Meeting Notice

1111 Broadway, Suite 800, Oakland, CA 94607 • 510.208.7400 • www.AlamedaCTC.org

Bicycle and Pedestrian Community Advisory Committee

Thursday, April 7, 2016, 5:30 p.m.
1111 Broadway, Suite 800
Oakland, CA 94607

Mission Statement

The mission of the Alameda County Transportation Commission (Alameda CTC) is to plan, fund, and deliver transportation programs and projects that expand access and improve mobility to foster a vibrant and livable Alameda County.

Public Comments

Public comments are limited to 3 minutes. Items not on the agenda are covered during the Public Comment section of the meeting, and items specific to an agenda item are covered during that agenda item discussion. If you wish to make a comment, fill out a speaker card, hand it to the clerk of the Commission, and wait until the chair calls your name. When you are summoned, come to the microphone and give your name and comment.

Recording of Public Meetings

The executive director or designee may designate one or more locations from which members of the public may broadcast, photograph, video record, or tape record open and public meetings without causing a distraction. If the Commission or any committee reasonably finds that noise, illumination, or obstruction of view related to these activities would persistently disrupt the proceedings, these activities must be discontinued or restricted as determined by the Commission or such committee (CA Government Code Sections 54953.5-54953.6).

Reminder

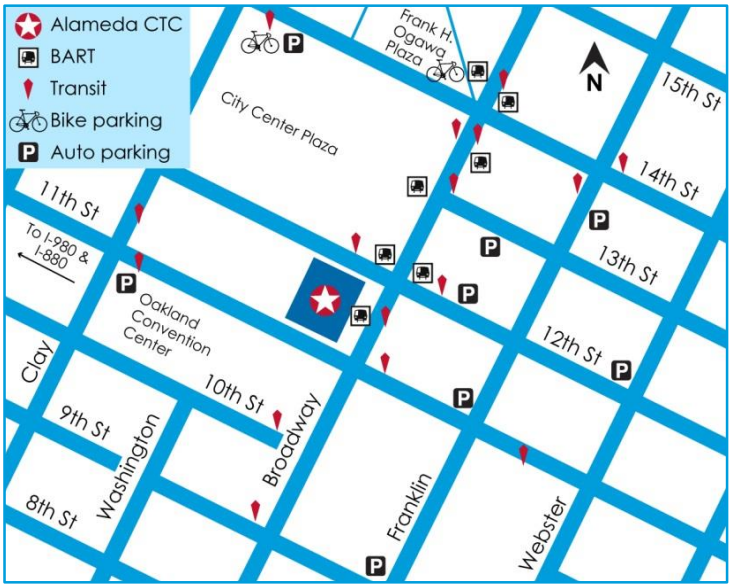
Please turn off your cell phones during the meeting. Please do not wear scented products so individuals with environmental sensitivities may attend the meeting.

Glossary of Acronyms

A glossary that includes frequently used acronyms is available on the Alameda CTC website at www.AlamedaCTC.org/app_pages/view/8081.

Location Map

Alameda CTC
1111 Broadway, Suite 800
Oakland, CA 94607



Alameda CTC is accessible by multiple transportation modes. The office is conveniently located near the 12th Street/City Center BART station and many AC Transit bus lines. Bicycle parking is available on the street and in the BART station as well as in electronic lockers at 14th Street and Broadway near Frank Ogawa Plaza (requires purchase of key card from bikelink.org). There is bicycle parking inside of the garage located off of 11th Street. Press the white button on the call box to inform security of the meeting you are attending at Alameda CTC. Once approved, security will open the gate and there is bicycle parking straight ahead.

Garage parking is located beneath City Center, accessible via entrances on 14th Street between 1300 Clay Street and 505 14th Street buildings, or via 11th Street just past Clay Street.
To plan your trip to Alameda CTC visit www.511.org.

Accessibility

Public meetings at Alameda CTC are wheelchair accessible under the Americans with Disabilities Act. Guide and assistance dogs are welcome. Call 510-893-3347 (Voice) or 510-834-6754 (TTD) five days in advance to request a sign-language interpreter.




Meeting Schedule

The Alameda CTC meeting calendar lists all public meetings and is available at www.AlamedaCTC.org/events/upcoming/now.

Paperless Policy

On March 28, 2013, the Alameda CTC Commission approved the implementation of paperless meeting packet distribution. Hard copies are available by request only. Agendas and all accompanying staff reports are available electronically on the Alameda CTC website at www.AlamedaCTC.org/events/month/now.

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Bicycle and Pedestrian Advisory Committee Meeting Agenda
Thursday, April 7, 2016, 5:30 p.m.

1111 Broadway, Suite 800, Oakland, CA 94607 • 510.208.7400 • www.AlamedaCTC.org

Chair: Midori Tabata
Vice Chair: Matt Turner
Bicycle and Pedestrian Coordinator: Matt Bomberg
Staff Liaison: Tess Lengyel
Public Meeting Coordinator: Angie Ayers

5:30 – 5:35 p.m. Midori Tabata	**1. Welcome and Introductions**			
5:35 – 5:40 p.m. Public	**2. Public Comment**			
5:40 – 5:45 p.m. Midori Tabata	**3. BPAC Meeting Minutes**		Page	A/I
	3.1.	Approval of January 7, 2016 BPAC Meeting Minutes	1	A
5:45 – 6:35 p.m. Dave Caneer Rodney Pimentel	**4. Review of I-80/Gilman Interchange Improvements Project**		7	I
6:35 – 7:05 p.m. Matt Bomberg	**5. Bicycle/Pedestrian Count Program Update**		27	I
7:05 – 7:20 p.m. Paul Keener	**6. Transportation Development Act Article 3 Projects**		39	I
7:20 – 7:40 p.m. Staff	**7. Staff Reports**			
	7.1.	BPAC Agenda Topic Suggestions		I
	7.2.	Capital Project Delivery Plan Update		I
	7.3.	Multimodal Plans Update (Verbal)		I
7:40 – 7:45 p.m. BPAC Members	**8. BPAC Member Reports (Verbal)**			
	8.1.	BPAC Roster	41	I
7:45 p.m. Midori Tabata	**9. Adjournment**			

Next meeting: July 7, 2016

All items on the agenda are subject to action and/or change by the Committee.

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1. **Welcome and Introductions**
   BPAC Chair Midori Tabata called the meeting to order at 5:30 p.m. The meeting began with introductions, and the chair confirmed a quorum. All BPAC members were present, except for Lucy Gigli, Diane Shaw, Matt Turner and Sara Zimmerman.

   Jeremy Johansen arrived during agenda item 2.

   Matt Turner arrived after agenda item 2.

2. **Public Comment**
   Ken Bukowski made a comment regarding the ease of taking bicycles on board AC Transit buses.

3. **Approval of October 8, 2015 Minutes**
   A member asked whether the motion from item 7 should use the word "topology" instead of "typology." Staff clarified that "typology" as used in the minutes is correct.

   Jeremy Johansen moved to approve the October 8, 2015 minutes. Kristi Marleau seconded the motion. The motion passed with the following votes:

Yes:	*Fishbaugh, Johansen, Jordan, Marleau, Murtha, Schweng, Tabata, Turner*
No:	*None*
Abstain:	*None*
Absent:	*Gigli, Shaw, Zimmerman*

4. **Presentation on City of Emeryville Christie Avenue Bay Trail Gap Closure Project**
   Amber Evans Economic Development Project Coordinator at the City of Emeryville, gave a presentation on Christie Avenue Bay Trail Gap Closure project.

   Questions and feedback from members:
   - The plan schematic slide seems to show green lanes and a cross-bike that were not constructed. Will this be built? Amber informed the committee that no additional construction elements will be added to the project. She stated that the design was modified to include a dedicated left turn bike pocket as well as a bike signal that allows bicyclists to cross from Shellmound to Christie when no cars are present in the intersection. She stated that the design assumed that turn movement at Shellmound and Powell will have a two phase turn and it does not show all items in the design. Amber discussed the decisions made for bicyclist movement during this project. Amber potential improvement projects that may produce additional funding for trail and intersection improvements.
   - The crossing of the I-80 ramps is very tough, in particular the Northbound off-ramp.
   - Bike East Bay noted that the City of Emeryville is the only city with a bike signal that gives bicyclists a dedicated phase, where cars must stop for bikes. Amber noted

that Emeryville has bike signals in two locations with their own buttons, at intersections to deal with volumes of bicycles interacting with motor vehicles. They are located: Turning left from San Pablo onto West MacArthur and the other is the improvements made with the Christie Avenue Bay Trail project discussed. The bike signal implemented as part of this project is combined with a pedestrian scramble phase and allows bicyclists to cross directly from the far right sight of the street on Shellmound northbound into the protected bike lane along Christie Avenue.

- What are the design considerations around driveway crossings? Amber said tactile domes approach used. The driveway was kept at grade with the road to cause less problems with cyclists.
- The trail curves in one section, which may prove to be problematic for cyclists. Amber said that there is only one curve in the project and it was used to maximize the width that was available.
- What is the purpose of the post (bollard) at the entry of the bike lane? Could this be a hazard for bicyclists? Amber noted that this is needed to keep cars from driving on the path.
- Was the midblock crossing of Christie Ave added in response to jaywalking? Is it marked by a flashing beacon? Amber noted that it is push button activated and that this is a signalized intersection.

