Meeting Call to Order – Chair

Chair & Executive Committee Report/Updates

ACTION ITEMS:
1. Adopt Minutes of Meeting – 03/09/2018
   Attachment A
2. Status Update on RAMP Report & Next Steps
   Attachment B
3. Sustainability Council Attendance and New Nomination

INFORMATIONAL ITEMS:
1. Sustainability Council Work Plan
2. Partnerships Subcommittee Work Plan –
   Presentation/Open Discussion
   Attachment C

Subcommittee Meetings
Open Discussion

Announcements by Councilmembers
Next Elections for Chair & Executive Committee

Upcoming Council Meeting Dates:
- May 11, 2018
- June 8, 2018

Future Agenda Item Recommendations
Q&A

IMPORTANT NOTICE: Subcommittee meetings TO
FOLLOW GENERAL Sustainability Council meeting:
from 11:00AM to 12:30PM
MEETING MINUTES:

CALL TO ORDER: By Council Chair.

Paul Backstrom moves call to approve meeting minutes, meeting # 9 at February 9, 2018
Tonatiuh Rodriguez-Nikl seconds motion.

Announcements: ECSV staff milestone
Staff and Council were selected for the American Planning Association for 2 awards. The Awards ceremony will take place in New Orleans in April.

ACTION ITEMS:
New Council member welcome: Cindy Montanez, (CEO TreePeople)

INFORMATIONAL ITEMS:
Presentations:
1. Improving the Resilience of Transit Systems Threatened by Natural Disasters
   By Deborah Matherly, AICP, ENV SP - Attachment B
2. The Costco Storm Water Diversion Project:
   Presentation by Charles Herbertson, Culver City Public Works Director – Attachment C
   a. Additional presentation re: Ballona Creek Revitalization project was given by Council member, and Vice Mayor Culver City Thomas Small.

EARTH DAY ACTIVITIES UPDATE
Invitation by Council Dilara Rodriguez to attend Earth Day the following Earth Day events:

APRIL 19:

1. Earth Day Grand Park – Downtown LA, 8 AM – 2 PM
   LA Metro Sustainability Council’s participation via sponsorship. Sponsorship will include donations of educational items and promotional items to stuff into giveaway backpacks for 500 school children in attendance.
   Expected attendance: 7,000.

2. 17th Municipal Green Building Conference & Expo – Downey, CA, 8 AM – 4 PM
   Council will host a 2- hour round table, divided in 4 parts:
   1. Activities at LA Metro and the Sustainability Council
   2. What other industries are doing?
   3. Ways to implement best practices in partnership
   4. The next steps

APRIL 21:

3. Earth Day LA Sanitation – Highland Park Rec Center, 10 AM – 2 PM
   Please come and visit LA Metro Sustainability Council Booth
   Wear your Sustainability Council t-shirts with pride.
INTERNATIONAL CONFERENCE ON SUSTAINABLE INFRASTRUCTURE 2019
Mark Norton (ASCE) – To give video presentation to Council from American Society of Civil Engineers. Conference will take place at Biltmore Hotel in Downtown Los Angeles, November 7 – 9, 2019
Invitation to Council members to contact Mark if interested in participating.
Mark Norton email: mnorton@sawpa.org.

Mike Sanio. Sustainability Director, ASCE. Addresses Council regarding ICSI 2019. Recruitment is now open to volunteers for the ICSI event.

SUBCOMMITTEE MEETINGS to follow Council meetings from 11 – 12:30 PM.
Partnerships – remain in Plaza View conference room
Resource Management - 15th floor library
Metro 27 – Invitation to stay in Plaza View
Electrification – No meeting today.

Tonatiuh Rodriguez-Nikl moves to adjourn.
Berwyn Salazar seconds motion.
Meeting adjourned.
MÉTRO REGIONAL ADVANCE MITIGATION NEEDS AND FEASIBILITY ASSESSMENT

Metro
1 Gateway Plaza,
Los Angeles, CA 90012

Prepared by:
ICF
525 B Street, Suite 1700 San Diego, CA 92101
1.1 Introduction: Metro Board Motion

The Los Angeles County Metropolitan Transportation Authority (Metro) Board passed a Board Motion on January 26, 2017, directing staff to consider a regional advance mitigation approach for future Metro project impacts on natural resources. The Board Motion recognized that

1) transportation projects in Los Angeles County, including Metro’s Capital Program projects, may result in impacts on biological resources such as sensitive species, sensitive habitats, wetlands and waters, and wildlife corridors; 2) some counties and regions have seen the benefits of implementing regional advance mitigation approaches; and 3) it is important to determine the applicability of an advance mitigation approach early to allow time for coordination with other agencies and stakeholders who may also benefit from and support the regional advance mitigation planning and implementation.

