AGENDA

City/County Manager's Technical Advisory Committee

Thursday, December 2, 2021
10:00 AM

LOCATION:
San Bernardino County Transportation Authority
First Floor Lobby - Board Room
1170 W. 3rd Street, San Bernardino, CA 92410

Call to Order

Attendance

Council of Governments

1. **Update from the Emergency Medical Care Committee on County Ambulance Issues – John Gillison, Rancho Cucamonga**

   Receive an update on ambulance contract options and discussions.

2. **Inland Regional Energy Network (I-REN) – Duane Baker and Kelly Lynn, SBCOG**

   Receive information on this new initiative that, in cooperation with Coachella Valley Association of Governments (CVAG) and Western Riverside Council of Governments (WRCOG), will use $65 million in funds from the California Public Utilities Commission (CPUC) over the next five (5) years to accomplish three (3) goals:

   - Build capacity and knowledge to enable local governments to effectively leverage energy efficiency services and demonstrate best practices.
   - Ensure there is a trained workforce to support and realize energy efficiency savings goals across sectors.
   - Work closely with local building departments and the building industry to support, train, and enable long-term streamlining of energy code compliance.

   Attachment No. 1: Pg. 5

3. **California Housing Legislation Update – Monique Reza-Arellano, SBCOG and Staff from National Community Renaissance (National CORE)**

   Receive an update from National CORE staff on housing legislation that has recently passed in the Legislature.

   Attachment No. 1: Pg. 7
   Attachment No. 2: Pg. 20

Transportation

4. San Bernardino County Transportation Authority (SBCTA) / San Bernardino Council of Governments (SBCOG) Emerging Technology Ad Hoc Committee – Tim Byrne and Duane Baker, SBCTA

Receive an update on next steps for the two (2) initial ideas that are being considered by the committee: traffic management and broadband infrastructure.

5. Countywide SB 743 Study Phase II and VMT Mitigation Bank Concept – Josh Lee, SBCTA and Delia Votsch, Fehr & Peers

Receive an overview of the San Bernardino County Senate Bill (SB) 743 Vehicle Miles Traveled (VMT) Reduction Study Phase II Draft Technical Memo and information on the concept of a Countywide VMT Mitigation Bank. As many of our member jurisdictions are having difficulty in implementing project specific VMT mitigation measures on individual development or transportation projects, staff would like to propose regional/countywide VMT mitigation options using San Bernardino County Transportation Authority's (SBCTA) current Telecommuting Program as a regional mitigation program in reducing VMT. In order for the regional mitigation bank concept to work, staff would need feedback from the City/County Managers on how the adopted 2020 VMT threshold implementation is currently functioning.

Attachment No. 1: Pg. 38
Attachment No. 2: Pg. 41

Public Comment

Brief comments from the General Public

ADJOURNMENT

The next meeting of the City/County Manager's Technical Advisory Committee is January 6, 2022

Meeting Procedures and Rules of Conduct

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

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

Agendas – All agendas are posted at 1170 W. 3rd Street, 1st Floor, San Bernardino at least 72 hours in advance of the meeting. Staff reports related to agenda items may be reviewed at the SBCTA offices located at 1170 W. 3rd Street, 2nd Floor, San Bernardino and our website: www.gosbcta.com.

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 by two-thirds vote of the Board of Directors or unanimous vote of members present 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 Chair will announce the subject matter of the closed session. If action is taken in closed session, the Chair may report the action to the public at the conclusion of the closed session.

Public Testimony on an Item – Members of the public are afforded an opportunity to speak on any listed item. Individuals wishing to address the Board of Directors or Policy Committee Members should complete a "Request to Speak" form, provided at the rear of the meeting room, and present it to the Clerk prior to the Board's consideration of the item. A "Request to Speak" form must be completed for each item an individual wishes to speak on. When recognized by the Chair, speakers should be prepared to step forward and announce their name and address for the record. In the interest of facilitating the business of the Board, speakers are limited to three (3) minutes on each item. Additionally, a twelve (12) minute limitation is established for the total amount of time any one individual may address the Board at any one meeting. The Chair or a majority of the Board may establish a different time limit as appropriate, and parties to agenda items shall not be subject to the time limitations. Members of the public requesting information be distributed to the Board of Directors must provide 40 copies of such information in advance of the meeting, except for noticed public hearings. Information provided as public testimony is not read into the record by the Clerk.

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

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

Public Comment – At the end of the agenda, an opportunity is also provided for members of the public to speak on any subject within the Board's authority. Matters raised under "Public Comment" may not be acted upon at that meeting. "Public Testimony on any Item" still applies.

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 Chair may recess the meeting or order the person, group or groups of person willfully disrupting the meeting to leave the meeting or to be removed from the meeting. Disruptive 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!

I-REN

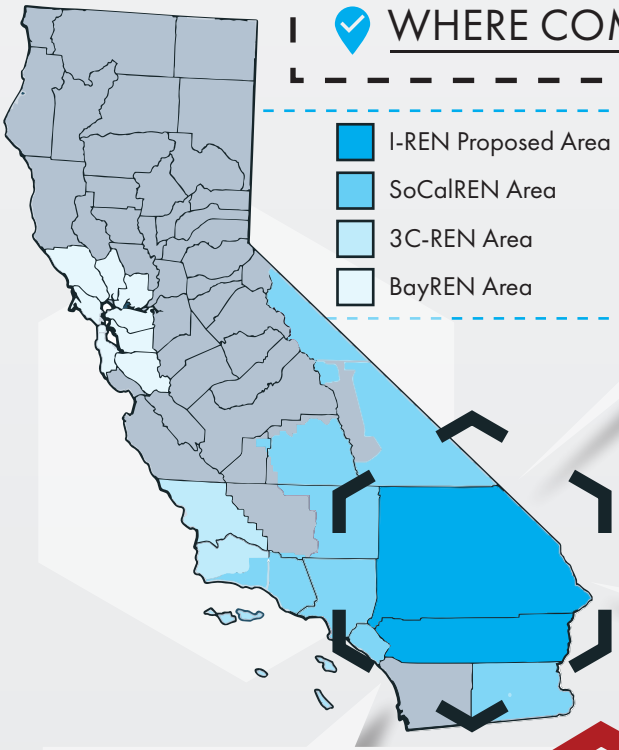
INLAND REGIONAL ENERGY NETWORK

WHAT IS THE I-REN?

The Inland Regional Energy Network (I-REN) is an exciting new offering of nearly $10 Million per year in energy efficient programs and services specifically designed and tailored for Inland Southern California.

NEARLY **$10 MILLION PER YEAR** IN ENERGY EFFICIENT PROGRAMS

WHERE COMMUNITY, ENERGY & EQUITY INTERSECT



COMMUNITY

I-REN WOULD BE THE

1ST TO UNIFY AN INLAND COMMUNITY

AND IS AN OPPORTUNITY TO SEIZE LOCAL CONTROL

EQUITY

The Establishment of the I-REN is the opportunity for Inland SoCal to receive its FAIR SHARE.

Communities That Pay Surcharge

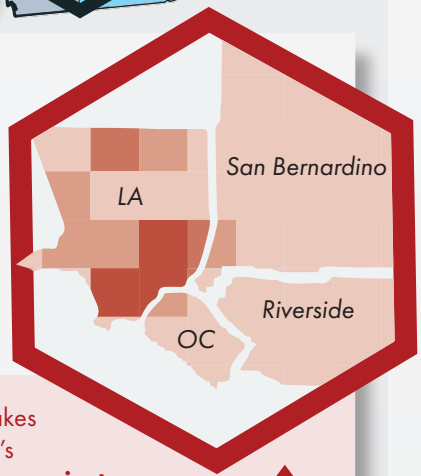
Communities Served by REN

Communities That Administer REN

I-REN would fall into this category.

ENERGY

Rate payer dollars are already allocated to the development of energy efficiency programs (like RENs) by the CPUC.



The Inland SoCal region makes up over 20% of SoCal REN's population **yet few energy projects have been completed in the inland region.**

HEAT MAP OF PROJECTS IN LA COUNTY VS INLAND SOCAL COUNTIES.

How Can We Leverage Local Control?

The establishment of an I-REN through the three Councils of Governments (COGs) will maximize local resources and input to best serve the unique and diverse needs of our communities.

The I-REN will leverage the three COGs':

- Existing committee structures
- Member input and program customization
- Administrative oversight
- Program delivery for equitable outcomes

What Will Be I-REN's Impact?

Goal 1:
Capacity Building

Build capacity and knowledge to enable local governments to effectively leverage energy efficiency services and to demonstrate best practices.

Example:
Public Agency Program Services | SoCalREN

Goal 2:
Strong Workforce

Ensure there is a trained workforce to support and realize energy efficiency savings goals across sectors.

Example:
Building Performance Training | 3C-REN

Goal 3:
Scalable Tools and Resources

Work closely with local building departments and building industry to support, train and enable long-term streamlining of energy code compliance.

Example:
BayREN Codes & Standards | BayREN

A Timeline of Support Through the Years

Scan the QR Code to see a complete list of supporting agencies.

2019

December 2018
WRCOG Executive Committee (E.C) authorize I-REN development

April 2019
Enter into Tri-Party Agreement with WRCOG/ CVAG/SBCOG develop I-REN Business Plan. Technical consultant support brought on board.

2020

December 2019
WRCOG Executive Committee – REN Update

March 2020
WRCOG Executive Committee – REN Update

2021

February 2021
I-REN Business Plan submitted to CPUC

December 2020
Presentation to California Energy Efficiency Coordinating Committee (CAEECC) as required by the CPUC as part of REN development

June 2020
WRCOG Executive Committee – REN Update

May 2020
Presentation to California Energy Efficiency Coordinating Committee (CAEECC) as required by the CPUC as part of REN development

February 2021
WRCOG Executive Committee – REN Update

April 2021
A&F – REN Update

2022

December 2021
Anticipated CPUC Final Decision on I-REN Business Plan

Early 2022
Development of program Implementation Plan

Remaining of 2022 and ongoing
Roll-out of Public sector, Codes & Standard, and Workforce Education & Training programs

Attachment No. 1 to Agenda Item No. 3 - PowerPoint Presentation
Housing Legislation Update

2021-2022 Budget Highlights

$100 Billion "California Comeback Plan", including:

- $5.2 billion in state and federal funds for rental assistance
- $1.75 billion for backlogged HCD pipeline projects
- $1.45 billion for FY 21-22 and $1.3 billion for FY 22-23 for Project HomeKey
- $1 billion/year for next 2 years to local governments to help address homelessness
- $500 million in additional state low-income housing tax credits

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2021-2022 Budget Highlights Cont'd

Creation of the Housing Accountability Unit

- $4.2 million for the creation of the Housing Accountability Unit (HAU) at HCD
- The 25-person team will work with local governments to provide technical assistance to comply with legislation mandating housing creation.
- Unit will be "empowered to take escalating enforcement steps to bring municipalities into compliance" with RHNA targets in cases of "persistent non-compliance"

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ADOPTED LEGISLATION - 2021

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UPDATES TO EXISTING HOUSING PRODUCTION TOOLS

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Updates to Existing Tools

Senate Bill 8 (Skinner)

- Extends the sunset and expands the provisions of the Housing Crisis Act of 2019 to 2030

Assembly Bill 1174 (Grayson)

- Strengthens the provisions of the streamlined, ministerial approval process for affordable housing created by SB 35

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Updates to Density Bonus Law

Assembly Bill 290 (Skinner)

- Makes various changes to Density bonus Law to expand its use

Senate Bill 728 (Hertzberg)

- Outlines a process for the purchase/ownership of for-sale units that qualified a project for the density bonus. Local government shall enforce equity sharing agreement.

Assembly Bill 634 (Carrillo)

- Allows local government to require (if permitted by local ordinance) an affordability period longer than 55 years for any units that qualified the project for the density bonus (exception: projects financed with LIHTC)

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NEW HOUSING PRODUCTION TOOLS

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INCREASED DENSITY IN SINGLE-FAMILY ZONES

Senate Bill 9 (Atkins)

- Requires ministerial approval of a proposed development containing no more than 2 residential units within a single-family residential zone.
- Requires ministerial approval of one lot into two lots under certain conditions within a single-family residential zone.
- Allows map extensions for up to 24 months if allowed by local ordinance, extends expiration for phased maps with constructed off-site improvements

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"Missing Middle" Housing Production Tools

Senate Bill 10 (Wiener)

- Allows for a city or county to pass a voluntary ordinance allowing up to 10 units of residential density on any parcel within a transit-rich area or urban infill site.

Senate Bill 478 (Skinner)

- Establishes minimum floor-area-ratio (FAR) standards for the development of small multi-family projects
  - *3-7 units: minimum FAR 1.0*
  - *8-10 units: minimum FAR of 1.25*

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LEGISLATION IMPACTING THE HOUSING ELEMENT

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HOUSING ELEMENT LEGISLATION

Assembly Bill 1398 (Bloom)

- Requires expedited rezoning (within 1 year) of housing element sites for jurisdictions that fail to adopt a legally compliant housing element within the grace period

Assembly Bill 215 (Chiu)

- Updates housing element update and amendment noticing and public comment periods and procedures and expands HCD's ability to bring legal action against a jurisdiction for non-compliance with housing law

Assembly Bill 1304 (Santiago)

- Expands and clarifies the ways in which local agencies must affirmatively further fair housing (AFFH) in their housing elements.

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OTHER HOUSING-RELATED LEGISLATION

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Other Notable Housing Legislation

Assembly Bill 838 (Grayson)

- Requires a city or county that receives a complaint of a substandard building or a lead hazard violation to inspect the building and outlines inspection timing and notification requirements.

Assembly Bill 602 (Grayson)

- Updates to development fee and nexus study requirements.

Assembly Bill 491 (Ward)

- Prohibits discrimination between market-rate and affordable units in mixed-income multifamily structures, including separating entrances, common areas and amenities.

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ADDITIONAL HOUSING-RELATED LEGISLATION

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CHANGES AT HCD

Senate Bill 791 (Cortese)

- Establishes the California Surplus Land Unit, to facilitate the development and construction of housing on local surplus land

Assembly Bill 68 (Quirk-Silva)

- Adds requirements for the California Statewide Housing Plan completed by HCD.

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OTHER HOUSING-RELATED BILLS

Reference	Description
AB 571 (Mayes)	Prohibits affordable housing impact fees, including inclusionary zoning fees and in-lieu fees, from being imposed on a housing development's affordable units in a development involving the density bonus.
AB 345 (Quirk-Silva)	Requires a local agency to allow an accessory dwelling unit to be sold or conveyed separately from the primary residence to a qualified buyer if certain conditions are met
AB 787 (Gabriel)	Allows reporting of converted existing multifamily units to deed-restricted moderate-income student housing toward a jurisdiction's RHNA (up to 25%)
AB 721 (Carrillo)	Enables an owner of an affordable housing development to modify a restrictive covenant that restricts the number, size, or location of the residences that may be built or restricts the number of persons/families in a development
AB 1466 (McCarty)	Expedites the removal of discriminatory covenants, includes requirements for County Recorders and title companies

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OTHER HOUSING-RELATED BILLS

Reference	Description
SB 263 (Rubio)	Makes changes to training requirements for real estate licensing to include components on implicit bias and state and federal fair housing
AB 948 (Holden)	Makes various reforms to safeguard against discrimination during the property appraisal process
AB 1584 (Committee on Housing and Community Development)	Makes several technical and clarifying changes to code sections pertaining to housing and community development
SB 381 (Portantino)	Makes changes to the Roberti Act to encourage the sale of homes owned by the California Department of Transportation for low- and moderate-income housing in the State Route 710 corridor in South Pasadena
SB 1029 (Mullin)	Adds "The preservation of affordable housing units through the extension of existing project-based rental assistance covenants" to list of prohousing local policies

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Bills Affecting Funding for Housing

Reference	Description
AB 1095 (Cooley)	Clarifies that the Affordable Housing and Sustainable Communities program may fund owner-occupied affordable housing in addition to rental housing
AB 1043 (Bryan)	Adds "acutely low income households" (product of 30% x 15% of AMI adjusted for family size) to the list of income categories for purposes of defining affordable rents.
AB 1297 (Holden)	Expands financing authority of the California Infrastructure and Economic Development Bank to economic development facilities and public development facilities to include housing if the housing meets certain financing requirements and limits.
AB 447 (Grayson)	Resolves technical issues that have arisen in the Low-Income Housing Tax Credit Program
SB 591 (Becker)	Creates a state policy around intergenerational housing for senior citizens, caregivers, and transition-aged youth, which allows these types of developments to utilize tax credit and other funding programs

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SUPPLEMENTAL INFORMATION ON SB 9

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INCREASED DENSITY IN SINGLE-FAMILY ZONES

Project Requirements for 2-Unit Development

- Units created must be at least 800 square feet.

Project Requirements for Lot Splits

- Original parcel must be at least 2,400 square feet.
- New parcels must be at least 1,200 square feet and no less than 40% original parcel's area
- Original parcel has not been subject to a previous SB 9 split. Neither the owner of the parcel nor any person acting in concert with the owner has subdivided an adjacent parcel under SB 9.

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INCREASED DENSITY IN SINGLE-FAMILY ZONES

Project Requirements for Lot Splits and Housing Projects

Project/site must:

- Be in a Single Family Residential zone
- Be in an urbanized area or cluster

Project/site must <u>not</u>:

- Be a historic landmark or within a historic district
- Alter or demolish deed-restricted affordable housing, rent controlled housing, housing occupied in last 3 years, or housing subject to the Ellis Act in last 15 years
- Demolish more than 25% of existing exterior walls, unless local agency permits

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Increased Density in Single-Family Zones

Local Government May Still:

- Impose objective design, subdivision, and zoning standards (unless they preclude development from reaching minimum unit size of 800 feet or lot size of 1,200 feet)
- Require public service/utility easements and ROW access
- Impose 4-foot rear and side setbacks (regardless of impact to unit size)
- Require up to 1 off-street parking space per unit (unless the project is within ½ mile of high-quality transit corridor or major transit stop or there is a car share vehicle within 1 block)
- Require periodic percolation tests as specified
- Deny a project if the building official makes a written finding that the proposed development would have a specific, adverse impact on public health and safety or the physical environment and for which there is no feasible method to mitigate or avoid the impact.

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Increased Density in Single-Family Zones

SB 9 Additional Considerations:

- ADUs and JADUs: Local government not required to allow more than 2 units on any parcel created nor permit an ADU or JADU on parcels that use both the SB 9 lot split and SB 9 development provisions
- Applications for lot split and units created under SB 9 shall be included in Housing Element APRs
- Short-Term Rental: local agency to ensure that units created must NOT be used for short-term rentals of 30 days or less
- Owner-Occupancy Affidavit Requirement for Lot Splits: local agency to require affidavit stating that applicant intends to occupy one of the housing units as principal residence for at least 3 years; no other owner-occupancy standards may be required.

