



**METROPOLITAN  
TRANSPORTATION  
COMMISSION**

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## **Arterial Operations Committee (AOC)**

**10:15 A.M. – 12 P.M., Tuesday, May 12, 2015**

Conference Room 171

Metropolitan Transportation Commission

101 Eighth Street, Oakland, CA 94607

Chair: Donald Shupp, WP Signal

Vice-Chair: Obaid Khan, City of Dublin

Staff Liaison: Linda Lee, MTC

Ganesh Karkee, MTC

For more information, please visit the Arterial Operations website at [http://www.mtc.ca.gov/services/arterial\\_operations/](http://www.mtc.ca.gov/services/arterial_operations/)

### **Meeting Agenda**

**1. Introductions (Shupp)**

- *Meeting Notes from March 10, 2015\**
- *Other Business*

**2. Program for Arterial System Synchronization (PASS)**

- *FY 13/14 Cycle Update (Karkee)*
- *FY 14/15 Cycle Update (Karkee)\**
- *FY 15/16 Cycle Update (Zhang)*

**3. Next Gen Arterial Operations Program (Zhang)**

**4. Program Funding Update**

- *Cycle 3 Funding (Lee)*  
[http://apps.mtc.ca.gov/meeting\\_packet\\_documents/agenda\\_2402/5\\_Active\\_Operational\\_Mgmt\\_TMS\\_CDI\\_rev\\_14.1.pdf](http://apps.mtc.ca.gov/meeting_packet_documents/agenda_2402/5_Active_Operational_Mgmt_TMS_CDI_rev_14.1.pdf)
- *Federal Funding Under MAP-21 (Shupp)\**

**5. AOP of the Future (Lee)**

- *Purpose*
- *AOC Meeting Composition\**
- *Formation of Subcommittee*

**6. Featured Presentation (Brian Sowers, Kimley-Horn)**

- *“Levi’s Stadium Traffic Operations” – The presentation highlights traffic operations and management for Levi’s Stadium events, including 49ers games and other large stadium events. The presentation includes background information on operational goals, game day operations, and lessons learned.*

**7. Adjournment (Shupp)**

- *Next Meeting: Tuesday, July 14, 2015 @ 10:15 A.M.*

\*Attachment included

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Arterial Operations Committee  
*Notes from March 10, 2015 meeting*

**1. Introductions**

- Meeting called to order at 10:15 A.M. in Conference Room 171 of the Joseph P. Bort MetroCenter. All members introduced themselves. Meeting notes from January 13, 2015 were reviewed and approved without any changes.

**2. Arterial Operations Program Funding Update**

- Linda Lee (MTC) provided an update on the Arterial Operations Program (AOP) funding. Linda said that for the upcoming Cycle 3, limited funding would be available for the Freeway Performance Initiative (FPI). At this time, staff are proposing two AOP funding level options (\$12 million and \$15 million) for the new 5-year cycle. Either one or both of these options will be presented to the Operations Committee in May 2015.