Although Metro projects generally occur within the more highly urbanized landscapes and typically have relatively small impacts on natural resources, a regional advance mitigation approach could benefit the efficiency and certainty of project planning and delivery for Metro. Recognizing that partnerships with other agencies and stakeholders is important in making a regional advance mitigation approach feasible for Metro, the Board Motion directed the preliminary discussion of a regional advance mitigation approach between Metro, environmental stakeholders, and representatives of various local planning and transportation agencies, resource agencies, and other stakeholders to discuss potential interest in a regional advance mitigation approach for multi-jurisdictional cooperation and coordination for biological mitigation and explore the development of a conservation greenprint to identify and help prioritize areas of high ecological value, including habitat for sensitive species, aquatic resources, and wildlife movement corridors.

The approved Board Motion directed the development of a working group to consider and evaluate the potential of a cooperative multiagency regional advance mitigation program. The motion also included developing an early project screening process for biological resource evaluation, to be applied to projects scheduled for planning and/or construction over the next 30 years. The screening is intended to include the risk of direct and indirect impacts on sensitive species and their habitats, aquatic and terrestrial ecological systems, and wildlife corridors. The project screening process could be applied to all foreseeable Metro projects, as well as other agencies’ projects in the region, to determine the potential need for natural resource mitigation and the potential benefit of a regional advance mitigation approach for long-term mitigation planning and implementation. The preliminary description of this screening process is included in Chapter 3 of this report.

In addition, it should be noted that the approved Metro Measure M Early Project Delivery Strategy\textsuperscript{2} policy is consistent with and complementary to an advanced mitigation approach. The Measure M Early Project Delivery Strategy establishes policy framework for early and accelerated project delivery of Measure M projects and entails processes for identifying the potential for project acceleration at the individual project level. Implementation of an advanced mitigation approach to Metro project mitigation needs would be consistent with the Measure M Early Project Delivery Strategy and serve as a promising avenue for meeting project acceleration goals.

\subsection*{1.2 History of Advanced Mitigation}

Beginning in the late 1990s, the California Department of Transportation (Caltrans) developed the first real advance mitigation project of its kind, the Beach Lake Mitigation Bank, which was implemented in southern Sacramento County to provide mitigation credits for impacts on seasonal wetlands under Section 404 of the Clean Water Act. This bank cost approximately $1 million to implement and provided mitigation for dozens of small transportation projects, saving Caltrans an estimated $20 million compared with the purchase price of mitigation credits at the time of permitting for the transportation projects (Caltrans unpublished data). Other advance mitigation efforts in California have been initiated through local tax measures, such as TransNet\textsuperscript{3} in San Diego County and Measures M and M2\textsuperscript{2} in Orange County. TransNet was a transportation planning measure, voted on in 1998, that included advance mitigation planning and implementation by the San Diego Association of Governments (SANDAG). Having identified mitigation needs as part of its transportation plan, TransNet was able to capitalize on a downturn in land prices during a lull in housing development to purchase mitigation lands at a low cost, providing a large cost savings to the program. Similarly, Measure M was voted on and approved in 1990 as a transportation funding mechanism in Orange County.\textsuperscript{4} It also included advance mitigation planning and land preservation components. Measure M2 is a second tax measure, continuing and improving upon the original Measure M. Although it continues to plan for transportation projects, the advance mitigation component also includes permitting assurances, further streamlining transportation project implementation. Caltrans and the California Department of Water Resources (DWR) formed a Regional Advance Mitigation Planning (RAMP) Work Group in 2008 and developed draft framework and guidance documents for RAMP programs and efforts. The Central Sacramento Valley Pilot Region RAMP and Bay Area Pilot RAMP, initiated in the late 2000s, have been making steady progress to establish regional advance mitigation programs. More information on regional advanced mitigation efforts in California can be found in Appendices A and B.

Advance mitigation programs have been implemented elsewhere in the United States. States such as North Carolina⁵ and Colorado⁶ have implemented advance mitigation programs in the form of programmatic permitting, mitigation, or in-lieu fee (ILF) programs for long-term planning of transportation projects. These programs have provided the transportation agencies with regulatory assurances and streamlined the permitting process for transportation projects.

