



**METROPOLITAN
TRANSPORTATION
COMMISSION**

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Arterial Operations Committee (AOC)

10:15 A.M. - 12 P.M., Tuesday, March 8, 2016

(10:00 – 10:15 A.M. Networking Time)

Conference Room 171

Metropolitan Transportation Commission

101 Eighth Street, Oakland, CA 94607

Chair: Obaid Khan, City of Dublin

Vice Chair: David Huynh, Iteris

Staff Liaison: Linda Lee, MTC

Virginia Lingham, MTC

For more information, please visit the Arterial Operations website at:

<http://www.mtc.ca.gov/our-work/operate-coordinate/arterial-operations>

Meeting Agenda

- 1. Introductions (Obaid Khan)** 10:15 a.m.
 - a. *Meeting Notes from January 12, 2016**
- 2. Arterial Operations Committee Activities and Updates** 10:20 a.m.
 - a. *Summary of AOP Task Force Meetings on January 13 and February 9, 2016 (Saravana Suthanthira, ACTC)**
 - b. *PASS FY15/16 Project Status**
 - c. *Member Announcements, Reports, or Updates*
- 3. Arterial Operations Program Funding Updates*** 10:40 a.m.
- 4. New Technologies for Arterial Operations**
 - a. *NextGen Arterial Operations Program Project Status (Linda Lee, MTC)** 10:50 a.m.
 - b. *Connected Vehicle Program Update (Virginia Lingham, MTC)**
- 5. Featured Presentation** 11:00 a.m.

*TranSync – A New Way of Doing Signal Timing (Dr. Zong Tian, Professor & Director for Center for Advanced Transportation Education & Research (CATER))**

A new software tool, called TranSync, was developed to meet the challenges of the four critical aspects of signal timing and coordination: management, optimization, diagnosis, and evaluation. Dr. Tian will demonstrate the key features of TranSync and will show its applicability in several case studies with various agencies
- 6. Focused Group Discussion** 11:40 a.m.
 - a. *ITS Architecture Updates*
- 7. Adjournment (Obaid Khan)** 12 noon

Next Meeting: Tuesday, May 10, 2016 @ 10:15 A.M. at Location TBD

*Attachment included

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Arterial Operations Committee
Notes from January 12, 2016 meeting

1. Introductions

Meeting called to order at 10:20 A.M. in Conference Room 171 of the Joseph P. Bort MetroCenter. All members introduced themselves.

- a. Meeting notes from the November 10, 2015 meeting were approved without any changes.
- b. Linda Lee (MTC) informed the AOC members that the official MTC move date to San Francisco is March 4. As such, the March AOC meeting will be held at MTC's new office in San Francisco. Located at 375 Beale Street, the site is a 10- to 15-minute walk from the Embarcadero Street BART station.

Jay Stagi (MTC) was introduced to the AOC and provided an update on the PASS FY 15/16 cycle of projects, noting that the eight projects are generally on schedule. The Draft Existing Conditions Report has been completed for all projects, except one, with the Draft Recommendations completion expected by February.

There was a question about video conferencing capabilities at the new MTC office, which could be necessary as the location in San Francisco could make in-person attendance more difficult for some. Jay responded that some conference rooms should have video conferencing capabilities. Alternatively, it was suggested that some meetings could be held via WebEx or GoToMeeting.

Saravana Suthanthira (ACTC) offered to host the AOC meetings at their office, in the event that an alternate East Bay meeting location is needed. She will check on meeting room availabilities and report back at the March meeting.

Linda discussed the newly-updated MTC website, which is now more modern, streamlined, and less text-heavy. For the web pages related to the Arterial Operations Program, certain documents, such as previous meeting agendas and Program Factsheets, can still be found on the website; however, slides from Featured Presentations are no longer available. Several members commented that access to these presentations as a resource is important and, therefore, access should be maintained. One suggestion was to place these presentations and other similar AOC resources on an FTP website.

2. Focused Group Discussion

- a. Linda discussed the AOP Work Plan for 2016
 - NextGen AOP
The four Next Generation Arterial Operations Program (NextGen AOP) pilot projects are being deployed to determine the extent of favorable b/c ratios these projects are likely to provide. The Fremont and Santa Clara County projects are nearing evaluation-readiness. A mini-RFP will be released to MTC's existing on-call consultants in late January, with work to be done during the Spring/Summer timeframe. Assuming the LAVTA/Dublin project stays on course, procurement for this project's evaluation is expected to start in the Summer.