5. Update on Safe Routes to Schools Program, Bicycle Safety Education Program, and iBike Campaign

Safe Routes to Schools Program:
Laurel Poeton of Alameda CTC and Kaley Lyons with Alta Planning gave an update on the Safe Routes to Schools Program (SR2S). The presentation covered:

- Program history and growth
- Elementary and middle school programming
- High school programming
- How student are traveling
- A look ahead

Questions from members:

- Is the theatre program for SR2S? Laurel stated that it's a new element as of 2014 and it was very effective. Kaley said that all 50 spots were filled and the children love the program.
- A member requested an explanation of the mode shift across semester slide because the data looked the same for multiple years. Kaley stated that the slide is showing data for schools that have been in the program for a while and new schools together which causes the mode share to look the same for multiple years. She stated that a separate analysis exists with the data broken out and the SR2S annual report correctly reflects the information. BPAC members agreed that school-level trend information is important to show.
- Does data exist that shows participation rate as students goes from middle to high school. Laurel stated that this data is not available.
- Will the program track the mode share changes that result from infrastructure improvements at a given school? Laurel stated that the program is expanding site assessments that identify needed infrastructure improvements. Matt Bomberg said the site assessments are key to scoping projects to compete for funding.

Matt Turner shared with the committee that the County ran an education campaign called Don't Rush Safety with Castro Valley, San Lorenzo and Hayward school districts. The partners were the Sheriff Department, California Highway Patrol (CHP) and Safe Routes to Schools. The campaign brought up issues with safety particularly in the unincorporated areas. The County is interested in continuing the program this year with the same partners and expanding the role of the CHP.

Bike Safety Education Program:
Laurel Poeton and Robert Prinz with Bike East Bay gave an update on the fiscal year 2014-15 Bike Safety Education Program. Robert mentioned that this was the second year of a 3-year contract for the program. At the beginning of the program a budget was created to expand the programs from year to year. Laurel and Robert discussed the class types and the average attendance and goal for the classes.

Questions from members:

- Attendance numbers are outstanding. How many cyclists are attending due to diversion programs? Robert stated that this accounts for a relatively small number of attendees, but that Bike East Bay is trying to grow diversion programs thanks to a legislative change that clarifies their legality.
- Experienced riders benefit from the classes as well as new riders.
- Do bicyclists need to provide their own bicycle for the Adult Learn to Ride? Robert stated that Bay Area Bikes provides subsidized rentals from their jack London Square location.
- Will more of successful classes be added next year? Yes, this is the plan.

2015 iBike Campaign:
Laurel Poeton discussed the advertisement of the 2015 iBike campaign. She asked BPAC for suggestions to expand the 2016 campaign. The following suggestions were made:

- Include humor in the images such as get 10 miles per burrito and Biking is fun because it is
- Include an electric bike in an image
- Include images to present local trips like going to the grocery store
- Include more diversity of the people being shown riding bikes
- Include an image with the sunset on the bay trail that says joy and an image with endless lights in front of you
- Include an image of flowers in a basket on the front of a bike
- Include a slogan like iBike to eat ice cream
- Include images that depict people not riding conventional bicycles but more stylized bicycles such as bikes modified that look like a chopper or images of bikes being customized in creative ways

6. Discussion on Future Agenda Topics

Matt Bomberg led a discussion on BPAC suggestions for future agenda topics. Matt emphasized that staff is interested in more details on the suggested topics and what the BPAC would provide input on, and that decisions about which topics to agendize would be made at a later date.

Specific input on suggested topics included:

- Pavement Management Programs – members expressed that they felt that this topic should ultimately be dealt with as a policy matter by the Commission. Matt noted that Midori had informed the Commission of the BPAC's motion at its October meeting as part of her Chair's report. He also noted that the Alameda CTC requires that jurisdictions all use the StreetSaver software as their Pavement Management Program, which is developed by MTC.
- Motorist education – BPAC members expressed interest in a report on what types of curricula are available and possible different models for implementing a program in Alameda County (e.g. agency led, non-profit led, etc.) Matt noted that this is a high priority program in the Countywide Bicycle and Pedestrian Plans but that Alameda CTC's program implementation staff are very busy launching an Affordable Student Transit Pass Program right now.
- Commute ferry from Treasure Island to San Francisco – members expressed that this is an important topic to maximize the investment in the Bay Bridge bicycle/pedestrian pathway. Matt noted that this topic, as well as other connections at county boundaries, could be dealt with as part of an update to the Countywide Bicycle/Pedestrian Plans.
- Hazardous detectable warning surfaces and pedestrian bumps – Discussion took place on how both of these items are similar but different. The conclusion is that both of these items are the same and can be combined. The committee wants to know if these items can be redesigned. A member discussed other materials exists that are safer than the "yellow bumps" for pedestrians, bicycles, and people with disabilities such as "tactile guideways." Matt noted that if members are aware of common issues in the design of warning surfaces or of alternative designs, he can share this information with city staff.
- Complete Streets Policy Implementation – Matt agreed to bring a report to BPAC in the coming year on the Central County Complete Streets project.
- Protected intersections – Matt said that professional development organizations will have materials coming out in the coming year. He stated that if Alameda CTC is hosting a webinar on this topic he'll let BPAC know. Matt said he recognizes the value of this topic and he believe that it will come up in the BPAC design review at some point.
- Enforcement of hit and runs – members discussed that this item could be related to the motorist education item.

Matt Bomberg recapped that the following topics most closely relate to the BPAC's roles and appear to be priorities for BPAC members: motorist education, hazardous detectable warning surfaces, and pedestrian bumps. Matt agreed to present a summary of how the proposed agenda topics will be addressed, either through discussion at a future BPAC meeting or other means, at the April meeting.

7. Staff Reports

7.1. Assembly Bill 1096 – E-bike Legislation

Matt Bomberg said that Assembly Bill 1096 recently was signed by the governor and clarifies how different types of e-bikes are regulated. It states that an electric bicycle is not a motorized bicycle. He requested the committee to review the chart on page 25 in the packet to see the chart that explains the requirements for the three classes on bicycles.

The committee noted the East Bay Regional Park speed limit is 15 mph and AB 1096 says the speed limit is 20 mph, which could be fast for trails.

8. BPAC Member Reports

David Fishbaugh informed the committee of the success of the October 11, 2015 Niles Canyon Stroll and Roll event. He said that it was an outstanding event.

Preston Jordan said that Caltrans approved the cycle route on San Pablo Avenue. A bicycle signal head will be there. He also noted that the City of Albany is committing $150,000 for sidewalk maintenance and exploring a parcel tax to provide sustainable funding for the City to maintain sidewalks.

Kristi Marleau informed the committee that the City of Livermore bicycle plan is under development and a website is up and running.

Midori Tabata attended the East Bay Greenway (EBG) opening. She said that the EBG is really being used by pedestrians and cyclists.

Preston noted that several of the pedestrian push buttons on the East Bay Greenway are not located in accessible locations. Matt noted that future segments will be coming to ACTC BPAC for review.

8.1. BPAC Roster

The committee roster is in the agenda packet for review purposes.

9. Meeting Adjournment

The meeting adjourned at 8:25 p.m. The next meeting is scheduled for April 7, 2016 at the Alameda CTC offices.

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DATE:	March 31, 2016
SUBJECT:	Review of I-80/Gilman Street Interchange Project
RECOMMENDATION:	Provide Input I-80/Gilman Street Interchange Project

Summary

One of the main roles of the Countywide BPAC is to provide input to sponsors of capital projects and programs during early development phase. The I-80/Gilman Street Interchange Project is one of the Named Capital Projects in the 2014 Measure BB Transportation Expenditure Plan. Alameda CTC is the project sponsor. The purpose of the project is to improve navigation and traffic operations on Gilman Street between West Frontage Road and 2nd Street through the I-80 interchange so that congestion is reduced, queues are shortened and merging and turn conflicts are minimized. In addition to improving mobility through the Gilman street corridor, the project aims to close the gap in local and regional bicycle facilities through the I-80/ Gilman Street interchange and provide access for bicycles and pedestrians traveling between the Bay Trail and Northern Berkeley.

The project is currently in the Preliminary Engineering/Environmental phase, through which a preferred alternative will be selected. The Project Team is currently evaluating alternatives involving a double roundabout design. Plan view layouts of two variants of the double roundabout design that involve different encroachments of Caltrans Right-of-Way are presented as Attachment C. Both variants include a new bicycle and pedestrian freeway overcrossing structure.

The Alameda CTC project manager will be in attendance at the April 7, 2016 meeting to answer questions and respond to comments on the project's preliminary design concepts. BPAC members are encouraged to review the project materials and formulate questions and comments in advance of the meeting, using the worksheet in Attachment E.

Fiscal Impact: There is no fiscal impact.

Attachments

A. Project Review Cover Sheet
B. Project Fact Sheet
C. Project Concept Drawings
    1. Double Roundabout - No Caltrans Right-of-Way encroachment
    2. Double Roundabout - Caltrans Right-of-Way encroachment
D. Project Area Collision History Map and Information
E. Project Review Checklist and Input Form

Staff Contact

Tess Lengyel, Deputy Director of Planning and Policy

Matthew Bomberg, Assistant Transportation Planner

Bicycle Pedestrian Advisory Committee Capital Project Information Sheet

Background Information

Project Name: I-80/Gilman Street Interchange Improvements

Project Location: Gilman Street from West Frontage Road to 2nd Street
Describe project limits, intersections, etc.