Identifying mitigation needs and opportunities in advance of project development, known as advance mitigation planning, is a growing trend in the field of environmental planning in both California and nationally. California recently enacted Assembly Bill (AB) 2087, which took effect on January 1, 2017, and outlines an advance mitigation program for identifying and prioritizing the conservation needs of vulnerable species and resources at a regional scale through the creation of Regional Conservation Investment Strategies (RCISs). Because of the increased interest in regional advance mitigation and its suite of co-benefits, California also enacted Senate Bill (SB) 1 legislation facilitating regional advance mitigation planning and allocating funding supporting its implementation. SB 103 legislation further defines the advance mitigation program and funding in SB 1 specifically as it applies to transportation.

These new programs and laws take a long-term approach to cumulatively consider potential impacts from proposed projects on natural resources and plan for the cumulative mitigation for those impacts in advance of project implementation. The result is a highly efficient project planning process resulting in lower overall project mitigation costs, decreased risk to project delivery, and much higher quality environmental outcomes over the traditional project-by-project mitigation approach that typically result in repetitive and redundant planning efforts resulting in piecemeal conservation outcomes.⁷,⁸ These increased benefits to both project delivery and natural resources result in a suite of co-benefits that a project-by-project planning and mitigation approach simply cannot achieve. In addition to the streamlined planning and reduction in mitigation costs, advance mitigation efforts can also support streamlined project permitting programs, reducing the time required for permitting during project development, and decreasing risks to project implementation from regulatory complications.

Advance mitigation planning can provide assurances that mitigation options will be available and readily accessible. Currently there is a paucity of mitigation credit purchase options in the Los Angeles metropolitan area, this often results in the necessity to develop permittee responsible mitigation to offset project-related natural resource impacts on a project-by-project basis. In comparison to regional advance mitigation approaches, the project-by-project mitigation approach is often planning, labor, and cost intensive, inefficient, and requires long-term staffing for management of resources. Pooling project and agency resources and approaching mitigation cumulatively and regionally through advance mitigation planning addresses these inefficiencies and also results in better overall conservation outcomes.

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SUSTAINABILITY PARTNERSHIPS SUBCOMMITTEE: THE WORKPLAN

Sustainability Partnerships Subcommittee – MISSION STATEMENT
To identify opportunities for synergies and collaboration between relevant stakeholders to maximize projects’ value, return, and resources use, through partnerships. Sustainability Partnerships extend beyond, sharing risk and fiscal responsibilities, and economic benefits, to incorporate multiple bottom line opportunities such as health, environmental, social, education, technology, and dialogue.

A sustainable urban environment is a vision of reconciliation, a holistic model of optimal trade-off between multi-faceted community opportunities and constraints, be it economic, social, environmental, health, political, institutional, legal, or economic. This vision is achieved through sustainable economic development practices defined as “the investment in business, social, built, and natural environments that creates increasing prosperity for all, now and into the future.” While partnerships for sustainability take place among various types of public and private partners and for different project types and needs, there is no unified coherent approach to systematically discern partnership prospects. Hence, many opportunities for optimizing efficiencies remain unidentified and missed. In urban development, these opportunities can be identified for different program type, scale, and scope (policy, guidelines, infrastructure, planning), at various stages of decision making (from need identification, to land use visioning, long-range planning, sustainability framework development, specific programs development, environmental reviews, implementation, monitoring, and adaptive evaluation), and different environmental sustainability matters (technology and innovation, air quality, water resources, urban greening, mobility, construction practices, community education, etc.). This is visualized in the matrix.

Sustainability Partnerships Subcommittee - GOALS
To develop a structured and strategic Framework for Sustainability Partnerships to guide Metro decision makers, throughout the life cycle of a program. These partnerships will focus on promoting active pursuit of innovation in materials and processes; active tracking and integration of state-of-the-art technology; and integration of programmatic efforts between partners in the region to develop unified programs and guidelines. The framework will set guidelines to, intentionally:
1. Establish needs and opportunities where partnerships are necessary, recommended, feasible and achievable.
2. Characterize Metro’s delivery process stages when such partnerships should be identified and integrated.
3. Identify and prioritize potential partners, influence, their motivators, level of commitment and engagement.
4. Mobilize and engage partners to develop measurable goals, objectives, responsibilities, and milestones.
5. Monitor program implementation, evaluate achieved results, and modify accordingly.

