



MOBILE SOURCE AIR POLLUTION REDUCTION REVIEW COMMITTEE
THURSDAY, FEBRUARY 21, 2019 MEETING MINUTES
21865 Copley Drive, Diamond, Bar, CA 91765 - Conference Room CC-8

MEMBERS PRESENT:

(Chair) Larry McCallon, representing SBCTA
(Vice-Chair) Greg Winterbottom, representing OCTA
Ben Benoit, representing SCAQMD
Rex Richardson, representing SCAG
Dolores Roybal Saltarelli (Alt.), representing Regional Rideshare Agency
Brian Berkson (Alt.), representing RCTC
Mark Yamarone (Alt.), representing Los Angeles County MTA (via v/c)

MEMBERS ABSENT:

Jack Kitowski, representing California Air Resources Board
Steve Veres, representing Los Angeles County MTA

MSRC-TAC MEMBERS PRESENT:

Steve Hillman, City of Los Angeles
Steven Lee, Los Angeles County Metropolitan Transportation Authority
Rongsheng Luo, representing SCAG
Kelly Lynn, representing SBCTA
Nicholas Nairn-Birch, California Air Resources Board
Vicki White, representing SCAQMD

OTHERS PRESENT:

Rubin Aronin, Better World Group Advisors
Sam Emmerson, Better World Group Advisors
Lauren Dunlap, SoCalGas
Ric Teano, OCTA

SCAQMD STAFF & CONTRACTORS

Leah Alfaro, MSRC Contracts Assistant
Naveen Berry, Asst. Deputy Executive Officer
Ray Gorski, MSRC Technical Advisor-Contractor
Daphne Hsu, Senior Deputy District Counsel
John Kampa, Financial Analyst
Matt Mackenzie, MSRC Contracts Assistant
Cynthia Ravenstein, MSRC Contracts Administrator
Paul Wright, Information Technology Specialist

CALL TO ORDER

- Call to Order

MSRC Chair Larry McCallon called the meeting to order at 2:00 p.m.

Roll call was taken at the start of the meeting. The following members and alternates were present: BEN BENOIT, LARRY MCCALLON, DOLORES ROYBAL SALTARELLI, GREG WINTERBOTTOM, MARK YAMARONE.

- Opening Comments

There were no opening comments.

- STATUS REPORT

Copies of the Clean Transportation Policy Update were distributed at the meeting.

[MSRC Member Rex Richardson arrived at 2:01 p.m.]

MSRC Chair Larry McCallon stated for the record that for Agenda Item #2, he does not have any financial interest, but is required to identify that he is a Member of the Board of Directors for the San Bernardino County Transportation Authority and the of Southern California Regional Rail Authority, which are involved in these items.

MSRC Vice Chair Greg Winterbottom stated for the record that for Agenda Item #2, he does not have any financial interest, but is required to identify that he is a Member of the Board of Directors for the Southern California Regional Rail Authority, which is involved in this item.

[MSRC Member Steve Veres arrived at 2:03 p.m.]

CONSENT CALENDAR (Items 1 through 9)

Receive and Approve Items

Agenda Item #1 – Minutes for the October 23, 2018 MSRC Meeting

The minutes of the October 23, 2018 Joint Retreat between the MSRC/MSRC-TAC were not yet ready and therefore, were pulled from the agenda.

Agenda Item #2 – Summary of Final Report by MSRC Contractors

The MSRC received and approved two final report summaries this month, as follows:

- San Bernardino County Transportation Authority, Contract #MS16092 which provided \$242,937 to implement a series of “Open Streets” events
- SCRRA (Metrolink), Contract #MS18016 which provided \$87,764.00 for special train service to Auto Club Speedway

ON MOTION BY MSRC VICE-CHAIR GREG WINTERBOTTOM, AND SECONDED BY MSRC MEMBER REX RICHARDSON, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #21 THROUGH #9, THE MSRC UNANIMOUSLY APPROVED THE FINAL REPORTS LISTED ABOVE.

AYES: BENOIT, MCCALLON, RICHARDSON, ROYBAL SALTARELLI, VERES, WINTERBOTTOM, YARAMONE.

NOES: NONE.

ACTION: MSRC staff will file the final reports and release any retention on the contracts.

Information Only - Receive and File**Agenda Item #3 – MSRC Contracts Administrator’s Report**

The MSRC AB 2766 Contracts Administrator’s Report for January 4 through January 30, 2019 was included in the agenda package.

ON MOTION BY MSRC VICE-CHAIR GREG WINTERBOTTOM, AND SECONDED BY MSRC MEMBER REX RICHARDSON, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #21 THROUGH #9, THE MSRC UNANIMOUSLY VOTED TO RECEIVE AND FILE THE CONTRACTS ADMINISTRATOR’S REPORT FOR JANUARY 4 THROUGH JANUARY 30, 2019.

AYES: BENOIT, MCCALLON, RICHARDSON, ROYBAL SALTARELLI, VERES, WINTERBOTTOM, YARAMONE.

NOES: NONE.

ACTION: Staff will include the MSRC Contracts Administrator’s Report in the MSRC Committee Report for the March 1, 2019 SCAQMD Board meeting.

