bernardino County Transportation Authority:

A. Approve decommissioning and removal of all call boxes on highways within San Bernardino County.

B. Approve termination of Contract No. 23-1003017 with Knightscope, Inc., for cause, as authorized under Section 18.2 of the contract, and in response to the documented deficiencies in contract performance as previously communicated to Knightscope, Inc.

C. Authorize the Executive Director, or his designee, to release an Invitation for Bids for a contractor to remove the call boxes and appropriately dispose of or recycle materials in coordination with California Department of Transportation and the California Highway Patrol.

D. Authorize the Executive Director, or his designee, to award the contract contingent upon the cost not exceeding the Fiscal Year 2024/2025 Budget for the Call Box Program.

Background:
In 1987, the San Bernardino County Transportation Authority (SBCTA) established itself as the San Bernardino County Service Authority for Freeway Emergencies (SB SAFE), following the enactment of Senate Bill 1199 in 1985. Under this authority, SBCTA operates a call box program that offers motorists traveling on multiple major highways in San Bernardino County access to a motorist aid call box, which, when activated, calls SBCTA's call answering center. Motorist aid calls may be forwarded to the California Highway Patrol (CHP) to assist the motorist with requesting Freeway Service Patrol (FSP) assistance, or by calling the motorists' roadside assistance provider (e.g., AAA or tow truck service) or a friend/family member. Motorist calls that are deemed an emergency (medical emergency, fire, debris on freeway, pedestrians on freeway, etc.) are forwarded directly to the CHP for assistance. Since the inception of the call box program in 1987, more than 1.5 million motorists have used the San Bernardino call box system.

SBCTA's call box network currently consists of 776 call boxes. Of those, 749 call boxes operate on the cellular network and 27 call boxes in remote areas operate on a satellite network. Each cellular and satellite call box is a battery-powered, solar-charged roadside terminal, with a microprocessor and a built-in digital cellular or satellite modem that allows for communications to the SBCTA call answering center. In the calendar year 2023, approximately 2,500 calls were made by motorists. Many of these calls for aid were on highways where cellular reception does not exist, and a significant number of calls were made from motorists who could not otherwise make a call due to a drained battery in their cell phone.

Of the 776 call boxes, 32 call boxes are in what is considered the "urban" areas of San Bernardino County (County) and 744 call boxes are in what is considered the "rural" areas

of the County. Call boxes in the urban region are predominately located along freeway transition areas. In rural areas the following highway segments have poor and/or inconsistent cellular coverage from at least one of the three major carriers (AT&T, Verizon, and T-Mobile): State Route (SR) 18, SR 38, SR 127, SR 330, US 95, US 395, and Fort Irwin Road. In these areas, a standard mobile cell phone may not be able to successfully connect to the cellular network. Because the call boxes are equipped with an external antenna (and some operate on the satellite communication network), the call boxes can provide a connection to the cellular network when a personal cell phone cannot. However, cell coverage is continually improving, and other options are becoming available for emergency calls. In addition, any 911 calls can typically be made on another provider's network even when the customer's own provider has a weak or non-existent signal.

With the advancement of technology and the proliferation of cellular phone ownership over the past 15-plus years, there has been a continued decline in the number of calls that have been completed by motorists who need assistance. SB SAFE took steps to evaluate and "right size" the call box system in 2015, resulting in the removal of 216 call boxes in 2016. Another system wide evaluation was completed in 2019, resulting in the removal of 245 call boxes in 2020. Both the 2016 and 2020 reduction of call boxes led to significant cost savings, in addition to more efficient operation of the call box program. The table below shows the number of call boxes and annual calls over the last 10 years. Almost half the calls are typically related to vehicles being disabled.

YEAR	# of CALL BOXES	# of CALLS per YEAR	Avg. # of CALLS per YEAR per CALL BOX
2015	1,240	7,030	5.67
2019	1,024	4,365	4.26
2022	777	2,565	3.30
2023	776	2,507	3.23

In late 2022, Knightscope, Inc., acquired CASE Systems (CASE), SBCTA's long-time call box maintenance contractor. CASE was the only qualified call box maintenance contractor in the State of California and was servicing every SAFE agency in the state. At the time, Knightscope hired all of the CASE call box field technicians and retained the owner of CASE to continue to maintain and address the services required through much of 2023. The contract was renewed in September 2023, given that, after its acquisition of CASE, Knightscope was the only qualified call box maintenance contractor available statewide.

In April of 2024, SBCTA staff became aware that Knightscope, Inc., had released the majority of the former CASE call box field technicians. Knightscope did not notify SBCTA of the change (they were released on March 8), and staff eventually found out about the release through confirmation from former CASE field technicians. The contract, under Article 15 "Key Personnel," provides that no changes may be made in Key Personnel without SBCTA's prior written consent.

Subsequent to Knightscope's change, they also abandoned systems such as "Lift Keeper," which was an electronic database system that SBCTA staff had access to in order to review and confirm what current maintenance activities had taken place, along with before and after pictures of each

call box addressed. It also documented work orders from the field technicians that noted what equipment was needed and replaced, and how much time the field technician took in repairing the call box.

It was brought to our attention by Knightscope on May 16 that they had engaged the services of two subcontractors: MCM Corporation and NOVO Communications. It was communicated to Knightscope that they had not received authorization to use subcontractors, and that permission was required per the contract. Even though Knightscope claimed that the call box maintenance work was being addressed by the subcontractors, SBCTA was not able to see any evidence of preventative or corrective maintenance being addressed in San Bernardino County since Saturday, March 9. Moreover, Knightscope has failed to provide contractually required documentation supporting invoices, despite SBCTA's repeated requests. In light of Knightscope's various contract compliance issues, SBCTA has rejected payment of its invoices since March 2024. Monthly invoices were averaging approximately $38,500. The payments are structured as a fixed unit price per call box.

In an exchange of several emails in May, Knightscope made a claim that they were maintaining call boxes, but the list of call boxes failing to check in was growing and there was no evidence backing up their invoices, per the contract, that the call boxes were being maintained. A letter was subsequently sent by SBCTA on June 14 requesting that Knightscope, Inc., address the ongoing concerns regarding contract obligations. Despite extensive communication, Knightscope has not brought the contract back into compliance, and the deficiencies remain unresolved.

Until August 19, SBCTA was still receiving the automated daily Knightscope Alerts. These daily reports allowed SBCTA to monitor all call boxes by providing information on how many call boxes are active and how many are not checking in. Knightscope cut off access to this report as of August 19, leaving SBCTA without the ability to monitor call box status. As of the last check 146 call boxes were failing to check in or having a Battery Alarm, suggesting a maintenance problem and that failure could occur in the near future. On September 5, SBCTA staff went into the field and tested a sample of the call boxes along the I-15 that had been noted as failing to check in, just to be certain that a true maintenance problem existed. Of the 12 call boxes tested, only 2 connected to the answering center. The rest were either damaged or simply not connecting. Most had been failing to check in for multiple weeks, well beyond Knightscope's contractual maximum response time.

In their most recent email communication to SBCTA on October 17, Knightscope listed several conditions of the contract with which they allegedly could not comply and stated the following in conclusion:

- "Conclusion: After a careful evaluation of Knightscope's capabilities and resources, we have determined that SBCTA's requirements do not align with Knightscope's business capabilities. The expense required to meet SBCTA's requirements would cause the company to simply go out of business."

- "Recommendation: Based on above, we have two options for SBCTA to consider:
    - Pursuant to Article 18.2 of the contract, SBCTA can choose to Terminate for Cause.

- We collaborate to amend the contract requirements, pricing, and payment terms to mutually benefit both parties."

SBCTA is aware that Knightscope has also contacted other SAFEs around the state, requesting amendments to their contracts to significantly increase reimbursement rates. We are not aware of situations where another SAFE has terminated its agreement with Knightscope. However, there is widespread acknowledgement of frustration with Knightscope, especially given that it is the only available provider of these services and has proprietary rights (previously held by CASE) over systems that are integral to call box performance.

SBCTA has more call boxes in service than any other county in the state, given our size and extensive highway mileage in rural areas. Most call boxes in our urban areas have been removed previously, given the increased cell coverage. As a general principle, areas with good cell coverage across the major cell providers should not require call boxes.

To further explore the current level of cell coverage on our highway system, SBCTA used a cell coverage mapping database available at www.cellmapper.net. This application provides an assessment of signal strength by provider for any location worldwide, as well as location and coverage of cell towers by provider. Records of cell phone "pings" on highway facilities are also mapped, making it a valuable source for confirming signal strength related to highway travel. This mapping application was used to show the SBCTA call box areas where a motorist would not be able to connect with a cellular signal using their cell phone. Attachment A shows the results of this analysis by outlining areas along highways that DO NOT have reasonable access to cell signals, defined as at least 4G coverage. The maps show the location of the SBCTA call boxes and color-coded rectangles indicating which providers do not have at least 4G coverage according to cellmapper.net. The mapping can also distinguish between 4G and 5G.

This analysis has indicated that there are a few areas with coverage issues, however, these areas are limited and generally on lower-volume roads. Interstates 15 and 40 generally have good coverage. Out of the more than 700 call boxes countywide, less than 200 are outside of at least one major cell provider network.

Though Knightscope's lack of performance has been unfortunate, it has also accelerated our analysis and thinking regarding whether and how fast SBCTA should continue to scale back its call box coverage even in the more rural areas. To be sure, there are portions of highway in the county that still have poor cell coverage. Most of these are non-interstate rural highways such as the rural areas along US 95, SR 62, SR 127, SR 247, and highways up and down the mountain areas, and most of these are lower volume roads that generate few calls. For example, in a tabulation of calls that involved an emergency or need for service on US 95 between April and August 2024, only eight such calls were received. While it may be distressing for anyone to be in that situation, there is also an element of weighing the need versus the cost. The SAFE funds being used for call boxes can also be used for providing FSP services. The funding would not just be forfeited back to the State. A key consideration in making the decision to remove all the call boxes is that if the call boxes are out there, the public will expect them to work. Because much of the call box system has been in place for over 35 years, and since we are unable to maintain them and many are failing, we need to act quickly to remove them.

In addition, there are emerging technologies that are becoming commercially available to provide access to emergency services. For example, with iPhone 14 or later, stranded travelers can use Emergency SOS via satellite to text emergency services when they are off the grid with no cellular or Wi-Fi coverage. A similar capability is forthcoming for Android devices. Further, SBCTA is also exploring other technologies, such as Starlink satellite connectivity, to provide targeted cell coverage for spot locations that may have specific, identifiable needs. Starlink has recently provided voice capability for their receivers. However, the evaluation process is still ongoing regarding the need, the cost of service, and strategies for providing security from vandalism and theft for the Starlink receivers. A report will be provided at a future meeting.

To summarize, because of the relatively good cell coverage on major rural highways, the lower call volume on other highways, and the fact that Knightscope is in breach of multiple obligations under its contract with SBCTA, staff is recommending that the Board authorize both a termination of the Knightscope contract for cause and the decommissioning and removal of call boxes. Staff will develop a systematic plan for call box removal and hire a contractor to carry out that plan, based on the Executive Director authorization in this agenda item, if granted.

The decommissioning plan needs to be coordinated with California Department of Transportation and the CHP. The call boxes are spread over many miles, and disposal/recycling arrangements will need to be made. In general, it would be expected that removal would begin on the roadways with the best cell coverage first, but the focus will be on accomplishing removal in an expeditious manner. A majority of the call boxes continue to operate, as evidenced by phone calls being answered at our call answering service, but if a call box is present, the public has a right to expect service, and this obligation is not currently being fulfilled. SBCTA is already proceeding with bagging the call boxes that are known to not be checking in.

Financial Impact:
This item has no financial impact on the adopted Budget for Fiscal Year 2024/2025. It is expected that the cost will not exceed the amount budgeted for the Call Box Program in this fiscal year, given the proposed termination of the contract with Knightscope, Inc.

Reviewed By:
This item is not scheduled for review by any other policy committee or technical advisory committee. SBCTA General Counsel has reviewed this item.

Responsible Staff:
Steve Smith, Director of Planning & Regional Programs

Call Box Locations within San Bernardino County in Areas without Cell Service

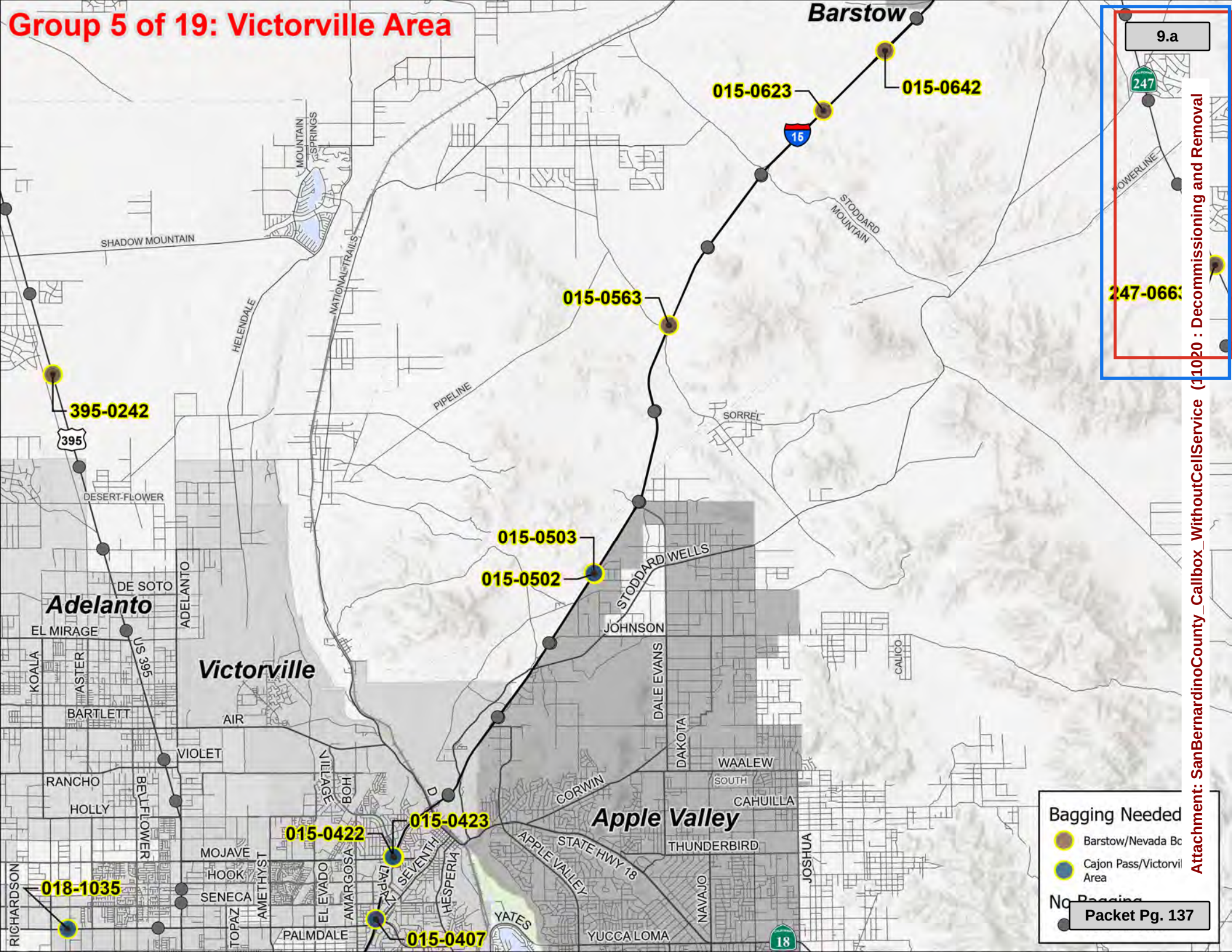
Along Route 127, I-40, U.S.-95, CA-62, CA-247, and SR 330

= Call Box Locations without Verizon 5G Cell Tower Service

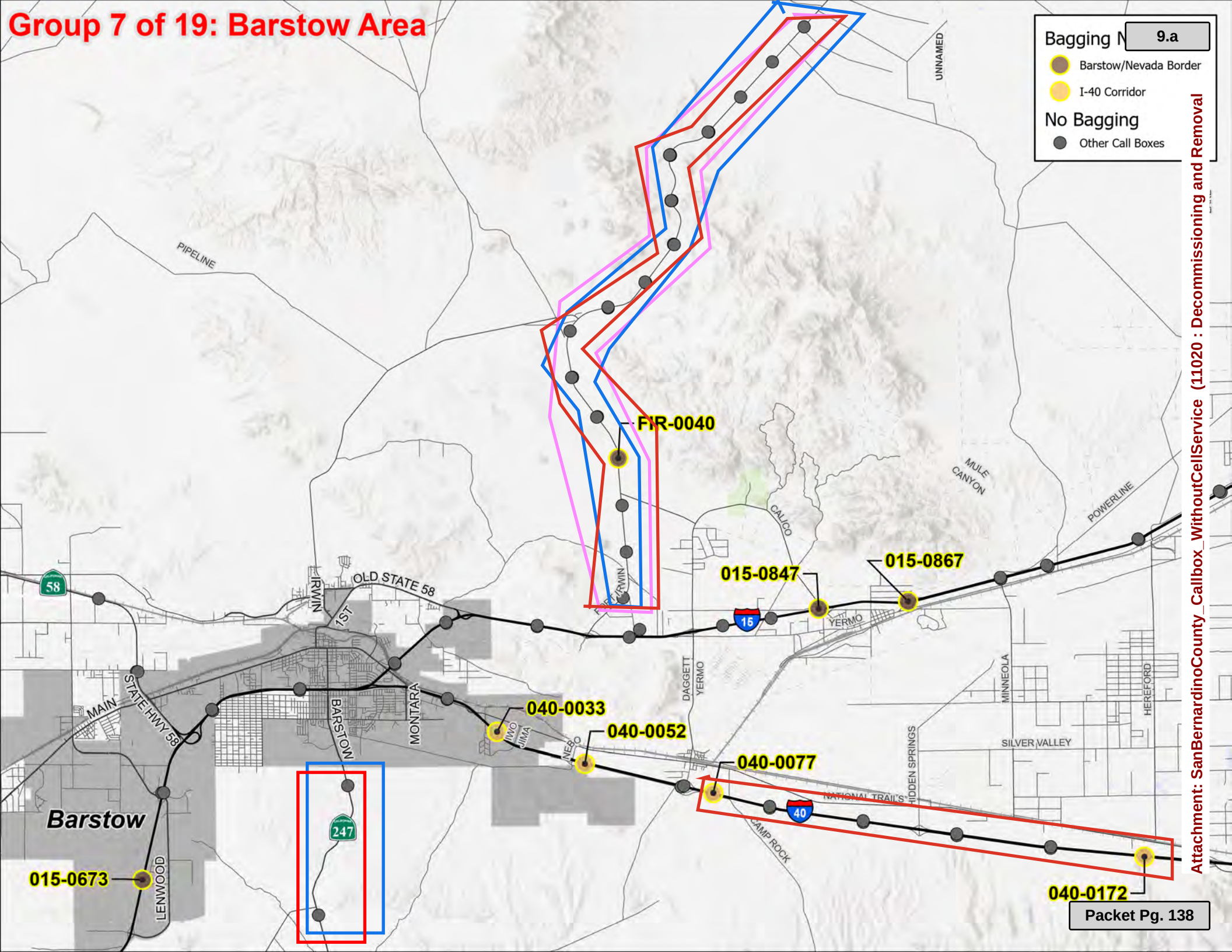
= Call Box Locations without AT&T 5G Cell Tower Service

= Call Box Locations without T-Mobile 5G Cell Tower Service

Group 3 of 19: Big Bear Lake Area

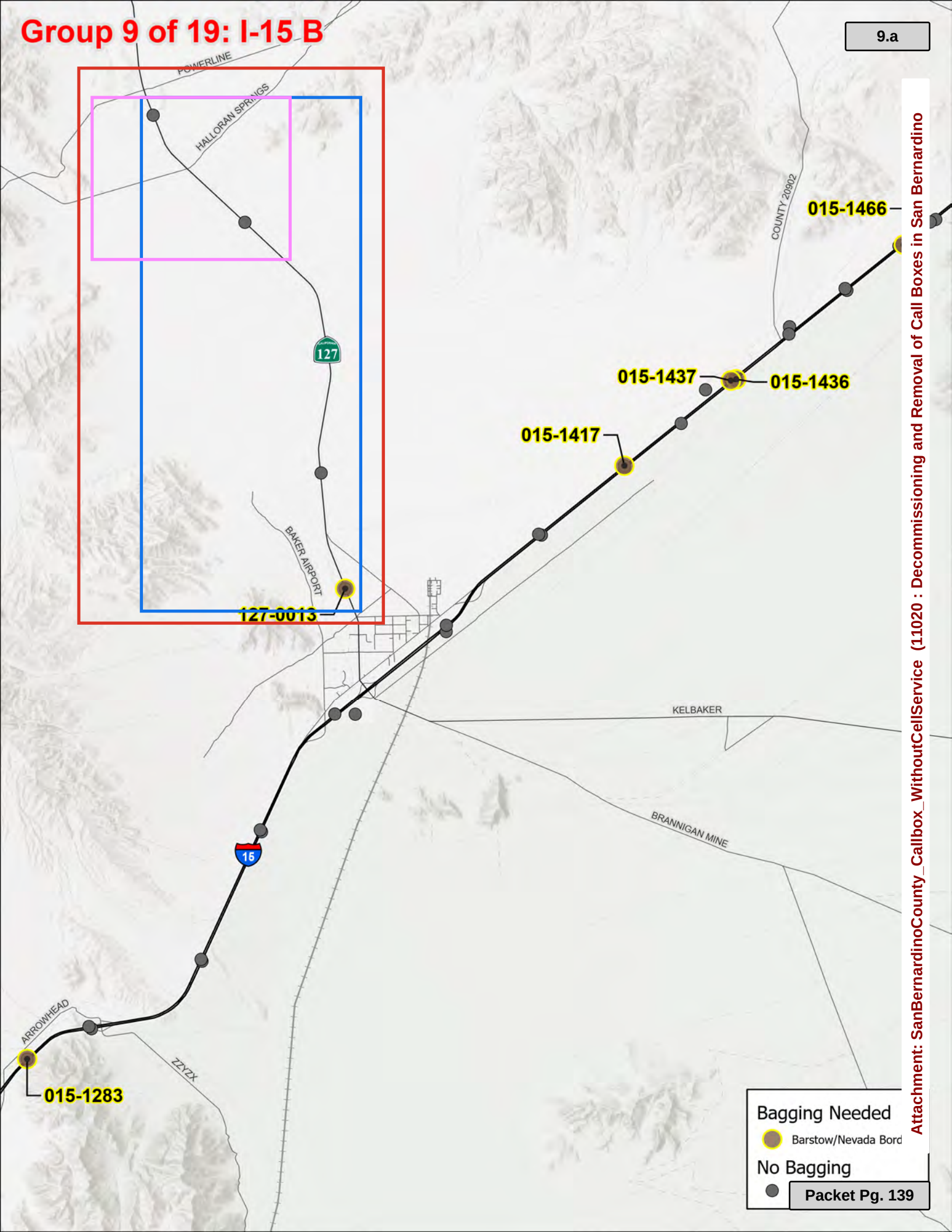

Group 5 of 19: Victorville Area
Barstow
015-0623
015-0642
015-0563
395-0242
015-0503
015-0502
015-0423
015-0422
018-1035
015-0407
Adelanto
Victorville
Apple Valley
SHADOW MOUNTAIN
HELENDALE
NATIONAL TRAILS
PIPELINE
STODDARD MOUNTAIN
SORREL
DESERT FLOWER
DE SOTO
EL MIRAGE
JOHNSON
STODDARD WELLS
DALE EVANS
DAKOTA
CALICO
WAALEW
SOUTH
CAHUILLA
CORWIN
THUNDERBIRD
APPLE VALLEY
STATE HWY 18
JOSHUA
NAVAJO
YUCCA LOMA
YATES
PALMDALE
SENECA
HOOK
MOJAVE
RANCHO
HOLLY
VIOLET
BARTLETT
AIR
KOALA
ASTER
ADELANTO
VILLAGE
BOH
EL EVADO
AMARGOSA
LAPAZ
SEVENTH
HESPERIA
AMETHYST
TOPAZ
BELLFLOWER
RICHARDSON
US 395
395
15
18
Bagging Needed
Barstow/Nevada Bc
Cajon Pass/Victorvil
Area
No Bagging
9.a
247
POWERLINE
247-0663
Attachment: SanBernardinoCounty_Callbox_WithoutCellService (11020 : Decommissioning and Removal
Packet Pg. 137

Group 7 of 19: Barstow Area

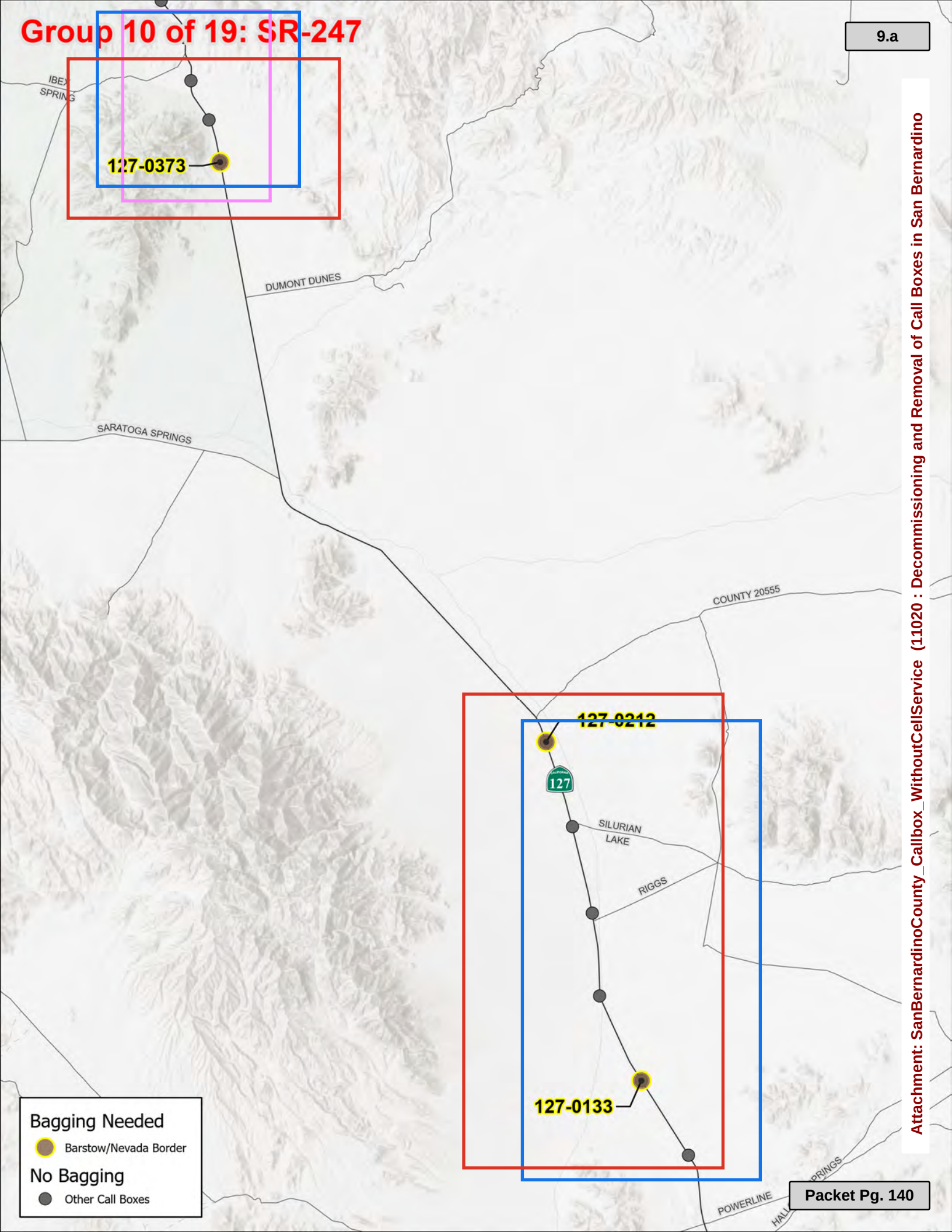


Attachment: SanBernardinoCounty_Callbox_WithoutCellService (11020 : Decommissioning and Removal