The diverse background of the members of the Sustainability Council and Sustainability Partnerships Subcommittee (SPS) provides a fertile environment where, otherwise unmapped knowledge, processes, technology, and innovation opportunities can be explored. With the wide perspective and inaccessible connections brought by the Subcommittee members, a structured, strategic, and intentional approach will be adopted to develop a sustainability partnerships framework with roadmaps to identify, originate, and
manage these partnerships towards a common goal.

The Sustainability Partnerships Subcommittee proposes in this Workplan to focus its efforts on four major areas of high priority to Metro, specifically, water resources, green procurement, technology and data, and sustainability metrics. Accordingly, one, or multiple, framework will be developed to support Metro in identifying, structuring, and mobilizing partnerships focused on furthering social and environmental sustainability associated with its programs. These partnerships’ scope should extend beyond sharing and matching of economic resources for program implementation; an integral objective for identifying and mobilizing them consists of exploring innovation in improved processes and unfamiliar technologies.

The proposed activities for the Subcommittee are listed in the approach section of this document. These activities include a series of workshops and presentations with various agencies to engage in the investigation of success stories, with associated challenges and solutions. In parallel, meetings and presentations from Metro departments will be needed to engage them in the conversation, understand their needs, and increase the process efficiency and effectiveness. By driving the process for identifying and developing strategic partnerships for future projects, programs, and initiatives, the SPS will provide a platform for Metro’s Planning, Design, Sustainability and Environmental teams for the proactive identification and assessment of opportunities for partnerships to attain even higher sustainability innovation practices, for short-term and long-term future projects/programs. This Workplan sets a general background and future steps the Sustainability Partnerships Subcommittee will be adopting towards achieving its mission and objectives.

A. BACKGROUND – SUSTAINABILITY COUNCIL

The motion response prepared for the Executive Management Committee, dated October 20th 2016 (Sustainability Strategies, Agenda Number 36), noticeably recognizes the crucial role of partnerships in Metro’s sustainability efforts. In accord, the objective of the Sustainability Partnerships Subcommittee, under the umbrella and leadership of the Metro’s Sustainability Council, is to further the objectives of the Council and Metro by providing “a framework and opportunity for Metro to strengthen and expand its sustainability policies, plans, and implementation efforts for the benefit of our metropolitan region and to foster a greater level of coordination with peer agencies trying to address overlapping sustainability mandates”, “to adapt its sustainability implementation strategy to reflect rapidly evolving technology, increasing impacts of extreme weather events, more stringent federal, state, and local requirements, advancements in best management practices for active transportation infrastructure, as well as the need for closer coordination among agencies” recognizing that it’s “not alone in this space”, and to “efficiently converge transportation, open space, air and water resource, and biodiversity protection into a shared vision of all our 88 cities and unincorporated areas of LA County and surrounding jurisdictions.”
As an international sustainability leader, and being the colossal integral part of the socio-economic, and environmental matrix of one of the main world economic regions, Metro is particularly well positioned to retain this role, regionally, nationally, and internationally, by aggressively leading in identifying, mobilizing, and implementing sustainability partnerships endeavors to warrant sustainable urban development.

**Sustainability Partnerships Subcommittee – OBJECTIVES and DELIVERABLES**

The first four objectives to occur in parallel, leading the fifth: Sustainability Partnerships Framework.

- Select a three or four pressing sustainability programs / disciplines where sustainability partnerships can play a positive role in supporting Metro address them
- Identify presentations and workshop opportunities, around these topics, during which multiple past and future potential partners can discuss successes and challenges. These will be documented in memo format to be used in developing the framework.
- Meet with Metro departments to focus on their needs and challenges, in a partnership context.
- Investigate national / international case studies where environmental, technological, and social sustainability geared successes were accomplished through partnerships. Document process in brief memos.
- Develop the Framework for Sustainability Partnerships Mobilization.

**B. CROSS-SECTOR COLLABORATIONS - “BUSINESS AS UNUSUAL”**

It is established that a partnership can combine the role of public actors among themselves with the strengths of private actors to create an enabling environment for providing high-quality services with innovation, technical knowledge and skills, managerial efficiency and entrepreneurial spirit. The success of a sustainability partnership, like any other partnership, must make sense to all partners. In addition, the success of a partnership can materialize in different shapes and forms, commitment by the parties to keep moving forward through the process towards the larger picture.

