

Memorandum

5.3

1111 Broadway, Suite 800, Oakland, CA 94607

510.208.7400

www.AlamedaCTC.org

DATE: May 30, 2019

TO: Alameda County Technical Advisory Committee

FROM: Carolyn Clevenger, Director of Planning

Saravana Suthanthira, Principal Transportation Planner

Kristen Villanueva, Senior Transportation Planner

SUBJECT: Plan Bay Area 2050 update and approval of project submissions for

Plan Bay Area 2050

Recommendation

Receive update on Plan Bay Area 2050, the Bay Area's next Regional Transportation Plan, and approve submission of projects in Alameda County for consideration for inclusion in Plan Bay Area 2050. Upon approval, the list and associated project details will be sent to MTC to meet their timeline of June 30, 2019.

Summary

The Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG) have been working on the update to Plan Bay Area (PBA), the region's long-range Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). This update, known as PBA 2050, goes out to 2050, and will be adopted in mid-2021. MTC/ABAG has been developing PBA 2050 across two phases: 1). Visionary concepts and future scenario planning in the first phase, referred to as "Horizon," and 2). Traditional planning and financial analysis in the second phase, referred to as "PBA 2050." An initial update on this process was presented to the Commission in May 2018. This agenda item will provide a high level update on work completed as part of the Horizon effort since May 2018 including a summary of future scenarios and outline how MTC is envisioning the Horizon effort to feed into PBA 2050. In addition, this item describes a request for project information that MTC has solicited from county transportation agencies on transportation projects for PBA 2050 and includes recommendation by the Commission to approve these projects for submission to MTC for consideration.

In March 2019, MTC requested information via the county transportation agencies on transportation projects for consideration for PBA 2050 that would be considered "regionally significant, non-exempt" for air quality modeling purposes of the RTP/SCS. Alameda CTC staff subsequently reached out to ACTAC members to update projects of this

type from the last regional plan, the 2016 Countywide Transportation Plan (2016 CTP), and to provide information on any new non-exempt projects from local planning initiatives. These projects are detailed in Attachment A.

To submit these projects for consideration for PBA 2050, MTC is requiring board approval of the projects by June 30, 2019. Note that Attachment A only includes large "exempt" projects, which are projects that are more operational in nature or address safety such as complete streets. The majority of remaining "exempt" projects will be bundled into **programmatic categories** for the RTP/SCS. MTC plans to update these programs in the fall, at which time Alameda CTC will again coordinate submission for the county.

In addition, Alameda CTC is starting work on the next countywide transportation plan, which will be called the 2020 Countywide Transportation Plan (2020 CTP). As with previous cycles, the CTP is designed to inform the RTP/SCS. County projects are typically listed in detail in the CTP, whereas the RTP/SCS focuses on large regional projects, with the majority of local projects and programs included as general programmatic categories. Alameda CTC has been actively engaged in the PBA 2050 update process, acting as the county's coordination agency for MTC, and is working to closely coordinate update efforts across the RTP/SCS and CTP. Staff plans to bring a full update of the 2020 CTP, including approach and planned engagement, to PPLC in July.

Background

MTC/ABAG, the Bay Area's transportation and land use planning agencies, have been working on the update to the Plan Bay Area called PBA 2050. The overall schedule is included as Attachment B. The update will occur in two phases:

- 1. Horizon or "Blue Sky" Planning: this effort has been underway for a year and a half and will be completed in fall 2019.
- 2. PBA 2050: This will cover the traditional regional planning process including identifying a preferred scenario, identifying a set of financially-constrained transportation projects, and performing the RTP/SCS environmental clearance.

Alameda CTC has been actively engaged in this process through participating in various forums including the Regional Advisory Working Group (RAWG) and County Transportation Agency coordination meetings.

Horizon

Horizon is a new planning process that leverages new techniques in exploratory scenario planning, embracing uncertainty as a central element of the long-range planning process. Horizon is intended to address a range of topics including but not limited to transportation and land use but also economic development, resilience and the effects of emerging technologies. Key features of Horizon/PBA 2050 initiative which are briefly described below include: Perspective Papers, Futures, Project Performance and Outreach. An overarching five guiding principles that are intended to frame or guide this process were developed in Summer 2018: Affordable, Connected, Diverse, Healthy and Vibrant.

- Futures Three Futures scenarios were created that include divergent aspects across key assumptions related to a variety of factors such as the future of federal environmental regulation, transportation technology deployment, regional economic prosperity, preferences for home locations and sizes, levels of federal infrastructure funding, major earthquakes, and levels of sea level rise. These Futures are called: Clean and Green, Back to the Future, and Rising Tides and Falling Futures. More information on the key assumptions in each of the Futures is included in the Attachment C. These futures will be used to test the merits of policy strategies and transportation projects that the Bay Area could consider including in PBA 2050.
- Perspective Papers Six papers are being published covering big ideas that the region is currently grappling with, such as autonomous vehicles, climate mitigation and regional growth strategies. The outcome for each paper is a set of high impact strategies that could be major drivers in shaping the region. Four have been released so far on technology, shared mobility, land use, and the future of jobs. The two remaining will cover potential new Bay Crossings and effects of sea level rise. The perspective paper on Land Use, titled "Regional Growth Strategies" identified proposed changes related to land development strategies including Priority Development Areas (PDAs). This change impacts a number of the existing PDAs in Alameda County, and Alameda CTC is coordinating with MTC and local jurisdictions to address this issue.
- Project Performance Similar to prior planning cycles, Horizon includes a Project Performance Assessment for major transportation investments. The assessment will identify costs and benefits of different transportation projects in each of the three Futures mentioned above. This assessment will be done for mega, transformative projects, which are those that would cost more than \$1 billion, and for major projects that generally cost more than \$250 million. Results from this performance assessment are anticipated in fall 2019.

As shown in Attachment B, the Horizon process will be completed in fall 2019. Informed by the outcomes of the above three elements, MTC/ABAG will develop a draft Preferred Scenario to transition to PBA 2050.