**3. Program for Arterial System Synchronization (PASS)**

- Ganesh Karkee (MTC) provided a status update on the PASS FY 13/14 projects. Ganesh reported that 18 out of 21 projects have been completed. Three projects were delayed due to construction and traffic controller issues. He mentioned that factsheets for 15 projects have been completed. He asked members to provide their feedback on the draft factsheets by March 31, 2015.
- Ganesh said there are 12 projects in the PASS FY 14/15 cycle. He mentioned that recommendation reports (Task 3) for six projects have been submitted to the stakeholders for review. Consultants will begin field implementation for some of these projects in late March 2015.
- Linda reported that only \$1 million in funding will be available for PASS FY 15/16 cycle. The Call for Projects (CFP) Guidelines will be issued for the PASS FY 15/16 cycle in late March 2015. Due to limited fund availability and MTC's regional objectives, the Guidelines will include some new criteria. For example, project corridors along reliever routes, with high transit ridership, and within high job/housing growth areas will be prioritized, and projects must be completed within 12 months of project start. MTC will also be including a local match requirement. MTC will be issuing a Request for Qualification (RFQ) to hire consultants for a 2-year contract term. The RFQ could be released any time from early- to mid-April 2015.
  - Nayan Amin (TJKM) asked for a tentative consultant selection schedule. Linda said the consultant selection recommendation could be presented at the June 2015 Operations Committee meeting.
  - Obaid Khan (City of Dublin) asked whether a project needs to meet all three criteria or only one of them. Linda said the proposed projects should meet all criteria. She also cited a list of cities projected in Plan Bay Area to have high job/housing growth.
  - Rene Baile (Menlo Park) expressed his concern that there are congested arterials within the City of Menlo Park that will not qualify for PASS funding, due to the new criteria.
  - Saravana Suthanthira (ACTC) asked that the project selection guidelines for the PASS FY 15/16 cycle be more flexible.
  - Obaid and other members suggested that MTC consider some type of tiered system for project selection, with each tier having slightly different criteria. Linda said they would be open to that.

Arterial Operations Committee  
*Notes from March 10, 2015 meeting*

**4. Next Generation Arterial Operations Program (NextGen AOP)**

- Lin Zhang (MTC) provided an update on NextGen AOP. As a reminder, the four projects are: AC Transit, LAVTA/Dublin, Fremont, and Santa Clara County. Kick-off meetings were conducted in October - December in 2014. The Systems Engineering analyses (Phase 1) are ongoing. User Needs Assessments have been completed for all four projects. The ongoing tasks include: Concept of Operations (ConOps), Systems Engineering Management Plan (SEMP), and system requirements. The anticipated Phase 1 completion is as follows: Santa Clara County in March, Fremont in June, AC Transit in July, and LAVTA/Dublin in September, 2015. Phase 2 (procurement of systems, design, and evaluation) will begin upon the completion of Phase 1.
- Vamsi Tabjulu (TJKM) asked if the consultants have been selected for the Phase 2 design work. Lin said that most project sponsors will be taking on those responsibilities, either utilizing their own staff or going through procurement processes to acquire consulting firms.

**5. Featured Presentation**

- Sandra Lennie (Iteris) was a featured presenter. The title of her presentation was: “Big Data for Congestion Management on Arterials.” The presentation has been posted on MTC’s Arterial Operations Committee website.

**6. Other Business**

- Donald Shupp (WP Signal) mentioned two local transportation events scheduled in March 2015. These events are as follows: i) the 42<sup>nd</sup> Annual ITE Vendors Night, Hutchins Street Community Center, Lodi, March 19 (2:00 P.M. – 8:00 P.M.) and ii) Connected Vehicle & Autonomous Vehicle (CV/AV) Technology Summit, Contra Costa Transportation Authority (CCTA), Concord Hilton, March 31 (7:30 A.M. – 3:00 P.M.).
- Lin mentioned the upcoming ITE Modeling Workshop scheduled for April 29, 2015. Detailed information for the workshop is available on the San Francisco Bay Area ITE website (<http://www.sfbayite.org>).

**7. Adjournment**

- The meeting adjourned at 12 P.M. The next meeting will be held on Tuesday, May 12, 2015.