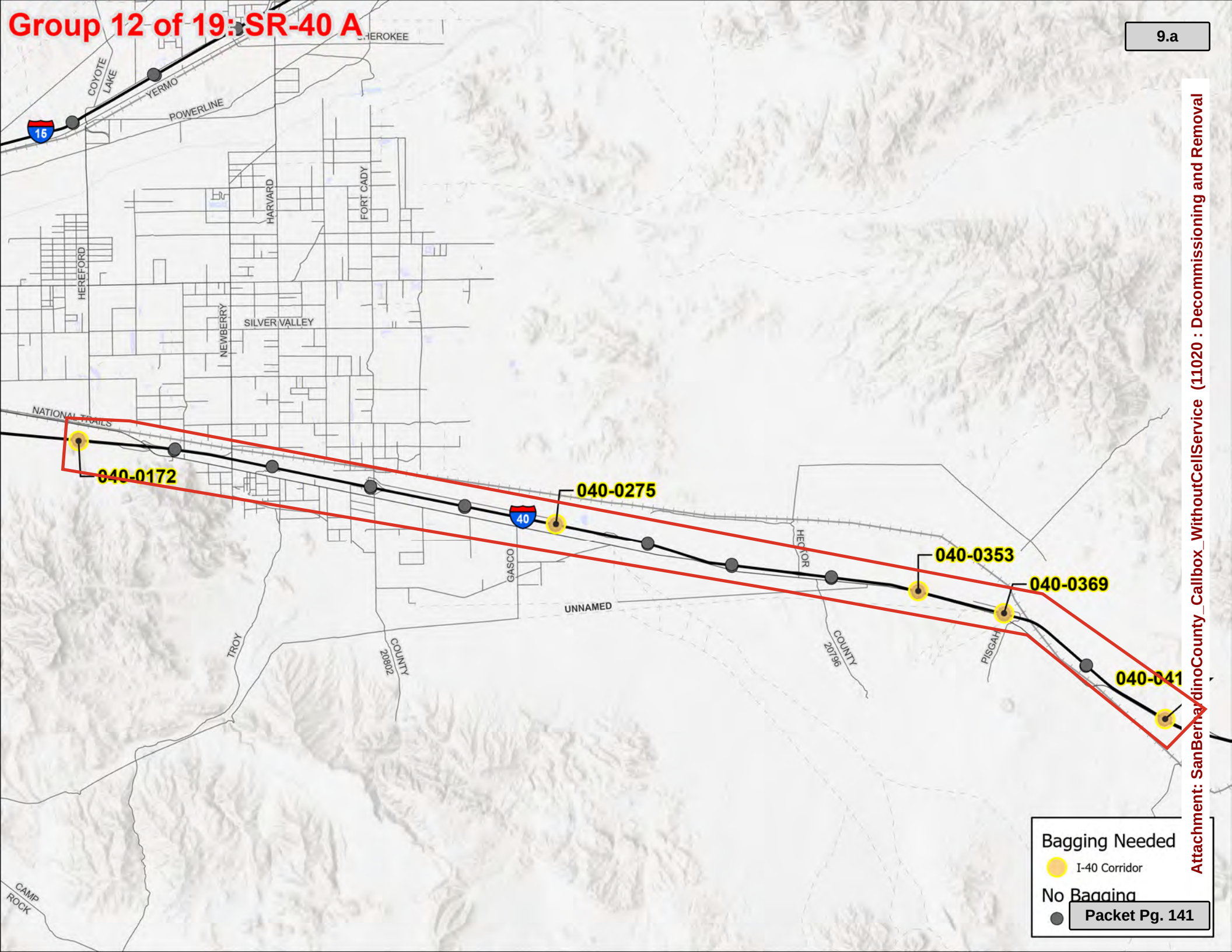
Group 9 of 19: I-15 B



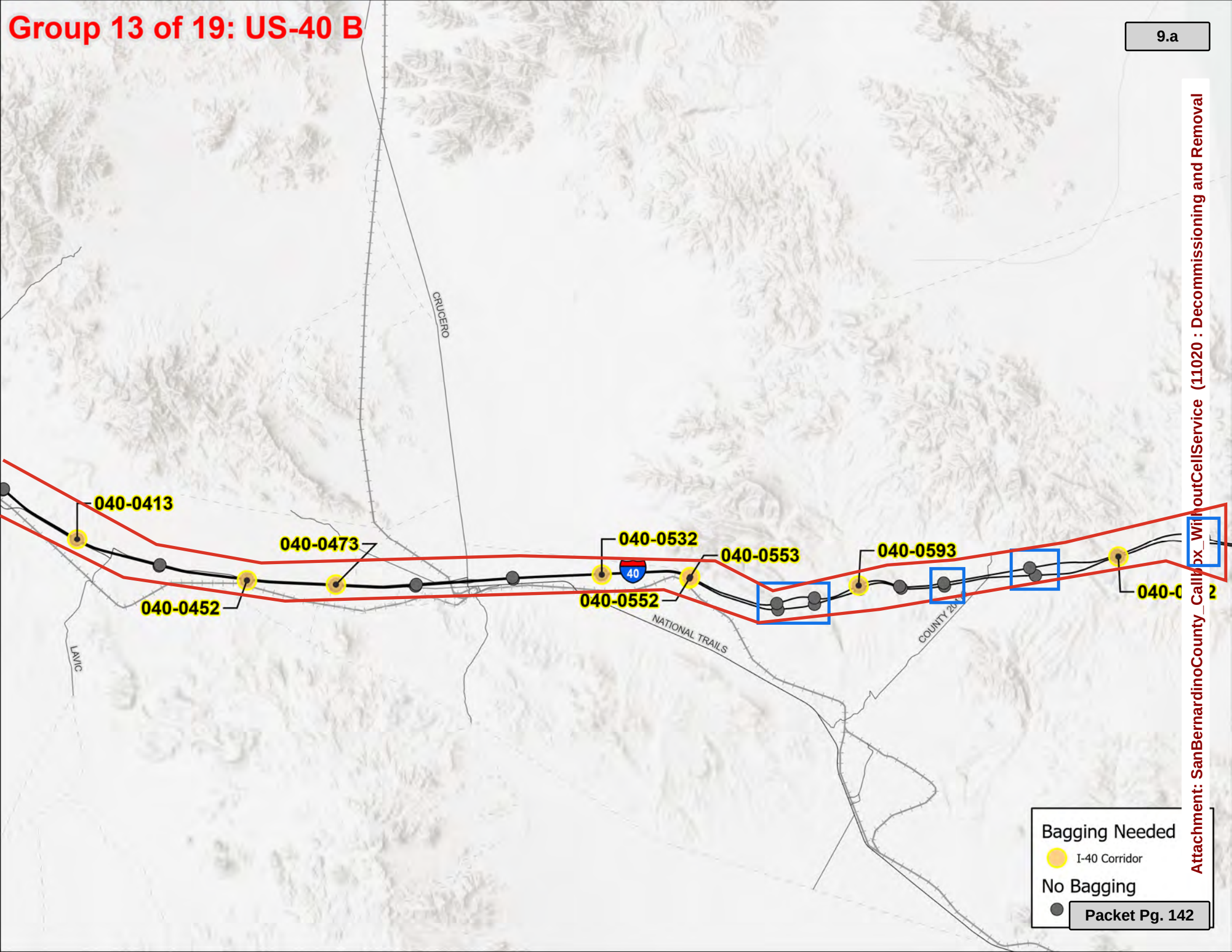
Group 10 of 19: SR-247



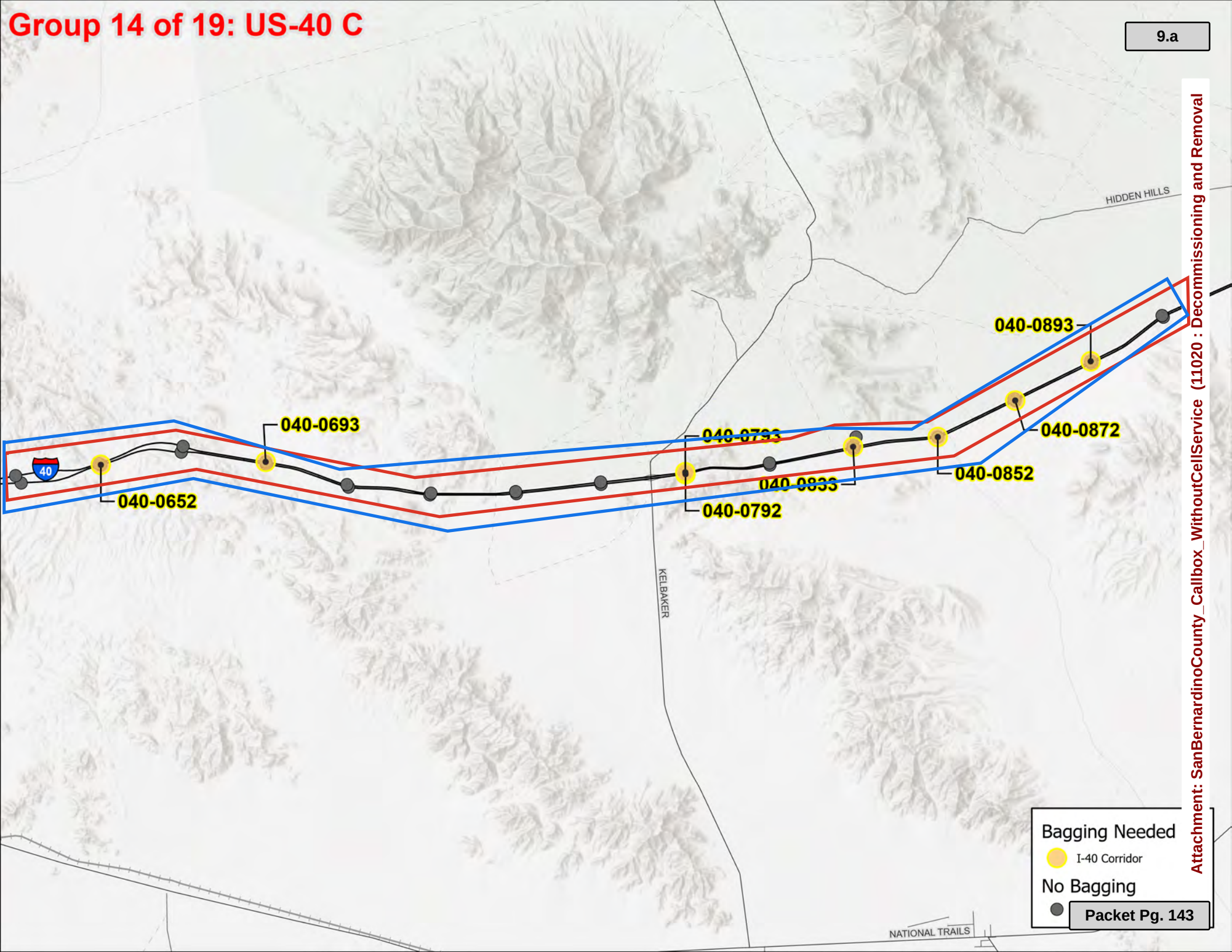
Group 12 of 19: SR-40 A



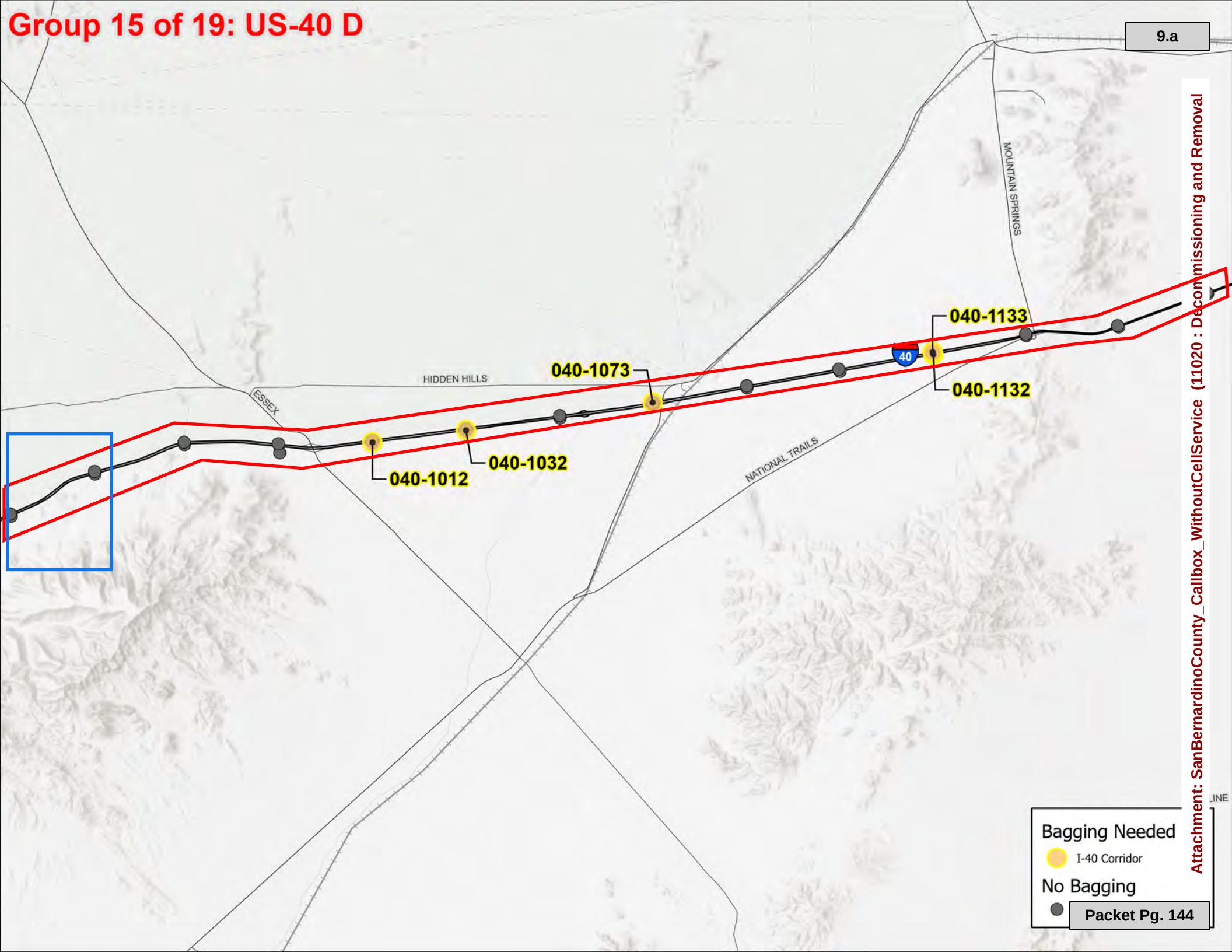
Group 13 of 19: US-40 B



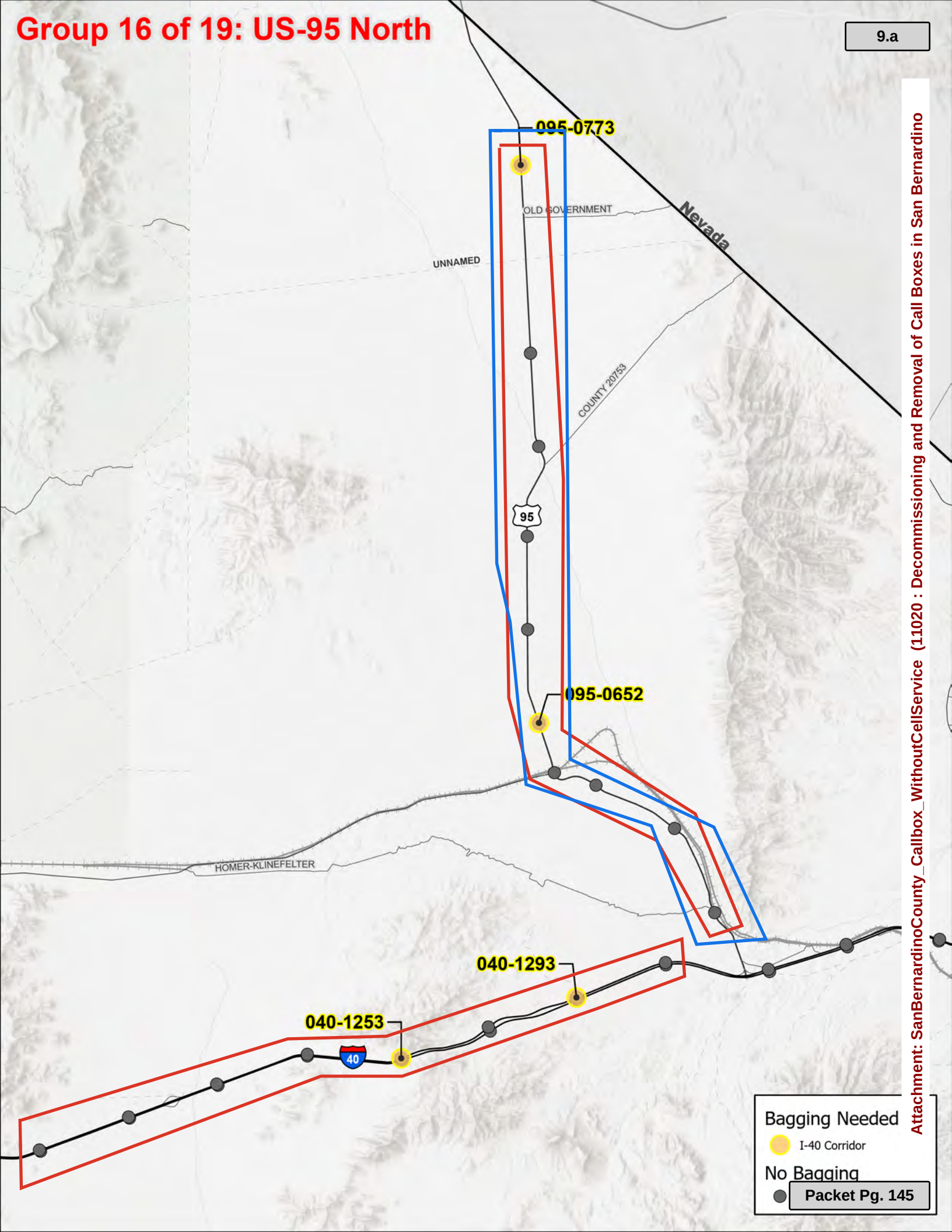
Group 14 of 19: US-40 C



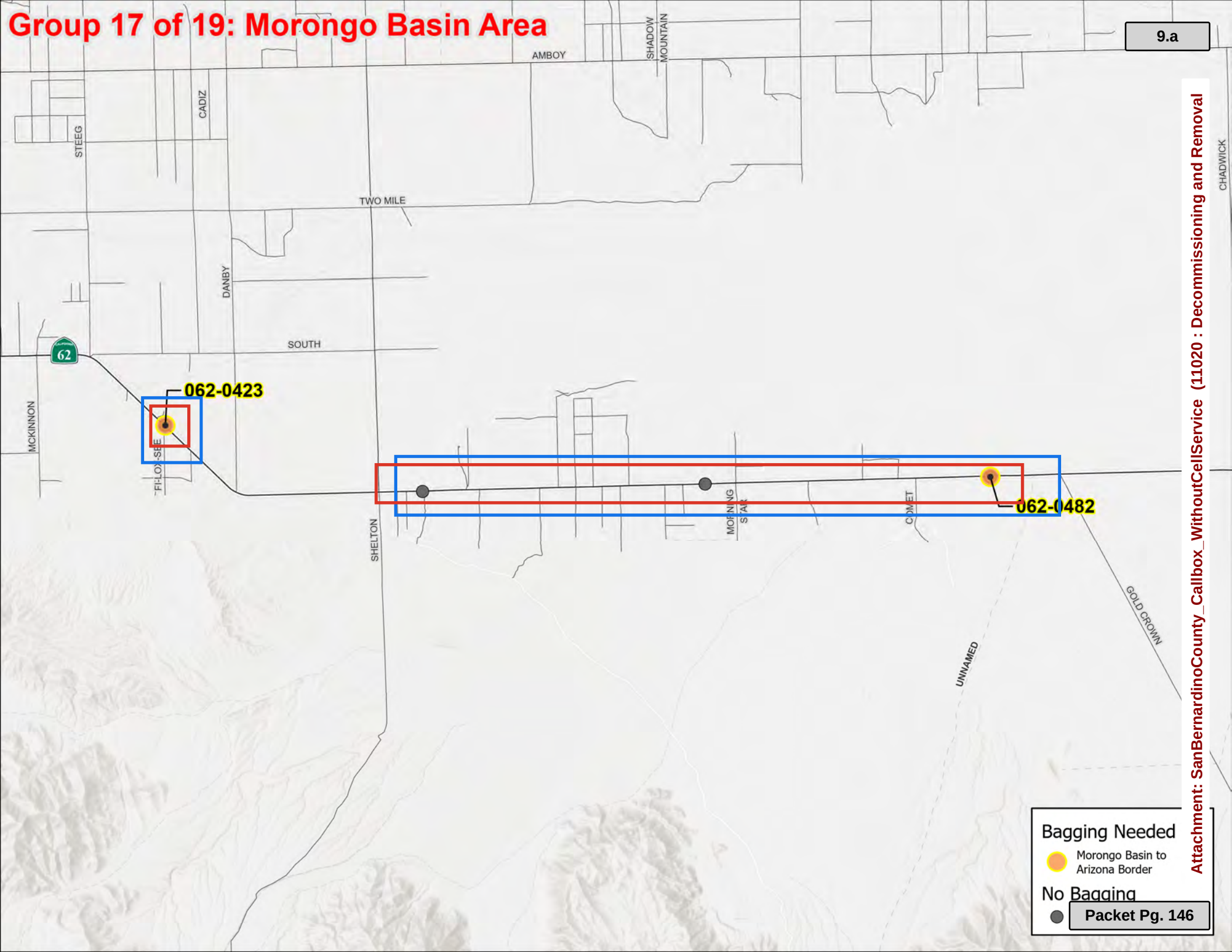
Group 15 of 19: US-40 D



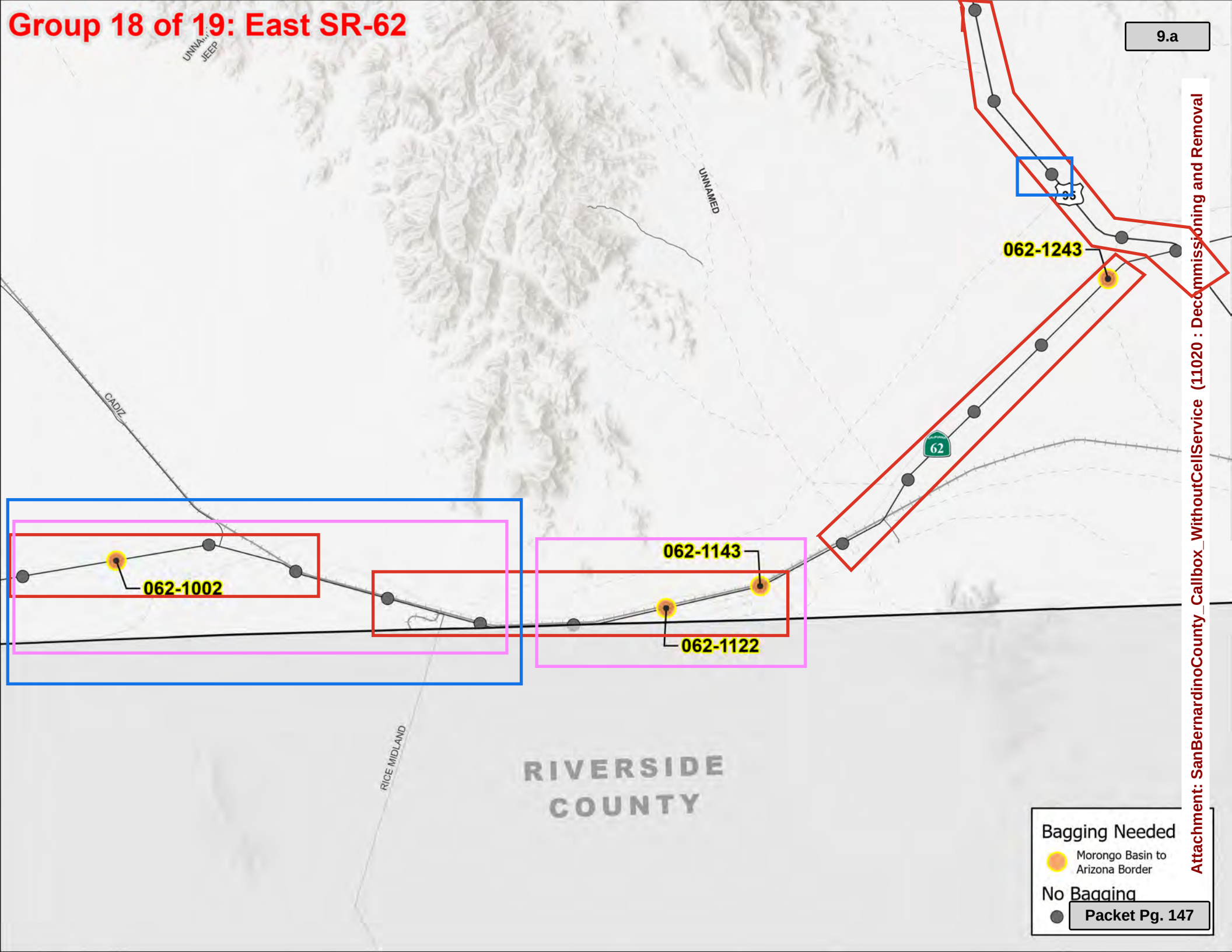
Group 16 of 19: US-95 North



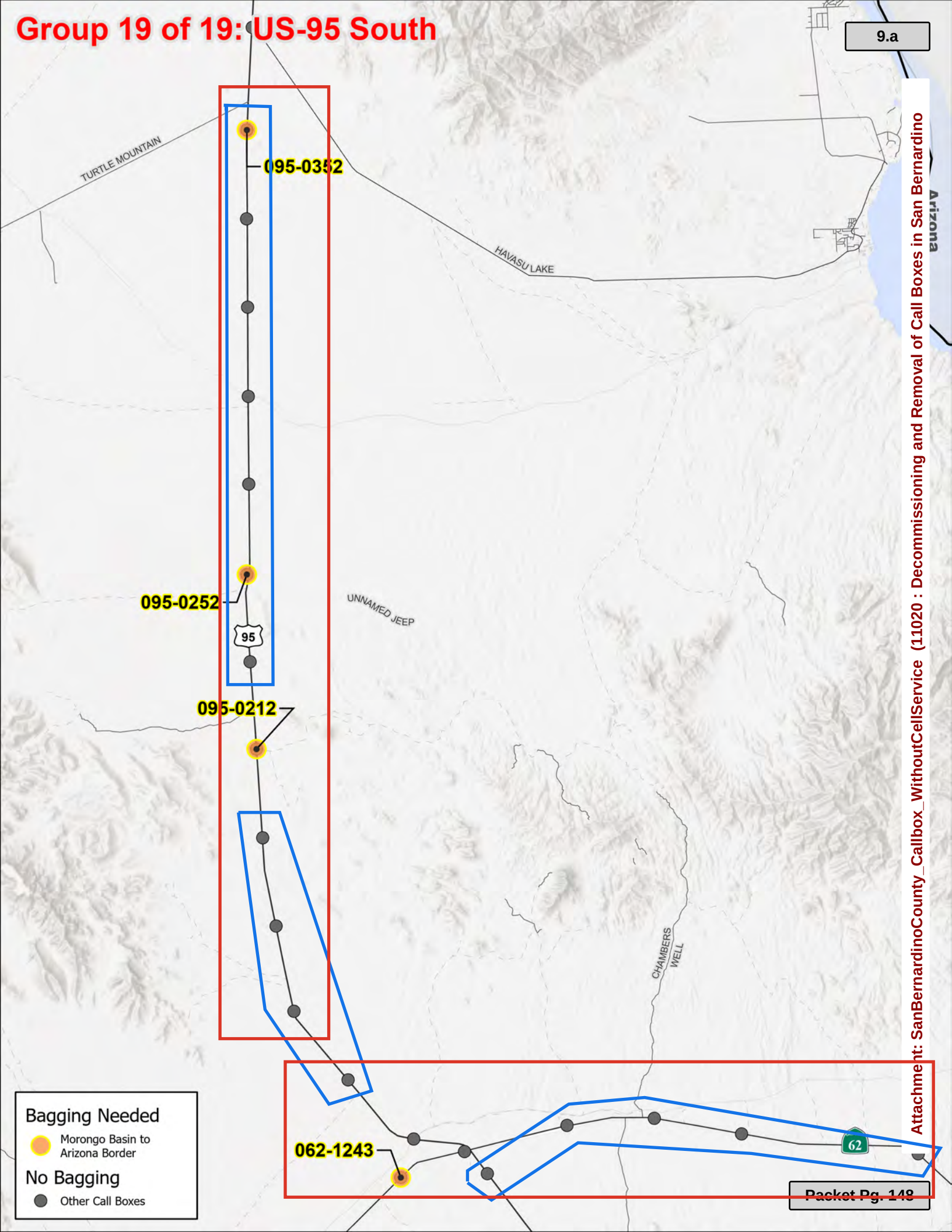
Group 17 of 19: Morongo Basin Area



Group 18 of 19: East SR-62



Group 19 of 19: US-95 South



Minute Action

AGENDA ITEM: 10

Date: November 13, 2024

Subject:
Request to Discontinue Dry Run Resolution of Necessity Hearings at the Committee Level

Recommendation:
That the General Policy Committee recommend the Board, acting as the San Bernardino County Transportation Authority:

Authorize staff to discontinue the presentations for Dry Run Resolutions of Necessity at committee level meetings, and that Resolution of Necessity Hearings be presented directly to the Board of Directors.

Background:
In 2012, San Bernardino County Transportation Authority (SBCTA) began taking on the role as the lead agency for right-of-way on many projects on the state highway system and began holding Resolution of Necessity (RON) Hearings. SBCTA modeled the process after the California Department of Transportation (Caltrans) procedure, which requires Caltrans District staff to present RONs to Caltrans Headquarters staff as a 'dry run' before the formal RON hearing. Since that time, SBCTA staff has been presenting Dry Run RON Hearings at the committee level prior to going to the Board of Directors (Board) for the formal RON Hearings. This process has also been followed for transit projects where SBCTA is the lead agency. This dry run process is not legally mandated and, in an effort to be cognizant of Board Members' time, staff is requesting authorization to discontinue the Dry Run RON Hearings at the committee level and take the RONs directly to Board for the required public hearings.

Financial Impact:
This item has no financial impact on the adopted Budget for Fiscal Year 2024/2025.

Reviewed By:
This item is not scheduled for review by any other policy committee or technical advisory committee. SBCTA General Counsel has reviewed this item.

Responsible Staff:
Kristi Harris, Director of Project Delivery

Approved
General Policy Committee
Date: November 13, 2024

Witnessed By:

Entity: San Bernardino County Transportation Authority

Minute Action

AGENDA ITEM: 11

Date: November 13, 2024

Subject:
Transportation Development Act Article 3 Annual Update: Fiscal Year 2023/2024

Recommendation:
That the Board, acting as the San Bernardino County Transportation Authority (SBCTA):

A. Receive an update on the status of active Transportation Development Act (TDA) Article 3 awards.

B. Direct SBCTA staff to work with the City of Rialto to resolve issues associated with TDA Article 3 transit awards that have not progressed within the first year, as required by the adopted guidelines, with a rescission of the awards if progress is not made by January 31, 2025.

C. Extend the deadline for the Town of Apple Valley's Fiscal Year 2021/2022 Bear Valley Road Bridge Connector bicycle/pedestrian improvement award from June 30, 2025 to December 31, 2027.

Background:
San Bernardino County Transportation Authority (SBCTA) oversees the disbursement of 2% of the Local Transportation Funds (LTF) made available to counties and cities for facilities for the exclusive use of pedestrians and bicyclists, known as the Transportation Development Act (TDA) Article 3 Program. In August 1999, the SBCTA Board of Directors (Board) approved a policy that 20% of the Article 3 program would be made available for projects that improve access to transit stops for pedestrians and persons with disabilities. The remaining 80% would be available for pedestrian and bicycle projects.

Over the years, SBCTA has had to modify the guidelines employed to disburse these funds to the different agencies throughout the county as needs changed and lessons were learned. These guidelines were last updated by the Board on May 3, 2023. One modification aimed at ensuring projects are completed as originally scoped is to require submittal of an annual Progress Report. By definition, "progress" is to be measured by the expenditure of funds within one year of award notification and awarding a construction contract for construction awards within three full fiscal years. The approved regulation that applies to all active awards stipulates that:

a) If the recipient is unable to demonstrate that funds have been expended in the first year, then those funds will be automatically rescinded and provided to the next highest scoring application within the same award category.

b) Additionally, funds will be rescinded for construction projects in cases where a construction contract has not yet been awarded within three full fiscal years. Since the completion deadline for all awards is roughly three years after issuance, the expectation is that a contractor will have been selected within at least the three full fiscal years. Upon Board approval, all active award recipients will be notified of these guidelines and subject to rescission if appropriate actions have not been taken to progress the project.

All active award recipients were notified of the updated requirements during the collection of project updates in preparation for the previous Fiscal Year (FY) 2022/2023 Annual Report. As this is a new regulation, the majority of FY 2021/2022 award recipients did not expend funds within one year of award notification since they were not aware of the need to do so. However, the majority of recipients have schedules that are consistent with the original deadline. SBCTA staff recommends these projects be "grandfathered in" and allowed to proceed as planned.

An analysis of the Annual Report included in Attachment A indicates an improvement as compared to the previous FY in terms of the number of projects needing to be modified and funding needing to be rescinded (Figure 1).

Figure 1: Open Project Analysis

	FY22/23	FY23/24
Active Projects	56	67
Completed		
Count	16	15
Total	$2,180,444	$1,915,597
Rescinding Letters Sent		
Count	10	0
Total	$1,653,299	$0
Extensions		
Count	25	16
Total	$5,665,626	$3,966,762
Scope Changes		
Count	13	11
Total	$3,566,277	$1,744,041

During solicitation of active project status information, it became apparent that the City of Rialto's transit projects are not progressing as required by the program guidelines. Additionally, the Town of Apple Valley requested an extension from June 30, 2025 to December 31, 2027 for their FY 2021/2022 Bear Valley Road Bridge Connector bicycle/pedestrian improvement award (Attachment B). The extension request is needed due to delays in securing a construction contractor. Despite advertising twice for Phase I, the Town received no bids. They shifted the construction strategy to change it from Phase I and Phase 2 (bridge and roadwork) and expect to be successful when they advertise again in January 2025.

Financial Impact:
This item is consistent with the adopted Budget for Fiscal Year 2024/2025.

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

Responsible Staff:
Ginger Koblasz, Senior Planner

Approved
General Policy Committee
Date: November 13, 2024

Witnessed By:

Fiscal Year 2023/2024 TDA Article 3 Status Report

Award Fiscal Year	Agency	Description	Project Type	TDA3	Local Share	Current Deadline	Status	TDA3 Est. Spent	Consultant/Contractor Selected?	On Current Schedule?	Scope Change Ever Needed	Extension Ever Needed	Yrs Ext Needed To-Date
23/24	Adelanto	Transit Improvements on Jonathan St	Transit	$144,000	$28,000	6/30/2027	As of 10/2/24, City is in the process of receiving design proposals from the consultants and will select consultant shortly	$0	No	Yes	No	No	
19/20	Apple Valley	Thunderbird Road Bus Turnout - REVISED Bear Valley & Navajo Rd Turnout	Transit	$53,897	$75,043	12/31/2024	Project was awarded, pre-construction meeting complete, and project to be completed on time	$0	Yes	Yes	Yes	Yes	
21/22	Apple Valley	Bear Valley Rd Bridge Connector	Bike/Ped	$232,300	$232,300	6/30/2025	In the process of submitting the request for authorization for construction (Exhibit 3-A) to Caltrans. Expected award of Construction in Feb 2025. One year extension requested.	$0	No	First extension request for project included in this item	No	Request included in this item	
21/22	Apple Valley	Village North Pedestrian Improvements	Bike/Ped	$361,818	$361,820	6/30/2025	Finalizing design and ROW	$0	No	Yes	No	No	
23/24	Apple Valley	McConnell Park Multi-Use Path	Bike/Ped	$240,426	$240,426	6/30/2027	Project was awarded on 10/8/24	$0	Yes	Yes	No	No	
23/24	Apple Valley	Central Road Class II Bikeway	Bike/Ped	$397,500	$397,500	6/30/2027	In design	$0	No	Yes	No	No	
23/24	Big Bear	Stanfield Marsh Outdoor Recreation & Education Trail Segment II (SMORE II)	Bike/Ped	$303,518	$303,518	6/30/2027	City Engineering Department staff are working on finalizing the construction plans. At the end of July 2024, they received the Soils Report that will be needed for bridge structural design. They are finalizing the bridge details and plans and coordinating with the adjacent property owner on the trail easement agreement. The City anticipates awarding a construction contract in Summer 2025.	$0	No	Yes	No	No	
13/14	Chino	Central/7th Sidewalk Improvements - REVISED Riverside Dr Rehab in 2019	Transit	$127,648	$28,632	Expired on 12/31/2021 after 5.5yrs exts. Originally 6/30/2016	Notice to rescind was sent on 6/13/23. City successfully appealed.	$127,648	Yes	Completed	Yes, more than one.	Yes	7.

Award Fiscal Year	Agency	Description	Project Type	TDA3	Local Share	Current Deadline	Status	TDA3 Est. Spent	Consultant/Contractor Selected?	On Current Schedule?	Scope Change Ever Needed	Extension Ever Needed	Yrs Ext Needed To-Date
17/18	Chino	Bicycle Path and Pedestrian Facilities	Bike/Ped	$353,081	$757,020	12/31/2024	Completed; in the process of invoicing	$353,081	Yes	Completed	Yes, more than one.	Yes	4.
17/18	Chino	Sidewalk Retrofitting	Transit	$87,000	$87,000	12/31/2024	Completed; in the process of invoicing	$87,000	Yes	Completed	Yes, more than one.	Yes	4.
21/22	Chino Hills	Sierra Vista & Del Norte Improvements	Bike/Ped	$170,965	$92,058	6/30/2025	Construction 85%	$650,000 SBCTA: $75,000	Yes	Yes	No	No	
21/22	Chino Hills	Montecito Dr Transit Access Improvements Project	Transit	$77,989	$148,676	6/30/2025	Design 95%	$65,000 SBCTA: $46,000	No	Yes	No	No	
21/22	Colton	Washington St. Class II	Bike/Ped	$223,200	$24,800	6/30/2025	Completed; in the process of invoicing	$375,685	Yes	Completed	No	No	
23/24	Colton	South La Cadena Bicycle Improvement	Bike/Ped	$208,000	$112,000	6/30/2027	Design on-going, 65% completed	$31,000	No	Yes	No	No	
00/01	County	Santa Ana River Trail - Waterman Ave. to California	Bike/Ped	$559,940	$0	12/31/2028	Funding will be used for plant establishment to begin after SART III bike trail construction is completed at the end of this year	$0	No	Yes	No	Yes	2
21/22	County	3rd Street at Pedley WB	Transit	$69,300	$7,700	6/30/2025	In design, construction expected in fall 2024	$6,033	No	Yes	No	No	
21/22	County	Bloomington Area Schools Project	Bike/Ped	$85,500	$85,500	6/30/2025	Completed and closed out	$75,597 ($9,903 returned)	Yes	Completed	No	No	
23/24	County	Bus Stop Improvements on Pacific Street	Transit	$90,000	$40,000	6/30/2027	In design, construction expected in fall 2024	$3,636	No	Yes	No	No	
17/18	Fontana	Alder Middle School SRTS	Bike/Ped	$250,000	$253,036	12/31/2024	In construction	$132,848	Yes	Yes	No	Yes	5.
21/22	Fontana	Kathy Binks Elementary (SRTS)	Bike/Ped	$160,000	$22,307	6/303/2025	Completed and closed out	$160,000	Yes	Completed	No	No	
21/22	Fontana	Transit Stops Improvements in the City of Fontana	Transit	$37,580	$37,580	6/30/2025	Completed; in the process of invoicing	$31,193	Yes	Completed	No	No	
23/24	Fontana	Rectangular Rapid Flashing Beacons (x7 - reduced to "3-4")	Bike/Ped	$52,500	$17,500	6/30/2027	In Design	$0	No	Yes	Yes	No	
23/24	Fontana	Catawba SRTS Sidewalk	Bike/Ped	$396,348	$396,349	6/30/2027	In Design	$0	No	Yes	No	No	
23/24	Fontana	10 Bus Pads in the City of Fontana	Transit	$59,023	$25,296	6/30/2027	Preliminary Design	$0	No	Yes	No	No	

Award Fiscal Year	Agency	Description	Project Type	TDA3	Local Share	Current Deadline	Status	TDA3 Est. Spent	Consultant/Contractor Selected?	On Current Schedule?	Scope Change Ever Needed	Extension Ever Needed	Yrs Ext Needed To-Date
17/18	Highland	City Creek/Alabama Street Bikeways - ATP Match	Bike/Ped	$371,546	$92,887	2/28/2026	GPC approved a scope change from pre-con to con on 10/9/24. City will invoice for balance if approved by Board on 11/6/24.	$369,867 ($297,237 reimbursed to date)	No	Yes	GPC approved on 10/9/24	Yes	6.
19/20	Highland	Baseline, Boulder, 9th Street and Olive Tree	Transit	$53,897	$23,993	12/31/2024	Completed and closed out	$53,897.00	Yes	Yes	Yes	Yes	
21/22	Highland	Construction of New Sidewalks to Bus Stops (Messina St/Seine Ave Gap)	Transit	$77,989	$63,511	6/30/2025	Completed; in the process of invoicing	$136,557	Yes	Completed	No	No	
23/24	Highland	9th St Transit Stops, Sidewalk, & Bikeway	Bike/Ped	$471,608	$471,608	6/30/2027	Design completed. Having settled on fair market value, the City is completing acquisition by eminent domain of a 696 SF TCE and 522 SF permanent roadway easement from APN 1192-161-21. They expect to complete construction by April 2025.	$134,087	No	Yes	No	No	
23/24	Loma Linda	11 Bus Stops in the City of Loma Linda	Transit	$50,122	$12,530	6/30/2027	Completed; in the process of invoicing	$0	Yes	Completed	No	No	
15/16	Omnitrans	22 stops	Transit	$273,351	$0	12/31/2021 Expired	Due to staffing issues, Omnitrans has been struggling to reconcile funds eligible for invoicing. They were given until the end of FY24/25 to do so or the funds will be rescinded.	$45,803	Yes	Yes	Yes	Yes	4.
17/18	Omnitrans	12 Stops	Transit	$390,100	$0	3/1/2022 Expired		Unknown	Yes	Yes	No	Yes	3.
19/20	Omnitrans	Bus Benches & Shelters	Transit	$193,126	$0	12/31/2022 Expired		Unknown	Yes	Yes	No	No	
21/22	Omnitrans	Transit Stops in Omnitrans Service Area	Transit	$79,784	$0	6/30/2025	Scope change requested to apply funds to locations without existing shelters	$76,727	Yes	Yes	Requested included in this item	No	
23/24	Omnitrans	Benches/Shelters for the City of Colton	Transit	$79,784	$0	6/30/2025	Starting amenities procurement	$0	No	Yes	No	No	
23/24	Omnitrans	Benches/Shelters for the City of Highland	Transit	$117,600	$0	6/30/2027	Starting amenities procurement	$0	No	Yes	No	No	
23/24	Omnitrans	Benches/Shelters for the City of Montclair	Transit	$111,200	$0	6/30/2027	Starting amenities procurement	$0	No	Yes	No	No	
23/24	Omnitrans	Benches/Shelters for the City of Ontario	Transit	$144,000	$0	6/30/2027	Starting amenities procurement	$0	No	Yes	No	No	
23/24	Omnitrans	Benches/Shelters for the City of Redlands	Transit	$108,776	$0	6/30/2027	Starting amenities procurement	$0	No	Yes	No	No	
23/24	Omnitrans	Benches/Shelters for the City of Rialto	Transit	$111,200	$0	6/30/2027	Starting amenities procurement	$0	No	Yes	No	No	
23/24	Omnitrans	Benches/Shelters for the City of Yucaipa	Transit	$128,800	$0	6/30/2027	Starting amenities procurement	$0	No	Yes	No	No	

Award Fiscal Year	Agency	Description	Project Type	TDA3	Local Share	Current Deadline	Status	TDA3 Est. Spent	Consultant/Contractor Selected?	On Current Schedule?	Scope Change Ever Needed	Extension Ever Needed	Yrs Ext Needed To-Date
21/22	Ontario	Bus Stop Pad Installation Project	Transit	$67,050	$0	6/30/2025	Design on-going	$0	No	Yes	No	No	
23/24	Ontario	Ontario Improvements - 3 Stops	Transit	$32,835	$0	6/30/2027	Design on-going	$0	No	Yes	No	No	
21/22	Rancho Cucamonga	Haven Sidewalk Improvement	Bike/Ped	$227,192	$122,334	6/30/2025	In design	$10,000	No	Yes	No	No	
23/24	Rancho Cucamonga	Day Creek Channel Bike Trail (addition to FY19 award)	Bike/Ped	$510,250	$274,750	6/30/2027	In Construction	$137,260	Yes	Yes	No	Yes	4.
23/24	Rancho Cucamonga	Cucamonga Creek Channel Maintenance (addition to FY21 award)	Bike/Ped	$162,415	$87,454	6/30/2027	In design	$4,450	No	Yes	No	Yes	
17/18	Redlands	East Valley Corridor Bike Route Interconnect	Bike/Ped	$264,401	$105,605	2023-02-28	Project completed and closed pending Board 11/6/24 approval of scope change request from con to pre-con	$108,647 ($155,755 to be returned to program)	No	Completed	GPC approved 2nd change on 10/9/24	Yes	3.
21/22	Redlands	Transit Stops Improvements in the City of Redlands	Transit	$46,340	$0	6/30/2025	Completed; in the process of invoicing	$0	Yes	Completed	No	No	
23/24	Redlands	Orange Blossom Trail Phase IV	Bike/Ped	$1,089,700	$192,300	6/30/2027	The plans are currently under second review with SBCFCD. Once permit is obtained, the project will be advertised for construction.	$2,000	No	Yes	No	No	
17/18	Rialto	Cedar Ave Railroad Crossing Ped Improvements	Bike/Ped	$250,000	$428,000	8/30/2024	Completed; in the process of invoicing	$250,000	Yes	Completed	No	Yes	4.
21/22	Rialto	Merrill SRTS (Boyd Elementary School)	Bike/Ped	$639,405	$815,565	6/30/2025	Bid advertisement	$232,351	No	Yes	No	No	
21/22	Rialto	Sycamore SRTS	Bike/Ped	$457,616	$457,616	6/30/2025	In construction	$157,753	Yes	Yes	No	No	
21/22	Rialto	Rialto Bus Stop Improvements	Transit	$71,497	$0	6/30/2025	May need to rescind due to lack of progress. Currently in discussion with City.	$0	No	No	No	No	
23/24	Rialto	Frisbie Middle School SRTS	Bike/Ped	$1,095,091	$589,664	6/30/2027	In design	$3,300	No	Yes	No	No	
23/24	Rialto	Bemis Elementary SRTS	Bike/Ped	$716,745	$779,774	6/30/2027	In design	$227,863	No	Yes	No	No	
19/20	San Bernardino	4 Stops: 5691 Baseline @ Sepulveda EB, 54 9th @ Medical Center EB, 5622 5th @ J St WB, 60 Sierra @ Ralston SB	Transit	$26,936	$6,734	12/31/2022 Expired	Notice to rescind was sent on 6/29/23. City successfully appealed.	$26,936	Yes	Completed	Yes, reduced from 4 to 2 stops	Yes	

Award Fiscal Year	Agency	Description	Project Type	TDA3	Local Share	Current Deadline	Status	TDA3 Est. Spent	Consultant/Contractor Selected?	On Current Schedule?	Scope Change Ever Needed	Extension Ever Needed	Yrs Ext Needed To-Date
21/22	San Bernardino	4 Stops: E @ 36th NB, Kendall @ Brookfield EB, Kendall @ Lakewood EB, Rialto @ Macy WB	Transit	$50,800	$0	2025-06-30	Completed; in the process of invoicing	$50,800	Yes	Completed	No	No	
23/24	San Bernardino	Bus Stop Sidewalk Improvements	Transit	$96,000	$24,000	6/30/2027	Under construction	$1,700	Yes	Yes	No	No	
23/24	Twentynine Palms	Channel Trail Class I	Bike/Ped	$420,750	$74,250	6/30/2027	Design on-going	$15,247	Yes	Yes	No	No	
21/22	Victorville	Old Town Sidewalk Connectivity - Phase 2	Bike/Ped	$249,640	$249,640	6/30/2025	In design	$0	No	Yes	No	No	
23/24	Victorville	Village Drive Sidewalk	Bike/Ped	$250,000	$308,000	6/30/2027	In design	$0	No	Yes	No	No	
21/22	VVTA	Apple Valley Bus Turn Out	Transit	$75,000	$85,926	6/30/2025	Completed; in the process of invoicing	$112,316	Yes	Completed	No	No	
21/22	VVTA	Hesperia Rd Between Chalan Rd and Sunset Drive	Transit	$51,722	$12,931	6/30/2025	Scheduled to be completed by May 30, 2025.	$0	City staff	Yes	No	No	
21/22	VVTA	13735 Rodeo Dr	Transit	$26,891	$6,723	6/30/2025	Scheduled to be completed by November 30, 2024	$0	City staff	Yes	No	No	
23/24	VVTA	Apple Valley - Bus Stop Improvements	Transit	$128,002	$32,001	6/30/2027	In design phase	$0	No	Yes	No	No	
23/24	VVTA	Victorville - Sunhill Drive & Chalon Road	Transit	$76,080	$19,020	6/30/2027	Developing a design Request for Proposals	$0	City staff	Yes	No	No	
23/24	VVTA	Victorville - Nevada Avenue & McCoy Drive	Transit	$10,362	$2,590	6/30/2027	Developing a design Request for Proposals	$0	City staff	Yes	No	No	
21/22	Yucaipa	Transit Stop Access in the City of Yucaipa	Transit	$13,200	$13,200	6/30/2025	Project is to bid. Contract scheduled to go to City Council for Approval on 8/26/24.	$0	Yes	Yes	No	No	

Expenditure within first year requirement not met.
Completed
Extension or Scope change requested

Attachment B

Town of Apple Valley

Engineering Department

A Better Way of Life

August 14, 2024

San Bernardino County Transportation Authority
Attn.: Ms. Lisa Chou
1170 West Third Street, 2nd Floor
San Bernardino, CA 92410

Subject: FY 2021/2022 Bear Valley Road Bridge Connector – time extension request

Dear Ms. Chou,

The Town of Apple Valley respectfully requests an extension of the completion date for the above referenced project to 12/31/2027.

Although the Town advertised twice for Phase 1 (grading and utilities relocation) there were no bids. That led to a shift in the project construction strategy changing it from Phase 1 and Phase 2 (bridge and road work) to one construction phase only. This translates into schedule and order of work changes. The current project milestones are as follows:

- Advertising for Construction: January 2025
- Construction contract award: February 2025
- Begin Construction: March 2025
- Complete Construction Contract August 2027

While the Town expects to complete work on TDA Article 3 eligible items well before overall project completion, this time extension will allow for sufficient time to construct, seek reimbursement and close-out this large scale and complex project.

Should you have any questions or concerns please don't hesitate to contact me at your convenience.

Thank you for your time and consideration.

Best regards,

Paula Pereira
Project Manager

Minute Action

AGENDA ITEM: 12

Date: November 13, 2024

Subject:
Smart County Master Plan Update

Recommendation:
Receive a status update on the Smart County Master Plan and provide feedback on the draft document.

Background:
The Smart County Master Plan has been moving forward since January of 2023, and through a process of heavy outreach and direction received from the San Bernardino Council of Governments (SBCOG) Ad Hoc Committee, the Board of Directors (Board), the City/County Manager's Technical Advisory Committee, and the Information Technology Working Group, SBCOG has completed a draft of the Smart County Master Plan (SCMP). The SCMP is envisioned to be a guide for the region in identifying and prioritizing projects that improve the infrastructure and telecommunications in the region. The SCMP is divided into two phases, the Early Action Plan and the full Master Plan.

SBCOG initiated this SCMP to align technology investments and actions in San Bernardino County with the region's overall objectives. To accomplish this, the SCMP recommends seven strategies to set the stage for a safer, more efficient and better-connected San Bernardino County.

This SCMP prioritizes public safety, transportation, and bridging the digital divide based on guidance from local government member agencies looking to support the increased commercial activity and change they are seeing and expecting. Seven strategies, all grounded in previously proven and field deployed technologies, are recommended in varying configurations in each of the four regions.

A set of toolkits were developed that align with the proposed strategies. The toolkits support local agencies in developing or furthering their programs in those areas. Four of the strategies (alternative fuel vehicles, Unmanned Aircraft System operations, data governance and sharing, and joint operations) are overarching strategies. For these strategies, the associated toolkit can be used to advance specific projects.

For the other three strategies (smart intersections, smart corridors, and broadband enhancements) specific deployment locations were prioritized based on several factors. The locations identified address needs in each of the four subregions throughout the county; West Valley, East Valley, Low Dessert, and High Desert.

Each of the seven strategies is mapped to the primary next step, which targeted outcomes it will address, and suggested performance metrics. The next steps identified were designed to address goals/target outcomes identified during the early planning process of 1) efficiency and responsiveness, 2) clean and sustainable transportation, 3) improved quality of life, and 4) support of a new narrative focused on innovation and opportunity. Each of the strategies addresses at least two, and often four of the identified target outcomes.

Entity: San Bernardino Council of Governments

In addition to the "Next Steps" identified, target outcomes and performance metrics are also identified as well as the roles and responsibilities designating which agency would be responsible, supporting, or informed of the task. A schedule for task implementation is also included along with cost estimates to guide projects and grant funding opportunities.

The final Smart County Master Plan Draft will be completed by December 31, 2024.

Financial Impact:
This item has no financial impact on the adopted Budget for Fiscal Year 2024/2025.

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

Responsible Staff:
Monique Reza-Arellano, Chief of COG and Equity Programs

Approved
General Policy Committee
Date: November 13, 2024

Witnessed By:

SMART COUNTY MASTER PLAN

SAN BERNARDINO SMART COUNTY

...another quality of life enhancement from SBCOG

October 2024

Table of Contents

Figures

Tables

Abbreviations and Acronyms

Abbreviation or Acronym	Definition
AAM	Advanced Air Mobility
AFV	Alternative Fuel Vehicle
AI	Artificial Intelligence
ALPR	Automated License Plate Readers
ATMS	Advanced Traffic Management System
AQ	Air Quality
BMMN	Broadband Middle-Mile Network
CAD	Computer-Aided Dispatch
Caltrans	California Department of Transportation
CEC	California Energy Commission
CPUC	California Public Utilities Commission
CV	Connected Vehicle
DSRC	Dedicated Short-Range Communication
EVP	Emergency Vehicle Preemption
FAA	Federal Aviation Administration
FHWA	Federal Highway Administration
FSP	Freight Signal Priority
GHG	Greenhouse Gases
HMIS	Homeless Management Information System
IOO	Infrastructure Owner Operators
ITS	Intelligent Transportation Systems
JIS	Joint Information System
JPS	Joint Powers Authorities
LiDAR	Light Detection and Ranging
Mbps	Megabits per second
NEVI	National Electric Vehicle Infrastructure
O&M	Operations and Maintenance
PM	Particulate Matter
RIITS	Regional Integration of Intelligent Transportation Systems
RSU	Roadside Unit
SBCOG	San Bernardino County of Governments
SBCTA	San Bernardino County Transportation Authority
SBVCTSS	San Bernardino Valley Coordinated Traffic Signal System
SCAG	Southern California Association of Governments
SPaT	Signal Phase and Timing
THEA	Tampa Hillsborough Expressway Authority
TMC	Transportation Management Center
TSP	Transit Signal Priority
TTAC	Transportation Technical Advisory Council
UAM	Urban Air Mobility
UAS	Uncrewed Aerial Systems
ViDS	Video Incident Detection Systems
VOC	Virtual Operations Center
VRU	Vulnerable Road User
WIM	Weigh In Motion
ZEV	Zero-Emission Vehicle

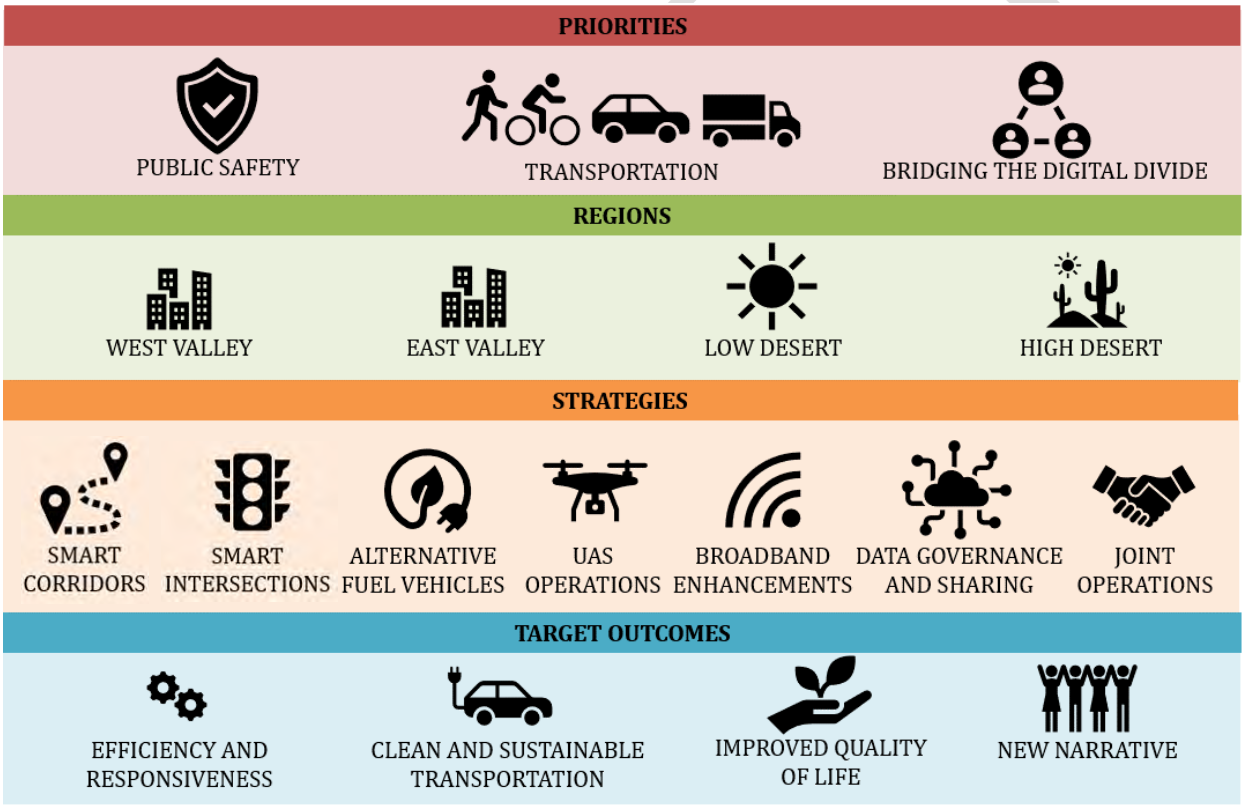
1 Executive Summary

The San Bernardino Council of Governments (SBCOG) initiated this Smart County Master Plan (Smart County MP) to align technology investments and actions in San Bernardino County with the region's overall objectives. To accomplish this, the Smart County MP recommends seven strategies to set the stage for a safer, more efficient, and better connected San Bernardino County. **Figure 1-1** summarizes these strategies**.**

1.1 Smart County Master Plan Summary

This Smart County MP (**Figure 1-1)** prioritizes public safety, transportation, and bridging the digital divide—based on guidance from local government member agencies looking to deliver public services more efficiently and effectively and to support the increased population and commercial activity expected in the future. Seven strategies, all grounded in previously proven and field deployed technologies, are recommended in varying configurations in each of the four regions.