Arterial Operations Committee
Notes from January 12, 2016 meeting

- **PASS**
For PASS FY16/17, a Call for Projects is expected to be released in March, although some uncertainty in the level of funding for this particular cycle was noted by Linda, due to this being a gap year in funding. (One Bay Area Grants Round 2 (OBAG2) funding, which is the identified funding source for near-term cycles, is not available until the FY17/18 Project Cycle.) Linda noted that deploying connected vehicle technologies could be in competition for these limited funds, and suggested reinforcing the message that PASS projects have always demonstrated very high b/c ratios.
- **Seminar/Workshop**
Linda discussed the possibility of MTC hosting one or two National Highway Institute (NHI) courses related to traffic signals that may be of interest to local agency staff and others. Amanuel Haile (Marin County) made a request to offer the NHI course on Adaptive Traffic Signals again, since some people were not able to attend this course when MTC hosted it in 2014. Linda responded by saying that priority would be given to the course(s) that have not been offered yet. To determine which NHI course to move forward with, a survey to the AOC could be conducted later.
- **Featured Presentations**
Some members proposed structuring some of the presentations to include more technical information in an applied format. Alternating between more general and focused presentations was also suggested, along with panel discussions as a means of facilitating transfer of technical information. Amanuel suggested that recipients of NGAOP funding present their results to the AOC upon project completion.

Curt Harrington (Parisi Associates, representing the City of Mill Valley) asked about MTC's plans through the 511 program to switch from INRIX data to HERE data and whether the INRIX data will continue to be made available to local agencies. Linda responded that other MTC programs rely on INRIX data, such as for the development of the annual Top 10 Most Congested Freeway Segments list. Therefore, there is interest in continuing a contractual relationship with INRIX for their data. Over the past several years, INRIX data collected from the arterial network has become more robust and continues to get better. This data could be valuable to local agencies for operational purposes. Should MTC continue to get INRIX data, access to the data can be made available to local agencies. Through his work with the City of Mill Valley, Curt has become a frequent user of the INRIX online interface and has agreed to give a demonstration at a future AOC meeting.

b. **AOC Engagement**

Obaid Khan (Dublin) opened the discussion by making reference to a Washington Post article which discussed the limited readiness of U.S. cities to deploy connected vehicle technology in the next 4 to 5 years. Obaid mentioned that Ford Motor Company may

Arterial Operations Committee
Notes from January 12, 2016 meeting

offer grants to local agencies to support the deployment of connected vehicle infrastructure.

Ananth Prasad (County of Santa Clara) gave the agency perspective on the subject of Connected Vehicles, citing a number of concerns:

- Aging infrastructure, and lack of clarity on what to do and when
- Legacy vehicles
- Limited grant funding
- No federal mandate yet for DSRC equipment to be installed in new vehicles, which makes implementation slow and incremental. The mandate is not expected until 2017. Changing requirements/standards that require limited resources and may not even be needed with greater foresight
- Missed opportunities for greater analysis with implementation of “smart systems.”

On the topic of AOC engagement, Linda wanted to get a sense of why some members attend the AOC meetings on a regular basis. Some vendors at the meeting noted that they like to attend, as it is good to understand/anticipate the pulse of what is needed by the local agencies. Some consultants stated that it was an opportunity to report, coordinate and further understand policy decisions, projects and the funding climate, as well as to develop relationships. Local agency representatives also expressed similar views.

3. New Technologies for Arterial Operations

- a. Linda reported that all four NextGen AOP projects continue to make good progress. Selection of an adaptive system for the Fremont project will be made soon, and Bluetooth units are currently being installed along the County of Santa Clara’s expressways. Per Ananth, this work should be completed around the end of this month.
- b. Since Virginia Lingham (MTC) was at TRB, Linda provided the Connected Vehicles update in her absence. There are several good online resources for basic information about Connected Vehicles – the USDOT’s website and a free CV 101 course offered by CITE. See memo for weblinks. There will be a guidance document released by FHWA sometime in the Summer of 2016; it should provide a lot of useful information that can help local agencies understand how to prepare for a Connected Vehicle environment. The SF Bay Area Regional ITS Architecture is being updated for the first time since 2011. Iteris is leading the effort for MTC. There are plans to hold two stakeholder workshops, with the first one in February 2016. Local agencies should have received an invitation last month for the February workshop.