Agenda Item #4 – Financial Report on AB 2766 Discretionary Fund

A financial report on the AB 2766 Discretionary Fund for January 2019 was included in the agenda package.

ON MOTION BY MSRC VICE-CHAIR GREG WINTERBOTTOM, AND SECONDED BY MSRC MEMBER REX RICHARDSON, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #2 THROUGH #9, THE MSRC UNANIMOUSLY VOTED TO RECEIVE AND FILE THE FINANCIAL REPORT FOR THE PERIOD ENDING JANUARY 2019.
AYES: BENOIT, MCCALLON, RICHARDSON, ROYBAL SALTARELLI, VERES, WINTERBOTTOM, YARAMONE.
NOES: NONE.

ACTION: No further action is required.

For Approval – As Recommended

Agenda Item #5 – Consider Four-Month Term Extension for the County of Los Angeles, Contract #ML14030 (\$425,000 – Bicycle Racks, Outreach & Education)

The County requests a four-month term extension due to delays associated with concerns over the grade of stainless steel used in the original equipment delivered. THE MSRC-TAC UNANIMOUSLY RECOMMENDS APPROVAL.

ON MOTION BY MSRC VICE-CHAIR GREG WINTERBOTTOM, AND SECONDED BY MSRC MEMBER REX RICHARDSON, MSRC UNANIMOUSLY VOTED TO APPROVE THE NO-COST TERM EXTENSION FOR THE COUNTY OF LOS ANGELES, CONTRACT #ML14030.
AYES: BENOIT, MCCALLON, RICHARDSON, ROYBAL SALTARELLI, VERES, WINTERBOTTOM.
NOES: NONE.

ACTION: MSRC Staff will amend the above contract accordingly.

Agenda Item #6 – Consider Eighteen-Month Term Extension for the City of Moreno Valley, Contract #ML16041 (\$20,000 – Install EV Charging Stations)

The City requests an eighteen-month extension due to a proposed switch of one of the locations to become part of a larger project including solar carport structures at its City Hall Annex Building parking lot. THE MSRC-TAC UNANIMOUSLY RECOMMENDS APPROVAL.

ON MOTION BY MSRC VICE-CHAIR GREG WINTERBOTTOM, AND SECONDED BY MSRC MEMBER REX RICHARDSON, MSRC UNANIMOUSLY VOTED TO APPROVE THE NO-COST TERM EXTENSION FOR THE CITY OF MORENO VALLEY, CONTRACT #ML16041.
AYES: BENOIT, MCCALLON, RICHARDSON, ROYBAL SALTARELLI, VERES, WINTERBOTTOM.
NOES: NONE.

ACTION: MSRC Staff will amend the above contract accordingly.

Agenda Item #7 – Consider Reduced Scope and Value by City of Paramount, Contract #ML18053 (\$72,580 – Install EV Charging Stations)

The City was awarded funding to install two public-access and three limited-access EV charging stations. They have encountered higher than anticipated costs associated with ensuring Americans with Disabilities Act compliance for the two stations to be installed on their properties. The City requests to reduce the number of stations to be installed from five to three, of which all three would now be publicly accessible, with a corresponding contract value reduction from \$72,580 to \$64,675. THE MSRC-TAC UNANIMOUSLY RECOMMENDS APPROVAL.

ON MOTION BY MSRC VICE-CHAIR GREG WINTERBOTTOM, AND
SECONDED BY MSRC MEMBER REX RICHARDSON, MSRC
UNANIMOUSLY VOTED TO APPROVE THE SCOPE AND CONTRACT
VALUE REDUCTION.

AYES: BENOIT, MCCALLON, RICHARDSON, ROYBAL SALTARELLI, VERES,
WINTERBOTTOM.

NOES: NONE.

ACTION: MSRC Staff will amend the above contract accordingly.

Agenda Item #8 – Consider Contract Replacement for the County of Los Angeles, Contract #ML14060 (\$104,400 – Install EV Charging Stations)

Due to the expiration of the County's prior contract, the County requests a contract replacement to complete the scope of work for this project. THE MSRC-TAC UNANIMOUSLY RECOMMENDS APPROVAL.

ON MOTION BY MSRC VICE-CHAIR GREG WINTERBOTTOM, AND
SECONDED BY MSRC MEMBER REX RICHARDSON, MSRC
UNANIMOUSLY VOTED TO APPROVE THE CONTRACT REPLACEMENT
FOR THE COUNTY OF LOS ANGELES, CONTRACT #ML14060.

AYES: BENOIT, MCCALLON, RICHARDSON, ROYBAL SALTARELLI, VERES,
WINTERBOTTOM.

NOES: NONE.

ACTION: This item will be considered by the SCAQMD Board at its March 1, 2019 meeting.

Agenda Item #9 – Consider Contract Replacement for the County of Los Angeles, Contract #ML14093 (\$150,000 – San Gabriel Bike Trail Underpass Improvements)

Due to the expiration of the County's prior contract, the County requests a contract replacement to complete the scope of work for this project. THE MSRC-TAC UNANIMOUSLY RECOMMENDS APPROVAL.

ON MOTION BY MSRC VICE-CHAIR GREG WINTERBOTTOM, AND SECONDED BY MSRC MEMBER REX RICHARDSON, MSRC UNANIMOUSLY VOTED TO APPROVE THE CONTRACT REPLACEMENT FOR COUNTY OF LOS ANGELES, CONTRACT #ML14093.