Transportation Projects for Approval

One major component of the regional plan is a fiscally constrained list of transportation projects and programs. As MTC/ABAG is transitioning from Horizon to preparation of PBA 2050, they have requested information on transportation projects that should be considered for inclusion in the RTP/SCS. Solicitations for transportation projects are occurring over three steps:

1. Request for transformative projects: In late 2018, MTC started the process with a call for regional projects that could "transform" the region and that cost over \$1 billion. MTC received 35 applications from public agencies. In Alameda County, Alameda CTC, Oakland, Newark, AC Transit, ACE, Caltrans, BART, and the Tri-Valley San Joaquin Valley Regional Rail Authority submitted projects for consideration. (As a reminder, the Commission reviewed the list of projects that Alameda CTC was planning to submit in

- May 2018.) A list of transformative projects that Alameda CTC submitted to MTC is included in Attachment A. A list of transformative projects submitted by other public agencies in Alameda County is included in Attachment D.
- 2. Update to the **regionally-significant**, **non-exempt projects**, which are projects that significantly change road or transit capacity or are regionally significant based on project cost. This is the content of the current project solicitation by MTC and more information is provided below.
- 3. Update projects that are **not regionally-significant and are exempt**. These will be grouped into programmatic categories in the RTP/SCS. These project types represent the majority of projects that are planned and underway in our county such as bike lanes and streetscape projects. Alameda CTC will start collecting this information later this summer for submittal to the RTP/SCS.

The current request, which MTC has asked the county transportation agencies to facilitate, is for **regionally-significant**, **non-exempt projects**. In April, Alameda CTC staff reached out to ACTAC members to update projects of this type from the last regional plan, the 2016 Countywide Transportation Plan (2016 CTP), and provide information on any new non-exempt projects agencies have developed as part of local planning initiatives in the meantime. MTC has requested that multi-county transit agencies submit projects directly to MTC. For reference, we are including the regional transit projects that agencies have informed us may be submitted in Attachment E.

In the context of PBA 2050, a project proposal will be deemed **regionally-significant**, **non-exempt** if it meets any of the following:

- Expands or extends the principal arterial system (length must be greater than ¼ mile)
- Expands or extends a roadway to become part of the principal arterial system (length must be greater than 1/4 mile)
- Reduces the number of lanes (e.g., road diet) of the principal arterial system (length must be greater than $\frac{1}{4}$ mile)
- Adds new or expands access to the principal arterial system (e.g., new interchanges or interchange modifications that add capacity)
- Extends or expands the fixed guideway transit infrastructure
- Adds new or expands transit stations or terminals, including parking facilities
- Expands transit fleets or service levels (e.g., increased frequency, hours of operation)
- Alters the cost for users of the transportation system (e.g., cordon pricing, tolling, transit fares).
- Is a large project that would otherwise be considered exempt (e.g. full build out of the SF Bay Trail)

An update to the remainder of project types, which includes exempt projects and programs, will be carried out in fall 2019 for the purposes of PBA 2050. MTC will also estimate costs associated with local streets and roads maintenance and transit operating and capital expenses out to 2050, which will affect the amount of future revenues that

could be assumed for projects. Alameda CTC will be actively participating in this step later this year and will continue to coordinate project updates on behalf of the county. It is anticipated that throughout this process, updates and changes will be made, and being included in Attachment A is not a guarantee that a project will be included in the final PBA 2050.

PBA 2050 Near Term next steps

For additional information on PBA 2050 background and activities, see MTC website on Horizon Process. As mentioned above (See Attachment B), Horizon will be completed in fall 2019, and is expected to identify high performing and resilient policies and projects based on the outcome from the Futures analysis, Perspective Papers, and Project Performance. Alameda CTC staff will continue to be actively engaged in this process and provide comments on the process and deliverables and seek Commission action, as appropriate.

Fiscal Impact: There is no fiscal impact associated with the requested action.

Attachments:

- A. Alameda CTC Resolution 19-004 and Draft Regionally Significant Projects for Alameda County
- B. Plan Bay Area 2050 Update Process Overview and Elements
- C. Summary of Futures
- D. Transformative Projects submitted by other public agencies in Alameda County
- E. Regional Transit Projects for Alameda County as of May 28, 2019





1111 Broadway, Suite 800, Oakland, CA 94607

510.208.7400

www.AlamedaCTC.org

Commission Chair

Supervisor Richard Valle, District 2

Commission Vice Chair Mayor Pauline Cutter.

City of San Leandro

AC Transit

Board Vice President Elsa Ortiz

Alameda County

Supervisor Scott Haggerty, District 1 Supervisor Wilma Chan, District 3 Supervisor Nate Miley, District 4 Supervisor Keith Carson, District 5

BART

Vice President Rebecca Saltzman

City of Alameda

Mayor Marilyn Ezzy Ashcraft

City of Albany

Mayor Rochelle Nason

City of Berkeley

Mayor Jesse Arreguin

City of Dublin Mayor David Haubert

City of Emeryville

Councilmember John Bauters

City of Fremont Mayor Lily Mei

City of Hayward Mayor Barbara Halliday

City of Livermore

Mayor John Marchand

City of Newark

Councilmember Luis Freitas

City of Oakland

Councilmember At-Large Rebecca Kaplan

Councilmember Sheng Thao

City of Piedmont Mayor Robert McBain

City of Pleasanton

Mayor Jerry Thorne

City of Union City

Mayor Carol Dutra-Vernaci

Executive Director

Arthur L. Dao

ALAMEDA COUNTY TRANSPORTATION COMMISSION RESOLUTION 19-004

Resolution approving regionally-significant projects in Alameda County for submittal to the Metropolitan Transportation Commission for consideration for inclusion in Plan Bay Area 2050

WHEREAS, the Metropolitan Transportation Commission (MTC) has initiated an update of the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), also known as Plan Bay Area 2050; and

WHEREAS, on March 4, 2019, MTC issued a request for regionally-significant projects for the update of the RTP/SCS as well as guidelines that defined the term "regionally-significant" for purposes of this submission; and

WHEREAS, MTC has requested Congestion Transportation Agencies (CTAs) to coordinate the submission of projects for each respective county; and

WHEREAS, as the CTA for Alameda County, Alameda County Transportation Commission (Alameda CTC) coordinated with members of the Alameda County Technical Advisory Committee (ACTAC), transit agencies, and internal project managers to update projects in the 2016 Countywide Transportation Plan (2016 CTP), and the current RTP/SCS, and solicit new projects for purposes of this submission; and

WHEREAS, Alameda CTC developed the attached proposed regionally-significant projects for consideration for Plan Bay Area 2050;

NOW, THERFORE BE IT RESOLVED, The submittal of the projects as attached to this resolution to MTC for consideration for Plan Bay Area 2050 is approved: and

The Clerk of the Alameda CTC is hereby directed to forward a copy of this Resolution to MTC.