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Bill Number	Description	Effective Date	Endorsements & Opposing Entities	Resources	Potential Impact(s) to Member Jurisdictions	Implementation Notes
2021 SIGNED AND CHAPTERED						
PLANNING & ZONING						
SB 8 (Skinner) Housing Crisis Act of 2019	Extends the sunset of the Housing Crisis Act of 2019 or SB 330 (HCA) to 2030 and makes other clarifications/changes to the HCA. SB 330 Refresher (Source: YIMBY): SB 330 prohibits local jurisdictions from enacting new laws that would have the effect of reducing the legal limit on new housing within their borders, or delay new housing via administrative or other regulatory barriers. Through its expiration, SB 330: • Prevents local governments from downzoning unless they upzone an equivalent amount elsewhere within their boundaries • Suspends the enactment of local downzoning and housing construction moratoriums • Requires timely processing of housing permits that follow zoning rules	Effective for projects submitted after January 1, 2022	Support: YIMBY groups, chambers of commerce, CA Apartment Association, CA BIA, California Housing Partnership, Facebook/Chan Zuckerberg, others Oppose: CA Cities for Local Control, Center for Biological Diversity, neighborhood groups, 14 local jurisdictions, other	Senate Analysis	Extends SB 330 requirements/ protections to ministerial projects and single dwelling units, jurisdictions may not impose new rules or standards on an affordable project for 3.5 years after approval, clarifies other HCA provisions	Other clarifications/provisions: Law applies to ministerial and discretionary projects and single dwelling units Limit the requirement to provide relocation benefits and a right of first refusal to only the occupants of protected units that are lower income households Defines "concurrently" for rezoning to mean at the

	• Ensures the demolition of housing does not result in a net loss of units • Postpones requirements for voter approval of zoning, general plan changes • Requires resettlement benefits and first right of refusal in new units or compensation for rehousing for renters who may be displaced.					same meeting or within 180 days of downzoning
SB 728 (Hertzberg) Density Bonus Law: purchase of density bonus units by nonprofit housing organizations	Adds requirements to Density Bonus Law regarding qualifying for-sale affordable units, allows qualified non-profit organizations to acquire density bonus affordable for-sale units as specified	January 1, 2022	Support: Habitat for Humanity, Housing Action Coalition, SF Bay Area Planning and Urban Research Association Oppose: None on file		Updates to Density Bonus ordinance	
SB 10 (Wiener) Planning and zoning: housing development: density	Creates an optional, streamlined process for cities to zone for "missing middle multi-unit housing", bypassing CEQA. Allows for a city or county to pass an ordinance allowing up to 10 units of residential density on any parcel, at a height specified by the local government, if the parcel is in a transit-rich area or urban infill site. (up to 2 ADUs and 2 JADUs/parcel do not count toward total number of units when	January 1, 2022	Support: CA YIMBY (sponsor), other YIMBY groups, CA Apartment Association, CA Association of Realtors, other prohousing groups Oppose: Various cities, HOAs and	Holland and Knight Analysis YIMBY Fact Sheet	Only if Council/BOS pass optional ordinance	Important to note that only the rezoning would be exempt from CEQA, not any subsequent housing project, under this bill. This could impact the effectiveness

	determining if the rezone is subject to SB 10)		neighborhood groups, CA Cities for Local Control, CA Housing Partnership Consortium, Housing California, California Housing Partnership Corporation			the bill (see Holland and Knight analysis).
SB 478 (Wiener) Planning and Zoning Law: housing development projects	Establishes minimum floor-area-ratio (FAR) standards for small neighborhood multifamily housing development projects of 3 to 10 units. In cases where local FAR standards conflict with the zoning code and prevent projects from reaching the allowable density, SB 478 creates a pathway for the allowable density to be built.	January 1, 2022	Support: YIMBY and other prohousing groups, environmental groups Oppose: California Association of Realtors, neighborhood groups, 8 cities, CA Cities for Local Control		A local agency may not enforce standards on a project that would make the minimum FAR standards outlined in the bill infeasible or deny a project solely because the proposed project does not meet the minimum lot size requirements.	Eligible for projects in multifamily residential or mixed-use zones only; Prohibits a local agency from imposing a floor area ratio standard that is less than 1.0 on a housing development project that consists of 3 to 7 units, or less than 1.25 on a housing development project that consists of 8 to 10 units, or

						denying a project solely on the basis that the lot area of the proposed lot does not meet agency's minimum lot size requirements
AB 1029 (Mullin) Housing elements: prohousing local policies	Adds affordable housing preservation policy to the list of specified prohousing local policies	Effective immediately	Support: City of Foster City (Sponsor) would like to receive credit for preservation programs Opposed: None on record		Could increase a jurisdiction's prohousing designation score if they extend project-based rental assistance covenants	The policy added to the list is: the preservation of affordable housing units through the extension of existing project-based rental assistance covenants
SB 591 (Becker) Senior Citizens: intergenerational housing developments	Authorizes the establishment of intergenerational housing development that includes senior citizens along with caregivers and transition age youth. Creates a state policy supporting intergenerational housing for senior citizens, caregivers, and transition age youth; which allows these developments to utilize federal and state LIHTC and other funding programs.	January 1, 2022	Support: AARP, CA Apartment Association, housing groups Oppose: None on file			At least 80% of units to be occupied by at least 1 senior citizen; 20% by caregiver or transition age youth; required to be affordable to lower income households

AB 634 (Carrillo) Density Bonus Law Affordability Restrictions	Local government may, if permitted by local ordinance, require an affordability period longer than 55 years for any units that qualified the applicant for the density bonus for projects that will be financed W/O LIHTC	January 1, 2022	Support: LA County BOS Oppose: Community Catalysts Preserving Local Control		May pass optional ordinance to allow extended affordability requirements for affordable projects	Jurisdiction must pass ordinance in order to allow longer affordability periods
SB 290 (Skinner) Density Bonus Law: qualifications for incentives or concessions: student housing for lower income students: moderate-income persons and families: local government constraints	Makes various changes to Density Bonus Law to expand its use: • Clarifies that density bonus project may include for-sale or rental units • Adds low-income student housing reporting requirement to APR • Student housing developments with at least 20% affordable units eligible for 1 incentive/concession • Parking reduction for 40% moderate income for-sale housing • Defines "total units" or "total dwelling units"	January 1, 2022	Support: YIMBY and other prohousing groups, California APA, California Association of Realtors, CA BIA, Zuckerberg Initiative, other community groups Oppose: CA Cities for Local Control, Livable California, neighborhood groups	National Law Review	Updates to density bonus ordinances and Annual Progress Reports	
AB 345 (Quirk-Silva) ADUs: separate conveyance	Facilitates the sale of ADUs to qualified (low-income) buyers; This bill requires each local agency to allow an accessory dwelling unit to be sold or conveyed separately from the primary residence to a qualified buyer if certain conditions are met.	December 31, 2021	Support: Habitat for Humanity (Sponsor)		Requires local government to allow for the conveyance of ADUs separate from the primary residence	To qualify, the builder/developer of the unit needs to be a qualified nonprofit and that the buyer is low-income.

	Essentially allows a nonprofit housing developer (such as bill sponsor Habitat for Humanity) to sell an ADU to a low-income household without a local ordinance that was previously necessary.				under certain conditions (no longer requiring a local ordinance)	Outlines provisions for agreements that need to be in place as well, including a 45-year affordability restriction and tenancy in common agreement.
AB 491 (Ward) Affordable and market rate housing	Prohibits discrimination between market-rate and affordable units in mixed-income multifamily structures, including separating entrances, common areas and amenities	January 1, 2022			Occupants of affordable units in mixed-income multifamily structures shall have the same access to common entrances, areas, and amenities as market rate occupants; prohibits isolation of affordable units to a specific floor or area	Requires that a mixed-income multifamily structures provide the same access to the common entrances, common areas, and amenities of the structure to occupants of the affordable housing units in the structure as is provided to occupants of the market-rate housing units. The bill also prohibits a mixed-income

						multifamily structure from isolating the affordable housing units within the structure to a specific floor or an area on a specific floor.
AB 602 (Grayson) Development Fees: impact fee nexus study	Updates to impact fee nexus studies, including the incorporation of CIPs into nexus studies and the imposition of certain fees on a square footage (instead of per/unit) basis	Effective January 1, 2022, additional requirements effective July 1, 2022	Oppose Unless Amended: League of CA Cities, APA CA, CSAC, RCRC, Urban Counties of California Support: CA YIMBY		Changes/additions to future impact fee nexus studies, certificate of occupancy requirements, and fee information posted on member websites	Fee schedule must be online effective January 1 Jurisdiction must collect and post to website (and update 2x per year) the total fees paid by project sponsor upon issuance of certificate of occupancy or final inspection Square footage requirement effective for nexus studies after July 1, 2022

AB 571 (Mayes) Density Bonus Affordable Units Fee Prohibitions	Prohibits affordable housing impact fees, including inclusionary zoning fees and in-lieu fees, from being imposed on a housing development's affordable units in a housing development involving the density bonus.	January 1, 2022			No affordable housing or inclusionary impact fees may be imposed on affordable units that qualified the project for the density bonus	
AB 838 (Friedman) State housing law: enforcement response to complaints	Requires a city or county that receives a complaint of a substandard building or a lead hazard violation to inspect the building and outlines inspection timing and notification requirements	July 1, 2022	Opposed: CSAC, League of CA Cities RCRC, Urban Counties of California (opposed unless amended, which it wasn't), California Rental Housing Association Support: National Association of Social Workers – California Chapter		Imposes new duties on code enforcement/inspection departments League of CA Cities opposition letter argues the bill could be construed to create a "mandatory duty" which may result in litigation of liability	Inspection must take place "at least as promptly" as a response to a request for a final building inspection City/county must issue certified copies of inspection to specified parties and cannot recover cost unless inspection reveals violation
HOUSING ELEMENTS AND ANNUAL PROGRESS REPORTS						
AB 1398 (Bloom)	Requires expedited rezoning for jurisdictions that fail to adopt a	January 1, 2022	Support: Public Interest Law		Expedited rezoning for	Impacted jurisdictions

Planning and zoning: housing element: rezoning of sites: prohousing local policies	legally compliant housing element within 120 days of statutory deadline		Project (Sponsor), Western Center on Law & Poverty Oppose: Livable California. CA Cities for Local Control		jurisdictions with a late adoption of its housing element	would have 1 year from statutory deadline to complete rezoning; additional consequences for jurisdictions without an adopted housing element w/in 1 year of deadline
AB 215 (Chiu) Housing Element Violations	Updates housing element update and amendment noticing and public comment periods and procedures and expands HCD's ability to bring legal action against a jurisdiction for non-compliance with housing law	Jan 1, 2022, though HCD has already been requiring the changes to the update noticing and public comment procedure for the 6th cycle update	Support: California Housing Consortium (Sponsor), Housing groups, CA Apartment Association, CA Association of Realtors, CA BIA, other prohousing groups Oppose: League of CA Cities, Public Advocates and other equity organizations, dozens of cities, including San Bernardino (most of the provisions		Changes to Housing Element update and amendment processes; increased potential for legal action for housing law non-compliance	Requires a local government to make the first draft revision of a housing element available for public comment for at least 30 days and, if any comments are received, take at least 10 additional business days to consider and incorporate public comments into

			they opposed to were removed from the Bill)			the draft revision
AB 787 (Gabriel) Reporting converted affordable housing units in Housing Element Annual Progress Report	Allows reporting of converted existing multifamily units to deed-restricted moderate-income student housing toward a jurisdiction's RHNA	Effective for reports issued after January 1, 2023; planning agencies may report conversions that occurred on or after January 1, 2022 in that report	Support: CA Community Housing Agency, APA CA, California Cities for Local Control, YIMBY Action, other housing groups, a few cities Oppose: None on file		Could help jurisdictions meet up to 25% of their moderate-income RHNA through conversion of existing multi-family units to deed-restricted student housing	
AB 1304 (Santiago) AFFH: Housing element: inventory of land	Expands/clarifies the ways in which local agencies must affirmatively further fair housing (AFFH) in their housing elements	Effective immediately	Support: National Housing Law Project (Sponsor) Oppose: None on file		Potential changes to Housing Element, including land Inventory, to enhance AFFH analysis	Specifically, this bill requires analysis of racial segregation patterns within the jurisdiction *and the region* in addition to historical factors and current policies that contribute

						to fair housing issues. Requires AFFH analysis of land inventory
MINISTERIAL APPROVALS						
SB 9 (Atkins) Increased Density in Single Family Zones	Requires a proposed housing development containing no more than 2 residential units or an "urban lot split" from 1 lot into 2 within a single-family residential zone to be considered ministerially if the proposed development or split meets certain requirements. This is effectively the 4plex bill as it requires a ministerial process for lot splits and 2-unit housing approvals. The original parcel must be at least 2,400 sf. Created parcel may not be smaller than 40% of the total lot area of the original parcel. Each created parcel must be 1,200 sf at a minimum. New units created under the bill must be 800 ft at a minimum. Allows for 4 ft. rear and side setbacks and objective standards. The Terner Center study presents an excellent summary of the eligibility criteria of the bill on page 5.	January 1, 2022	Oppose: League of CA Cities, 244 cities, homeowner associations, neighborhood groups Support: YIMBY and other prohousing Groups, APA CA, BA BIA, Apartment Association, CA Association of Realtors, Inland Empire Regional Chamber of Commerce, a few local jurisdictions, Terner Center	Terner Center Study on SB 9 Helpful resource on SB 9 created for ABAG by Goldfarb & Lipman National Law Review SB 9: The California HOME Act | Focus	Updates to or adoption of objective standards for duplexes and urban lot splits	Terner Center study estimates that there are 385,000 eligible parcels and 56,500 total market-feasible new units in San Bernardino County. City must prohibit short term rentals on created units (less than 30 days) Allows map extensions for up to 24 months rather than 12 if allowed by local ordinance Only objective standards for

						urban lot splits and duplex projects allowed Sets forth what a local agency can require for urban lot splits, requires an applicant affidavit stating that they intend to occupy one of the housing units as principal residence for at least 3 years Exempts these projects from CEQA
AB 1174 (Grayson) Planning and zoning: development application modifications, approvals, and subsequent permits	Strengthens SB 35, clarifies provisions of streamlined, ministerial approval for multi-family projects SB 35 REFRESHER SB 35 requires jurisdictions not meeting their RHNA for above moderate or lower-income households to streamline the review and approval of qualifying affordable housing projects through a	Effective Immediately, applies to projects already approved	Support: Bay Area Council (sponsor) Oppose: None on file	Northern California Record article	Impacts development approvals obtained through SB 35, including projects already approved	Intended to close SB 35 "loopholes" Currently, a project approval under SB 35 is valid for 3 years following approval and remains valid

	ministerial process and exempting the project from CEQA. Qualifying projects must: • At least 50% affordable housing, at least 2/3 of sf must be residential for mixed-use projects • Be Urban Infill: located in urban area with 75% of perimeter already developed • Be at least 2 units • Be designated for residential use (general plan and/or zoning) • Not be in certain hazard/other areas (farmland, wetlands, coastal zones, flood zones, fire hazard zones, etc.) • Pay prevailing wage and utilize a skilled and trained workforce development (certain projects) • Not involve demolition historic buildings, rent-controlled or deed-restricted affordable housing, or housing where site was tenant-occupied within the last 10 years					indefinitely as long as vertical construction has begun and is in process. This bill added that if a project approval is litigated, the 3-year timeline begins the day of the final judgement upholding the development's approval (which saved an expiration of an SB 35 approval in Cupertino) The bill also makes changes to what standards jurisdiction may impose on modification applications submitted on approved SB 35 projects and

						other technical changes.
FUNDING						
SB 129 (Skinner) Budget Act of 2021	SB 129 reflects the majority of the 2021-22 state budget agreement, including the $100 billion "California Comeback Plan", the biggest economic recovery package in CA history. The "California Housing Accelerator" fund makes up $1.75 billion of the Plan, which is designed to expedite construction of affordable multifamily units in projects stalled due to constraints on the supply of tax-exempt bonds and LIHTC.	Effective immediately		2021-2022 California Budget Update - California Housing Consortium (calhsng.org)	2021-2022 budget includes money for rental assistance, $1 billion per year to help local governments address homelessness, Project Homekey, IIG, affordable housing preservation program, and other state programs	See Cal Housing Consortium for full list of affordable housing funding in the 2021-2022 budget and more information on each program Here is the legislative summary on the complete budget
AB 447 (Grayson) California Debt Limit Allocation Committee: income taxes: low income housing tax credit	AB 447 resolves three technical issues that have arisen with respect to state law governing the Low-Income Housing Tax Credit (LIHTC) Program. This bill would revise the findings and declarations relating to the Debt Limit Allocation Committee.	January 1, 2022	Support: CA Housing Partnership Corporation (Sponsor), CA State Treasurer Ma Oppose: None on file		None	AB 447 makes changes to the state LIHTC program to: • Expand the list of projects "at risk of conversion" for the purpose of state LIHTC

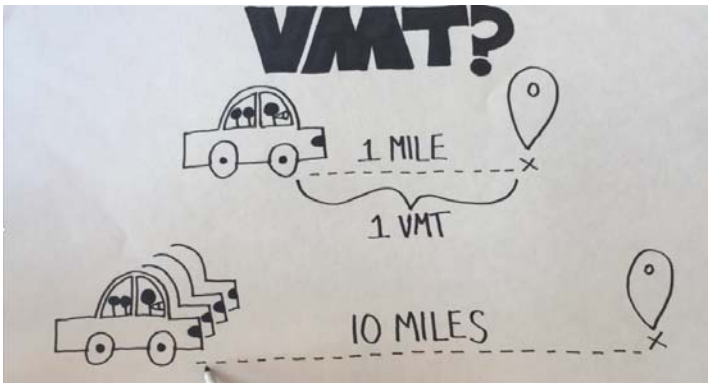
						• Excludes an HCD or other agency agreement for interim financing when determining a property's at risk status • Adds adaptive reuse to new construction definition, allowing these projects to be eligible for additional state credits
AB 1043 (Bryan) Housing Programs: rental housing developments; affordable rent	Adds "acutely low income households" (product of 30% x 15% of AMI adjusted for family size) to the list of income categories for purposes of defining affordable rents.	January 1, 2022	Support: County of LA, California Housing Partnership Corporation, California Rural Legal Assistance Foundation, Housing California, Western Center on Law & Poverty		None	The bill will have no impact on state funding requirements unless the state's programs are amended to require units be restricted to acutely low-income households.