AYES: BENOIT, MCCALLON, RICHARDSON, ROYBAL SALTARELLI, VERES, WINTERBOTTOM.

NOES: NONE.

ACTION: This item will be considered by the SCAQMD Board at its March 1, 2019 meeting.

[MSRC Alternate Brian Berkson arrived at 2:06 p.m.]

ACTION CALENDAR (Items 10 through 12)

FYs 2016-18 WORK PROGRAM

Agenda Item #10 – Consider Recommendations from MSRC-TAC for New FYs 2018-21 Work Program Concepts

Ray Gorski, MSRC Technical Advisor, reported that at the last meeting the MSRC approved a three-year Work Program with a value of \$64.2 million for FYs 2018-21. FY 2018 commenced on July 1, 2018. The MSRC-TAC was given the task to bring back options relative to a large scale, regionally significant program. The \$64.2 million will be allocated through this program as well as the potential continuation of Work Program elements which have been implemented previously by the MSRC. Finally, there is also the potential for new currently unidentified Work Program elements to be included within that overall budget. The TAC was tasked to develop program options that the MSRC could take the lead in implementing, identifying external funding opportunities and partnerships which could be forged, and to develop an action plan. The TAC has been very hard at work over the last four weeks, with several hours of thoughtful deliberations at the subcommittee and committee level. They debated the potential options that could be included under a regional program. Under Agenda Item #12 there is a recommendation for the continuation of a previously implemented Work Program category, the Major Event Center Transportation Program. We also engaged the Outreach Coordinator and they are ready to hit the ground running at the direction of the MSRC.

There are three Regional Program concepts to present to you today. Two of them were identified at the MSRC meeting last month. The first is a Regional Goods Movement Clean Corridor Program. The key elements would be the deployment of zero and near zero emission vehicles at and between the Ports--the ports of entry and the inland ports, which are the warehouse

distribution centers, which are primarily located within the Inland Empire. This would entail the demonstration of zero emission freight technologies as well as the expansion of commercially available natural gas trucks. It would include both infrastructure as well as the vehicles, and it would have multiple partners including the Ports; the regulatory agencies such as the California Air Resources Board and the California Energy Commission--which we view as potential funding partners; licensed motor carriers, those that move the containers between the ports of entry and the inland ports; distribution centers, which are located out in the Inland Empire; and the infrastructure providers, as well as the Outreach Coordinator, to help facilitate having this type of a program put together.

Three relative ranking attributes for each option are (1) the complexity; (2) the timeline to implement; and (3) to what degree it supports the South Coast Air Quality Management District's Air Quality Management Plan (AQMP), which was adopted by the SCAQMD Governing Board back in 2016-2017. The reason I am suggesting that the Regional Goods Movement Program would have a relatively high level of complexity is simply the number of potential partners which would be involved in a program like this. We have relationships with all the entities; the South Coast AQMD has significant relationships with all the entities. It's simply a matter of bringing all the players to the table. It would take some time but it's certainly doable. The timeline to implement would be high and there are a couple of key reasons. Infrastructure has a long lead time and that is whether it's a natural gas refueling station, hydrogen refueling station or even a simple electric vehicle charging station. It all typically has to go through a public process, permitting, inspection, etc. We need to recognize that with a commitment today to implement a program like this, the result won't be seen within six months. Finally, we get to how this supports the SCAQMD's goals as articulated in the AQMP. The AQMP has as its primary objective the increase in the number of zero and near zero emission vehicles which are deployed within the South Coast region, especially those which are used in the vocation of goods movement. So, this is really directly in support of the AQMP goals.

Concept #2 is what we'll call the EV Ready Electric School Bus Program. It would be a program to help school districts prepare for the coming of zero emission school buses. It would have a primary focus on education and a secondary focus on infrastructure. It also has the potential to include vehicle deployments because we do have electric school buses commercially entering the marketplace. From a complexity standpoint, this would have middle-of-the-road complexity. We have a good idea who the school districts are. They all operate in a somewhat similar manner. The deployment of zero emission vehicles is absolutely in keeping with the AQMP. But the vehicles that they will primarily displace are already natural gas buses. You're displacing an existing alternative fuel solution with a zero-emission solution. While there is an incremental air quality improvement, it's not going to be as great as if you replace an existing diesel tractor that's operating between the Port and the Inland ports.

Concept #3 is somewhat similar, but it would take approach #2 and expand it to communities throughout the South Coast region. This would be what we would call EV Ready Communities. It would have several of the same elements, in that it would focus on education and the deployment electric vehicle infrastructure to prepare for a larger number of electric vehicles to be coming within the next several years. There's an opportunity to partner with local governments as we've done under previously implemented Local Government Programs, as well as leverage other electric vehicle supply equipment revenue streams which are being made available through other agencies. From a complexity standpoint, it would not be really easy to work with that many

jurisdictions. We have 162 jurisdictions within the South Coast region. The timeline to implement would be pretty much the same as the other programs, things do take time and there would be an infrastructure element which would require long lead times. How does this support the SCAQMD's AQMP goals? It's somewhat in the middle. While this would certainly be moving the bar towards having greater numbers of zero emission vehicles, the types of vehicles which would probably be utilizing this infrastructure would be light-duty vehicles. Light-duty vehicles don't have the same emissions impact compared to the top categories as they're laid out within the AQMP. Those include diesel on road trucks, diesel off-road equipment and marine vessels. This Concept supports the proliferation of additional ZEVs, but it is not targeting the source categories that have been identified as the key for achieving clean air by 2023 and 2031.