Alameda County Transportation Commission Resolution 19-004 Page 2 of 2

DULY PASSED AND ADOPTED by the Alameda CTC Commission at the regular Commission meeting held on June 17, 2019 in Oakland, California, by the following vote:

AYES:	NOES:	ABSTAIN:	ABSENI:	
SIGNED:		ATTEST:		
Richard Vo	_	Vanessa Le		
Chair, Alar	neda CIC	Clerk of the	e Commission	

Project costs are estimates and subject to change as projects move through development and PBA 2050 processes Project costs include an estimate of operations costs through 2050 and are in millions of Year-of-Expenditure \$ RTP ID is "New" if project was included in a program for PBA 2040 or is new for this RTP cycle

Part	RTP IL	P ID is "New" if project was included in a program for PBA 2040 or is new for this RTP cycle									
211.222 71.00014 AACAMIC Son Frencisco Bay Field 1364 Lings Bis Feed Lings Exempt Under Unde	#		PBA 2040 ID	Lead Agency	Project Title		Project Type	Submission Type			
2 4 17-10 0000 AC. Transit AC Transit Non-Desimpt 4 70 New AC Transit AC Transit AC Transit AC Transit AC Transit Non-Desimpt 5 New AC Transit AC Transit Non-Desimpt \$1.35 Transit Non-Desimpt 6 New ACT Start AC Transit Non-Desimpt \$1.50 Transit Non-Desimpt 7 392 New Actornation Non-Desimpt Non-Desi	1		17-10-0014	ABAG/MTC	San Francisco Bay Trail	\$354		Large Exempt			
New AC Tonst Tonst Tonst Tonst	2	4	17-10-0060	AC Transit	AC Transit: East Bay Bus Rapid Transit	\$206	Transit				
4 70 New AC Transit New AC Transit Ac Transit New			New	AC Transit		\$300	Transit	Non-Exempt			
New AC Terrait		70						·			
Alternation						·		·			
7 332 New Alameda County Niles Caryon Trail S156 Large Britain Ped Lar					Altamont Corridor Vision - Mid-Term (Alameda County	·		· ·			
8 2.5 17-01-0001 Alarmeda CTC East Bay Creenway \$421 Longe Bike Ped Longe Exempt 9 302 17-01-0015 Alarmeda CTC 7th Street Grade Separation Fast and RTIS \$355 Port Roli Lorge Exempt 10 303 17-01-0018 Alarmeda CTC 7th Street Grade Separation West \$245 Port Roli Lorge Exempt 11 318 17-01-0019 Alarmeda CTC -880 Integrated Confoct Mobility (LCM) \$146 Technology Non-Exempt 19 150 17-01-0020 Alarmeda CTC -880 Wilston Sobulevard Cross Connector Improvements \$912 Express Lorses and Express Lorses and Express Lorses and Express Asia Non-Exempt 14 160 17-01-0024 Alarmeda CTC -880 Wilston Avenue A Street Interchange Reconstruction \$114 Modernization Non-Exempt 15 27 17-01-0028 Alarmeda CTC -880 Wilston Avenue A Street Interchange Reconstruction \$114 Modernization Non-Exempt 16 37 17-01-0023 Alarmeda CTC Re 8 Wildening, south of Ruby HIID to 14-80 \$224 </td <td></td> <td>220</td> <td></td> <td></td> <td></td> <td></td> <td>Major Trails and</td> <td></td>		220					Major Trails and				
9 302 17-01-0015 Alarmeda CTC 7th Street Grade Separation East and RTS \$355 Port Rail Large Exempt 10 303 17-01-0018 Alarmeda CTC 7th Street Grade Separation West \$265 Port Rail Large Exempt 11 318 17-01-0019 Alarmeda CTC \$80 Integrated Corridor Mobility (ICM) \$146 Technology Non-Exempt 12 150 17-01-0021 Alarmeda CTC \$8.00 Millson Boulevard Cross Connector Improvements \$912 Express Bus Non-Exempt 13 36 17-01-0021 Alarmeda CTC \$80 Millson Avenue A Street Interchange Reconstruction \$114 Modernization Non-Exempt 15 27 17-01-0028 Alarmeda CTC \$80 Winton Avenue A Street Interchange Reconstruction \$11.30 Modernization Non-Exempt 15 27 17-01-0032 Alarmeda CTC \$80 Winton Avenue A Street Interchange Reconstruction \$11.30 Modernization Non-Exempt 16 37 17-01-0032 Alarmeda CTC \$80 Winton Avenue Access Project \$11.31 Modernization				,			Major Trails and				
10 303 17-01-0018 Alomedo CTC 7th Street Grade Separation West \$255 Port Rail Large Exempt						·					
11 318 17-01-0019 Alomedo CTC \$80 Integrated Corridor Mobility (ICM) \$146 Technology Non-Exempt 12 150 17-01-0020 Alomedo CTC \$8-242 Mission Boulevard Crass Connector Improvements \$912 Express Law Supress Sun Sun Supress Sun Sun Supress Sun Sun Supress						·					
12				Alameda CTC			Port Rail	Large Exempt			
13 36 17-01-022 Alameda CTC E88/Whilipple Rd Industrial Pkwy SW I/C Imps \$174 Interchange Modernization Non-Exempt 14 160 17-01-0024 Alameda CTC E880 Winton Avenue A Street Interchange Reconstruction \$114 Modernization Non-Exempt	11	318	17-01-0019	Alameda CTC	I-580 Integrated Corridor Mobility (ICM)	\$146		Non-Exempt			