4. AOP Task Force

As the Chair of the AOP Task Force, Saravana provided updates from the November and December 2015 meetings. The BASIS (Bay Area Signalized Intersection System) database is of interest to locals and CMAs, although the scope will likely be limited to major arterials and only a core set of attributes. This could be done by locals and CMAs and coordinated on an annual basis. Obaid noted that there is applicability of BASIS to Connected Vehicles.

Arterial Operations Committee
Notes from January 12, 2016 meeting

The AOP Task Force talked extensively about revisions to the PASS Eligibility Requirements, which have now been finalized. In general, revisions were made to the local match requirements; special provisions were added for local match requirements for Caltrans intersections; and the job/housing requirement was replaced with ADT and peak hour traffic volume thresholds.

A list of funding opportunities was prepared by MTC staff to identify various grant programs and other fund sources that could be used to support some arterial improvement projects. Linda suggested that local agencies review the list to see if any projects they have in mine could qualify for some of these grants. If an agency applies for a grant, it would be helpful if their experience could be shared with the AOC to help others who may also want to go through the same process. A member asked if information could be included about how much and when funds for each grant opportunity would be available. Linda responded that this type of information can vary year by year and that it is best for people to click on the links provided to obtain current details about each program.

5. Adjournment

The meeting adjourned at 12:05 P.M. The next meeting will be held on Tuesday, March 8, 2016 at either MTC's existing office or its new office in San Francisco.

Arterial Operations Committee
Notes from January 12, 2016 meeting

Arterial Operations Committee
Attendees from meeting on Tuesday, January 12, 2016

#	Name	Agency	Phone No.	E-Mail
1	Allen Chen	St. Francis Elec.	510.695.0582	achen@sfe-inc.com
2	Amanuel Haile	Marin Co	415.499.7137	ahaile@marincounty.org
3	Ananth Prasad	SCL County	408.494.1342	ananth.prasad@rda.sccgov.org
4	Brian Burkhard	Jacobs	415.747.1008	brian.burkhard@jacobs.com
5	Christopher Flores	Sensys	510.548.4620	chrisf@sensysnetworks.com
6	Curt Harrington	Mill Valley	415.649.6036	curt@parisi-associates.com
7	David Huynh	Iteris	510.423.0742	dxh@iteris.com
8	David Mahama	DKS	510.267.6613	dcm@dksassociates.com
9	Dylan Grabowski	Caltrans	510.286.6304	dylan.grabowski@dot.ca.gov
10	Francisco Martin	Fehr & Peers	510.587.9422	f.martin@fehrandpeers.com
11	Jay Stagi	MTC	510.817.5808	jstagi@mtc.ca.gov
12	Jia Hao Wu	W & S Solutions	925.256.4731	jiahao.wu@wu-song.com
13	Linda Lee	MTC	510.817.5825	llee@mtc.ca.gov
14	Noe Voloso	Fremont	510.494.4774	nveloso@fremont.gov
15	Obaid Khan	Dublin	925.833.6634	obaid.khan@dublin.ca.us
16	Rich Shinn	Iteris	925.872.0834	RJS@iteris.com
17	Ron Hernandez	Econolite	510.207.2281	rhernandez@econolite.com
18	Saravana Suthanthira	Alameda CTC	510.208.7426	ssuthanthira@alamedactc.org
19	Scott Carlson	Iteris	714.724.7089	src@iteris.com
20	Simin Timuri	Walnut Creek	925.256.3529	timuri@walnut-creek.ca.us



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Memorandum

TO: Arterial Operations Committee (AOC)

DATE: March 1, 2016

FR: Linda Lee, MTC

CC: AOP Task Force

RE: AOP Task Force – January 13, 2016 Meeting Summary

The AOP Task Force held a meeting on January 13, 2016. This memo provides a summary of the key discussion items:

- Technical Transfer Seminars –
 - As a follow-up from the December AOP Task Force meeting, the group discussed how the format of some of the technical transfer seminars could be changed to include fewer presenters in order to get more technical, detailed, and less broad on the topic. For example, using real-world applications, questions that could be addressed include: What were the objectives of the project? How were the objectives achieved? What was used to meet the objectives? Specific seminar topics should be selected through the development of established criteria/guidelines.