			Oppose: None on record			
AB 1095 (Cooley) Affordable rental and owner-occupied housing: equity in state and local programs	Clarifies that AHSC may fund owner-occupied housing, in addition to rental housing	Effective for NOFAs released after July 1, 2022	Support: Habitat for Humanity (sponsor), CA Assocation of Realtors, Housing Action Coalition Oppose: None on file		None	Clarifies that projects eligible for AHSC funding include owner-occupied housing Requires Strategic Growth Council (SGC) to adopt guidelines accordingly
AB 1297 (Holden) California Infrastructure and Economic Development Bank: public and economic development facilities: housing	Expands financing authority of the California Infrastructure and Economic Development Bank to economic development facilities and public development facilities to include housing if the housing meets certain financing requirements and limits, as specified.	January 1, 2022	Support: California Apartment Owners Association Oppose: None on file		None	
REAL ESTATE ISSUES (RESTRICTIVE COVENANTS, TRAINING, TRANSACTIONS, ETC.)						
AB 721 (Carrillo) Covenants and restrictions: affordable housing	Enables an owner of an affordable housing development to modify a restrictive covenant that restricts the number, size, or location of the residences that may be built or restricts number of persons/families in a development	January 1, 2022				The covenant modification document makes the covenant unenforceable

AB 948 (Holden) Bureau of Real Estate Appraisers: disclosures: demographic information: reporting: continuing education	The Bill makes various reforms to safeguard against discrimination during the property appraisal process	Phased implementation of the bill, some provisions go into effect as soon as January 1, 2022	Support: Government Relations Committee of the Appraisal Institute, California Association of Realtors Opposed: None on file		None	
AB 1466 (McCarty) Real property: discriminatory restrictions	Expedites the removal of discriminatory covenants, includes requirements for County Recorder and title companies	July 1, 2022	Support: Consumer Attorneys of California Oppose: California County Recorders' Association		Contains County recorder requirements; authorizes board of supervisors to impose $2 recording fee to fund program	
SB 263 (Rubio) Real estate applicants and licensees: education requirements: fair housing and implicit bias training	Makes changes to training requirements for real estate licensing to include components on implicit bias and state and federal fair housing	January 1, 2023	Support: California Association of Realtors, Zillow Group Oppose: None on file		None	

OTHER						
AB 68 (Quirk-Silva) HCD Statewide Housing Plan Annual Reports	Adds requirements for the California Statewide Housing Plan completed by HCD.	Effective after January 1, 2023			None	
AB 1584 (Committee on Housing and Community Development) Housing Omnibus	Makes several technical and clarifying changes to code sections pertaining to housing and community development	Various effective dates, beginning as early as December 31, 2021	Support: California Housing Partnership Corporation Oppose: None on file			Includes clean-up language on several issues, including ADUs, preservation notice law, density bonus law, and others
SB 381 (Portantino) Surplus residential property: priorities, procedures, price, and fund: City of South Pasadena	Makes changes to the Roberti Act (the Act) to encourage the sale of homes owned by the California Department of Transportation for low- and moderate-income housing in the State Route 710 corridor in South Pasadena	Jan 1, 2022			None	
SB 791 (Cortese) California Surplus Land Unit	Establishes the California Surplus Land Unit within HCD to facilitate development and construction of residential housing on local surplus land	Upon appropriation	Support: California Apartment Association, California Association of Realtors, California Housing Partnership Corporation		None	

SB 743 VMT MITIGATION SOLUTIONS?



SBCTA - SB 743 Implementation: Phase I & Phase II Background

- Phase I Effort – Local VMT implementation assistance: Cities established project-level thresholds that will give each project exact VMT reduction requirements under CEQA
- July 1, 2020 Board action: *"Authorize staff to develop options for establishing a mitigation crediting system that would allow for quantification of the trip-reduction and greenhouse gas (GHG) reduction benefits of telework and other TDM options and the voluntary application of those credits to facilitate environmental mitigation of projects in San Bernardino County..."*
- Phase II Effort – voluntary regional mitigation bank for developments in SBC
  - Draft SB 743 VMT Mitigation Bank Technical Memo – Fehr & Peers
  - Bank/credit program vs Fee program
  - Challenges with on-site VMT mitigation
  - Telework strategy under IE Commuter program
  - Cost effectiveness
  - Mitigation for development/transportation projects

SBCTA - SB 743 Implementation: Phase II Tech Memo – Initial Banking Concept

- Many steps in process, requiring multiple Board approvals before operational
- Participating commuters generate VMT reductions, motivated by reimbursement per mile of VMT reduction (all voluntary)
- Participant may reside or work in SB County to be eligible
- Reporting (app based) of individual work trip VMT for "new travel pattern" vs. baseline VMT (HBW only)
- VMT credits accumulate in the bank (payments are made on a regular basis)
- **Projects in need of CEQA VMT mitigation buy credits from the bank. (land use or transportation projects – voluntarily requested, if needed for project)**
- Focus on work trips, starting with telework as most cost-effective
- Add other alternative modes over time, building on incremental steps
- Initial target would be recruiting 10,000 commuters for telework

SBCTA - SB 743 Implementation: Phase II Technical Memo - Legal

- Legal risks exist just like any program – No case law yet available
- Being "First" – advantages and disadvantages
- Specific Challenges:
  - Establishing program baseline and individual trip baseline (legal advises pre-COVID baseline would be OK, but could also use current commute as baseline)
  - Concept of additionality
  - Concept of Lifecycle (Industry accepted practice - 20 years)
  - Trip verification - Minimizing fraud will require selective trip monitoring

SBCTA - SB 743 Implementation: Phase II Technical Memo – Setup & Logistics

- SBCTA/SBCOG vs separate entity?
- Establishing which technology to use – goal is to streamline administration through integrated transportation app and financial system – oversight still needed
- Automate trip verification strategy as much as possible (participants must turn on location services for trip monitoring periods, otherwise no credit earned)
- Tentative target for operation by end of 2022, assuming seed-funding (REAP 2021)
- Administrative costs and program sustainability – over long term, needs to be sustained by purchase of credits

San Bernardino County Transportation Authority

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Regional VMT Mitigation Program Development (Draft)

Prepared for:
SCAG
SBCTA

Date: 11.18.2021

OC20-0748

FEHR PEERS

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Executive Summary

The San Bernardino County Transportation Authority (SBCTA) has completed an initial countywide study on the implementation of Senate Bill 743 (SB 743). This 'Phase 1' of implementation included resources for all jurisdictions in San Bernardino County on threshold options, a web-based screening tool, sample implementation documentation, and mitigation options.

With the passage of SB 743 and adoption of VMT as the preferred CEQA transportation impact metric, project applicants that have identified significant VMT impacts are required to mitigate to the fullest extent feasible. Mitigation options for project applicants typically include:

- **On-site mitigation:** This typically involves physical design changes and Transportation Demand Management (TDM) strategies designed to reduce personal vehicle travel and encourage more sustainable modes of transportation. Most on-site mitigation strategies are highly dependent on who will occupy the building, which may not be known at the outset of a project and may change throughout the project's lifespan. The effectiveness of on-site VMT mitigation strategies is therefore difficult to quantify with a high level of confidence. SBCTA's Phase 1 study also revealed substantial limitations for on-site project mitigation due to the county's land use and transportation context.
- **Off-site mitigation:** Off-site mitigation options can be provided through VMT mitigation programs. A "program approach" to VMT mitigation expands the feasible VMT mitigation options to include off-site strategies that can extend from the project site neighborhood to regional in scale. These strategies may take the form of infrastructure expansion, such as new transit and bicycle facilities, or programs and services that influence travel demand.

The establishment of a VMT mitigation program is a high priority for many California jurisdictions searching for effective mitigation approaches as lead agencies and project applicants work through the initial years of the transition to a VMT impact metric. Through this effort, SCAG has taken the lead on exploring the possibility of a multi-agency VMT mitigation program in Southern California.

As a result, SBCTA, in partnership with SCAG, has proceeded with 'Phase 2' to examine the potential of establishing a regional CEQA mitigation program for VMT impacts in San Bernardino County. The options discussed in this memorandum should be considered conceptual, with substantial review needed by local jurisdictions and subsequent approval by the SBCTA Board of Directors prior to proceeding with implementation. References to any specific approaches are subject to change and will require Board direction prior to engaging in next steps.

"Teleworking" or "Telecommuting" are interchangeable terms used to describe an employed person who would typically work outside the home altering their travel patterns to work inside the home.

Through the process explored in Phase 2, SBCTA identified that establishing a regional VMT mitigation bank would provide mitigation options for projects with significant VMT impacts. Initially, the existing Telework Program under IE Commuter Program would be the only program or project included in the bank, although additional projects and

programs may be added in the future. Incentivizing telecommute was compared with other VMT mitigation strategies and was shown to be the most cost-effective option available.

The regional VMT bank would be available to people who live and/or work in San Bernardino County. The IE Commuter Program would continue to operate and be available to employers and residents of San Bernardino and Riverside Counties. Participants who enroll in the Telecommute Program of the VMT bank would participate in tracking their travel (with a focus on work trips - see details in Chapter 5.2.4 Monitoring) and would receive a cash incentive only if their VMT is reduced. If a participant fails to reduce VMT over the monitoring period, they will not receive a cash incentive. The bank would in turn sell VMT credits based on the amount of accumulated VMT reduced by participants. It is expected that the cost to reduce VMT and the incentive for participants would change over time.

The regional VMT bank would be **reviewed at least annually** to ensure:

- **Programs:** Are there any additional projects or programs that could be included in the bank? Could the telework program be changed or expanded?
- **Monitoring:** How much VMT did participants reduce? How many credits can potentially be sold in the coming year?
- **Costs:** Should the cost per mile of VMT change? Do marketing costs or cash incentives need to increase to attract more participants? Is there an opportunity to use a different mechanism to buy or sell credits?

This model for a regional VMT Mitigation Bank was identified as a leading contender because it is an efficient, lower-cost system than other VMT-reducing alternatives and can be easily scaled up. Confirming this assessment was an analysis conducted of the potential mitigation cost per VMT reduced. The estimated cost per mile for VMT ranges widely from 3-4 cents per mile for Telework program to in the range of $20 per mile for infrastructure-focused projects. Transportation Demand Management (TDM) programs such as vanpooling and carpooling tend to be more cost-effective, if individuals are willing to participate.

1. Introduction

The San Bernardino County Transportation Authority (SBCTA) has completed an initial countywide study on the implementation of Senate Bill 743 (SB 743). This 'Phase 1' of implementation included the following resources for all jurisdictions in San Bernardino County:

- Development of VMT threshold options
- Discussion of VMT tools, methodologies and approaches
- Baseline and Future VMT estimates for all Cities and the County
- Sample Traffic Impact Analysis Guidelines
- Sample VMT Resolution
- Web-based VMT Screening Tool
- VMT Mitigation Options

Phase 1 of the countywide study focused on providing jurisdictions in San Bernardino County the information and resources needed to adopt a VMT threshold and begin assessing VMT on all projects that require study under the California Environmental Quality Act (CEQA).

With the passage of SB 743 and adoption of VMT as the preferred CEQA transportation impact metric[1], project applicants that have identified significant VMT impacts are required to mitigate to the fullest extent feasible. Mitigation options for project applicants typically include:

- **On-site mitigation:** This typically involves physical design changes and Transportation Demand Management (TDM) strategies designed to reduce personal vehicle travel and encourage more sustainable modes of transportation. Most on-site mitigation strategies are highly dependent on who will occupy the building, which may not be known at the outset of a project and may change throughout the project's lifespan. The effectiveness of on-site VMT mitigation strategies is therefore difficult to quantify with a high level of confidence. SBCTA's Phase 1 study also revealed substantial limitations for on-site project mitigation due to the county's land use and transportation context.
- **Off-site mitigation:** Off-site mitigation options can be provided through VMT mitigation programs. A "program approach" to VMT mitigation expands the feasible VMT mitigation options to include off-site strategies that can extend from the project site neighborhood to

[1] In response to growing concerns about the consequences of climate change, and the significant role of vehicle miles traveled (VMT) in the generation of greenhouse gas (GHG) emissions, the California State legislature passed Senate Bill 743 (SB 743) in 2013. SB 743 required the adoption of a new methodology to replace motor vehicle delay, measured by level of service (LOS), for evaluating transportation impacts under the California Environmental Quality Act (CEQA) review process. The new methodology must serve to reduce GHG emissions, facilitate development of compact, transit-oriented communities, and encourage development of bicycle and pedestrian facilities and improvements. The Governor's Office of Planning and Research (OPR) was tasked with identifying an alternative transportation impact methodology that best meets the criteria of SB 743. In 2017, OPR selected VMT as the preferred CEQA transportation impact metric.

regional in scale. These strategies may take the form of infrastructure expansion, such as new transit and bicycle facilities, or programs and services that influence travel demand.

The establishment of a VMT mitigation program is a high priority for many California jurisdictions searching for effective mitigation approaches as lead agencies and project applicants work through the initial years of the transition to a VMT impact metric. Through this effort, SCAG has taken the lead on exploring the possibility of a multi-agency VMT mitigation program in Southern California.

As a result, SBCTA, in partnership with SCAG, has proceeded with 'Phase 2' to examine the potential of establishing a regional CEQA mitigation program for VMT impacts in San Bernardino County.

This Phase 2 report covers the following considerations that were evaluated for this program concept.

- ***Introduction*** - provides an overview of study background
- ***Mitigation Approach*** – reviews VMT mitigation program alternatives and recommendations for SBCTA
- ***Additionality*** – discusses the considerations for additionality requirements under CEQA, and examines six possible programs and if they would pass an additionality test
- ***Costs*** – describes potential costs of reducing VMT through a regional programmatic approach and through on-site mitigation
- ***Establishment and Operation of a Regional Mitigation Program -*** discusses key policy questions that were identified and investigated through this initial effort, documenting the discussion and progress that has been made to resolving these questions for SBCTA and describes the potential or SBCTA's IE Commuter Program to be an early mitigation action that could be implemented quickly through the establishment of a regional VMT Mitigation Program

2. Mitigation Approach

Jurisdictions have historically mitigated traffic impacts under CEQA project-by-project (i.e., piece-meal through conditions of approval or mitigation measures) or through a comprehensive program. The piece-meal approach required specific developments to implement specific improvements or pay a fair share contribution toward improvements that the City would then implement. The program approach was typically implemented through traffic impact fee mitigation programs where the local agency identified the needed improvements, established a nexus between the needed improvements and new development, and then established a program to collect money from new development that was used to construct the needed improvements.

Use of impact fees for CEQA mitigation has generally been accepted because of the certainty associated with development costs and the ability to leverage fee revenues to obtain greater levels of state and federal dollars for specific improvements.

Upon implementation of SB 743, the environmental impact metric was changed from Level of Service (LOS) to VMT. This change makes conventional impact fee programs based on LOS obsolete for purposes of mitigation CEQA VMT impacts. While SBCTA member jurisdictions can continue to use impact fee programs to deliver their Circulation Element roadway system, other programs can be developed to provide CEQA mitigation for VMT impacts.

This chapter explores some of these potential programs.

2.1 Local Approach to Traffic Impact Fees

Most SBCTA member jurisdictions maintain traffic impact fee programs. These programs collect a fair-share fee payment from new development to contribute to the cost of a capital improvement program (CIP). These CIPs contain the roadway network expansion projects necessary to accommodate planned population and employment growth. A common theme for the existing programs is that they focus on vehicle trips or vehicle LOS as the key metric for determining deficiencies, developing CIP projects, and estimating new-development's fair share contribution toward those improvements.

In their current form, these programs would not qualify as VMT impact mitigation programs. This is because most CIPs include roadway capacity expansion projects that contribute to VMT increases through induced vehicle travel effects. Agencies could modify/update their impact fee programs to focus the nexus and CIP on VMT reduction or create a new mitigation program exclusively focused on VMT reduction.

Refer to the following websites for more research information and technical details related to induced travel.

- http://www.dot.ca.gov/newtech/researchreports/reports/2015/10-12-2015-NCST_Brief_InducedTravel_CS6_v3.pdf
- https://www.arb.ca.gov/cc/sb375/policies/hwycapacity/highway_capacity_brief.pdf

- https://pubsindex.trb.org/view/2017/C/1437757

2.2 Regional Approach to Mitigation

As an alternative to local agencies updating/modifying their specific programs, a regional approach toward VMT mitigation could be implemented. This study focused on three different regional program concepts:

1. A traditional VMT Impact Fee program
2. A VMT Mitigation Exchange
3. A VMT Mitigation Bank

Exchanges and banks are new mitigation concepts for VMT impacts. The first resource document to describe and assess these programs was recently published by the UC Berkeley School of Law and is entitled, "Implementing SB 743, An Analysis of Vehicle Miles Traveled Banking and Exchange Frameworks," The University of California Institute of Transportation Studies, October 2018. This document is a useful starting place for a dialogue about these programs, but readers should note that specific descriptions and elements of the programs are still evolving in practice and any recommendations in the document should not be considered legal advice.

The findings of the report are supportive of these concepts noting the following about the reasoning for their consideration.

> *Yet while methods for reducing VMT impacts—such as mileage pricing mechanisms, direct investments in new public transit infrastructure, transit access subsidies, and infill development incentives—are well understood, they may be difficult in some cases to implement as mitigation projects directly linked or near to individual developments. As a result, broader and more flexible approaches to mitigation may be necessary. In response, state and local policy makers are considering the creation of mitigation "banks" or "exchanges." In a mitigation bank, developers would commit funds instead of undertaking specific on-site mitigation projects, and then a local or regional authority could aggregate these funds and deploy them to top-priority mitigation projects throughout the jurisdiction. Similarly, in a mitigation exchange, developers would be permitted to select from a list of pre-approved mitigation projects throughout the jurisdiction (or propose their own), without needing to mitigate their transportation impacts on-site. Both models can be applied at a city, county, regional, and potentially state scale, depending on local development patterns, transportation needs and opportunities, and political will.*

This reasoning is important for lead agencies in the SBCTA area because mitigating VMT impacts on a project-by-project basis is challenging and less effective than regional approaches, especially in suburban or rural areas where travel choices are limited. That said, the UCB report and research conducted for this study identified the following key challenges with these types of programs.

- Challenges for Mitigation Exchanges
    - Potential mismatch between funds and mitigation projects available
    - Potential for reduced oversight of project selection

    - Difficulty in verifying VMT reductions and their sustainability especially with VMT generation changing over time due to disruptive transportation trends such as fluctuating fuel prices, transportation network companies (TNCs), and autonomous vehicles (AVs)
    - Difficulty in demonstrating an essential nexus
    - Potential opposition to mitigation not directly occurring in the project impact area especially if impacts are concentrated in or near disadvantaged communities and the mitigation occurs in more affluent areas
- Challenges for Mitigation Banks
    - Increased need to conduct careful CEQA/Mitigation Fee Act analysis
    - Accounting challenge in delay from fee payment to project funding
    - Greater need for program administration budget
    - Political difficulty in distributing mitigation projects and coordinating across jurisdictions
    - Difficulty in verifying VMT reductions and their sustainability especially with VMT generation changing over time due to disruptive transportation trends such as fluctuating fuel prices, transportation network companies (TNCs) and autonomous vehicles (AVs)
    - Difficulty in demonstrating an essential nexus
    - Potential opposition to mitigation not directly occurring in the project impact area especially if impacts are concentrated in or near disadvantaged communities and the mitigation occurs in more affluent areas

Table 1 below outlines VMT mitigation through an impact fee program, exchange, or bank. This assessment is intended to highlight some of the key differences between each program concept.

Another important element for either of these concepts is to have an entity that is responsible for establishing, operating, and maintaining the program. This is a potential role for a sub-regional or regional entity, especially for programs that would extend mitigation projects beyond individual jurisdictional boundaries. A key part of 'operations' is that the entity will need the capability to provide verification of the VMT reduction performance and to adjust the program projects over time. Whether the entity is regional or sub-regional is another important consideration. A sub-regional entity could help minimize potential concerns about mitigation not occurring near the project site or in the same community.