These Concepts all have common themes. There's a need to leverage MSRC funds because these would be expensive programs to undertake, and we feel that if there's ever a time to go out and seek additional monies, that time is now. That's because of the efforts which are being put forth by the State of California through several programs including those under the administration of the Air Resources Board, California Energy Commission, Cal STA, etc. The program would need to utilize resources offered by the SCAQMD; the MSRC is not a legal entity, therefore they can't submit a proposal to the Air Resources Board to get funding, and someone would have to do that on our behalf. The shovel ready projects will probably be happening in 2021 or maybe a little later because they do take time to go through the regular public process. There's also a backlog currently for some of the technologies which we would want to demonstrate, for example the new near zero 11.9 liter Cummins engine. It's becoming very popular and there's currently a delay in acquiring those engines if you put your order today. Zero emission technologies always have a long lead. In reality, it's no different than any program that the MSRC undertakes. If you look at the timelines of contract schedules between the time someone gets an award from the MSRC to the time they actually install that CNG refueling station, or acquire that transit bus, or they get that EV charger in, it is not happening within six months. It's happening within the time frames we're talking about for these Regional Programs.

The MSRC also charged the TAC to look at additional Work Program Categories. The TAC has an Event Center Subcommittee that's in progress. What we would like is, at the earliest convenience of the MSRC, to obtain some guidance and direction as how you would like us to continue to proceed. You don't necessarily have to pick only one program. If there was more than one program that you had an interest in, we could certainly put our effort to work on the primary program. But because of the timelines we're talking about, we could also start planning and gathering information for the follow-on program, which could be implemented in a couple of years. And we've already had meetings with the Better World Group Advisors, your Outreach Coordinator. Under Agenda Item #11 they've put together what their intentions and plans are, and the costs associated with that. They're engaged and ready to hit the ground running.

MSRC Chair Larry McCallon commented, my personal view is that the Regional Goods Movement Clean Corridor is one that's badly needed. I like it from the standpoint that it's fuel neutral as opposed to choosing one over another, and it's something that directly affects the Inland Empire which we serve. I think it's a program that as you said, has high value in many other areas too. So, I'm very supportive of us moving in that direction if the rest of the MSRC is.

MSRC Ben Benoit commented I completely agree. I guess the only part where I might deviate is, Goods Movement actually affects us all way down to the Port and back. The impact especially in

our environmental justice communities down by the Port is huge. If we can just get 10% of those trucks driving out of that Port electrified, that's not only an impact on those communities but an impact to our Air District across the board. We talked about the number of tons coming out of that one category in the past. I think we have an opportunity here to start moving the needle in that category unlike any other time previously. Technology is just about to ripen, especially with the Tesla trucks coming online, and the other electric trucks that can be right behind them between Cummins and the others. I see this as a huge opportunity to move that needle in that regard and from the Air District standpoint, I think it's huge.

MSRC Vice Chair Greg Winterbottom asked we took a trip to the ports a long time ago, what are we doing now with any of that information? Mr. Gorski replied the good news is there is now a focus on goods movement from the regional basis. Looking at the Regional Transportation Plan, the work that's being done at SCAG, there's a big focus on trying to identify Goods Movement not only on a long haul basis but also on a short haul basis and even for the first and last miles, meaning that there are opportunities under the program to not only do the Class 8 tractors, but there are advancing technologies for the vehicles that take that product and deliver it. From the warehouse those containers get broken down and then they get distributed using smaller vehicles. So I really feel that if we designed this correctly, we can demonstrate the near zero and zero emission technology vehicles, not only between the Ports and the Inland Empire but also throughout the region as advanced technology smaller trucks pick up those goods and take them to the retail outlets. We will do a complete survey of what is going on in Goods Movement within this region. Who has the money? What projects are being demonstrated? Who's demonstrating them? That's something that the Ports have expressed an interest in seeing and I think the MSRC would be positioned to take the lead on that immediately and lay out exactly what is going on and that will help us identify the holes and the immediate next steps.