13 36 17-01-0021 Alameda CTC 1-880/Minton Avenue A Street Interchange Reconstruction \$114 Modemization Non-Exempt Non	12	150	17-01-0020	Alameda CTC	SR-262 Mission Boulevard Cross Connector Improvements	\$912		Non-Exempt			
14 160 17-01-0024 Alameda CTC 1-880 Winton Avenue A Street Interchange Reconstruction \$11.4 Modemization Non-Exempt	13	36	17-01-0021	Alameda CTC	I-880/Whipple Rd Industrial Pkwy SW I/C Imps	\$174	Modernization	Non-Exempt			
15 27 17-01-0028 Alameda CTC L-880/680 Interchange HOV/HOT Widening \$1,500 Modemization Non-Exempt	14	160	17-01-0024	Alameda CTC	I-880 Winton Avenue A Street Interchange Reconstruction	\$114	Modernization	Non-Exempt			
17 33 17-01-0030 Alameda CTC Dakland/Alameda Access Project \$113 Modemization Non-Exempt	15	27	17-01-0028	Alameda CTC	I-580/680 Interchange HOV/HOT Widening	\$1,500		Non-Exempt			
17 33 17-01-0030 Alameda CTC Oakland/Alameda Access Project \$113 Modemization Non-Exempt Under Construction Interchange Under Construction Under Construc	16	37	17-01-0029	Alameda CTC	Rte 84 Widening, south of Ruby Hill Dr to I-680	\$234		Non-Exempt			
18 32 17-01-0331 Alameda CTC 1-880 North Safety Improvements \$109 Modemization Construction Under Construction Under Construction Interchange Interchange Interchange Interchange Interchange Interchange Interchange Interchange Non-Exempt Interchange Non-Exempt Interchange Non-Exempt Interchange Non-Exempt Non-Exe	17	33	17-01-0030	Alameda CTC	Oakland/Alameda Access Project	\$113	Modernization				
17-01-0032 Alameda CTC SR 84 Expressway Widening \$120 Road Midening Construction	18	32	17-01-0031	Alameda CTC	I-880 North Safety Improvements	\$109					
123 17-01-0037 Alameda CTC H80/Ashby Avenue Interchange Improvements \$52 Modemization Non-Exempt	19	37	17-01-0032	Alameda CTC	SR 84 Expressway Widening	\$120	Road Widening				
21 31 17-01-0040 Alameda CTC L80 Gilman Street Interchange Improvements \$55 Modemization Non-Exempt	20	123	17-01-0037	Alameda CTC	I-80/Ashby Avenue Interchange Improvements	\$52		Non-Exempt			
22 6 17-10-0003 Alameda CTC San Pablo Avenue Corridor Project \$300 Transit Non-Exempt 1-680 Express Lanes (NB): Automail Pkwy to SC County Line Phase 2 Express Lanes and Express Bus Non-Exempt 28 17-10-0058 Alameda CTC Phase 2 Phase 2 Phase 2 Phase 2 September 1-680 Express Lanes (NB): SR-84 to Automail Pkwy Phase 1 Phase 2 Express Lanes and Express Bus Non-Exempt 25 30 17-10-0058 Alameda CTC Phase 2 Ph	21	31	17-01-0040	Alameda CTC	I-80 Gilman Street Interchange Improvements	\$55	-	Non-Exempt			
F-880 Express Lanes (NB): Automail Pkwy to SC County Line Express Lanes and Expr		6									
24 28 17-10-0058 Alameda CTC I-680 Express Lanes (NB): SR-84 to Automall Pkwy Phase 1 \$236 Express Lanes and Large Exempt 1 100, 147, 17, 18, 100, 187, 187, 188, 188, 188, 188, 188, 188					I-680 Express Lanes (NB): Automall Pkwy to SC County Line		Express Lanes and				
25 30 17-10-0062 Alameda CTC I-680 Express Lanes; SR-84 to Alcosta \$480 Express Lanes and Express Bus Non-Exempt 26 325 New Alameda CTC Student Transit Pass Program \$850 Transit Large Exempt 27 273, 284, New Alameda CTC Rail Safety and Connectivity \$1,070 Transit Large Exempt 28 326 New Alameda CTC Safe Routes to School \$1,138 Other Large Exempt 29 New Alameda CTC Safe Routes to School \$1,138 Other Express Lanes and Express Lanes and Implementation \$786 Express Lanes and Lane Lane Lane Lane Lane Lane Lane Lane							Express Lanes and				
26 325 New Alameda CTC Student Transit Pass Program \$850 Transit Large Exempt 100, 147, 27 273, 284, New Alameda CTC Rail Safety and Connectivity \$1,070 Transit Large Exempt 28 326 New Alameda CTC Safe Routes to School \$1,138 Other Large Exempt 1-580 Design Alternatives Assessments (DAAs) Express Lanes and Express Bus Non-Exempt 29 New Alameda CTC I-680 Express Bus to Silicon Valley \$479 Express Bus Non-Exempt 20 Non-Exempt 20 New Alameda CTC I-680 Express Bus to Silicon Valley \$479 Express Bus Non-Exempt 21 Non-Exempt 22 Non-Exempt 23 Non-Exempt 24 Non-Exempt 25 New Berkeley Shattuck Complete Streets and De-couplet \$77 Road Diet Non-Exempt 26 Non-Exempt 27 Non-Exempt 28 Non-Exempt 29 Non-Ex						·	Express Lanes and				