**Anchoring the partnership**

Effective partnerships are driven by the need to solve problems and involved a process of mutual benefit and learning. While the objective of a sustainability partnership is the same, partners are pulled into the partnership by different motives. A strong sustainable commitment by the parties requires clear reasons, incentives, and outcomes that lead them to achieving their primary interests. Whether the reward is sharing financial resources, protecting environmental resources, not wanting to be left out, or pure publicity, it needs to be significant enough, relatively to each party, to excite people, increase support, and generate momentum for collaboration and progress. Initial mobilization by senior leadership ascertains commitments beyond each organizational biases and culture.

**Defining the partnership success**

In a sustainability partnership, benefits may (and will) extend beyond sharing financial resources and risk to include many intangible and hard to measure success metrics. The partnership will have many efficacies, some intended and others unexpected. While defining and committing to a clear mission and objectives for a partnership is essential for its success, rewarding outcomes can come from many undefined directions, setting a positive precedence to build on, at least a cultural one. Whether negotiating with a City’s mayor’s office for a large infrastructure project, with City’s internal engineering department for utilities upgrades, an international government for global collaboration, a non-governmental stewardship organization for project impact mitigation, a small business hub for technology transfer, or an academic institution for innovative solutions, the opportunities are limitless. The flexibility of the parties is decisive to keep moving forward.
C. WHERE DO WE BEGIN?
It is crucial to start the conversation by recognizing that partnerships between the different organizations charted in the graphic above is and has been taking place for many years now. As society is expecting and demanding more from its leaders, the push for collaboration, for sustainability partnerships in particular, has been paving the way in issues and opportunities identification for projects planning and implementation, in different projects disciplines and at different projects scales.

A tipping point has been reached for sustainability partnerships among Metro and its potential partners. Sustainability mandates, many times overlapping, are omnipresent in every conversation, be it on major capital projects (rail extension), a component of improvement programs, such as sidewalks repair or greenways, accessibility initiatives and active transport, climate impact and resiliency, or health and pollution reduction. As mentioned previously, Metro’s position in the area makes its reach, thus the potential opportunities for sustainability partnerships, boundless! The “Sustainability Partnerships Matrix”, presented earlier, exemplifies the different dimensions to be considered in selecting and assessing sustainability partnerships opportunities, and ultimately, developing a framework for this process.

D. METRO’S PROGRAMS PRIORITIES
In the last three years, Metro has succeeded in putting forward several major initiatives: “Operation Shovel Ready” and Measure M. These initiatives, briefly described below, set the capital project priorities for Metro. In addition, these initiatives account for programmatic non-capital projects covering areas such as local street improvements, bike and pedestrian connections to transit, and community programs, such as the complete streets and first-last mile initiatives. Some of these projects are summarized in the tables below. These lists can be used as a guide as the scope of the Partnerships Subcommittee is further refined. It is to be noted that Metro is highly involved with initiatives led by agencies throughout the Los Angeles County, with objectives similar to those planned under Measure R, “Operation Shovel Ready”, and Measure M. These must be considered during the analysis.

**Measure R, Measure M, “Operation Shovel Ready”, and “Twenty-Eight by 28 Initiative**

LA Metro has several aggressive initiatives aimed to achieve a more livable, successful, and equitable region faster than originally planned. “Operation Shovel Ready” developed by Metro in 2016 aims to “aggressively move forward in bringing major transit and highway projects closer to the implementation stage”. One objective of this program is to take advantage of potential funding and grants, private sector participation, and local community support. Sustainability partnerships are an intrinsic element of such a program. The goals of Measure R and Measure M, passed in 2008 and 2017, are to ease traffic congestion, expand rail and rapid transit system and connectivity, improve local and neighborhood streets including signals synchronization, enhance bike and pedestrian connections, improve accessibility and mobility options for seniors, students, and the disabled; and provide better mobility options for our aging population, retrofit earthquake and improve on system safety. Measure M includes provisions to reduce pollution, embrace modern technology and innovation; generate local economic benefits, increase personal quality time and overall quality of life, and protect and monitor the public’s investments through accountability and transparency. A table summarizing these projects can be found at the end of this document. “Twenty-Eight by ‘28 Initiative” plan or Measure M Early Project Delivery Strategy, highlight twenty eight projects for completion by the 2028 Olympic and Paralympic Games.