- Role of the Arterial Operations Committee (AOC) –
 - Based on discussions at previous AOC meetings, the topic of whether the AOC should report to MTC's Partnership Technical Advisory Committee (PTAC) was discussed. The group briefly discussed the differences in the roles and composition between the AOC and, for example, MTC's Local Streets & Roads Working Group (LS&RWG), which reports to PTAC. The LS&RWG meetings are more formally run and attended primarily by local agency Public Works Directors or Transportation Directors. The AOC meetings, on the other hand, are attended by local agency staff, vendors, and consultants. The high level of vendor/consultant attendance at the AOC meetings is likely due to the fact that it was originally established as a forum for information sharing. The group decided that attendance by local agency staff needs to increase before further consideration is given to changing the current reporting structure.

The issue with the AOC is the consistent low attendance from the local jurisdictions. Generally, more so recently, the AOC meetings are attended mostly by vendors/consultants. The Task Force explored this issue including how and what information about PASS and the AOC is being disseminated and whether it attracts local jurisdictions' attendance. The group agreed that better

outreach is needed. As a first step in that outreach, the development of a flyer about the AOC was discussed. The intent is the flyer would be used to promote the benefits of the Program; highlight current or cutting-edge projects (e.g., adaptive signal systems, connected vehicles, etc.); describe how the AOC meetings bring together stakeholders; make reference to the high benefit/cost ratios of PASS projects; include examples of how AOC involvement can benefit the local agency, etc. A general schedule for developing and disseminating the flyer is as follows: a preliminary draft to be developed by the Task Force prior to its February meeting, a draft to be provided to the AOC for review/comments at the March meeting, and a final flyer to be distributed through CMA and/or CMA TAC meetings before the May AOC meeting.

- The final AOP Task Force meeting is February 9, 2016.



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Memorandum

TO: Arterial Operations Committee (AOC)

DATE: March 1, 2016

FR: Linda Lee, MTC

CC: AOP Task Force

RE: AOP Task Force – February 9, 2016 Meeting Summary

The AOP Task Force held its last meeting on February 9, 2016. This memo provides a summary of the key discussion items:

- Draft AOP Flyer –
 - As a follow-up from the January 2016 AOP Task Force meeting, the group discussed the issue of low attendance and participation by local agency staff generally, more so at recent AOC meetings, and how to better outreach to increase their attendance. The group agreed to develop a flyer to describe the Program and promote its benefits, and then disseminate it to the local agencies through the CMA and/or CMA TAC meetings. A preliminary draft flyer was prepared and discussed at the February meeting. The group provided a lot of good comments on the preliminary draft, which have been incorporated, and the draft flyer is attached. The Task Force welcomes any comments from the AOC before it gets distributed to the CMAs, which is anticipated to occur in April/May 2016.

- Wrap-up of All Task Force Activities –
 - The group reviewed all the activities accomplished by the Task Force since it first started meeting in June 2015, and discussed any next steps or follow-up that is needed. Attached is a summary of the activities, along with any follow-up items, which are briefly described below:
 - ✓ The final AOP mission statement, goals & objectives will be posted on MTC's website (AOP webpage).
 - ✓ The revised final PASS eligibility requirements will be applied to the upcoming PASS FY16/17 Cycle of Projects.
 - ✓ Work to begin reviving the BASIS database, which has been inactive for several years, will first include determining which major roadways and which attributes will be included in the database. In this regard, a list of attributes and a GIS layer (created by MTC) of all roadways

within the California Road System (CRS) will be distributed to the local agencies for feedback.

- ✓ The list of fund sources that had been developed as a tool to assist agencies in identifying possible funding opportunities will be posted on MTC's website (AOP webpage) and will be updated periodically. As a next step, MTC will likely coordinate with Federal and State grant program managers to attend and discuss details and answer questions about their respective programs at upcoming AOC meetings.
- ✓ Further discussions about how future OBAG2 funds (available starting in FY17/18) will be distributed across the different subprograms (e.g., PASS, NGAOP with/without Transit Signal Priority, Connected Vehicles, etc.) are being postponed until Fall/Winter 2016, pending benefit/cost results of NGAOP projects and deployment cost information related to Connected Vehicle technologies.
- ✓ A draft flyer, prepared and reviewed by the Task Force to promote the benefits of the AOP and increase local agency participation at the AOC meetings, will be distributed to the AOC for feedback. A final flyer will be disseminated to the local agencies through the CMA.

Arterial Operations Program (AOP)

WHAT...is the AOP?