100, 147, 27 273, 284, New Alameda CTC Rail Safety and Connectivity \$1,070 Transit Large Exempt					·	·	·				
28 326 New Alameda CTC Safe Routes to School \$1,138 Other Large Exempt 1-580 Design Alternatives Assessments (DAAs) 29 New Alameda CTC Implementation \$786 Express Bus Non-Exempt 30 New Alameda CTC I-680 Express Bus to Silicon Valley \$479 Express Bus Non-Exempt 31 New Alameda CTC E14th/Mission Blvd Corridor Project \$330 Transit Non-Exempt 32 107 New Berkeley Shattuck Complete Streets and De-couplet \$7 Road Diet Non-Exempt 33 105 New Berkeley Southside Complete Streets & Transit Improvement \$9 Road Diet Non-Exempt 34 New CCJPA Oakland to San Jose Phase 2A (OSJ2A) \$271 Transit Non-Exempt 35 57 17-01-0009 City of Alameda New Alameda Point Ferry Terminal \$22 Transit Non-Exempt 36 69 17-01-0061 City of Alameda Orbus Dameda Orbus Damed		100, 147,				·					
1-580 Design Alternatives Assessments (DAAs) 5786 Express Lanes and Express Bus Non-Exempt	27	273, 284,	New	Alameda CTC	Rail Safety and Connectivity	\$1,070	Transit	Large Exempt			
New Alameda CTC I-680 Express Bus to Silicon Valley \$479 Express Lanes and Express Bus Non-Exempt New Alameda CTC E14th/Mission Blvd Corridor Project \$330 Transit Non-Exempt	28	326	New	Alameda CTC		\$1,138		Large Exempt			
New Alameda CTC E14th/Mission Blvd Corridor Project \$330 Transit Non-Exempt	29		New	Alameda CTC	Implementation	\$786		Non-Exempt			
32 107 New Berkeley Shattuck Complete Streets and De-couplet \$7 Road Diet Non-Exempt 33 105 New Berkeley Southside Complete Streets & Transit Improvement \$9 Road Diet Non-Exempt 34 New CCJPA Oakland to San Jose Phase 2A (OSJ2A) \$271 Transit Non-Exempt 35 57 17-01-0009 City of Alameda New Alameda Point Ferry Terminal \$22 Transit Non-Exempt 36 69 17-01-0061 City of Alameda Organical Parkway Dedicated Bus Lanes or Bus Queue Jump Lanes \$15 Road Diet Non-Exempt 37 55 New City of Alameda Central Avenue Safety Improvements \$15 Road Diet Non-Exempt	30		New	Alameda CTC	I-680 Express Bus to Silicon Valley	\$479	Express Bus	Non-Exempt			
33 105 New Berkeley Southside Complete Streets & Transit Improvement \$9 Road Diet Non-Exempt 34 New CCJPA Oakland to San Jose Phase 2A (OSJ2A) \$271 Transit Non-Exempt 35 57 17-01-0009 City of Alameda New Alameda Point Ferry Terminal \$22 Transit Non-Exempt 36 69 17-01-0061 City of Alameda Ralph Appezzato Memorial Parkway Dedicated Bus Lanes or Bus Queue Jump Lanes \$15 Road Diet Non-Exempt 37 55 New City of Alameda Central Avenue Safety Improvements \$15 Road Diet Non-Exempt	31		New	Alameda CTC	E14th/Mission Blvd Corridor Project	\$330	Transit	Non-Exempt			
New CCJPA Oakland to San Jose Phase 2A (OSJ2A) \$271 Transit Non-Exempt 35 57 17-01-0009 City of Alameda New Alameda Point Ferry Terminal \$22 Transit Non-Exempt 36 69 17-01-0061 City of Alameda Office Phase 2A (OSJ2A) \$15 Road Diet Non-Exempt 37 55 New City of Alameda Central Avenue Safety Improvements \$15 Road Diet Non-Exempt	32	107	New	Berkeley	Shattuck Complete Streets and De-couplet	\$7	Road Diet	Non-Exempt			
35 57 17-01-0009 City of Alameda New Alameda Point Ferry Terminal \$22 Transit Non-Exempt Ralph Appezzato Memorial Parkway Dedicated Bus Lanes or Bus Queue Jump Lanes \$15 Road Diet Non-Exempt 37 55 New City of Alameda Central Avenue Safety Improvements \$15 Road Diet Non-Exempt	33	105	New	Berkeley	Southside Complete Streets & Transit Improvement	\$9	Road Diet	Non-Exempt			
Ralph Appezzato Memorial Parkway Dedicated Bus Lanes or Bus Queue Jump Lanes \$15 Road Diet Non-Exempt Non-Exempt Non-Exempt	34		New	ССЈРА	Oakland to San Jose Phase 2A (OSJ2A)	\$271	Transit	Non-Exempt			
36 69 17-01-0061 City of Alameda or Bus Queue Jump Lanes \$15 Road Diet Non-Exempt 37 55 New City of Alameda Central Avenue Safety Improvements \$15 Road Diet Non-Exempt	35	57	17-01-0009	City of Alameda		\$22	Transit	Non-Exempt			
	36	69	17-01-0061	City of Alameda		\$15	Road Diet	Non-Exempt			
38 53 New City of Alameda Clement Ave and Tilden Way Complete Streets \$15 Road Diet Non-Exempt	37	55	New	City of Alameda	Central Avenue Safety Improvements	\$15	Road Diet	Non-Exempt			
	38	53	New	City of Alameda	Clement Ave and Tilden Way Complete Streets	\$15	Road Diet	Non-Exempt			