## Arterial Operations Committee

Attendees from meeting on Tuesday, March 10, 2015

#	Name	Agency	Phone No.	E-Mail
1	Abul Hossain	Concord	925.671.3181	abul.hossain@ci.concord.ca.us
2	Brian Sowers	Kimley-Horn	925.398.4862	brian.sowers@kimley-horn.com
3	Chirag Safi	Kittelson	510.839.1742	csafi@kittelson.com
4	David Huynh	Iteris	510.423.0742	dxh@iteris.com
5	David Kobayashi	VTA	408.321.5892	david.kobayashi@vta.org
6	David Mahama	DKS	510.267.6613	dcm@dksassociates.com
7	Donald Shupp	WP Signal	510.276.6400	shupp@wpsignal.com
8	Francisco Martin	Fehr & Peers	510.587.9422	f.martin@fehrandpeers.com
9	Frans van der Meer	City of Fremont	510.494.4796	fvandermeer@fremont.gov
10	Ganesh Karkee	MTC	510.817.5625	gkarkee@mtc.ca.gov
11	Jia Hao Wu	W & S Solutions	925.413.8983	jiahao.wu@wu-song.com
12	Jorge Barrios	Kittelson	510.433.8075	jbarrios@kittelson.com
13	Joy Bhattacharya	Stantec	925.296.2107	joy.bhattacharya@stantec.com
14	Justin Calkins	Econolite	925.784.4566	jcalkins@econolite.com
15	Karen Karasevich	DKS	510.267.6601	kjk@dksassociates.com
16	Lin Zhang	MTC	510.817.5616	lzhang@mtc.ca.gov
17	Linda Lee	MTC	510.817.5825	llee@mtc.ca.gov
18	Manoj Madhavan	SF Planning	415.575.9095	Manoj.Madhavan@sfgov.gov
19	Maria Tribelhorn	DKS	510.763.2061	maria@dksassociates.com
20	Maurice Palumbo	Golden Gate Bridge	415.257.4431	mpalumbo@goldengate.org
21	Mike KcIntee	Econolite	916.799.8796	mmcintee@econolite.com
22	Nayan Amin	TJKM	925.463.0611	namin@tjkm.com
23	Nino Genoese	Jacobs	510.457.0044	antonino.genoese@jacobs.com
24	Obaid Khan	Dublin	925.833.6634	obaid.khan@dublin.ca.us
25	Patrick Armijo	Western P Signal	562.441.1776	armijo@wpsignal.com
26	Philip Ho	Oakland	510.238.6256	pho@oakland.net
27	Phong Vo	AECOM	408.297.9585	Phong.vo@aecom.com
28	Rene Baile	Menlo Park	650.330.6770	rcbaile@menlopark.org
29	Rich Shinn	Schneider Electric	925.872.0834	richard.shinn@schneider-electric.com
30	Ron Hernandez	Econolite	510.207.2281	rhernandez@econolite.com
31	Sandra Lennie	ITERIS	510.984.1474	slennie@iteris.com
32	Saravana Suthanthira	Alameda CTC	510.208.7426	ssuthanthira@alamedactc.org
33	Simin Timuri	Walnut Creek	925.256.3529	timuri@walnut-creek.ca.us
34	Swathi Korpu	AECOM	408.297.9585	swathi.korpu@aecom.com
35	Tam Nguyen	Alameda County	510.670.5758	tam@acpwa.org
36	Vamsi Tabjulu	TJKM	510.325.3462	vtabjulu@tjkm.com
37	Yi Zheng Wei	W & S Solutions	925.380.1320	Wei-yi296@msn.com