An MTC Program that:

- *Provides technical assistance to public agencies to help improve multimodal mobility and safety along their arterials*;* and
- *Holds forums, via the Arterial Operations Committee (AOC), to share relevant information and promote multi-jurisdictional coordination.*

WHO...should attend the AOC meetings?

- *Public agency staff responsible for planning, funding, and/or managing arterial networks or freeway operations;* and
- *Private sector representatives (e.g., consultants, vendors, manufacturers, etc.) who can share their knowledge and expertise.*

WHY...should public agencies attend the AOC meetings?

- *To learn and influence funding opportunities for specific arterial improvement projects;*
- *To provide input on planning and project activities related to arterial operations;*
- *To learn about solutions to similar or unique traffic operations issues; and*
- *To gain insights on applying new technologies for improving mobility, safety, and the environment.*

WHEN...does the AOC meet?

- *Bi-monthly, starting in January, 2nd Tuesday, 10:15am to 12:00pm*
- *Virtual meetings can be accommodated*

More information about the AOP can be found at: <http://www.mtc.ca.gov/our-work/operate-coordinate/arterial-operations>.

* Current technical assistance programs include: Program for Arterial System Synchronization (PASS) and Next Generation Arterial Operations Program (NGAOP)

Program Benefits



Arterial Operations Program

Task Force Activities

Updated 2-9-2016

		ACTIVITY	STATUS	FOLLOW-UP
1	Review mission statement, goals and objectives	The Task Force will review and revise, if necessary, the current mission statement, goals and objectives to ensure they make sense and are relevant to today's environment.	Completed August 2015	Post on MTC website (AOP webpage)
2	Develop a 25-year funding plan for PBA 2040	The Task Force will assist in the development of a recommended long-range funding plan for the Arterial Operations Program for MTC's RTP update (referred to as "Plan Bay Area 2040" or "PBA 2040").	Completed August 2015	n/a
3	Review new PASS eligibility requirements	The Task Force will review the PASS project eligibility requirements (reliever routes, high transit services, high-growth cities with respect to jobs/housing) from the recent FY15/16 cycle to determine if modifications are needed.	Completed November 2015	Include in PASS FY16/17 Cycle
4	Determine the future of BASIS	Originally developed as a needs assessment tool for assessing funding needs for the RTP, the Task Force will revisit the purpose/need and consider modifying the data set, as it is currently too broad and the data is difficult to collect, populate, and maintain.	Completed December 2015	Create GIS layer of California Road System and list of BASIS attributes; obtain feedback from local agencies
5	Research funding options	The Task Force will research funding opportunities that can support arterial improvements. Such funding alternatives should not only include new sources, but also existing MTC funding programs, where there may be overlaps, e.g., Transit Performance Initiative, Local Street and Roads, etc.	Completed December 2015	Post on MTC website (AOP webpage); update periodically
6	Review focus of Technical Transfer Seminars	The Task Force will consider establishing educational goals that could include the latest technologies in arterial improvements.	Completed January 2016	n/a
7	Develop OBAG2 funding plan	The Task Force will assist in the development of a recommended 5-year OBAG2 expenditure plan	Postponed	Revisit in Fall 2016
8	Explore option for AOC to report to PTAC	The Task Force will discuss the possibility of having the AOC report to the Partnership Technical Advisory Committee (PTAC), similar to what the Local Streets & Roads Working Group does.	Completed January 2016	Distribute draft flyer to AOC for feedback; distribute final to CMAs for dissemination to local jurisdictions

Program for Arterial System Synchronization (PASS) FY 15/16 Cycle - Project Status Update (As of 2/26/2016)