Project Type (check one below):

Arterial/ Collector	Freeway Interchange	Multi-use Pathway	Transit Station Area	Local Street	Streetscape
	X				

Project Cost (estimated): $33,810,000

Project Phase: Preliminary Engineering/Environmental
(Example: feasibility study, scoping, preliminary design, 30% design)

Project Description: reconfigure Interstate 80/Gilman Street interchange to improve navigation and traffic operations on Gilman Street and provide access for bicycles and pedestrians traveling between the Bay Trail and Northern Berkeley.

Project Context

Major Trip Generators: (please describe): Tom Bates Regional Sports Complex, Golden Gate Fields, San Francisco Bay Trail

Land Use(s): Industrial/commercial (east side of freeway)
(Example: high-density residential, mixed residential/commercial, rural/agricultural, etc.)

Existing Facility Classifications

FHWA Functional class: Gilman Street – principal arterial

Transit routes: AC Transit H Transbay (no stops within project area)

Bicycle facilities: Class II bike lanes on Gilman St east of 2nd Street

Pedestrian facilities: Sidewalks on north and south side of Gilman Street under freeway. Marked crosswalks across three of four on/off-ramps. No marked crosswalk across SB on-ramp and no crosswalk along Gilman St between Frontage St and SB on-ramp.

Truck route (yes/no): Gilman Street - yes

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ALAMEDA County Transportation Commission

CAPITAL PROJECT FACT SHEET | PN 1444.000

I-80 Gilman Interchange Improvements

PROJECT DESCRIPTION | December 2015

The proposed project will reconfigure the Interstate 80 / Gilman interchange, located in northwest Berkeley near its boundary with the City of Albany.

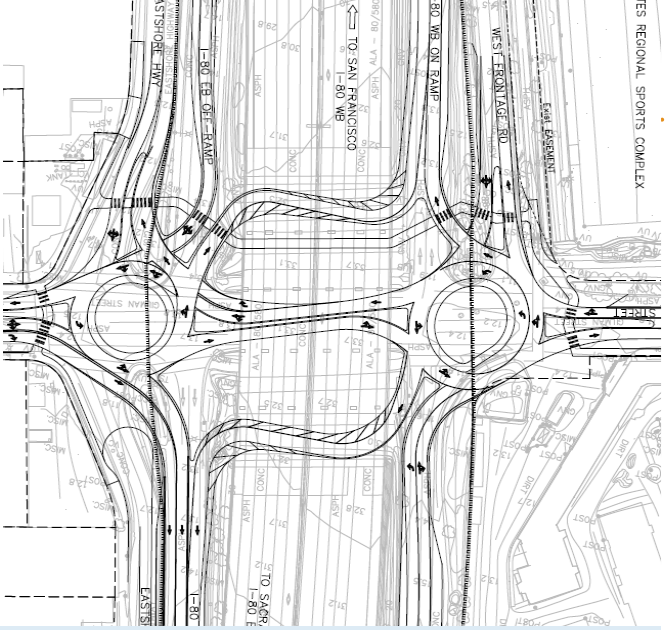
The purpose of the project is to improve navigation and traffic operations on Gilman Street between West Frontage Road and 2nd Street through the I-80 interchange so that congestion is reduced, queues are shortened and merging and turn conflicts are minimized. In addition to improving mobility through the Gilman street corridor, the project aims to close the gap in local and regional bicycle facilities through the I-80/ Gilman Street interchange and provide access for bicycles and pedestrians traveling between the Bay Trail and Northern Berkeley.

PROJECT STATUS | The Project Study Report - Project Development Support (PSR-PDS) for the project was approved by Caltrans in October 2014.

Measure BB funding has advanced project development. In May 2015, Alameda CTC released a Request for Proposals for consultant support to complete the Environmental and Design Phases of the project. The professional services contract was authorized by the Commission in July 2015 and environmental phase work activities began October 2015.

PROJECT SPONSOR | Alameda CTC

Aerial view of project location



A preferred alternative will be selected through the environmental process.

I-80 Gilman Interchange | Benefits

- **Improve congestion and mobility**
- **Shorten queues**
- **Improve turn conflicts and merging**
- **Improve local and regional biking facilities**
- **Provide safe access for pedestrian and bicyclists**

PROJECT COST ESTIMATE

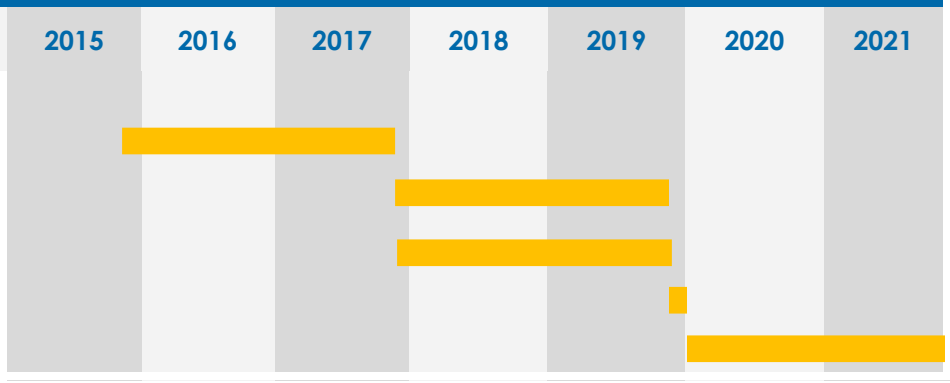
Cost Estimate by Phase ($ X 1,000)		
Planning/Scoping	$	794
PE/Environmental	$	3,557
Final Design (PS&E)	$	3,671
Right-Of-Way	$	1,475
Utility Relocation	$	0
Construction	$	24,313
TOTAL Expenditures:	**$**	**33,810**

PROJECT FUNDING

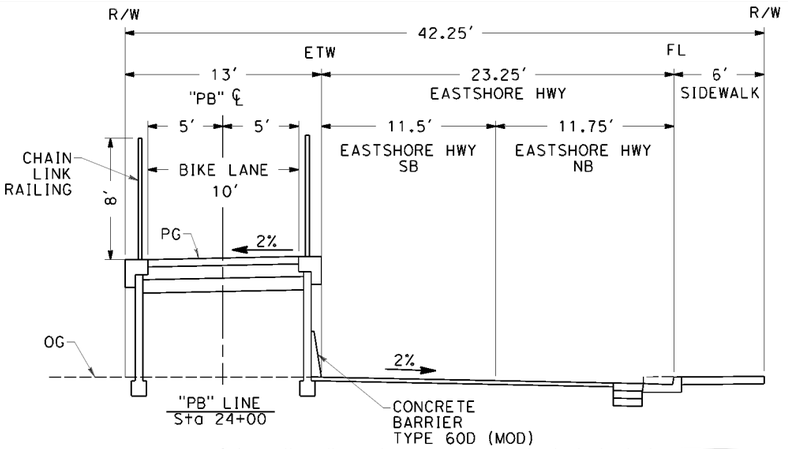
Funding by Fund Source ($ X 1,000)		
Measure BB	$	24,000
Federal	$	1,080
State	$	12
Regional	$	0
Local (City of Berkeley)	$	300
TBD	$	8,418
TOTAL Revenues:	**$**	**33,810**

PROJECT SCHEDULE

Project Phase	Begin - End MM/YY
Scoping	04/12 - 10/14
Environmental	10/15 - 10/17
Final Design (PS&E)	10/17 - 10/19
Right-Of-Way	10/17 - 10/19
Ad / Award	11/19 - 12/19
Construction	01/20 - 01/22



Note: The information on this fact sheet is subject to periodic updates.



CURVE DATA

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③	65.00′	95°44′34"	71.86′	108.62′
④	65.00′	82°09′44"	56.67′	93.21′
⑤	55.00′	110°38′27"	79.49′	106.21′

LAYOUT

SCALE: 1" = 50′

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Page 13

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	Ala	80	4.0C1		--

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — No. — Exp. — CIVIL — STATE OF CALIFORNIA

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PARSONS
155 GRAND AVE., STE 350
OAKLAND, CA 94612

ALAMEDA CTC
1111 BROADWAY #800
OAKLAND, CA 94607

REVISED BY | DATE REVISED

CALCULATED-DESIGNED BY | CHECKED BY

CONSULTANT FUNCTIONAL SUPERVISOR | XX

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION | XX

Caltrans

LAST REVISION 12-17-15 | DATE PLOTTED: ---- | TIME PLOTTED: ----

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04	Ala	80	4.0C2		--

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — No. — Exp. — CIVIL — STATE OF CALIFORNIA

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PARSONS
155 GRAND AVE., STE 350
OAKLAND, CA 94612

ALAMEDA CTC
1111 BROADWAY #800
OAKLAND, CA 94607

R/W — EXIST R/W — CITY R/W

12.25′ CALTRANS LONGITUDINAL RELINQUISHMENT — 44.45′

ES 4′ SHLD. — ETW 12′ GILMAN EB OFF-RAMP — ETW 8′ SHOULDER — ES 10.75′ — 18.5′ — ETW 22′ EASTSHORE HWY — ETW 8′ PARKING — FL 6′ MIN. SIDEWALK