MSRC Member Rex Richardson commented Regional Program Concept #1 seems like it has consensus at this table and I certainly would agree that should be a priority program. Our SCAG counterparts reminded us that SCAG has the Go Zone Programs, so we should consider that as a strategy of the program. I'd like to learn more as we progress about the process you talked about, how to engage those partners and stakeholders. And I want to think about maybe adding some community voices to that process if we're going to be deploying resources. Why not much focus on the commuter traffic? MSRC Member Ben Benoit responded right now when you look at a commuter car, even a gas-powered commuter car, the delta between that gas-powered car and an EV, is not huge. We can throw a lot of money at it and not get a lot of change. The other thing is, there are a lot of people out there right now doing it on their own. What we aren't seeing, other than very few demonstration projects, is electrification or really clean natural gas trucks in quantity. If we can help push that up over the hump, to get it rolling on its own, I think that's the focus. Mr. Richardson responds that makes sense, the higher impact, this is the area that needs more focus. I think we need to think about the gaps that exist. Not many people can afford the electric vehicles. EV readiness is not really something happening in communities that are typically traditionally impacted by environmental problems because there's not a financial reality or economic reality. What is real for those communities are community colleges, workforce, whether where there's a density of jobs--those are real and a lot of times they count on public transportation. There is significant work on cleaning up those bus routes and trains, so where are the gaps? Where are the areas that the last mile technologies are still not meeting? It was exciting to hear about last mile technologies such as bike-share and scooters. The majority of them were deployed on a market based model, not an equity based model. They went to Long Beach--there's

bikes are everywhere, and in downtown Long Beach there are scooters. Where the Blue Line is, it makes a lot of sense, but nothing in the areas that are not adjacent to the Blue Line. Most of the programs have no equity requirements. So, could we think about a program where we look at a collaboration between transit agencies and economic institutions to say, if you streamline your bus routes to get people to college faster and it's electric we'll help you evaluate the process and streamline it? There's been analysis across LA County about these areas where it's difficult to access workforce education centers for adults, which essentially contributes to low educational attainment and the need for a car. I'm on board with Concept #1, absolutely. But if we're thinking about another program for later, we have to talk about meeting some of the gaps in the last mile stuff. Mr. Gorski replied absolutely, we can do that. Most of the bigger construction companies know how to engage with the programs to get the rebates on the trucks. Who's not engaging those programs are the small trucking companies and minority-owned businesses--single guys. They are not complying with a lot of things, they're parking in our neighborhoods, still going here to there. They don't have fuel programs. They're buying fuel at the truck stops, which have the highest mark up on fuel. It's a game of pennies and they're the ones rolling into our neighborhoods and our schools. Where we can incentivize getting those guys connected to cleaner fueled trucks, there could be more benefits on the ground.

MSRC Alternate Brian Berkson commented I don't know exactly how the technology has progressed up to this point, but we all see drones out there and we all heard the stories of Amazon someday delivering packages right to the house, which would eliminate virtually all the carbon footprints. The question is, is this the appropriate time or do we need to wait a few years to see how that technology progresses? MSRC Chair Larry McCallon replied I would think that's probably not within this timeframe. And certainly right now, when you order something from Amazon, it could be a rental truck or a guy in a car is delivering it. That's one of the things that we're dealing with in terms of the indirect source rule that SCAQMD's talking about--the warehouses, and looking at the business models and the kinds of trucks that are used in terms of trying to reduce the pollution footprint.

Mr. Berkson added in our city we recently approved a TA Truck Stop. It was a much contested situation, but one of the key factors that I found helpful to support that project was that every single semi-truck spot is going to have an electric plug-in. That is huge, in my eyes, because now you've taken trucks off the streets that were previously all over our city idling all night long because they don't have a place to plug in. Maybe we look at some kind of a program that invests in parking lots with electric plug-ins so that we would be able to get some of these trucks to turn off for several hours a day.

MSRC Member Rex Richardson commented some of the trucks have Auxiliary Power Units (APUs). An APU allows them to turn off the truck and not have to idle. It's a little machine that just keeps the heater going or keeps the AC going; it costs about \$3,000 to \$5,000 to put on a truck. Independent operators, if it's not built on the truck, they don't go retrofit and that's one of the biggest issues in communities surrounding trucking. If they had a simple incentive of \$2,500 and they knew where they could pull up and put an APU on their truck for \$500, they would invest in it. Mr. Berkson replied that's the kind of thing we should be looking at. Ray Gorski, MSRC Technical Advisor added the MSRC has in the past funded and supported truck stop electrification. This is going back several years, but it was it for exactly the reasons you articulated--to allow trucks to turn off their engines and still operate their essential services, including HVAC and anything else if they're going to be there for a long time. There's a prohibition in the Health &

Safety Code, at least the interpretation, that MSRC is not able to utilize their monies to fund, for example, transportation refrigeration units (TRUs). That said, we can work with our legal staff to determine if there's a nexus between that and increased emissions by having that mobile source engine idle for a long period of time, we can take that under consideration too.

MSRC Member Ben Benoit commented this Concept #1 came out of the mind of Dan York, the MSRC-TAC Chair. He's an engineer, and one of the concepts we talked about was at those truck stops like you're referring to could there be 5 EV Chargers? Not only would you be electrifying the DC that truck would not be idling. The APUs are mostly diesel generators.