## Program for Arterial System Synchronization (PASS) FY 14/15 Cycle - Project Status Update (As of 5/5/2015)

#	County	Project Sponsors (# of signals)	# of Signals			Project Corridors (# of signals)	Project Services and Plans	GPS Clocks				Consultant	Project Status*
			Local	Caltrans	Total			Controller	Local	Caltrans	Total		
1	Alameda	Oakland (36), Caltrans (5)	36	5	41	14th St (14), Oak St (8), 98th Ave (19)	Weekday (AM/Midday/PM); Weekend (one period)	170E (26), 170 (5), 2070 (1)	28	4	32	Advantec	3A
2	San Mateo	South San Francisco (17), Caltrans (21)	17	21	38	E Grand Ave (6); Airport Blvd (5); S Airport Blvd (6); ECR/Chestnut/Westborough (21)	Weekday (AM/Midday/PM) (38); Weekend (Midday/PM) (21)		0	0	0	Advantec	3A
3	Alameda	Alameda County (9), Caltrans (3)	9	3	12	Castro Valley Blvd (10); Strobridge Ave (2)	Weekday (AM/Midday/PM)		0	0	0	DKS	4
4	San Mateo	San Bruno (7), San Mateo County (1), Caltrans (7)	8	7	15	San Bruno Ave	Weekday (AM/Midday/PM)	170 (3), EPAC 300 (1); Naztec 2070 (1)	3	2	5	DKS	3B
5	Solano	Suisun City (9), Caltrans (3)	10	3	13	Sunset Ave (5), Walters Ave (4), SR 12 (3)	Weekday (AM/Midday/PM); Turning Movement Analysis (Sunset/Railroad Ave)		0	0	0	DKS	3B
6	Contra Costa	Walnut Creek (54), Caltrans (8)**	54	8	62	Citywide	Weekday (AM/Midday/PM) (62); Weekend (AM/Midday/PM) (27)		0	0	0	DKS	3A
7	Contra Costa	Antioch (8), Caltrans (2)	8	2	10	Somersville Rd	Weekday (AM/Midday/PM)		0	0	0	KHA	3B
8	Alameda	Fremont (4), Caltrans (4)	4	4	8	Auto Mall Pkwy	Weekday (AM/Midday/PM)		0	0	0	KHA	3A
9	Alameda	Union City (12), Hayward (5), Caltrans (2)	17	2	19	Whipple Rd (14), Dyer St (5)	Weekday (AM/Midday/PM)	2070 (2), Econolite (1)	1	2	3	KHA	4
10	Contra Costa	Walnut Creek (21), Contra Costa County (3)***, Caltrans (3)**	23	4	27	Treat Blvd/Main St (9); Ygnacio Valley Rd (18)	Traffic Responsive (27) [Ygnacio-18, Treat-9]		0	0	0	KHA	3B
11	Contra Costa	Concord (53)	53	0	53	Ygnacio Valley Rd (11); Downtown (18); Clayton Rd (13); Monument Blvd (11)	Weekday (AM/Midday/PM) (20); Weekday (AM/PM) (9); Weekend (two peaks) (24); Actelis EADs Copper based (10)		0	0	0	TJKM	4
12	Contra Costa	San Ramon (19), Caltrans (2)	19	2	21	E Crow Canyon Rd (8), W Crow Canyon Rd (5), Alcosta Blvd (8)	Weekday (AM/Midday/PM) (18); Weekday (AM/PM) (3); School (AM/PM) (3); Weekend (two peaks) (18)		0	0	0	TJKM	4
<b>Total</b>			<b>258</b>	<b>61</b>	<b>319</b>				<b>32</b>	<b>8</b>	<b>40</b>		

\*3A = Draft Recommendations Report; 3B = Revised Recommendations Report; 4 = Preliminary Implementation and Fine-tuning.

\*\*Signals are operated and maintained by the City of Walnut Creek.

(#) Indicates the number of signals.



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## *Memorandum*

TO: Arterial Operations Committee (AOC)

DATE: May 5, 2015

FR: Linda Lee, AOC Staff Liaison  
Ganesh Karkee, AOC Staff Liaison

W. I.: 1234

RE: Federal Funding Under Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21)

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Donald Shupp of Western Pacific Signal will be at the meeting to discuss Federal Funding Under MAP 21. The following are the main highlights what will be discussed:

1. 100% Federal funding is available for qualified and designated traffic signal control improvement projects, under authority of Title 23 USC 120(c).
2. The project detail must align with MAP-21 provisions of the Highway Safety Improvement Program (HSIP), and is funded by the FHWA Trust fund for Federal Aid projects.
3. Qualified projects include material and installation cost reimbursement for traffic signal controller and software upgrades, Emergency Vehicle Preemption (EVP) & Transit Signal Priority (TSP) enhancements, LED-based highway lighting, Accessible Pedestrian Signal (APS), Bicycle detection or discrimination devices, and other public-safety related improvements focused “to achieve a significant reduction in traffic fatalities and serious injuries on public roads”.
4. The specific Federal Highway Administration match ratio is as follows:
  - a. 80% for non-HSIP, but other qualified highway improvement projects;
  - b. 90% for HSIP qualified projects, based on data-driven fatality & injury reduction programs;
  - c. 100% for qualified projects, such as item #3 above, which confirm to §23 USC 120(c).
5. The specific qualifying statutory text reads as: Increased Federal Share for Certain Safety Projects ***-The Federal share payable on account of any project for traffic control signalization***, safety rest areas, pavement marking, commuter carpooling and vanpooling, rail-highway crossing closure, or installation of traffic signs, traffic lights, guardrails, impact attenuators, concrete barrier end treatments, breakaway utility poles, or priority control systems for emergency vehicles or ***transit vehicles at signalized intersections*** may amount to 100 percent of the cost of construction of such projects; except that not more than 10 percent of all sums apportioned for all the Federal-aid systems for any fiscal year in accordance with Section 104 of this Title shall be used under this subsection.
6. Application and reimbursement is coordinated and administered by Caltrans Local Assistance Program Guidelines (LAPG), in a similar format as a HSIP application, but with citation and justification reference to the “Increased (100%) Federal Share for Qualifying Safety Projects”, within the Caltrans LAPG funds request spreadsheet.
7. Caltrans Local Programs Procedures (LPP) office maintains the most current, up to date funding limits available per project. The §120(c) spending limit is defined as 10% of all FHWA highway project funding for California, which is \$2.35B ([http://www.fhwa.dot.gov/map21/docs/fy\\_2015\\_computational\\_tables.xlsx](http://www.fhwa.dot.gov/map21/docs/fy_2015_computational_tables.xlsx)) for FY 2015.



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## *Memorandum*

TO: Arterial Operations Committee (AOC)

DATE: May 4, 2015

FR: Linda Lee, AOC Staff Liaison  
Ganesh Karkee, AOC Staff Liaison

CC: Donald Shupp, AOC Chair  
Obaid Khan, AOC Vice Chair

RE: Arterial Operations Committee (AOC) Meeting Composition

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This memo is for informational purposes only. It is intended to show how the composition of AOC meeting attendance has changed over time. AOC meeting sign-in sheets since January 2010 were reviewed, and attendees have been grouped into six different categories, as follows:

- City/County
- Consultant
- Vendor/Supplier
- CMA
- FHWA/Caltrans
- Transit

### **Key Findings**

The number of meeting attendees by category is shown in Figure 1, and the percentage of meeting attendees by category is shown in Figure 2. The total number of attendees varied from 15 to 41 between January 2010 and March 2015, with an average of 26 total attendees per meeting. In terms of the percentage of meeting attendees, below is a summary of key findings:

- **City/County:** Representation from the Cities and Counties appears to be decreasing over time. Attendance averaged about 37% per meeting between 2010 and 2012, but has dropped to an average of about 31% beginning in 2013.
- **Consultant:** Consultant representation generally appears to remain steady over time, averaging about 43% per meeting.
- **CMA:** Representation from the CMAs has also generally remained steady, averaging about 7% per meeting.
- **Vendor/Supplier:** Attendance from Vendors/Suppliers was more sporadic in earlier years (2010 and 2011), but has become more consistent in recent years. Also,



Vendor/Supplier attendance has increased over time – averaging about 6% per meeting between 2010 and 2012, and increasing to an average of about 16% beginning in 2013.