Table 1: VMT Mitigation Program Type Comparison

Program Type	Pros	Cons
Impact Fee Program	• Common and accepted practice • Accepted for CEQA mitigation • Adds certainty to development costs • Allows for regional scale mitigation projects • Increases potential VMT reduction compared to on-site mitigation only	• Time consuming and expensive to develop and maintain • Requires strong nexus • Increases mitigation costs for developers • Limited to jurisdictional boundary unless a regional authority is created • Uncertainty about feasibility and strength of nexus relationship between VMT and pedestrian, bicycle, and transit projects (especially in suburban/rural jurisdictions)
Mitigation Exchange	• Limited complexity • Reduced nexus obligation • Expands mitigation to include costs for programs, operations, and maintenance • Allows for regional scale mitigation projects • Allows for mitigation projects to be in other jurisdictions • Increases potential VMT reduction compared to on-site mitigation only	• Requires 'additionality' • Potential for mismatch between mitigation need and mitigation projects • Increases mitigation costs for developers because it increases feasible mitigation options • Unknown timeframe for mitigation life • Effectiveness depends on scale of the program
Mitigation Bank	• Adds certainty to development costs • Allows for regional scale projects • Allows for mitigation projects to be in other jurisdictions • Allows regional or state transfers • Expands mitigation options to include costs for programs, operations, and maintenance • Increases potential VMT reduction compared to on-site mitigation only	• Requires 'additionality' • Time consuming and expensive to develop and maintain • Requires strong nexus • Political difficulty distributing mitigation dollars/projects • Increases mitigation costs for developers • Unknown timeframe for mitigation life • Effectiveness depends on scale of the program

2.2.1 Regional VMT Impact Fee

Under a regional VMT impact fee, SBCTA or some other regional agency could develop a list of projects that would reduce VMT. Since impact fees are limited to capital projects, they cannot include other VMT-reducing programs such as transportation demand management (TDM) strategies (e.g., telecommute programs) or other operational projects that would reduce VMT such as increasing transit frequency.

Given the above limitations, a regional VMT impact fee would likely include projects consisting of new bike lanes, new pedestrian facilities, or new transit facilities. An example of this type of VMT-reducing fee program has been developed the City of Los Angeles as part of their Coastal Transportation Corridor Specific Plan and West Los Angeles Transportation Improvement and Mitigation Specific Plan. More recently, the City of Orange in Orange County completed a similar effort to establish a VMT reduction based fee program.

Details are provided at the following website related to the West Los Angeles approach.

http://www.westsidemobilityplan.com/ctcspwla-timp-final-eir/

The primary advantage to a development impact fee program is the creation of certainty in development costs.

2.2.2 Regional VMT Exchange Program

An alternative to paying an impact fee is for a development project applicant to directly fund or implement a transit, TDM, bicycle, or pedestrian project. Projects requiring VMT reduction can select from a pre-approved list of mitigation projects that may be located within the same jurisdiction or possibly from a larger area. The intent is to match the project's needed VMT reduction with a specific mitigation project of matching size and to provide evidence that the VMT reduction will reasonably occur.

2.2.3 Regional VMT Banking Program

A mitigation bank attempts to create a monetary value for VMT reduction such that a developer or an agency building a VMT-generating project could purchase VMT reduction credits. The money exchanged for credits could be applied to local, regional, or state level VMT reduction projects or actions. Like all VMT mitigation, substantial evidence would be necessary that the projects covered by the bank would achieve expected VMT reductions and some form of monitoring may be required. This is more complicated than a simple exchange and would require more time and effort to set up and implement.

The verification of how much VMT reduction is associated with each dollar or credit would be one of the more difficult parts of the program especially when updating this value over time. An important question is whether the price per VMT reduction would be set based on individual strategies or an aggregate average cost of all the projects in the bank.

This concept differs from the more conventional impact fee program approach described above in that the fees are directed to a few larger projects or multiple, aggregated smaller projects that have the potential for a more significant reduction in VMT or a less expensive and/or less transaction-intensive deployment of VMT reducing projects. The bank may also include strategies that influence travel behavior through incentives and disincentives directed at reducing the barriers or constraints to travel choices that would produce lower VMT (such as subsidized transit passes, vanpool programs, or other operational programs that can be included in a VMT bank but cannot be included in a mitigation fee program). The program could also be regional or even statewide in nature, providing additional participants and programs that otherwise cannot be accessed at the local level.

2.3 VMT Program Considerations

One complicating component of using any type of program-based approach relates to the additionality test for CEQA mitigation. Mitigation measures are supposed to produce actions that would not otherwise occur such that they are 'conditional' based on approval of the project. Absent project approval, the mitigation action would not occur.

If all development projects are required to pay a VMT impact fee, then no conditional mitigation is needed (the program should already be included in the project development assumptions under CEQA) and the additionality test fails. Alternatively, a fee program that was designed to mitigate the general plan's VMT impact could serve as mitigation if the project is consistent with the general plan. Projects inconsistent with the general plan would not have this same mitigation option.

Making a VMT program voluntary is one option for addressing the additionality issue, but other issues arise related to whether the program would result in sufficient funding to implement the needed improvements. Previous court decisions such as the *Napa Citizens for Honest Government v. Board of Supervisors* (2001) 91 Cal.App.4th 342 have made it clear that incomplete funding of projects cannot result in the mitigation being implemented and therefore should not be included as appropriate project mitigation.

2.4 IE Commuter Program

The Bi-County TDM Initiative, or "IE Commuter" program, is a joint SBCTA and Riverside County Transportation Commission (RCTC) effort that provides resources to eligible Riverside County and San Bernardino County employers and residents[2] interested in TDM such as ridesharing, and telecommuting (or telework). The resources are provided at no-cost, and data is collected regularly and shared with RCTC and SBCTA.

"Teleworking" or "Telecommuting" are interchangeable terms used to describe an employed person who would typically work outside the home altering their travel patterns to work inside the home.

Resources and program offerings include:

- Sample Guides and Cost Calculators
- Customized Survey Collection and Quarterly Reports
- Marketing Downloads
- Video training and tips on growing and promoting a telework or TDM program
- Quarterly prize drawing (valued at up to $250)
- Lyft Vouchers

[2] The IE Commuter program is voluntary for residents and employers. However, South Coast AQMD Rule 2202 mandates that some employers of 250 people or more report their South Coast AQMD Rule 2202 mandates that some employers of 250 people or more report their Average Vehicle Ridership (AVR) annually. This program integrates surveys that enable employers to meet that mandate.

- Hosted virtual happy hours
- Video broadcast tutorials

The program supports employers and residents establishing and implementing TDM programs and supports their ongoing needs and challenges.

SBCTA and RCTC expanded the program by Board/Commission action in July 2020 to include a telework program. This program expansion was initiated specifically to facilitate an avenue for increased VMT reduction that would otherwise not be available.

2.5 Recommended VMT Mitigation Program

Based on the review of mitigation program options with SBCTA staff and industry experts, a VMT Bank has been identified as the preferred mechanism for funding and administering the regional mitigation program as it provides an avenue to take the IE Commuter Program, estimate VMT reductions associated with the program, and then sell those VMT reduction credits to projects that need VMT reductions. The remaining chapters of this report will further investigate the implementation of a VMT Mitigation Bank specifically for SBCTA.

3. Additionality

3.1 Defining Additionality

Additionality is the concept that a mitigation action proposed to offset a project's significant impact under CEQA would not otherwise occur without the project's approval and associated commitment by the lead agency, project applicant, and any other relevant parties to implement the action.

A regional VMT bank concept would similarly need to demonstrate that, without the bank, the mitigation action would not occur. Demonstrating that the mitigation would not be funded, constructed, or otherwise implemented if not for the bank, will be discussed below as the "additionality test".

3.2 Additionality Test

Generally, to ensure additionality, the mitigation projects or programs should not:

a. Be part of the proposed project description
    i. In the case of the VMT bank, this point would typically not be applicable when compiling project and programs to be included in the bank, given their off-site nature. However, project applicants would need to confirm as part of the application review process that they are not already funding or constructing VMT mitigation that is part of the VMT bank.
b. Be considered a "fully committed" project or program
    i. When considering the addition of a program or project in the bank, the administrator should review if the mitigation project or program is "committed". "Committed" projects or programs will generally meet the following criteria:
        1. Be fully funded, with specific funding sources assigned to the project or program[3], and
        2. Be approved[4] under CEQA, if subject to CEQA[5], and

[3] Given the long-term nature of planning documents such as Specific Plans, General Plans, Regional Transportation Plans (RTPs), funding is never certain. Projects that are planned in later horizons have less certainty than near-term projects. Projects without specific funding allocated to them but rather programmed as part of a larger document may not be considered "fully funded".

[4] "**(a)** "Approval" means the decision by a public agency which commits the agency to a definite course of action in regard to a project intended to be carried out by any person. The exact date of approval of any project is a matter determined by each public agency according to its rules, regulations, and ordinances. Legislative action in regard to a project often constitutes approval.**(b)** With private projects, approval occurs upon the earliest commitment to issue or the issuance by the public agency of a discretionary contract, grant, subsidy, loan, or other form of financial assistance, lease, permit, license, certificate, or other entitlement for use of the project." Cal. Code Regs. tit. 14 § 15352

[5] Most VMT-reducing projects, such as active transportation infrastructure, and VMT-reducing programs such as implementing bike-share are either exempt from or not subject to CEQA.

3. Have documented support from key stakeholders such as elected officials.

ii. The administrator should compile, confirm, and document how a project or program is committed.

iii. See below for a discussion of partially committed mitigations.

c. Be considered part of CEQA Conditions of Approval

i. When considering the addition of a program or project in the bank, the administrator should review if the mitigation project or program is included in the conditions of approval for any approved, entitled, or under construction projects.

3.3 Considerations for Partially Committed or Implemented Mitigations

As noted above, committed mitigations will generally be fully funded, approved under CEQA, and have documented support from key stakeholders. However, it is likely that mitigation projects or programs may only partially meet some or all these criteria.

Based on discussions with CEQA attorneys from Best Best & Krieger, projects and programs that only meet a partial definition of committed could be included in a regional mitigation program, but that the administrator's conclusion to include the project or program should be based on substantial evidence with clear reasoning. The ability of the administrator to include partially committed projects and programs would ultimately be dependent on acceptance of legal risk and should be discussed with legal counsel.

One element that could strengthen the ability to include partially committed mitigations would be to demonstrate that any existing funding sources are insufficient to fully fund the mitigation. Furthermore, the administrator would demonstrate that no other additional funds are likely to close that funding gap within a foreseeable time period. The administrator's work in compiling and confirming that all possible funding sources have been exhausted as part of the additionality test could then potentially be used to show that the contribution of the bank would be the only source available to close that ultimate gap in funding.

Another option for incorporating a partially funded or implemented mitigation would be to account and credit only for the incremental mitigation benefits directly caused by the specific, partial funding or implementation support provided by the bank. The administrator would then determine how much of the VMT reduction resulting from the mitigation is directly attributable to the bank contribution, such as with additional bank funding for an existing program that will result in directly proportional VMT benefits.

Similarly, the administrator could demonstrate that while the lead agency is undergoing the CEQA approval process, there are no major barriers to CEQA approval, and that project approval is expected within a reasonable timeframe as technical documentation or an Environmental Impact Report is prepared.

3.4 Case Studies

To further explore how additionality would function in relation to a potential regional VMT bank in San Bernardino County, we have reviewed the additionality test for six VMT-reducing projects or programs that were considered of interest to SBCTA and could be included in the future bank.

3.4.1 Telework: Generation of VMT Credits through Telework by Program Participants (Fixed-Cost/VMT Bank)

The IE Commuter program is described above in section 2.1.1. Under this concept, the telework program would be enhanced to incentivize participants directly who sign up for the program and demonstrate a reduction in VMT through telework. The reduced VMT would be sold as mitigation credits and would be priced as a "fixed-cost" per VMT based on the cost of the program and the amount of VMT reduced. While it is likely costs would change over time, likely on an annual basis, the cost per VMT would be based solely on the cost to reduce VMT and the VMT reduced.

The telework program as a fixed-cost bank would pass the additionality test. Additional details on this can be found in Appendix A.

3.4.2 Telework or School Pool: Market-Based Bank

As an alternative to a fixed-cost bank, a market-based bank could be considered. Under this program, employers, individuals, school districts, HOAs, or other institutions would implement VMT reducing programs internally, such as telework or school pools, and would 'sell' their VMT reduction credits to the bank. Applicants interested in 'buying' VMT credits to mitigate project impacts would purchase these at quarterly or annual auctions held by the administrator. This 'market-based' approach would result in a price per VMT reduced that the market would support and would be similar to the SCAQMD RECLAIM program as well as the State Cap-and-Trade program. Alternatively,, the bank could set a price for credits and sell those credits at any time there are willing buyers. The price could be adjusted periodically in response to general market conditions for the credits.

VMT reducing programs instituted by employers, individuals, and others could be combined with the telework program or other VMT reducing strategies administered by SBCTA under this model, this case study examines the additionality of only the programs instituted by others.

The telework or school pool as a market-based bank partially passes the additionality test. As these programs are already being funded and instituted by others, they could be considered fully funded. However, this model could cover the cost of and incentivize further investments in employee infrastructure, telework, school pools or other TDM programs. Documentation would need to be provided showing that funding by others is required or the 'owner' of the program would be unable to fund it. Additional details on this can be found in Appendix A.

3.4.3 Brightline

'Brightline West' is a proposed privately funded high-speed-rail corridor which is being planned to connect Las Vegas, Nevada to San Bernardino County, with a connection at the Rancho Cucamonga

Metrolink station, enabling travel to Los Angeles Union Station and connection with the future California High Speed Rail system[6]. The project alignment has not been finalized, and the project does not as yet have identified financing.

This case study examines the concept of a regional VMT bank providing partial funding for some portion of the capital costs to construct one or more elements of the system.

Brightline partially passes the additionality test. As Brightline is not yet financed, the considerations for partially committed projects should be reviewed. Additional details on this can be found in Appendix A.

3.4.4 VMT Reducing Infrastructure

VMT reducing infrastructure includes infrastructure that supports active transportation modes – bicycles, pedestrians, and transit. Transit infrastructure would include funding for local shuttles or transit lines, to purchase new buses, or construct infrastructure such as bus turnouts, bus shelters, or charging equipment for electric buses. Bike and pedestrian infrastructure would include sidewalks, bike lanes, curb ramps, or any signing and striping that enhances bike or pedestrian comfort, access and participation/usage.

VMT-reducing infrastructure could be constructed in support of an existing or proposed transit station, such as Metrolink or Brightline, but could also be built independently of existing or proposed transit. This case study looks at unfunded bike and pedestrian projects included in the *San Bernardino County Non-Motorized Transportation Plan* (June 2018), as well as new local shuttles and transit connectors throughout the county.

VMT reducing infrastructure passes the additionality test. Additional details on this can be found in Appendix A.

3.4.5 VMT Reducing Programs

VMT reducing programs include any ongoing program administered by SBCTA, local transit providers, or other public agencies that promote active transportation modes – bicycles, pedestrians, and transit.

Transit programs could include the promotion of transit ridership through funding free or reduced-cost transit passes. This could include local bus providers, regional commuter rail, or potential future high-speed-rail service. The funding would promote increased transit ridership, and in turn contribute fare revenue which funds the maintenance of the transit system. Other VMT-reducing programs could include safety, education, and awareness programs for walking and biking, funding school pool or school bus programs, and bike share programs.

This case study looks at providing funding to local jurisdictions for the Safety and Education Programs described in the *San Bernardino County Non-Motorized Transportation Plan* (June 2018), as well as funding to local transit providers for free or reduced-priced transit passes throughout the county.

VMT reducing programs would potentially pass the additionality test. If programs were partially funded, a program would need to document the incremental VMT benefits associated directly with the increase in funding from mitigation dollars. Additional details on this can be found in Appendix A.

[6] https://www.gobrightline.com/sites/default/files/202103/2021_Brightline%20West%20Fact%20Sheet.pdf

3.4.6 Mileage Based Fee or VMT Fee (not a local measure that SBCTA or similar agency could implement – only at the national, state, or regional level)

A mileage-based fee or VMT based fee would function like a roadway toll, wherein vehicles would be charged a fee directly based on miles driven, and potentially on factors such as time of day, type of road, vehicle weight, and fuel economy. Fees would in turn fund transportation improvements and programs. Increasing the cost of vehicle use, especially if applied statewide, could be one of the most effective methods for reducing VMT, depending on the fee level. However, this action would require state legislative action, would apply to all vehicle users, and would not be appropriate as mitigation for individual development projects.

This case study looks at folding a mileage-based fee or VMT fee into a bank. Please note at this time a VMT fee or mileage-based fee is not proposed for inclusion in any SBCTA program. This example is meant to provide context for a fee if it were implemented at a regional or state level.

A mileage-based fee or VMT fee potentially passes the additionality test. No funding is currently identified for this fee, but if it were funded or implemented outside of the Bank, it would not meet the additionality test. Furthermore, once launched, the program should be self-sustaining, with revenue from the fees/taxes covering any administrative costs. At that point, the program fails the additionality test. Additional details on this can be found in Appendix A

3.4.7 Feasibility

The six case studies are summarized as follows:

1. Telework: Generation of VMT Credits through Telework by Program Participants (Fixed-Cost Bank): Considered to possibly pass the additionality test, if crediting only additional VMT benefits traced to additional funding
2. Telework or School Pool: Market-Based Bank: Considered unlikely to pass the additionality test, if already paid for by private actors now seeking credit
3. Brightline: Considered to possibly pass the additionality test, only if the bank covers a big funding gap or covers a discrete aspect of the project
4. VMT reducing infrastructure: Considered likely to pass the additionality test
5. VMT reducing programs: Considered likely to pass the additionality test
6. Mileage Based Fee or VMT fee: Considered unlikely to pass the additionality test, since the program would generate its own revenue to cover startup funds and is mandatory

Given these considerations, VMT reducing infrastructure, VMT reducing programs, and the Telework: Fixed-Cost Bank may be the most viable options for a future regional VMT mitigation program.

3.5 Verification

It is possible that the program administrator could establish a verification process for the generation and sale of VMT credits that would be transparent, through periodic reports, audits, and public presentations

at meetings of its Board of Directors. However, it may also benefit the administrator of a bank to consider the use of a third-party verifier. In addition to simplifying the role and reducing administration costs for the administrating agency, a third-party verifier could also independently ensure transparency and confidence in the regional program.

The administrator of a bank would need to identify and establish as part of their program the appropriate internal verification process or independent third-party verification process if they wanted external verification. Agreement should be established on what data the administrator will provide to the verifier, how frequently, and if needed, processes for contracting and invoicing.

4. Costs

To support SBCTA in the exploration of a regional CEQA mitigation program for VMT impacts, four potential VMT-mitigating projects and programs were considered to determine what a potential price per VMT reduced would be. On-site mitigation options and their costs were also considered, and sample projects were tested to understand potential on-site and off-site mitigation costs to projects using these pricing mechanisms.

4.1 Mitigation Timeline

One key component to calculating the potential costs of on-site and off-site mitigation is the length of time that mitigation is required.

For the costs presented in this chapter, a 20-year lifecycle was assumed for all potential on-site and off-site mitigation. This was assumed as project impacts are evaluated through a horizon or future year, in San Bernardino County, the forecast VMT is calculated using the best available tool, the San Bernardino Transportation Analysis Model (SBTAM). As SBTAM has a horizon year approximately 20 years in the future, a 20-year lifecycle for mitigation was assumed.

In order to demonstrate that the VMT impact has been reduced to a less than significant level through mitigation, the VMT impact must first be calculated at the scale and timeframe that matches the mitigation. As our current tools that are best suited to calculating VMT impacts (regional transportation demand models) are limited to a horizon year typically approximately 20-25 years into the future, impacts are not quantified for the entire lifespan of the project and quantification of mitigation to a project's lifespan would require new technical procedures and methodology than are currently available.