MSRC Member Steve Veres commented on Concept #1, we're basically looking at movement between port and warehouse, is there any conversation about how we go from warehouse to local? I know it's a bigger truck to take it from port to warehouse, but then there's also a smaller truck or smaller delivery type vehicle that takes final locations. For Concept #2, I'm looking at a focus principally for education infrastructure. What's the jump going from a diesel bus to an EV and how much is out there to do it? We've done lots of work over the years to convert to natural gas. For Concept #3, have we given any thought or discussion into all the rideshare apps out there? What can we do with these rideshare apps and encouraging some of those drivers to go to a cleaner vehicle? Or it may be just that they're idling around neighborhoods waiting. Ray Gorski, MSRC Technical Advisor replied staff has been remiss in focusing too much only on the goods movement between the port and the warehouse distribution centers because there definitely is another component. There's considerable amount of work from a technology perspective being done on the Class 5 through 7 vehicles. SCAQMD has been strongly advocating the use of zero emission vehicles in many cases as products are delivered to local retail outlets. So, there's definitely a component here which we can pursue, in addition to the port or inland port route, looking at using clean technology to have those goods delivered from the distribution warehouses to the retail outlets. That absolutely will be something that we don't miss again, it will be included in the overall program scope. With regard to your question on Concept #2, the difference between diesel and zero emission buses, while there are still a limited number of diesel school buses operating within the South Coast region, that is a very small number. The majority of those buses are in fact now natural gas fueled. The certifications of the various engines are: zero emission buses, of course zero; and the newest technology near zero emissions school buses are certified to 0.02 g/bhp-hr. If you look at a non near zero bus, it's still natural gas at 0.2 g/bhp-hr. Currently the majority of the vehicles are operating at the 0.2 g/bhp/hr NO_x level. The near zero are operating at 90 percent lower than that and then of course the zero goes that little extra increment. From an overall effectiveness standpoint, the primary issue with school buses is on an average annual mileage basis, they are rather limited compared to commercially operated vehicles. They don't have quite the rigorous duty cycle. The primary point is that the school bus fleet within the South Coast has already taken great strides in cleaning up their emissions. There have been huge investments by the AQMD, the MSRC, and the California Energy Commission as well as the Air Resources Board buying down the cost of school buses and that's been going on for over a decade. The next increment will be transitioning to zero but as far as the source category is concerned, it's not as critical compared to the less regulated fleets which are operating older vehicles which operate on diesel fuel. Relative to the proliferation of Ubers, Lyfts and other shared ride services, that's something that is a whole Work Program unto itself because the explosive rate at which they've entered the marketplace and their popularity and the attractiveness as a source of income for individuals. There are a lot of drivers out there and they are orbiting around key venues looking for their next fare. How we address that, I personally don't know but I do know that folks

like our Transportation Commissions including LA Metro, which serves on this Committee, are looking very strongly at this. What are the excess emissions which are being produced? SCAG through their future Community Programs is also looking at that. It's part of the MSRC-funded effort. There's been proposed legislation to mandate that some of these shared ride services go to clean technology vehicles, including hybrids and electric. It's definitely an issue, it's probably one that's going to be getting worse as opposed to better in the immediate future, but through regulatory and other incentives, maybe there's an opportunity at some point in the future to implement programs which focus on how to reduce emissions from these shared ride services.

Mr. Veres commented regarding the EV School Bus program, I felt like as I was listening to you, you were talking me out of my support of this concept because of the challenges that you laid out. I wonder why it's in the top three categories. Mr. Gorski replied the reason that #2 was included as a category was because there's a belief that at some point school districts are going to become more regulated, either at the state level or at the local level. At some point they're going to be told to transition their fleets to zero emissions and this category would anticipate a future state or local regulatory action which could be viewed as an unfunded mandate. However, school districts would not have the necessary experience, knowledge or potentially financial resources to accomplish that. Mr. Veres added to follow up on the rideshare app conversation, does that require some further action from us or is it something that we can check in on with LA Metro to discuss at a working group or how would you approach that issue? Mr. Gorski replied that is definitely an item which the MSRC-TAC can undertake through the subcommittee process. We can work with the membership of the MSRC-TAC, which includes all four county transportation commissions.

Naveen Berry commented Ray has done a really commendable job assessing all three concepts with respect to the AQMP goals. Your ranking is right in line with the SCAQMD's thinking and what our Board is thinking. In Concept #1 we would perhaps include renewable fuels. On Concept #2, especially for the infrastructure part, perhaps include coordination with public utilities, like Edison or LADWP, and leveraging their programs that may already be available would be beneficial. And on the EV Ready Communities, are you looking at Level 2 and/or a mix of Level 3 chargers? Ray Gorski, MSRC Technical Advisor replied it will definitely be a mixture of Level 2 and DC Fast Chargers.

MSRC Chair Larry McCallon asked are you envisioning that we would attack all three of these? Ray Gorski, MSRC Technical Advisor replied the MSRC-TAC is seeking your guidance for picking one. However, the MSRC-TAC wanted to ensure that I convey that they're very flexible. If there's a desire to take one as the primary focus but also to set the stage for potential future programs for one of the others, we will be more than happy to do that. Mr. McCallon replied taking on one of these, especially the Regional Goods Movement Clean Corridor, is going to take up more than enough of your time and resources. MSRC Member Ben Benoit added there's so many things we discussed about Concept #1, outside of just what's here. MSRC Alternate Brian Berkson commented based on this long lead time, the money that we're setting up for this program, are we just going to let it sit in a pot and wait for years until companies are ready to act on this. Mr. McCallon replied we have other parts of the program going on. We have other things such as the Major Event Centers Program that we're going to do too; it's not all the money reserved for this program. Mr. Gorski added you're paying out today the money which was allocated three to four years ago. Irrespective of whether it's a big program or a single charger station at one of our local cities, there's a timeline. And between the date that the Governing Board approves the MSRC's Work Program and the date that payment is authorized, is not six months.