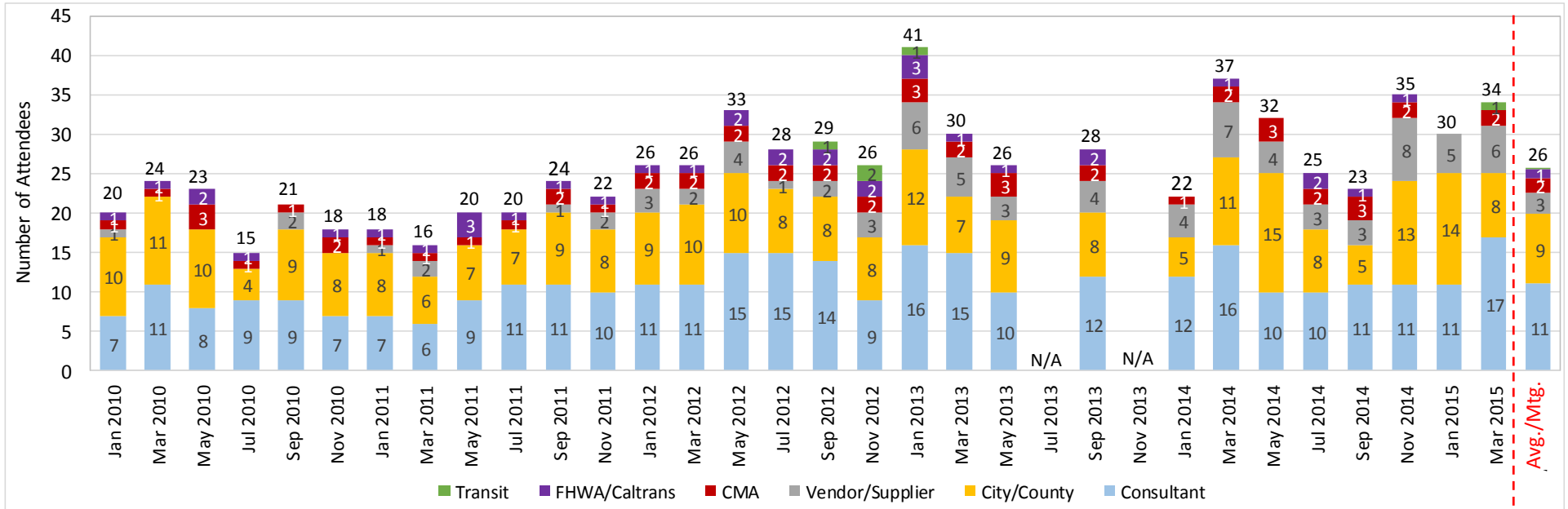
- **FHWA/Caltrans:** Representation from FHWA/Caltrans was consistent between 2010 and 2013 – average about 6% per meeting. However, beginning in 2014, FHWA/Caltrans attendance has been slightly inconsistent/sporadic – attending only four of the last eight meetings.
- **Transit:** Representatives from local transit agencies have only attended four meetings since January 2010. The agencies represented included: AC Transit, SFMTA, and Golden Gate Bridge Highway and Transportation District.

The average percentage of attendees per meeting by category is shown as a pie chart in Figure 3. Approximately 53% of all attendees represented the private sector: Consultant (43%) and Vendor/Supplier (10%). The remaining 47% of the attendees represented the public sector: City/County (35%), CMA (7%), FHWA/Caltrans (5%), and Transit (less than 1%). It should be noted that while this data seems to indicate the majority of the meeting attendees are Consultants, it may just be that the local agencies are sending their Consultants to these meetings, as an extension of staff.