#	County	Project Sponsor	Project Corridor (# of signals)	# of Signals	GPS Clocks	Project Services and Plans	Consultant	Project Status*
1	Alameda	Fremont	Fremont Blvd (8), Mowry Ave (8), Stevenson Blvd (8)	24	0	Weekday (AM/MD/School/PM) (24); Weekend (One peak period) (24)	Iteris	4
2	Alameda	Hayward	Tennyson Rd (13)	13	6	Weekday (AM/MD/PM) (13)	Iteris	4
3	Alameda	Oakland	40th St (8), Harrison St (15), Jackson St (10), MacArthur Blvd (10)	43	40	Weekday (AM/MD/PM) (43); Weekend (two peak periods) (43)	KHA	3A
4	Alameda	San Leandro	San Leandro Blvd (7)	7	1	Weekday (AM/MD/PM) (7); Weekend (three peak periods) (7)	Iteris	4
5	Napa	Napa	Hwy 121 (12), Redwood Rd/ Trancas St (9), Soscol Ave (5)	26	17	Weekday (AM/MD/PM) (14); Weekend (two peak periods) (14); Data Collection Only (12)	TJKM	3A
6	Contra Costa	Oakley	Main St (5)	5	5	Weekday (AM/MD/PM) (5); Weekday (Two school Peaks) (5)	TJKM	4
7	Santa Clara	Sunnyvale	Java Dr (5), Mathilda Ave/ Sunnyvale Saratoga Rd (24), Maude Ave (4), Tasman Dr (4)	37	0	Weekday (AM/MD/PM) (37); Weekend (two peak periods) (17)	DKS	3A
8	San Mateo	South SF	Hickey Blvd (5), Gateway Blvd (5)	10	8	Weekday (AM/MD/PM) (10); Weekend (two peak periods) (10); Weekday (One school Peak) (5)	TJKM	3A
Total				165	77			

* 1B = Final Scope, Schedule and Budget; 2A = Draft Existing Conditions Report; 2B = Final Existing Conditions Report; 3A = Draft Recommendations Report; 3B = Revised Recommendations Report; 4 = Preliminary Implementation and Fine-tuning.

Metropolitan Transportation Commission Programming and Allocations Committee

February 10, 2016

Agenda Item 5a

MTC Resolution No. 4202. OBAG 2 Framework Status Update

- Subject:** Informational status updates on the One Bay Area Grant (OBAG 2) Program including increased revenue estimates from the new federal surface transportation authorization and look-ahead at potential approaches for anti-displacement and affordable housing policies.
- Background:** On November 18, 2015 the Commission adopted MTC Resolution No. 4202, establishing the project selection criteria, programming policies, and program funding amounts for the OBAG 2 program, covering the five-year period of Fiscal Years 2017-18 through 2021-22.
- On December 4, 2015, shortly after adoption of the OBAG 2 program, President Obama signed into law a new five-year surface transportation authorization. On the whole, Fixing America's Surface Transportation Act (FAST) maintains core highway and transit funding programs and policies established by its predecessor, Moving Ahead for Progress in the 21st Century (MAP-21), and provides stability to the federal surface transportation policy and funding landscape over the short-term. In addition, FAST directs increased funding to the two programs that support OBAG 2, the Surface Transportation Program (renamed by FAST as the Surface Transportation Block Grant Program) and the Congestion Mitigation and Air Quality Improvement Program (CMAQ). Early estimates indicate that the Bay Area's share of these funds will increase by approximately \$72 million through the end of OBAG 2.
- In adopting the OBAG 2 program, the Commission also directed staff to develop a recommendation for anti-displacement and affordable housing policies to incorporate into OBAG 2, and investigate the possibility of establishing a housing preservation fund.
- Issues:**
- 1. Distribution of Increased Revenues.** Staff is currently developing options for the use of the additional revenues, to present to the Commission for consideration. In developing a set of proposals, staff is relying on the principles adopted in the OBAG 2 framework, while also balancing other regional objectives such as supporting affordable housing and combatting climate change. Initial concepts include:
- Distributing the additional revenues according to the adopted OBAG 2 framework, with 45% being directed to the county programs (\$32 million) and the remaining 55% directed to various regional programs (\$40 million).
 - For the additional revenues to the regional programs, consider restoring funding for existing programs to OBAG 1 levels, augmenting certain programs related to housing affordability and climate change needs, or a combination of these options.

Programming and Allocations Committee

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Staff welcomes feedback on these preliminary concepts. We had a preliminary consultation with the Bay Area Partnership last month and expect to return to that group for additional advice before this item returns to the Committee for approval. As a reminder, the table below illustrates the inaugural OBAG1 program as well as the OBAG2 program – before the FAST Act approval – in November 2015.

OBAG 1 and 2 Program Amounts

\$ in millions

Program	OBAG 1	OBAG 2
Regional Planning Activities	\$8	\$10
Pavement Management Program	\$9	\$9
Priority Development Area (PDA) Planning and Implementation	\$20	\$20
Climate Initiatives Program	\$22	\$22
Priority Conservation Area (PCA)	\$10	\$16
Regional Operations Programs	\$184	\$170
Transit Priorities Program	\$201	\$189
Regional Programs	\$454	\$436
County Programs	\$372	\$354
County Programs	\$372	\$354
Total	\$827	\$790

2. Approach for Affordable Housing/Anti-Displacement. Staff has been exploring approaches to present to the Commission for consideration. The range of approaches includes (a) an incentives approach to reward jurisdictions that address the issues of affordable housing and displacement, (b) a regulatory approach in which jurisdictions must adopt housing policies or develop plans to address housing stability and affordability, and (c) an investment approach to directly invest in the production or preservation of affordable housing.