Project costs are estimates and subject to change as projects move through development and PBA 2050 processes Project costs include an estimate of operations costs through 2050 and are in millions of Year-of-Expenditure \$ RTP ID is "New" if project was included in a program for PBA 2040 or is new for this RTP cycle

# Inc 39 5 40 5 41 7 42 7 43 44 45 1 46 1 47 12 48 1	55 55 72	PBA 2040 ID New New	Lead Agency City of Alameda	Project Title	Project Cost (\$ Millions)	Project Type	Submission Type
40 5 41 7 42 7 43 44 45 1 46 1 47 1:	55 72		City of Alameda				- 71-0
41 7 42 7 43 44 45 1 46 1 47 12 48 1	72	New		Lincoln Avenue Safety Improvements	\$3	Road Diet	Non-Exempt
42 7 43 44 45 1 46 1 47 12 48 1			City of Alameda	Otis Drive Safety Improvements	\$1	Road Diet	Non-Exempt
43 44 45 1 46 1 47 12 48 1	75	New	City of Alameda	Stargell Complete St	\$5	Road Diet	Non-Exempt
44 45 1 46 1 47 12 48 1		New	City of Alameda	Water Shuttle Operations	\$47	Transit	Non-Exempt
45 11 46 1 47 12 48 1		New	City of Alameda	West End Bike/Ped Crossing	\$222	Major Trails and Large Bike Ped	Large Exempt
46 1 47 12 48 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		New	City of Alameda	Waterfront and Bay Trails in City of Alameda	\$154	Major Trails and Large Bike Ped	Large Exempt
47 12	116	17-01-0038	Dublin	I-580 Interchange Imps at Hacienda/Fallon Rd, Ph 2	\$66	Interchange Modernization	Non-Exempt
48 1	114	17-01-0048	Dublin	Dublin Blvd North Canyons Pkwy Extension	\$175	Road Widening	Non-Exempt
48 1	120	17-01-0051	Dublin	Tassajara Road Widening from N. Dublin Ranch Drive to City Limit	\$31	Road Widening	Non-Exempt
		17-01-0053	Dublin	Dougherty Road Widening	\$45	Road Widening	Non-Exempt
49 1		17-01-0057	Dublin	Dublin Boulevard widening	\$12	Road Widening	Non-Exempt
50		New	Emeryville	40th Street Bus Lanes	\$18	Road Diet	Non-Exempt
			,			Interchange Modernization	
		New	Emeryville	Powell Transbay Bus I-80 Ramp/Bus Stop	\$13		Non-Exempt
		New	Emeryville	Powell Street Bridge Widening	\$9	Road Widening	Non-Exempt
		17-01-0052	Fremont	Auto Mall Parkway Improvements Near I-680	\$50	Road Widening	Non-Exempt
		17-01-0058	Fremont/ BART	Irvington BART Station	\$342	Transit Interchange	Non-Exempt
55 13	158	17-01-0036	Hayward	Rt 92/Clawiter/Whitesell Interchange Improvements	\$55	Modernization	Non-Exempt
56		New	Hayward	Downtown Hayward Complete Streets/Road Diet Project	\$35	Road Diet	Non-Exempt
57		New	LAVTA	LAVTA On-Demand First-Mile/Last-Mile Microtransit Program	\$18	Transit Interchange	Non-Exempt
58 17	174	17-01-0033	Livermore	I-580 Vasco Road Interchange Improvements	\$81	Modernization Interchange	Non-Exempt
59 1	169	17-01-0034	Livermore	I-580 Greenville Road Interchange Improvements	\$68	Modernization Interchange	Non-Exempt
60 1	168	17-01-0035	Livermore	I-580 First Street Interchange Improvements	\$62	Modernization Interchange	Non-Exempt
61 17	172	17-01-0039	Livermore	I-580 SR-84/Isabel Interchange Improvements Phase 2 Bayside TOD PDA Transit Station and Pedestrian	\$43	Modernization	Non-Exempt
62 18	186	New	Newark	Overcrossing Old Town PDA Road Diet and Complete Streets	\$12	Transit	Non-Exempt
63 18	183	New	Newark	Improvemens	\$4	Road Diet	Non-Exempt
64 2	214	17-01-0016	Oakland	Oakland Army Base Infrastructure Improvements	\$301	Port of Oakland	Large Exempt
65 19	190	17-01-0043	Oakland	42nd Ave. & High St. I-880 Access Improv.	\$18	Interchange Modernization	Non-Exempt
66 19	198	17-01-0046	Oakland	Coliseum City Transit Hub	\$181	Transit	Non-Exempt
67 20	202	New	Oakland	Oakland: Telegraph Ave Bike/Ped Imps and Road Diet	\$1	Road Diet	Non-Exempt
68 20	202	New	Oakland	Oakland: Telegraph Avenue Complete Streets	\$5	Road Diet	Non-Exempt
69 20	204	New	Oakland	Oakland Fruitvale Ave Bike/Ped Imprvmnts H8-04-014	\$1	Road Diet	Non-Exempt
70 18	188	New	Oakland	14th Street Safe Routes in the City	\$14	Road Diet	Non-Exempt
				·			·
71 20	202	New	Oakland	Telegraph Avenue Road Diet	\$2	Road Diet	Non-Exempt
72 18	188	New	Oakland	14th Street West Oakland Road Diet	\$0.2	Road Diet	Non-Exempt
73 19	194	New	Oakland	High Street Road Diet	\$0.2	Road Diet	Non-Exempt
74 19	194	New	Oakland	Adeline Street Road Diet	\$0.1	Road Diet	Non-Exempt

Project costs are estimates and subject to change as projects move through development and PBA 2050 processes Project costs include an estimate of operations costs through 2050 and are in millions of Year-of-Expenditure \$ RTP ID is "New" if project was included in a program for PBA 2040 or is new for this RTP cycle

#	2016 CTP Index	PBA 2040 ID	Lead Agency	Project Title	Project Cost (\$ Millions)	Project Type	Submission Type
75	215	New	Oakland	Upper Park Blvd Road Diet	\$0.1	Road Diet	Non-Exempt
76	194	New	Oakland	73rd Avenue Road Diet	\$0.1	Road Diet	Non-Exempt
77	215	New	Oakland	Lower Park Blvd Road Diet	\$0.2	Road Diet	Non-Exempt
78	200	New	Oakland	West Grand Ave Road Diet	\$4	Road Diet	Non-Exempt
79	246	17-01-0042	Pleasanton	I-680 Overcrossing Widening and Improvements (at Stoneridge Drive)	\$19	Interchange Modernization	Non-Exempt
80	247	17-01-0044	Pleasanton	I-680 Sunol Interchange Modification	\$15	Interchange Modernization	Non-Exempt
81	242	17-01-0045	Pleasanton	Santa Rita Road I-580 Overcrossing Widening	\$10	Interchange Modernization	Non-Exempt
82	237	New	Pleasanton	Extension of El Charro Road from Stoneridge Drive to Stanley Blvd	\$62	Road Widening	Non-Exempt
83		New	Pleasanton	El Charro Interchange	\$27	Interchange Modernization	Non-Exempt
84	308	17-01-0017	Port of Oakland	Outer Harbor Intermodal Terminal (OHIT) Phases 2 and 3	\$311	Port of Oakland	Large Exempt
85		New	Port of Oakland	Inner Harbor Turning Basin	\$350	Port of Oakland	Large Exempt
86		New	Port of Oakland	Port Wide Electrification	\$218	Port of Oakland	Large Exempt
87	307	New	Port of Oakland	Port Seaside Projects: Outer Harbor Turning Basin and Marine Terminal Expansion	\$154	Port of Oakland	Large Exempt
88	309, 305	New	Port of Oakland	Port Operations and Resiliency	\$113	Port of Oakland	Large Exempt
89		New	San Leandro	Fairmont Blvd Bike Lanes	\$0.4	Road Diet	Non-Exempt
90	266	17-01-0054	Union City	Union City Boulevard Widening (Whipple to City Limit)	\$17	Road Widening	Non-Exempt
91	276	17-01-0059	Union City	Union City Intermodal Station Phase 4	\$75	Transit	Non-Exempt
92	26	17-01-0047	Union City and Fremont	East-West Connector in Fremont & Union City	\$320	Road Widening	Non-Exempt