Figure 1-1: San Bernardino Smart County Master Plan Summary



A set of toolkits was developed that align with the proposed strategies. The toolkits support local agencies in developing or furthering their programs in those areas. Four of the strategies – Alternative Fuel Vehicles (AFVs), Uncrewed Aeriel Systems (UAS) operations, which refer to aircraft operated without a human pilot onboard and can be operated remotely or autonomously, data governance and sharing, and joint operations – are overarching strategies. For these strategies, the associated toolkit can be used to advance specific projects.

For the other three strategies – smart corridors, smart intersections, and broadband enhancements – potential deployment locations were initially identified based on several factors. The locations identified in **Figure 1-2** and **Figure 1-3** address needs in each of the four regions throughout the county: West Valley, East Valley, Low Desert, and High Desert. For smart corridors, there was an additional level of outreach to local jurisdictions and Omnitrans

that included the potential for investing in “priority transit corridors” in the East and West Valley subregions. A priority transit corridor could include selective application of strategies ranging from Transit Signal Priority (TSP) or “queue jumps” at intersections to full Bus Rapid Transit (BRT). It is expected that a Request For Information (RFI) will be disseminated to Valley cities in Fiscal Year 2024-2025 to assist the SBCTA Board in determining which corridors represent the best multimodal investments on which to spend Valley Measure I funding that has been identified for that purpose. See **Section 5.1** for additional information.

Figure 1-2: Smart County Master Plan Strategies

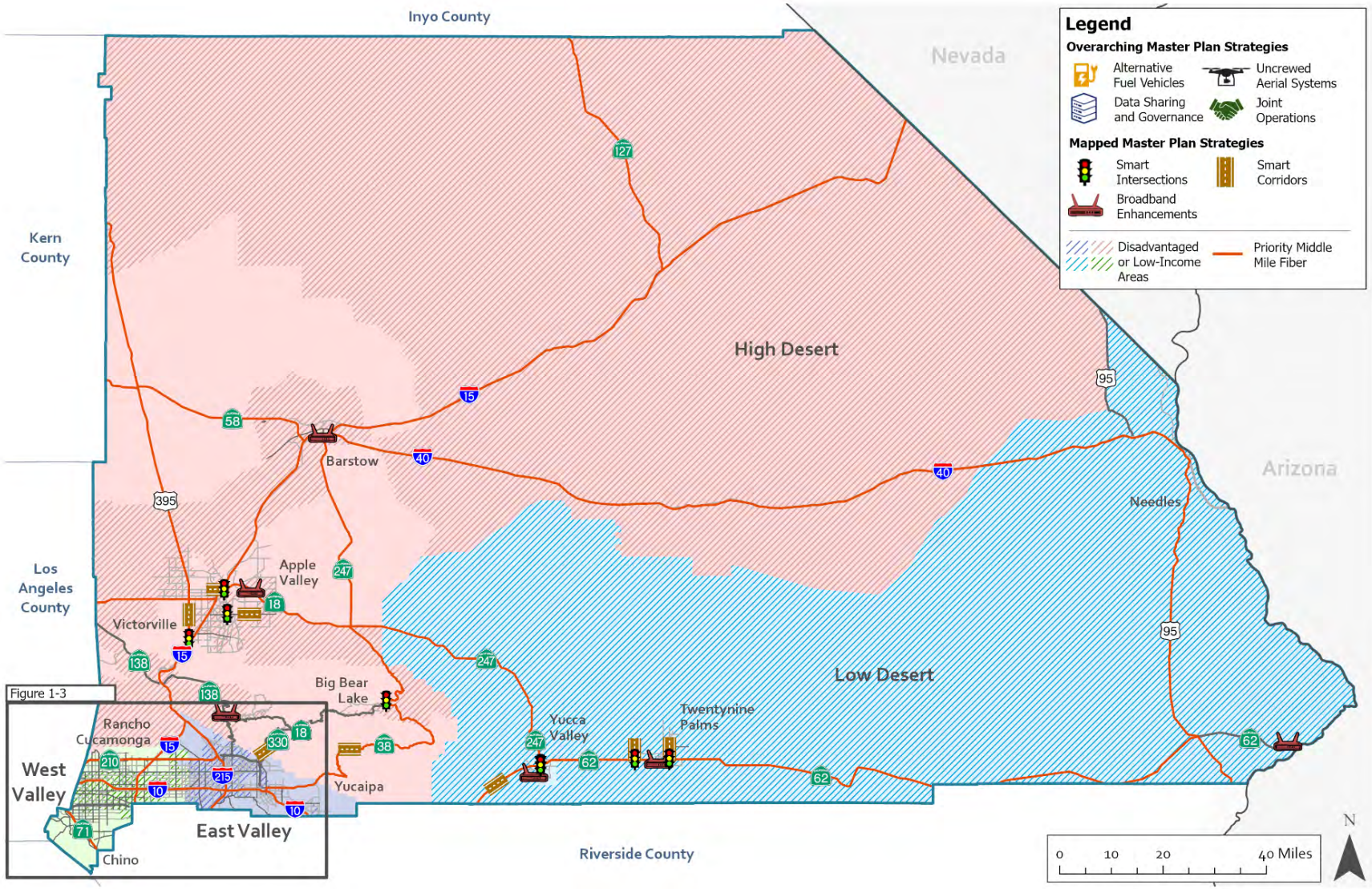
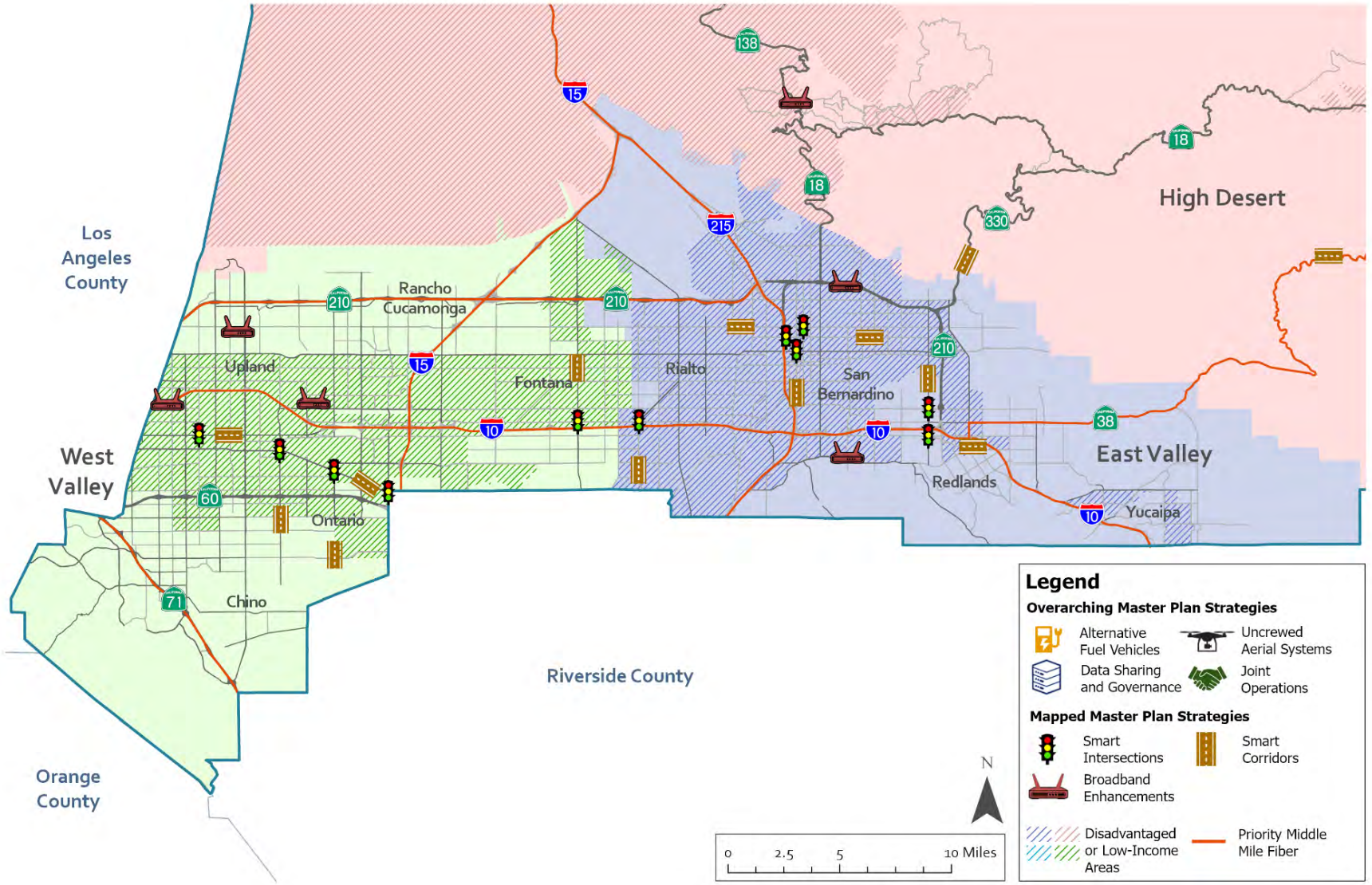


Figure 1-3: Smart County Master Plan Strategies in West Valley and East Valley



1.2 Value to San Bernardino County Region

This plan has benefitted from input from numerous stakeholders across the county and in turn, upon implementation, will benefit these and other stakeholders for years to come. **Table 1-1** summarizes the anticipated benefits by stakeholder group.

Table 1-1: Benefits to Smart County Master Plan Stakeholder Groups

County and SBCTA Member Agencies By leveraging the data governance and data sharing toolkit elements, government agencies within the county can enhance their operational and regional efficiency. Increased data sharing allows agencies to streamline processes, improve decision-making, and ultimately deliver better services to the residents and visitors of San Bernardino County.	**Public-Safety Services Providers** Public-safety services providers will benefit from faster response times through greater information and data sharing enabled by the joint operations strategy. The use of UAS, commonly known as drones, for disaster assessment and rescue operations will enhance public and frontline worker safety. Additionally, they will improve response effectiveness and speed due to better intelligence.
Transportation Service Providers Smart intersection and smart corridor strategies will enhance traffic flow and safety. Transportation service providers will have access to performance data from deployed technologies such as video and light detection and ranging (LiDAR) sensors, broadband communications, and data analytics. Over time, insights derived from this information can inform evaluation of other types of sensors, emerging technologies, or other corridors that would benefit from these types of improvements.	**The General Public** The implementation of electric-vehicle charging stations and smart intersections and corridors will provide the immediate benefits of improved traffic flow and increased convenience. Over time, these strategies will also support better air quality through consistent, large-scale deployments. Additionally, providing broadband connectivity to disadvantaged areas will reduce the digital divide and offer opportunities for underserved populations.

1.3 Next Steps

Each of the seven strategies is mapped to the primary next step, its targeted outcomes, and suggested performance metrics (see **Table 1-2**). Each of the strategies addresses at least two, and often four, of the following goals and target outcomes identified during the early planning process:

- Efficiency and Responsiveness
- Clean and Sustainable Transportation
- Improved Quality of Life
- Support of a New Narrative Focused on Innovation and Opportunity

Table 1-2: Strategies, Next Steps, Target Outcomes, and Performance Metrics

Strategy	Next Steps	Outcomes	Performance Metrics
Smart Corridors	Issue a Request For Information to determine local level of interest. Board to make		▪ Decrease in average commute time on optimized routes

Strategy	Next Steps	Outcomes	Performance Metrics
	final determination of corridors where investment is appropriate. Proceed to implement and integrate smart technology within key corridors		▪ Improvement in roadway and transit level of service post optimization ▪ Reduction in overall corridor congestion ▪ Increase in corridor safety metrics (e.g., fewer accidents, reduced severity of accidents)
Smart Intersections	Implement and integrate smart intersection technology at key intersections based on level of interest by individual jurisdictions and Board concurrence		▪ Hard-braking events, speeding, V2X* interactions ▪ Arrivals on green/red ▪ Clearance interval activity ▪ Pedestrian activity ▪ Turning movement counts ▪ Phase termination detail and summary
Alternative Fuel Vehicles	Identify jurisdictions, assess needs and solutions, develop a funding plan, secure vendor partnerships and funding, and deploy solutions		▪ Number of new alternative fueling/charging stations installed (cars and trucks) ▪ Amount of funding secured to install charging and hydrogen fueling infrastructure ▪ Quantity of greenhouse gas emissions reduced as a result of new fueling/electric-vehicle charging stations installed
Uncrewed Aerial Systems Operations	Conduct inventory of local services and policies, identify shared use opportunities, and determine priority use cases		▪ Reduction in average response time to emergency situations ▪ Number of successful infrastructure inspections conducted using UAS with zero safety violations ▪ Reduction in time required to complete infrastructure inspections
Broadband Enhancement	Leverage Broadband Middle-Mile Network (BMMN) project, assess infrastructure, implement network expansion, and share best practices		▪ Increase in broadband coverage area ▪ Improvement in broadband speed and reliability ▪ Increase in number of households or businesses accessing broadband services ▪ Enhancement in overall digital connectivity and accessibility
Data Governance and Sharing	Establish data governance framework and policies, collaborate through working groups, identify data sharing opportunities, and determine approach. Continue implementation of CAD-to-CAD		▪ Data governance plans completed across agencies ▪ Data sharing agreements executed ▪ Number of successful data integration initiatives across departments or agencies
Joint Operations	Establish working group to identify and prioritize opportunities, develop interagency agreements, and create detailed plans for implementation		▪ Reduction in expenses achieved ▪ Assess enhancements in service delivery quality ▪ Track the number of personnel trained and the effectiveness of joint training programs ▪ Assess improvements in procurement processes ▪ Number of successful Community Outreach and Support Team (COAST) interventions

* V2X (vehicle-to-everything) is wireless communication between a vehicle and any entity that affects, or may be affected by, the vehicle.

Table 1-3 outlines key strategies identified for immediate action within the next 18 months. These strategies represent achievable steps that can be taken in the near term to build momentum and demonstrate progress towards the county's broader vision for a smart future. Each strategy is paired with specific, actionable next steps to ensure alignment with current capabilities and available resources, while laying the groundwork for more complex initiatives in the future.

Table 1-3: Immediate Next Steps

Strategy	Immediate Next Steps
Smart Corridors	▪ Issue a Request for Information to identify candidate corridors and determine priority corridor recommendations.
Smart Intersections	▪ Identify local champions and develop ITS specifications to prepare for sensor implementation at key intersections.
Broadband Enhancement	▪ Assess existing infrastructure, establish local partnerships, and seek ways to leverage the BMMN project.
Data Governance and Sharing	▪ Create a working group to establish a data governance framework. Continue work on the CAD-to-CAD data sharing system.

Table 1-4 provides a generalized overview of the projected timelines and key milestones for the proposed strategies. While the schedule outlines anticipated phases—Policy & Planning, Design & Procurement, Construction & Implementation, and Operations, Maintenance, & Performance Metrics—across all strategies from 2025 to 2029, it is important to note that each project will have a unique implementation schedule. The actual timelines will depend on factors such as funding availability, the readiness of the local jurisdictions involved, and coordination with Caltrans and other relevant agencies. The staggered timelines reflect the prioritization and sequential commencement of these initiatives, ensuring a structured and strategic approach to project development and execution.

Table 1-4: Master Plan Schedule

Policy & Planning

Design & Procurement

Construction & Implementation

Operations, Maintenance, & Performance Metrics

	2025				2026				2027	2028	2029
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Smart Intersections/Corridors: Project 1											
Smart Intersections/Corridors: Project 2											
Smart Intersections/Corridors: Project 3*											
Alternative Fuel Vehicles											
UAS Operations											
Broadband Enhancement: Project 1											
Broadband Enhancement: Project 2											
Broadband Enhancement: Project 3*											
Data Governance and Sharing											
Joint Operations											
Working Group Meetings											

* Note: The timeline is representative, illustrating staggered schedules. Priority projects will commence first, followed by other projects.

1.4 Costs

Table 1-5 includes the general cost data for each strategy. Estimated costs associated with the implementation of each proposed strategy are categorized into preliminary activities, construction, annual operations and maintenance, and other costs such as equipment and software development. Joint operations, which involve coordinated efforts between multiple departments or agencies to improve efficiency and reduce costs, is not shown in the cost table since this strategy will largely depend on the specific areas of focus.

Table 1-5: Cost Estimates

Strategy	Preliminary Activities	Construction/Equipment/ Software Development	Estimated Cost to Implement	O&M (per year)
Smart Corridor Costs	$78,000 per mile	Construction: $880,000 per mile Software Development: $2,000,000	$2,000,000 program costs + $958,000 per mile up-front costs	$50,000 per mile
Smart Intersections	$16,000 - $32,000	Construction: $65,000 Equipment: $5,000 - $100,000	$86,000 - $197,000	$13,000
Alternative Fuel Vehicles	$10,000	$180,000	$190,000	$5,000
Uncrewed Aerial Systems Operations	$5,000 - >$100,000 per drone/operator	Operational cost of $20 per hour per drone	Around $200,000 for 10 drones	Minimal
Broadband Enhancement	$10,000 - $30,000	$60,000 - $100,000	$70,000 - $130,000	$50,000 per mile
Data Governance and Sharing*	$80,000 - $100,000	$250,000	$350,000 for first year	$250,000

* Data Governance and Sharing costs are for the creation of a data portal.

To support implementation of these strategies, several grants were identified to advance the Smart county MP strategies. The Early Action Plan, part of the Smart County MP effort, involved a six-month analysis and stakeholder outreach. Its goal was to identify the focus areas for further study and pinpoint early projects for quick wins. The “120 Days to Win” process recommended in the Early Action Plan can also be followed to help set up the region for success on future grants.

2 Introduction

At over 20,000 square miles, San Bernardino County in California (CA) is the largest county in the contiguous United States (U.S.). It stretches from east of Los Angeles, CA to the Nevada (NV) state border just southwest of Las Vegas, NV. Its region ranges from urban, in the southwestern portion of the county, to extremely remote areas such as the 1.6 million acres Mojave National Preserve in the northeast.

Most of the 2.2 million in population is concentrated in its East Valley and West Valley, which is served by the Ontario International Airport (ONT) – among the fastest growing airports in the U.S. for the past several years. Just a few miles from the airport, Brightline is working to initiate high-speed passenger rail service from Rancho Cucamonga, CA to Las Vegas, NV.

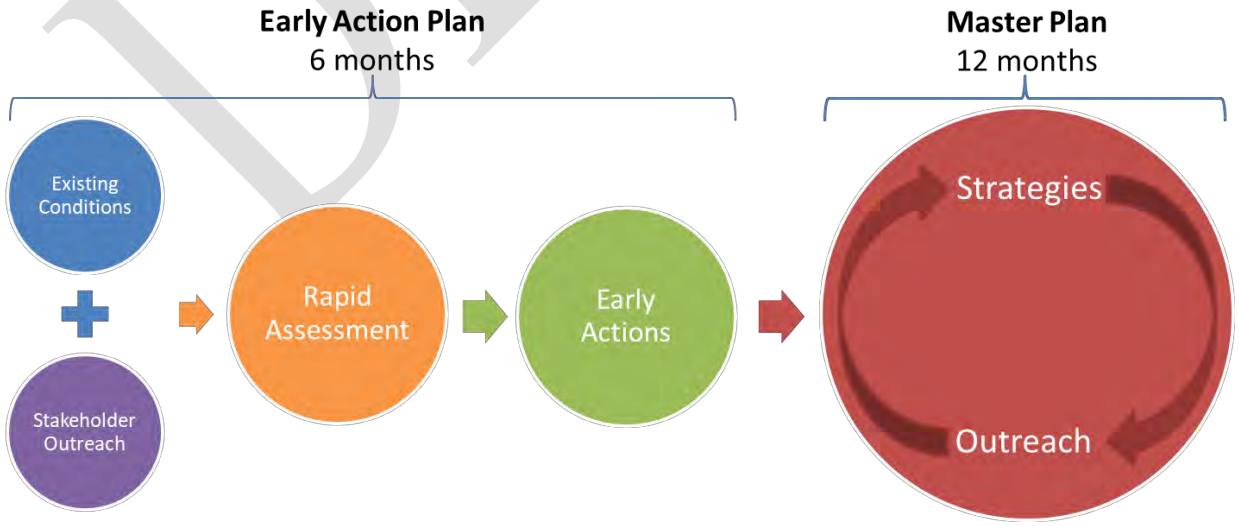
This Smart County Master Plan (Smart County MP) supports the priorities of both SBCOG and San Bernardino County Transportation Authority (SBCTA), under direction of the SBCTA/SBCOG Board. The board comprises representatives from each of the 24 incorporated cities and towns in San Bernardino County, and the five supervisorial districts of San Bernardino County. SBCOG guided this effort, with input from county and city technology representatives.

The project was delivered in two phases, as explained below and in **Figure 2-1**:

- The Early Action Plan phase started with stakeholder outreach and an Existing Conditions Report that identified baseline conditions. A rapid assessment was then conducted which led to recommendations presented in the **Early Action Plan**.
- The Smart County **Master Plan** builds on the Early Action Plan solutions and offers additional strategies that, if supported by member agencies, can improve service, enhancing the quality of life for both residents and visitors to the county.

The Smart County MP recommends a range of strategies to address the initial priorities and enhance the efficiency of government service delivery. These strategies were developed, tested, and reshaped through a more recent series of meetings discussed in **Chapter 4: Outreach Outcomes.** The Smart County MP also provides a toolkit for member agencies with a mix of templates, steps needed to initiate and progress strategies, and resources available online to support delivering the strategies.

Figure 2-1: Smart County Planning Process



3 Current Market

The market landscape is rapidly evolving, influenced by a variety of factors that are shaping the future. A few of the most significant factors are noted in **Table 3-1**.

Table 3-1: Market Conditions/Drivers

			
The technology landscape is maturing, and the use of advanced analytics is accelerating.	Domestic production is on the rise, contributing to economic growth.	Natural disasters are occurring more frequently, creating public safety challenges, and impacting transportation systems.	The level of grant funding available is unprecedented, providing diverse opportunities.

Maturing Technology and Accelerating Advanced Analytics: As technology continues to mature and the use of advanced analytics accelerates, agencies are increasingly adopting data-driven decision-making approaches. This shift allows for deeper insights, enhanced efficiency, and drives innovation across various sectors. Advanced analytics contribute to the thoughtful deployment of resources, prompt diagnostics of performance problems, and enable timely interventions, thereby maximizing cost-effectiveness.

Similarly, the integration of Machine Learning and Artificial Intelligence (AI) is transforming public safety and transportation systems and infrastructure. The move towards autonomous vehicles and Advanced Air Mobility (AAM) systems highlights the pivotal role of AI in advancing modern transportation infrastructures to be safer, more efficient, and responsive to evolving demands.[1] For example, AI can process sensory information to support real-time decision-making for urban air transport, route planning, and automation of complex processes like take-offs and landings.

Domestic Production: There is a clear recent trend towards increasing domestic production in the U.S. This growth is evident across various sectors. Policy changes are being implemented to make U.S. manufacturing more globally competitive, which is expected to further boost domestic production. The U.S. is investing in new industrial strategies, such as transitioning the auto industry from internal combustion engines to electric and expanding domestic semiconductor design, production, and packaging. These changes are being driven by three major pieces of legislation[2]:

- **The Infrastructure Investment and Jobs Act** $1.2 trillion authorized for transportation and infrastructure spending.
- **The Inflation Reduction Act** $400 billion in clean energy funding to substantially reduce U.S. carbon emissions by the end of the decade.

[1] https://journals.sagepub.com/doi/abs/10.1177/03611981221095090

[2] https://www.americanprogress.org/article/investing-to-be-competitive-the-new-u-s-industrial-strategy/

- **The CHIPS and Science Act (CHIPS Act)** $50 billion to strengthen semiconductor research, development, and manufacturing.

Natural Disasters: Natural disasters are occurring more frequently, impacting transportation systems, and creating public safety challenges.[3] Climate change is intensifying issues such as rising temperatures, wildfires, droughts, flooding, and severe weather, which in turn place significant pressure on the nation's emergency services and transportation infrastructure. Recent incidents include the floods in Michigan, the wildfires in California, the deadly snow and ice storm in Texas, and the buckling of I-5 in the Pacific Northwest.[4] These events jeopardize public safety and disrupt transportation networks. In response, agencies are looking to reduce greenhouse gas emissions, enhance infrastructure resiliency, and improve disaster response capabilities to mitigate the impact of natural disasters and ensure continuity of essential services.

Funding: Between the Infrastructure Investment and Jobs Act, providing $1.2 trillion in transportation and infrastructure investment, and the Inflation Reduction Act signed into law in 2022, providing over $5 billion for transportation-related programs, the level of current transportation funding is unprecedented. Additionally, through various legislative efforts at the state level, California has created a range of programs for planning and building transportation, safety, and digital infrastructure. These grant programs include the Regional Resilience Planning and Implementation Grant Program that annually awards roughly $20 million to fund climate resilience efforts, and the California Public Utilities Commission (CPUC) Broadband Loan Loss Reserve Fund that annually awards $175 million to assist local entities and nonprofits to secure private broadband financing. As discussed later in **Section 6.4** (Funding), this funding can support implementation of innovative projects, such as the strategies proposed in this Smart County MP, that advance key initiatives benefitting San Bernardino County communities.

[3] https://ppms.trec.pdx.edu/media/project_files/TRB_TRBAM-22-00866_Paper.pdf

[4] Climate Action | US Department of Transportation

4 Outreach Outcomes

As part of the Smart County MP outreach efforts, diverse stakeholders, including city officials and IT professionals, were engaged through surveys, interviews, and meetings. Their feedback was used to establish the Smart County MP priorities and refine the strategies.

4.1 Identification of Priorities

A Success Management Workshop with the Emerging Technology Ad Hoc Committee, including county and city leaders, was held on June 14, 2023. Based on this and other stakeholder discussions and surveys that were part of the Early Action Plan, priorities were pared down to three categories:

- **Public Safety –** Public safety was the top priority for stakeholders. Despite a decrease in overall crime between 2017 and 2021, violent crimes slightly increased, and safety measures need enhancement.[5] Priorities include enhancing law enforcement technology for crime prevention and suspect identification, improving emergency response with Computer-Aided Dispatch (CAD)-to-CAD systems, addressing the increase in homelessness, and promoting interagency information sharing.
- **Transportation –** San Bernardino County residents face longer commute times compared to nearby regions. A shift away from solo commuting was also noticed in 2021 as the region came out of COVID. Solo commuting dropped from 79.9% to 73.2%.[6]

  Despite a decrease in vehicle collisions in 2020, rates have returned to pre-pandemic levels.

  Stakeholders aim to transform transportation by addressing congestion and safety needs through technology, with strategies such as smart intersections and corridors, zero-emission vehicles, and regional data sharing.
- **Bridging the Digital Divide –** The goal of bridging the digital divide is to extend digital connectivity to all residents of San Bernardino County, ensuring equal access and opportunities. Recent CPUC and Federal Communications Commission rulemaking has designated 100 megabits per second (Mbps) download and 20 Mbps upload as the minimum speed as a standard for internet connectivity, up from the previous standard of 25 Mbps download and 3 Mbps upload. This change reflects surges in residential high-bandwidth internet use, such as videoconferencing. Within San Bernardino County, numerous census tracts do not have complete broadband adoption at 25 Mbps download and 3 Mbps upload, thus lagging even farther behind the new state and federal standard.[7]

  Addressing broadband to bridge the digital divide also allows for the enhancement of public safety communications. Police, fire, and other emergency services workers rely on being able to communicate and retrieve information to do their jobs effectively. In areas without access to strong, available digital connectivity, these workers are forced to purchase and transport expensive equipment. This effort will bridge the digital divide for residents and public safety.

4.2 Strategy and Toolkit Refinement

Outreach during the master planning portion of the Smart County effort focused on testing strategies, understanding any strategy gaps, and homing in on the most useful strategies. **Table 4-1** summarizes some of the key outreach meetings and the feedback or outcomes that helped shape what strategies were ultimately recommended.

[5] https://indicators.sbcounty.gov/safety/crime-rate/

[6] DP03: SELECTED ... - Census Bureau Table

[7] https://www.broadbandmap.ca.gov/

Table 4-1: Smart County Master Plan Outreach

Attendees	Date	Feedback/Outcome
City Managers and IT Directors	02/ 01/24	▪ UAS was flagged as a topic that should be added to the Smart County MP. ▪ The importance of training and opportunity for joint training was raised.
Regional Integration of Intelligent Transportation Systems (RIITS) and Southern California Association of Governments (SCAG)	02/20/24 (RIITS) 04/03/24 (SCAG)	▪ It is possible to integrate certain types of regional planning data with the existing RIITS and SCAG platforms.
City of Ontario	03/18/24	▪ Lessons learned from UAS efforts, Broadband deployment at the city level, and the need for toolkits for each was discussed.
City of Victorville	05/29/24	▪ Agreed that data sharing could be beneficial among the County agencies. ▪ Discussed the benefits of joint purchasing agreements between local agencies.
Transportation Technical Advisory Council (TTAC)	06/03/24	▪ Reviewed seven proposed strategies with the TTAC.
San Bernardino County	09/26/24	▪ Discussed County's current data platform project and how SBCTA member agencies may be able to share and use data in the future.
San Bernardino County GIS	07/08/24	▪ Discussed County's current data sharing program with Google/Waze and opportunities to advance it. ▪ Identified need for regional data standards to enable more effective data sharing among the region's agencies.
San Bernardino County Fire and CONFIRE	06/18/24	▪ Shared the many initiatives that the local Fire community is undertaking. ▪ Agreed that a forward-looking strategy will be beneficial – including data sharing.

5 Proposed Strategies

Utilizing an understanding gained through development of the Existing Conditions Report, rapid assessment, and development of early action items, several strategies were developed to support San Bernardino County's future. These strategies were added to and refined through outreach with local agencies and industry. Based on this input, user needs established during the existing conditions work, and the state of practice, seven recommended stategies were agreed upon and are listed in **Table 5-1** and mapped to the three priorities established in the Early Action Plan.

Table 5-1: Proposed Strategies

	Public Safety	Transportation	Bridging the Digital Divide
Smart Corridors: Instrument corridors with technology and infrastructure to improve traffic efficiency and safety. This includes enhanced connectivity, a building block for sustainable broadband enhancement (discussed later).	Secondary	Primary	
Smart Intersections: Implement intelligent traffic signal systems and other technologies at intersections to optimize traffic flow and improve safety for vehicles and vulnerable road users.	Secondary	Primary	
Alternative Fuel Vehicles: Promote the use of AFVs and pursue high-priority grant opportunities to expand access to charging infrastructure equitably.	Secondary	Primary	
Uncrewed Aerial Systems Operations: Invest in UAS technology for operations that address infrastructure inspection, emergency response, and other public safety applications.	Primary	Secondary	
Broadband Enhancements: Improve broadband infrastructure to provide access to underserved communities.		Secondary	Primary
Data Sharing: Establish a working group to discuss protocols and, where necessary, standards for sharing data among government agencies and the public setting the stage for future virtual operations center, traveler information system, and other efforts.	Primary	Secondary	
Joint Operations: Involve collaborative efforts between two or more government agencies to deliver services more efficiently and cost-effectively. By pooling resources and coordinating actions, agencies can enhance service delivery, reduce redundancies, and achieve common goals.	Primary		

The remainder of this chapter provides detail on each of the seven proposed strategies. Each section starts with an overview of the strategy and then covers the following areas:

- **Benchmarking**: Summarizes various other locations, within the U.S., where similar strategies have been deployed and the impact, lessons learned, or benefits realized from the deployment.
- **Potential Strategy Elements**: Introduces technologies or phases that will serve as the building blocks of the strategy.
- **User Needs**: Reviews the stakeholder needs gathered during the Existing Conditions Report and through stakeholder discussions and workshops that apply to the strategy being proposed.
- **Prioritized Strategy Deployments**: Explains how elements of the strategy were prioritized and what the resulting priorities were.
- **Relevant Stakeholders**: Notes the expected stakeholders needed to successfully implement the strategy.
- **Benefits**: Describes the benefits expected to result from employing the strategy.
- **Costs**: Provides estimated cost ranges for various elements of the strategy.

5.1 Smart Corridors

Smart corridors enable favorable traffic flow and safety by using real-time communications to connect intersections across a corridor. Typically, the through movement along a corridor is optimized, but may vary throughout the day. For example, in industrial areas with a higher density of semi-trucks, prioritizing freight movements can improve level of service along the corridor. Additionally, when priority or preemption is used (Freight Signal Priority (FSP), Transit Signal Priority (TSP), Emergency Vehicle Preemption (EVP)), smart corridors utilize recovery strategies that enable a more rapid return to signal coordination when compared to legacy technology. This ability to recover corridor throughput can improve efficiency and safety where railroad preemption is used today or planned for rail freight or passenger routes with nearby at-grade crossings. In addition to strategies such as preemption/priority, smart corridors use Intelligent Transportation Systems (ITS) to improve the mobility of key arterials, often those which feed into the freeway network, or parallel the freeway network as an alternate route in the case of incidents or recurring congestion.

5.1.1 Benchmarking

This section covers the key developments and current applications in smart corridor technology, outlining their contributions to more efficient transportation.

I-75 Florida's Regional Advanced Mobility Elements Gainesville: This project deployed emerging technologies to better manage, operate, and maintain the multimodal transportation system and create an Integrated Corridor Management solution for I-75 and state highway systems in the cities of Gainesville and Ocala. The emerging technologies proposed in this project were Automated Traffic Signal Performance Measures and CV technologies such as Roadside Units (RSU) and On-Board Units for effective traffic operations, TSP and FSP. The goal of the project was to disseminate real-time information to motorists during freeway incidents. The project was implemented using Dedicated Short-Range Communication (DSRC).[8]

Georgia Connected Vehicles: The Georgia Department of Transportation has significantly advanced CV technology in metro Atlanta, notably enhancing traffic signal efficiency and response times for emergency and transit vehicles. The agency upgraded 2,200 traffic signals and 185 ramp meter locations. This setup ensured connectivity across every major intersection in metro Atlanta. Key features of this CV initiative include emergency vehicle preemption

[8] https://www.fdot.gov/traffic/teo-divisions.shtm/cav-ml-stamp/cv/maplocations/i75-frame.shtm

at select signals to improve response times, TSP for smoother operations on specific routes, and FSP to support efficient platooning. These enhancements streamlined vehicle flow and improved safety.[9]

I-80 Smart Corridor, San Francisco Bay Area: The I-80 Smart Corridor improves safety and mobility along one of California's busiest highways. It spans from the Carquinez Bridge to the Bay Bridge, utilizing ITS technologies like adaptive ramp metering, high-occupancy vehicle (HOV) bypass lanes, and dynamic lane management to optimize traffic during incidents. The system improves traffic flow and incident response through the usage of dynamic message signs and real-time travel advisories which provide drivers with up-to-the-minute updates. These technologies have led to smoother traffic operations and reductions in travel delays.[10]

5.1.2 Potential Strategy Elements

Smart corridor functions link smart intersection devices by utilizing high-speed communications infrastructure. These functions include the following:

- **Dynamic Signal Control:** Dynamic signal control enables Transportation Management Center (TMC) operators to respond to incidents or changing traffic conditions nimbly, by using advanced detection systems at and between intersections. Improved vehicle and VRU detection allow traffic managers to better understand and respond to incidents by altering traffic signal timing and/or instituting other pre-planned response plans. This application goes beyond earlier implementation of adaptive signal timing and requires extensive communications and traffic management equipment, typically with a TMC or virtual TMC based central system to adjust signal timing, with various levels of autonomy. An AI-based Decision Support System enhances this dynamic control by leveraging advanced algorithms to process real-time data, enabling more intelligent and rapid decision-making compared to traditional methods. This integration of AI facilitates better predictions and adjustments to traffic conditions, improving overall traffic flow and incident response efficiency.
- **Traffic Signal Coordination:** Traffic signal coordination associates traffic signals so that delays are minimized at each intersection along a given arterial roadway corridor. Proper signal coordination enables each intersection to be phased in a way that benefits the movements along the corridor. Signal coordination enables platooning of vehicles, which is proven to reduce delay.[11] San Bernardino County is no stranger to coordination. In 1999, SANBAG (predecessor to SBCTA and SBCOG), identified the need to perform signal timing coordination in the San Bernardino Valley (East and West). This occurred in four tiers, starting with development of an overarching strategic plan in 1999, and construction in 2006, and lasting through 2014, with over 1,200 intersections coordinated.[12]
- **Signal Pre-empt / Priority**: Connected intersections, including those leveraging CV technology, allow for enhanced operations and safety for emergency responders, transit, and freight management by using detection technologies and/or V2X communications to identify and communicate information between traffic signals and appropriately equipped vehicles. These technologies can also be utilized at locations of railroad preemption to assist in transitioning back to normal operations after a preemption event. Although these devices are installed at intersections and would offer direct benefits to the intersection, they are most effective when connected along a corridor to provide the most impact.
- **Transit Signal Priority (TSP):** TSP enables transit to have an advantage when crossing an intersection to reduce transit trip times and improve transit reliability. Legacy decentralized methods typically involved direct line of sight communication between the approaching transit vehicle and intersection equipment, while newer "cloud-based" implementations allow relay of TSP check-in and check-outs via a virtual phase selector which is connected to both the transit vehicle and traffic signal networks. This requires cross-jurisdictional corridors to

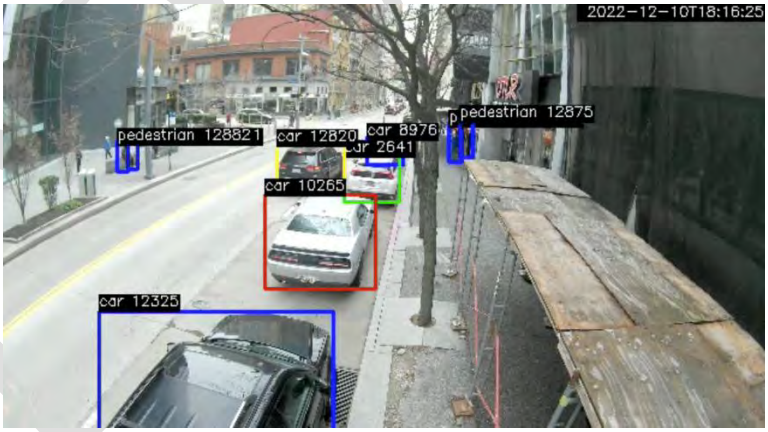
[9] https://transportationops.org/sites/transops/files/GDOT%20V2I%20Update%20-%20July%202019.pdf
[10] https://www.theiotintegrator.com/transportation/california-s-first-smart-highway-project-comes-to-life
[11] https://www.sciencedirect.com/science/article/abs/pii/S0191261505000792
[12] https://www.gosbcta.com/plan/sb-valley-coordinated-traffic-signal-system-plan/

understand each other's system requirements and to work closely with the transit agency to ensure that the TSP calls work without issue.