11′ EASTSHORE HWY NB — 11′ EASTSHORE HWY SB

"PB" ℄ CHAIN LINK RAILING

BIKE PATH 15.5′ — 8′

PG — 2% — OG — 2% — 4′

"PB" LINE Sta 25+00

CONCRETE BARRIER TYPE 60D (MOD)

TOM BATES REGIONAL SPORTS COMPLEX

GILMAN ST "GS" LINE

GOLDEN GATE FIELDS

EXIST R/W

SAN FRANCISCO BAY TRAIL

POC COLUMN (TYP)

STAIRCASE WITH 4′ LANDING

"PB" LINE

WEST FRONTAGE RD

"PB" 16+95.42 BC

"PB" 15+43.69 EC

"PB" 13+94.76 BC

"PB" 17+93.09 EC

"C5" LINE

ROUTE 80

"C5" 173+59.85 BC

"C5" 177+06.27 POC
"GS" 8+65.18 POT

"C5" 180+52.19 EC

"PB" 20+36.37 BC

"PB" 26+22.78 BC

"PB" 26+55.48 EC

EASTSHORE HWY

CITY R/W

EXISTING 14′ DRIVEWAY

"PB" 22+03.44 EC

"PB" 21+40.51 PRC

EXISTING 29′ DRIVEWAY

"PB" 27+07.12 BC

"PB" 27+89.57 EC

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2ND ST

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③	65.00′	98°50′11"	75.89′	112.13′
④	65.00′	91°48′02"	67.08′	104.14′
⑤	300.00′	12°01′05"	31.58′	62.93′
⑥	189.25′	10°00′15"	16.56′	33.04′
⑦	65.00′	72°40′19"	47.81′	82.44′

LAYOUT

SCALE: 1" = 50′

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CALCULATED-DESIGNED BY | CHECKED BY

CONSULTANT FUNCTIONAL SUPERVISOR | XX

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION | XX

Caltrans

DATE PLOTTED: ----

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LAST REVISION 12-17-15

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Collision History in Project Vicinity: January 1, 2009 - December 31, 2013

Case ID	Crash Severity	Violation Category	Number Fatalities	Number Injuries	Pedestrian Involved?	Bicycle Involved?	Truck Involved?	Alcohol Involved?	Crash Type	Pedestrian Action	Primary Road	Secondary Road	In Intersection?	Date	Time	Number Parties	Primary Collision Factor	CA Vehicle Code	CA Vehicle Code Subsection
4142001	4	3	0	1					C	A	GILMAN ST	EASTSHORE HWY	N	2/4/2009	945	2	A	22350	
4213447	4	4	0	1					C	A	GILMAN ST	EASTSHORE HWY	N	3/17/2009	1604	2	A	21703	
4213518	4	8	0	1					C	A	GILMAN ST	2ND ST	Y	3/18/2009	1214	4	A	22107	
4384646	4	12	0	1					D	A	GILMAN ST	EASTSHORE HWY	Y	7/29/2009	2134	2	A	22450	
4384754	4	9	0	1					H	A	GILMAN ST	EASTSHORE HWY	N	7/23/2009	2119	2	A	21802	A
4400504	4	3	0	1					C	A	GILMAN ST	EASTSHORE HWY	Y	8/6/2009	1255	2	A	22350	
4511786	3	9	0	1					D	A	GILMAN ST	WEST FRONTAGE RD	N	10/2/2009	1652	2	A	21801	A
4513779	4	9	0	1					D	A	GILMAN ST	WEST FRONTAGE RD	Y	11/23/2009	1725	2	A	21802	A
4655798	3	9	0	1					D	A	EASTSHORE HWY	GILMAN ST	Y	3/29/2010	929	3	A	21802	A
4760111	4	3	0	1					D	A	GILMAN ST	EASTSHORE HWY	Y	5/14/2010	946	2	A	22350	
4848775	4	1	0	1					A	A	WEST FRONTAGE RD	GILMAN ST	Y	7/21/2010	404	1	A	23152	A
5040312	3	9	0	2					-	A	GILMAN ST	EASTSHORE HWY	Y	8/22/2010	1703	2	A	21802	A
5190286	4	9	0	1		Y			D	A	GILMAN ST	WEST FRONTAGE RD	Y	5/24/2011	732	2	A	21804	A
5204941	4	9	0	1					D	A	EASTSHORE HWY	GILLMAN ST	Y	4/21/2011	2200	2	A	21801	A
5204945	4	3	0	1				Y	C	A	EASTSHORE HWY	GILMAN ST	Y	4/20/2011	2327	2	A	22350	
5250298	3	8	0	2					A	A	GILMAN ST	EASTSHORE HWY	Y	6/3/2011	2301	2	A	22107	
5284832	3	9	0	1					D	A	GILMAN ST	EASTSHORE HWY	Y	6/27/2011	1857	2	A	21802	A
5309462	4	9	0	1					D	A	GILMAN AV	EASTSHORE WY	Y	8/29/2011	723	2	A	21802	A
5360163	3	9	0	1					D	A	GILMAN ST	2ND ST	Y	9/20/2011	724	2	A	21802	A
5408400	4	3	0	1					C	A	FRONTAGE RD	GILMAN ST	N	8/25/2011	1520	2	A	22350	
5621864	3	9	0	1					A	A	GILMAN ST	EASTSHORE HWY	Y	2/7/2012	1252	2	A	21802	A
5762392	4	9	0	3					D	A	GILMAN ST	EASTSHORE WY	Y	6/17/2012	1351	2	A	21801	A
5917559	4	8	0	1				Y	D	A	EASTSHORE RD	GILMAN ST	Y	11/17/2012	1822	2	A	22107	
6056662	3	9	0	1		Y			D	A	GILMAN ST	W FRONTAGE RD	Y	3/26/2013	1705	2	A	21801	A
6111355	4	9	0	1					A	A	GILMAN ST	W FRONTAGE RD	Y	5/6/2013	825	2	A	21801	A
6140310	4	9	0	1					D	A	GILMAN ST	W FRONTAGE RD	Y	6/28/2013	1540	2	A	21802	A
6202741	3	8	0	1		Y			D	A	GILMAN ST	EASTSHORE HWY	Y	8/28/2013	1837	2	A	22107	
6216522	3	5	0	1		Y			D	A	GILMAN ST	RT 80	Y	8/14/2013	1856	2	A	21651	C
6251935	3	11	0	1	Y			Y	G	D	GILMAN ST	EASTSHORE HWY	Y	9/18/2013	2029	2	A	21954	A

Source: Statewide Integrated Traffic Record System as downloaded through UC Berkeley Traffic Injury Mapping System, June 2015

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Select SWITRS Variable Definitions

Collision Severity

1 - Fatal
2 - Injury (Severe)
3 - Injury (Other Visible)
4 - Injury (Complaint of Pain)
0 – Property Damage Only (PDO) (PDO collisions not included on TIMS)

Violation Category

01 - Driving or Bicycling Under the Influence of Alcohol or Drug
02 - Impeding Traffic
03 - Unsafe Speed
04 - Following Too Closely
05 - Wrong Side of Road
06 - Improper Passing
07 - Unsafe Lane Change
08 - Improper Turning
09 - Automobile Right of Way
10 - Pedestrian Right of Way
11 - Pedestrian Violation
12 - Traffic Signals and Signs
13 - Hazardous Parking
14 - Lights
15 - Brakes
16 - Other Equipment
17 - Other Hazardous Violation
18 - Other Than Driver (or Pedestrian)
19 -
20 -
21 - Unsafe Starting or Backing
22 - Other Improper Driving
23 - Pedestrian or "Other" Under the Influence of Alcohol or Drug
24 - Fell Asleep
00 - Unknown
- - Not Stated

Type of Collision

A - Head-On
B - Sideswipe
C - Rear End
D - Broadside
E - Hit Object
F - Overturned
G - Vehicle/Pedestrian
H - Other
- - Not Stated

Ped Action

A - No Pedestrian Involved
B - Crossing in Crosswalk at Intersection
C - Crossing in Crosswalk Not at Intersection
D - Crossing Not in Crosswalk
E - In Road, Including Shoulder
F - Not in Road
G - Approaching/Leaving School Bus
- - Not Stated

Primary Collision Factor

A - (Vehicle) Code Violation
B - Other Improper Driving
C - Other Than Driver
D - Unknown
E - Fell Asleep
- - Not Stated

CA Vehicle Code

Corresponds to categories and described in vehicle code manual - (http://www.dmv.ca.gov/pubs/vctop/vc/vc.htm)

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Bicycle Pedestrian Advisory Committee Project Review Checklist

Routine accommodation

Potential issues	Opportunities
• Missing sidewalks • Crosswalks missing on some intersection approaches • Adequate intersection crossing time at signalized intersections • Uncontrolled crossings of high volume roadways • Missing bicycle detection	• Frequently spaced pedestrian crossing opportunities • Pedestrian crossing opportunities placed according to "desire lines" • Signing and striping to alert motorists of pedestrians and bicyclists • Bicycle signal detectors and markings • Connected sidewalk network with well-spaced crossing opportunities

Shorten crossings

Potential issues	Opportunities
• Crossing of numerous vehicle lanes • Roadways that cross at skewed angles (greater than 90 degrees) • Wide vehicle lanes when not justified by presence of buses or trucks • Special populations that need more time to cross not considered	• Add median refuges or pedestrian refuge islands • Add curb extensions • Narrow vehicle lanes • "Tee up" intersection approaches • Calculate appropriate pedestrian clearance time