On February 20, 2016, MTC and the Association of Bay Area Governments (ABAG) are scheduled to convene a regional forum with local jurisdictions, residents, business organizations, and other stakeholders to further consider the role of regional agencies in addressing displacement and affordable housing. Although the forum will not focus specifically on OBAG, the discussion will inform staff's recommendation for potential policies to incorporate into OBAG 2. A flyer for this forum is provided as an attachment. We encourage your attendance at this event.

3. Timeline. Staff plans to return to this Committee in April with proposed revisions to the OBAG 2 program related to the increased FAST revenues and an approach to affordable housing and displacement. Final approval of the program revisions by the Commission is tentatively scheduled for consideration in April. Additional detail on the timeline is provided below.

Programming and Allocations Committee

February 10, 2016

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Agenda Item 5a

January-February Outreach, information and discussion with the Bay Area Partnership Board, advisory and working groups

March Staff development of draft proposals/options

April Final OBAG 2 policy revisions presented to Committee and Commission for adoption

Recommendation: Information. No action required.

Attachments: Flyer for MTC/ABAG's forum on affordable housing and displacement



You're Invited! Special Forum

Calling the Bay Area Home: Tackling the Affordable Housing and Displacement Challenge

Saturday, February 20, 2016, 9 a.m. to 1:30 p.m.

Oakland Marriott City Center 1001 Broadway, Oakland (at 12th St. City Center BART Station)

Please join us at a half-day event bringing together community and business leaders, housing developers, elected officials and city planners for a timely and important dialogue on the role that Bay Area local governments and regional agencies — as well as the state and federal government — can play in addressing skyrocketing housing costs and displacement of long-time residents.

Who should attend?

- Elected officials and local agency staff
- Community and business leaders
- For-profit and affordable housing developers
- Advocates

This half-day forum will focus on:

- Regional trends and community impacts
- Common challenges and barriers
- Local and regional strategies, solutions and implementable actions
- Appropriate role for local jurisdictions, regional agencies, and state and federal government

Participants will also break out into four smaller groups to discuss specific challenges and strategies for (1) San Francisco, (2) the Peninsula and South Bay, (3) the East Bay and (4) the North Bay. Your comments will help inform future discussions and actions.

To learn more and register, visit PlanBayArea.org. This forum is provided at no charge; we need your registration information to ensure sufficient space and lunches.

Do you need an interpreter or any other assistance to participate? Please call 510.817.5757 or 510.817.5769 for TDD/TTY three days in advance.

¿Necesita un intérprete u otra asistencia para participar? Por favor llámenos con tres días de anticipación al 510.817.5757 o 510.817.5769 para TDD/TTY.

您是否需要翻譯員或任何其他幫助才能參加呢？請提前三天致電 510.817.5757或聽障專線(TDD/TTY) 510.817.5769



NextGen Arterial Operations Program Project Status (as of 2/26/2016)

#	Key Deliverable	NextGen AOP Projects			
		AC Transit	LAVTA/ Dublin	City of Fremont	County of Santa Clara
1	1a. Draft SEMP	Completed	Completed	Completed	n/a
	1b. Final SEMP	Completed	Completed	Completed	n/a
2	2a. Draft User Needs Report	Completed	Completed	Completed	Completed
	2b. Final User Needs Report	Completed	Completed	Completed	Completed
3	3a. Draft ConOps	Completed	Completed	Completed	n/a
	3b. Final ConOps	Completed	Completed	Completed	n/a
4	4a. Draft System Requirements	Completed	Completed	Completed	Completed
	4b. Final System Requirements	Completed	Completed	Completed	Completed
5	5a. Draft Verification Plan	Completed	Completed	Completed	Completed
	5b. Final Verification Plan	Completed	Completed	Completed	Completed
6	6a. Draft Procurement Document	<i>Ongoing</i>	<i>Ongoing</i>	Completed	n/a
	6b. Final Procurement Document	*	*	Completed	n/a
7	7. Vendor Selection	*	*	<i>Ongoing</i>	n/a
8	8. System Deployment	*	*	*	<i>Ongoing</i>
9	9. System Acceptance	*	*	*	*
10	10. Project Evaluation	*	*	*	*

Note: * Deliverables to be completed later.