- **Emergency Vehicle Preemption:** Like TSP, emergency vehicle preemption allows the intersection phasing to favor the phase through which an emergency vehicle will be traveling. However, emergency vehicle preemption typically will have a higher-level priority than TSP. Pre-established operating rules allow efficient restoration of traffic signal coordination. On a smart corridor, peer-to-peer communication can reestablish coordination much faster, minimizing delay to overall traffic flow. Improved EVP enables faster emergency response times and decreased congestion.
- **Freight Signal Priority (FSP):** FSP is a strategy at the intersection level that can have corridor-wide impact. FSP is like EVP and TSP, where a call can be made from the commercial vehicle to the intersection to enable improved movement through the intersection, typically in the form of protected turn phases into warehouse areas for freight vehicles. Corridors that are equipped with FSP can have higher throughput due to the reduction of stopped trucks or trucks blocking traffic through incomplete turn movements, which hinders overall flow. FSP is typically a soft priority, like TSP. FSP can be programmed for certain times at specific intersections, where communication between the vehicle and the intersection can be direct or cloud based.
- **Rail Preemption**: Integrating rail preemption into at-grade rail-roadway crossings provides advanced notification for active crossings and integrates with Advanced Traffic Management System (ATMS) platforms to mitigate traffic disruptions. Such integration may allow vehicles to reroute to avoid active crossings and, by extension, possible conflicts. After the train has passed the grade crossing, nearby intersections can be timed to more effectively clear traffic queues.
- **Freight Applications:** There are many other technology solutions that can be implemented along corridors to improve reliability and safety for freight movements. Weigh In Motion (WIM), thermal brake inspection, and tire pressure anomaly identification are strategies that aid freight carriers in identifying issues early to reduce incidents. This in turn reduces local agency operating expenses associated with responding to emergency situations.
- **Weigh in Motion (WIM)**: WIM is particularly beneficial in regions with mountainous terrain. It allows for the real-time detection of issues such as overheating or defective brakes in moving vehicles. When installed at strategic locations, it allows for routine weight checks for compliance. Examples are the I-15 Weigh Stations in Cajon or Mountain Pass. In addition to WIM, other roadside technologies can be deployed to enhance safety. For example, infrared sensors could be used to identify overheated brakes. These sensors can relay warnings directly to the vehicle's cab (V2X) or through roadside warning signs.
- **Mobile Freight Application**: Another possible freight amenity would be a mobile application focused on travel information targeted for commercial vehicle operators. California Department of Transportation (Caltrans) District 8 will be deploying an ATMS with the capability to support a Truck Parking Availability System. Other useful travel information for commercial vehicle operators might include traffic conditions, and would support routing for efficient, just-in-time delivery. San Bernardino County has an opportunity to partner with Caltrans to deliver mobile application services to commercial vehicle drivers These applications can potentially leverage the various existing freight platforms such as the I-10 Truck Parking Availability System, Sunguide or Lonestar. Commercial vehicle operators have expressed interest in these application services if they are not required to install additional hardware in the vehicle to operate. A ubiquitous, mobile freight application has the possibility of increasing safety, decreasing emissions, and speeding routing across the county.
- **Environmental Monitoring**: Environmental monitoring at its most basic level occurs at the intersection level, however, there are benefits to extending environmental monitoring along a corridor. The more air quality and weather data that is available to decision makers, the more informed the decision can be. Corridor-wide weather data can be useful for evacuations so the coordinating agencies can understand the situation on the ground along an evacuation corridor. Corridor-wide air quality data can inform policy makers where unsafe concentrations of pollutants are located, which can then be used to implement strategies to mitigate or remediate these issues.

- **Public Agency Wi-Fi**: San Bernardino County has slightly less residents with access to high-speed internet relative to the rest of the state.[13] To bridge the digital divide, public Wi-Fi could be offered cost-efficiently along smart corridors at key public gathering points. Parks near intersections, mobility hubs or frequent event locations could offer Wi-Fi to those in the area. As new fiber is deployed by the State's BMMN, municipalities that connect their traffic control devices to fiber may opt to install extra capacity and network equipment to support public Wi-Fi and a virtual local area network. A virtual local area network can be used to provide public Wi-Fi to individuals near the traffic control device, either continuously for areas like a park or intermittently for special events. This can offer new areas of public Wi-Fi that can be used by residents, visitors, and even special event vendors.
- **Off-Pavement Parking Management:** Finding parking can be frustrating. A potential solution to help private and public operators manage parking utilizes AI and smart technologies to facilitate an improved experience. This could include real-time space availability, dynamic pricing, predictive analytics, or user-friendly apps that facilitate reduced congestion, space optimization, and the reduction of greenhouse gases. Ensuring that parking is available when desired can reduce congestion in commercial districts and increase throughput of a corridor.
- **Curb Management Sensors:** Curb space is a valuable commodity in the urban environment with multiple demands such as increased pick-ups, drop-offs, and new alternative transportation modes. Smart sensors built on interactive platforms can support effective curb management, similar to those discussed as part of parking management. These sensors leverage AI to drive turnover, safety, accessibility, and they communicate information to the user. For example, they can display recognized objects and events to help manage curb space more efficiently (**Figure 5-1**). These systems can improve turnover like off-pavement parking management that results in a more efficient use of available space, primarily in commercial districts.

Figure 5-1: Automated Curb Management



- **Speed Indicators:** Reducing speeds can dramatically reduce the severity of collisions, and in many cases, protect VRUs. Speed indicators are "feedback signs" that show drivers the speed at which they are traveling to encourage them to decrease their speed, when appropriate. Speed indicator signs have been proven to reduce speeds by 10-20% and increase speed limit compliance from 30% to 60%.[14] Areas such as school zones, residential areas, or other high-trafficked pedestrian areas can benefit by having vehicles travel at safer speeds that decrease the incidence and severity of collisions.

[13] California Public Utilities Commission (CPUC). 2023. "State of California Fixed Consumer Broadband Deployment." https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/broadband-mapping/docs-uploaded-2023/household-deployment-by-county-as-of-dec-31-2021.pdf

[14] https://www.radarsign.com/#:~:text=Speeders%20slow%20down%20up%20to,remarkable%2030%25%20to%2060%25

5.1.3 User Needs

Table 5-2 outlines the needs identified that could be addressed as part of the implementation of a Smart Corridor implementation strategy. Smart Intersection user needs, in **Table 5-9**, also covers user needs that would be met by a Smart Corridor implementation strategy.

Table 5-2: Smart Corridor User Needs

Category	User Needs
Traffic Management	▪ Need for dynamic traffic management on arterial portions of the roadway network. ▪ Need for customized traffic management strategies that consider local factors on key corridors. ▪ Need for real-time traffic data to dynamically address the operational performance of corridors. ▪ Need for high-speed, reliable traffic signal and ITS communications infrastructure.
Freight Management	▪ Need for facilitating freight deliveries through the additional use of urban arterial management. ▪ Need for improved commercial vehicle travel information. ▪ Need for automated commercial vehicle inspection, credentialing, and clearance systems to enable more efficient commercial vehicle operations.
Equity and Environment	▪ Need to increase driver awareness of surroundings and signage around High Injury Network locations (including speed limits, crosswalks, and transit stops). ▪ Need to provide real-time alerts (e.g., location of pedestrians, pedestrian crossings, multimodal travel options/connections, and wayfinding information) to drivers and transit users for better decision-making and trip planning. ▪ Need for technology improvements at rail grade crossings to improve safety. ▪ Need to consider coordination and connection opportunities with existing transit/paratransit services.

5.1.4 Prioritized Strategy Deployment Locations

San Bernardino County has a varied geography and each of the four regions pose unique opportunities and challenges. This means that smart corridor plans may vary slightly between jurisdictions, and from one proposed smart corridor to another. The methodology for corridor identification started by creating four categories (safety, evacuation, freight, and congestion/air quality), to help distinguish and address different needs across the county.

There was an additional level of outreach, outside of the Smart County MP, to local jurisdictions and Omnitrans that included the potential for investing in "priority transit corridors" in the East and West Valley subregions. A priority transit corridor could range from selective application of strategies such as TSP or "queue jumps" at intersections to full BRT. This outreach is occurring as part of SBCTA's Long Range Multimodal Transportation Plan (LRMTP) and will be factored into the prioritization and funding process subsequent to the completion of the Smart County MP. While the smart corridors identified for the Victor Valley (Bear Valley Road) and Morongo Basin (SR-62) appear firm at this point, additional discussions will be held with local jurisdictions, Caltrans, and the SBCTA Board to confirm that direction.

The identification of the actual corridors for investment in all subareas will be undertaken under SBCTA Board oversight and the following general sequence:

- The full set of candidate smart corridors will be identified based on the combination of Smart County MP input and outreach to the jurisdictions, Caltrans, and transit operators. In other words, the list of corridors and corridor limits may be expanded or modified based on this additional input.

- Potential funding sources will be identified. For the Valley, the Board has already set aside $5 million of Measure I Traffic Management System funds for investment in traffic signal coordination upgrades, and additional funding for the transit portion could come from the Measure I funding set aside for Express Bus/BRT. It should be noted that the first $1 million investment of this funding was made to enhance operations on the Haven Avenue corridor through a joint effort by Rancho Cucamonga and Ontario. Further investment was put on hold until the completion of the Smart County MP. For the Victor Valley

and Morongo Basin, Measure I Project Development and Traffic Management System (PDTMS) funds are potential sources. But in all corridors, grant funding will also need to be pursued, and those opportunities will be identified.

- For the East and West Valley, a Request For Information (RFI) will be disseminated in Fiscal Year 2024-2025 to assist the SBCTA Board in determining which corridors represent the best Smart Corridor/Transit investments on which to spend Valley Measure I funding that has been identified for that purpose.

- Recommendations for Smart Corridors will be drafted based on the responses to the RFI, in coordination with recommended priority transit corridor investments. Inclusion on a priority transit corridor will be a consideration, but not necessarily a requirement for Smart Corridor investment.

- The SBCTA Board will make a final determination on the recommended investments.

In terms of the evaluation of corridors for the Smart County MP, the following four criteria enabled the assessment of potential corridors for consideration:

- **Safety:** The most effective deployment of Smart Corridor technology can be along corridors that have the highest density of collisions. Thus, corridors were selected by determining a novel "collision per mile" statistic using TIMs data[15], which enabled the identification of corridors with the greatest density of collisions. Various elements can be used along these corridors, such as dynamic signal control, coordination, speed indicators and soft priorities for VRU protection. Smart intersection strategies for VRUs can be applied to relevant intersections along the corridor to reduce VRU/vehicle conflicts such as a leading pedestrian interval. Additionally, physical infrastructure improvements can be beneficial for safety such as increased lighting, bike boxes, or curb extensions.[16]
- **Evacuation:** San Bernardino experiences earthquakes, riverine flooding, landslides, wildfires, and mountain area winter weather, among other natural disasters. This is compounded by areas that have low community resilience. Less resilient communities are not as prepared for disasters and face greater disruptions during disaster recovery.[17] Corridors were identified that traversed particularly high-risk census tracts specified by Federal Emergency Management Agency.[18] This aligns with the objectives of the SBCTA/WRCOG Emergency Evacuation Network Resilience Study of improving network resilience and improving emergency access during evacuations with a particular focus on disadvantaged communities. During evacuation events, sudden large influxes of traffic can flood travel corridors, rapidly overwhelming capacity. Evacuation corridors could utilize smart infrastructure monitoring, enhanced redundant communications platforms, public/agency Wi-Fi, changeable message signs, connected vehicle applications, or legacy driver communication technology with the objective of being able to move large numbers of people rapidly and safely, while providing the most up-to-date information to prepare or direct evacuees for adverse conditions.
- **Congestion/air quality:** San Bernardino County has some of the worst air pollution in the nation.[19] Top transportation mitigation methods include improving traffic throughput and reducing idling. Dynamic signal control, coordination, and FSP can mitigate idling to reduce emissions. Corridors were selected by determining census tracts with the worst CalEnviroScreen Scores, developed by the California Environmental Protection Agency, which ranks census tracts on a composite score composed of various health factors. Nearby corridors were then selected based on publicly available traffic data. Corridors were thus selected from areas with the poorest air quality and most significant congestion.

[15] https://tims.berkeley.edu/

[16] https://dot.ca.gov/-/media/dot-media/programs/safety-programs/documents/shsp/shsp-vru-report2-a11y.pdf

[17] Community Resilience | National Risk Index (fema.gov)

[18] Map | National Risk Index (fema.gov)

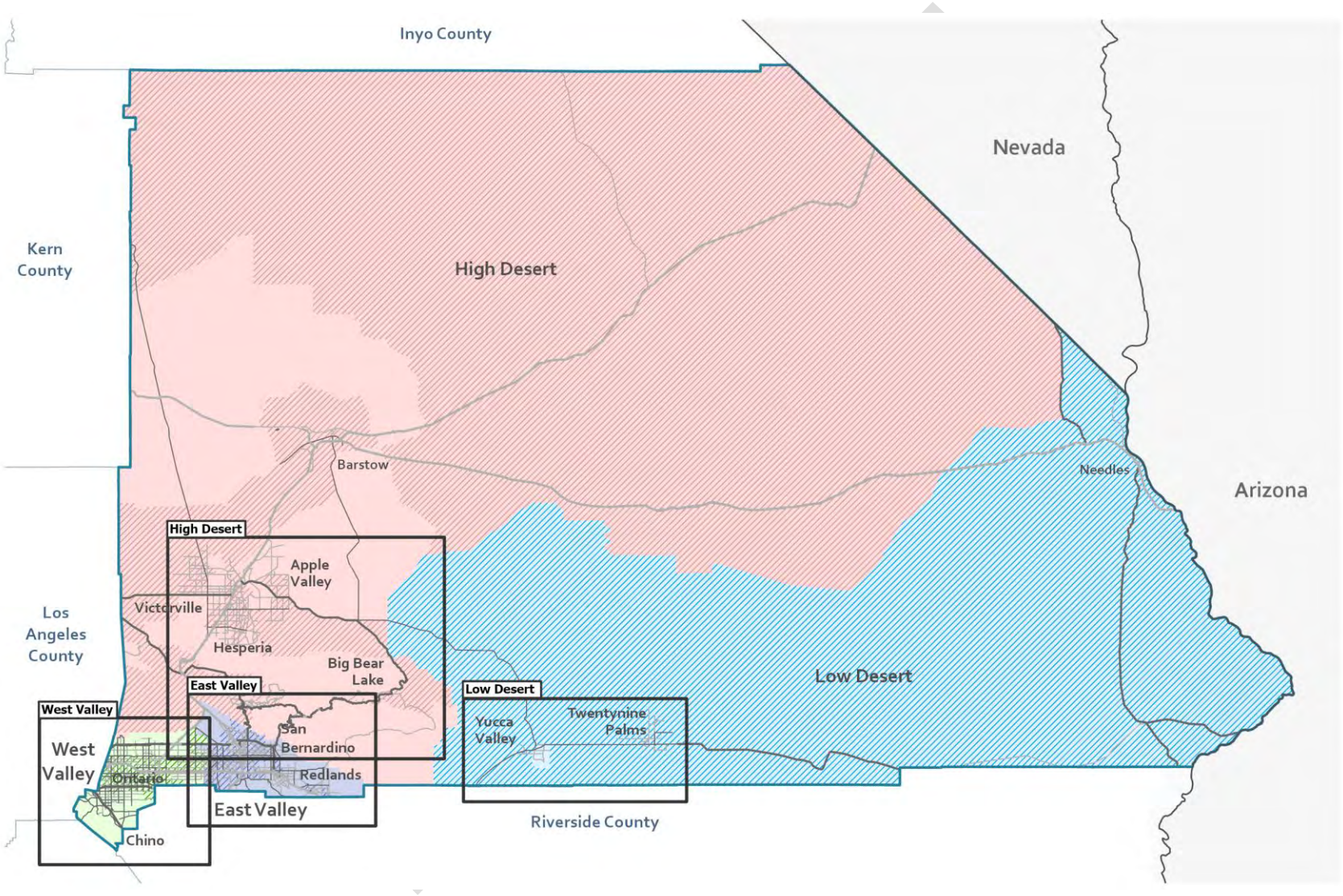
[19] Inland Empire Once Again Ranks As Worst in Nation for Air Quality | Earth Focus | News & Public Affairs | PBS SoCal

- **Freight:** San Bernardino County has numerous important freight routes that stand to benefit from improved signal timing, coordination, driver communication, and FSP strategies. Improvements along these corridors can also reduce truck traffic on local streets by increasing driver awareness of appropriate truck routes and increasing driver trust in infrastructure. Corridors were selected based on expert industry input and literature review. Freight corridors also include rail freight improvements such as at-grade crossing safety improvements to reduce or eliminate costly collisions. Signal coordination between local agencies and railroads can enable the routing of traffic away from at-grade crossings prior to rail freight moving through the crossing to mitigate conflicts. This back-end mitigation can be in addition to in-situ improvements such as double crossing-gates.

Next, corridors were reviewed based on similar work that was already underway or recently completed to align future efforts. This included the work done in the East and West Valley on the San Bernardino Valley Coordinated Traffic Signal System (SBVCTSS) project and the smart corridor work proposed for Archibald Avenue in Ontario and San Bernardino Ave/Alabama St in an unincorporated San Bernardino County Island, encircled within the city of Redlands. In the following figures, corridors marked with an asterisk (*) were included in part or whole in the SBVCTSS Tiers 1-4. Corridors marked with a plus (+) were included in the Early Action Plan, which identified locations that were prioritized for the benefits that these would provide when implemented.

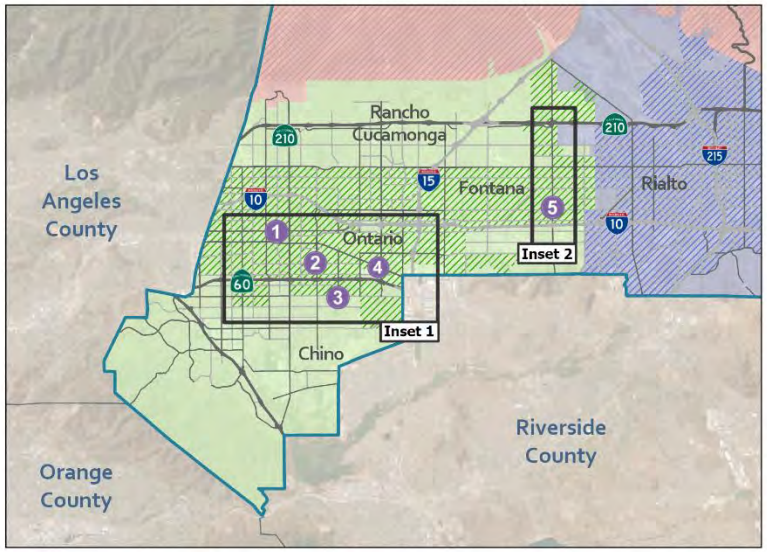
The following figures illustrate the potential smart corridors identified through Smart County MP process and that will be considered in the decision-making framework for investment described earlier in this section across the four regions (West Valley, East Valley, High Desert, and Low Desert).

Figure 5-2: Prioritized Smart Intersections and Corridors Deployment



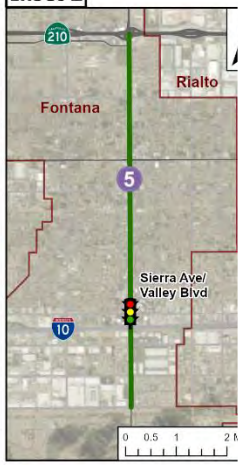
West Valley

Smart Corridors and Intersections



Inset 1

Inset 2



1 * Holt Blvd (Ramona Ave to Convention Ctr Wy)

2 *+ S Grove Ave (E Riverside Dr to E Holt Blvd)

3 * Archibald Ave (Ontario Ranch Rd to E Jurupa St)

4 * Mission Blvd (S Grove Ave to SR-60)

5 * Sierra Ave (Jurupa Ave to SR-210)

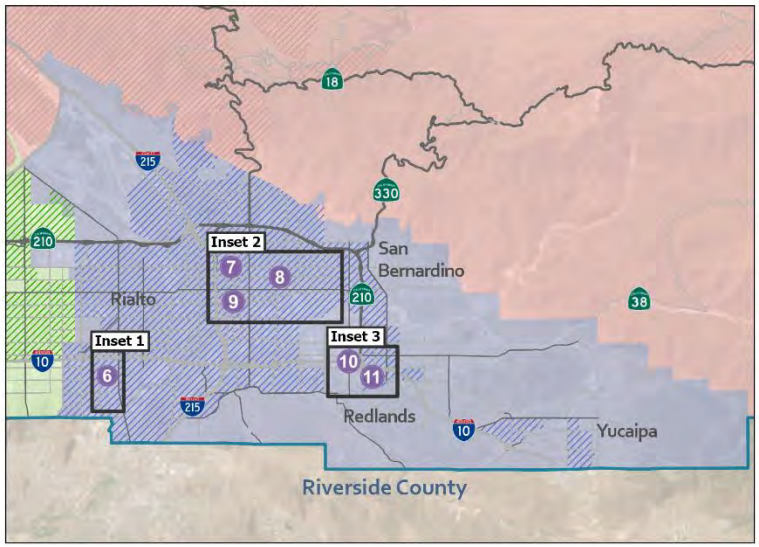
Legend

Proposed Improvements

- Freight
- Evacuation
- Smart Corridor
- Safety
- Congestion/Air Quality
- Smart Intersection
- Corridor ID
- * Included in SBVCTSS Tiers 1-4
- + Included in Early Action Plan

East Valley

Smart Corridors and Intersections



Inset 1

Inset 2

Inset 3

6 Cedar Ave (Jurupa Ave to Bloomington Ave)

7 * W Baseline St (N California St to N Arrowhead Ave)

8 W 9th St (Medical Ctr Dr to Palm Ave)

9 N/S E St (West Orange Show Rd to W Baseline St)

10 + Alabama Ave (Palmetto Ave to Redlands Blvd)

11 Redlands Blvd (California St to E Citrus Ave)

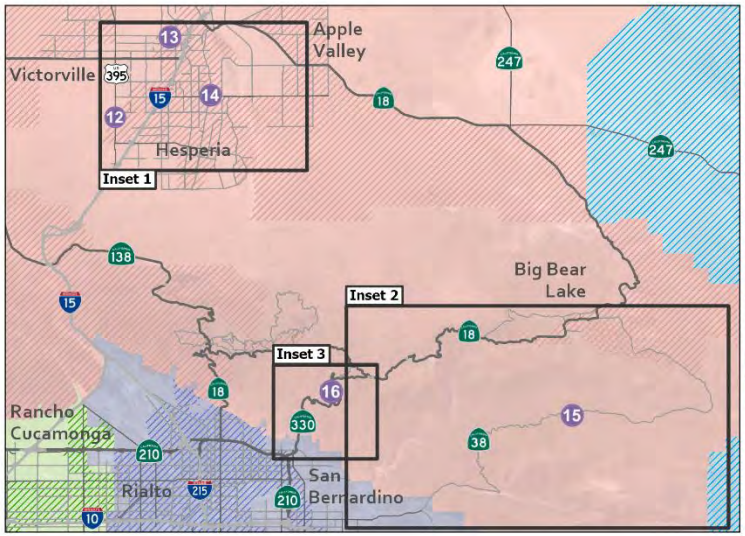
Legend

Proposed Improvements

- Freight
- Evacuation
- Smart Corridor
- Safety
- Congestion/Air Quality
- Smart Intersection
- * Included in SBVCTSS Tiers 1-4
- Corridor ID
- + Included in Early Action Plan

High Desert

Smart Corridors and Intersections



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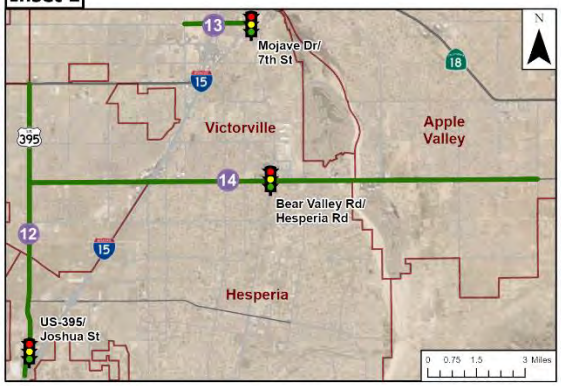

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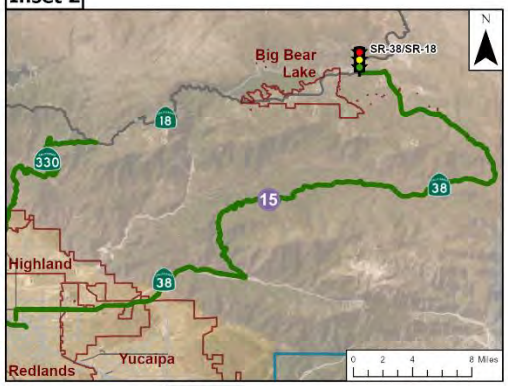
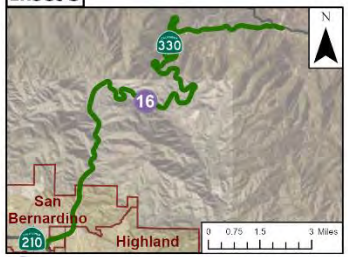


Inset 3



12 US-395 (from I-15 to SR-18)

13 Mojave Dr (Amargosa Rd to 7th St)

14 + Bear Valley Rd (I-15 to Central Rd)

15 SR-38 (I-10 to SR-18)

16 SR-330 (SR-210 to SR-18/Running Springs)

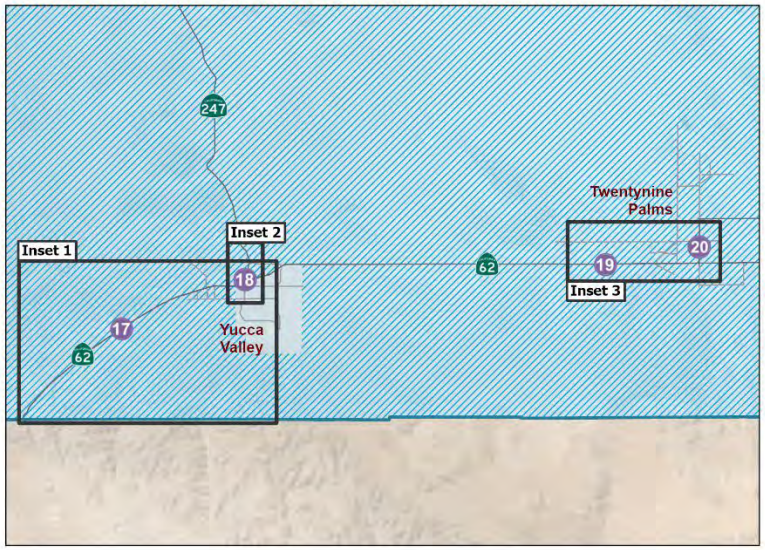
Legend

Proposed Improvements

- Freight
- Evacuation
- Smart Corridor
- Safety
- Congestion/Air Quality
- Smart Intersection
- \+ Included in Early Action Plan
- # Corridor ID

Low Desert

Smart Corridors and Intersections

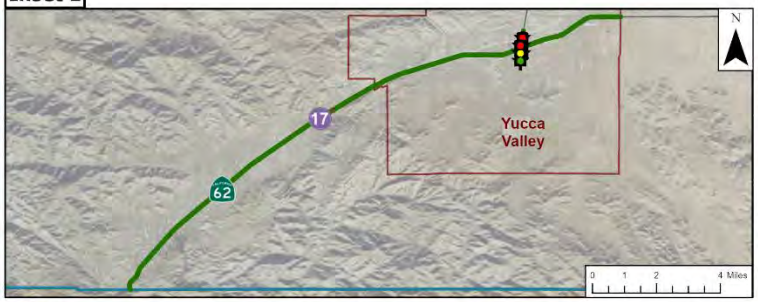


Legend

Proposed Improvements

- Freight
- Evacuation
- Smart Corridor
- Safety
- Congestion/Air Quality
- Smart Intersection
- \+ Included in Early Action Plan
- Corridor ID

Inset 1

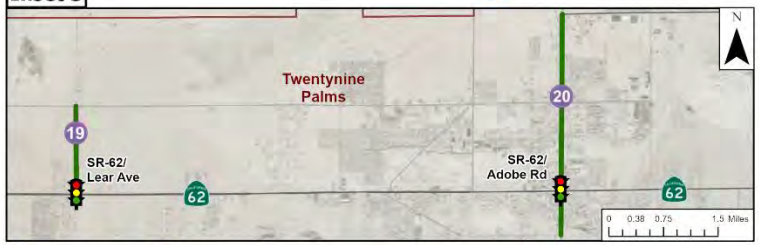


17 + SR-62 (County line to Yucca Mesa Rd)

Inset 2

18 SR-247 (Yucca Trail to Crestview Dr)

Inset 3



19 Lear Ave (SR-62 to 2 Mile Rd)

20 Adobe Rd (Sullivan Rd to Amboy Rd)

5.1.5 Relevant Stakeholders

While Infrastructure Owner Operators (IOO) will hold the primary responsibility for planning and implementation, other stakeholders will be helpful throughout each project. Where the project spans multiple jurisdictions, local agencies, SBCTA/SBCOG and Caltrans can be helpful for planning and coordinating efforts. Caltrans, specifically, will be involved when corridors pass through Caltrans operated intersections or state routes. For the priority or preemption strategies, the IOOs will work with the entities affected by the new technology. This may include transit agencies, freight companies, rail operators, and public safety agencies and may involve entities from multiple jurisdictions based on the corridor.

The community should also be engaged to understand the opportunities smart corridors bring and how any technology implementation will affect them. Their input could help an IOO identify user needs to build out the right solution for their community. Communities who have health concerns may wish to implement FSP to reduce diesel emissions from idling vehicles. Another community may be more interested in TSP and work with the transit agency and SBCTA to implement.

The immediate stakeholders to help develop this strategy further include traffic operations personnel from the IOOs, the SBCTA TTAC, and the IT working group.

5.1.6 Benefits

Smart corridors offer numerous benefits, enhancing overall traffic management, safety, and environmental quality. The following are some of these benefits:

- Reduction in Greenhouse Gases (GHG):
  - Benefits: Residents, Environment
  - Impact: Lower emissions, improved air quality in areas with high ozone, particulate matter 2.5 micrometers and smaller ($PM_{2.5}$), and diesel fumes.
- Reduction in Crashes:
  - Benefits: Travelers, Emergency Services
  - Impact: Increased safety, fewer accidents, and reduced emergency response needs.
- Reduction in Travel Times:
  - Benefits: Travelers, Freight Transport
  - Impact: Faster journeys, reduced congestion, and improved efficiency in freight transport.
- Increased Reliability:
  - Benefits: Travelers, Public Transport
  - Impact: More predictable travel times and improved public transport schedules.
- Improved Management of Traffic Diversion:
  - Benefits: Travelers, Local Businesses
  - Impact: Better handling of freeway incidents, reduced congestion on arterial roads, and minimized disruption to local traffic.
- Dynamic Sign Control and Traffic Signal Timing:
  - Benefits: Drivers, Traffic Management Authorities
  - Impact: Real-time information sharing, optimized traffic flow, and enhanced incident response capabilities.

5.1.7 High-Level Costs

Costs for smart corridor projects will vary greatly depending on the selected technology, the length of the corridor and the number of intersections. Outside conditions including existing transportation technology and the availability of electricity and fiber in the area will also affect the cost.

The following cost estimates have been developed for each corridor by assuming that fiber conduit will be trenched along the length of the corridor, controller upgrades will take place at each of the signalized intersections, and the various amenities included are implemented in the quantities indicated. Some corridors may not require this level of infrastructure, depending on specific applications. The estimates do not include any smart corridors that may be added as a result of the priority transit corridor outreach for the LRMTP. The costs are provided only to give a sense of the overall scale of investment that could be needed. Costs will be refined based on the specific design concept and scope for each corridor as it is developed. Each of the quantities developed is listed on a per corridor basis. Depending on agency need, this may vary in implementation. **Table 5-3**, **Table 5-4**, **Table 5-5**, and **Table 5-6** provide high-level summaries of smart corridor improvement costs in the West Valley, East Valley, High Desert, and Low Desert, respectively.

Table 5-3: Smart Corridor Improvement High-level Cost Summary – West Valley

Cost Elements (S=Short, M=Medium, L=Long)	Corridor						Unit of Measure	Cost per Unit	Total Cost
	1	2	3	4	5	6			
Number of signalized intersections	12	28	18	11	7	8	Each	N/A	N/A
Upgrade Controllers (S)	6	14	9	11	7	8	Intersections (1 Controller per Intersection)	$10,000	$0.55M
Upgrade Detection (veh, bike, ped) (S)	5	14	9	11	7	4	Intersections (4 Upgraded Approaches per Intersection)	$11,000	$0.55M
Upgrade Signal Timing (S)*	12	28	18	11	7	8	Intersections (1 Upgrade per Intersection)	$5,000	$0.42M
Communications (S)**	2.14	6.10	6.40	1.76	1.76	3.30	Miles (Total along corridor)	$812,000/mile	$17.4M
Closed-Circuit Television (S)*	5	7	9	4	2	2	Intersections (1 unit per intersection)	$8,000	$0.23M
Automated License Plate Readers (S)	3	6	9	6	2	4	Intersections (1 unit per intersection)	$20,000	$0.58M
Air Quality Sensors (M)	3	3	3	2	2	3	Intersections (1 unit per Intersection)	$13,000	$0.21M
Connected Vehicle RSUs (M)	5	6	5	4	4	4	Intersections (1 per Intersection)	$10,000	$0.29M
CV Vulnerable Road User App (M)	Lump Sum – Countywide Cost***								-
CV Freight App (M)	Lump Sum – Countywide Cost***								-
Video Management System (M)	Lump Sum – Countywide Cost***								-

Cost Elements (S=Short, M=Medium, L=Long)	Corridor						Unit of Measure	Cost per Unit	Total Cost
	1	2	3	4	5	6			
Enable Broadband Middle-Mile connection (L)	-	2	1	1	1	1	Intersections (1 connection per intersection)	$100,000	$0.60M
Total Cost (M$)	2.20	5.90	6.10	2.10	1.86	3.14	-	N/A	$20.86M

* # of intersections; ** in miles; *** cost included in **Table 5-7**

Table 5-4: Smart Corridor Improvement High-level Cost Summary – East Valley

Cost Elements (S=Short, M=Medium, L=Long)	Corridor					Unit of Measure	Cost per Unit	Total Cost
	7	8	9	10	11			
Number of signalized intersections	11	15	9	13	17	Each	N/A	N/A
Upgrade Controllers (S)	11	15	9	13	17	Intersections (1 Controller per Intersection)	$10,000	$0.65M
Upgrade Detection (veh, bike, ped) (S)	11	15	9	13	17	Intersections (4 Upgraded Approaches per Intersection)	$11,000	$0.71M
Upgrade Signal Timing (S)*	11	15	9	13	17	Intersections (1 Upgrade per Intersection)	$5,000	$0.32M
Communications (S)**	1.52	6.52	4.51	3.10	2.88	Miles (Total along corridor)	$812,000/ mile	$15.05M
Closed-Circuit Television (S)*	5	3	4	6	5	Intersections (1 unit per intersection)	$8,000	$0.18M
Automated License Plate Readers (S)	4	3	3	6	6	Intersections (1 unit per intersection)	$20,000	$0.44M
Air Quality Sensors (M)	2	4	4	3	2	Intersections (1 unit per Intersection)	$13,000	$0.20M
Connected Vehicle RSUs (M)	3	4	2	5	8	Intersections (1 per Intersection)	$10,000	$0.22M
CV Vulnerable Road User App (M)	Lump Sum – Countywide Cost***							-
CV Freight App (M)	Lump Sum – Countywide Cost***							-
Video Management System (M)	Lump Sum – Countywide Cost***							-
Enable Broadband Middle-Mile connection (L)	2	1	1	1	2	Intersections (1 connection per intersection)	$100,000	$0.70M
Total Cost (M$)	2.01	6.03	4.25	3.35	3.36	-	N/A	$18.47M

* # of intersections
** in miles
*** cost included in **Table 5-7**

Table 5-5: Smart Corridor Improvement High-level Cost Summary – High Desert

Cost Elements (S=Short, M=Medium, L=Long)	Corridor					Unit of Measure	Cost per Unit	Total Cost
	12	13	14	15	16			
Number of signalized intersections	9	26	-	-	7	Each	N/A	N/A
Upgrade Controllers (S)	9	26	-	-	7	Intersections (1 Controller per Intersection)	$10,000	$0.42M
Upgrade Detection (veh, bike, ped) (S)	9	26	-	-	7	Intersections (4 Upgraded Approaches per Intersection)	$11,000	$0.46M
Upgrade Signal Timing (S)*	9	26	-	-	7	Intersections (1 Upgrade per Intersection)	$5,000	$0.21M
Communications (S)**	7.37	9.91	15.42	59	1.73	Miles (Total along corridor)	$812,000/mile	$75.87M
Closed-Circuit Television (S)*	3	6	6	6	4	Intersections (1 unit per intersection)	$8,000	$0.20M
Automated License Plate Readers (S)	2	6	2	6	4	Intersections (1 unit per intersection)	$20,000	$0.40M
Air Quality Sensors (M)	3	3	4	6	4	Intersections (1 unit per Intersection)	$13,000	$0.23M
Connected Vehicle RSUs (M)	2	6	2	6	4	Intersections (1 per Intersection)	$10,000	$0.20M
CV Vulnerable Road User App (M)	Lump Sum – Countywide Cost***							-
CV Freight App (M)	Lump Sum – Countywide Cost***							-
Video Management System (M)	Lump Sum – Countywide Cost***							-
Enable Broadband Middle-Mile connection (L)	1	1	0	0	1	Intersections (1 connection per intersection)	$100,000	$0.3M
Total Cost (M$)	6.51	9.23	12.82	48.35	1.96	-	N/A	$78.29M

* # of intersections

** in miles

*** cost included in **Table 5-7**

Table 5-6: Smart Corridor Improvement High-level Cost Summary – Low Desert

Cost Elements (S=Short, M=Medium, L=Long)	Corridor				Unit of Measure	Cost per Unit	Total Cost
	17	18	19	20			
Number of signalized intersections	12	3	2	2	Each	N/A	N/A
Upgrade Controllers (S)	12	3	2	2	Intersections (1 Controller per Intersection)	$10,000	$0.19M
Upgrade Detection (veh, bike, ped) (S)	12	3	2	2	Intersections (4 Upgraded Approaches per Intersection)	$11,000	$0.21M
Upgrade Signal Timing (S)*	12	3	2	2	Intersections (1 Upgrade per Intersection)	$5,000	$0.1M
Communications (S)**	15.08	1.01	1.01	0.67	Miles (Total along corridor)	$812,000/mile	$14.29M
Closed-Circuit Television (S)*	4	2	1	2	Intersections (1 unit per intersection)	$8,000	$0.07M
Automated License Plate Readers (S)	4	1	1	2	Intersections (1 unit per intersection)	$20,000	$0.16M
Air Quality Sensors (M)	3	1	1	1	Intersections (1 unit per Intersection)	$13,000	$0.10M
Connected Vehicle RSUs (M)	1	1	0	1	Intersections (1 per Intersection)	$10,000	$0.03M
CV Vulnerable Road User App (M)	Lump Sum – Countywide Cost***						-
CV Freight App (M)	Lump Sum – Countywide Cost***						-
Video Management System (M)	Lump Sum – Countywide Cost***						-
Enable Broadband Middle-Mile connection (L)	-	1	1	-	Intersections (1 connection per intersection)	$100,000	$0.20M
Total Cost (M$)	12.81	1.10	1.03	0.72	-	N/A	$15.46M

* # of intersections
** in miles
*** cost included in **Table 5-7**

A rough estimate of the overall corridor costs which include the above-mentioned amenities can be found in **Table 5-7.** These are preliminary values, and each interested jurisdiction should develop costs for their specific projects. The number of variable costs and potential differences in scope within these projects poses challenges for creating one estimate that can be used for the entire county.

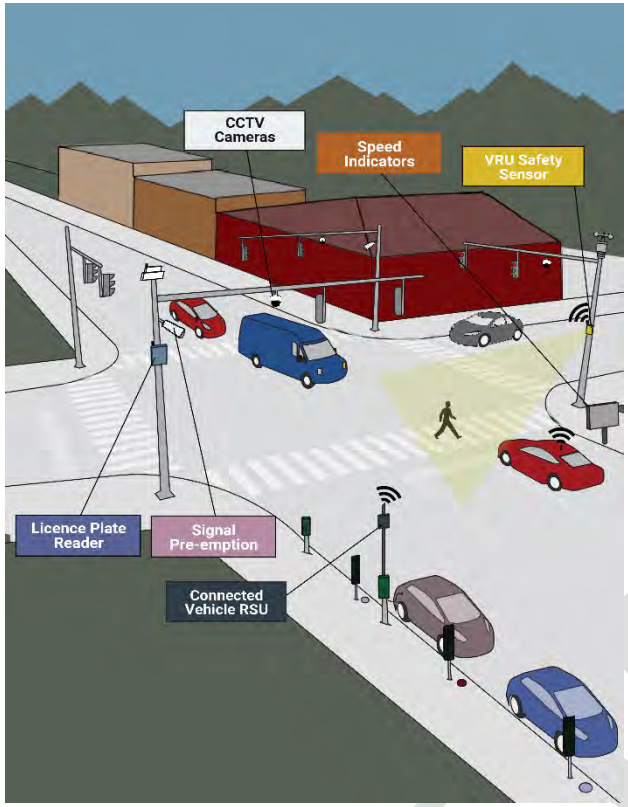
Table 5-7: Smart Corridor Costs

Cost Category	Average Cost
Preliminary Activities	$78,000/mile
Construction	$880,000/mile
Software Development	$2,000,000
Estimated Implementation Cost	$2,000,000 software costs + $958,000 per mile up-front costs
Estimated Ongoing Operations and Maintenance	$50,000/mile/year

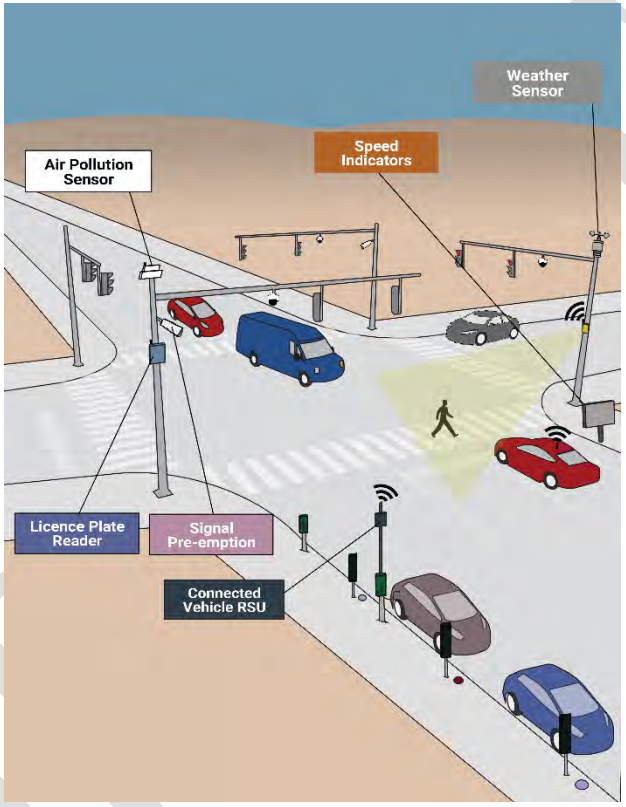
5.2 Smart Intersections

Smart intersections are one of the key building blocks of a smart jurisdiction. Once an intersection has upgraded network communication abilities, the opportunity to pilot new technologies, enhance traffic and safety, gather data, and communicate in real-time with drivers is expansive. Smart intersections can benefit from following a regional template and regional Intelligent Transportation System (ITS) architecture, while having amenities or subsystems tailored to the needs of their specific geography and jurisdiction. **Figure 5-3** illustrates some options addressed in the Early Action Plan for various regions of San Bernardino County.