MSRC Member Rex Richardson questioned when will this program likely go into effect? Mr. Gorski replied this program will have multiple elements, some that can be implemented sooner than others. The longest lead items will probably be the implementation of hydrogen refueling stations to support an increasing number of fuel cell electric trucks. This relates to the demonstrations which are being conducted by Toyota and they're also doing some work with putting in fueling stations. It's a potential that the MSRC may choose to have an organization like theirs be one of the partners on this program and expand the current program that Toyota's doing. As you bring this forward, you're going to see there are going to be a lot of opportunities like that, with the MSRC coming in and working with a partner, to expand a program which is now just being initiated. That will allow the MSRC to get that money out there quicker because some of that legwork is already being done. Mr. Richardson commented at some point the process I want to figure out how to do something really unique and special within this program around the economic inclusion portion of this conversation. We learned from the clean trucks programs out of the ports that the small businesses which are largely owned by the people of color, and the drivers themselves, have a difficult time accessing most programs. If as a part of this we were to partner and create a purchasing consortium, then the consortium could pass incentives down directly to these folks. And then maybe we could work with a local workforce agency, who profiles companies who are ready, and we bring them in, hold their hands and we pilot this. Something like this in this program early shouldn't take a lot to craft but that's something that I think will get local communities a little more interested. Mr. Gorski replied I could do it right now. I could work with Naveen Berry because SCAQMD has, or at least will have very shortly, programs such as the Voucher Incentive Program (VIP) which assist fleets with 10 or less vehicles. The MSRC could set another set of requirements that say if you're an independent owner operator or truck that hauls drayage out of the ports of Los Angeles and if you're included in the Drayage Truck Registry, you can come in and work with the District and the MSRC to secure grant funding from the District under their VIP program and that would be matched with monies from the MSRC. That would, in all honesty, pay for over two-thirds of a brand-new near zero truck right off the top. Mr. Richardson added if we just coupled that, with the hand-holding that's necessary to bring people. Mr. Berry added on the VIP program, we do that hand holding. We help the small operators through the application process and go through all the reporting process with them. We have had that program for at least 10 years. MSRC-TAC Member Vicki White added it's their contractual relationships with dealerships. The dealerships are the ones who help the small owners. Mr. Gorski added the MSRC has the discretion and flexibility to put any requirements, conditions, constraints on the program. They can target specific operators, in this case drayage trucks. There are programs which have everything already in place.

ACTION: No further action required.

Agenda Item #11 – Authorize Research and Outreach in Support of FYs 2018-21 Work Program Development

Cynthia Ravenstein, MSRC Contracts Administrator reported the TAC talked about engaging the MSRC's Programmatic Outreach Coordinator, the Better World Group Advisors (BWGA). Without knowing exactly what the focus is going to be, BWGA had to come up with a bit of a generic initial effort that they think is going to be needed to be able to hit the ground running. Because with the idea of wanting to leverage funds and once you know what the program area is,

then there needs to be an assessment of what funding is already out there that relates to this. Who are the people that MSRC may need to engage with, both at the state and local regional level, and potentially have meetings with? They came up with an estimate for this first stage of assessing what the landscape is and coming up with an initial outreach plan to coordinate with agency representatives and other policymakers. There is funding available under their contract. This is aside from their regular tasks, this is funding that was not allocated to a specific task. The estimated cost for this initial effort is \$9,850. The information was not available in time for MSRC-TAC, so it was not considered at the TAC meeting. There's not a recommendation coming forward, but I would be seeking the MSRC's authorization to issue a task order to the Better World Group Advisors to conduct this initial effort in supporting the Large Scale Program.

ON MOTION BY MSRC VICE-CHAIR GREG WINTERBOTTOM, AND
SECONDED BY MSRC MEMBER REX RICHARDSON, MSRC
UNANIMOUSLY VOTED TO AUTHORIZE A TASK ORDER TO THE
BETTER WORLD GROUP ADVISORS IN THE AMOUNT OF \$9,850.

AYES: BENOIT, BERKSON, KITOWSKI, MCCALLON, ROYBAL SALTARELLI,
VERES, WINTERBOTTOM, YAMARONE.

NOES: NONE

ACTION: MSRC staff will issue the Task Order as directed.

Agenda Item #12 – Consider Development of Follow-On Major Event Center Transportation Program

Ray Gorski, MSRC Technical Advisor, reported that the MSRC-TAC discussed additional Work Program categories and again Major Event Center rose as the first priority. We formed a subcommittee, and staff prepared a white paper to both initiate and stimulate the discussion amongst subcommittee members. We've had two subcommittee meetings to date and there's a third one planned for next week. This is a work in progress. The committee focus is really two things: 1) to achieve verifiable emission reductions for the investment that the MSRC makes; and 2) to improve the overall cost-effectiveness for the MSRCs investment. We know how to implement an Event Center Program because MSRC has done it continuously since 2010. However, there's a desire on the part of the TAC to look at the program and make necessary modifications to ensure that the projects do have verifiable emission reductions and improve the overall cost-effectiveness. The MSRC-TAC has not taken final action; however, the subcommittee process has resulted in several preliminary recommendations. One is to take a pause from heavy rail at this time. The rationale there is that we have had many rail programs implemented by the MSRC over the last few years and there have been difficulties experienced with those programs. We have been unable to secure, on behalf of the MSRCs investment, what we believe is a quantifiable air quality benefit. We understand the reasons. That's why I used the word pause, because if we can go in and take corrective action, at some point there might be an opportunity to continue those programs. One of them is to demonstrate even cleaner locomotives at Metrolink beyond Tier 4. We're going to have some discussions with technology providers in the very near term and see if there's the potential to actually do a demonstration program for our Event Center using a Metrolink train which is retrofitted with an emission control system that's going to clean the emissions significantly beyond those which are achievable for Tier 4 locomotive.