For impact fee programs, project applicants make a one-time payment at building permit. For exchanges and banks, mitigation may be required until substantial evidence verifies that the VMT impact has been reduced to a less than significant level or the purchase of credits is based on credits that have already been earned.

4.2 Potential Costs Per VMT

4.2.1 Regional Mitigation Program Costs

Regional mitigation program costs have been developed for four potential sources of VMT mitigation.

- **Telework Fixed-Cost Bank** – as described above, this program would continue to provide incentives and resources to individuals and employers to increase telework. The funds provided by the regional bank to this existing program would generate additional VMT reduction.
- **VMT Reducing Program (Transit Passes)** – this program would provide free or discounted transit passes for residents or employed persons in San Bernardino County. This program would provide passes to individuals not already eligible for free or discounted passes through work, school, or other programs.

- **VMT Reducing Program (Vanpool) -** this program would provide free or discounted vanpool, or shuttle service to workers in San Bernardino County. This program would provide vanpool services to individuals not already eligible for a free or discounted vanpool through work, school, or other programs.
- **VMT Reducing Infrastructure (Bike Lanes)** – the construction of infrastructure that provides new bicycle facilities and therefore encourages a shift from vehicle trips to bicycle trips is associated with a reduction in VMT. This case looked at constructing the Class II bike lanes included in the *San Bernardino County Non-Motorized Transportation Plan* (June 2018).

Although additional case studies were examined in Chapter 3, Brightline, Mileage Based or VMT fee and the Work or School Pool Exchange were not included in the exploration of costs. The capital costs of constructing Brightline are unknown and any significant portion of the project would likely be higher than a regional program could economically support. Mileage Based Fee or VMT fee and School Pool Exchange were not included in the cost summary as they were considered unlikely to pass the additionality test.

Note that the cost per VMT could change over time as the cost to implement VMT reducing projects and programs changes, and the administrator of a VMT bank or exchange could choose to alter the price of VMT or administrative fees based on financial sustainability of the program, economic feasibility, or other considerations.

The potential cost per VMT varied from **$.033 per mile** ($0.67 per VMT for a 20-year mitigation period)[7] for the Telework Fixed-Cost Bank to **$145 per mile** ($2,900 per VMT for a 20-year mitigation period)[8] for VMT Reducing Infrastructure (Bike Lanes). The VMT Reducing Programs were more cost effective than VMT Reducing Infrastructure but telework was the most cost-effective measure tested.

[7] Total cost per VMT was calculated assuming a $5 million annual program budget and 40,000 participants. Participants were assumed to reduce average daily VMT by 12% and a 10% administrative fee was included.

[8] Total cost per VMT was calculated assuming an approximately 1% reduction in VMT per 100 miles of bike lanes constructed and a 10% administrative fee was included. This cost represents the least efficient area to construct bike lanes in San Bernardino County (Mountain region). The most efficient areas to construct a bike lane cost $96.49 per VMT and $185.38 per VMT for the West Valley and East Valley regions respectively.

4.2.2 On-Site Mitigation Costs

Currently, as no regional mitigation programs exist, all VMT mitigation must be attempted at the project level as on-site mitigations. To better understand how on-site mitigation costs may vary and how they compare to regional program costs, on-site mitigation costs have been developed and are presented below.

- **VMT Reducing Program (Carpool or School Pool Subsidy) –** the project would provide a direct subsidy to its residents or employees for those that participate in a carpool or school pool. Some projects provide the subsidy to a portion of their residents or employees, while others provide it to all, depending on the VMT reduction required to mitigate the project impact. This strategy is applicable to employment or residential projects in most locations. Note, a school pool subsidy would only be applicable to school projects.
- **VMT Reducing Program (Ridematch Program) –** the project would provide funds for a ridematch program, which usually employs a coordinator, which would be open to the project's residents or employees. The program would pair residents or employees willing to carpool or share rides. This strategy is applicable to employment or residential projects in most locations.
- **VMT Reducing Program (Transit Passes)** – this program would provide free or discounted transit passes for the project's residents or employees. This program would provide passes to individuals not already eligible for a free or discounted passes through work, school, or other programs. This strategy is applicable to employment or residential projects only in locations where there is access to high-quality transit.
- **Telework** – as described above, this program would continue to provide incentives and resources to individuals and employers to increase telework. The funds provided by the Project to this existing program would result in proportionally additional VMT benefits. This strategy is applicable to employment or residential projects in most locations.

Additional on-site mitigation options exist, and each individual project may develop a TDM plan which employs a variety of mitigation strategies appropriate to a project's specific land use mix and location. The on-site mitigations were selected based on which strategies would likely be commonly deployed in San Bernardino County.

4.3 Case Study Mitigation Costs

Land use project case studies were previously analyzed as part of Phase 1 of SBCTA's SB 743 Implementation Study. Five of these projects that did not meet screening criteria and generated potentially significant impacts were tested to see what the mitigation cost would using the potential mitigation costs per VMT outlined above.

The cost per VMT of bike lanes was considered prohibitively high and would not be considered economically feasible. It was not included in the results below.

All case studies are hypothetical, and actual on-site mitigation costs could vary significantly beyond what is presented below based on project location, type, and specifics of the mitigation action implementation.

4.3.1 High Desert Retail

This hypothetical project in the High Desert includes 303,000 square feet of retail and commercial uses on the 32.44-acre site.

Table 2: High Desert Retail VMT

Daily Project VMT/SP	Daily Jurisdiction Threshold VMT/SP	Annual Project VMT[1]	Annual Jurisdiction Threshold VMT	VMT Reduction Needed
10.48	9.95	2,813,461	2,671,177	142,284

1. Daily Project VMT per Service Population was annualized through the Service population of 866 and an annualization factor of 310
2. Daily Jurisdiction Threshold VMT per Service Population was annualized through the Service population of 866 and an annualization factor of 310

4.3.1.1 Regional Mitigation Program Costs

By purchasing VMT credits or paying into a VMT bank at the amount of annual VMT reduction needed, this project would result in a less-than-significant impact.

Table 3: High Desert Retail Regional Costs

Annual VMT Reduction Needed	20-Year Cost – Commuter Program	20-Year Cost – Bus Pass Low Use	20-Year Cost – Bus Pass High Use	20-Year Cost – Vanpool Low Ridership	20-Year Cost – Vanpool High Ridership
142,284	$159,462	$2,934,603	$586,921	$695,610	$186,324
Cost per Square Foot	$0.53	$9.69	$1.94	$2.30	$0.61

Using an average of all four mitigation costs and the project size results in an average cost of **$2.97 per square foot** in mitigation.

4.3.1.2 On-Site Mitigation Costs

The project needs to achieve a 5.5% reduction in VMT through on-site mitigation to achieve a less-than significant impact. A retail/commercial center in a suburban setting could implement the following measures on-site for its employees and visitors:

- Provide a carpool subsidy to employees **estimated 20-year program cost $1,143,120**
- Provide a ride match program to employees **estimated 20-year program cost $770,000**

In this location, transit passes would not be effective as there is limited transit service in the area. For this land use type, telecommuting would not be effective as retail employees typically cannot work from home. This would not provide enough VMT reduction to result in a less-than-significant impact. CEQA requires that all feasible mitigation be accommodated, even if it does not mitigate the project impacts.

Using the total estimated cost of on-site mitigation and the project size results in an estimated cost of **$6.31 per square foot** in mitigation.

4.3.2 East Valley Logistics Center

This hypothetical logistics center in the East Valley region proposes to construct over 1 million square feet of warehouse.

Table 4: East Valley Logistics Center VMT

Daily Project VMT/SP	Daily Jurisdiction Threshold VMT/SP	Annual Project VMT[1]	Annual Jurisdiction Threshold VMT	VMT Reduction Needed
35.44	31.90	4,075,954	3,668,819	407,135

1. Daily Project VMT per Service Population was annualized through the Service population of 371 and an annualization factor of 310
2. Daily Jurisdiction Threshold VMT per Service Population was annualized through the Service population of 371 and an annualization factor of 310

4.3.2.1 Regional Mitigation Program Costs

By purchasing VMT credits or paying into a VMT bank at the amount of annual VMT reduction needed, this project would result in a less-than-significant impact.

Table 5: East Valley Logistics Center Costs

Annual VMT Reduction Needed	20-Year Cost – Commuter Program	20-Year Cost – Bus Pass Low Use	20-Year Cost – Bus Pass High Use	20-Year Cost – Vanpool Low Ridership	20-Year Cost – Vanpool High Ridership
407,135	$456,288	$8,397,168	$1,679,434	$1,990,440	$533,154
Cost per Square Foot	$0.41	$7.47	$1.49	$1.77	$0.47

Using an average of all mitigation costs and the project size results in an average cost of **$2.29 per square foot** in mitigation.

4.3.2.2 On-Site Mitigation Costs

The project needs to achieve a 10% reduction in VMT through on-site mitigation to achieve a less-than significant impact. An industrial project in a suburban setting could implement the following measures on-site for its employees:

- Provide a carpool subsidy to employees **estimated 20-year program cost $979,440**
- Provide a ride match program to employees **estimated 20-year program cost $770,000**
- Transit Passes for employees **estimated 20-year program cost $587,664**

For this land use type, telecommuting would not be effective as industrial employees typically cannot work from home. This would not provide enough VMT reduction to result in a less-than-significant impact. CEQA requires that all feasible mitigation be accommodated, even if it does not mitigate the project impacts.

Using the total estimated cost of on-site mitigation and the project size results in an estimated cost of **$2.08 per square foot** in mitigation.

4.3.3 Unincorporated High Desert Residential

This hypothetical project is located in the unincorporated High Desert region. The project includes 248 single family homes.

Table 6: Unincorporated High Desert Residential VMT

Daily Project VMT/SP	Daily Jurisdiction Threshold VMT/SP	Annual Project VMT[1]	Annual Jurisdiction Threshold VMT	VMT Reduction Needed
27.28	24.81	6,291,859	5,722,178	569,681

1. Daily Project VMT per Service Population was annualized through the Service Population of 744 and an annualization factor of 310
2. Daily Jurisdiction Threshold VMT per Service Population was annualized through the Service population of 744 and an annualization factor of 310

4.3.3.1 Regional Mitigation Program Costs

By purchasing VMT credits or paying into a VMT bank at the amount of annual VMT reduction needed, this project would result in a less-than-significant impact.

Table 7: Unincorporated High Desert Residential Costs

Annual VMT Reduction Needed	20-Year Cost – Commuter Program	20-Year Cost – Bus Pass Low Use	20-Year Cost – Bus Pass High Use	20-Year Cost – Vanpool Low Ridership	20-Year Cost – Vanpool High Ridership
569,681	$638,458	$11,749,667	$2,349,933	$2,785,106	$746,011
Cost per Dwelling Unit	$2,574.43	$47,377.69	$9,475.54	$11,230.27	$3,008.11

Using an average of all four mitigation costs and the project size results in an average cost of **$14,527.25 per dwelling unit** in mitigation.

4.3.3.2 On-Site Mitigation Costs

The project needs to achieve a 9% reduction in VMT through on-site mitigation to achieve a less-than significant impact. A residential project in a rural setting could implement the following measures on-site for its residents:

- Provide telework support and incentives to residents **estimated 20-year program cost $68,200**
- Provide a carpool subsidy to residents **estimated 20-year program cost $163,680**
- Provide a ride match program to residents **estimated 20-year program cost $770,000**

In this location, transit passes would not be effective as there is limited transit service in the area. This would not provide enough VMT reduction to result in a less-than-significant impact. CEQA requires that all feasible mitigation be accommodated, even if it does not mitigate the project impacts.

Using the total estimated cost of on-site mitigation and the project size results in an estimated cost of **$4,039.84 per dwelling unit** in mitigation.

4.3.4 Unincorporated Valley Residential

This hypothetical project is located in an unincorporated area between the East Valley and West Valley regions. It would construct 241 multifamily residential units.

Table 8: Unincorporated Valley Residential VMT

Daily Project VMT/SP	Daily Jurisdiction Threshold VMT/SP	Annual Project VMT[1]	Annual Jurisdiction Threshold VMT	VMT Reduction Needed
14.52	14.44	2,711,973	2,697,031	14,942

1. Daily Project VMT per Service Population was annualized through the Service Population of 603 and an annualization factor of 310
2. Daily Jurisdiction Threshold VMT per Service Population was annualized through the Service population of 603 and an annualization factor of 310

Unincorporated Valley Residential was tagged as being partially located in a low VMT zone. It was not eligible for screening as there are no multi-family units in the project zone. However, it is located in a relatively VMT-efficient location.

4.3.4.1 Regional Mitigation Program Costs

By purchasing VMT credits or paying into a VMT bank at the amount of annual VMT reduction needed, this project would result in a less-than-significant impact.

Table 9: Unincorporated Valley Residential Costs

Annual VMT Reduction Needed	20-Year Cost – Commuter Program	20-Year Cost – Bus Pass Low Use	20-Year Cost – Bus Pass High Use	20-Year Cost – Vanpool Low Ridership	20-Year Cost – Vanpool High Ridership
14,942	$16,746	$308,179	$61,636	$73,050	$19,567
Cost per Dwelling Unit	$69.49	$1,278.75	$255.75	$303.11	$81.19

Using an average of all four mitigation costs and the project size results in an average cost of **$392.10 per dwelling unit** in mitigation.

4.3.4.2 On-Site Mitigation Costs

The project needs to achieve a 0.6% reduction in VMT through on-site mitigation to achieve a less-than significant impact. An infill residential project in a suburban setting could implement the following measures on-site for its residents:

- Provide a ride match program to residents **estimated 20-year program cost $770,000**

Additional measures could be implemented at this site but are not required to meet the reduction requirement. This could provide enough VMT reduction to result in a less-than-significant impact.

Using the total estimated cost of on-site mitigation and the project size results in an estimated cost of **$3,195.02 per dwelling unit** in mitigation.

4.3.5 West Valley Hotel

This hypothetical project proposes to construct a new 126 room hotel the West Valley region.

Table 10: West Valley Hotel VMT

Daily Project VMT/SP	Daily Jurisdiction Threshold VMT/SP	Annual Project VMT[1]	Annual Jurisdiction Threshold VMT	VMT Reduction Needed
34.36	31.83	2,481,823	2,299,081	182,742

1. Daily Project VMT per Service Population was annualized through the Service Population of 233 and an annualization factor of 310
2. Daily Jurisdiction Threshold VMT per Service Population was annualized through the Service population of 866 and an annualization factor of 310

The West Valley Hotel project could be screened from VMT assessment as a local-serving hotel in some jurisdictions based on their adopted screening criteria.

4.3.5.1 Regional Mitigation Program Costs

By purchasing VMT credits or paying into a VMT bank at the amount of annual VMT reduction needed, this project would result in a less-than-significant impact.

Table 11: West Valley Hotel Costs

Annual VMT Reduction Needed	20-Year Cost – Commuter Program	20-Year Cost – Bus Pass Low Use	20-Year Cost – Bus Pass High Use	20-Year Cost – Vanpool Low Ridership	20-Year Cost – Vanpool High Ridership
182,742	$204,804	$3,769,052	$753,810	$893,405	$239,305
Cost per Square Foot	$6.83	$125.64	$25.13	$29.78	$7.98

Using an average of all four mitigation costs and the project size results in an average cost of **$38.52 per square foot** in mitigation.

4.3.5.2 On-Site Mitigation Costs

The project needs to achieve a 7.4% reduction in VMT through on-site mitigation to achieve a less-than significant impact. An infill hotel project in a suburban setting could implement the following measures on-site for its employees and visitors:

- Provide a carpool subsidy to employees **estimated 20-year program cost $307,560**
- Provide a ride match program to employees **estimated 20-year program cost $770,000**
- Transit Passes for employees **estimated 20-year program cost $3,690,720**
- Price off-street on-site parking **estimated 20-year program cost $0**

This could provide enough VMT reduction to result in a less-than-significant impact.

Using the total estimated cost of on-site mitigation and the project size results in an estimated cost of **$158.94 per square foot** in mitigation.

4.4 Cost Conclusions

Based on the calculations and sample projects presented above, potential cost of mitigation varies substantially by project location and type. Potential cost per VMT varies by regional mitigation strategy but telework provides the lowest cost per VMT.

Bike infrastructure is effective at reducing VMT, but the cost per VMT for bike infrastructure is much higher than the cost of telework, vanpool, and transit pass programs. Bike infrastructure is the most cost efficient the East Valley and West Valley incorporated cities, and the least cost effective in the Mountain Region.

Based on the five sample projects that were reviewed, on-site mitigations are the same cost or more expensive than the average cost of paying into a regional mitigation program for three of the five case studies. On-site mitigations are also much less likely to result in a less-than-significant impact, likely due to the fact on-site mitigations are limited to reduction strategies that are appropriate to the project type and location, and further limited by the project's employment and resident pool.

5. Establishment and Operation of a Regional VMT Mitigation Program

5.1 Considerations for Program Administrators

A regional bank could operate with or without SBCTA as the administrator of the program. Other alternatives include local jurisdictions, other regional agencies such as SCAG, or an independent third-party. A larger region, such as SBCTA, could provide lower costs to running the bank by introducing cost efficiencies while maintaining County-level authority over localized mitigation actions.

The bank would create a monetary value for VMT reduction such that a developer or an agency building a VMT-generating project could purchase VMT reduction credits. The money exchanged for credits could be applied to local, regional, or state level VMT reduction projects or actions.

5.1.1 Bank Administration

The bank administrator is required to have several organizational components, including:

- Administrative - The Bank must perform several administrative functions such as collecting fees, managing information, answering questions, and other business operations.
- Technical - There is a significant amount of technical work needed to initially and continually prove the mitigation options reduce VMT and that the reductions would not have occurred without the programs. The Bank also needs to show the fees it receives are related and proportional to new development.
- Accounting - The Bank requires a thorough accounting system to track collected fees and to ensure fees are being handled according to CEQA mitigation monitoring practices and other legal guidelines. This includes payments for implementing VMT reduction projects.

SBCTA should consider their ability to perform these roles when deciding whether the bank should be run internally or by a third party.

SBCTA could also consider if they would administer the bank as SBCTA, or if a separate entity, such a joint powers authority, LLC or other organization should be established with the sole purpose of administering the bank.

> ***SBCTA Decision 1:*** Should SBCTA administer the bank?

SBCTA staff has evaluated the needs of their member jurisdictions, and their ability to perform the administrative role required, and has determined SBCTA would be a candidate for administrator of a bank in San Bernardino County. This would be subject to approval by the Board of Directors.

SBCTA should further consider and decide if they would administer the bank as SBCTA, or if a separate entity, such a joint powers authority, should be established with the sole purpose of administering the bank. SBCTA could identify a third-party Program Administrator, which would, under the supervision of SBCTA staff, be responsible for the day-to-day operations of the bank and for identifying and interfacing with other vendors and service providers which serve the bank.

Sample SBCTA staff recommendation:

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

A. Establish a San Bernardino County Vehicle Miles Travelled (VMT) Mitigation Bank and approve Resolution No. XX-XXXX.

B. Authorize the Executive Director, or his designee, to execute Contract No. XX-XXXX, subject to approval as to form by General Counsel, a Restricted Grant Agreement between San Bernardino County Transportation Authority (SBCTA) and XXXXXXXX for SBCTA to receive an amount not-to-exceed $X,XXX,XXX for the development of the San Bernardino County VMT Mitigation Bank.