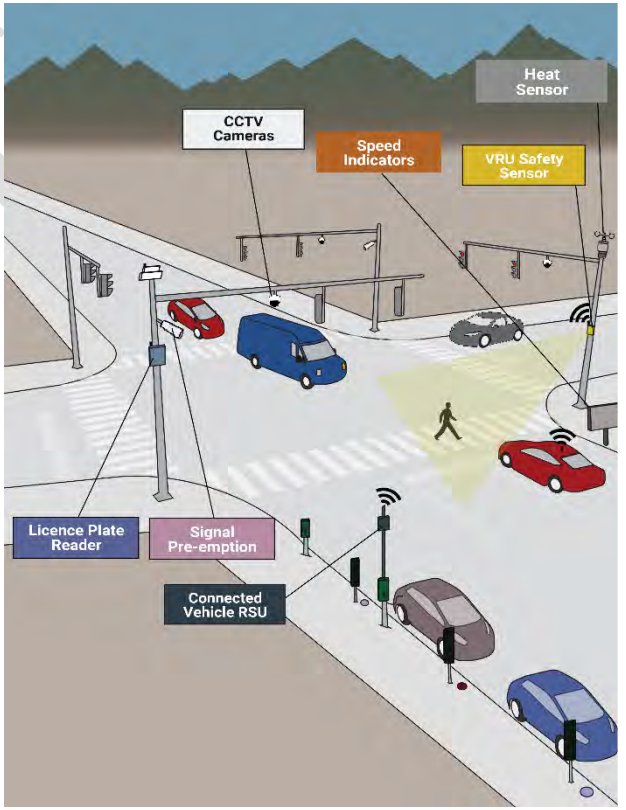
Figure 5-3: Smart Intersection Amenity Examples by Region



East Valley and West Valley



High Desert



Low Desert

5.2.1 Benchmarking

In the rapidly evolving mobility landscape, intersections are where most of the activity and potential for improved efficiency, safety, and information occur within local jurisdictions. Freeways are also an important backbone of the regional transportation system for moving people and freight. SBCTA, in partnership with Caltrans and local jurisdictions, is making great strides to upgrade freeways with High Occupancy Toll (HOT) lanes on I-10 and I-15 to transition them into a truly multimodal network that can be managed and optimized. While the evolution of the freeway network and its technologies are not addressed in the Smart County MP, suffice it to say that this system must work together with the interchanges, arterials, transit, shared-ride systems, and logistics operators to maintain mobility for people and goods. It must work together with emergency service providers who need to get information out to the traveling public about incidents, road closures, transit schedule interruptions, route diversions, and other events. An overview of the current and planned multimodal freeway network for San Bernardino County can be found in the Executive Summary of the 2021 Countywide Transportation Plan at: Draft Countywide Transportation Plan 2021 (gosbcta.com).

This section reviews some successful U.S. intersection technology deployments, providing perspective in advance of the strategies recommended in the next section. These technologies can be implemented in various settings and situations throughout San Bernardino County.

Using Automated License Plate Readers (ALPRs) for Traffic Safety: An ALPR report sponsored by the National Highway Traffic Safety Administration[20] highlights the significant benefits and successful implementations of ALPR technology across various jurisdictions. The dual focus of this technology has been to enhance traffic safety and prevent crime. The research finds ALPR to be a cost-effective tool, demonstrating a quick return on investment—within one week for property crimes and one month for violent crimes. Following the deployment of ALPR in New York City, there was a 31 percent increase in automobile theft arrests. Similarly, Sacramento experienced a reduction in per-capita auto theft rates after local police began utilizing ALPRs to recover stolen vehicles.

The City of Las Vegas Wrong-Way Driving Detection System: To enhance road safety, the city of Las Vegas implemented an advanced wrong-way driving detection system along a stretch of 110-198 E Clark Avenue. The system employs camera and imaging technology to monitor traffic patterns and flows. Utilizing AI, the system analyzes the gathered traffic data to generate valuable insights. The AI technology detected instances of wrong-way driving, and these instances were then provided to the city for further analysis. Based on these insights, the city decided to replace stop signs with traffic signals on busy streets. The introduction of this technology and the subsequent actions taken led to a 90% reduction in wrong-way driving incidents in the study area. This substantial decrease highlights the effectiveness of integrating AI with traffic management systems to enhance road safety and prevent potentially dangerous driving behaviors.[21]

Chattanooga Smart Intersection Expansion: Chattanooga, Tennessee, will add dozens of "smart city intersections" through an ongoing partnership supported by the U.S. Department of Transportation. The Chattanooga Department of Innovation Delivery and Performance, working with Seoul Robotics and the Center of Urban Informatics and Progress at the University of Tennessee at Chattanooga, are installing sensing technology in 86 downtown intersections, building on a testbed established in 2019. The intersections will be equipped with tools, namely light detection and ranging (LiDAR) sensing technology, to gain real-time traffic insights and monitor infrastructure usage. That data can inform future traffic management, alleviate congestion, and map ideal locations for EV charging stations, among other potential benefits. The expansion is expected to result in over 100 tech-equipped intersections across downtown.[22]

[20] https://rosap.ntl.bts.gov/view/dot/55586

[21] https://us.nttdata.com/en/case-studies/city-of-las-vegas-client-story

[22] https://www.smartcitiesdive.com/news/chattanooga-smart-city-intersections-lidar-seoul-robotics-usdot/639799/

Love My Air Denver's Air Quality (AQ) Program: Launched in 2018 with a focus on enhancing community awareness and action regarding AQ, Denver's "Love My Air" program addresses the city's air pollution issues. In collaboration with Denver Public Schools, Love My Air has established a comprehensive citywide AQ monitoring network. This system uses innovative, low-cost air pollution sensors that are solar-powered and equipped with battery storage and data connectivity, making the technology scalable and adaptable for other cities. Focusing on $PM_{2.5}$, the network provides vital real-time data. This data infrastructure underpins the Love My Air app launched in 2022, which offers real-time AQ updates and comparisons across school sites, integrating state and neighboring municipalities' data for a broader AQ assessment. The information from the program supports school staff in making informed decisions about outdoor activities on poor AQ days. Additionally, it empowers students, particularly those with asthma, to take proactive steps in managing their health in response to AQ levels.[23]

5.2.2 Potential Strategy Elements

There are several technologies in use today, as shown in **Figure 5-3,** and described further in **Table 5-8**, that can transform intersection operations within San Bernardino County. Smart Corridor strategy elements, in **Section 5.1.2**, may also be found at the intersection level.

Table 5-8: Smart Intersection Subsystems Inventory

Smart Intersection Subsystem	Key Requirement Coverage	San Bernardino County Applicable Regions
Vulnerable Road User Safety Systems Video Incident Detection Systems / LiDAR / Detection	Public Safety / Transportation	All
Weather / Air Quality Emissions Sensors	Equity	All
Automatic License Plate Readers	Public Safety	All
Connected Vehicle Roadside Unit	Public Safety / Transportation	All

VRU SAFETY SYSTEMS

Video Incident Detection Systems **(ViDS)/LiDAR/Detection:** VRU safety is currently a pressing matter for the California and federal governments. Although San Bernardino County is fifth in population in the state, it has had the third most pedestrian fatalities and serious injuries across all counties in the state in the last four years, only behind San Diego and Los Angeles counties.[24] Within San Bernardino County, the diverse nature of the county is challenging because there is not a "one-size fits all" solution that can be applied countywide. Some traffic treatments may work better or worse than others in a different area. VRU Safety Systems can comprise a variety of sensors such as LiDAR, Video Incident Detection Systems (ViDS), leading pedestrian indicators, or bicycle signals and beacons, all targeting tracking and detecting issues that occur between vehicles and VRUs.

ViDS utilize advanced video cameras and image processing algorithms to monitor and analyze traffic conditions in real-time. ViDS play a crucial role in enhancing the safety of VRUs. By continuously analyzing video footage from strategically placed cameras, ViDS can identify unusual movements, predict risky situations, and facilitate proactive measures to protect VRUs. LiDAR is a technology that uses a visible light laser to measure distance between the sensor and the objects surrounding it. In the context of traffic safety, a LiDAR sensor can track objects and determine conflicts in real-time by creating a precise 3D model of its surrounding environment.[25] **Figure 5-4** shows a pedestrian tracking heat map using LiDAR. Multiple sensors can be strung together to create a holistic picture of

[23] https://denvergov.org

[24] TIMS - Transportation Injury Mapping System (berkeley.edu)

[25] What is lidar? (noaa.gov)

the given areas. The LiDAR-based ViDS can be linked to illuminate roadside beacons or send an alert to RSUs to communicate hazardous conditions to drivers, with the goal of preventing VRU involved crashes.

Figure 5-4: Pedestrian Tracking Heat Map Using LiDAR Sensors between Intersections[26]

WEATHER/AIR QUALITY EMISSIONS SENSORS

Portions of San Bernardino County can face severe weather and AQ conditions, often at the same time. In 2022, the American Lung Association ranked San Bernardino County as the worst county in the United States for ozone pollution.[27] Portions of the East/West Valley suffer from high ozone, diesel PM , and $PM_{2.5}$ levels.[28] AQ sensors, shown in **Figure 5-6**, are a way of monitoring conditions as they occur. Equipped intersections can feed data back to the South Coast Air Quality Management District to be disseminated to the public. AQ sensors can have hardwired communication and use Power Over Ethernet (or use cellular communication and solar power. Sensors can be programmed to measure AQ, wind speed, rainfall, and flooding among other things. Environmental sensors are especially useful in the High Desert, Low Desert, and mountainous areas that are susceptible to dust storms, flash flooding and snowstorms. Given the remote nature of some of these locations, solar-powered, cellular-enabled sensors, as shown in **Figure 5-5**, support the timely detection and communication of adverse conditions.

[26] Low-cost sensors are helping communities find gaps in air quality data | Grist

[27] Inland Empire Once Again Ranks As Worst in Nation for Air Quality | Earth Focus | News & Public Affairs | PBS SoCal

[28] CalEnviroScreen 4.0 Results (arcgis.com)

Figure 5-5: Solar/Cellular-Enabled Environmental Sensor

At smart intersections, similar environmental sensors can be readily connected to the existing communication network so that the Transportation Operations Center can be made aware of any potentially hazardous conditions in real-time; the Transportation Operations Center can then update the relevant entities of the conditions. As more sensors are implemented, a more nuanced and precise understanding of the weather or AQ event will be available to government decision makers and the public.

Figure 5-6: Air Quality Monitor

AUTOMATIC LICENSE PLATE READERS (ALPR)

Public safety was identified as a top priority by many of the city managers during the Early Action Plan outreach. Public safety is a complex issue that can be addressed through a variety of approaches. One technology that can be leveraged to enhance public safety is ALPRs, which are cameras that can identify the license plate numbers of vehicles within the camera's field of vision. These can be used to help find and track stolen vehicles, for AMBER alerts, or for other vehicle-related public safety issues. It is important that agencies review restrictions and use cases for ALPRs, as the collection of data can be a contentious issue. ALPR data can be sent to a public safety CAD system to trigger an alert in the agency's CAD software indicating that a known vehicle of interest has passed

through a given intersection heading in a certain direction. The local agency can then dispatch assets to investigate.

SPEED INDICATORS

Reducing speeds can dramatically reduce the severity of collisions, and in many cases, protect VRUs. Speed indicators are "feedback signs" that show drivers the speed at which they are traveling to encourage them to decrease their speed, when appropriate. Speed indicator signs have been proven to reduce speeds by 10-20% and increase speed limit compliance from 30% to 60%.[29] Areas such as school zones, residential areas, or other high-trafficked pedestrian areas can benefit by having vehicles travel at safer speeds that decrease the incidence and severity of collisions.

CONNECTED VEHICLE (CV) ROADSIDE UNIT (RSU)

CV RSUs allow for the direct, secure, low-latency communication of data between smart intersections and vehicles. **Figure 5-7** displays a message from an RSU on a vehicle dashboard. While the industry is still maturing, future generations of production vehicles are likely to include CV technology based on cellular-vehicle to everything (C-V2X) standards. In the meantime, aftermarket devices can provide immediate benefits to public agencies and consumers. Signal pre-empt and priority, discussed further as part of **Section 5.1** (Smart Corridors), provide day-one benefits. In addition, CV technology allows direct communication of safety data such as crash avoidance information, and signal phase and timing (SPaT) information that can enable more economical trips and reduce greenhouse gas emissions.[30] Finally, in conjunction with the smart corridors to be discussed later, CV can be used to communicate evacuation information.

Figure 5-7: Traffic-Light Information

5.2.3 User Needs

Tailoring the strategy elements to the specific needs of the county is important for the success of the Smart County MP. **Table 5-9** outlines the needs identified in the Existing Conditions Report that have guided planning for smart intersections.

[29] Radar Speed Signs | Driver Feedback Signs | Flashing Beacons (radarsign.com)

[30] UMEC-Final report 051 - C-V2X Research.pdf (morgan.edu)

Table 5-9: Smart Intersections User Needs

Category	Needs
Traffic Management	▪ Need to improve traffic operations using innovative smart technologies. ▪ Need to address growing recurring congestion via the use of increased investment in congestion management strategies. ▪ Need for traffic management solutions with advanced capabilities and functions.
Freight Management	▪ Need for operational support of freight mobility in rural areas and facilitating freight deliveries in urban areas using ITS. ▪ Need for additional relay of traffic information on primary freight corridors to improve routing decisions. ▪ Need for information on alternative freight-specific routes to improve roadway efficiency throughout the county.
Public Safety	▪ Need to provide situation awareness systems to emergency management and response agencies. ▪ Effective movement of assets into areas under emergency operations (e.g., adverse weather events, brush fires, etc.). ▪ Efficient evacuation of the public from areas under emergency operations.
Data Sharing	▪ Need for updated user security in accordance with existing IT security policies and procedures that are applicable to the IT environment of the ITS elements.
Equity and Environment	▪ Need for advanced monitoring equipment to detect and identify vulnerable road users such as pedestrians, cyclists and people who use wheelchairs, to ensure their safety and prioritize their movement. ▪ Need to improve pedestrian visibility and crossing conditions for everyone, especially those with mobility challenges, to create a more inclusive and accessible environment. ▪ Need to ensure equitable access to smart intersection technologies across all neighborhoods, especially in areas historically underfunded or neglected. ▪ Need to enhance air quality monitoring to address environmental justice concerns and improve public health outcomes.
Operations and Maintenance	▪ Need to support agencies in operations. ▪ Need for agencies to maintain their own assets. ▪ Need for active asset management platform to effectively plan and maintain regional assets.
Performance Metrics	▪ Need to develop, assess, and present performance metrics for continuous improvement and reporting. ▪ Need to consider opportunities to share collected data and performance metrics with stakeholders, and public/private sectors.

5.2.4 Prioritized Strategy Deployment Locations

A smart corridor system integrates various technologies and strategies to dynamically manage and optimize traffic, ensuring real-time responsiveness to changing roadway conditions and enhancing overall travel efficiency and safety. To address the issues raised by SBCTA and San Bernardino County stakeholders, the transportation network has been organized into smart corridors. These corridors aim to improve AQ, reduce travel times, decrease vehicle collisions, and increase transportation network resilience.

Within each smart corridor, key intersections, termed “smart intersections,” have been identified and developed to act as critical points for implementing these innovative strategies. These smart intersections serve as crucial elements in transforming the transportation network, with their improvements acting as building blocks to address broader network issues. Smart intersections will be deployed within these smart corridors (See **Section 5.1.4** for details). It should be noted that the selection of smart intersections will be guided by subsequent local jurisdiction outreach and review by the SBCTA Board, just as with the smart corridors. Local interest in smart intersections will be gauged through the RFI process and Board direction described for smart corridors in **Section 5.1**.

A smart intersection location was developed within 19 of the 20[31] smart corridors defined in **Section 5.1**. The 20 smart corridors were categorized by the following four corridor types from which 19 representative Smart intersections were chosen:

- **Freight Intersection**: the representative smart intersection is either closest to the freeway or the largest intersection along the chosen freight corridor. These are represented in the following matrix with a "".
- **Safety Intersection:** the representative smart intersection is the intersection that historically has the highest number of crashes along the chosen safety corridor. These are represented in the following matrix with a "".
- **Evacuation Intersection**: the representative smart intersections were selected from the corridor's midpoint or endpoint within the identified corridor. These are represented in the following matrix with a "".
- **Congestion/Air Quality Intersection:** the representative smart intersections were determined using Google Traffic data to pinpoint intersections on the chosen corridor with the worst congestion. These are represented in the following matrix with a "".

Table 5-10 illustrates the milestones that are required for each potential component of an upgraded smart intersection. These milestones include:

- **Field Survey:** Prior to any technology installation or upgrade, a field survey, including a detailed asset inventory, needs to be conducted. Mounting locations, location and configuration of other equipment, availability of space in roadside cabinets, power sources, available conduit, network access, etc. should all be documented. As indicated in the matrix, many of the technologies require this step and it is likely one field survey will satisfy the needs for all technologies.
- **Plans, Specifications, and Estimate Design:** As with any new deployment, a detailed design should be completed to ensure:
  - Equipment Installation
  - Equipment Configuration
- **Incorporation of Existing Functions**
- **Software / Firmware Compatibility**
  - Component Validation
  - Local Agency / Stakeholder Coordination

The table below highlights candidate smart intersections throughout the County, outlining potential sensors and technologies that could be implemented to enhance safety, connectivity, and environmental monitoring.

[31] One smart corridor does not have any intersections.

Potential Sensors	Intersection Aerial
Holt Ave & Benson Ave, Montclair, *West Valley* ▪ VRU Safety, Public / Agency Wi-Fi, Speed Indicators, CV RSU	
Sierra Ave & Valley Blvd Fontana, *West Valley* ▪ VRU Safety, Public / Agency Wi-Fi, ALPR, Speed Indicators, CV RSU	
Mission Blvd & Milliken Ave *Ontario, West Valley* ▪ Public / Agency Wi-Fi, Weather/ Air Quality Sensor, CV RSUs, Freight Management	
S Grove Ave & Mission Blvd *Ontario, West Valley* ▪ VRU Safety System, Public / Agency Wi-Fi, Weather/ Air Quality Sensor	
Archibald Ave & Mission Blvd, *Ontario, West Valley* ▪ Weather/ Air Quality Sensor, ALPR, CV RSUs, Freight Management	

Potential Sensors	Intersection Aerial
Cedar Ave & Valley Blvd Bloomington, *West Valley* ▪ Weather/ Air Quality Sensor, ALPR, CV RSUs, Freight Management	
W 9th St & H St San Bernardino, East Valley ▪ VRU Safety, Public / Agency Wi-Fi, ALPR, Speed Indicators, CV RSU	
W Baseline St & N Arrowhead Ave *San Bernardino, East Valley* ▪ VRU Safety, Public / Agency Wi-Fi, Weather / Air Quality Sensor, CV RSU, FSP	
Redlands Blvd & Alabama St *Redlands, East Valley* ▪ VRU Safety System, Public / Agency Wi-Fi, Weather/ Air Quality Sensor	
S E St & W 5th St San Bernardino, East Valley ▪ VRU Safety System, Public / Agency Wi-Fi, Weather/ Air Quality Sensor	

Potential Sensors	Intersection Aerial
Alabama St & San Bernardino Ave *Alabama, East Valley* ▪ Weather/ Air Quality Sensor, ALPR, CV RSUs, Freight Management	
Bear Valley Rd & Hesperia Rd *Victorville, High Desert* ▪ VRU Safety, Speed Indicators	
SR-38 & SR-18 Big Bear, High Desert ▪ VRU Safety System, Public / Agency Wi-Fi, Weather/ Air Quality Sensor	
Mojave Dr & 7th St High Desert, High Desert ▪ VRU Safety System, Public / Agency Wi-Fi, Weather/ Air Quality Sensor	
395 & Joshua St Hesperia, High Desert ▪ VRU Safety, Weather / Air Quality Sensor, EV Charging, Smart Metering, CV RSU	

Potential Sensors	Intersection Aerial
Adobe Rd & SR-62 Twentynine Palms, Low Desert ▪ VRU Safety, Public / Agency Wi-Fi, Weather / Air Quality Sensor, CV RSU, FSP	
Lear Ave & SR-62 Twentynine Palms, Low Desert ▪ VRU Safety, Public / Agency Wi-Fi, Weather / Air Quality Sensor, CV RSU, FSP	
SR-62 & SR-247 Yucca Valley, Low Desert ▪ VRU Safety System, Weather/ Air Quality Sensor, ALPR, CV RSUs, Freight Management	
SR-247 & Yucca Tr Yucca Valley, Low Desert ▪ VRU Safety System, Public / Agency Wi-Fi, Weather/ Air Quality Sensor	

Table 5-10: Smart Intersection Component Upgrade Matrix

	Field Survey	Plans, Specifications, and Estimate Design	Equipment Installation	Equipment Configuration	Incorporate Existing Functions	Software/ firmware compatibility Check	Component Validation	Local Agency / Stakeholder Coordination
Upgrade Traffic Signal Controllers	✓	✓	✓	✓	✓	✓	✓	
Upgrade Vehicle Detection (from loops)	✓	✓	✓	✓			✓	
Upgrade Bike/Ped Detection	✓	✓	✓	✓			✓	
Deploy Fiber-Optic Communications Infrastructure (local agency)	✓	✓	✓	✓			✓	
Deploy Closed-Circuit Television Cameras at Intersections	✓	✓	✓	✓			✓	
Upgrade Traffic Signal Timing (including Leading Pedestrian Interval (LPI))	✓	✓			✓		✓	
Deploy ALPRs	✓	✓	✓	✓	✓		✓	✓
Deploy Air Quality Sensors	✓	✓	✓	✓			✓	✓
Deploy Connected Vehicle Roadside Units (RSU)	✓	✓	✓	✓		✓	✓	✓
Deploy a Connected Vehicle Application (focused on freight movement)				✓		✓	✓	✓
Interconnect Middle-Mile Broadband Fiber to Local Agency Fiber and/or Last-Mile Fiber (create a demarcation point to MMBB fiber)	✓	✓	✓	✓	✓	✓	✓	✓

5.2.5 Relevant Stakeholders

Typically, smart intersection amenities will be added to existing infrastructure by the IOOs. Depending on location, this could be a city, the county, or Caltrans. The type and level of change will dictate the appropriate level of community outreach.

The immediate stakeholders to help further develop this strategy include IOO traffic operations personnel, the SBCTA Transportation Technical Advisory Committee (TTAC), and the IT working group.

5.2.6 Benefits

Smart intersections provide numerous benefits, the following are some of these benefits:

- Minimized Disruptions and Improved Travel Times:
  - Benefits: Travelers
  - Impact: Provides smoother and faster journeys, reducing congestion and travel delays.
- Higher Level of Service:
  - Benefits: Travelers, IOOs
  - Impact: Enhances the travel experience by improving traffic flow and reducing wait times at intersections.
- Lower Operations and Maintenance Costs:
  - Benefits: IOOs
  - Impact: Reduces expenses associated with the upkeep and operation of intersection infrastructure.
- Reduced Instances of Crashes:
  - Benefits: Travelers, IOOs
  - Impact: Increases safety, leading to fewer accidents and reduced costs related to crash response and management.
- Real-time Monitoring and Control:
  - Benefits: IOOs, Travelers
  - Impact: Enables immediate adjustments to traffic signals and management strategies, improving overall traffic efficiency and response to incidents.
- Regional Benefits:
  - Benefits: Municipalities, IOOs, Travelers
  - Impact: Provides a cumulative advantage as more areas adopt smart intersection technology, leading to widespread improvements in traffic management across the region.
- Data Collection:
  - Benefits: IOOs, Regional Planners
  - Impact: Facilitates the gathering of detailed traffic data, allowing for better-informed decisions and tailored solutions to specific regional and intersection needs.

5.2.7 Costs

Smart intersections will vary in cost depending on the desired sensor suite and upgrades that the interested agency might include. On the high end, implementing two LiDAR sensors at an intersection may cost upwards of $20,000, whereas implementing a weather sensor may cost around $1,000, both barring any needed communication or power upgrades. IOOs must also decide the ITS deployment size; a pilot project is a great proof of concept, but it would have a much higher cost per unit than if numerous IOOs created a large joint purchase order for some sensor that would be prolifically used. The USDOT operates a library of project costs for ITS deployments which is an excellent resource for IOOs to consult for previous ITS deployment costs.[32] **Table 5-11** shows the anticipated expenses for implementing smart intersections (per intersection).

Table 5-11: Smart Intersection Project Costs (per intersection)

Cost Category	Estimated Cost
Preliminary Activities	$16,000-$32,000
Equipment	$5,000-$100,000
Construction	$65,000
Estimated Implementation Cost	$86,000 - $197,000
Ongoing Operations and Maintenance (per year)	$13,000

5.3 Alternative Fuel Vehicles

One of the larger concentrations of electric vehicles in California is in San Bernardino County; the county ranks in the top 10 counties for light-duty EV registrations.[33] California has mandated that all new light-duty vehicles sold beyond 2035 will be zero-emission vehicles.[34] This will drive a demand for EV charging infrastructure.

AFVs run on fuels other than conventional diesel or gasoline. These fuels emit less pollutants and include natural gas, hydrogen, and electricity. AFVs have been gaining popularity due to increasing gasoline prices and environmental concerns like climate change and criteria pollutants. The last few decades have seen a remarkable rise in the adoption of alternative fuels in both commercial and private passenger vehicles nationally and on a state level. AFVs are often known for their efficient energy use and reduced greenhouse gas emissions.

The rising trend in EV usage presents a pivotal opportunity to expand the EV charging infrastructure. Federal and state grant funding plays an important role in accelerating this expansion, making EVs a more feasible option for a larger demographic. The importance of these grants, methods to support agencies to apply for these funds, and guidance on prioritizing which grants to pursue are discussed in **Section 6.4**. The overarching goal is to expedite the expansion of EV infrastructure, contributing to a sustainable future. This section examines the existing trends and electrification efforts to date, setting the stage for a comprehensive understanding of the current landscape and future possibilities.

The California Energy Commission (CEC) has partnered with the Department of Motor Vehicles to track the sales and population of light-duty ZEVs (Zero-Emission Vehicles) in California, which include battery-electric (BEV), plug-in hybrid electric (PHEV), and fuel-cell electric vehicles.[35] California has been leading the U.S. in ZEV adoption, with significant policy support at the state level. The State has made considerable efforts to accelerate California's

[32] Costs | ITS Deployment Evaluation (dot.gov)

[33] Light-Duty Vehicle Population in California

[34] Cars and Light-Trucks are Going Zero - Frequently Asked Questions | California Air Resources Board

[35] Zero Emission Vehicle and Infrastructure Statistics - Collection (ca.gov)

electric and zero-emissions future, which includes surpassing the goal of 1.5 million ZEVs ahead of schedule and proposing new federal emissions standards. The State has achieved 24.7% of all new cars sold in Q4 2023 as ZEVs and has offered up to $24,500 in grants and rebates for low-income Californians.[36] These initiatives are part of California's broader commitment to have 100% of new car sales as ZEVs by 2035 and to increase the number of zero-emission trucks on the road.

The adoption of ZEVs in San Bernardino County is part of a larger trend observed across California. By the end of 2023, there were 51,206 ZEVs on the road in San Bernardino County[37], up from 36,094 in 2022. **Figure 5-8** compares San Bernardino County to other counties across California. San Bernardino ranked as the 9th highest among California's 58 counties in terms of the number of light-duty ZEVs registered. This number is expected to continue to rise over the next several years.

Figure 5-8: Total ZEVs in California Counties

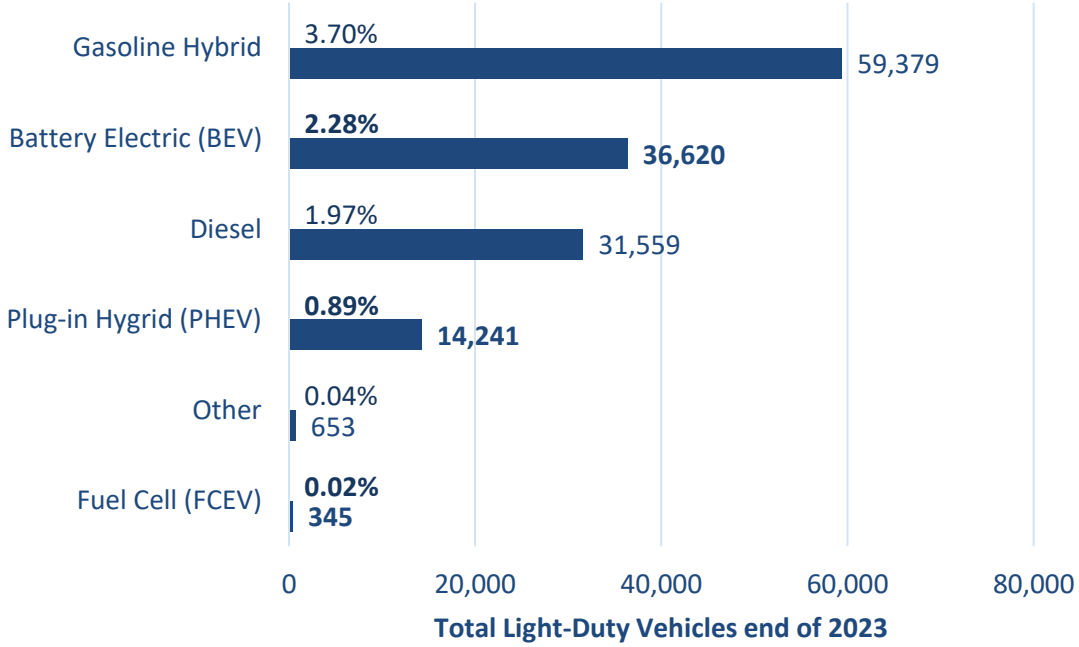
Source: California Energy Commission

San Bernardino County's total percentage of registered ZEVs as of the end of 2023 is 3.19%. This is detailed in **Figure 5-9**, where the ZEVs are broken down into 36,620 BEVs (2.28%), 14,241 PHEVs (0.89%) and 345 fuel-cell electric vehicles (0.02%).

[36] https://www.gov.ca.gov/2023/04/21/california-surpasses-1-5-million-zevs-goal-two-years-ahead-of-schedule/

[37] Light-Duty Vehicle Population in California

Figure 5-9: Total Light-Duty Vehicles Registered in San Bernardino County by End of 2023



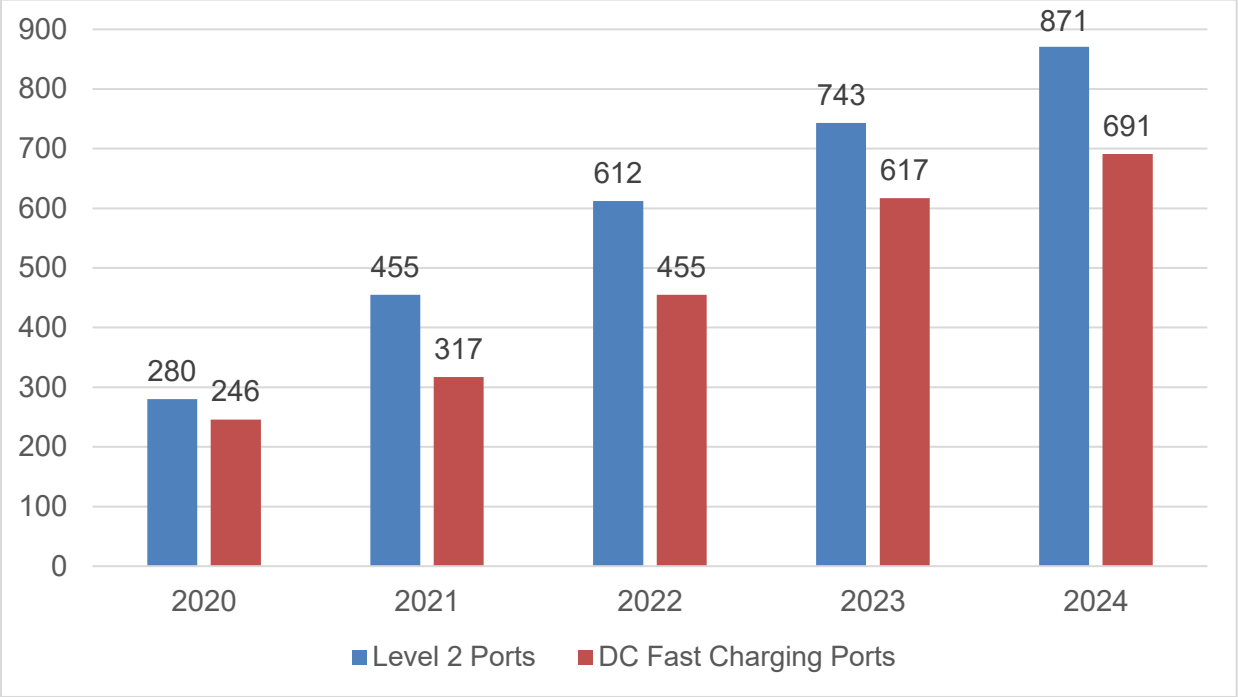
Source: California Energy Commission

San Bernardino County has been proactive in supporting the growing number of ZEVs. The County has developed the Countywide Zero-Emission Vehicle Readiness and Implementation Plan.[38] This plan is aimed at guiding government agencies in the region to develop actionable approaches for removing barriers to ZEV adoption and identifying charging station deployment opportunities, particularly focusing on supporting the projected 82,500 ZEVs by 2025. The plan recommends additional ZEV infrastructure at public agencies, workplaces, destinations, and transit stations, with a particular focus on disadvantaged communities.

As of July 2024, there were 871 public Level 2 ports, and 691 Direct Current (DC) fast-charging ports in San Bernardino. A Level 2 port generally uses a 240-volt power source (like a clothing dryer outlet) to provide for electric vehicle charging of one car at a time. Level 2 stations may have multiple ports. Level 2 ports can fully charge a car in 4 to 8 hours. DC fast-charging ports generally require 480-volt electrical service and can fully charge electric vehicles in 20 to 60 minutes. Level 2 ports are appropriate for workplace and destination charging. DC fast-charging ports are ideal for quick stops during long trips. The number of Level 2 and DC fast-charging ports has steadily increased over the years. **Figure 5-10** shows the cumulative total of ports for each year beginning from 2020.

[38] https://www.gosbcta.com/san-bernardino-countywide-zero-emission-vehicle-readiness-and-implementation-plan/

Figure 5-10: San Bernardino County Public Electric Vehicle Infrastructure



Source: Alternative Fuel Data Center, retrieved July 2024

Given the increasing trend in EV usage, this momentum presents an opportune time to further expand EV charging infrastructure. By leveraging available federal and state grant funding, this expansion can be accelerated, making EVs an increasingly viable option for more people.

5.3.1 Benchmarking

Below are some recent EV efforts that have elements applicable to San Bernardino, highlighting significant advancements in sustainable mobility:

- **Smart Columbus Playbook, Ohio:**[39] The Smart Columbus Playbook serves as a strategic roadmap to foster innovation, enhance mobility, improve sustainability, and stimulate economic growth. A key focus of the playbook is the promotion of EVs, with initiatives aimed at increasing EV adoption, expanding charging infrastructure, and providing EV education.
- **City of Ontario, California, Smart Ontario:** Ontario is implementing state-of-the-art technologies to create a brighter future for its 176,000+ residents and 11,000 businesses. With solar panel structures, backup battery energy storage systems, EV charging stations, and LED streetlights citywide.[40]
- **St. Paul, Minnesota**: St. Paul launched the largest publicly owned, renewably powered, electric car-sharing program in the nation, Evie Carshare.
- **Orlando, Florida**: Orlando is now requiring all new buildings and major remodel projects to integrate EV charging infrastructure.

[39] https://smartcolumbus.com/playbook-assets/our-journey/welcome-to-the-smart-columbus-playbook
[40] https://smartontarioca.com/

- **Charlotte, NC**: the Charlotte city council approved a groundbreaking approach to overcome initial hesitation about up-front costs of transitioning to electric buses. A pilot program enables the city to try out—and train staff on—18 electric buses and charging infrastructure from various manufacturers to collect data on what will fit Charlotte's needs.

5.3.2 Potential Strategy Elements

The below potential strategy elements can facilitate the expansion of EV infrastructure and increase EV adoption in San Bernardino County:

- **Education and Outreach:**
  - Develop guides and information resources available to jurisdictions for funding pursuits.
  - Raise awareness about the benefits of EVs through public campaigns, workshops, and community events.
  - Provide information on available incentives, charging locations, and cost savings to encourage residents to adopt EVs.
- **Early Coordination:**
  - Convene meetings with local jurisdictions to incentivize early coordination with utilities and private companies to expand EV charging infrastructure.
- **Partnerships and Grant Support:**
  - Provide letters of support for application to federal and state grants earmarked for EV infrastructure developments.
  - Work with private site managers where appropriate, such as managers of multi-family apartment sites, and seek partnerships with private companies, nonprofits, and educational institutions. These collaborations can lead to joint initiatives, research, and funding opportunities.
- **Community Feedback and Planning:**
  - Gather community feedback through surveys to understand community needs and preferences, which can guide the planning and deployment of EV infrastructure.
- **EV Charging at Intersections:**
  - Leverage excess power available at intersections to install on-street charging infrastructure.
  - Deploy traditional Level 2 charging units adjacent to parking stalls.
- **Fleet Electrification:**
  - Collaborate with public and private partners to identify the most suitable options for fleet electrification.
  - Explore potential grants and develop comprehensive resources and guides to assist jurisdictions in their funding pursuits.
- **Assessment and Feasibility:**
  - Evaluate the downtime and utilization of existing charging stations to identify high-demand sites for additional installations.
  - Conduct land use and feasibility studies (e.g., electricity availability) to prioritize potential locations for new EV infrastructure across the county.

In addition to expanding EV infrastructure, it is worth noting that there are existing hydrogen refueling stations and existing initiatives to expand the hydrogen infrastructure in the county. Notably, the California Fuel Cell

Partnership[41] initiative to expand hydrogen refueling stations statewide plays a role in developing a diverse and resilient alternative fuel infrastructure. Future strategies should consider integrating hydrogen infrastructure developments to complement the overall sustainable transportation network.

5.3.3 User Needs

The Existing Conditions Report has highlighted the current insufficiency of both the charging infrastructure and its funding to support the anticipated volume of EVs as the State strives to meet zero-emissions goals for cars, passenger trucks, and medium- and heavy-duty vehicles in the county. **Table 5-12** presents the AFVs user needs.

Table 5-12: Alternative Fuel Vehicles User Needs

Category	User Needs
Equity and Environment	▪ Need to accelerate transition to zero-emission freight and passenger vehicles through coordination with private sector on accessible and easy-to-locate zero-emission charging and fueling infrastructure.

5.3.4 Prioritized Strategy Deployments

Expanding EV infrastructure should be focused on high traffic corridors, in disadvantaged communities where at-home charging may be unavailable and in areas where charging does not currently exist. Major routes with high traffic should be considered to help facilitate long-distance travel and for the ease of shorter commutes. Access to disadvantaged communities could also be considered, ensuring that the benefits of EVs are not limited to affluent areas. Other considerations might include areas with multi-unit dwellings, neighborhoods without access to having at-home charging installed, visitor destinations, or regions where the grid can readily support additional load. By deploying EV infrastructure in this strategic manner, it is possible to create more options for EV drivers, focus infrastructure where it is needed most and promote the adoption of EVs.

Because medium and heavy-duty trucks have significantly greater energy requirements, and travel longer distances, it is critical to consider hydrogen as a fuel source for emerging hydrogen fuel cell (HFC) trucks. Both HFC and EV trucks are beginning to come off the assembly line, and the need for charging/fueling infrastructure is being addressed through significant state and federal grant programs. The California Transportation Commission prepared the Clean Freight Corridor Efficiency Assessment in late 2023 (see: sb671-final-clean-freight-corridor-efficiency-assessment-dor.pdf (ca.gov)), and three of the top six corridors for investment run through San Bernardino County (I-10, I-15, and I-40). See **Figure 5-11** for a map of the priority corridors. SBCTA and other entities are working with the private sector vendors to bring as much of this funding to San Bernardino County as possible. A recent award by EPA of Climate Pollution Reduction Grant (CPRG) funding to the South Coast Air Quality Management District will help considerably with this infusion of funding to accelerate the transition to clean trucks via both electric and hydrogen. In addition, California was awarded $1.2 billion to jump-start a set of hydrogen production hubs under the moniker ARCHES (Alliance for Renewable Clean Hydrogen Energy Systems). See link to the ARCHES fact sheet here: H2Hubs ARCHES_Award Fact Sheet.pdf (energy.gov).

Figure 5-11: Top 6 Priority Corridors for Clean Truck Investment in the CTC's SB 671 Assessment

[41] H2Hubs ARCHES_Award Fact Sheet.pdf (energy.gov)

Table 5-13 outlines the different charging priorities, opportunities, and considerations. The table provides an overview of the various charging priorities but is not exhaustive. There may be other factors and considerations that are not included in this table but could be relevant depending on the specific context.

Figure 5-11: Top 6 Priority Corridors for Clean Truck Investment in the CTC's SB 671 Assessment

Table 5-13: Types of Charging

Type of Charging	Description	Opportunities	Considerations
Major Routes	Strategically placed along major highways and travel corridors to facilitate long-distance travel.	▪ Limited funding availability. ▪ Resiliency and redundancy.	▪ Geographical prioritization of stations. ▪ Planning and permitting coordination. ▪ Grid capacity.
Community Charging	Provides accessible EV charging in residential and public areas to support local EV owners.	▪ Convenience. ▪ Economic development. ▪ Ability to focus on underserved areas.	▪ Planning and permitting coordination. ▪ Location selection. ▪ EV education.
Destination Charging	Offers charging at tourist attractions to support the tourism industry.	▪ More chargers for a smaller investment. ▪ Longer duration of stay.	▪ Permitting and planning coordination. ▪ Location selection. ▪ Matching funds. ▪ Grid capacity.
Freight Charging and Hydrogen Fueling	Support commercial fleet electrification and HFC truck fueling with rapid chargers and hydrogen fueling at logistic centers and on freight corridors, especially for long-haul trucks.	▪ Enable lifecycle cost savings. ▪ Emissions reduction.	▪ Initial cost. ▪ Planning horizon for charging infrastructure. ▪ Grid capacity/Power draws. ▪ Cyber and physical security. ▪ Site selection. ▪ Vehicle and cargo weight.
Other Types	Covers specialized needs and innovative technologies.	▪ Accessibility. ▪ Resiliency. ▪ Economic development.	▪ Slower MD/HD adoption rates. ▪ Existing transit ZEB funding. ▪ Training emergency personnel.

5.3.5 Relevant Stakeholders

EV and hydrogen fueling infrastructure stakeholders can be very broad as both the public and private sectors can play a role. **Table 5-14** provides information on the stakeholders and their respective roles in EV permitting, deployment, use, and response situations.

Table 5-14: Alternative Fuel Vehicles Relevant Stakeholders

Agency	Role
SBCOG	▪ Collaborate with local cities, agencies, and representatives to develop strategies for EV infrastructure. ▪ Identify charging station opportunities and support shovel-ready projects.
San Bernardino County Member Jurisdictions	▪ Collaborate with SBCOG and other stakeholders to implement EV infrastructure strategies locally. ▪ Support the permitting and installation of EV charging stations.
Charging Infrastructure Providers	▪ Provide incentives for companies to build and operate charging stations.
San Bernardino County Department of Public Health	▪ Public/community engagement efforts contributing to public well-being and community development by involvement in EV charging initiatives to promote health, safety, and sustainable transportation options.
Workforce Development Board (WDB)	▪ Focusing on workforce readiness and economic development. ▪ Tribal, utility, and site-specific engagement in support of funding pursuits.
General Public	▪ Participate in community meetings to support the planning and implementation of EV infrastructure.