### **Conclusion**

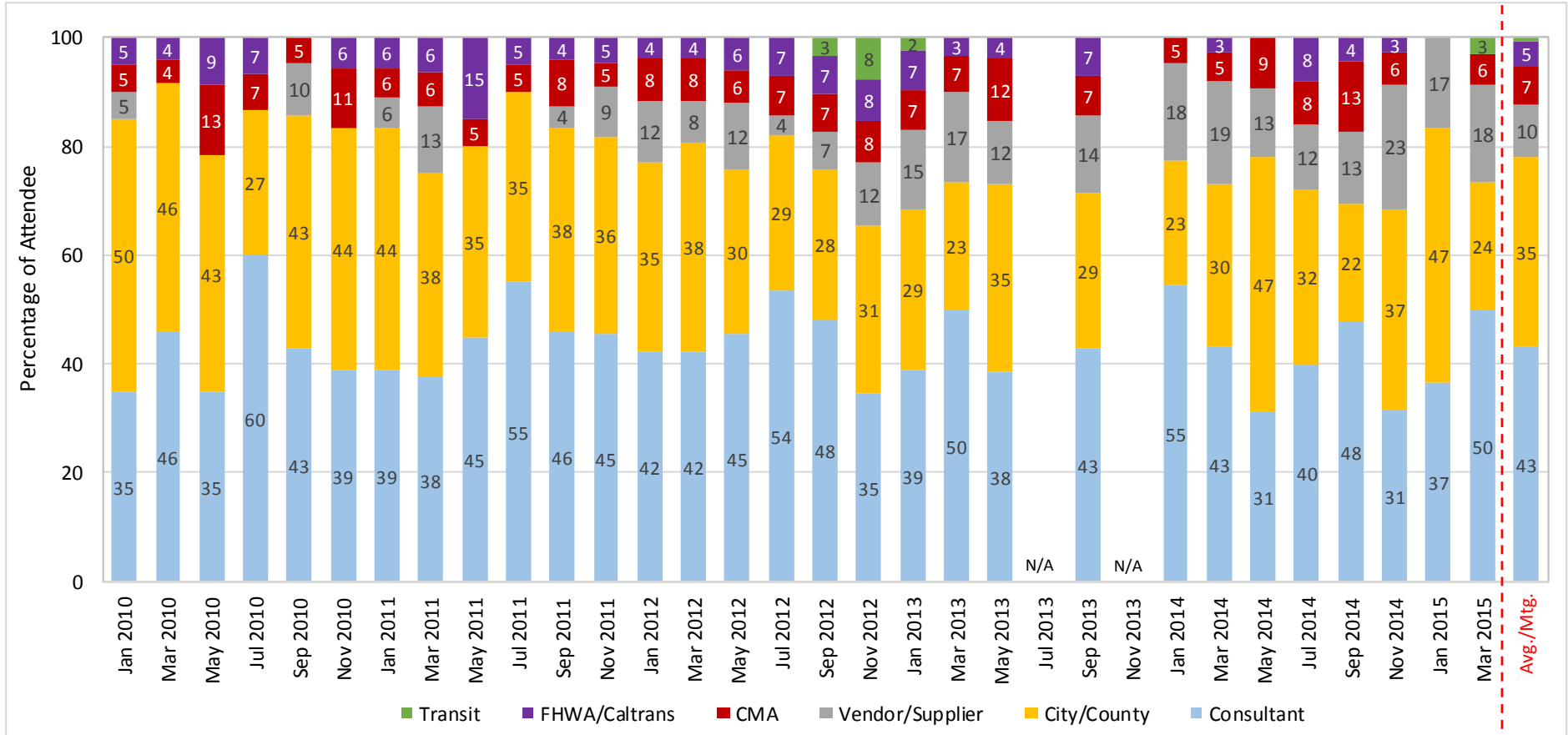
MTC's Arterial Operations Program is a program that has historically provided local agencies with the ability to improve traffic operations along arterial corridors at no cost to the agencies (except for staff time). As part of this Program, the AOC meetings have provided representatives from both the public and private agencies a forum for discussing issues and topics that pertain to arterial operations. Increasing the interest and participation at the meetings can help bring awareness to the regional importance of this Program and ensure its continuation.

**Figure 1. Number of AOC Meeting Attendees by Category**



Note: Nov 2013 meeting was cancelled. Jul 2013 meeting sign-in sheet is not available.

**Figure 2. Percentage of AOC Meeting Attendees by Category**



Note: Nov 2013 meeting was cancelled. Jul 2013 meeting sign-in sheet is not available.

**Figure 3. AOC Meeting Composition**