Manage vehicle speeds

Potential issues	Opportunities
• Vehicle capacity much greater than volumes • Wide lane widths when not justified by presence of buses or trucks • Wide turn radii at intersections • Documented history of vehicle speeding	• Consider lane reduction or narrowing lane widths • Reduce turning radii • "Tee up" intersection approaches • Time traffic signals for slower signal progression speed • Employ traffic calming techniques • Speed feedback signs

Improve visibility

Potential issues	Opportunities
• Obstructions of sight lines to pedestrians (parked cars, utility boxes, etc.) • Multiple threat situations at mid-block crossings • Vertical curves preceding merging zones • Reduced field of vision from skewed roadway approach angle	• Daylight intersections with red curb or curb extensions • Tee up intersections to widen field of vision • Curb extensions and bulb outs to position pedestrian more prominently • High-visibility crosswalks • Back-in angle parking

Clarify the right-of-way

Potential issues	Opportunities
• Yielding non-compliance at mid-block crossings • Weaving zones for through bicyclists and right-turning vehicles • Bus/bike weaving • Driveway conflicts • Turn conflicts between through bikes on cycle tracks and turning autos	• Advance stop lines or yield markings • Mark conflict zones with green paint, striping, etc. • Signage and traffic control devices to indicate right-of-way • Bus loading islands with bicycle lanes behind • Separate bicycle signal phasing and/or protected turns across cycle tracks

One decision at a time

Potential issues	Opportunities
• Permitted left turns – vehicles must scan for gaps in traffic and look for crossing bicyclist and pedestrians • Weaving/merging of through bicyclists and right turning vehicles • Right turning vehicles must scan for gaps in traffic and identify pedestrians waiting to cross intersection • Driveway conflicts – vehicle must look for pedestrians and gaps in traffic	• Change permitted left turns to protected • Leading bicycle and/or pedestrian intervals in signal phasing • Restrict right turn on red in high pedestrian demand areas or with bike turn treatments • Control free right turns ("slip lanes") with stop or yield signs • Bike lanes to the left of right turn pockets • Appropriate weaving distance for bicyclists and motorists in advance of intersection

Keep it direct

Potential issues	Opportunities
• Missing crossing opportunities near transit stops and major trip generators • Infrequently spaced crossing opportunities • Bicycle/pedestrian grade separation that results in less direct route	• Frequently spaced crossing opportunities • Align crossing opportunities with transit stops, major trip generators • Crossing opportunities at all intersection legs unless strong justification for restricting

Access for all

Potential issues	Opportunities
• Sidewalks not wide enough for mobility device users • Curbs that do not accommodate mobility device users, people with strollers, elderly, etc. • Vision impaired users • Hearing impaired users	• Directional ADA compliant curb ramps at all crosswalk approaches • ADA compliant median refuges, wide enough to fit a bike or stroller • Tactile markings and accessible/audible pedestrian countdown devices

Comfortable, secure environment

Potential issues	Opportunities
• Lighting does not fully illuminate bicycle or pedestrian zones • Pinch points or obstructions of sidewalk • Insufficient lighting and eyes on the street in undercrossings • Landscaping with potential to be overgrown or cause sidewalk maintenance issues	• Pedestrian scale lighting • Buffers between sidewalk and vehicle travel lanes (parked cars, landscape strip, etc) • Clear definition of amenity and walking zones of sidewalk • Sidewalk width adequate for groups to walk side-by-side • Landscaping that contributes positively to streetscape • Placemaking elements • Benches, trash cans, bicycle parking, and other amenities

Low stress bicycling streets

Potential issues	Opportunities
• Minimal separation from high speed, high volume vehicle traffic • Bicycle lanes impeded by car door zone or storm drains • Shared lanes on roadways with high traffic volumes and/or speeds	• Implement wide bike lanes and/or mark door zone with parking T's or buffer • Add buffers between travel lanes and bike lane • Opportunities for traffic calming on shared streets

Low stress bicycling intersections

Potential issues	Opportunities
• Left turn situations in which bicyclist must merge across multiple lanes of traffic • Cycle tracks with permitted turns at signalized intersections and poor visibility at unsignalized intersections	• Bike boxes, two stage left turn queue boxes, and bicycle signal phases to facilitate left turns onto/off of key bikeways • Separated bike signal and/or protected turn phasing at cycletracks • Red curb, tight curb radii, and clear sight lines at unsignalized intersections for cycle tracks

Trail/Multi-Use Path user conflicts

Potential issues	Opportunities
• Insufficient width for bicyclists to pass pedestrians • Speed differential between bicyclists and pedestrians	• Adequate trail width • Treatments to slow bicyclists down • Marking different zones for bicyclists/pedestrians with striping, paving materials, signage etc.

Trail/Multi-Use Path crossings

Potential issues	Opportunities
• Drivers not expecting trail crossing • Trail users cross multiple lanes of traffic with no enhancements • Long crossing distances for trail users	• Gateway features • Raised crosswalks • Special paving, signage, and striping to denote trail crossings rather than crosswalk • Flashing beacons (RRFB, PHB) or signalization • Signage (for vehicles and trail users)

Bicycle/pedestrian friendly freeway ramps

Potential issues	Opportunities
• Insufficient space and queues for vehicle speed transition • Bicycle lane located between auto travel lanes for long distances (e.g. more than 200 ft) • Need for pedestrians and bicyclists to cross multiple lanes • Long crossing distances where ramps meet urban streets • Poor visibility of motorists entering/ exiting ramps	• Realign ramps at 90 degree angles • Crosswalk sited to balance highest visibility and lowest auto speeds through ramp • Add buffers around bicycle lanes • Mark conflict zones with green • Add yield marking and yield here signs • Add HOV lane or second lane to ramp only after crosswalk • Provide bicycle lane escape ramps to sidewalk option

Fast, efficient, attractive transit operations

Potential issues	Opportunities
• Unreliable arrivals and slow operating speeds that make transit an unappealing option • Buses required to use pull outs • Buses experiencing significant signal delay • Buses inadequately sized for articulated buses or multiple bus arrivals • Bicycle/bus conflicts on high frequency bus routes or major bicycle routes • Safety and comfort at bus stops	• Move transit stops to far side of intersection • Transit bulb outs to keep buses from needing to pull back into traffic • Consolidation of stops • Bus queue jump lanes • Bicycle lane runs behind bus stop to separate bicycle/bus conflicts • Shelters, lighting, information, trash receptacles, and benches at stops

Accommodating trucks

Potential issues	Opportunities
• Not accommodating loading/delivery resulting in double parking • Insufficient lane widths • Inadequate turning radii	• Appropriately select design vehicle (18 wheeler vs. delivery truck) • Bicycle lanes can contribute to effective turning radius • Designate loading zones • Mountable curbs in some situations

Bicycle Pedestrian Advisory Committee Project Review Input Form

Instructions:

- This form is designed to facilitate BPAC members in their role reviewing projects during early development phases.
- BPAC members may use this form to brainstorm comments/questions for project sponsors in advance of a meeting at which a capital project is reviewed.
- BPAC members may share comments/questions verbally or submit this form at the meeting.
- The categories on this form correspond to the BPAC Complete Streets Project Review Checklist, and BPAC members should consult this checklist for an overview of issues and opportunities in each category.
- In addition to this form, BPAC members may also develop comments/questions by marking up/annotating project design drawings.

Project Name:

_____

Comments/Questions on Project Design:

Routine accommodation

_____

_____

Shorten crossings

_____

_____

Manage vehicle speeds

_____

_____

Improve visibility

_____

_____

Clarify the right-of-way

_____

_____

One decision at a time

_____

_____

Keep it direct

Access for all

Comfortable, secure environment

Low stress bicycling streets

Low stress bicycling intersections

Trail/Multi-Use Path user conflicts

Trail/Multi-Use Path crossings

Bicycle/pedestrian friendly freeway ramps

Fast, efficient, attractive transit operations

Accommodating trucks

Other Comments or Questions

DATE:	March 31, 2016
SUBJECT:	Countywide Bicycle/Pedestrian Count Program
RECOMMENDATION:	Provide Input on Future Bicycle/Pedestrian Count Program Design

Summary

Bicycle and pedestrian count data is important for a variety of planning purposes. Alameda CTC has an existing bicycle/pedestrian count program includes both manual and automated counting components. Alameda CTC's manual counts consists of a set of 63 locations at which one-day bicycle and pedestrian counts are conducted on an annual basis. Alameda CTC's automated counts consist of a small set of automated counters deployed around the county that collect continuous data on bicycle and pedestrian volumes. Attachment A provides further details on the Alameda CTC count program including program history, current count locations, and past uses of count data. Alameda CTC makes all count data available on its website (Attachment B).

Alameda CTC has funds allocated to conduct manual counts in 2016 and 2017. Alameda CTC has observed some shortcomings of its current approach to conducting counts which are summarized in Attachment A. Prior to initiating data collection this fall, Alameda CTC wishes to revisit the overall count program design to ensure that the program best achieves its intended goals.

At the April BPAC meeting, staff will facilitate a discussion on the overall program design. The following are questions that staff seeks input on from the BPAC:

- What do you view as the most important goals of bicycle and pedestrian count data collection (see Attachment A, page 1 for possible goals)?
- Would you prioritize collecting detailed information on characteristics of bicyclists and pedestrians (e.g. gender, helmet usage, wrong-way riding) or conducting counts at more locations?
- Would you prioritize collecting data for multiple time periods (e.g. AM, midday, school, PM) at the same location or conducting counts at more locations?
- Would you prioritize counting the same locations every year, or rotating counts between different locations from year-to-year to expand the number of locations where data is collected?