One key project that was identified in the San Bernardino County Early Action Plan to meet the need of insufficient charging infrastructure is to proactively secure funding for charging and fueling infrastructure for zero-emission passenger vehicles and trucks, through collaboration between SBCTA/SBCOG and local jurisdictions throughout San Bernardino County. Focus on public agency-led grant applications with charging vendor partners, while encouraging local jurisdictions to develop zero-emission charging sites and apply for funding on their own in parallel.

The immediate stakeholder group that will help develop this strategy further is the TTAC and city managers.

5.3.6 Benefits

Adopting AFVs offers a range of benefits that promote environmental sustainability, economic growth, and energy security. The following are some of these benefits:

- Reduction in Greenhouse Gas Emissions:
  - Benefits: Environment, Urban Residents
  - Impact: Improved air quality due to zero tailpipe emissions from EVs.
- Support for Renewable Energy Sector:
  - Benefits: Renewable Energy Industry, Environment
  - Impact: Increased use of electricity generated from renewable sources, promoting cleaner energy.
- Economic Growth:
  - Benefits: Job Seekers, Local Economies
  - Impact: Job creation in EV manufacturing, charging station installation, and maintenance services.
- Reduced Dependence on Fossil Fuels:
  - Benefits: National Energy Security, Consumers
  - Impact: Enhanced energy security and resilience, less reliance on imported fossil fuels.
- Lower Operating Costs for Consumers:
  - Benefits: Consumers
  - Impact: Reduced expenses due to cheaper electricity compared to gasoline and lower maintenance needs for EVs.

5.3.7 Costs

Expanding EV and hydrogen fueling infrastructure, particularly the deployment of DC fast chargers, involves significant costs due to their complex installation and operation requirements. The average cost of a DC fast-charging port typically ranges from $150,000 for a 50-kW port to $250,000 for a 150-kW port, while a Level 2 charging port generally falls within the $3,500 to $10,000 range depending on the size of installation, power availability and upgrades, vendor, trenching needed, and other considerations. The cost of hydrogen fueling infrastructure varies and the cost of H2 production needs to come down to make the fuel more economically viable. Significant reductions in price are expected between now and 2030 as the demand grows. Costs for H2 fueling are not included since they are so variable at this time.

Table 5-15 breaks down the average cost of deploying and operating a DC fast-charging port and a Level 2 port.

Table 5-15: Average Deployment and Operating Costs of Charging Infrastructure

Cost Category	Estimated Level 2 Port Cost	Estimated DC Fast-Charging Port Cost (150 kW)
Preliminary Activities	$800	$10,000
Construction	$8,000	$180,000
Estimated Implementation Cost	$8,800	$190,000
Operations and Maintenance (per year)	$200	$5,000

The up-front capital costs for fast-charging stations are high. A 150 kW to 350 kW DC fast-charging unit can cost anywhere from $45,000 to over $150,000. Federal grants significantly alleviate the cost associated with expanding EV infrastructure. Typically, grants offer an 80/20 matching program, meaning that for every dollar spent by the grant recipient, the federal government provides an additional four dollars.

5.4 Uncrewed Aerial Systems Operations

AAM is a developing industry that uses smaller aircraft to provide services and move both goods and people. They typically fly shorter distances and can provide access to more remote rural or tighter urban locations than traditional aircraft. AAM focuses on highly automated aircraft that are most often electric and can take off vertically and include smaller UAS aircraft, commonly referred to as drones. These aircraft can be piloted remotely and are increasingly used as eyes in the sky to see infrastructure and situations that are too difficult or dangerous to access by normal means and quickly determine appropriate response needs. UAS are proving to be a tool to de-risk government activities and provide last-mile delivery services.

San Bernardino County can invest in and promote the use of UAS operations in several ways, including investing in the digital communications infrastructure necessary to support operations beyond visual line of sight, as well as critical public safety applications including infrastructure inspection, emergency response, and public safety applications. These efforts would enable more immediate benefits to the community. While the use of larger UAS aircraft for passenger transport is a long-term vision and dependent on overcoming significant regulatory and technological challenges, focusing on current applications will help lay the groundwork for future advancements. In the meantime, the County's role can be centered around fostering innovation, and ensuring that the local infrastructure evolves to support future UAS technologies as they emerge.

San Bernardino County is home to some of the nation’s most cutting edge UAS testing, research, and application, including:

- The UAS Center at SBD International Airport was established in 2020 and holds the Federal Aviation Administration (FAA) Certificate of Authorization that allows for the testing and demonstration of UAS technology.[42] The UAS Center, an enterprise fund under the Inland Valley Development Agency, works in close partnership with the San Bernardino County Fire District.
- The City of Ontario is promoting the use of small UAS to enable the delivery of goods via the adoption of an integrated system that identifies potential hazards, provides real-time authorization of UAS operations, and provides flight monitoring, leveraging the City’s advanced fiber-optic broadband network.
- Via funding obtained through the Urban Areas Security Initiative, the San Bernardino County Fire Protection District is obtaining two small UAS, which will allow improved planning and operational coordination.
- The San Bernardino County Fire Protection District is using drones as first responders for early wildfire detection, leveraging CAD data to determine which calls may require aerial surveillance. These autonomous

[42] https://uascentersbd.com/

systems gather information from wildfire videos and can take immediate action by deploying fire suppressants. This technology is currently undergoing pilot testing on Little Mountain.

5.4.1 Benchmarking

This section reviews the key trends in UAS operations and focuses on a pivotal benchmark that illustrates the current state and potential of this emerging field.

LOS ANGELES DEPARTMENT OF TRANSPORTATION (LADOT), CALIFORNIA

LADOT, LA Department of City Planning, and the LA Mayor's office are collectively developing the policies and procedures to regulate Urban Air Mobility (UAM) (Urban Air Mobility) operations in anticipation of greater adoption. The UAM Policy Framework Considerations report considers privacy, workforce development, data, and economic growth while developing policies for site and operation permitting.[43]

TEXAS TRANSPORTATION COMMISSION URBAN AIR MOBILITY COMMITTEE

The Committee explored the intersection of policy and technology to develop a set of recommendations to support the UAM ecosystem development for the State of Texas. The Urban Air Mobility Advisory Committee Report presents a set of recommendations that can be used as a foundation for developing new regulations that can facilitate the development of the State's UAM deployment and adaptation capabilities.[44]

ADVANCED MOBILITY NC[45]

The North Carolina Department of Transportation's Division of Aviation and its Integrated Mobility Division partnered to develop North Carolina's five-year Advanced Transportation Mobility Strategic plan in 2024. The strategic plan envisions future advanced mobility use cases where air and ground mobility come together at hubs in North Carolina, provides a framework for local agencies to prepare for advanced mobility technologies, and details specific action items to support North Carolina's path to an advanced mobility future.

DRIVEOHIO – ADVANCED AIR MOBILITY FRAMEWORK

Ohio developed a statewide AAM Framework to apply AAM for the safe, efficient, and equitable transportation of people and goods throughout the state. Ohio, through DriveOhio's UAS Center, has been working with many stakeholders on AAM and UAS solutions for the state since 2013. The Framework discusses the Ohio's opportunities to allow AAM to increase modality options, safety, and improve transportation resiliency and efficiency. The Framework captures the existing AAM ecosystem, Ohio specific activities, route planning considerations, recommendations for establishing vertiports, and provides a strategic framework for Ohio to support AAM.[46]

5.4.2 Potential Strategy Elements

Potential strategy elements that can facilitate the expansion of UAS operations include the following:

- **Coordination and Education:**
  - SBCTA to convene semi-annual meetings to share latest UAS operations activity, benefits, and lessons learned from partners and provide advice to agency partners working to incorporate UAS into their operations, modeled after similar efforts throughout the country.

[43] https://ladot.lacity.gov/sites/default/files/documents/ladot-uam-policy-framework-considerations.pdf
[44] https://ftp.txdot.gov/pub/txdot/avn/uam-report.pdf
[45] https://www.ncdot.gov/divisions/aviation/advance-mobility/Pages/advanced-transportation-mobility-plan.aspx
[46] https://drive.ohio.gov/programs/aam/aam-framework

- Seek opportunities to promote use cases for UAS operations and the benefits they may provide to transportation users.

- **Funding and Grant Support:**
  - Provide information on available incentives and grants to lower the barriers to entry and encourage member agencies to adopt UAS operations.
  - Consider opportunities for agencies to work together to support joint grant applications wherein one agency owns and operates the equipment, but it is available for other agencies to use.
  - Provide letters of support for UAS operations funding requests and grant applications.
- **Partnership:**
  - Explore partnerships within SBCTA and with private companies, nonprofits, and research institutions to support economic and workforce development opportunities.

5.4.3 User Needs

The UAS operations strategy addresses the user needs listed in **Table 5-16**.

Table 5-16: Uncrewed Aerial Systems Operations User Needs

Category	User Needs
Public Safety	▪ Need to reduce the time required to reach, identify, and support emergency response situations, including wildfire, search-and-rescue, and police response scenarios. ▪ Need to reduce risks to safety for routine or emergency infrastructure inspection. ▪ Need to develop the digital infrastructure necessary to support reliable and redundant communications networks (i.e., broadband networks). ▪ Need to provide situational awareness systems to Police Departments (e.g., during active shootings).

5.4.4 Prioritized Strategy Deployments

Based on the stakeholder outreach conducted, which included meetings with San Bernardino County Fire, CONFIRE, and the City of Ontario, it was determined that the focus of prioritized deployments should be centered on emergency response and public safety.

UAS have the potential to revolutionize emergency response scenarios. While many companies are exploring the use of drones for delivering goods ranging from groceries to critical medical supplies, the focus here is on their application to aid in preventing, assessing, and assisting in emergency situations.

In diverse landscapes like San Bernardino County, drones can be particularly useful. This region, with its mix of residential and remote areas, is often susceptible to natural disasters. In such situations, traditional vehicle transport can become too dangerous or even impossible.

However, drones can overcome these challenges. They can quickly reach, identify, and provide support in emergency situations, including wildfires, search-and-rescue operations, and police response scenarios. By reducing the time required to respond to these emergencies and the possibility of harm to the responders, drones can significantly enhance the effectiveness of disaster management strategies. This makes them a valuable asset in ensuring the safety and well-being of communities, particularly those in outlying areas.

In addition to emergency response, UAS can also be used as a tool for infrastructure inspections, where overhead wiring or cabinets/equipment are not easily accessible by vehicles. Drones can provide a quick and efficient way to inspect infrastructure improving service reliability. This use case further demonstrates the versatility and potential of UAS in various sectors.

5.4.5 Relevant Stakeholders

All government agencies within the county can be a stakeholder in this technology whether they provide these services themselves or use a centralized provider (i.e., SBCTA). Within each government agency, there can be multiple stakeholders ranging from police and fire to public service/public works and public utilities.

The immediate stakeholder group that will help develop this strategy further is the TTAC.

5.4.6 Benefits

Implementing UAS technologies provides numerous benefits in various sectors, enhancing efficiency, safety, and innovation. The following are some of these benefits:

- Infrastructure Inspections:
  - Benefits: IOOs
  - Impact: Enhanced safety by reducing human error, mechanical failures, and fuel consumption associated with traditional aviation.
- Emergency Services Response:
  - Benefits: Emergency Responders, Communities
  - Impact: Faster response times, improved efficiency in emergency situations.
- Package Delivery:
  - Benefits: Consumers, Delivery Services
  - Impact: Time savings, cost reduction, and reduced greenhouse gas emissions by relocating goods movement from ground to air.
- Support for Renewable Energy Sector:
  - Benefits: Renewable Energy Industry, Environment
  - Impact: Increased use of electricity from renewable sources to power UAS, promoting cleaner energy.
- Economic Growth:
  - Benefits: Job Seekers, Local Economies
  - Impact: Job creation in manufacturing, training, operations, maintenance, and service roles associated with UAS technologies.
- New Air Corridors for People and Goods:
  - Benefits: Travelers, Businesses, Urban Planners
  - Impact: Development of new transit routes connecting various hubs, promoting efficient transportation and urban development.

5.4.7 Costs

Enabling UAS operations will require capital, operations and maintenance costs. Capital costs for small UAS suited to specific activities can range from thousands to over $100,000 for the aircraft depending on factors including on-board equipment, flight time, and other features. Costs for pilots and other support personnel will include training, certification (for pilots) and labor when performing UAS duties. For small UAS, San Bernardino County can also expect costs associated with minor charging infrastructure. Widespread adoption of larger aircraft and associated operational costs, combined with digital and physical infrastructure costs are not yet easily identified. **Table 5-17** shows the estimated costs of deploying and operating UAS.

Table 5-17: Uncrewed Aerial Systems Project-Related Costs

Cost Category	Estimated Cost
Preliminary Activities (Aircraft and charging infrastructure purchase, pilot certification, training)	$5,000 - >$100,000 per drone/operator
Construction	Incidental costs associated with small UAS operations; According to a recent report documenting 125 UAS deployments, the operational cost for a UAS is $20 per hour.*
Estimated Implementation Cost	The cost of a single UAS for public safety can vary widely and depends on the capabilities and features. Assuming a mid-range drone costing $20,000 each, 10 drones would cost around $200,000.
Ongoing Operations and Maintenance (per year) (Pilot and support personnel labor and any maintenance for aircraft)	Minimal

* https://ops.fhwa.dot.gov/publications/fhwahop20063/fhwahop20063.pdf

5.5 Broadband Enhancement

San Bernardino County residents lag overall broadband access by 5% compared to the state average.[47] Broadband enhancement is crucial for improving internet connectivity and accessibility across various regions. This is particularly relevant for different applications such as home use, business operations, and emergency response services. Home broadband supports online learning, work from home, and digital leisure activities. It enables the use of smart devices, streaming platforms, and video chat tools. Current advancements aim to boost speed and dependability. Business broadband underpins operations like cloud-based computing, data storage, digital marketing, and remote teamwork. Upgrades allow for quicker data transfer, enhanced video call quality, and continuous cloud services. Emergency broadband offers dependable communication channels during emergencies, facilitating real-time information sharing and quicker response times. Developments focus on creating robust networks that can endure various disaster scenarios.

Broadband communications have historically been defined by the Federal Communications Commission as 25/3 Mbps (download/upload speeds). However, recent CPUC and Federal Communications Commission rulemaking has revised the target to 100/100 Mbps or 100/20 Mbps where impractical.[48] (These target speeds are an expected outcome of this plan.)

The State of California is already underway with a major broadband program. The California Department of Technology's Middle-Mile Broadband initiative, BMMN, will construct fiber-optic cable trunk lines along the State Highway Network – in conjunction with Caltrans – to provide vital connections between the internet backbone and last-mile providers. Broadband enhancement projects included in this plan go beyond filling in the missing gaps between the existing infrastructure and the new BMMN infrastructure and focus on the following goals:

- Bridging the digital divide by improving residential broadband access to underserved communities.
- Enhancing connectivity to small and medium businesses in revitalization focused areas, to create jobs and decrease unemployment.

[47] California Public Utilities Commission (CPUC). 2023. "State of California Fixed Consumer Broadband Deployment." https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/broadband-mapping/docs-uploaded-2023/household-deployment-by-county-as-of-dec-31-2021.pdf

[48] California Public Utilities Commission (CPUC). 2023. "CPUC Adopts Program Rules To Bring Broadband to Communities Most in Need." CPUC Adopts Program Rules To Bring Broadband to Communities Most in Need

- Improving local public agencies' enterprise network communications capabilities to support the deployment of innovative ITS capabilities.

The first and second goals would allow for subsidized broadband internet access for underserved county residents and businesses that are not adequately covered by current commercial broadband service providers. The third goal would allow local agencies to connect more of their facilities (i.e., government buildings, schools, police/fire stations), Traffic Management Centers, and ITS field devices.

5.5.1 Benchmarking

Broadband enhancement is crucial for improving internet connectivity and accessibility across various regions for home use, business operations, and emergency response services.

This section presents the latest trends and benchmarks in the different broadband applications, highlighting key improvements and their role in expanding digital inclusion.

STARLINK

Starlink is a satellite internet service provided by SpaceX, aimed at delivering high-speed internet globally through a constellation of low-earth orbit (LEO) satellites. This technology allows for the transmission of internet data between ground stations, satellites, and user terminals with minimal latency compared to traditional satellite internet. The advantages of using Starlink are particularly evident in rural and remote areas where traditional broadband infrastructure and cellular service is either non-existent or too costly to deploy. It offers rapid deployment, improved broadband speeds, cellular services, and more reliable internet connectivity. Importantly, a service like Starlink could significantly enhance the operations of emergency responders in rural areas where other connectivity options may be limited or non-existent.

Several corridors in San Bernardino County lack call boxes and/or cellular service, which can be devastating in an emergency. SR 38, a popular tourist destination in the summer, has neither call boxes nor cellular service. In May 2024, two children drowned at Thurman Flats, a mountain destination with very limited cellular service (depending on location and carrier) and no call box at the entrance. The nearest call box is 0.7 miles away. Starlink could provide better coverage for cell phone usage. Instances of Starlink implementation in rural areas include:

- In Cuba, New Mexico, the community lacked internet infrastructure, affecting remote learning during the COVID-19 pandemic. Implementing Starlink enabled over 400 households to access online education and other essential services.[49]
- In East Carroll Parish, Louisiana, where lack of internet access hindered educational and job opportunities, the introduction of Starlink to 120 households facilitated remote learning and job applications, enhancing digital accessibility in the community.[50]
- In San Bernardino County, safety agencies have found innovative ways to use Starlink to enhance their operations. In areas where broadband is not available, Starlink has proven to be a valuable tool, helping to identify hazards during search-and-rescue operations led by the Sheriff's department. During incidents, the department can bring in Starlink to create a network, ensuring constant communication. SBC Fire is considering the installation of flat satellite antennas on top of vehicles to maintain uninterrupted communication. Furthermore, they are exploring the use of mesh networks for efficient data transmission. This technology could significantly improve the department's ability to respond to emergencies, particularly in rural and remote areas.

[49] https://stories.starlink.com/stories/internet-from-space-for-students-in-rural-new-mexico
[50] https://stories.starlink.com/stories/internet-from-space-for-louisiana-students

FIRSTNET

FirstNet is a nationwide, interoperable LTE network that provides reliable and secure communication for public safety professionals and first responders. FirstNet provides real, dedicated mobile broadband when needed with always-on priority and preemption for first responders. It was created to help save lives, solve crimes, and keep communities safe, and one of its top priorities is reaching rural areas. More

than 25,000 public safety agencies and organizations use FirstNet, including law enforcement, fire services, emergency management services, 9-1-1, and emergency management. Given its proven reliability and wide reach, FirstNet could be a viable communication option to consider.

CHATTANOOGA, TENNESSEE, COMMUNITY-WIDE FIBER-OPTIC NETWORK

Chattanooga's high-speed, community-wide fiber-optic network has delivered economic and social benefits worth over $2.69 billion in its first decade.[51] The network, launched in 2010, was built by the City-owned utility Electric Power Board to support an advanced smart grid power distribution system.[52] There are several other municipal broadband networks in the country, but the Electric Power Board was the first to offer gigabit speeds citywide – at 1,000 Mbps and later 10,000 Mbps.

CITY OF ONTARIO, CALIFORNIA

Ontario is building one of California's very first municipally owned fiber-optic networks, that aims to deliver high-speed fiber internet to all Ontario residents and businesses.[53] Over 1,400 residential + 250 commercial customers are serviced. Given its pioneering efforts in this area, Ontario can serve as a valuable benchmark from which other regions can learn and apply lessons in their own pursuit of establishing high-speed internet infrastructure.

The City of Ontario has been successful in building out their roadside network and has taken several steps that can help other jurisdictions. Below are key highlights:

- **Network Layout and Expansion**: The City of Ontario has built a network with fiber throughout small neighborhoods and communities. They have started to build into areas that were underserved, aiming to build a resilient network ring.
- **Funding and Partnerships**: The city has a revenue-sharing agreement with Onward, an internet service provider partner for Ontario Net. The city keeps 60% of the revenue, which supports their build-out and operational support.
- **Construction and Infrastructure**: The city has separate contracts for conduit installation and cabling work. They have over 250 miles of fiber throughout the city and aim to accomplish fiber-optic infrastructure throughout the entire city.
- **Wireless Ventures**: The city is venturing into the wireless space, utilizing their streetlights. They are running fiber to their streetlights and have deployed Ubiquiti nodes in a pilot area to test their fixed wireless solution to the home.
- **Metrics of Success**: The city is looking at new metrics on educational attainment and advancement. They are working with different school districts to understand their needs and looking at opportunities to conduct pilots with students having trouble with connectivity.

[51] https://cities-today.com/chattanoogas-municipal-broadband-pays-off-with-2-69-billion-in-benefits/

[52] https://www.tn.gov/content/dam/tn/health/documents/healthy-places/successfulcasestudies/TRRN_CS_Chattanooga_Broadband_Infrastructure_2013.pdf

[53] Ontario Fiber | City of Ontario, California (ontarioca.gov)

5.5.2 Potential Strategy Elements

Elements needed to deploy this strategy are physical fiber-optic infrastructure components to link the BMMN fiber trunk line with existing local stakeholder communications infrastructure. This includes buried conduit with fiber-optic trunk line cables, vaults, splice enclosures, and fiber-optic pull boxes. Handoff of networks will typically occur at a middle-mile node. **Figure 5-12**shows a typical fiber Caltrans field network node which is likely to take on the same form as an envisioned middle-mile node/demarcation.

Where impractical to extend wired internet connectivity, wireless and satellite internet can be used. Rural areas of the county could utilize these methods in the short and medium term, with a long-term goal being to extend fiber connectivity to all parts of the county. Satellite internet has become a more attractive option as latency has dropped due in part to low-earth orbit and medium-earth orbit satellites, popularly available through Starlink. Starlink can provide internet with latency that is roughly similar to fixed broadband.[54] Although Starlink is more expensive where fixed broadband is available, areas where this is not available might be best served by providing subsidized satellite-based internet connections to bridge the digital divide.[55] SBCTA is currently exploring the use of Starlink to replace motorist aid call boxes in remote areas where conventional cell service is too weak or non-existent. SBCTA is the operating agency for the county's call box system, funded largely with state funds. The call boxes are primarily located on the rural interstates and rural state highways of which San Bernardino County has many miles, as well as in the mountains. Starlink recently incorporated voice capabilities, which makes the service attractive for this use. Pilot testing is needed, along with discussions with Caltrans and California Highway Patrol (CHP) before decisions can be made on deployment in the field.

Figure 5-12: Typical Broadband Enhancement Node Connection

[54] How Starlink's Satellite Internet Stacks Up Against HughesNet and Viasat around the Globe (ookla.com)

[55] Starlink vs. T-Mobile Home Internet: Which Is Better for Rural Internet? - CNET

5.5.3 User Needs

The Broadband Enhancements strategy addresses the user needs listed in **Table 5-18**.

Table 5-18: Broadband Enhancement User Needs

Category	Needs
Equity	▪ Need for reliable communications network throughout the County. ▪ Need to build upon the State of California's BMMN to bridge the gap with "last-mile" connections. ▪ Need to provide public outreach and education regarding the implementation of emerging technologies (e.g., broadband). ▪ Need to provide enabling infrastructure to support ITS project elements.

5.5.4 Prioritized Strategy Deployment Locations

The challenges and opportunities for broadband deployment are different across the four regions of San Bernardino County so the solution will need to be tailored appropriately. Jurisdictions have the option to build municipal fiber networks like Ontario. Through SBCTA/SBCOG, it is possible to foster partnerships between municipalities to develop the projects, so they do not end at a jurisdiction border.

Broadband deployment candidates were identified using CPUC's 2023 data and GIS software, which aggregated and ranked unserved locations based on the number of households without adequate internet speeds. Cross-referencing with additional map layers confirmed fiber-optic conduit installation as the preferred method for bridging the digital divide. The detailed methodology for broadband deployment selection is presented in the Early Action Plan.

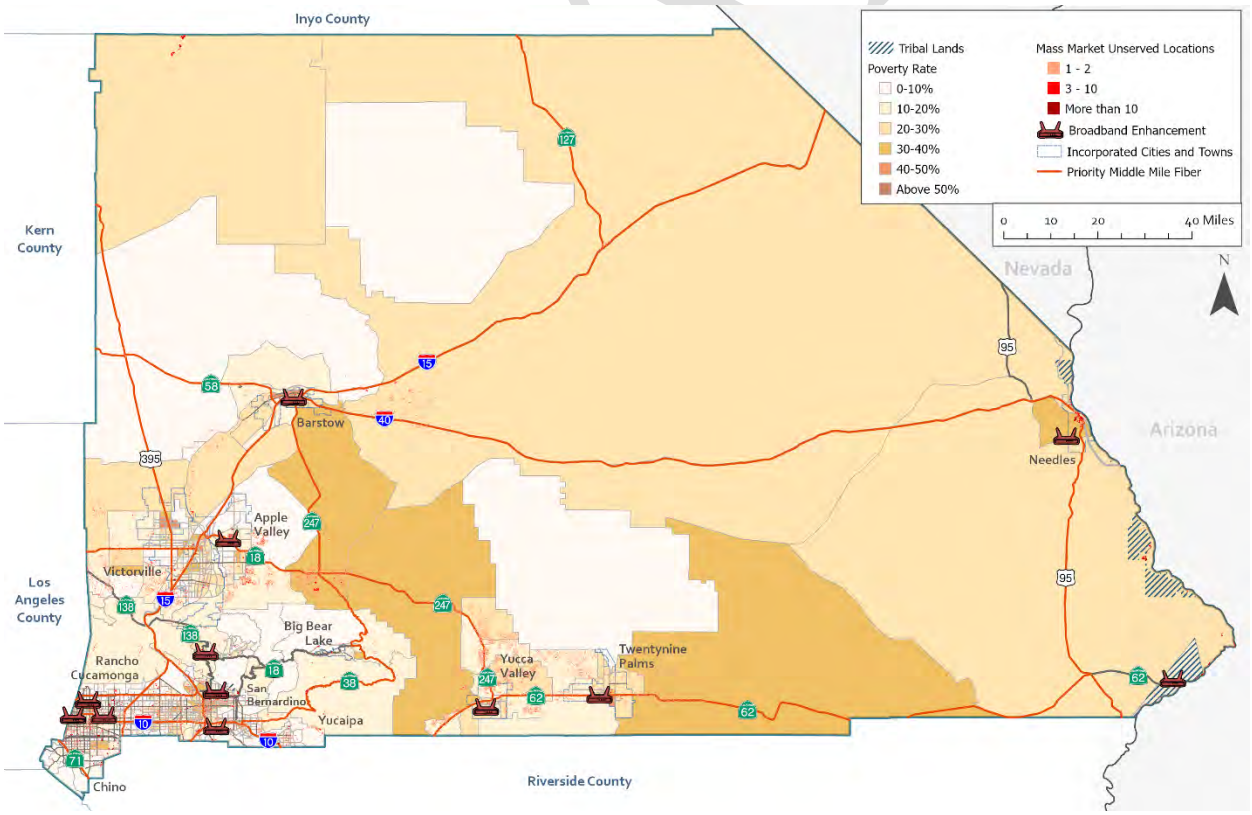
The locations below have been identified as potential broadband deployment candidates and are presented in priority order. These are shown in **Figure 5-13**.

- West Valley, City of Upland – from Early Action Plan
- East Valley, City of San Bernardino – from Early Action Plan
- High Desert, City of Barstow – from Early Action Plan
- Low Desert, City of Yucca Valley – from Early Action Plan

- East Valley, City of Montclair – I-10 will have Broadband. Interest was expressed in this location at the February 1 workshop.
- West Valley, City of Ontario – I-10 and I-15 will have Broadband. City already has a public network. This would enhance it.
- East Valley, City of Loma Linda – I-10 and US66 will have Broadband. City already has a public network. This would enhance it.
- High Desert, City of Twentynine Palms
- High Desert, City of Apple Valley
- High Desert, an undeserved area in the mountains
- Low Desert, City of Needles
- Low Desert and East Valley Tribal Areas

In terms of potential Starlink applications for remote call box locations, SBCTA has approximately 750 call boxes in service, with perhaps 2/3 of those that could benefit by conversion to Starlink or similar service. As cell coverage improves along some of the county's rural highways, the Starlink locations could be decommissioned or moved to other locations.

Figure 5-13: Potential Broadband Deployment Locations



5.5.5 Relevant Stakeholders

Relevant stakeholders for broadband enhancements include information technology and traffic departments from applicable agencies, Caltrans District 8, and the State of California Department of Technology.

The public in each of these defined locations should also be considered as stakeholders. Beyond sharing their needs, the residents or businesses can provide test environments and feedback on any implementation.

The immediate stakeholder group that will help develop this strategy further is the IT working group.

5.5.6 Benefits

Enhancing broadband infrastructure delivers multiple benefits, driving economic growth, improving connectivity, and supporting advanced technologies. The following are some of these benefits:

- Lower Cost Plans for Residents:
  - Benefits: Residents
  - Impact: Affordable broadband access through municipal networks.
- Grants for Private Broadband Network Development:
  - Benefits: Municipalities, Broadband Providers
  - Impact: Financial support for developing broadband infrastructure.
- Customization and Flexibility:
  - Benefits: Municipalities, Residents, Businesses
  - Impact: Enhanced services and higher speeds not typically available from private providers, as seen with Electric Power Board in Chattanooga, Tennessee.
- Economic Growth and Job Creation:
  - Benefits: Local Economies, Job Seekers
  - Impact: Opportunities in network construction, maintenance, and related services.
- Enhanced Traffic Management Capabilities:
  - Benefits: Municipalities, Traffic Management Authorities
  - Impact: Improved ITS device connectivity and traffic management through municipal broadband networks.
- Partnerships for Cost Reduction:
  - Benefits: Municipalities, Underserved Areas
  - Impact: Economies of scale driving down costs for fiber deployment in underserved areas.
- Risk Minimization:
  - Benefits: Municipalities
  - Impact: Reduced risk from network build-out and operational costs through partnerships with private providers.
- Cost Savings for Future Infrastructure:
  - Benefits: Municipalities, Future Projects

  - Impact: Long-term savings by laying spare conduit for future fiber installations, reducing the need for additional digging and associated costs.

- Enhanced Connectivity for Underserved Areas:
  - Benefits: Residents in Unserved or Underserved Areas
  - Impact: Improved access to broadband services through reduced costs for providers and collaborative municipal efforts.
- Improved Procurement and Technical Understanding:
  - Benefits: Municipalities, Broadband Providers
  - Impact: Better procurement terms and technical insights through shared information and cooperative practices.

5.5.7 Costs

Table 5-19 summarizes the costs associated with broadband infrastructure deployment. These costs would be most applicable for connecting local agency fiber networks to the BMMN.

Table 5-19: Broadband Enhancement Related Costs

Cost Category	Estimated Cost (per mile)
Preliminary Activities (including permits, design, surveys, project management)	$10,000 - $30,000
Construction (trenching, conduit, pulling fiber-optic cables, splice enclosures, and vaults)	$60,000 - $100,000
Estimated Implementation Cost	$70,000 - $130,000
Ongoing Operations and Maintenance (per year) – includes repairs and monitoring the installed fiber-optic infrastructure	$1,000 - $5,000

5.6 Data Governance and Sharing

Data has become a new commodity for governments. For planning, data is invaluable to show needs or predict changes over time. For operations, it allows agencies to monitor system performance and react to potential issues. And for transparency of government action, data has become a powerful public relations tool. To properly harness the power of the collected data, a data governance plan should be created and updated regularly for each agency.

Data governance relates to procedures and standards for managing data including sourcing (collecting, creating, or purchasing), storing, securing, transforming, maintaining, and sharing data both internally and externally. A data governance plan documents the data and systems that an agency owns, describes roles and responsibilities for the agency's staff around the management, use, maintenance, and security of the data, and establishes standards, policies, and procedures for data management. Developing and implementing a data governance plan can be a lengthy process but the result is a better-informed team and higher quality data which can be used in myriad ways including sharing data with regional agencies.

Data sharing involves agencies coming together to identify data sets worth sharing and developing data sharing agreements and protocols to enable such sharing while safeguarding data and privacy. Establishing a data sharing working group to address and resolve data sharing issues across the region is often used to accomplish this. Even when the data each agency collects is used internally, creating standards, processes, and procedures that help public agencies share data with each other will help San Bernardino County member agencies become smarter together.

The rest of this section will focus on data sharing as the data governance aspect will need to be taken up by each agency individually.

5.6.1 Benchmarking

Data sharing is essential for fostering innovation and collaboration. This section outlines the latest trends and benchmarks, emphasizing the significant role that shared data plays.

SMART CITY PDX

- **Data Services (internal to the City of Portland)**: Smart City PDX's Data Services provides centralized, modern data management services that enhance the City of Portland's operations internally. This initiative spans various aspects of data management, from producing visible outputs like interactive dashboards to overseeing the governance, tools, and training that underpin data usage across city services. These comprehensive services improve the usefulness and longevity of data products while also enabling informed decision-making, ensuring that data acts as a powerful asset for the community. The program currently focuses on several strategic projects aimed at refining citywide data practices. These include the City Data Governance Committee, which sets best practices for data management; the Community Leads Cohort that integrates community feedback into data policies; and the Community Safety Data Project, which improves public safety data systems. Additional initiatives like the Rescue Plan Data and Equity Strategies Team and support for the Transition Team's survey design and data analysis efforts demonstrate Smart City PDX's commitment to leveraging data for better service delivery and policy development, fostering an environment of collaboration and high-quality data governance.[56]
- **Open Data Program in Portland (Internal and External):** This program is designed to elevate transparency and foster a data-driven approach to city governance, thereby enhancing service outcomes. Launched to reduce the workload involved in handling data requests and to stimulate innovative solutions to urban challenges, the program emphasizes the importance of making city data accessible. This openness extends to data generated from various sources including city operations, and collaborations with the private sector, nonprofits, and academic institutions, aiming to support Portland's commitments to open access and extensive data sharing.[57] Originating with the pioneering Open Data Resolution in 2009, the first in the U.S., Portland has been a leader in open data practices. These efforts were expanded in 2017 with a formal ordinance that established a structured Open Data Program, promoting open standards to ensure interoperability and facilitate data exchange across different platforms. This strategic use of open data is intended to enhance community engagement, inform policymaking, and improve the quality of life.

KING COUNTY HOMELESS MANAGEMENT INFORMATION SYSTEM (HMIS)

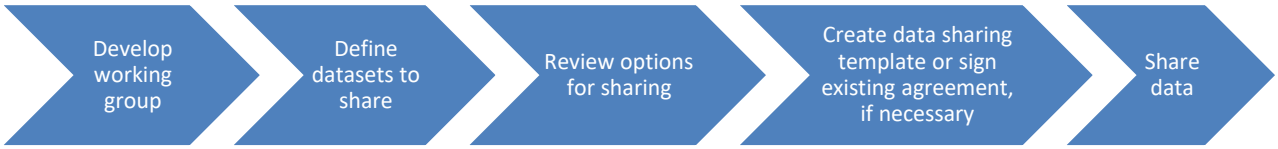
The HMIS in King County, Washington (which includes the City of Seattle), is a pivotal tool used by the King County Regional Homelessness Authority to optimize homelessness services. This secure online database enhances service delivery by streamlining access to housing and support, thereby advancing efforts to reduce homelessness. It securely stores detailed client information, protected by advanced security features, to facilitate benefits such as reduced duplicate assessments, coordinated case management, and streamlined referrals. Moreover, it aids agency directors in tracking outcomes and enhances public policymakers' ability to evaluate and respond to homelessness trends and needs. HMIS utilizes Bitfocus, Inc.'s Clarity Human Services software for automated and customized processes. This system complies with federal mandates and ensures data privacy. The King County Regional Homelessness Authority leverages its data to generate comprehensive reports. These reports serve to enhance the capacity of local organizations to deliver housing and services, ultimately strengthening regional efforts to eradicate homelessness.[58]

[56] https://www.portland.gov/bps/smart-city-pdx/data-services
[57] https://www.portland.gov/bps/smart-city-pdx/open-data-program
[58] King County Home (bitfocus.com)

5.6.2 Potential Strategy Elements

At a high level, the data sharing strategy is envisioned to be composed of the following elements shown in **Figure 5-14.**

Figure 5-14: Data Sharing Strategy Elements



When defining datasets to share, the working group needs to identify what datasets are available from each agency and what datasets are valuable to other agencies. As the working group talks through datasets, they can identify categories of data based on value to the agencies. **Table 5-20** highlights examples of datasets that might be available from agencies and their perceived value.

Table 5-20: Examples of Available Datasets from Agencies

Description	High Value	Medium Value	Low Value
Dataset	Fiber Owned by Agency	Fleet Availability	Traffic Data
Reasoning	This can be valuable to understand where interagency connections can be made at jurisdiction borders.	Fleet data can be valuable if a natural disaster or emergency situation leaves one agency's fleet vehicles unusable. Understanding the available fleet of a neighboring jurisdiction can allow for faster mutual aid requests.	Waze data is already available to all agencies so adding another traffic dataset may be less valuable.

Data sharing on a large, organized scale is often easiest with a common data portal. SBCTA member agencies currently have access to two regional data portals (RIITS and SCAG). SCAG is a regional planning organization for all aspects of planning in Southern California and operates a data portal focused on planning data. RIITS is an operational exchange of resources for transportation focusing on real-time information of regional significance as it relates to the ITS architecture for the Los Angeles region. Each of these entities has their own mission for their data portal so inviting both to present their mission and portal abilities at a working group meeting will be advantageous. San Bernardino County has a data portal project underway with two main goals: 1. to create an internal dashboard for the County to have access to decision making data and to provide services more efficiently and 2. to create a data storage, access and sharing system for local agencies within the County. This project is still in the conceptual stage which could allow agencies to give input into what could be helpful to them in a portal. The San Bernardino County project team has shared they are open to working with cities within the County to identify what data could be available and where there are data gaps. If the above three options did not meet the needs of the SBCTA member agencies, a portal could be built to their specific, identified needs.

Table 5-21 lists the details and requirements for the four portal options at a high level.

Table 5-21: SBCTA Data Portal Options

Category	RIITS	SCAG Regional Data Platform and Local Data Exchange Portal	San Bernardino County Portal*	San Bernardino Data Portal*
Website	www.riits.net	Info: www.scag.ca.gov/RDP Landing Page: https://hub.scag.ca.gov/	TBD	TBD
Operated By	Los Angeles County Metro Transit Authority on behalf of RIITS members	SCAG team	San Bernardino County	TBD
Action Needed to Participate	Enter into an interagency membership agreement that includes the exchange of operational data, aligning with established data exchange standards. This membership includes a complete organization structure that provides access to RIITS resources, licenses, and agreements to allows sharing of the members data through RIITS.	An account is required to access the Local Data Exchange (LDX) Portal. The LDX is only accessible to designated staff from SCAG local jurisdictions and key partners.	TBD but expect the agency would need to enter into a data sharing agreement to have access. Also expect each agency would be asked to share data.	Each agency would need to enter into a data sharing agreement and share their data.
Cost to Share Data	No cost to exchange operational resources through RIITS. This is highly dependent on the operational and programs needs managed by organizations, as participation is dependent on collaboration through RIITS.	No cost to share data with data portal. This may change in the future.	TBD	TBD
Cost to Use Data	Agency personnel time and use of organizations operational and infrastructure resources.	Agency personnel time.	TBD	TBD
Ability to Host Sensitive/Private Datasets	Yes, the goal is to upload shareable datasets, but sensitive datasets can be secured with only authorized users able to access.	Yes, the goal is to upload shareable datasets, but sensitive datasets can be secured with only authorized users able to access.	TBD	Yes, the portal can be designed this way.
Cost to Build and Operate Data Portal	RIITS main benefit is providing the platform for member organizations to build their sharing environment for transportation information. The base costs are currently maintained by RIITS, but build costs are the responsibility of the member.	No expected future cost to build but upgrade costs could be split among members in the future.	TBD	Approximately $350,000 to build and $250,000 each year to operate and maintain

* The portal is currently a concept and not operational.

SBCTA agencies can use one, two or all three of these data portal options to share data as much or as little benefits their agency.

5.6.3 User Needs

Table 5-22 outlines the user needs that the data governance and sharing strategy fulfills.

Table 5-22: Data Sharing User Needs

Category	User Needs
Data Sharing	▪ Need to support standardized data collection, processing, and reporting as part of a centralized County data repository system. ▪ Need for updated communication protocols to exchange requests, responses, and messages with other subsystems and applications. ▪ Need to integrate systems across jurisdictions for better coordinated response to the needs of the homeless population. ▪ Need for updated communication protocols to share data among different jurisdictions. ▪ Need to improve quality, accuracy, and validation processes of collected data. ▪ Need for updated user security in accordance with existing IT security policies and procedures that are applicable to the IT environment of the ITS elements. ▪ Need to secure sensitive data via encryption in accordance with enterprise IT policies on information security. ▪ Need for cloud-based services to host systems/applications.
Operations & Maintenance	▪ Need for active asset management platform to effectively plan and maintain regional assets.
Performance Metrics	▪ Need to develop, assess, and present performance metrics for continuous improvement and reporting. ▪ Need to consider opportunities to share collected data and performance metrics with stakeholders, and public/private sectors.

5.6.4 Prioritized Strategy Deployments

Once data governance and sharing practices are established, other projects will come easier or should be considered as a follow-up to this effort. The following opportunities came from the Early Action Report and numerous conversations with San Bernardino County and the agencies within the county including the February 1, 2024, City Managers, and IT Directors meeting.

- **Data Analysis**: Utilize collected data to identify patterns, trends, and areas of improvement to enhance operational efficiency and decision-making processes.
- **Traveler Information Systems**: Develop and implement systems to provide real-time information to travelers, improving traffic flow and reducing congestion.
- **Virtual Operations Center**: Establish a centralized, virtual hub for coordinating and managing transportation operations across various agencies within the county.
- **Information Sharing**: Promote the exchange of information between agencies to ensure cohesive and integrated transportation management and emergency response.
- **CAD-to-CAD**: Enhance communication and coordination between agencies during incidents and emergencies by integrating CAD systems.
- **Planning for Digital Delivery**: Establish standards and procedures to create, send and receive plans digitally.

DATA ANALYSIS

Data analysis has gone from paper and pen reviews to AI using datasets to create output that would take hours or even days for a human to complete. Each agency should consider what analytics solutions may be available to activate their data into a powerful tool to use for planning and decision-making. Advances in machine learning and AI are continuing to grow. Governments are starting to implement these tools for projects and processes including in the areas of human resources, traffic, and safety. The working group could host presentations from several companies experienced with data analytics to understand how each solution might benefit each agency.

TRAVELER INFORMATION SYSTEMS

Traveler Information Systems refer to any system that collects and analyzes traffic data. Typically, these systems are part of an agency's ITS program. These ITS systems can offer real-time data on traffic conditions, location of incidents, weather, road closures and other relevant information to help travelers reach their destination safely and more efficiently. Caltrans is responsible for managing and operating highway facilities and state routes. Overall, highway facilities are well equipped with Traveler Information Systems. However, most urban arterials and rural routes are not instrumented with these systems and offer little to no usable information other than third-party probe-based data.