Secondly, require that the transportation vehicles that do participate in the program meet the near zero CARB standard, this is 0.02 g/bhp-hr NOx. Right now, the program requires 2010 standards. 2010 is almost a decade ago, and technology has advanced over the last 10 years and because this is a cleaner program, it's felt that we should be utilizing vehicles which meet the current CARB low emission standards. That's going to be a new requirement. Thirdly, show a nexus to other existing public transit. If there's public transit which is already operating, whether it be an SCRRA Metrolink locomotive or an MTA Transit bus, if people would use that existing transportation to access the event center transportation, we get to count all the miles which they displaced by not driving their car. Because existing transportation is running anyway, and if they can get on at their origin spot and take the Red Line into Union Station and then hop on a bus to go to the sports venue, then the trip we've eliminated is not just the distance traveled by that shuttle, it's the entire length of that trip. You get much better cost-effectiveness and emission reductions if you can link multiple public transit routes with the Event Center Program. That's going to be a focus on the next one.

So, the final remaining element, which we're still discussing, is to improve the overall cost-effectiveness. We're having good dialogue, but at the end of the day what we intend to bring back to you would be a new Work Program element. It would be similar to your previously implemented one, but it would raise the bar on the quality of the transportation which provides the service, it would increase the utilization of existing public transit in addition to the Event Center Transportation, and it would give you a more cost-effective program because we're going to go in and make sure that the relative contributions from the MSRC and the project implementers are equitable.

MSRC Alternate Mark Yamarone stated regarding the Dodger Stadium Express, we have the Major League Baseball season starting on March 28th. And what we're looking for is, we would like to be able to submit our application compliant with everything that the TAC and subcommittee has come up with and agreeing to meet what's developed under the fourth criterion. Just a quick reminder based on Ray Gorski's analysis at our Retreat, the Express exceeds all these criteria, under total emissions, it's produced five times greater emissions reductions than the second closest one. We are gearing up for this, producing all the marketing that MSRC brands as the sponsor of this. We like the ability to submit the application, so that it can be evaluated under what the group comes up with, but to be considered by the board in March, so that we are able to coincide with the opening of the service on March 28th.

MSRC Chair Larry McCallon asked whether Metro would agree to abide by any and all recommendations made by the TAC? Mr. Yamarone responded yes, we would like to submit the application and it would be evaluated on what the TAC adopts. Mr. McCallon asked whether Metro agrees to potentially follow all negotiations to revise their proposed project prior to contract execution? Mr. Yamarone responded yes.

MSRC Member Steve Veres commented just having been a part of a few of these kickoffs for the program since it's been implemented, it really is important to have a program settled and functioning at the beginning of the year because it really sets the standard for fans throughout the entire year. So, if the program is successful, the fans get a good exposure, expectation and understanding. Even if they drove to the game on opening day, for example, or during a preseason game, they know the program is in place. I think the timing of it is actually important in the conversation because not having it in place in the beginning interrupts the service and the impact

of the service throughout the entire year. Metro is certainly willing to modify based on final requirements here.

ON MOTION BY MSRC VICE-CHAIR GREG WINTERBOTTOM, AND SECONDED BY MSRC MEMBER BEN BENOIT, MSRC UNANIMOUSLY VOTED TO ALLOW LOS ANGELES COUNTY METROPOLITAN AUTHORITY (METRO) TO SUBMIT THEIR APPLICATION FOR DODGER STADIUM EXPRESS SERVICE FOR CONSIDERATION BY THE MSRC AT THEIR MARCH 2019 MEETING, UNDER THE CONDITION THAT METRO AGREES TO ABIDE BY ALL RECOMMENDATIONS RESULTING FROM THE MSRC-TAC PROCESS AND THEY AGREE TO POTENTIAL NEGOTIATIONS TO REVISE THEIR PROPOSED PROJECT PRIOR TO CONTRACT EXECUTION.

AYES: BENOIT, BERKSON, KITOWSKI, MCCALLON, ROYBAL SALTARELLI, VERES, WINTERBOTTOM, YAMARONE.

NOES: NONE

ACTION: No further action is required.

Agenda Item #13 – Other Business

No other business was introduced.

PUBLIC COMMENT PERIOD

Public comments were allowed during the discussion of each agenda item. No comments were made on non-agenda items.

ADJOURNMENT

There being no further business, the MSRC meeting adjourned at 3:15 p.m.

NEXT MEETING

Thursday, March 21, 2019 at 2:00 p.m., Room CC8.