**METROPOLITAN
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Memorandum

TO: Arterial Operations Committee (AOC)

DATE: March 1, 2016

FR: Virginia Lingham, MTC

RE: Connected Vehicle Program Update

Catapult Bay Area Update

MTC's Connected Vehicle Program, which has been newly named as "Catapult Bay Area", supports various initiatives related to connected vehicle, automated vehicle, and autonomous vehicle deployments in the San Francisco Bay Area using Vehicle-to-Vehicle (V2V), Vehicle-to-Infrastructure (V2I), and Vehicle-to-Anything (V2X) communications, tools, and applications. While MTC is currently working on several new initiatives, two near-term efforts of the Program include:

- *Drive Smart Bay Area Hackathon*: MTC's Drive Smart Bay Area Hackathon, in close collaboration with Automatic (Automatic.com), will convene programmers, developers, artists, technologists, data analysts, environmental stewards, travel behavior experts, and commuters for the Drive Smart Bay Area Hackathon. The hackathon will challenge participants to transform how travelers get around in the Bay Area by building working apps and tools that encourage smarter driving, safer driving, and encourage travelers to consider alternate mode options when traveling in the Bay Area. Visit <http://drive-smart-bay-area.devpost.com/> for more information and the latest updates about this event.
- *Evaluation of Transit Signal Priority (TSP) on the California Connected Vehicle Test Bed*: This MTC-led initiative, in partnership with Santa Clara Valley Transit Authority (VTA), Caltrans, and Savari Networks, will conduct an evaluation of a Dedicated Short Range Communications (DSRC)-based TSP system along the California Connected Vehicle Test Bed on El Camino Real in and around Palo Alto. A successful demonstration and preliminary evaluation of the readiness and effectiveness of the technology and its associated systems was conducted in November 2015; this evaluation has been initiated in order to assure that DSRC-based TSP will provide that same benefits as conventional TSP systems provide. It will also explore the benefits of enabling a new communications platform from which safety, mobility, and environmental tools can be developed that may lead to a number of sizeable benefits that conventional TSP does not provide. The results of the evaluation will provide better information from which the partners will be able to make investment decisions regarding the near-term scalability of the DSRC-based technology along this corridor and/or other corridors throughout the region.

Updates on other program initiatives will be provided in upcoming memos as work continues to develop.

Upcoming Bay Area Connected Vehicle Related Events

Date	Event	Location
April 2016	Drive Smart Bay Area Hackathon	MTC, Oakland, CA
Spring 2016	V2I Deployment Guidance Bay Area Workshop	MTC, SF, CA
June 2016	ITS America San Jose Expo	San Jose, CA
July 2016	Automated Vehicle Symposium	San Francisco, CA

Connected Vehicle Projects within the Bay Area

Please contact Virginia Lingham at vlingham@mtc.ca.gov to add your project or make edits to this list or with any questions.

Project Name	Leading Agency	Status	V2V	V2I	V2X	Self-Driving
Carma I-Beacon	CCTA	Complete		YES		
Enlighten Mobile Application	City of Walnut Creek	Complete			YES	
MMITSS - CA Demonstration	UCB PATH	Complete		YES	YES	
I-80 Connected Corridor ICM	Caltrans	In-Progress		YES	YES	
Google Self-Driving Car	Google	In-Progress	YES		YES	YES
Smart Driving Phase 3: Partnership with Automatic	MTC	In-Progress			YES	
San Jose Transportation Innovation Zone	San Jose	In-Progress		YES	YES	
VTA Flex On-Demand Dynamic Transit Operations	VTA	In-Progress		YES	YES	
Bishop Ranch Autonomous Vehicle Operations	CCTA	Planning		YES	YES	YES
GoMentum Station	CCTA	Planning	YES			YES
I-680 High Tech Corridor	CCTA	Planning		YES		
TriDelta Integrated Dynamic Transit Operations	CCTA	Planning		YES	YES	
FRATIS and ITS Improvements at Port of Oakland	MTC	Planning	YES	YES	YES	
MMITSS-based Transit Signal Priority Evaluation	MTC	Planning				
San Jose Innovative Streetlight Replacement	San Jose	Planning		YES	YES	
Swift Mile Electric Bikes	VTA	Planning				