This strategy aims to expand the county's existing Traveler Information Systems infrastructure to provide a high-quality traveler information service, focused on the key urban, suburban, and rural routes. This strategy would ensure the agency-owned sensor infrastructure is deployed on key routes to enhance the granularity of traffic information.

At a high level, this strategy is envisioned to be composed of various key elements:

- Investment in traffic data services, utilizing agency-owned sensors and/or private sector probe data services.
- Consolidation of multiple data sources into a consistent format for each data type, such as road closure information, traffic data, incidents, and route performance, to allow easy data sharing among stakeholders.
- Establishing a trusted API to broadcast data to the public and private data users, within parameters established under the data use guidelines.
- Enhancing Go511 to be an available resource in a mobile application form to encourage adoption, such as by providing routing services for passenger car vs freight versus.

The components to this strategy require data to be successful. As the agencies become more comfortable sharing data across the county, this strategy can take shape.

VIRTUAL OPERATIONS CENTER

Once data sharing has been established, new opportunities for sharing emerge for agencies to gain better access to real-time systems and efficiencies through dashboard information and joint operations. One opportunity is to create a Virtual Operations Center (VOC). A VOC can be utilized as the core for managing multiple systems, where systems and personnel manage information about the transportation network and safety operations to ensure the safe and efficient movement of people and goods. A VOC can help monitor, collect, process, manage and disseminate real-time information without a physical facility. For example, operations would rely on the use of advanced web-based software solutions, cloud computing and Software as a Service. There are several benefits from implementing a VOC, these include but are not limited to:

- Cities with no existing operations center, and limited funding to build or maintain a physical facility.
- Intention to perform joint operations with other agencies – either by starting or merging centers.
- Need to monitor rural areas or specific corridors.
- Enhancement of emergency operations.

Most operations centers are housed in physical facilities and are typically managed by a single entity (e.g., DOT, agency). In San Bernardino, the regional TMC is managed by Caltrans District 8. Regional TMCs may experience challenges coordinating with local TMCs and smaller operations centers, especially during major events, limiting any opportunity for large-scale coordination. Some regions looking to help bridge this gap have elected to invest in a VOC to provide more consistent communication and coordination.

VOCs can benefit from emerging technologies which offer remote system accessibility and opportunities for multi-agency deployments. The VOC model relies more on data communications rather than on physical infrastructure.

In line with this, SBC Fire is piloting AI solutions that will aggregate fire data into one database with Microsoft. They have a minimum viable product and this solution will begin a phased deployment in September 2024 that will take about 3 years. This initiative is an example of how agencies are leveraging technology to enhance their operations and coordination efforts. It also underscores the potential of VOCs in facilitating such advancements. This strategy aims to implement a VOC that will oversee coordination of SBCOG agencies.

HOMELESS INFORMATION SHARING

In San Bernardino County in 2023, over 4,000 adults and children were identified as homeless during the 2023 Point-in-Time Count and Survey which was a 25.9% increase from 2022.[59] The homeless community can interact with many entities to receive services including assistance with food, transportation, jobs, short term shelter, medical treatment, and legal needs. An additional data sharing opportunity lies among social service and public safety agencies to share interaction data. Sharing information on previous services provided or interaction activity for an individual including through which agency the services were provided and the timeline would help an emergency responder know how to help the individual best. SBCTA has initiated conversations with the Homeless Outreach and Proactive Enforcement organization, which has done tremendous work pulling local resources together to serve the homeless more informatively and efficiently. Working with this organization and others in the county to research opportunities to share information should be considered.

COMPUTER-AIDED DISPATCH (CAD)-TO-CAD

Municipal and regional public safety emergency communications centers often lack the technology to efficiently interface with neighboring jurisdictions during emergencies. This may lead to delayed response times from not utilizing closer resources that are in a different jurisdiction or missing critical information necessary for the safety of first responders and the public.

Both San Bernardino County and public safety agencies, such as police, fire, and emergency medical services, utilize CAD systems and software in their dispatch centers to manage and coordinate emergency response. A CAD-to-CAD approach is particularly beneficial for operations centers dispatching services, enabling swift and efficient data exchange across diverse platforms. CAD systems streamline the dispatch process by providing real-time information and automating various functionalities. These systems typically include features such as call-taking, incident creation, unit assignment, mapping and routing, status tracking, and resource management.

While CAD systems offer numerous benefits, there are challenges with their implementation and use, particularly when it comes to use across different jurisdictions. San Bernardino County agencies use different versions and variations of CAD systems, each with its own features and capabilities. As the agencies work through data sharing, they can consider a CAD-to-CAD system for all public safety answering points that can elevate emergency service response. County Fire has initiated a CAD-to-CAD network with nine other agencies and is seeking an expanded set of participants within both San Bernardino and Riverside Counties. The expansion of this system is one of the Smart County Early Action Plan items, and SBCOG could assist by conducting some strategic planning and facilitating a collaboration across jurisdictions to move the process forward.

DIGITAL DELIVERY

Digital delivery, the practice of moving formerly paper-based plans for design, construction and as-builts to digital models to capture the entire lifecycle of a project, is becoming very popular across the United States. Digital

[59] https://www.sbcounty.gov/uploads/sbchp/content/SBC-2023-Homeless-Count-Report.pdf

delivery has been shown to create efficiencies and save costs, not the least of which is the paper that is used for producing large plan sets. One study showed that using digital delivery and building information modeling (BIM) (the modeling of the design and construction of infrastructure assets) saved 15% in change orders.[60]

This new technology shift requires planning but the data governance steps that are suggested in this plan can align with the governance that needs to be defined for digital delivery. The initial planning phase would include identifying members for a working group, laying out how plan delivery is currently done, understanding use cases and defining standards and procedures for the use of digital delivery.

Taking this first planning step will allow the members to understand the technology and opportunities and collectively develop a framework for this technology to move forward.

5.6.5 Relevant Stakeholders

All agencies within San Bernardino County can be stakeholders for data governance and sharing. Villages, cities, and county agencies can share data with a centralized data portal or directly with each other. Specifically, technology department personnel will be effective as this strategy takes shape.

The immediate stakeholder group that will help develop this strategy further is the IT working group.

5.6.6 Benefits

Effective data governance and sharing mechanisms offer significant benefits, improving decision-making, operational efficiency, and funding opportunities. The following are some of these benefits:

- Better-Informed Decisions:
  - Benefits: Government Agencies, Policy Makers
  - Impact: Enhanced decision-making capabilities through access to comprehensive regional data.
- Increased Efficiency and Agility:
  - Benefits: Government Agencies, Residents
  - Impact: Streamlined operations and quicker response times due to efficient data sharing.
- Improved Grant Writing and Justification:
  - Benefits: Municipalities, Nonprofit Organizations
  - Impact: Easier grant applications and stronger justification for funding through detailed and accurate data reporting.

5.6.7 Costs

Costs will depend on which data sharing solution(s) are selected. With RIITS or SCAG, costs will likely be low to no cost but as these data portal options grow or if SCBCTA requests additional services from them to assist with data processing, a cost-share may be requested. The cost of creating a data portal can be split between the agencies using the portal. An estimate of the cost to create a data portal is shown in **Table 5-23**.

[60] https://www.asce.org/publications-and-news/civil-engineering-source/civil-engineering-magazine/issues/magazine-issue/article/2023/03/transportation-agencies-shift-toward-digital-delivery

Table 5-23: New Data Portal Costs

Cost Category	Estimated Cost	Notes
Preliminary Activities	$80,000-100,000	Includes planning, data discovery, documentation, design, and procurement support, as needed
Construction	$250,000	Includes initial fee to purchase and set up an open data portal solution
Estimated Implementation Cost	$350,000 for first year	
Ongoing Operations and Maintenance (per year)	$250,000	Annual vendor fee to host and maintain solution

5.7 Joint Operations

Government agencies are often seeking opportunities to reduce costs while giving their residents the same high level of service more efficiently. Joint operations are where two or more agencies work together to deliver a service.

5.7.1 Benchmarking

JOINT POWERS AUTHORITIES (JPA)

JPAs in California represent a unique and effective model for public agencies to collaborate and achieve common goals efficiently. Established under the California Government Code section 6500 et seq., JPAs allow two or more public agencies to jointly exercise their powers, enhancing service provision through collective efforts. These entities can take the form of either contractual agreements or separate legal entities, each with distinct legal rights and responsibilities. By pooling resources and coordinating efforts, JPAs can secure better rates and bids for services, optimize resource sharing, and eliminate redundant actions. Through this collaborative framework, JPAs enable public agencies to address mutual challenges, fund projects, and act as a unified entity for specific activities.[61] SBCOG operates as an established JPA.

The SBCOG JPA is made up of representatives from 24 cities and towns and the San Bernardino County Board of Supervisors. The JPA was established to assist with cooperative regional planning.

THE COLUMBUS POLICE TRAINING ACADEMY

This academy, in Columbus, Ohio, exemplifies the principles of joint operations by integrating recruits from various law enforcement agencies into its comprehensive and standardized training programs. By hosting recruits from other police departments, particularly those that may not be large enough to conduct their own training, the academy ensures that all recruits receive appropriate certification. This joint training approach not only provides cost-effective solutions for smaller agencies but also fosters cross-agency networking and builds lasting relationships among personnel from different organizations. An additional benefit is that responders are trained in the same skills, enhancing their effectiveness during joint emergency efforts.[62]

THE BAY AREA JOINT INFORMATION SYSTEM (JIS)

JIS provides a comprehensive framework for coordinating public information and warning systems across the San Francisco Bay Area during emergencies. This system enhances emergency coordination by sharing situational awareness, collaborating on messages to avoid conflicts, monitoring social and traditional media, and addressing misinformation trends. It facilitates the sharing of written materials, supports mutual aid, manages media

[61] https://www.nevada.courts.ca.gov/system/files/2021-spd-jointpowersauthorities.pdf

[62] Columbus Police Training Academy Training - City of Columbus, Ohio

inquiries, and contributes to after-action reporting. The JIS adapts its coordination based on the emergency level, whether it involves a single Operational Area, multiple areas requiring a regional response, or a catastrophic event necessitating federal resources. A critical aspect of the JIS is the verification of information before dissemination, ensuring accurate and reliable communication. This systematic approach strengthens media confidence, supports effective response efforts, and serves as a model for interagency coordination in emergency management.[63]

JOINT/COOPERATIVE PURCHASING LAKE COUNTY, ILLINOIS

By encouraging other units of government to jointly procure goods and services, Lake County has significantly improved efficiency, generated greater economies of scale, and achieved substantial cost savings. In Fiscal Year 2017, the county leveraged over $8.9 million through cooperative contracts for a wide range of items including vehicles, IT software licensing, facilities maintenance equipment and services, and office supplies. These cooperative efforts include joint bids with local entities for bulk rock salt, elevator inspection services, copy paper, sand, gravel and spoil removal, crack sealing, and pavement marking. Additionally, Lake County has piggybacked on other regional contracts for root control, sewer televising services, and vehicle purchases, demonstrating a strategic approach to maximizing public resources and reducing administrative overhead.[64]

5.7.2 Potential Strategy Elements

Potential strategy elements that can facilitate joint operations opportunities between the San Bernardino County agencies include the following:

- **Joint Operations Working Group**
  - Establish a group with representatives from various interested agencies to identify and prioritize joint operation opportunities.
  - Evaluate potential joint operations based on feasibility, impact, resources, and alignment with each agency's strategic goals.
  - When considering new contracts for any joint operations that involve purchasing, review the opportunities presented by the existing SBCOG JPA.
  - Develop detailed plans for selected opportunities with clear timelines and responsibilities.

Once the working group is formed and operational, other potential duties/strategies for consideration are:

- **Interagency Collaboration Framework**
  - Develop interagency agreements to define roles, responsibilities, and resource sharing.
  - Establish task forces with personnel from different agencies to tackle specific challenges.
  - Align missions to ensure all agencies work towards common goals.
- **Group Purchasing**
  - Leverage group purchasing power to negotiate better prices for goods and services.
  - Use standardized contracts to streamline the procurement process across agencies.
  - Achieve cost savings and operational efficiencies through bulk purchasing and shared contracts.
  - Create a list of purchase topics and companies used by each agency to look for opportunities to share past contracts or feedback on service.

[63] https://www.bayareauasi.org/jis

[64] https://www.lakecountyil.gov/4061/Joint-Purchasing

- **Joint Training Programs**
  - Conduct regular training sessions involving multiple agencies to improve teamwork and readiness.
  - Host workshops to share best practices and lessons learned.
- **Resource Sharing**
  - Utilize shared spaces to reduce costs and improve communication.
  - Create a joint funding mechanism for common projects.
  - Share technological resources and equipment.

5.7.3 User Needs

The joint operations strategy addresses the user needs listed in **Table 5-24**.

Table 5-24: Joint Operations User Needs

Category	Needs
Improve Government Operations	▪ Need to enhance existing partnerships for more efficient service delivery. ▪ Need to ensure high-quality, cost-effective service delivery. ▪ Need to foster new collaborations to improve the quality of life for residents. ▪ Need to benefit the community with improved resource allocation.

5.7.4 Prioritized Strategy Deployments

The following prioritized strategy deployment ideas were developed over many meetings with the county agencies both in-person and virtually.

GROUP PURCHASING

From pens to computers, most agencies buy the same goods. Coming together to make larger purchases of goods where price can be affected by quantities purchased can bring savings to the agencies involved. In cases where a group purchase does not make sense, sharing procurement requirements, documents, thinking and pricing outcomes will allow agencies to better negotiate future purchases. To move forward with group purchasing, agencies will first need to review their individual procurement laws to ensure it is allowable. It is expected that the department with purchasing needs, the procurement team, and the legal team will be involved in this research and conversation. Next, the agencies would consider whether to use the existing SBCOG JPA or a new contract to establish the purchasing relationship. Terms that are important to consider when purchasing as a group are: What type of items or services can be purchased by the group; who will handle the procurement documentation, review, and award; will contracts be through one agency or will all agencies involved have their own contract; and who can terminate a contract.

COORDINATED TRAINING OPPORTUNITIES

Like data sharing and joint purchasing, there can be sharing opportunities with training. If an agency is hosting training for new or existing software or a special skill, allowing other agencies to attend can create efficiencies and can create a team of users that can be helpful to each other. The first step towards a coordinated training effort is to identify similar training activities across agencies. From the basics like Microsoft Word to how to breach a house on fire, opportunities will exist to jointly train staff. Next the procurement and fiscal team members can review how much it currently costs to educate each student and the training staff can estimate how many additional students can be included and if the training facility can accommodate the larger class size. Finally, a cost benefit analysis can be done to decide which coordinated training makes the most fiscal and/or preparedness sense.

COAST TEAM MODEL

COAST in San Bernardino County provides an excellent model for interagency collaboration, focusing on mental health crises. COAST includes a team of professionals from the San Bernardino Sheriff's Department, San Bernardino County Department of Behavioral Health, and the San Bernardino County Fire Department. This multidisciplinary team, armed with data from each agency, proactively engages with community members experiencing mental health crises, intercepting calls for service before they escalate and require extensive first responder intervention. This approach not only alleviates the burden on first responders but also enhances community relations by providing personalized care and ongoing support to individuals in need. By forming a similar task force across agencies and sharing data, San Bernardino County can streamline crisis intervention efforts, reduce use-of-force incidents, and build trust within the community while creating efficiencies.

OTHER SERVICES

Other services can be jointly pursued. As not all agencies will have the people resources available or the full-time need to train new skills like drone operations, this is an area where another government agency can fulfill that service on an as-needed basis. Like the mutual aid agreements that are in place for San Bernardino County's Fire and Rescue teams, there can be opportunities to share specialized skills or assets that are acquired by an agency. Often government agencies must forego new skills or asset opportunities due to a lack of people or fiscal resources. Looking at those opportunities with an eye toward regional growth and experience can allow for a joint option to share the costs and personnel to grow the region's abilities.

5.7.5 Relevant Stakeholders

All agencies can play a role in joint operations. From leading a program or procurement to purchasing equipment that can be jointly used, agencies of every size can participate.

The immediate stakeholder groups that will help develop this strategy further are the IT working group and the TTAC.

5.7.6 Benefits

Joint operations among agencies yield considerable benefits, including increased efficiency, cost savings, and enhanced coordination. The following are some of these benefits:

- Increased Efficiency:
  - Benefits: Participating Agencies
  - Impact: Streamlined operations and improved coordination among agencies.
- Lower Costs:
  - Benefits: Participating Agencies
  - Impact: Cost savings through shared resources and joint efforts.

5.7.7 Costs

Costs will be dependent on how the joint operations are executed but most costs will come in the form of in-kind labor contributions.

6 Master Plan

Together, the seven prioritized strategies and costs presented in **Chapter 5** form the basis of the Smart County MP. This chapter compiles them and provides an overview of the scope, schedule and costs associated with implementing these strategies. Potential funding sources are provided, as identifying, and securing appropriate funding is essential to ensure the successful realization of this Smart County Master Plan's objectives. Overall, this chapter aims to provide a framework for moving forward with the proposed strategies. Together with the toolkit provided in **Chapter 6**, it will support effective execution of the strategies.

6.1 Scope and Schedule

Figure 6-1 and **Figure 6-2** depict the proposed strategies and their recommended locations across the county. The locations cover all four regions in a way that addresses the specific needs and priorities of each region. The map also indicates disadvantaged or low-income areas, as this awareness will help in addressing equity and accessibility.

The schedule for the proposed strategies, shown in **Table 6-1**, provides a high-level plan for implementation of the strategies from 2025 to 2034. In addition to the timing, the schedule also specifies the roles and responsibilities associated with each task, identifying if the county or local government are responsible, supporting, or informed. At key points the schedule also indicates where the general public should be informed. Together with the toolkit materials provided in the next chapter, these materials are intended to support implementation of the proposed strategies.

Figure 6-1: Master Plan Strategies

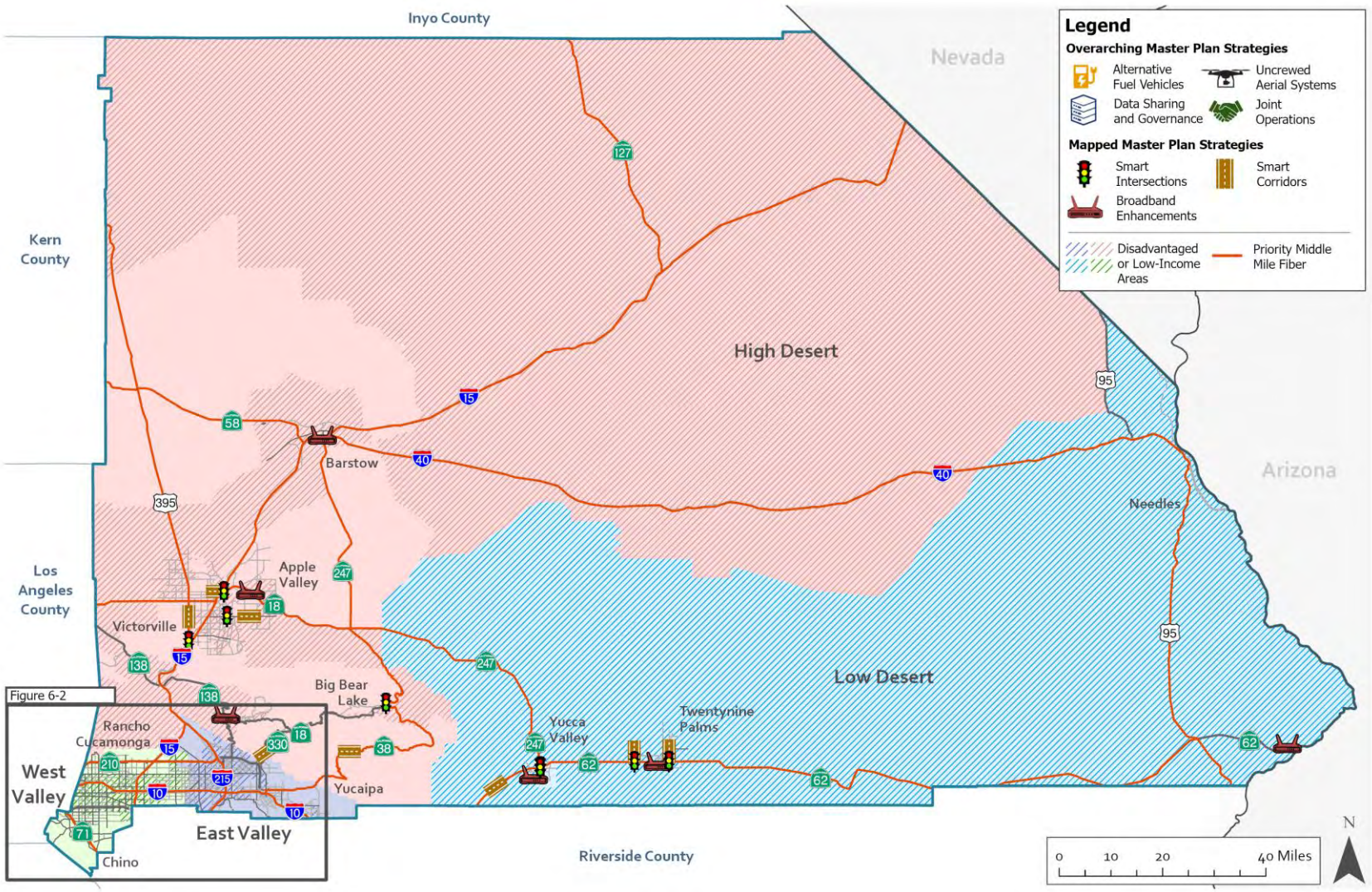


Figure 6-2: Master Plan Strategies in West Valley and East Valley

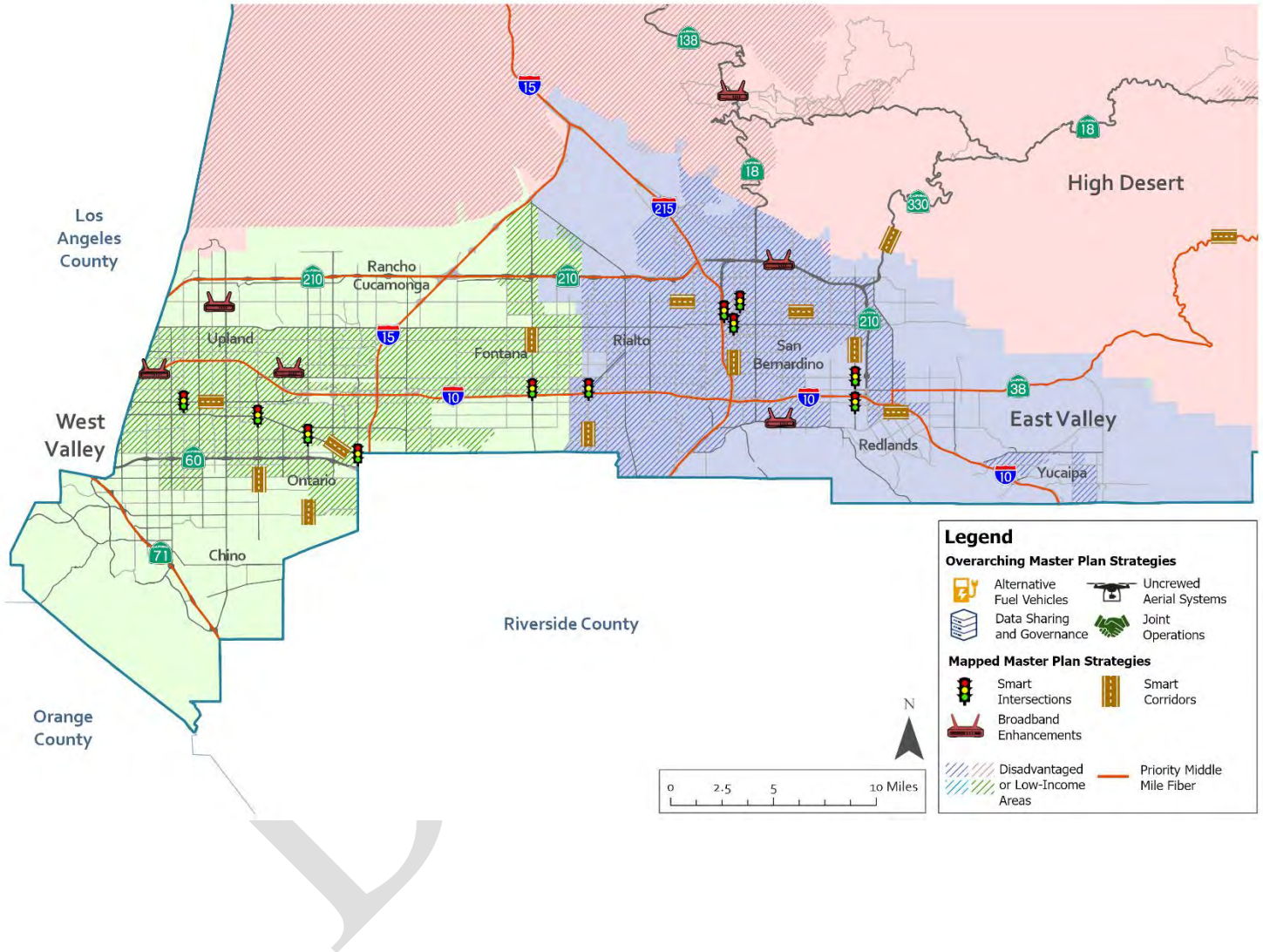


Table 6-1: Master Plan Schedule

	2025				2026				'27	'28	'29	'30-'34	SBCTA	Local Agencies	General Public
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4					Responsible/Supporting/Informed		
Task 1: Smart Corridors															
1.1 Request for Information on Candidate Corridors														R	
1.2 Priority Corridor Recommendations													S	R	
1.3 Development of Corridor System Requirements													R	S	
1.4 Integrate Technology/Agencies along Corridor													I	R	I
1.5 Identify Funding Sources													S	R	
1.6 Develop Plans and Specifications														R	
1.7 Procure Services, Select Vendor, and Issue Contract													I	R	
1.8 Implement, Integrate and Validate Technology														R	
1.9 Maintenance and Operations													S	R	
1.10 Track and Report Performance													S	R	I
Task 2: Smart Intersections															
2.1 Identify Local Champions													S	R	I
2.2 Develop ITS Specifications													R	S	
2.3 Recommend Best Sensors for Each Intersection													I	R	I
2.4 Identify Funding Sources													S	R	
2.5 Develop Plans and Specifications														R	
2.6 Procure Services, Select Vendor, and Issue Contract													I	R	
2.7 Implement, Integrate and Validate Technology														R	
2.8 Maintenance and Operations													S	R	
2.8 Track and Report Performance													S	R	I
Task 3: Alternative Fuel Vehicles															
3.1 Identify Interested Jurisdictions													R	S	
3.2 Identify Local Champions														R	
3.3 Identify Needs and Corresponding Solutions														R	I
3.4 Develop Funding Plan and Identify Partners													S	R	
3.5 Deploy Solutions														R	I
3.6 Track and Report Performance													S	R	I
Task 4: Uncrewed Aerial Systems Operations															
4.1 Inventory of Local AAM and UAS Services													R	S	
4.2 Inventory of Local AAM and UAS Policies/Laws													R	S	
4.3 Identify and Draft Language for Policy Changes/Additions													S	R	
4.4 Identify MOU Opportunities for AAM/UAS Shared Use													S	R	

	2025				2026				'27	'28	'29	'30-'34	SBCTA	Local Agencies	General Public
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4					Responsible/Supporting/Informed		
4.5 Determine Priority Use Cases and Funding Opportunities													S	R	
4.6 Track and Report Performance													S	R	I
Task 5: Broadband Enhancement															
5.1 Leverage BMMN Project															
▪ Identify Stakeholders and Establish Local														R	
▪ Secure Funding and Resources													S	R	
▪ Assess Infrastructure and Develop an Expansion														R	
▪ Procure Services, Select Vendor, and Issue													I	R	
▪ Implement and Integrate the Network														R	
▪ Track and Report Performance													S	R	I
5.2 Creating Broadband Toolkit													R		
▪ Share Toolkit/Best Practices													R		
Task 6: Data Governance and Sharing															
6.1 Establish Data Governance Framework															
▪ Develop Comprehensive Data Governance Policies													I	R	
▪ Implement Data Governance Training for Relevant														R	
6.2 Continue work on the CAD-to-CAD development													I	R	
6.3 Working Group Collaboration (Quarterly)													S	R	
6.4 Data Sharing Activities															
▪ Identify Data to Share (Ongoing)													S	R	
▪ Evaluate Costs and Benefits (Annual)													S	R	
▪ Determine Approach (Annual)													S	R	
6.5 Data Governance Agency Updates (Annual)													I	R	
6.6 Virtual Operations Center (2026 opportunity)													R	S	
6.7 Track and Report Performance													S	R	I
Task 7: Joint Operations															
7.1 Form a Working Group for Opportunity Selection														R	
7.2 Establish Interagency Collaboration Framework													S	R	I
7.3 Implement Joint Programs															
▪ Group Purchasing Program														R	
▪ Joint Training Programs														R	
7.4 Track and Report Performance													S	R	I

6.2 Target Outcomes and Performance Metrics

The SBCTA held a "Success Management Workshop" in June 2023, which aimed to establish a shared vision for the Smart County program, aspiring to transform San Bernardino County into a leading Smart County. The vision encompassed innovative transportation systems, universal broadband connectivity, improved government operations, and enhanced quality of life for all residents.

The workshop identified the following target outcomes:

- **Promote Clean and Sustainable Transportation** **:** Revolutionize transportation within San Bernardino County by championing zero-emission mobility options and paving the way for clean air vehicles. The County aspires to establish itself as a leader in hydrogen and electric fueling infrastructure, underlining its commitment to environmental sustainability.[65]

- **Enhance Traffic Flow and Connectivity** **:** SBCTA is collaborating with local agencies to implement solutions that improve traffic conditions and reduce congestion through improved traffic signal operations. These solutions also improve safety and air quality.

- **Improve Quality of Life through Universal Broadband Access** **:** Bridging the digital divide has been shown to support education and career advancement, wages and standard of living, and public health and safety.[66] Recognizing the digital divide in its communities, SBCTA/SBCOG seeks to provide broadband access to disadvantaged and underserved areas in San Bernardino County to realize these benefits.

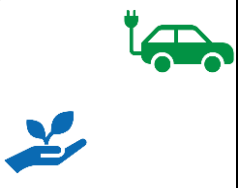
- **Rewrite the Narrative** **:** As noted, San Bernardino County leaders are committed to collaborative efforts, enhancing existing partnerships, and creating new ones to improve residents' quality of life. This goal involves promoting advancements and early wins to incentivize living and working in this region of Southern California.

Each of the seven strategies is mapped to the primary next step, with targeted outcomes the strategy will address, and suggested performance metrics (see **Table 6-2**). The next steps map to the four target outcomes identified during the Success Management Workshop. Each strategy addresses at least two, and often all four of the identified target outcomes.

[65] https://main.sbcounty.gov/2024/04/11/the-future-of-transportation-and-logistics-is-here/

[66] US Department of Education, Office of Educational Technology. 2022. "Advancing Digital Equity for All: Community-Based Recommendations for Developing Effective Digital Equity Plans to Close the Digital Divide and Enable Technology-Empowered Learning". Page 14. September. https://tech.ed.gov/files/2022/09/DEER-Resource-Guide_FINAL.pdf. Accessed on: August 20, 2023.

Table 6-2: Strategies, Next Steps, Target Outcomes, and Performance Metrics

Strategy	Next Steps	Outcomes	Performance Metrics
Smart Corridors	Issue a Request for Information to determine local level of interest. Board to make final determination of corridors where investment is appropriate. Proceed to implement and integrate smart technology within key corridors		▪ Decrease in average commute time on optimized routes ▪ Improvement in roadway and transit level of service post optimization ▪ Reduction in overall corridor congestion ▪ Increase in corridor safety metrics (e.g., fewer accidents, reduced severity of accidents)
Smart Intersections	Implement and integrate Smart Intersection technology at key intersections based on level of interest by individual jurisdictions and Board concurrence		▪ Hard braking events, speeding, V2X interactions ▪ Arrivals on green/red ▪ Clearance interval activity ▪ Pedestrian activity ▪ Turning movement counts ▪ Phase termination detail and summary
Alternative Fuel Vehicles	Identify jurisdictions, assess needs and solutions, develop a funding plan, secure vendor partnerships and funding, and deploy solutions		▪ Number of new alternative fueling/charging stations installed (cars and trucks) ▪ Amount of funding secured to install charging and hydrogen fueling infrastructure ▪ Quantity of GHG emissions reduced as a result of new fueling/EV charging stations installed
UAS Operations	Conduct inventory of local services and policies, identify shared use opportunities, and determine priority use cases		▪ Reduction in average response time to emergency situations ▪ Number of successful infrastructure inspections conducted using UAS with zero safety violations ▪ Reduction in time required to complete infrastructure inspections
Broadband Enhancement	Leverage BMMN project, assess infrastructure, implement network expansion, and share best practices		▪ Increase in broadband coverage area ▪ Improvement in broadband speed and reliability ▪ Increase in number of households or businesses accessing broadband services ▪ Enhancement in overall digital connectivity and accessibility
Data Governance and Sharing	Establish data governance framework and policies, collaborate through working groups, identify data sharing opportunities, and determine approach. Continue CAD-to-CAD development		▪ Data governance plans completed across agencies ▪ Data sharing agreements executed ▪ Number of successful data integration initiatives across departments or agencies
Joint Operations	Establish working group to identify and prioritize opportunities, develop interagency agreements, and create detailed plans for implementation		▪ Reduction in expenses achieved ▪ Assess enhancements in service delivery quality ▪ Track the number of personnel trained and the effectiveness of joint training programs ▪ Assess improvements in procurement processes ▪ Number of successful Community Outreach and Support Team (COAST) interventions

6.3 Costs

Table 6-3 summarizes the costs associated with the implementation of each proposed strategy. Costs are categorized by preliminary activities, construction, annual operations and maintenance, and other costs such as equipment and software development. Joint Operations costs will involve further project definition to determine how this strategy should be bests implemented and which other strategies it will be support.

Table 6-3: Cost Estimates

Strategy	Preliminary Activities	Construction/Equipment/Software Development	Estimated Cost to Implement	O&M (per year)
Smart Corridor Costs	$78,000 per mile	Construction: $880,000 per mile Software Development: $2,000,000	$2,000,000 program costs + $958,000 per mile up-front costs	$50,000 per mile
Smart Intersections	$16,000 - $32,000	Construction: $65,000 Equipment: $5,000 - $100,000	$86,000 - $197,000	$13,000
Alternative Fuel Vehicles	$10,000	$180,000	$190,000	$5,000
Uncrewed Aerial Systems Operations	$5,000 - >$100,000 per drone/operator	Operational cost of $20 per hour per drone	Around $200,000 for 10 drones	Minimal
Broadband Enhancement	$10,000 - $30,000	$60,000 - $100,000	$70,000 - $130,000	$50,000 per mile
Data Governance and Sharing[67]	$80,000 - $100,000	$250,000	$350,000 for first year	$250,000

6.4 Funding

Securing adequate funding will be critical to the successful implementation of the strategies identified in this Smart County Master Plan. Early and thoughtful project planning and messaging will better position applicants to secure financial resources whether this is in the form of budget allocations, public-private partnerships, state or federal grants or other mechanisms. Specific to state and federal grants, **Table 6-4** summarizes those best aligned with the recommended strategies. Support for the joint operations strategy should be tied to one or more of the other strategies and applied for as part of the grants listed for those strategies.

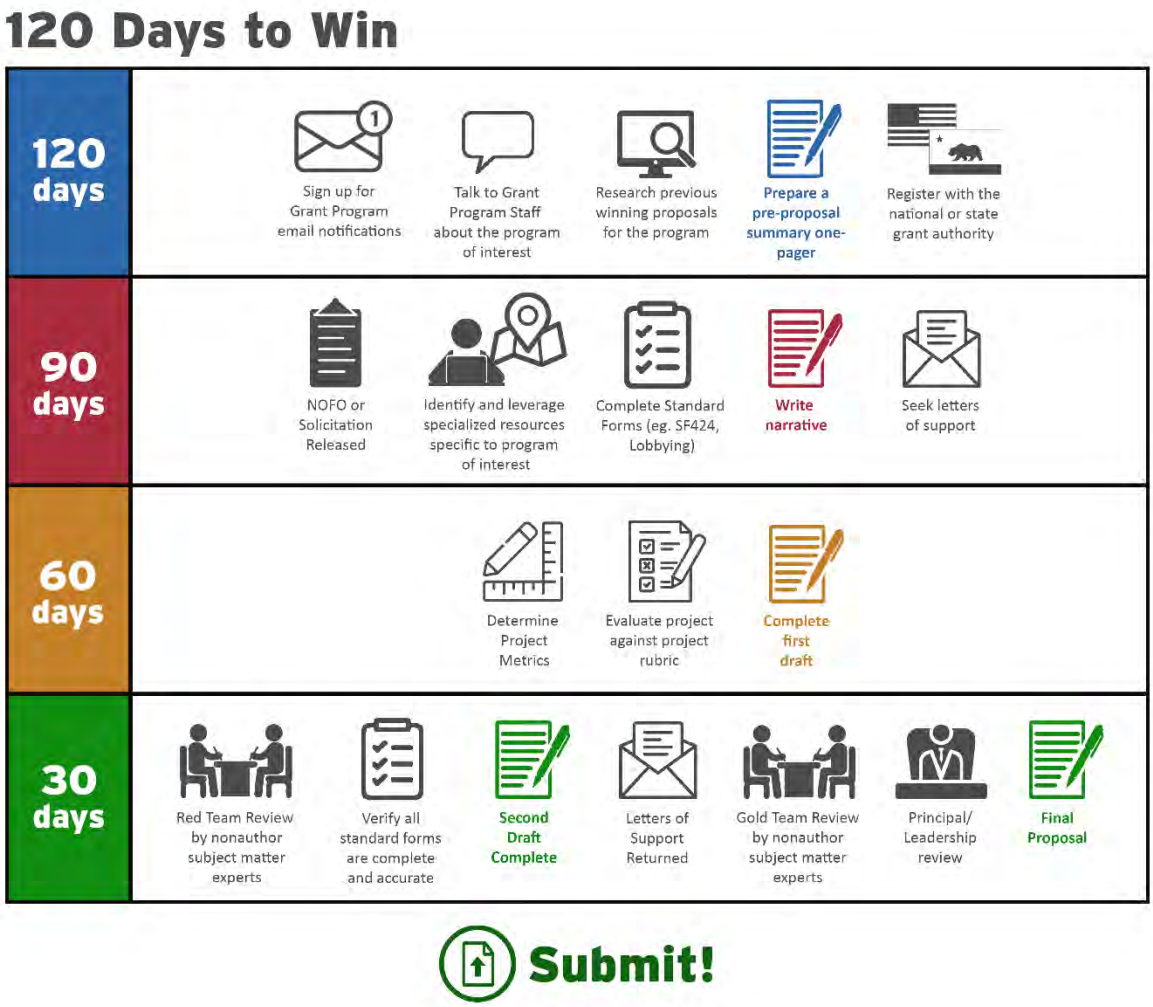
[67] Data Governance and Sharing costs are for the creation of a data portal.

Table 6-4: Relevant Grant Opportunities

Grant	Smart Intersections	Smart Corridors	Alternative Fuel Vehicles	Advanced Air Mobility	Broadband Enhancement	Data Sharing & Governance
Strengthening Mobility and Revolutionizing Transportation (SMART) Grant	✓	✓				✓
Highway Safety Improvement Program (HSIP)	✓	✓				
Caltrans Safe Streets and Roads for All Grant Program	✓	✓				
State Highway Operation and Protection (SHOPP)	✓	✓				
Trade Corridor Enhancement Program (TCEP)		✓				
National Electric Vehicle Infrastructure (NEVI) Program			✓			
Charging and Fueling Infrastructure Program			✓			
Energy Commission Clean Transportation Program			✓			
Charging Reliability and Accessibility Accelerator Program			✓			
USDOE Vehicle Technologies Office (VTO)			✓			
Federal Homeland Security Grants				✓		
UAS Technology Donations				✓		
FAA Aviation Workforce Development Grants				✓		
California Broadband Equity, Deployment, and Access Program					✓	
California Public Utilities Commission (CPUC) Broadband Loan Loss Reserve Fund					✓	
FHWA's Surface Transportation Block Grant (STBG)						✓
California Regional Resilience Planning and Implementation Grant Program	✓		✓		✓	

Figure 6-3 provides general guidance on what steps to take when seeking state or federal grant funds. As noted, a good initial step is to sign up for notifications at http://www.grants.ca.gov/subscribe-to-updates/ or www.grants.gov/connect to receive up-to-date information about future grants. In addition to these options, funding from regional collaborations or private partners should be explored to line up any required matching funds.

Figure 6-3: Process to Seek Grant Funding



6.5 Toolkit

The following toolkit was created to advance the strategies presented in the Smart County MP. It is intended to serve as a practical guide for local governments, communities, and stakeholders. The ten toolkit components are organized to encourage consideration of key questions or topics throughout the lifecycle of project delivery from planning to operations and maintenance. See the left side of the pages for these key questions or topics. On the right side of the page, corresponding resources are linked to help the delivery team progress the projects. For each of the ten toolkit components, the relevant lifecycle topics listed below are addressed:

- **Planning**: This involves setting project goals, defining tasks, and scheduling activities.
- **Policy**: This stage focuses on resolving institutional issues and establishing guidelines for project execution.
- **Funding**: This involves securing the financial resources necessary for the project.
- **Design/Procurement**: This stage includes creating project designs and acquiring necessary materials and services.
- **Implementation**: This involves executing the planned activities to achieve the project goals.
- **Operations & Maintenance (O&M)**: This includes activities required to operate and maintain the project deliverables post-implementation.

The primary goal of the toolkit is to make the adoption of innovative technologies and strategies more straightforward, and to serve as a resource for anyone involved in project development and management. Not all stages may be applicable to each strategy or project. The relevance of each stage depends on the specific requirements and context of the project.

For each strategy, agencies will need to determine the stakeholders within their organization such as IT, public works, police, fire, building permitting, utility permitting, health and planning. For every strategy, it is anticipated that law, finance, and human resources will play a role. It will also be important to determine for each strategy if design, implementation, operation, and maintenance will be the responsibility of each local agency, a coordinated approach, or best with countywide management. This decision will impact policies, funding, and staffing.

6.5.1 Data Sharing

PLANNING

CONSIDER

- Reviewing the data within your own agency to determine what data is available and suitable for sharing with other agencies. What additional data is needed?
- Checking the available data to ensure it is quality data.
- Understand the benefits and challenges of data sharing with another agency.
- Considering which data the agency would be interested in receiving to use for planning or decision-making.
- Meeting with partner agencies interested in sharing data.
- For a specific Smart Initiative, what data is needed or desired to achieve the best result and measure performance?
- Consider data sharing from the perspective of an agency sharing its own data vs trying to acquire more data from another agency.