C. Authorize the Executive Director, or his designee, to release Request for Proposals No. XX-XXXXX for the program implementation and administration of the San Bernardino County VMT Mitigation Bank.

D. Approve a budget amendment to the Fiscal Year XX/XX Budget, Task No. XXXX, by adding XXXXXX Grant funds in the amount of $X,XXX,XXX.

5.1.2 Third-party Verification

SBCTA Decision 2: Should the bank include a third-party auditor to review projects for additionality and verify the reduction potential of VMT programs?

SBCTA could identify a qualified third-party auditor to review programs or projects for additionality and verify the reduction potential of VMT programs. The third-party verifier would report to the Program Manager and be responsible for verifying additionality and actual reduction of VMT from the programs and projects included in the bank.

There are several steps in establishing and running a VMT mitigation bank where the review and verification of information by a third-party could provide for a more robust program and increase the confidence of jurisdictions and developers paying into the program. The administrator of the bank could also self-review and self-certify the results; however, it may not provide for as much transparency or confidence as with a third-party reviewer making it a higher standard than current traffic impact fee programs which are self-reviewed and self-certified by the administering agency and have been historically accepted as CEQA mitigation. Since there is no outside agency or group currently identified to perform the role of third-party verifier, SBCTA staff could recommend utilizing the concept of self-review and self-certification by authorizing the program administrator to hire a reputable performance auditing firm.

5.1.3 Impact Significance Under CEQA

Another concept worth careful consideration is the role of the program in reducing significant VMT impacts. There is a key difference between a stated goal of 'lessen a significant VMT impact' versus produce a 'less than significant VMT impact'. 'Lessen a significant VMT impact' would signify that the mitigation program need only provide some reduction in VMT, and that a project may continue to have a significant VMT impact, albeit to a lesser extent than without the program. Producing a 'less than significant VMT impact" would signify that with the mitigation program for a project would reduce their VMT to meet or fall below the local jurisdiction's threshold of significance. As the threshold of significance varies by jurisdiction and the magnitude of the project's impact varies by project, it may be challenging to authenticate that a program could produce a 'less than significant VMT impact,' unless VMT reduction credits "that were already earned" were purchased from the bank.

> ***SBCTA Decision 3:*** Should the bank provide a stated goal of 'lessen a significant VMT impact' versus produce a 'less than significant VMT impact'?

As the threshold of significance varies by jurisdiction and the magnitude of the project's impact varies by project, it may be challenging to authenticate that a program could produce a 'less than significant VMT impact'. Therefore, the bank will focus on providing a stated goal of 'lessen a significant VMT impact'.

5.1.4 Included Projects and Programs

As discussed in Chapter 3 – Additionality and Chapter 4- Costs, there are several key considerations for which VMT reducing programs and projects should be included in a regional bank. The potential effectiveness, feasibility of costs, whether a program would meet the additionality requirement, and if the program is established should all be considered.

> ***SBCTA Decision 4:*** What VMT reducing projects or programs should be included in a bank?

While some VMT mitigation bank concepts are project-focused (e.g. building and operating transit or bike/pedestrian systems) or employer-focused (e.g. ridesharing and carpool programs), they tend to have challenges demonstrating additionality or can be very high cost for the amount of VMT reduced. The proposed concept favored by SBCTA staff presents an approach that is based on an individual choice and motivation directed toward individual commuters, not the employers or transportation project developers. Individuals would "opt in" to the crediting program, record trip-making via a mobile phone app, establish a baseline trip profile, and earn VMT reduction credits by choosing not to take vehicle trips to their employment. These voluntary credits would be deposited into an authorized VMT mitigation bank, and project proponents in need of VMT mitigation credits would purchase credits from the bank. The proceeds from the sale would be distributed to those individuals who generated the credits, which in turn would increase the motivation for commuters to take action to reduce their VMT even further.

Thus, as a starting point, the Telework Program under the IE Commuter Program would be included in the bank. In the future, additional projects and programs may be added to the bank. However, the Telework Program was considered an ideal program to begin the bank based on the review of additionality as detailed in Chapter 3 and costs as detailed in Chapter 4. Home-Based-Work (HBW) trips that either begin

or end within the San Bernardino County geographical boundary would be included in the mitigation bank program. Once the mitigation bank program stabilized, the program could add other modes and trip purposes and potentially include crediting programs outside of the San Bernardino County boundary.

5.1.5 Cost Mechanisms

SBCTA should also consider what kind of cost mechanism would be developed for determining the price per VMT reduced per year. Options for a cost mechanism could include a "fixed estimated cost" of regional programs or a "market-based cost" approach.

a. A fixed cost approach would entail the bank administrator annually calculating the price per VMT reduced. The cost should be calculated as dollars/annual VMT reduced = Cost of programs or projects included in the bank divided by the expected annual VMT reduced.
b. A market-based approach would entail the bank administrator holding quarterly or annual auctions, where project applicants would purchase credits to mitigate project impacts, which would result in a price per VMT reduced that the market would support. This would be similar to the SCAQMD RECLAIM program as well as the State Cap-and-Trade program (except without the cap). The specifics of this concept, including frequency and administration of credit auctions, would require further development, but it could both incentivize VMT reduction and satisfy the need for VMT mitigation. [9]
c. Hybrid approach – Both fixed cost and market-based approaches could be incorporated, either in sequence over time or in parallel. For example, a project applicant seeking mitigation could choose from the fixed cost list or could go to auction to purchase credits.

Fixed cost or market-based prices should be based on the total VMT reductions earned by the participants in the program or by other projects and/or programs included in the bank. Project applicants should similarly calculate the total annual VMT that requires mitigation. Note that project VMT in CEQA documentation will likely be normalized (i.e. presented as VMT/Worker, etc.) and will need to be converted back to total VMT and annualized for the purposes of purchasing credits from the bank.

SBCTA Decision 5: What pricing mechanism should the regional bank or exchange use?

Initially, a fixed-cost approach would be recommended. It is important that the program be designed to break even, and, since the regional program is not yet operating, it is unclear how much demand there will be for VMT reduction. A market-based approach would require a good understanding of the relationship between VMT mitigation supply and demand. Once the program has been operating for some time, the option of a market-based or hybrid pricing approach can be reconsidered. . This concept

[9] The bank administrator could include VMT credits established through programs run by others. For example, employers setting up telework programs could contact the bank administrator and offer the VMT reduced by their program be sold at auction. Once sold, the employer could receive the price paid for their VMT reduction, which could cover the cost of and incentivize investments in employee infrastructure, telework, or other TDM programs.

is designed to incentivize VMT reduction by the individual, with the individual depositing into their account any VMT credit generated. However, to increase participation by employers, arrangements could be made to share some of the individually earned credits with their employer, to potentially incentivize employers to be more flexible with employee trip choices.

5.1.6 Conclusions

Based on all the considerations presented above, SBCTA is interested in establishing a regional VMT mitigation bank. Initially, the existing Telework Program under IE Commuter Program would be enhanced to include the ability for individuals to earn VMT reduction credits. This would initially be the only program or project included in the bank, although additional projects and programs may be added in the future.

The steps for establishing and running the bank are outlined and presented below, along with a hypothetical organizational chart of the bank operations.

Establishing the Bank

Decision Analytical process or procedural outcome

Step 1

Establish and identify regional VMT-reducing programs and projects to fund

Clearly connect regional programs and projects to the legislative intent of SB 743.

Step 2

Document expected VMT reduction effectiveness of proposed regional programs and projects

Ongoing monitoring and verification of all programs and projects proposed as part of the bank, either operated by the bank administrator or others, would be required.

Utilize the best available data, such as the annual IE Commuter Program survey[1].

Bank policy will outline how SBCTA will document anticipated VMT reductions from each program and project (i.e. what independent, transparent sources, like a third-party VMT calculator, will be used), starting with the IE Commuter Program and subsequent programs/projects in the future.

[1] The annual survey should be expanded to collect additional data to enable a thorough quantification of the travel activity of the program participants and the VMT reduction of the program. The survey should capture how total VMT for the individual and possibly their associated household changed before and after participation in the program. In some cases, increased work from home days could lead to more VMT generation by the individual participant due to increased flexibility in their schedule. If the individual is part of a household, this increased activity and vehicle travel may be offset by less vehicle travel from other household members.

Utilize the best available data, such as the annual IE Commuter Program survey[1].

Step 3

Develop a mechanism for determining the price per VMT reduced per year, based on estimated cost of regional programs or on a market-based approach

VMT cost mechanism to be determined after further consideration.

Step 4

Account for Additionality[2]

Additionality is the concept that a mitigation proposed to offset a significant impact under CEQA would not have occurred unless a project specifically funds, constructs, or implements the mitigation measure.

Generally, to ensure additionality, the mitigation projects or programs should not:

- ✕ Be part of the proposed project description
- ✕ Be considered a "fully committed"[2] project or program
- ✕ Be planned as part of other future developments
- ✕ Be included in the "background" or "no project" conditions of the project

Does the project/program ensure additionality?

NO — If it meets any of these requirements

YES

[2] Any VMT mitigation program would need to establish and demonstrate that the mitigation projects and programs funded by the bank/exchange would be feasible, effective, and would not have occurred without the existence of the bank/exchange. Fully committed projects are considered fully funded projects or programs with specific funding sources assigned to the project, are approved under CEQA (if subject to CEQA), and have documented support from key stakeholders.

Step 5

Finalize Bank Documentation

Instructions for Applicants

List of included projects and programs: Expected VMT Reduction | Additionality

Approach to price per VMT

Administration Plan: Approvals | Distribution of Funds | Regular Review

Step 6

Present to Board

Step 7

Pass Ordinance

The ordinance will include the jurisdiction (regional with opportunity to join other regions or statewide banks as feasible/desirable); entity responsible for administering the bank/assembling projects/verifying, etc.; and general guidelines on the process, pricing, etc.

Continue to **Running the Bank** Steps 8-10

Running the Bank

Decision | Analytical process or procedural outcome

Continued from
Establishing the Bank
Steps 1-7

Step 8 Approvals

Individual Project Applicants/Local Jurisdictions Contact SBCTA

- Dedicated staff/point of contact
- Local applicants/jurisdictions from outside of San Bernardino County could be included, particularly those in the operating area of the IE Commuter Program (Riverside County) and any future programs.
- Projects outside the operating area of the reduction programs could potentially be included. Applicants outside the operating area could face concerns from the lead agency for the applicant's project related to mitigation feasibility, as the mitigation would not apply or be relevant to the community the project is located in.

Individual Project Applicants/Local Jurisdictions should document and demonstrate project has significant impacts that cannot be fully mitigated with on-site improvements.

SBCTA reviews and verifies information and provides fee sheet with a price per VMT.

SBCTA should develop an agreement with the lead agency that allows the Bank's mitigation options to be considered an acceptable mitigation measure for the EIR.

Project Applicants/Local Jurisdictions should document and demonstrate project has significant impacts that cannot be fully mitigated with on-site improvements.

SBCTA reviews and verifies information and provides fee sheet with a price per VMT.

SBCTA should develop an agreement with the lead agency that allows the Bank's mitigation options to be considered an acceptable mitigation measure for the EIR.

Step 9 Distributing Funds

Project and program funds distributed based on budgets and allocations assumed in the fee development/reduction documentation.

Local jurisdictions/individual applicants may pay fees that support programs and projects not in their local area.[3]

[3] Funds be spent on VMT reductions as geographically close to the project as possible. As the IE Commuter Program draws employers and employees from all of San Bernardino County, any project located within the County would initially be within the geographic area of the bank.

Step 10 Regular Review

Update steps 1-3 of establishing the bank on a regular basis to keep the program/project list, and fees up to date.[4]

[4] VMT reduction will likely change over time. It may become more costly to lure more commuters into carshare/work-from-home over time. The price should basically be fluid, subject to regular assessments of new inputs/documentation from trusted, transparent sources.

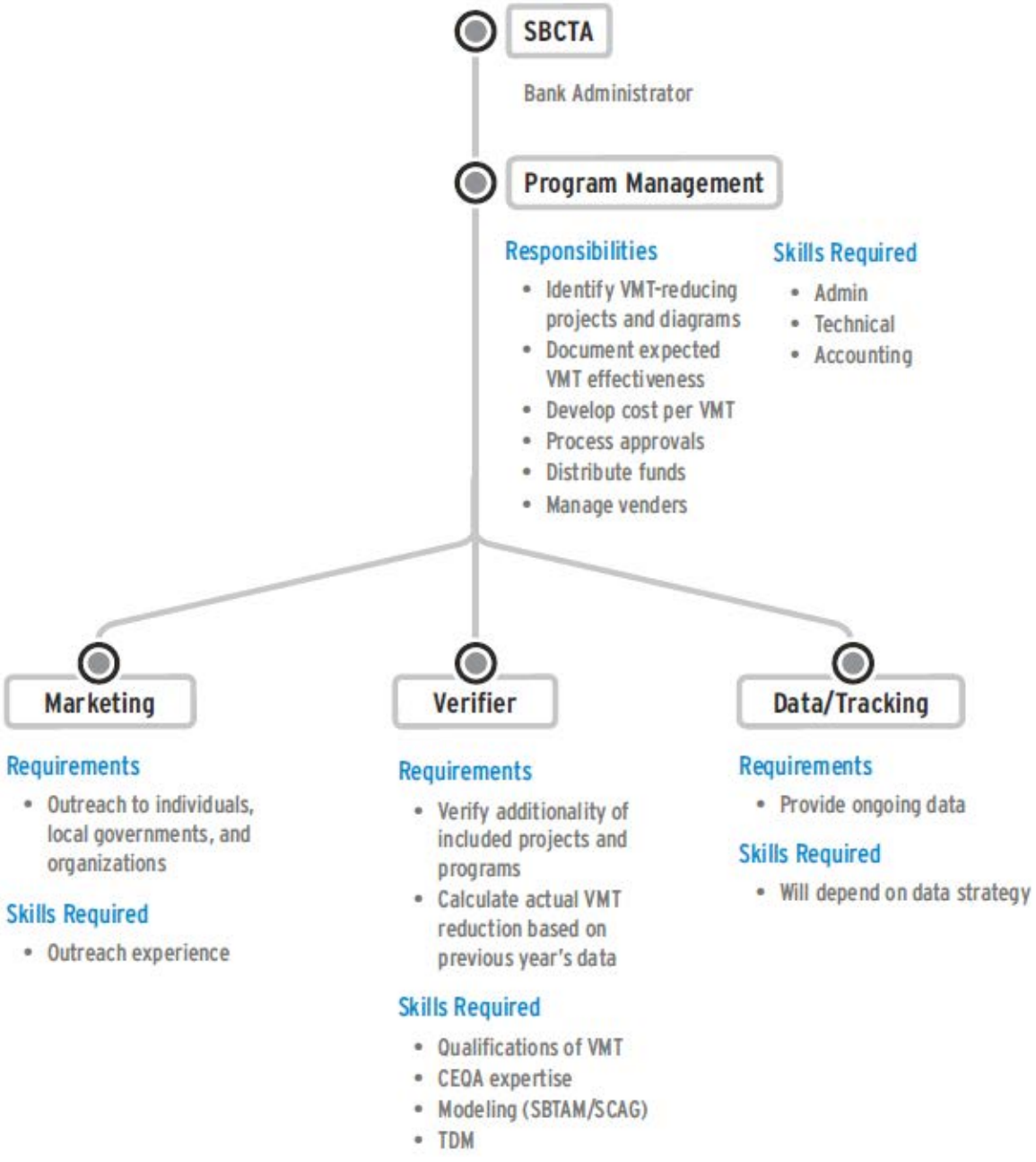
Step 1 Establish and identify regional VMT-reducing programs and projects to fund

Step 2 Document expected VMT reduction effectiveness of proposed regional programs and projects

Step 3 Develop a mechanism for determining the price per VMT reduced per year, based on estimated cost of regional programs or on a market-based approach

Mitigation Bank Operations

FEHR & PEERS



5.2 IE Commuter to VMT Mitigation Program

SBCTA could begin by identifying and contracting a Program Manager. The Program Manager would be responsible for finalizing the bank documentation with the information in Steps 1-4 presented below. The Program Manager should also confirm the estimate of initial costs for starting the mitigation bank. A Telework model for a regional VMT Mitigation Bank was identified as a leading contender because it is an efficient, lower-cost system than other VMT-reducing alternatives and can be easily scaled up. Confirming this assessment was an analysis conducted of the potential mitigation cost per VMT reduced. The estimated cost per mile for VMT ranges widely from 3-4 cents per mile for Telework program to in the range of $20 per VMT reduced for infrastructure-focused projects. Transportation Demand Management (TDM) programs such as vanpooling and carpooling tend to be more cost-effective, if individuals are willing to participate. Thus, the example implementation process described below focuses on a Telework approach. Other VMT reduction strategies could be added once the VMT Mitigation Program becomes established.

Step 1 **Establish and identify regional VMT-reducing programs and projects to fund**

Clearly connect regional programs and projects to the legislative intent of SB 743.

The Program Manager should begin by documenting the parameters of the Telework Program and how it connects to the legislative intent of SB 743. The three stated goals of the legislation are to balance the need for congestion management with the following goals:

- To reduce Greenhouse Gas Emissions
- To promote active transportation
- To encourage infill development

The Telework Program reduces Greenhouse Gas Emissions by increasing the number of people who telework. Details on how this should be quantified and presented are discussed below.

Step 2 **Document expected VMT reduction effectiveness of proposed regional programs and projects**

5.2.1 Participants

All residents, employers, and employed persons in Riverside and San Bernardino County will continue to be eligible for the benefits and resources in the IE commuter program, but only some participants will be considered eligible and will be counted towards the VMT benefit for telework that the bank uses for CEQA mitigation.

In order to be included in the bank as VMT mitigation, participants must:

- Be new to telework as of July 2020 when the SBCTA Board established the Program
- Indicate that they would not be teleworking if not for the program
- Home or work location in San Bernardino County

When participants sign up the administrator should collect the following information:

- Home zip code
- Workplace zip code
- Days per week teleworking
- When did you begin/when do you plan to begin teleworking? (Month/Year)
- Would telework be available without the IE Commuter Program/Telework Program (Yes/No)
- Agree to all contract terms, disclosures, and privacy statements

If this information has already been collected through the IE Commuter Program Survey, it can be used in establishing the effectiveness of the program. If this information is not available for existing participants who have signed up since July 2020, it should be collected.

5.2.2 Bank Administrator

The Program Manager should use the participant data collected above to quantify the potential VMT reduction of the program annually, ahead of the coming year to determine how much VMT they anticipate will be reduced.

$$A = B * C$$

$$D = (B - 2E) * C$$

$$Potential\ VMT\ Benefit = (A - D) * 48\ working\ weeks\ per\ year$$

Table 13: Telework VMT Reduction Potential Calculation

	Parameter	Value
A	Participant VMT without Telework Program	--
B	Home-Based-Work trips per week	10
C	Home-Based-Work trip length	Varies[1]
D	Participant VMT with Telework Program	--
E	Days per week telecommuting	Varies[2]

Notes:
1. Varies by establishing the Home-Based-Work (HBW) trip length for each participant using the home and workplace zip code data.
2. This information should be provided by the participant upon sign up.

Source: Fehr & Peers, 2021.