- What factors would you prioritize in selecting count locations?

Following the April BPAC meeting, staff will develop a proposed set of count locations for 2016 and 2017. These will be presented to the BPAC for review at the July BPAC meeting, prior to data collection in September-October 2016 and 2017.

Attachments

A. Countywide Bicycle and Pedestrian Count Program Overview
B. Alameda CTC Bicycle and Pedestrian Count Program Data

Staff Contact

Tess Lengyel, Deputy Director of Planning and Policy

Matthew Bomberg, Assistant Transportation Planner

Countywide Bicycle and Pedestrian Count Program Overview

Introduction

This document describes the Alameda CTC's Countywide Bicycle and Pedestrian Count Program. Alameda CTC has collected bicycle/pedestrian count data in various forms dating back to 2002. The program has furnished valuable data that have been used in a variety of planning applications, as described in this document. In addition, a number of valuable lessons have been learned through these efforts, including experience with different counting methods/technologies and possible partnerships with other agencies. It is the intent of this document to facilitate a discussion regarding redesign of the Alameda CTC's Countywide Bicycle and Pedestrian Count Program including clarifying the program goals and best aligning program design to those goals.

Goals of Count Program

A thoughtful program design should start with considering the goals of the program. The following are all goals that could be achieved via a Countywide Bicycle and Pedestrian Count Program. The specific program design will determine the degree to which various goals are met.

- **Baseline data and trends:** monitor if more people are biking and walking over time.
- **Return on investment:** understand the usage of new facilities; understand how the buildout of a network increases bicycling and walking levels.
- **Accurate safety analysis:** simply looking at the highest crash locations tends to suggest that areas with the highest bicycling and walking levels are most unsafe (e.g. UC Berkeley campus area for bicycling and Oakland Chinatown for walking). Accurately assessing underlying safety requires normalizing by level of exposure (e.g. collisions per bicyclist, not simply collisions).
- **Communicate role of bicycle and pedestrian facilities in transportation system:** provide information that shows how bicycling and pedestrian facilities carry significant volumes of people and are used for transportation/commuting purposes.
- **Provide data for interested researchers.**
- **Leverage funding:** provide required information for grant applications such as Active Transportation Program; assist local jurisdictions in providing such information.
- **Travel model enhancement:** enhancing the ability of the Alameda CTC travel model to represent bicycling and walking requires observed data to calibrate the model.

Manual vs. Automatic Count Data

There are two general types of bicycle and pedestrian count data collection: manual and automatic counts. Alameda CTC's current program includes both types of data collection. Appendix B provides more details on types of count technologies.

Manual count data collection involves human observation of the number of bicycles and pedestrians counted. Manual count data collection can cover a large number of locations and can enable

observation of some characteristics of the bicyclists and pedestrians (e.g. gender, helmet usage). Manual counts typically collect data for a limited amount of time because of the labor costs associated with the counts.

Automated counts involve using equipment that automatically detects the presence of a bicyclists or pedestrian. Automated counts can observe data for a long period of time (over weeks or months) but typically do not cover as many locations because of the cost of equipment. Automated counters also require field installation and maintenance.

Current Alameda CTC Count Program

Manual counts

Alameda CTC's current manual count program has been in place since 2010. The count program consists of 63 locations that are counted annually between September and October. Counts are conducted by paid professionals who are instructed to use the National Pedestrian and Bicycle Documentation Project (NPBDP) methodology. Counters are instructed not to count during poor weather or other unusual circumstances.

Each location is counted for two 2-hour periods. All locations are counted during the PM peak period (4 pm – 6 pm). In addition, each location is counted during either a midday period (12 pm – 2 pm) or a school period (2 pm – 4 pm), as appropriate for that location. Counts consist of turning movement counts for bicyclists and intersection leg crossing counts for pedestrians. In addition to number and direction, information is also gathered on gender and helmet usage for bicyclists.

The 63 locations were determined in 2010, and are distributed among Alameda County's four planning areas in approximately equal proportion as population. The 63 locations were determined using criteria including inclusion in the Countywide Bicycle and Pedestrian Plans, proximity to schools or trails, and availability of historic count data at that location. Both local staff and the BPAC provided input on count locations. Appendix A shows the count locations in a map.

Alameda CTC funded the full cost of the manual count program in 2013 and 2014. In 2015, counts were not conducted due to considerable questions about the veracity of one-day count data when presented to the Planning, Policy, and Legislation Committee. Alameda CTC has a consultant under contract to conduct counts manual counts in 2016 and 2017.

Automated counts

Alameda CTC has deployed automated bicycle/pedestrian counting equipment in different forms since 2008. At present, Alameda CTC has five automated bicycle/pedestrian counters installed around the County, as summarized in Table 1. The counters vary in technologies, maintenance/management requirements, and types of users counted. Two are in-pavement bicycle counters installed in bike lanes and three are portable trail counters that detect bicyclists and pedestrians (two portable and one permanent).

The in-pavement counters were deployed as part of a research project with UC Berkeley. Memoranda of understanding were developed between UC Berkeley, Alameda CTC, and the respective cities, and the cities agreed to install the counters according to manufacturer directions.

The portable trail counters were installed by an Alameda CTC consultant. In some cities, encroachment permits were required. These trail counters can be moved to different locations and were intended to be rotated between different sites every six months. Alameda CTC, East Bay Regional Park District (EBRPD), and Bay Trail staff collaborated in developing the list of potential sites for the counters; factors considered included gap closure, inclusion in Countywide Bicycle and Pedestrian Plans, proximity to communities of concern, schools, transit, and activity centers, and ensuring a mix or primarily recreational and primarily commuter trails. Alameda CTC staff have not moved the counters as intended due to staff time constraints.

Table 1: Automated Counter Locations

Location	Type	Counts	Battery life	Data retrieval	Installation
Telegraph @ 66th St	In-pavement loop detector	Bicycles only, one direction	2 years	Manual	City
Amador Valley Blvd @ Iron Horse Trail	In-pavement loop detector	Bicycles only, one direction	2 years	Manual	City
West St Pathway at Virginia	Portable trail counter (Pyro)	Total users, two directions	10 years	Manual	Alameda CTC consultant
Emeryville Greenway at Folger St	Portable trail counter (Pyro)	Bikes and peds, two directions	10 years	Manual	Alameda CTC consultant
East Bay Greenway at 75th Ave	Permanent trail counter (Urban Multi)	Bikes and peds, two directions	2 years	GSM	As part of capital project

(PYRO AND URBAN MULTI ARE THE VENDOR MODEL NAMES, GSM = CELLULAR TRANSMISSION)

Grant agreement requirements

Alameda CTC typically requires recipients of Measure B or Vehicle Registration Fee bicycle/pedestrian discretionary grants to conduct before and after counts to ascertain whether a project leads to an increase in walking and biking. Grant agreements typically stipulate that Alameda CTC may specify the count methodology; Alameda CTC has typically recommended manual counts using the National Pedestrian and Bicycle Documentation Project methodology.

Past Uses of Count Data

Alameda CTC staff have made use of bicycle/pedestrian count data for a variety of purposes, as described below:

- **Demand forecasting and grant applications** – the state Active Transportation Program grant application requires applicants to include a projection of estimated use of the proposed project. For the East Bay Greenway application, staff prepared an estimate of the demand for the trail based on count data from other trails around the county. Presenting a well-documented demand forecast prepared using robust count data was a factor in the success of this grant

application in a highly competitive funding program. Other jurisdictions have also requested count data from Alameda CTC for use in their ATP applications.

- **Travel model validation** – as part of the 2013-2015 travel demand model update, the model was enhanced to include the ability to forecast which routes bicyclists will take. Both automated and manual count data were used as part of the model validation. Automated count data were used to develop factors to convert between 2-hour manual counts and daily volumes. The manual count data were used to compare estimated and observed bicycle volumes at a variety of locations.
- **Performance monitoring** – bicycle and pedestrian counts are one of the adopted performance measures in the Countywide Bicycle and Pedestrian Plans. From 2010-2012, Alameda CTC prepared a detailed count report to monitor this performance measure. In 2013 and 2014, count data were reported on in the Performance Report.
- **Public information -** as part of the 2014 TEP public information campaign, the positive growth trend in bicycle and walking volumes between the early 2000s and 2012 was frequently cited as a reason for voters to consider supporting Measure BB and its associated investments in walking and biking. This trend information was based on data from the count program.
- **Research projects** – Alameda CTC has supported several research projects at UC Berkeley that have required bicycle and pedestrian count data.

Current Program Shortcomings

The current bicycle and pedestrian count program has several shortcomings, described below. A redesign of the program should seek to address these shortcomings.