RESOURCES

Internal resources from the department interested in sharing data to the legal and technology teams should be engaged in planning. Engaging the entire team early will help guide success.

Review the agency's data governance plan to identif the available data.

POLICY

CONSIDER

- What data can and should be shared.
- Contractual or licensing restrictions on purchased data to determine any sharing limitations.
- The legal framework for sharing various types of data with another agency.
- If legislation is necessary to allow for data sharing.
- The leadership framework necessary to manage the Smart Initiative and explore cooperative opportunities to share staff, funding, oversight, etc.
- Implementing data privacy and security measures to ensure the protection of shared data.

RESOURCES

Draft legislation language: Agency A may share the data listed herein with Agency B upon the execution of a data sharing agreement.

FUNDING

CONSIDER

- The necessary staffing, equipment, storage, and associated initial and ongoing costs for obtaining data, storing it, and managing its sharing.

RESOURCES

DESIGN/PROCUREMENT

CONSIDER

- Drafting a data sharing agreement.
- Specifying the type of data to be shared.
- Identifying the type of agreement needed for data sharing.
- Ensuring the agreement includes terms and conditions for personally identifiable information if applicable.
- Verifying whether the licensing agreement prohibits an agency from sharing purchased data.

RESOURCES

A sample county Data Sharing Agreement for California can be reviewed here: California County Example.

Review a sample template for data sharing agreement and use here: Health Information Example.

Data sharing agreement template provides basic example with headings and descriptions.

Read about "Data Governance for Next-Generation Platforms".

IMPLEMENTATION

CONSIDER

- Testing between the agencies that will be sharing data. This will allow the team to understand how long it takes for the data to transfer and if the right data is in the transfer.

RESOURCES

Tampa (THEA) Data Management Plan discusses approach to data sharing, including archives and institutional relationships.

Joint Office of Energy and Transportation maintains EV-ChART to facilitate the standardization and collection of the data submittals.

O&M

CONSIDER

- While data sharing does not specifically require O&M, it is always good to obtain input from partners to evaluate the usefulness of any data sharing.
- What data is required for proper operation of the system and how to ensure local data is collected and shared.

RESOURCES

6.5.2 Data Governance

PLANNING

CONSIDER

- Pulling together all written and unwritten data policies for review, update, and proper documentation.
- Reviewing administrative policies related to data, including data standards for procurement, data handling, training for handling personally identifiable information, and compliance with regulatory policies.
- Reviewing all data that is collected, purchased, and stored to have a complete list of all data that the agency needs to operate.
- Identifying the data residing on all servers, data accessed via online resources, and clarify whether the agency owns the data or has usage rights for a contracted period.
- Identifying the team members that are part of the data life cycle and their roles.
- Who the data owners are and assign responsibilities for reviewing the data as it is received, as well as maintaining and updating the data.
- Discussing the trust that the agency has in the data that is being used.
- Assessing the use of identified data, validate the agency's trust in the data's validity and completeness, ensure all data adheres to the same data standards, and establish a common data architecture.

RESOURCES

The Data Governance Framework and Components.

The Path to Modern Data Governance.

Read About Data governance for next-generation platforms.

POLICY

CONSIDER

- Drafting an overarching data governance policy
- The need for information sharing with the public via a county website/platform for common branding and display of information.

RESOURCES

FHWA Data Governance Plan.

FHWA has resources on Data Quality and Performance metrics.

Federal Highway Administration (FHWA) Dat Update Policy.

FUNDING

CONSIDER

- Shared costs:
  - Staffing needs
  - Server/storage/access fees
  - Management of public information sharing

RESOURCES

DESIGN/PROCUREMENT

CONSIDER

- Existing processes and create new processes to enhance decision-making, comply with regulations and protect privacy.
- Who has access to the data and how is access management handled for public versus private data?
- Is training available for staff to understand how to effectively handle data?
- How often is data reviewed for its value?
- How is data erased or removed?

RESOURCES

IMPLEMENTATION

CONSIDER

- Creating an actionable plan to remediate any issues identified through the data governance planning exercise.

RESOURCES

FHWA Enterprise Data Architecture establishes standardized interfaces for linking and processing information.

O&M

CONSIDER

- Reflecting on the data governance documentation annually for updates.

RESOURCES

6.5.3 AI Governance

The following toolkit provides considerations when looking to implement AI elements across the project lifecycle. Even more so than many advanced mobility technologies, there is uncertainty around future AI regulation and potential risk associated with its deployment. Scaling machine learning and AI activity without the proper resources or structure in place can inadvertently create inefficiencies rather than eliminate them. Drafting and enacting an AI policy that addresses operational and ethical requirements will help address accountability and transparency, support innovation, and protect privacy and data security. This is crucial to building trust in the technology.

PLANNING

CONSIDER

- **How machine learning and AI are being used within your organization.**
- **How AI can support your goals.**
- **Accountability, transparency, how to support innovation and protect privacy and data security. An agency employee who utilizes AI is responsible for the AI work product and results.**

RESOURCES

The Federal government created a website for AI

The Federal government created a website for AI

POLICY

CONSIDER

- **Establishing an AI policy for all agencies involved in the Smart Initiative that addresses operational and ethical items and can be shared with all employees. It can also be included in any procurement requests to avoid AI being used in inappropriate or unknown ways.**
- **Including data security and privacy measures in the AI policy to ensure the protection of data used and generated by AI systems.**

RESOURCES

The GoVAI Coalition created a draft AI Policy

AI Policy Manual

FUNDING

CONSIDER

- **The funding sources for a new solution.**
- **Assessing the overall cost of using an AI solution, including necessary training and data quality improvement.**
- **Evaluating whether the solution will create efficiencies or eliminate the need for other technology solutions.**
- **Exploring the inclusion of an AI component in existing grant applications.**
- **Investigating the possibility of a joint purchase of an AI solution with another agency in the region.**

RESOURCES

Federal grants have had opportunities for AI funding on https://www.grants.gov/

DESIGN/PROCUREMENT

CONSIDER

- Creating use cases that appropriately utilize AI. Review and vet the use cases with legal and contracts/procurement teams for clarity and compliance.
- Interview companies utilizing AI technology to understand their existing solutions as well as their roadmap.
- Ask companies using AI technology to share how their solution works.
- Documenting your agency's expectations for copyright laws, data security, data privacy, and accountability for the work product involving AI tools and software.

RESOURCES

Use Case Template, examples of available use case templates include the following:

- Agency Chatbot
- Meeting Assistant
- Object Detection

This is a draft agreement fo an AI purchase Vendor Agreement.

AI Incident Response Plan.

This template asks potenti vendors to complete a fac sheet on their solution. Third-Party AI Fact Sheet.

IMPLEMENTATION

CONSIDER

- Ensuring all employees who work with data for AI purposes or those who work with the data that AI produced are trained and understand the importance of using quality data. The data that is generated from AI is only as good as the data that created it.
- Requiring that all AI systems have a human-in-the-loop who comprehends the AI's processes, validates its methodology, and takes accountability for its outputs and deliverables.

RESOURCES

Training for all employees on all AI policies and on the AI solution

O&M

CONSIDER

- Coordinating ongoing training and updates for staff of all agencies.

RESOURCES

6.5.4 Smart Intersections/Smart Corridors

PLANNING

CONSIDER

- Assessing the current availability of smart technologies, including existing facilities and potential opportunities.
- Identifying technologies that may enhance safety and accessibility along the corridor.
- Developing a Concept of Operations following FHWA's Systems Engineering Process to guide planning and ensure all stakeholder needs and project objectives are thoroughly addressed.
- What other infrastructure investments are underway and can be leveraged to implement smart intersections/corridors?
- Identifying future projects or initiatives that will benefit from the planned smart intersection/corridor investment.
- Adopting a "dig once" approach to save money and time. Determining the data needed for the successful operation of smart technology both locally and regionally, assess the availability of this data, and identify new data requirements and how to access or develop this data.

RESOURCES

The Intelligent Transportation Systems (ITS) Joint Program Office: Strategic Plan 2020–2025 includes in-depth discussions on strategic goals and programs for accelerating ITS deployment.

FHWA's Systems Engineering Guidebook for ITS provides information to assist with the application of systems engineering in ITS projects.

California's ITS program guidelines include resourc for project development, funding, and environment requirement for Intelliger Transportation Systems (IT Projects

POLICY

CONSIDER

- Identifying the considerations needed to facilitate the deployment of smart signal equipment.
- Determining if MOUs or agreements between agencies are required for deployment.
- Establishing considerations for data sharing agreements.
- Assigning responsibility for the maintenance and operation of the smart signal equipment.
- Defining how the associated costs will be shared among the involved parties.
- Ensuring the Concept of Operations document addresses these policy considerations.

RESOURCES

The Intelligent Transportation System Architecture and Standards outlines policies and procedures to comply with section 5206(e) of TEA-21 (Public Law 105-178).

Is additional staffing need for operation, maintenanc and for data gathering/sharing? Wha type of staff, licenses or credentials are needed?

FUNDING

CONSIDER

- Developing a plan to mitigate construction costs and maximize the reach of available project funding.
- Establishing funding sources for ongoing operations and maintenance to ensure the long-term sustainability of the deployed smart technologies.
- Creating a plan for replacing equipment at the end of its lifecycle, including setting aside money annually for future replacements or addressing replacements as they arise.
- Determining how local match funding will be covered and shared.

RESOURCES

The SMART Grants Program offers grants to eligible public agencies for demonstration projects, emphasizing advanced smart community technologies.

The ATTAIN program offe grants to deploy advance transportation technologi to improve safety, mobilit efficiency, connectivity, ar infrastructure ROI.

DESIGN/PROCUREMENT

CONSIDER

- Developing performance goals and measures.
- Establishing criteria for choosing appropriate technologies to meet specific needs.
- Designing the system as a regional setup with local agency phasing and associated costs.
- Conducting a site evaluation to verify that the chosen technologies will perform as expected based on existing site conditions.
- Ensuring compatibility and interoperability between new technology and existing systems and determine if existing systems need to be replaced as part of the design plan.
- Ensuring the technologies comply with privacy laws, particularly concerning ALPRs and data collection.
- Verifying if the available communications infrastructure supports the bandwidth requirements for the proposed technology devices and include expanded communications infrastructure in the project if necessary.

RESOURCES

The ITS Joint Program Office define Testing and Development Standards for ITS deployment.

FHWA's webinar on CV Pilot Deployment shares acquisition and installation experiences from the Tampa Hillsborough Expressway Authority (THEA) pilot.

SAE's technical paper describes best practices in OBU antenna procurement for connected vehicle deployments.

IMPLEMENTATION

CONSIDER

- Establish a training and education plan to equip city personnel and stakeholders with information about new technology and their benefits.
- Leverage lessons learned from a pilot or initial implementation to shape a larger rollout.

RESOURCES

Wyoming, New York City, and Tampa (THEA) CV Pilot plans presents a comprehensive installation plan for the software, hardware and maintenance for purchases for CV Pilot projects.

ITS JPO's training video gives instruction on how to set up Roadside Unit (RSU

The Connected Intersections Implementation Guide provides guidance to setting up and operating a connected intersection.

Connected Intersections Validation Report provide findings from Connected Intersections Project Validation Phase.

O&M

CONSIDER

- Implementing system performance measures designed earlier.
- Implementing the plan for continuous monitoring to ensure the quality of the system during operation.
- Executing an outreach plan to keep the public informed about the changes and benefits of smart intersections and corridors. Communicate updates to elected officials and cooperating agencies to ensure a coordinated message.

RESOURCES

The Intelligent Transportation Systems (ITS) Professional Capacity Building Program offers training and resources to advance transportation workforce about ITS.

SPaT/MAP Message Capture Tool Alternatives for Validation Sites.

FHWA's ITS Standards Field Support Team assists with ITS standards, including assessment, guidance, review, advice, planning, and compliance.

6.5.5 Alternative Fuel Vehicles

PLANNING

CONSIDER

- Identifying a regional champion.
- Assessing the current market share for EVs.
- Evaluating the current and projected EV adoption rates.
- Identifying available incentives for EV adoption.
- Various factors in developing a charging infrastructure plan.
- Identifying high-priority locations for EV charging.
- Identifying underserved communities for charging infrastructure deployment.
- Determining the types and quantities of vehicles to be transitioned to EVs in a fleet.
- Identifying geographic areas that will be difficult to serve, such as isolated locations or areas with extreme conditions.

RESOURCES

The AFDC Station Locator is a tool used to find alternative fueling stations, including EV charging stations.

US DOE's Vehicle Cos Calculator compares t costs of different vehi types, including EVs, t determine the best fit f fleet.

California's NEVI Formula Program describes how the state plans to develop a network of DC fast chargers along designated Alternative Fuel Corridors throughout California.

The Assembly Bill 212 Second Electric Vehic Charging Infrastructu Assessment examine charging needs to supp California's zero-emiss vehicles in 2030 and 20

POLICY

CONSIDER

- Reviewing local and state regulations regarding EV charging infrastructure.
- Establishing a plan for managing and monitoring EV charging.
- Assessing the impact on the grid and the use of renewable energy.
- Prioritizing projects that provide workforce training and development opportunities and engage with local communities.
- Determining the need for private and public ownership of EV charging infrastructure.
- Establish common requirements for hours of operation and design for personal safety, including lighting, cameras, and emergency phones.

RESOURCES

The AFDC Policy Database is a database of AFV related polici

FUNDING

CONSIDER

- Identifying available funding opportunities for EV charging infrastructure and fleet transitions.
- Determining the costs associated with purchasing and installing EV charging equipment.
- Utilizing external resources to track and monitor funding opportunities.
- Using cost estimates as part of site prioritization.
- Designating a grant champion to explore public funding availability for private entities for maintenance or upgrades.

RESOURCES

The CEC's Clean Transportation Program funds innovation to accelerate zero-emission transportation and fuel technology development and deployment.

The NEVI Formula Progr funds states for deploy EV charging stations ensuring maintenanc establishing networ connections, and facilita long-term data sharin

CALeVIP provides incentives for installing EV charging infrastructure at public sites across California.

CALeVIP in California provides incentives fo installing EV charging infrastructure at publi accessible sites through California.

DESIGN/PROCUREMENT

CONSIDER

- Confirming the willingness of the site host to add EV charging stations to the site.
- Verifying that the local utility has sufficient power available for charging stations.
- Ensuring that anticipated costs are within the allocated project funding.
- Planning for the visibility, accessibility, and convenience of charging stations.
- Designing the infrastructure to support future expansion and increased capacity needs.
- Developing design guidelines for safety and amenities and determine if branding is needed.

RESOURCES

Accessible EV Parking Requirements and Dimensions specifies parking space and accessibility requirements for EV charging stations.

IMPLEMENTATION

CONSIDER

- Monitoring and evaluating the deployment process to ensure alignment with the initial design and community needs.
- Determining if a public sector inspection and acceptance process is required for this project. If required, will it be local agencies or countywide?

RESOURCES

ENERGY STAR Certification Process ensures that EV charging installed under the CALeVIP program is energy efficient.

California's Guide to EV Charging Station Regulations summarizes state rules from agencies: division of measurement standards, air resources board, Public Utilities Commission etc.

O&M

CONSIDER

- Define performance measures for EV charging stations.
- Assess the utilization of the charging stations.
- Develop a plan for continuous monitoring and maintenance to ensure the quality and reliability of the charging stations.
- Create a public communication plan to keep the public informed about the benefits and availability of EV charging infrastructure.
- Common branding in the county or state?

RESOURCES

The Open Charge Point Protocol Certification process by CEC ensure interoperability and accessibility of EV charging infrastructure in California.

The Electric Vehicle Charging Station Permittin Guidebook assists stakeholders in navigating the permitting process fo promoting EV charging station installations in California.

6.5.6 Broadband

PLANNING

CONSIDER

- Assessing the current broadband availability and identifying any gaps.
- Setting clear, achievable goals for broadband deployment and digital inclusion.
- Identifying existing assets that could support broadband deployment.
- Formulating a Broadband Planning Committees and defining their roles and responsibilities.
- Engaging community leaders and establish a leadership framework to guide the broadband initiative.

RESOURCES

California Digital Equity Plan outlines the vision and goals for achieving digital equity among Californians, including strategies and implementation activities.

The Broadband Mapping Program includes resources like California's Interactive Broadband Map, mapping feedback tool, and CPUC's annual broadband data, aiding broadband planning initiatives.

The NTIA Tribal Broadban Planning Toolkit and Planning a Community Broadband Roadmap provide resources for ever stage of the broadband planning journey.

POLICY

CONSIDER

- Reviewing the rights-of-way and policies governing access.
- Identifying barriers and streamline processes to incentivize investment.
- Leveraging the regulatory and legislative environment to maximize broadband deployment.
- Assessing local permitting and inspection requirements and determining their similarity within the region. Assessing the need for developing regional requirements.

RESOURCES

The California Senate Bill 156 broadband legislation aims to guid the expansion of the state's broadband fiber infrastructure and t increase internet connectivity.

FUNDING

CONSIDER

- Identifying and securing funding sources and developing financial models to support the project.
- Establishing public-private partnerships to leverage funding, expertise, and resources.
- Ensuring there is funding for operation and maintenance, particularly in underserved or isolated/rural environments.

RESOURCES

California Broadband Equity, Access, and Deployment Program provides funds for planning and infrastructure deployment to expand high-speed internet access.

Local Agency Technical Assistance help tribes and local agencies expand broadband services to Californians with inadequate internet access.

The Last-Mile Federal Funding aims to expand internet access for underserved and unserve communities across California.

DESIGN/PROCUREMENT

CONSIDER

- Designing the broadband network to ensure technical and safety standards are met.
- Establishing criteria to evaluate and select broadband providers for potential partnerships.
- Determining whether ownership will be private or public and assess how this impacts design and expandability.

RESOURCES

The California Local Jurisdiction Permitting Playbook explores actions to enhance permitting processes at all levels of government to support broadband deployment in the State.

Permitting Best Practices: Case Studies provides example case studies and examples of streamlining permitting including Broadband Ready Communities, E-Permitting and Rights-of-Way.

Data sharing agreement template provides basic example with headings and descriptions.

Read about "Data Governance for Next-Generation Platforms".

IMPLEMENTATION

CONSIDER

- Drafting and circulating Requests for Proposals or Requests for Information to select suitable contractors and service providers.
- Developing a plan for overseeing the construction and deployment process.
- Deciding between local coordination or establishing a regional authority for project management.

RESOURCES

The California Local Jurisdiction Permitting Playbook explores actions to enhance permitting processes at all levels of government to support broadband deployment.

Permitting Best Practices: Case Studies provide case studies and examples of streamlining permitting including Broadband Ready Communities, E-Permitting and Rights-of-Way.

NEPA Review: Categorical Exclusions and Environmental Assessments provide guidance for compliance with environmental regulations and NEPA analysis for CATEXs.

O&M

CONSIDER

- Manage the expectations of stakeholders and ensure transparent communication.
- Develop metrics to measure the success of broadband initiatives.
- Establish a plan for continuous monitoring to ensure the quality and reliability of broadband services.
- Create a plan for community engagement and marketing to raise awareness of broadband initiatives and their benefits.

RESOURCES

California State Library's Career Pathways provides access to NorthStar and other educational resources to support digital equity, skill building, and job training.

Lessons can be learned fro how digital equity has bee achieved by Chula Vista, Sa Francisco, or Los Angeles County.

Local Government Check List for Digital Equity provides a checklist for local government leaders to achieve digital equity.

6.5.7 Uncrewed Aerial Systems Operations

PLANNING

CONSIDER

- Define the goals of integrating AAM services into existing transportation networks, distinguishing between public and private objectives.
- Establish strategies to promote technological innovations and operational safety within the AAM ecosystem.
- Identify ways to improve resident services and enhance energy efficiency through the integration of AAM.
- Develop a plan to minimize or mitigate potential negative impacts of AAM integration and foster public acceptance.
- Explore how AAM systems can aid in search-and-rescue operations.
- Explore the potential applications of drones within the AAM ecosystem.

RESOURCES

The FAA's AAM Implementation Plan outlines steps and components for enabling scalable advanced air mobility operations by 2028.

APA's 2024 PAS Report 606, "Planning for Advanced Air Mobility," provides key insights for planners and policymakers on AAM development impacts.

Read about the Office of Science and Technology Policy commitment to AAM during The White House Summit on Advanced Air Mobility

POLICY

CONSIDER

- Verify the compliance of potential operations and programs with existing federal, state, and local policy and regulatory environments.
- Develop local policies that support the safe and efficient integration of AAM services.
- Ensure consistency in terminology when creating local policies to facilitate understanding and compliance for external users.
- Identify the necessary skill sets required for the effective operation and management of AAM programs.
- Collaborate with educational institutions to develop career paths that align with the emerging AAM industry.

RESOURCES

NASA's AAM Mission Integration, Advanced Air Mobility (AAM): Overview and Integration Considerations.

AAM working ecosystem aims to advance development of safe AAM flight operations through information, and expert opinion and sharing input

FUNDING

CONSIDER

- Identify and secure funding sources and develop financial models to support the project.

RESOURCES

FAA Aviation Workforce Development Grants are available to eligible entities to help prepare a more inclusive talent pool of pilots and aviation maintenance technicians.

DESIGN/PROCUREMENT

CONSIDER

- Designing UAS operations with public safety as a primary consideration.
- Ensuring the design aligns with existing goals associated with ADA compliance.
- Developing a plan to integrate UAS operations seamlessly with multimodal transportation networks.
- Coordinating the design with existing utility infrastructure to avoid conflicts and ensure safe operation.
- Implementing design principles that promote energy efficiency and sustainability in UAS operations.
- Meeting with vendors in the UAS and AAM space to understand the solutions to better draft procurement

RESOURCES

FAA's Small Unmanned Aircraft Systems guide covers AAM factor like weather, emergency procedures, communication, performance measures, and airport operations. FAA Part 105 guides vertiport development.

IMPLEMENTATION

CONSIDER

- Establishing comprehensive safety protocols for the implementation phase of UAS operations.
- Developing clear operational procedures to guide the safe and efficient implementation of UAS technologies.

RESOURCES

Advanced Air Mobility National Campaign Partners work alongside NASA to test data and evaluate aviation standards.

Advanced Air Mobility National Campaign Partner work alongside NASA to te data and evaluate aviatio standards.

O&M

CONSIDER

- Define performance metrics to evaluate the success of UAS operations initiatives.
- Establish a routine maintenance plan to ensure the operational safety and reliability of UAS systems.
- Develop procedures for emergency repairs and incident response to mitigate risks and maintain operational continuity.
- Identify opportunities for program refinement and improvement based on performance data and operational experience.

RESOURCES

FAA's Aircraft Maintenance Division standardizes regulations, directives, policies, certifications, inspections, and surveillance o aviation maintenance.

6.5.8 Performance Measures

Implementing performance measurement throughout the lifecycle of a program is helpful for several reasons. It supports goal alignment, efficiency, risk management, and continuous improvement. If addressed thoughtfully throughout the program, more appropriate and better data will be gathered, which is critical to demonstrating the value and impact of strategies, not just for the agencies participating in the program, but also for the public.

With that in mind, this portion of the toolkit is intended to be used in parallel with each of the proposed strategies. For instance, starting in the planning stage, for AFV, broadband, or other programs, agencies can concurrently refer to the planning portion of the performance measurement table, and then work their way through policy, funding, and so on as the program develops. Integrating performance measurement considerations throughout the program will inform participants and the public and help build trust in the program.

PLANNING

CONSIDER

- **Assessing the alignment of the metric with the organization's desired outcomes.**
- **Evaluating the criticality of the metric in achieving project goals and outcomes.**
- **Verifying that relevant data is readily available, accurate, and reliable.**
- **Confirming the importance of the metric to stakeholders, including citizens, partners, and funding agencies.**
- **Analyzing the practicality and cost-effectiveness of measuring and tracking the metric.**
- **Determining the level of participation required from each agency to support countywide Smart Initiatives.**

RESOURCES

THEA CV Pilot Deployment Program Performance Measurement and Evaluation discusses key indicators related to V2V and V2I deployment.

The Performance Measurement and Evaluation Support Plan demonstrate how to set goal and objectives for CV deployment.

POLICY

CONSIDER

- **Evaluating the extent of stakeholder involvement in the policy shaping process.**
- **Assessing the anticipated impacts of proposed policies on project outcomes.**
- **Highlighting the innovative aspects that the proposed policies bring to the initiatives.**
- **Gauging the level of support for the proposed policies from public officials and agencies.**

RESOURCES

Deployment Readiness Summary – Tampa (THEA) discusses governance documents for planning and execution of the Tampa THEA CV Pilot.

FUNDING

CONSIDER

- Assessing the long-term financial sustainability of the initiatives.
- Monitoring the adherence of initiatives to allocated budgets and financial plans.
- Utilizing available grants and subsidies effectively.
- Analyzing the diversity of funding sources for each initiative to ensure resilience and sustainability.

RESOURCES

Partnership Status Summary discusses funding for initial implementation and operations and long-term funding commitments for a CV Pilot program.

DESIGN/PROCUREMENT

CONSIDER

- Verify compliance of designs with all relevant standards and specifications.
- Assess the effectiveness of integrating advanced technologies into the design.

RESOURCES

IMPLEMENTATION

CONSIDER

- Monitor the progress of the initiatives according to established timelines and milestones.
- Identify and document innovative approaches being utilized during implementation.

RESOURCES

O&M

CONSIDER

- Evaluate the long-term sustainability of operational practices and systems.
- Assess the effectiveness of maintenance programs in ensuring the long-term functionality of equipment and infrastructure.
- Monitor the efficiency of day-to-day operations to identify potential areas for improvement.

RESOURCES

The Broadband for All Initiative action plan progress tracker provides action plans, and key indicators for measuring the progress made towards achieving digital equity.

Performance indicators fo measuring alternative fue vehicles and electrificatio success may include achieving charging infrastructure goals, compliance metrics etc.

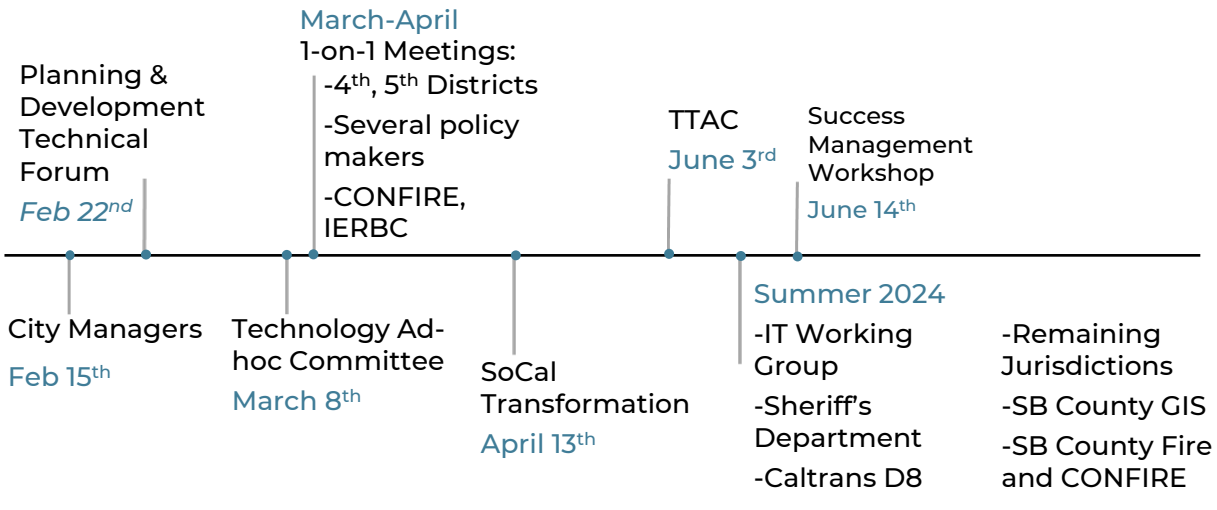
San Bernardino Smart County Master Plan

Monique Arellano
Council of Governments and Equity Programs Manager

San Bernardino Council of Governments

1

Stakeholder Outreach



2

Market Drivers

Maturing Technology and Accelerating Advanced Analytics	**Domestic Production** is on the rise, contributing to economic growth	**Natural disasters** are occurring more frequently, creating public safety challenges, and impacting transportation systems	**Funding levels** are unprecedented, providing diverse opportunities

3

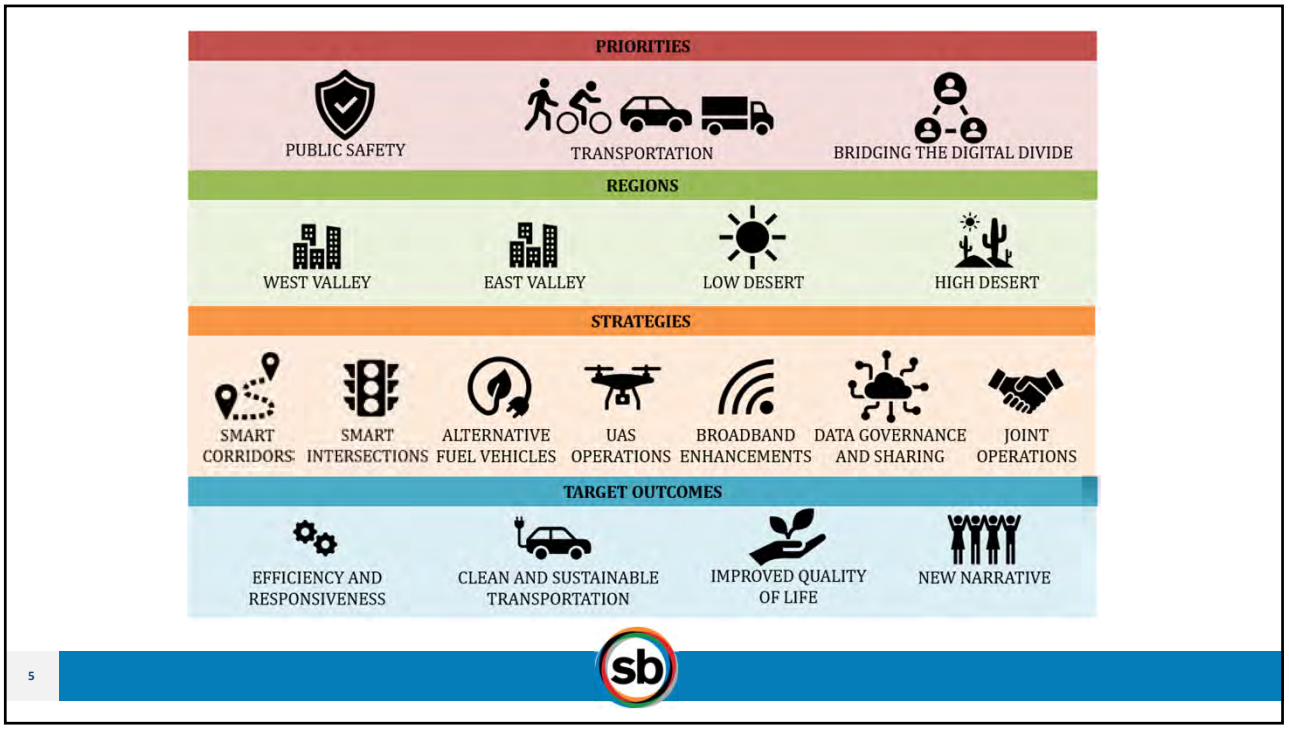
3

Goals of the Plan

- Promote Clean and Sustainable Transportation
- Enhance Efficiency and Responsiveness
- Improved Quality of Life
- Support of a New Narrative Focused on Innovation and Opportunity

4 Goals

4



5

Strategies mapped to Priorities

	Public Safety	Transportation	Bridging the Digital Divide
Smart Corridors	Secondary	Primary	
Smart Intersections	Secondary	Primary	
Alternative Fuel Vehicles	Secondary	Primary	
Uncrewed Aerial Systems Operations	Primary	Secondary	
Broadband Enhancements		Secondary	Primary
Data Sharing	Primary	Secondary	
Joint Operations	Primary		

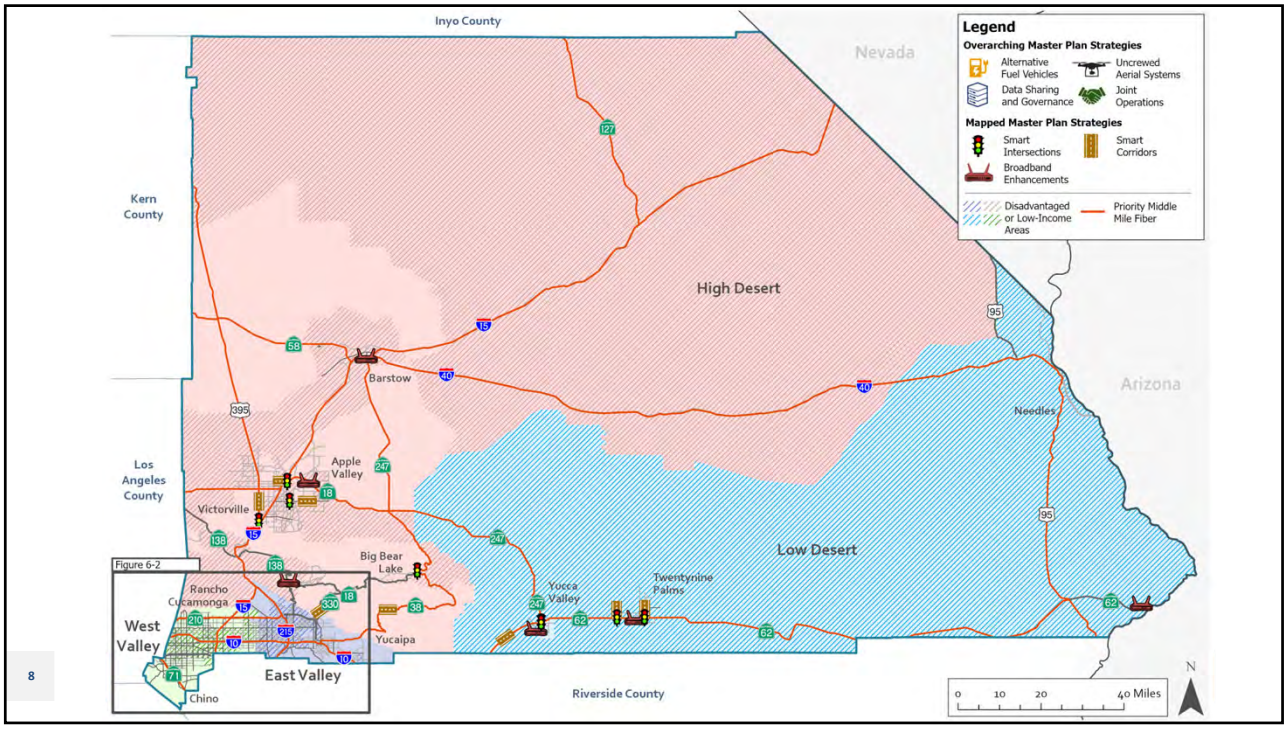
6

Smart County Master Plan Strategies

Focus Area	Summary
Benchmarking	Summarizes various other locations, within the U.S., where similar strategies have been deployed and the impact, lessons learned, or benefits realized from the deployment.
Potential Strategy Elements	Introduces technologies or phases that will serve as the building blocks of the strategy.
User Needs	Reviews the stakeholder needs gathered during the Existing Conditions Report and through stakeholder discussions and workshops that apply to the strategy being proposed.
Prioritized Strategy Deployments	Explains how elements of the strategy were prioritized and what the resulting priorities were.
Relevant Stakeholders	Notes the expected stakeholders needed to successfully implement the strategy
Benefits	Describes the benefits expected to result from employing the strategy.
Costs	Provides estimated cost ranges for various elements of the strategy.

7

7



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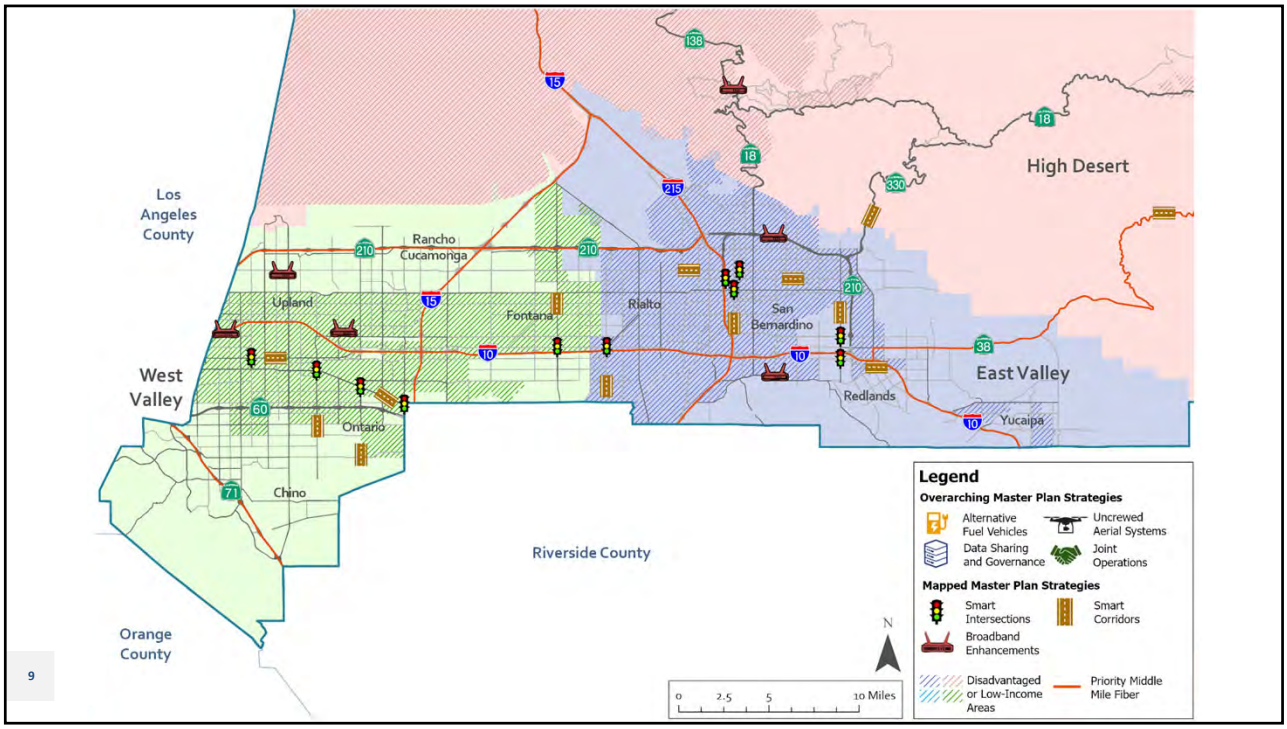

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Toolkits

- Data Sharing
- Data Governance
- AI Governance
- Smart Intersections/ Smart Corridors
- Broadband
- Alternative Fuel Vehicles
- Uncrewed Aerial Systems Operations
- Performance Measurement

10

10

Benefits to Stakeholder Group

County and SBCTA Member Agencies	Public-Safety Services Providers
Transportation Service Providers	The General Public

11

Toolkit Example

Data Governance

PLANNING

CONSIDER

- Pulling together all written and unwritten data policies for review, update, and proper documentation.
- Reviewing administrative policies related to data, including data standards for procurement, data handling, training for handling personally identifiable information, and compliance with regulatory policies.
- Reviewing all data that is collected, purchased, and stored to have a complete list of all data that the agency needs to operate.
- Identifying the data residing on all servers, data accessed via online resources, and clarify whether the agency owns the data or has usage rights for a contracted period.
- Identifying the team members that are part of the data life cycle and their roles.
- Who the data owners are and assign responsibilities for reviewing the data as it is received, as well as maintaining and updating the data.
- Discussing the trust that the agency has in the data that is being used.
- Assessing the use of identified data, validate the agency's trust in the data's validity and completeness, ensure all data adheres to the same data standards, and establish a common data architecture.

RESOURCES

The Data Governance Framework and Components.

The Path to Modern Data Governance.

Read About Data governance for next-generation platforms.

AI Governance

POLICY

CONSIDER

- Establishing an AI policy for all agencies involved in the Smart Initiative that addresses operational and ethical items and can be shared with all employees. It can also be included in any procurement requests to avoid AI being used in inappropriate or unknown ways.
- Including data security and privacy measures in the AI policy to ensure the protection of data used and generated by AI systems.

RESOURCES

The GoVAI Coalition created a draft AI Policy

AI Policy Manual

12

Immediate Next Steps

Strategy	Immediate Next Step
Smart Corridors	Issue a Request for Information to identify candidate corridors and determine priority corridor recommendations.
Smart Intersections	Identify local champions and develop ITS specifications to prepare for sensor implementation at key intersections.
Broadband Enhancement	Assess existing infrastructure, establish local partnerships, and seek ways to leverage the Broadband Middle-Mile Network project.
Data Governance and Sharing	Create a working group to establish a data governance framework. Continue work on the CAD-to-CAD data sharing system.

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San Bernardino Smart County Master Plan

Questions?

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Additional Information

GENERAL POLICY COMMITTEE ATTENDANCE RECORD – 2024

Name	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Dawn Rowe Board of Supervisors				X		X		X		X		
Curt Hagman Board of Supervisors		X	X	X	X	X						
Joe Baca, Jr. Board of Supervisors			X	X	X	X		X	X	X		
Paul Cook Board of Supervisors		X	X	X		X						
Jesse Armendarez Board of Supervisors								X	X	X		
Art Bishop Town of Apple Valley		X	X	X	X	X		X	X			
Ray Marquez City of Chino Hills		X	X	X	X	X		X	X	X		
Frank Navarro City of Colton		X	X	X	X	X		X	X	X		
Acquanetta Warren City of Fontana			X	X	X							
Larry McCallon City of Highland		X	X	X		X		X	X	X		
John Dutrey City of Montclair									X	X		
Alan Wapner City of Ontario					X			X	X			
Helen Tran, Mayor City of San Bernardino								X	X	X		
Debra Jones City of Victorville			X	X						X		
Rick Denison Town of Yucca Valley		X	X	X	X	X		X	X	X		

X = Member attended meeting. * = Alternate member attended meeting. Empty box = Member did not attend meeting. Crossed out box = Not a Board Member at the time.
Shaded box = No meeting.

Acronym List

This list provides information on acronyms commonly used by transportation planning professionals. This information is provided in an effort to assist Board Members and partners as they participate in deliberations at 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. 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
SRTP	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 21st 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

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San Bernardino County Transportation Authority

San Bernardino Council of Governments

MISSION STATEMENT

Our mission is to improve the quality of life and mobility in San Bernardino County. Safety is the cornerstone of all we do.

We achieve this by:

- Making all transportation modes as efficient, economical, and environmentally responsible as possible.
- Envisioning the future, embracing emerging technology, and innovating to ensure our transportation options are successful and sustainable.
- Promoting collaboration among all levels of government.
- Optimizing our impact in regional, state, and federal policy and funding decisions.
- Using all revenue sources in the most responsible and transparent way.

Approved December 4, 2019