Two general checks on the VMT benefit should be performed:

1. To account for the fact that new trip-making from the household could occur due to a participant teleworking, the VMT Benefit should not exceed a 12% reduction when compared to the average household VMT without Telework Program[10].
2. The Participant VMT with Telework Program should be converted to a daily HBW VMT/worker and compared against the jurisdictional or home zip code average HBW VMT/worker from data produced by SBTAM or through big data sources. This check confirms that participants are generating lower VMT on a per person basis than the average worker in their area.

VMT Benefit as described above will be in the form of annual VMT.

Participants who do not meet the requirements listed above should not be included in the calculation of VMT reduction.

Ultimately, total VMT benefit for the program will equal the number of VMT credits that are available for sale as VMT mitigation. As noted above in Table 12, between 1,490,000 and 2,985,000 credits were assumed to be offered initially. It should be confirmed at the time of quantification that this assumption is reasonable. SBCTA through its pursuit of outside funding/grants, could purchase enough credits to start selling credits in the first year.

At the end of the year, the potential VMT benefit should be compared with the actual VMT benefit produced by participants and collected through ongoing monitoring (see below to Step 10 – Regular Review: Monitoring). The relationship between potential VMT benefit and actual VMT benefit for the prior year should be examined and inform the coming year estimation for potential VMT benefit.

Step 3 **Develop a mechanism for determining the price per VMT reduced per year, based on estimated cost of regional programs or on a market-based approach**

VMT cost mechanism to be determined after further consideration.

As discussed above, SBCTA is considering using a fixed-cost, market-based, or hybrid approach to pricing VMT. Initially, a fixed cost approach would be recommended when establishing the bank.

The fixed cost per VMT price should be calculated by first establishing the annual cost of Telework Program, plus administrative costs. Previous calculations presented in this report assumed a 10% administrative cost. The price per annual VMT reduced would then be calculated as the annual cost of the program plus administrative costs/total annual VMT benefit of all participants from Step 2. This should be

[10] This recommendation is based off a review of data collected in the SACOG region. This data showed that on a household basis, households with one worker teleworking from home full time, household VMT was 12% lower than the average of all households.

compared back to the initial estimate of cost per VMT for the Telework program and compared against the estimate of cost to open the bank presented in Table 12 of this report.

Step 4 Account for Additionality[2]

Survey data collected and VMT benefit calculated in Step 2 should be reviewed. It should be confirmed that the VMT benefit was calculated appropriately using only data from eligible participants, and that the program meets the requirements of additionality.

As previously noted, SBCTA is interested in identifying a third-party verifier who would review and verify additionality of projects.

Step 5 Finalize Bank Documentation

Summarize all the materials documented in Steps 1 through 4 and produce a document which includes instructions for applicants, list of included program with expected VMT reduction and additionality, approach to price per VMT and the administrative plan for approvals, distribution of funds, and regular review.

Step 6 Present to Board

Step 7 Pass Ordinance

The ordinance will include the jurisdiction (regional with opportunity to join other regions or statewide banks as feasible/desirable); entity responsible for administering the bank/ assembling projects/verifying, etc.; and general guidelines on the process, pricing, etc.

Once the bank has been established, running the bank would include **Step 8 – Approvals** and **Step 9 – Distributing Funds**.

Step 8 Approvals

Individual Project Applicants/Local Jurisdictions Contact SBCTA

- Dedicated staff/point of contact
- Local applicants/jurisdictions from outside of San Bernardino County could be included, particularly those in the operating area of the IE Commuter Program (Riverside County) and any future programs.
- Projects outside the operating area of the reduction programs could potentially be included. Applicants outside the operating area could face concerns from the lead agency for the applicant's project related to mitigation feasibility, as the mitigation would not apply or be relevant to the community the project is located in.

Individual Project Applicants/Local Jurisdictions should document and demonstrate project has significant impacts that cannot be fully mitigated with on-site improvements.

SBCTA reviews and verifies information and provides fee sheet with a price per VMT.

SBCTA should develop an agreement with the lead agency that allows the Bank's mitigation options to be considered an acceptable mitigation measure for the EIR.

Project applicants will contact SBCTA, who will refer them to the Program Manager. Applicants can have identified a specific project impact, or purchase credits preemptively, before a specific project impact is identified. In the case of a preemptive purchase, the purchaser must apply the credits to a project impact after all feasible on-site mitigation has been exhausted and provide documentation of this back to the Program Manager. In the case of purchase for specific project impacts, the applicant should provide whatever technical analysis and CEQA documentation that has been completed which shows:

a. Does the Project have a significant transportation impact?
b. Has on-site mitigation been proposed?
c. Does the Project have a significant impact on transportation with all feasible on-site mitigation?

The Program Manager will review the provided materials and provide the applicant with a cost per VMT. Chapter 4.3 provides a summary of project level VMT mitigation needs.

The following presents two examples of hypothetical projects to demonstrate how VMT would be priced and reviewed during the approval process.

The first project unincorporated Valley Residential proposes to construct 241 multifamily residential units. This project represents a case where a smaller amount of VMT mitigation is needed. The second project, located in the unincorporated High Desert includes 248 single family homes. This project represents a case where a larger amount of VMT mitigation is needed. In these cases the Project's daily VMT and needed VMT reduction would have been previously calculated and would be presented to SBCTA as part of an application to the bank.

Table 14: Unincorporated Valley Residential VMT

Daily Project VMT/SP	Daily Jurisdiction Threshold VMT/SP	Annual Project VMT[1]	Annual Jurisdiction Threshold VMT	VMT Reduction Needed
14.52	14.44	2,711,973	2,697,031	14,942

1. Daily Project VMT per Service Population was annualized through the Service Population of 603 and an annualization factor of 310
2. Daily Jurisdiction Threshold VMT per Service Population was annualized through the Service population of 603 and an annualization factor of 310

Table 15: Unincorporated High Desert Residential VMT

Daily Project VMT/SP	Daily Jurisdiction Threshold VMT/SP	Annual Project VMT[1]	Annual Jurisdiction Threshold VMT	VMT Reduction Needed
27.28	24.81	6,291,859	5,722,178	569,681

1. Daily Project VMT per Service Population was annualized through the Service Population of 744 and an annualization factor of 310
2. Daily Jurisdiction Threshold VMT per Service Population was annualized through the Service population of 744 and an annualization factor of 310

By purchasing VMT credits or paying into a VMT bank at the amount of annual VMT reduction needed, these projects could result in a less-than-significant impact. However, since the goal of the program is to "lessen the significant" of the project and not fully mitigate the impacts, the ultimate credit purchased from the developer will be determined by the purchaser and the lead agency. The Bank may set the price and how much credit is available for purchase, but it does not determine how much VMT credit is needed for the project level VMT mitigation. The applicant should indicate how much VMT will be purchased and should provide documentation that this has been accepted by the lead agency. This can be done at the time of application if a project impact has been identified or provided later if credits are purchased preemptively.

To reduce the project below less-than-significant impact level for El Paseo, the VMT reduction per year need for this project is 14,942 VMT. If SBCTA sets the price per VMT for 20 years of mitigation at $0.67, the cost for the project to fully mitigate its VMT is $10,011, or $42 per home.

To reduce the project below less-than-significant impact level for Alta Mira, the VMT reduction per year need for this project is 569,681 VMT. If SBCTA sets the price per VMT for 20 years of mitigation at $0.67, the cost for the project to fully mitigate its VMT is $381,686, or $1,539 per home.

To ensure mitigation through the bank is accepted by the lead agency of the CEQA document for each specific project, SBCTA should develop agreements with local jurisdictions that allows the programs and projects included in the bank to be considered an acceptable mitigation measure.

Step 9 Distributing Funds

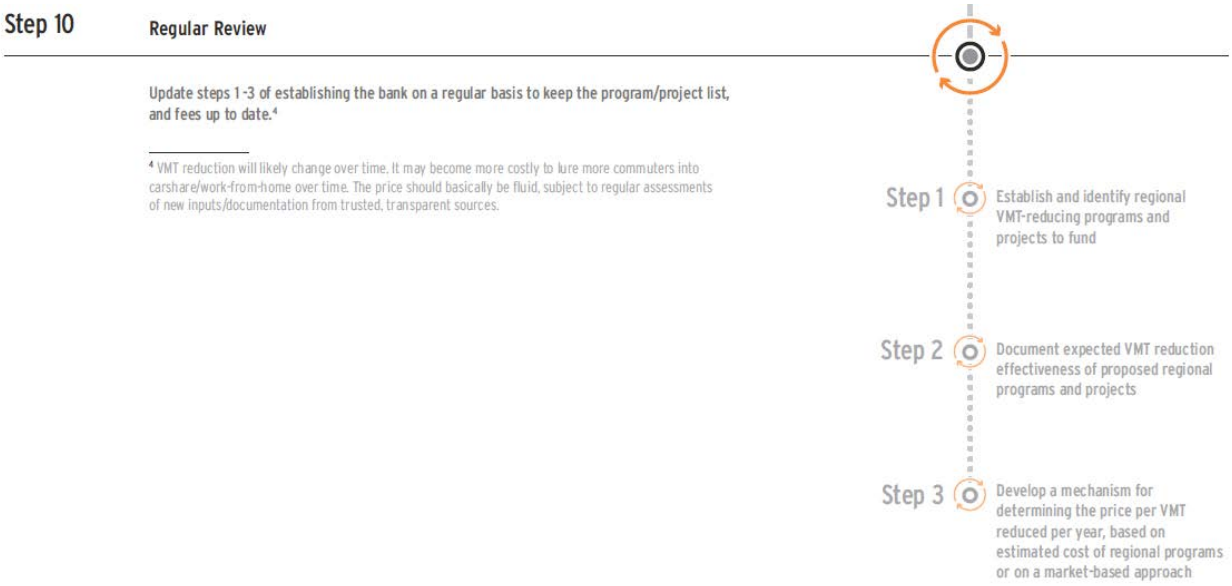
Project and program funds distributed based on budgets and allocations assumed in the fee development/reduction documentation.

Local jurisdictions/individual applicants may pay fees that support programs and projects not in their local area.[3]

[3] Funds be spent on VMT reductions as geographically close to the project as possible. As the IE Commuter Program draws employers and employees from all of San Bernardino County, any project located within the County would initially be within the geographic area of the bank.

The Program Manager would oversee the distribution of funds from the bank to the appropriate programs, initially to the Telework program. The Program Manager would also confirm and process the receipt of payment from project applicants or local jurisdictions.

The bank would also require **Step 10 – Regular Review**. We recommend that regular review happen annually, performed by the Program Manager. Detailed considerations for this review for the Telework Program are presented below.



5.2.3 Regular Review: Identify Programs

When the bank is being reviewed annually, the Program Manager should consider and submit for SBCTA approval if any projects or programs other than the Telework program should be included.

5.2.4 Regular Review: Monitoring

In order to provide documentation to allow for third-party verification of additionality and confirmation of program effectiveness, the IE Commuter/Telework program should have all new participants fill out the survey described above in Step 2. However, annual documentation of the expected VMT reduction effectiveness of the Telework Program will require some ongoing monitoring of participants. Different monitoring options are discussed below. Note that these options could potentially be combined.

5.2.4.1 Annual Surveys

This concept is the simplest and least expensive option. An annual survey to participants could be distributed in a similar way to how the program currently distributes surveys.

Currently in the program, annual surveys were completed by employers primarily because they were needed for South Coast AQMD Rule 2202 which mandates that some employers of 250 people or more report their Average Vehicle Ridership (AVR) annually. In order to provide the needed information to document the program's effectiveness and additionality as CEQA mitigation, participant surveys should become mandatory for participation in the program and receipt of financial incentives.

Employers who participate would likely need to distribute the survey to their individual employees. Rather than relying on employers to perform this task, at the time of signing up employers could be required to provide names and email contact information of the employees participating in the program. The annual survey to employer participants could include:

- Number of employees telecommuting
- Name and email of participating employees

Annual survey to all participants which solicits the following information:

- Home zip code
- Workplace zip code
- Days per week teleworking

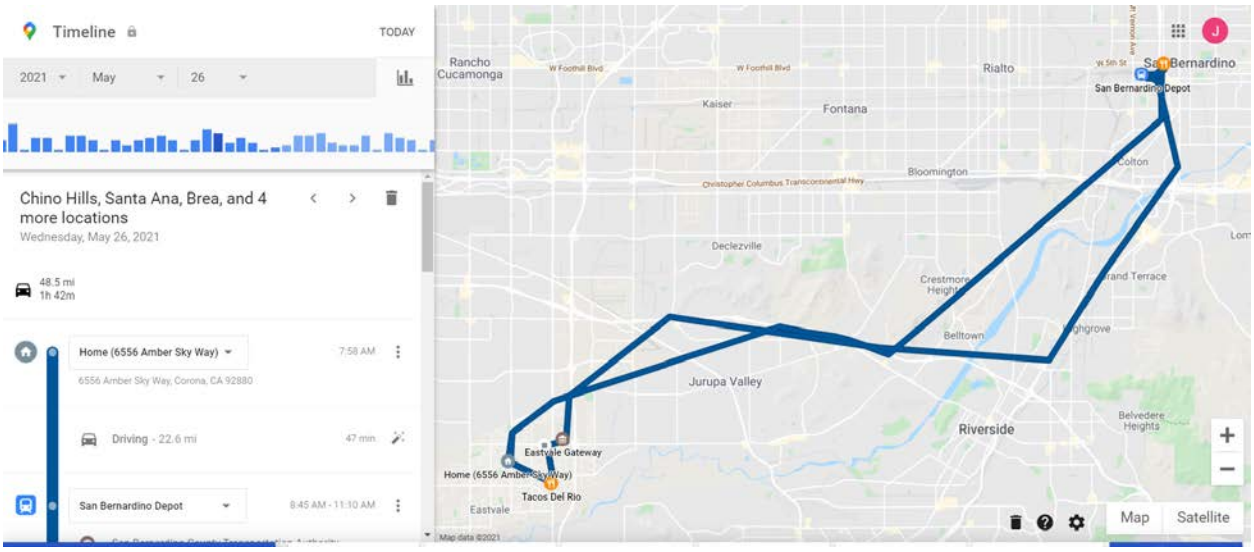
The annual survey could solicit additional information and details to obtain a more complete dataset regarding household travel and overall travel behavior, however it may discourage participation if the survey becomes too complicated.

5.2.4.2 Smart Phone App or Vehicle Dongle – Passive Tracking

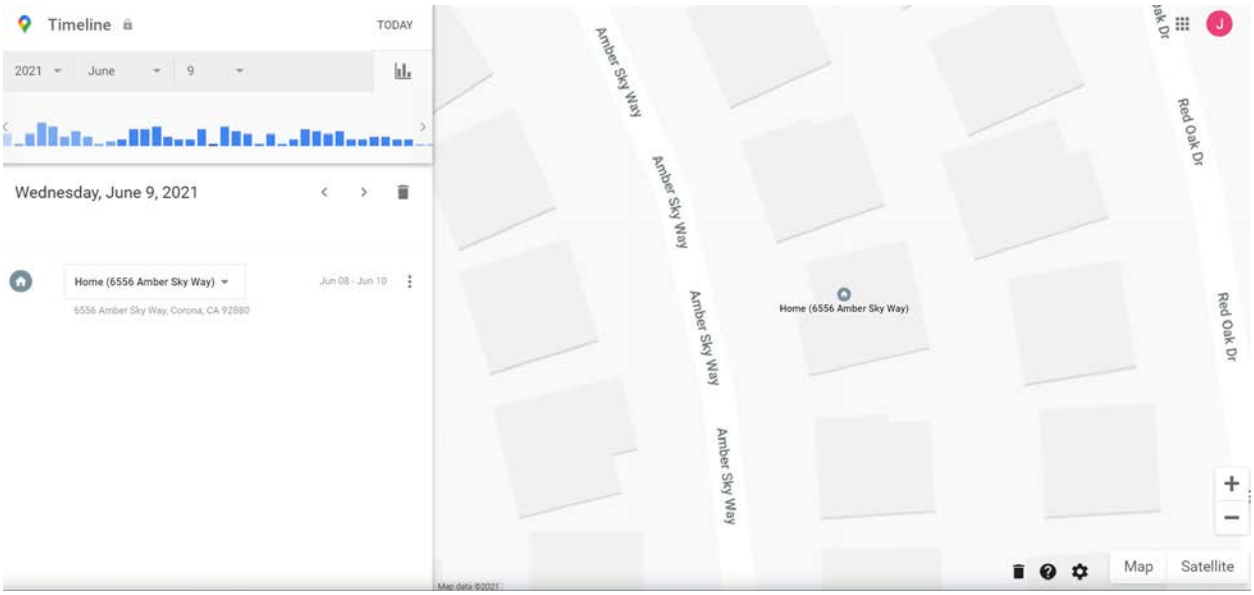
Under this concept, anyone receiving a benefit from the Telework Program would be required to download a smart phone application or install a tracking dongle at the time of signing up for the program. Under this concept, the app or dongle would passively track the participants travel throughout the day. This could capture how many trips they make and how far they travel daily.

The primary opportunity for earning credits at the beginning of the Program would be on an individual's HBW trips. There are currently phone apps that can log locations at discrete points in a trip, so participants would be able to verify a departure from home and arrival at work. There are also apps that

can establish that people are traveling together in a carpool (via Bluetooth communication among phones) and can distinguish whether the person is on transit or riding a bike. However, some manual logging and strategic trip verification is likely to be needed. While it is conceivable that other trip types could be included, there would need to be a way to establish a baseline for those trips. Tracking through a phone app already exists with Google. Below is an example of how Google Timeline tracks an individual's HBW trip.



Below also shows a telecommuting example when the HBW trip does not occur.

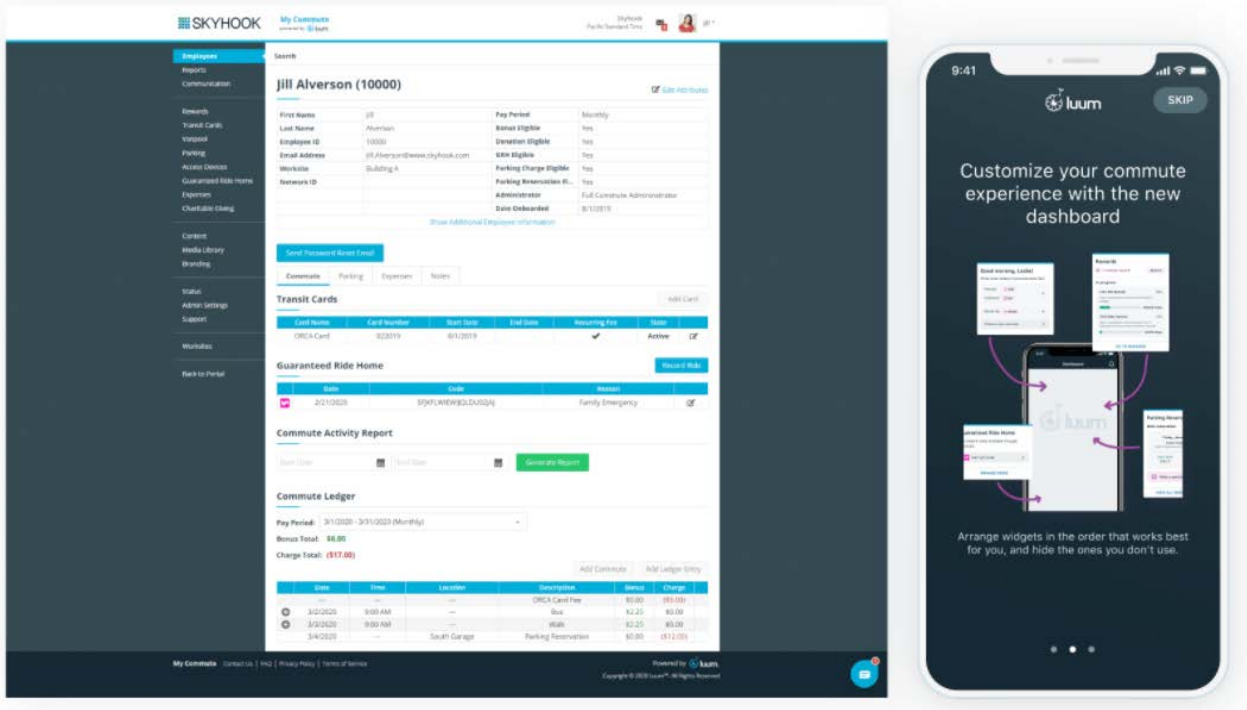


Example of Vehicle Dongle – Provided by Avantree

5.2.4.3 Smart Phone App – Participant Tracking

This concept operates in a similar way to the passive tracking app, only instead of the app tracking participants, participants would enter their travel manually into an app. This could be simplified to prompt only trips related to work (i.e. how many days per week did you telecommute this month?) or could prompt participants to log all their trip making. Like the annual survey, if the amount of data requested becomes burdensome, it may discourage participation.