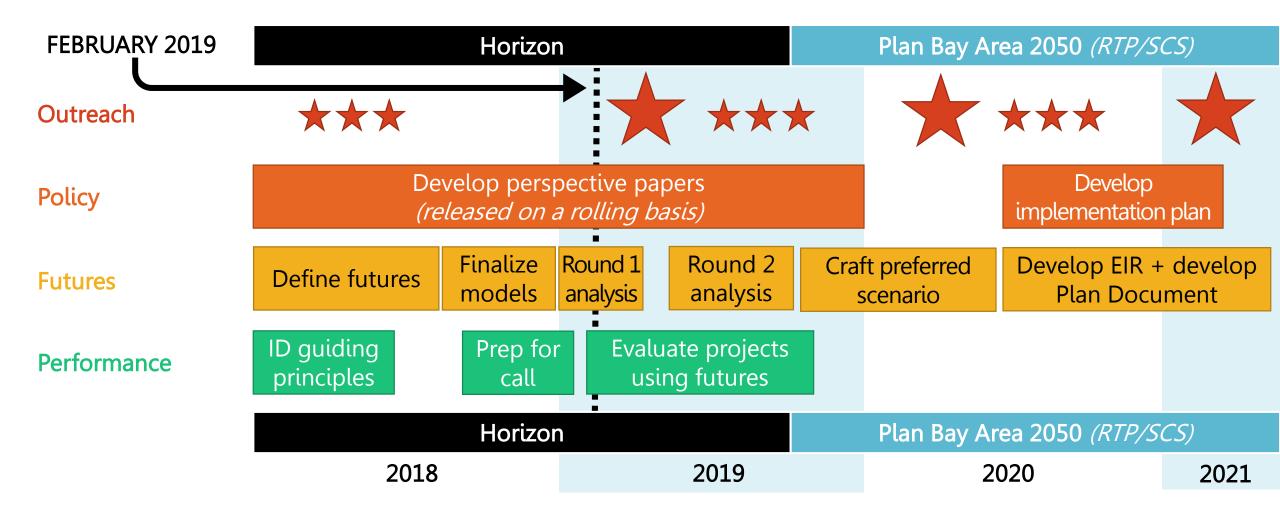
Transformative Projects Submitted by Alameda CTC in Fall 2018 Cost rounded to the nearest \$100 million

#	2016 CTP Index RTP ID Lead Agency Project		Lead Agency	Project Title	Project Cost (\$ Millions)	Project Type	Submission Type
1	n/a	n/a	Alameda CTC	Alameda County BRT Network + CV Corridors: The Project would create a Multimodal Connected Major Arterial Network in Alameda County through bus infrastructure based on AC Transit's Major Corridor Study; Connected Technology for Roadway infrastructure; Mobility Hubs and EV infrastructure	\$5,100	Transit	Transformative
2	n/a	n/a	Alameda CTC	I-580 I-680 Corridor Enhancements: The Project would implement a series of highway and express lane projects along the I-580 and I-680 corridors in Alameda County including complementary express bus services.	\$7,100	Express Lanes and Express Bus	Transformative
3	n/a	n/a	Alameda CTC	Access Safe Routes to Schools: The Program would implement infrastructure improvements at all K-12 public schools in Alameda County to build a true network of Safe Routes to School.	\$1,200	Major Trails and Large Bike Ped	Transformative
4	n/a	n/a	Alameda CTC	Alameda County Rail Strategy: The Alameda County Rail Strategy is a program of projects that would advance a more efficient and resilient rail system in Alameda County	\$2,000	Transit	Transformative
5	n/a	n/a	Alameda CTC	Major Trails in Alameda County: The proposed improvements include construction of three major trails, including closing the gaps on the two existing facilities, in addition to supporting implementation of other new trails under development.	\$1,600	Major Trails and Large Bike Ped	Transformative

Project costs are estimates and subject to change as projects move through development and PBA 2050 processes Project costs include an estimate of operations costs through 2050 and are in millions of Year-of-Expenditure \$ RTP ID is "New" if project was included in a program for PBA 2040 or is new for this RTP cycle

#	2016 CTP Index		Lead Agency		Project Cost (\$ Millions)	Project Type	Submission Type
				Student Transit Pass Program: The program would cover all middle and high schools that have transit service within one quarter mile of the school and provide free bus passes on youth Clipper cards to all interested students in			
6	n/a	n/a	Alameda CTC	participating districts.	\$800	Transit	Transformative

Horizon and Plan Bay Area 2050 Schedule



Overview



Outreach



Perspective Papers



Futures



Project Performance



Plan Preparatory Work

Outreach Feedback

- 1) Autonomous Vehicles
- 2) Toward a Shared Future
- 3) Regional Growth Strategies
- 4) Crossings
- 5) Future of Jobs
- 6) Governance
- 7) Sea Level Rise

Challenges & Opportunities Report "Win-Win" Strategies Report

Project Performance Results

Call for Projects

Needs & Revenues (Transportation)

Needs & Revenues (Housing)

Needs & Revenues (Resilience)

Growth Forecasts (Population, Jobs)

Growth Framework (PDAs, etc.)

- Plan Bay Area 2050
- Environmental Impact Report
- Implementation Plan



Transportation



Land Use



Economic Development



Resilience

 Regional Housing Needs Assessment (RHNA)