- **Spatial coverage:** Manual program provides poor spatial coverage (63 locations for a county of over 1.5 million population). The National Pedestrian and Bicycle Documentation (NPBD) project recommends a count location for every 15,000 population, which would equate to roughly 105 count locations for Alameda County.
- **Manual count statistical significance:** National research indicates that bicycle and pedestrian volumes can vary by as much as 40 percent from day-to-day (compared to 10 percent for auto volumes). Alameda CTC has observed declines in manual counts data, even when national data sources suggest increases in bicycle and pedestrian commuting. It is difficult to know if declines in counts are due to day-to-day variability or an actual decrease in levels of biking and walking.
- **Automated counter manual data retrieval and battery changes:** 4 of 5 automated counters require field visits to download the data. All counters require field visits to change batteries. Conducting field visits to counters around a very large county is difficult for Alameda CTC which has resulted in some loss of data.
- **Automated counter theft/damage vulnerability:** A portable trail counter was stolen from the Ohlone Greenway in 2012. One of the in-pavement loop detector counters was rendered inoperable during a re-paving project in Dublin in 2015.

Appendix A: Program History

Manual counts

- 2002 – 2008: ACCMA counts 12 locations through LOS monitoring contract (biennially)
- 2002 – 2003: MTC counts 13 locations in Alameda County
- 2008: ACTIA augments UC Berkeley research project funded by a Caltrans grant which counts 50 locations; 30 of these are on State Highway System
- 2009: ACTIA and UC Berkeley collaborate to conduct 37 counts using volunteers
- 2010: MTC reinstates regional count program. Alameda CTC pays MTC for to count additional locations in Alameda County. Total of 63 locations counted, 50 of which are funded by Alameda CTC. 63 locations come from sources including previous CMA count program, UC Berkeley research projects, and local suggestions.
- 2011 and 2012: MTC continues program, Alameda CTC continues to pay for additional locations in Alameda County.
- 2013: MTC discontinues regional program; Alameda CTC pays to count all 63 locations.
- 2014: Alameda CTC pays to count all 63 locations
- 2015: No count data collected

Automated counts

- 2008: ACTIA awards a grant to augment UC Berkeley Caltrans grant which is used to purchase four portable automated bicycle and pedestrian counters and two in-pavement bicycle counters. Two permanent counters are installed in Dublin and Oakland. Portable counters are rotated among different locations by UCB for research project.
- 2010-2012: Alameda CTC, EBRPD, and Bay Trail develop criteria and locations for automated counter deployment
- 2012: Portable automated counters deployed to their current locations in Berkeley and Emeryville.
- 2015: Permanent counter (GSM-equipped) installed by Alameda CTC as part of East Bay Greenway Segment 7A

Appendix B: Overview of Counting Methods/Technologies

Manual Counts

In-Person Counts

- Field observer tallies bicyclists and pedestrians
- Multiple observers may be required if high traffic intersection
- Best ability to discern gender, helmet usage, other attributes

Video Counts

- Video counters mounted to traffic signal or other poles; observers then count from video footage back in office
- Lower cost because observers watch footage at 3X to 5X speed
- Ability to check footage if suspected outlier/error
- May be difficult to discern gender, helmet usage, other attributes

Automated Counts

In-pavement loop counters

- Loop detector sunk in pavement in bike lane
- Requires city public works department to install
- One direction only
- Data collection can be via GSM (cellular transmission) or manual download
- Can be damaged or impeded by repaving project

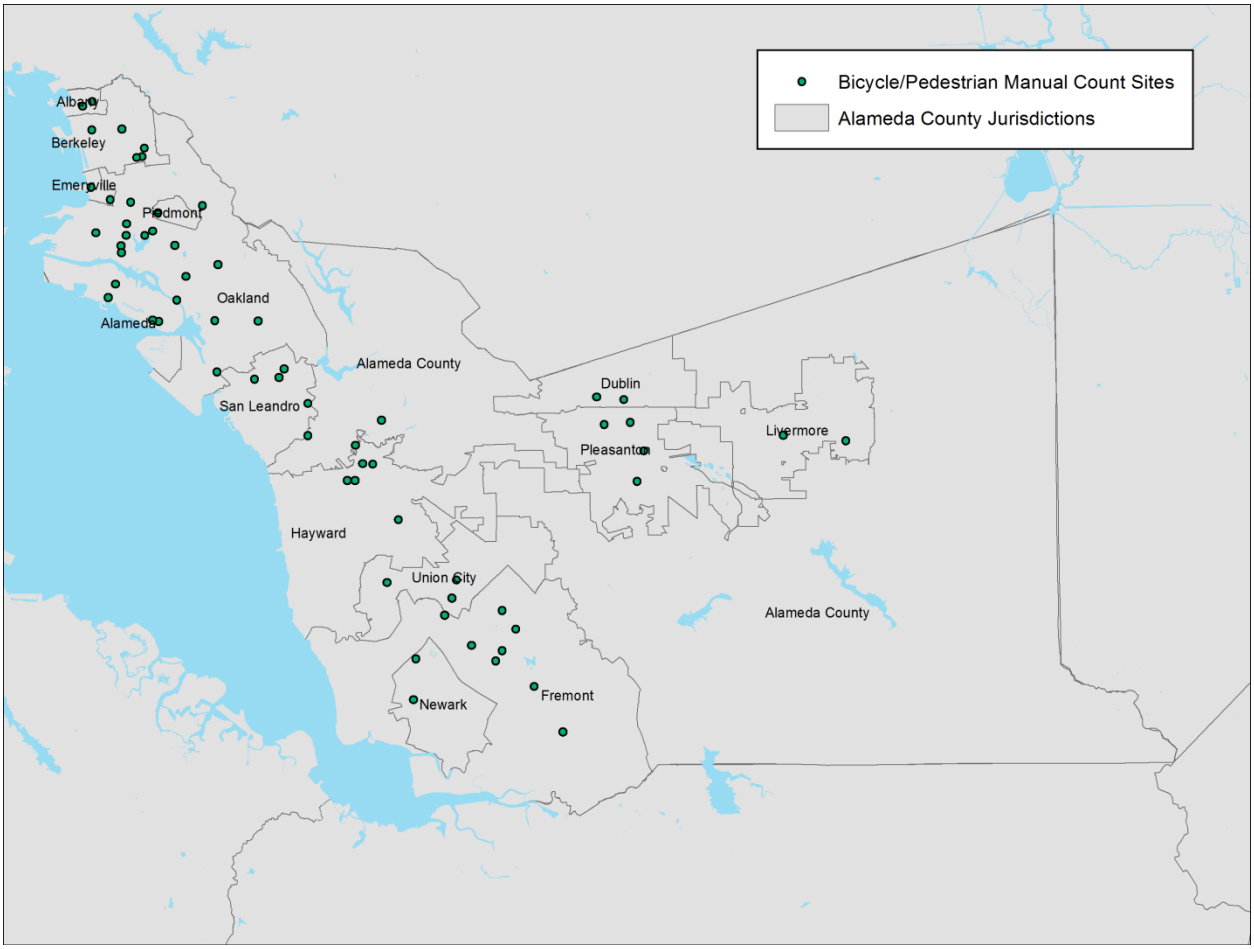
Portable trail counters

- Mounted box counts via infrared detection; can also be paired with in pavement loops to distinguish bikes vs. peds
- Can be moved from location to location
- Encroachment permit may be required by city
- Does not require public works or contractor to install
- Susceptible to theft

Permanent trail counters

- Mounted box counts via infrared detection; can also be paired with in pavement loops to distinguish bikes vs. peds
- No ability to move from location to location
- Encroachment permit may be required by city
- Requires public works or contractor to install, if not done as part of a larger project
- Less susceptible to theft

Appendix C: Current Manual Count Locations



Planning Area	Locations	Percent	Population	Percent
North	30	49%	618,736	41%
Central	13	21%	362,447	24%
South	12	20%	327,720	22%
East	8	13%	198,042	13%

Table 2: Current Manual Count Locations (Counted 2010-2014)