This option would be lower cost and less technically complex than passive tracking but relies on participants regularly logging their travel. However, this could provide an alternative to a traditional survey which is more convenient for participants and provides a more complete dataset to the bank administrator.



Example of Active Tracking App – Provided by Luum

5.2.4.4 Big Data

The administrator could purchase big data which includes HBW VMT. Big data vendors typically allow their customers to define a geographic area and purchase data within that area. The administrator could purchase data annually in the home zip codes of participants and compare that to previous years and nearby zip codes with no participants to confirm that participation in the program reduces VMT.

This method requires no effort from participants and would be lower cost than the applications. It would likely still be higher cost than the annual surveys and would only be effective in capturing travel patterns at a "zonal" scale, would not be able to track or quantify individual participants or smaller employers.

5.2.4.5 Insurance Companies

The administrator could partner with a "pay-by-mile" insurance provider. Under this concept, participants would have the option to purchase car insurance from the partnered provider. The insurance company would then employ whatever methods they use for customers to track mileage and charge their fees based on miles driven. The insurance provider would report back to the administrator annually on the number of miles driven by participants.

This option would be lower cost and less technically complex than most other options. It also incentivizes participants to drive less through lowering their insurance bill. The insurance company could also act as a third-party verifier as well as data vendor in this instance, and they would collect and confirm the accuracy of all report data. Switching insurance providers could be a significant barrier for some participants and finding an insurance provider willing to partner with the administrator could be potentially challenging.

Table 16: VMT Mitigation Program Monitoring Options

Option	Pros	Cons	Estimated Cost
Annual Survey	• Common and accepted practice • Simple to execute • Low Cost	• Requires effort and participation from participants • May be challenging to reach individuals if employer signs up • May be challenging to fully capture all travel behavior outside of telework	$3,000 - $6,000 annually in staff time for administrator to develop, distribute, and process results of survey
Cell Phone App – Passive Tracking	• Data is collected passively and continuously, no effort required from participants • Ability to track a participant's complete travel behavior	• Time consuming and expensive to develop and maintain • Participants may have hesitation around allowing their movements to be tracked • May not be able to distinguish trip purpose or other nuances of travel	One-time custom app set up $100,000-$250,000 Cost for existing provider/platform will vary Ongoing data storage and app maintenance will vary annually
Dongle – Passive Tracking	• Data is collected passively and continuously, no effort required from participants • Ability to track a participant's complete travel behavior • Lower cost to purchase	• Time consuming and expensive to maintain • Participants may have hesitation around allowing their movements to be tracked • May not be able to distinguish trip purpose or other nuances of travel	One time dongle purchase $40 - $100 per dongle Ongoing data storage and app maintenance will vary annually
Cell Phone App – Participants Tracking	• Lower cost and technical complexity than passive tracking • Ability to have a participant log telecommuting and other travel activity	• Time consuming and expensive to develop and maintain • Requires effort and participation from participants	One-time custom app set up $100,000-$150,000 Cost for existing provider/platform will vary Ongoing data storage and server maintenance will vary annually

Option	Pros	Cons	Estimated Cost
Big Data	• No effort required from participants • Higher cost than survey, but lower cost than the apps • Ability to capture complete travel behavior	• Would only be effective in capturing travel patterns at a "zonal" scale, would not be able to track or quantify individual participants or smaller employers	$10,000 - $50,000 annually for purchase of data and in staff time for administrator to process data
Insurance Company	• Limited to no cost to administrator • Insurance provider acts as data vendor and third-party verifier	• Relies on participants willingness to change car insurance providers • May not be able to distinguish trip purpose or other nuances of travel	$0 Potentially some minimal cost in staff time for coordination

Whichever method or methods for collecting participant data is deployed, that data should be used to quantify the expected VMT benefit of the program as described above in Step 2. The data should also be reviewed annually under the same process as Step 4 by the third-party verifier to confirm additionality.

5.2.4.6 Telework Program Monitoring

An individual's VMT would be monitored daily through a mobile phone application. Participants would need to "opt in," with the explicit understanding that their trip-making would be logged/tracked, using parameters they, themselves, could set. They can control the extent to which they want to participate, and as part of participating, would sign off on the privacy policy.

The individuals would establish their own "baseline" Home-Based-Work (HBW) trip VMT by using the VMT app by providing home address and an employment address. The app will automatically track VMT credits that are generated during a typical working weekday (Monday – Friday) that the individual does not make the HBW trip. They would earn credits as the difference between their baseline VMT and their reduced VMT (any trips made during the workday, approximately 8 AM to 5 PM, would be deducted from the total credits earned, or a reduction factor could be applied based on telework research data). Credits would be deposited into the bank on a quarterly or bi-annual basis and verified annually by the Program Administrator and/or Third Party Verifier.

When participants change job locations, or home locations, they would have to reset their baseline. The job and/or home location would need to be reset in the app as well. This information would be subject to verification by the bank, to minimize abuse.

Annually, the Program Administrator and/or Third-Party Verifier should review and verify the Actual VMT Benefit from the previous year based on the data received from the participants.

$$A = B * C$$

$$D = (B - 2E) * C$$

$$Actual\ VMT\ Benefit = (A - D)$$

Table 17: Telework Actual VMT Reduction Calculation

	Parameter	Value
A	Participant VMT without Telework Program	--
B	Home-Based-Work trips per week before Telework Program	Varies[2]
C	Home-Based-Work trip length	Varies[1]
D	Participant VMT with Telework Program	--
E	Total Days Teleworking	Varies[2]

Notes:
1. Varies by establishing the Home-Based-Work (HBW) trip length for each participant using the home and workplace location entered in the tracking application.
2. This information should be provided by the participant through the tracking application.

Source: Fehr & Peers, 2021.

VMT Benefit as described above will be in the form of annual VMT.

Participants who do not reduce VMT or who do not maintain their tracking application should have their participation in the program discontinued following notification and a grace period.

At the end of the year, the potential VMT benefit from the previous year should be compared with the actual VMT benefit produced by participants and collected through ongoing monitoring. Potential VMT benefit for the coming year should be calculated as described above in Step 2, and the relationship between potential VMT benefit and actual VMT benefit for the prior year should be examined and inform the coming year estimation for potential VMT benefit.

5.2.5 Regular Review: Costs

Cost per VMT should be updated annually based on changes to the annual cost of the program and the potential VMT benefit quantified using the data collected through ongoing monitoring.

As noted above, this would also be the opportunity to consider a market-based or hybrid approach to pricing once there is a better understanding of the demand for VMT reduction.

The buying and selling could be established in several different ways. Ultimately, the supply of and demand for credits would drive the price. In an open market, greater demand would increase the price, which could motivate commuters to reduce VMT further and generate additional credits, which would push the price downward closer to demand. The mitigation bank would succeed only to the extent that commuters and other trip-makers are willing and able to reduce their VMT.

A continuously open market similar to a stock exchange. Credits could be bought and sold at any time within the market's operating hours. The generators of the credits would be in charge of when they wanted to put the credits on the market, and users of the credits would decide when they wanted to buy.

Buyers would need to be registered with the bank based on actual projects potentially in need of credits. In other words, it would not be open to independent investors that would leave the market more open to manipulation.

Periodic (e.g. quarterly) auctions. Project proponents would put in requests for purchase of VMT reduction credits, setting limits on the price they are willing to pay. Owners of the credits could set minimum price thresholds on their willingness to sell, and rules would be established governing these transactions.

A price for credits could be set by the bank, with sensitivity to the supply of and demand for credits. A large supply of credits in the bank would argue for a reduction in price. A small supply would argue for an increase in price. Purchases could only occur for CEQA mitigation purposes. Sales of credits would require protocols, such as first-credits-in are first-credits-sold. Buyers of credits could also be put on a waiting list, with transactions made at the current price based on the chronology of the request to buy.

The bank could buy the credits up front, based on the current price, and accumulate them for sale. The advantage would be that the commuters could be paid earlier, given that delayed payment could cause commuters to lose their motivation to reduce VMT. However, this would introduce an element of risk (or reward) for the bank, given that the ability to sell the credits at that price would not have been established. It is unlikely this level of risk could be assumed.

Mitigation credit "advances:" - The most desirable means of operating the bank would be that credits cannot be sold until they are actually earned and deposited in the bank. This is how an SBCTA-managed Mitigation Bank Program might initially start. However, project proponents may require more VMT credits than are available. Part of this depends on how many years out into the future mitigation must extend. VMT mitigation under CEQA in some cases could require, for example, 20 years of mitigation of the VMT that the project would generate. If sufficient credits are not available at the time of need, project proponents could opt to provide a one-time up-front payment, fully funding their CEQA VMT mitigation for that time period. The payment would be used to fund future credit payments and/or cost-effective VMT-reducing investments. This process is similar to what the South Coast Air Quality Management District (AQMD) has adopted under Rule 2202 (for employer-based trip reduction in-lieu fees) and the recently adopted Rule 2305, the Warehouse Indirect Source Rule (ISR). In Rule 2305, warehouse operators can pay a fee in lieu of paying directly for acquisition of clean trucks, clean fueling stations, electrified warehouse equipment, etc. These fees are then used by AQMD to provide incentives for these energy and air quality investments. No mitigation credit advances would be available at the start of the Program.

5.2.5.1 Marketing

It is expected that over time the cost to recruit and incentivize new participants may increase. Marketing will be a key component to the ongoing maintenance and viability of the program. Outreach will be required to enroll individuals and employers into the program. The Program Manager should employ a Marketing firm or specialist to oversee this effort.

Some strategies that SBCTA could employ to reach new participants could include:

- Social media

- Direct Mailers
- Partnership with local jurisdictions

5.3 Summary

The power of the proposed approach of incorporating a Regional VMT Mitigation Bank as an option within the IE Commuter/Telework Program is that the value of the credits would drive personal incentives to telework or take alternate modes. Over time as costs are reviewed annually, the bigger the need for credits, the higher the value of credits, which will incentivize more individuals to participate. This approach potentially greatly simplifies the process of administration by not burdening employers with record-keeping; rather, it goes directly to incentivizing the employees or residents of San Bernardino County. The employees can work in large or small businesses and still receive the incentives/rewards. There would be a more direct relationship between the program and choices the individual commuters are making. It is an efficient, lower-cost system than other VMT-reducing alternatives and can be easily scaled up.

The system should pass the additionality test because each individual is making choices, and they would not necessarily make those choices without the incentive created by the availability of credits. There is a mechanism for setting a valid baseline, and portions of the program would be self-verifying through the app, with a system set in place for verifying monitoring results that appear out of the norm, or spot checks on participant inputs.

An in-lieu fee process, if acceptable, would allow for greater certainty on the part of project proponents requiring mitigation of VMT impacts, and those funds would go toward paying for future VMT credits and/or other VMT reduction strategies.

Appendix A

Additional details on the six cases examined in Chapter 4 – Additionality are presented below.

Table A-1: Telework: Fixed-Cost Bank Program Additionality Test

Criteria where Additionality would NOT Be Satisfied	Test Result	Notes
Is the mitigation part of the descriptions of projects that will pay into the bank?	Passes Additionality Test	The administrator should confirm through the approval process that the project applicant is not proposing telework incentives or similar programs as part of TDM plan in the project description.
Is the mitigation project or program fully committed?	Passes Additionality Test	South Coast AQMD Rule 2202 mandates that some employers of 250 people or more report their Average Vehicle Ridership (AVR) annually. The IE Commuter program integrates surveys that enable employers to meet that mandate. Reporting AVR is complementary to the program, but the program still introduces new incentives, support, resources that encourage telework above and beyond what is included through the existing AQMD rule. Document that additional funds for this existing program will result in proportionally additional VMT benefits, per the "partially committed" discussion above. This program is not subject to CEQA and therefore CEQA approval is not a factor in determining if it is fully committed.
Is the mitigation program included in the conditions of approval for any approved, entitled, or under construction projects?	Passes Additionality Test	The administrator should confirm through the approval process that the project applicant is not proposing telework incentives or similar programs as part of TDM plan if the project is proposing mitigation.

Table A-2: Telework or School Pool: Market-Based Bank Additionality Test

Criteria where Additionality would NOT Be Satisfied	Test Result	Notes
Is the mitigation program part of the project descriptions of projects that will pay into the bank?	Passes Additionality Test	The project applicants 'buying' credits would not be instituting the VMT reducing programs and 'selling' credits to the exchange.
Is the mitigation project or program fully committed?	Potentially Passes Additionality Test	As these programs are already being funded and instituted by others, they could be considered fully funded. However, this model could cover the cost of and incentivize further investments in employee infrastructure, telework, school pools or other TDM programs. Documentation would need to be provided showing that funding by others is required or the 'owner' of the program would be unable to fund it. This program is not subject to CEQA and therefore CEQA approval is not a factor in determining if it is fully committed.
Is the mitigation program included in the conditions of approval for any approved, entitled, or under construction projects?	Passes Additionality Test	Projects that implement telework, school pools, or other VMT reducing programs as part of required CEQA mitigation should not sell their VMT credits to the exchange.

Table A-3: Brightline Additionality Test

Criteria where Additionality would NOT Be Satisfied	Test Result	Notes
Is the mitigation program part of the project descriptions of projects that will pay into the bank?	Passes Additionality Test	Brightline will not be funded by individual development projects which will contribute to the bank.
Is the mitigation project or program fully committed?	Potentially Passes Additionality Test	Brightline will be privately funded but is not fully financed. It is not expected that the project would be fully funded through available funding sources. As this is partially funded, it would only partially meet this criteria, and considerations for partially funded projects should be reviewed. Additionally, fully funding Brightline through a VMT bank would be economically infeasible, due to the high cost of the proposed project relative to the likely revenue stream from a VMT bank. Brightline is not subject to CEQA as it is a Federal Railroad Administration project and therefore CEQA approval is not a factor in determining if it is fully committed.
Is the mitigation program included in the conditions of approval for any approved, entitled, or under construction projects?	Passes Additionality Test	Brightline will not be conditioned on individual projects which will contribute to the bank.

Table A-4: VMT Reducing Infrastructure Additionality Test

Criteria where Additionality would NOT Be Satisfied	Test Result	Notes
Is the mitigation program part of the project descriptions of projects that will pay into the bank?	Passes Additionality Test	Applicants must demonstrate and the administrator must confirm at the time that applicants purchase VMT credits or pay into the bank that unfunded bike and pedestrian projects are not included in the project description. If the project description includes construction of bike and pedestrian infrastructure, the fee and benefit must be updated to reflect the removal of that project from the bank project list.
Is the mitigation project or program fully committed?	Passes Additionality Test	The bike and pedestrian infrastructure do not have identified funding in the *San Bernardino County Non-Motorized Transportation Plan*. The administrator should confirm that local jurisdictions have not funded the improvements through local impact fees or other funding sources. New local shuttle and transit connectors would be proposed as new projects, as long as those projects are not funded. The *San Bernardino County Non-Motorized Transportation Plan* is not subject to CEQA and therefore CEQA approval is not a factor in determining if it is fully committed. Any new local shuttle, transit connectors, or other VMT-reducing infrastructure would not similarly be exempt from CEQA.
Is the mitigation program included in the conditions of approval for any approved, entitled, or under construction projects?	Passes Additionality Test	When the administrator regularly reviews and updates the list of included projects, they should confirm this criteria continues to be met for all bike, pedestrian, and transit projects funded through the bank.

Table A-5: VMT Reducing Programs Additionality Test

Criteria where Additionality would NOT Be Satisfied	Test Result	Notes
Is the mitigation program part of the project descriptions of projects that will pay into the bank?	Passes Additionality Test	Applicants must demonstrate and the administrator must confirm at the time that applicants purchase VMT credits or pay into the bank that unfunded transit pass subsidies and active transportation education programs are not included in the project description. If the project description includes funding for these programs, the fee and benefit must be updated to reflect the removal of that program from the bank project list.
Is the mitigation project or program fully committed?	Potentially Passes Additionality Test	Because the safety and education programs in the *San Bernardino County Non-Motorized Transportation Plan* are already being funded and instituted by local jurisdictions, they could be considered fully funded. However, the project mitigation could incentivize and cover the cost of expanded programs or enable jurisdictions previously not instituting these programs to launch them. Funding to local transit providers to support a free or reduced cost transit pass program would completely meet this criteria if there are no existing transit pass programs. If funding were used to expand an existing free or reduced cost transit pass program, it would partially meet this criteria, especially if the program claimed credit solely for the additional VMT benefits attributed exclusively to the increase in mitigation support for the program. Document the incremental VMT benefits associated directly with the increase in funding from mitigation dollars. Most or all VMT-reducing programs would likely be exempt from CEQA and therefore CEQA approval is not a factor in determining if it is fully committed.

Criteria where Additionality would NOT Be Satisfied	Test Result	Notes
Is the mitigation program included in the conditions of approval for any approved, entitled, or under construction projects?	Passes Additionality Test	When the administrator regularly reviews and updates the list of included projects, they should confirm this criteria continues to be met for all bike, pedestrian, and transit programs funded through the bank.

Table A-6: Mileage Based Fee or VMT Fee Additionality Test

Criteria where Additionality would NOT Be Satisfied	Test Result	Notes
Is the mitigation program part of the project descriptions of projects that will pay into the bank?	Passes Additionality Test	Individual projects will not institute mileage-based fees or VMT fees
Is the mitigation project or program fully committed?	Potentially Passes Additionality Test	The SCAG RTP currently includes further research, development, and demonstration of mileage-based user fees; however, no funding is identified. If SCAG were to fund or implement this program it would not meet this criteria for inclusion in a bank. Furthermore, once launched, the program should be self-sustaining, with revenue from the fees/taxes covering any administrative costs. At that point, the program fails the additionality test.
Is the mitigation program included in the conditions of approval for any approved, entitled, or under construction projects?	Passes Additionality Test	Individual projects will not institute mileage-based fees or VMT fees