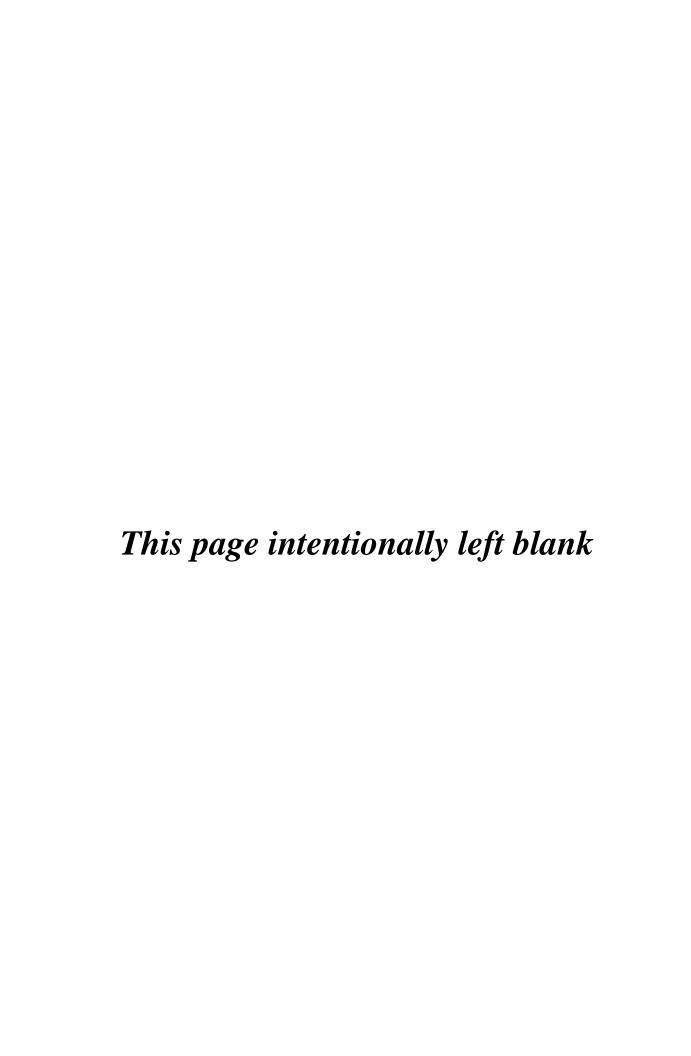


External Forces Summary

#	FUTURE NAME	IMMIGRATION AND TRADE	NATIONAL TAXES AND FUNDING	NATIONAL GROWTH	LAND USE PREFERENCES	NATIONAL ENVIRONMENTAL POLICY	NEW TECHNOLOGIES	NATURAL DISASTERS
	Clean	Similar	Higher funding	Similar to today	Housing: more urban	Stricter		earthquake Magnitude 7.0 Hayward Fault
A	and Green	to today	via carbon tax		Jobs: more dispersed	regulations (1' SLR)	Widespread	
	Rising Tides,		Lower funding due to tax cuts	Limited	Housing: more urban	Relaxed		
В	Falling Fortunes	Reduced			Similar to today	regulations (3' SLR)	More limited	
	Back to the Future		Similar to today	Rapid	Housing: more dispersed	Similar		Magnitude 7.0 Hayward Fault earthquake
C		the Future Increased			Jobs: more urban	to today (2' SLR)	Widespread	

Bay Area Conditions — Summary

#	FUTURE NAME	2050 POPULATION	2050 JOBS	2050 INCOME DISTRIBUTION	2050 RACIAL DISTRIBUTION	2050 AGE DISTRIBUTION	2050 INTERREGIONAL TRAVEL	2050 TRANSPORTATION REVENUES
Α	Clean and Green	10.9 million	5.2 million	21 % low-income	73% minority	41 median age	*	\$\$\$
В	Rising Tides, Falling Fortunes	8.6 million	4.6 million	31 % low-income	71 % minority	43 median age	†	\$\$
С	Back to the Future	13.8 million	6.8 million	21% low-income	77% minority	38 median age	† † †	\$\$\$\$



List of Transformative Projects submitted by Other Public Agencies in Alameda County

Project costs are estimates and subject to change as projects move through development and PBA 2050 processes Project costs include an estimate of operations costs through 2050 and are in millions of Year-of-Expenditure \$

#	Project Sponsor	Project Title	Project Description	Project Cost (\$ millions)
1	AC Transit	AC Transit Transbay Improvements	The Project would support a multipart program of roadway improvements for Transbay services through the Bay Bridge corridor as well as frequency increases.	\$8,200
2	2 AC Transit	AC Transit Rapid Network	The Project would upgrade service on 9 AC Transit major corridors in Alameda and Contra Costa Counties to include high frequency service and BRT-like infrastructure.	\$11,600
3	Caltrans	Webster Posey Tube Replacements	The Project would repalce the Webster Posey Tube.	\$6,800
2	City of Newark	Fremont-Newark LRT to Redwood City	The Project would construct subterranean or elevated automated Light Rail Transit or Personal Rapid Transit	\$2,400
	City of Oakland	Oakland Alameda Gondola Network	The Project would create a network of aerial gondolas to supplement the AC Transit bus network in East Oakland.	\$1,300
6	SJRCC/ACE	Altamont Corridor Vision	The Project would provide safe, frequent, and reliable service by modernizing the corridor connecting the Central Valley and San Francisco Bay Area.	\$6,500
7	'TVSJVRR	Valley Link (Dublin to San Joaquin Valley)	The Project would connect San Joaquin County and Tri-Valley commuters to BART system, with connectivity to ACE train.	\$5,300

Cost rounded to the nearest \$100 million Operations cost are escalated out to year 2050



Project costs are estimates and subject to change as projects move through development and PBA 2050 processes Project costs include an estimate of operations costs through 2050 and are in millions of Year-of-Expenditure \$ RTP ID is "New" if project was included in a program for PBA 2040 or is new for this RTP cycle

#	RTP ID	Lead Agency	Project Title	Project Cost (\$ Millions)
1	17-10-0001	AC Transit	Major Corridors Plan	\$10,667
2	New	AC Transit	Maintenance yard rehabilitation	\$568
3	New	AC Transit	Clean Corridors Plan	\$155
4	New	ACE/SJRR	ACE Nearterm Corridor Improvements	\$137
5	New	ACE/SJRR	Altamont Corridor Vision - Long Term (Alameda County port	\$6,416
6	New	ССЈРА	Oakland to San Jose Phase 2A (OSJ2A)	\$271
7	New	WETA	Small Vessels	\$671
8	17-06-0030	WETA	Redwood City-San Francisco-Oakland Ferry	\$519
9	17-10-0042	WETA	Berkeley-San Francisco Frequency Increase	\$325
10	17-01-0009	WETA	Alameda Point-San Francisco Ferry	\$287
11	17-05-0019	WETA	Mission Bay-East & North Bay Ferry	\$208
12	New	WETA	South San Francisco Frequency Increase	\$166
13	17-10-0041	WETA	Harbor Bay Ferry Frequency Increase	\$95
14	17-10-0041	WETA	Alameda/Oakland Ferry Frequency Increase	\$50
15	17-10-0006	BART	BART Transbay Corridor Capacity Project	TBD
16	New	BART	Second Transbay Crossing	TBD
17	New	BART	Caldecott Tunnel Resilience Project	TBD
18	17-10-0064	BART	Hayward Maintenance Complex (HMC) Phase I	TBD
19	New	BART	Transit Operations Facility (TOF)	TBD
20	17-10-0005	BART	BART Metro Program	TBD
21	17-10-0005	BART	Bay Fair Connection	TBD
22	New	BART	System Capacity Expansion	TBD