					In Plan			W/in 1/4 mi		
ID#	Street	Cross street	City	ACTIA Planning Area	Reg Bike Plan	Co. Bike Plan	Co. Ped Plan	School	Trail	Historic Data (pre-2010)
1	Atlantic Avenue	Webster Street	Alameda	North	x	x	x	x		X
2	Broadway (CA 61)	Calhoun Street	Alameda	North		x				X
3	Central Avenue	Fifth Street	Alameda	North	x	x	x	x		X
7	Park Street	Otis Drive	Alameda	North			x			X
95	Buchanan Street	Jackson Street	Albany	North	x	x	x	x		
9	Solano Avenue	Masonic Ave(Ohlone Trail)	Albany	North	x	x	x	x	x	X
10	Ashby Avenue (CA 13)	Hillegass Avenue	Berkeley	North	x	x	x			X
12	Ashby Avenue (CA 13)	Telegraph Avenue	Berkeley	North			x	x		X
14	College Avenue	Derby Street	Berkeley	North			x	x		X
16	Hearst Avenue	Milvia Street	Berkeley	North	x	x	x	x		X
17	San Pablo Avenue	Virginia Street	Berkeley	North			x			X
22	Hesperian Boulevard	Lewelling Boulevard	County	Central		x	x	x		X
23	Mission Boulevard (CA 185)	Grove Way	County	Central		x	x			X
24	Redwood Road	Castro Valley Boulevard	County	Central		x				X
28	Dublin Boulevard	Hacienda Drive	Dublin	East	x	x	x	x		X
27	Dublin Boulevard	Scarlett Drive (Iron Horse Trail)	Dublin	East		x	x		x	X
30	Powell Street	Christie Avenue	Emeryville	North		x	x			X
31	San Pablo Avenue	40th Street	Emeryville	North			x	X		X
32	Fremont Blvd	Mowry Avenue	Fremont	South			x			X
98	Fremont Blvd (Washington)	Union Street	Fremont	South			x			
33	Fremont Boulevard (CA 84)	Peralta Boulevard	Fremont	South		x	x			X
34	Mission Boulevard (CA 238)	Nichols Avenue	Fremont	South			x	x		X
35	Mowry Avenue (CA 84)	Cherry Lane	Fremont	South		x				X
36	Paseo Padre Parkway	Mowry Avenue	Fremont	South		x	x			X
99	Paseo Padre Parkway	Decoto Rd	Fremont	South	x	x	x	x		
38	Warm Springs	Grimmer	Fremont	South	x	x	x			X
97	C Street	Grand Street	Hayward	Central	x	x	x			
39	Foothill Boulevard (CA 238)	D Street	Hayward	Central			x	x		X
41	Mission Boulevard (CA 238)	Jefferson Street	Hayward	Central			x	x		X
45	Santa Clara Street	Ocie Way	Hayward	Central		x		x		X
47	Winton Avenue	Amador Street	Hayward	Central			x	x		X
49	East Street	Vasco Road	Livermore	East		x	x			X
50	Railroad Avenue	First Street	Livermore	East			x			X
51	Ardenwood Boulevard (CA 84)	Newark Boulevard (E side interchange ramp)	Newark	South		x				X
52	Thornton Avenue	Willow Street	Newark	South		x		x		X
53	66th Avenue	San Leandro St	Oakland	North			x	x		X
55	Bancroft Avenue	Auseon Avenue	Oakland	North		x	x	x		X
56	Broadway	12th Street	Oakland	North			x			X
57	Broadway	20th Street	Oakland	North		x	x	x		
58	Chatham Road	13th Avenue	Oakland	North			x	x		X
59	Doolittle Drive (CA 61)	Airport Access Road	Oakland	North	x	x	x		X	X
62	Fruitvale Avenue	Foothill Blvd	Oakland	North		x	x	x		
63	Fruitvale Avenue	Alameda Ave	Oakland	North		x			x	X
64	Grand Avenue	Staten Ave	Oakland	North		x		x		
65	Grand Avenue	Lake Park	Oakland	North		x	x	x		X
70	MacArthur Boulevard	38th Avenue	Oakland	North	x	x	x	x		X
72	Mandela Parkway	14th Street	Oakland	North	x	x				X
75	Mountain	La Salle	Oakland	North		x				X
96	Telegraph Avenue	40th Street	Oakland	North	x	x	x			
76	Telegraph Avenue	27th Street	Oakland	North	x	x	x	X		X

					In Plan			W/in 1/4 mi	
ID#	Street	Cross street	City	ACTIA Planning Area	Reg Bike Plan	Co. Bike Plan	Co. Ped Plan	School / Trail	Historic Data (pre-2010)
78	Webster Street	7th Street	Oakland	North			x		X
79	Grand Avenue	Oakland Avenue	Piedmont	North				X	X
80	Main St	Bernal Ave	Pleasanton	East		x	x	x	X
81	Owens Drive	Andrews Drive	Pleasanton	East			x		X
82	Santa Rita Road	Francisco Street	Pleasanton	East	x	x	x	x	X
83	Stoneridge Drive	Hopyard Road	Pleasanton	East		x		x	X
85	Bancroft Avenue	Estudillo Avenue	San Leandro	Central	x	x	x	x	X
87	Davis Street (CA 61)	Pierce Avenue	San Leandro	Central		x			X
88	East 14th Street (CA 185)	Hesperian Boulevard	San Leandro	Central		x	x		X
89	East 14th Street (CA 185)	Maud Avenue	San Leandro	Central			x		X
92	Alvarado-Niles Road	Dyer Street	Union City	South		x	x	x	X
93	Decoto Road	Alvarado-Niles Road	Union City	South		x	x		X
94	Decoto Road	7th Street	Union City	South	x	x	x	x	X

DATE:	March 31, 2016
SUBJECT:	TDA Article 3 Project Review
RECOMMENDATION:	Provide input on TDA Article 3 projects for select jurisdictions

Summary

The Countywide BPAC is responsible for reviewing and providing input on TDA Article 3 projects in Alameda County. As in the past, the BPAC is being requested to review several projects being submitted by local jurisdictions for funding in Fiscal Year (FY) 2016/2017. The 4 projects are described below.

Background

TDA Article 3 is a funding source administered by the Metropolitan Transportation Commission (MTC) that is available annually local agencies to use for bicycle and pedestrian projects. Local balances are determined according to population by formula, and jurisdictions may spend funds or roll them over to a future year. MTC requires that all projects submitted for funding be reviewed by a Bicycle Advisory Committee (BAC) and several jurisdictions in Alameda County use the Alameda CTC BPAC for this purpose.

This year 2 jurisdictions are requesting review of their projects by the Countywide BPAC: Alameda County and the City of Hayward. Their projects are summarized below. All other jurisdictions have elected to roll-over TDA Article 3 funds for future years or will use a local BAC for project review.

Alameda County

1. ***Bicycle and Pedestrian Improvements at Various Locations in Alameda County Unincorporated Areas***

   The Bicycle Improvement Project includes bicycle lane striping, signage, sharrows, bicycle loop detectors, bicycle racks, bicycle lockers, and other bicycle facility improvements. The TDA funds will help implement the bicycle projects identified in the Alameda County Bicycle and Pedestrian Master Plan. The project will close gaps in the Alameda County Unincorporated Areas bicycle network.

   The Pedestrian Improvement Project includes sidewalks, curbs, gutters, crosswalks, striping, high visibility crosswalks, pedestrian ramps, modifying existing ramps, and

associated improvements at various locations in unincorporated Alameda County to meet American with Disabilities Act standards. This project will improve access to pedestrian activity centers by removing barriers that limit pedestrian travel. The TDA funding request is $100,000.

2. ***Pedestrian Ramps at Various Locations in Alameda County Unincorporated Areas***
   This project will construct pedestrian ramps and modify existing ramps at various locations in Alameda County unincorporated areas to meet American with Disabilities Act standards. This project will provide and improve access to pedestrian activity centers by removing barriers that limit pedestrian travel. The TDA funding request is $100,000.

3. ***Bicycle/Pedestrian Safety Education Program***
   The Bicycle/Pedestrian Safety Education Program will provide traffic safety materials, such as brochures, activity books, flashing reflectors, reflector bands, bicycle lamps, helmets, bicycles, and other items to promote pedestrian and bicycle safety. The program would also support bicycle and pedestrian community activities that promote biking and walking, such as "Don't Rush Safety," "Walk to School Week," and "Bike to Work Day."

   The aim of the program is to educate and prevent injuries while promoting the benefits of physical activity. The Public Works Agency will continue to partner with the Alameda County Department of Public Health, Sheriff's Department, California Highway Patrol, Alameda County Safe Routes to School Program, Alameda County Transportation Commission, elected officials, local leaders, the Bay Area Air Quality Management District, and other agencies to identify and address needs within the community, as well as sponsor bicycle and walk events. The TDA funding request is $38.115.

City of Hayward

1. **Citywide ADA Compliant Wheelchair Accessible Ramps**
   Installation of wheelchair ramps at various locations citywide. The TDA funding request is $142,491.

Fiscal Impact: There is no fiscal impact.

Staff Contact

Tess Lengyel, Deputy Director of Planning and Policy

Matthew Bomberg, Assistant Transportation Planner

Alameda County Transportation Commission
Bicycle and Pedestrian Advisory Committee
Roster and Attendance Fiscal Year 2015-2016

	Suffix	Last Name	First Name	City	Appointed By	Term Began	Re-apptmt.	Term Expires	Mtgs Missed Since Jul '15
1	**Ms.**	**Tabata, Chair**	**Midori**	**Oakland**	**Alameda County Mayors' Conference, D-4**	**Jul-06**	**Dec-15**	**Dec-17**	**0**
2	**Mr.**	**Turner, Vice Chair**	**Matt**	**Castro Valley**	**Alameda County Supervisor Nate Miley, District 4**	**Apr-14**		**Apr-16**	**1**
3	Mr.	Fishbaugh	David	Fremont	Alameda County Supervisor Scott Haggerty, District 1	Jan-14	Jan-16	Jan-18	0
4	Ms.	Gigli	Lucy	Alameda	Alameda County Supervisor Wilma Chan, District 3	Jan-07	Oct-12	Oct-14	2
5	Mr.	Johansen	Jeremy	San Leandro	Alameda County Mayors' Conference, D-3	Sep-10	Dec-15	Dec-17	0
6	Mr.	Jordan	Preston	Albany	Alameda County Supervisor Keith Carson, District 5	Oct-08	Oct-14	Oct-16	1
7	Ms.	Marleau	Kristi	Dublin	Alameda County Mayors' Conference, D-1	Dec-14		Dec-16	0
8	Mr.	Murtha	Dave	Hayward	Alameda County Supervisor Richard Valle, District 2	Sep-15		Sep-17	0
9	Mr.	Schweng	Ben	Alameda	Alameda County Mayors' Conference, D-2	Jun-13	Jul-15	Jul-17	0
10	Ms.	Shaw	Diane	Fremont	Transit Agency (Alameda CTC)	Apr-14		Apr-16	1
11	Ms.	Zimmerman	Sara	Berkeley	Alameda County Mayors' Conference, D-5	Apr-14		Apr-16	1

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