E. WORKPLAN IMPLEMENTATION APPROACH

**SPS MEMBERS WORKSHOP**
F. SUSTAINABILITY PARTNERSHIPS PRIORITIES

This section briefly shows example opportunities for the SPS to provide meaningful guidance for Metro. These can be built upon and/or used as a starting point of conversation. As a disclaimer, Metro may already be involved in some form or shape in these partnerships. In these cases, it is important to note that SPS is uniquely positioned to develop insights on ongoing key challenges faced by Metro environmental, planning, and design and construction teams and to assist with developing creative solutions and win-win strategies for resolving in a proactive manner for future Infrastructure projects/programs, through this effort.

The importance of using past and on-going experiences to guide future ones achieves a balance between long-term and short-term goals set up for this Council. Driving the process of identifying and developing strategic partnerships for future projects, programs, and initiative further reiterates Metro's role and leadership in the region towards a vision of sustainable urban development, mobility, social, health, environmental, and economic growth.

Based on the priorities of the SPS member stakeholders, identified opportunities are, in no specific order:

A. Water Resources Management (Quantity and Quality)
B. Innovative Technology Transfer and Data Management
C. Sustainability Plan and Metrics
D. Green Procurement Plan

Additional discussed, but excluded, opportunities which can be tackled through future efforts were academic transfer of knowledge and technology and green freight.

Water Resources Management

Opportunities for partnerships clearly present themselves when discussing stormwater management and dewatering associated with construction projects. Quality, Green Infrastructure, and Active Transportation Metro is not just the major transportation agency in Los Angeles County; it is the major driver behind the County’s current and future urban development matrix. Imperviousness which can be associated with the urban environment is the major cause behind increased in flash flooding, water quality degradation, and reduction in groundwater replenishment from rainfall. While Metro’s continuously thrives to implement best practices in coordination with other stakeholders, there is always potential for breaking barriers and improving coordination. In a time where great focus and resources are directed towards increased mobility and accessibility through improved transportation infrastructure, and complete streets and first-last mile planning, and associated cascading benefits, the stage is set for increased alignment and coordination in planning and implementation.

In the case of stormwater management throughout Best Management Practices (BMP) / Low Impact Development (LID), a comprehensive County coordinated strategy with stormwater and landuse planners and regulated stakeholders, will not only ensure regulatory compliance, but also the optimal potential social and environmental benefits created by increased accessibility and walkability.
For construction projects when the groundwater table is high, the necessary removal, or dewatering, of that water, presents an obvious source of water which requires an efficient and effective management approach, at a time where the region is focused on capturing and using every drop of water and reusing consumed water! This also requires a cohesive framework for partnerships between the various jurisdictions, including in the conversation innovative processes that can be brought by international governments and potential private partners.

**Innovative Technology Transfer and Data Management**

With rapidly advancing technologies, it is challenging to keep up to date with all the possibilities available. International government agencies and established and budding national and internationally-based industries are in a relentless flux to ideate, develop, and implement innovative technologies to improve on the efficiencies of the transportation system with its over-arching impact on local and regional social and environmental sustainability. Sustainability Partnerships Subcommittee can further Metro’s objective of accessing and using the latest applicable and feasible technologies. Identified relevant innovations, successfully tried by other agencies or at the ideation and development stage, can be brought to Metro’s attention via presentations and workshops and/or via a circular economy assessment process to an agreed upon case study. Example relevant technologies would be ones that would result in further improving the economic and sustainability efficiencies for Metro through impactful results such as provide up to date inventory and condition status of roads, traffic signs and tracks to other organizations automatically with aid of Artificial Intelligence, as one example.

Another imperative partnership is that of data management and sharing. Many of the systems and devices collect data with sensors, cameras and other means nowadays. This data holds a big promise of improved efficiency and faster decision making. Challenge with the increased amount of data is to focus on the relevant information and further process it towards added value. The Sustainability Partnerships Subcommittee can provide references and best practices from other organizations to assist Metro in sustainably growing its information system platforms as its infrastructure system and community impact continue to expand. The on-going and planned partnerships with other entities, private and public, emphasizes the additional need for an integrated data sharing platform, at the heart of which is transparency and collaboration. The Subcommittee can explore opportunities where, only achievable through partnerships, sustainable high value data sharing and management platforms were successfully implemented and document the challenges overcome to reach that goal.

**Sustainability Plan and Metrics**

Agencies are facing and trying to address the same socio-economic and environmental sustainability matters. Although their matters and end points are common, they tend to address them through parallel processes, with a level of “creative collision” that is not conducive for optimal collective learning, exchange of knowledge, and ideation. This lends itself to the need for one sustainability partnership to develop a common and carefully designed set of strategies and a replicable system of metrics. A unified framework, intentionally and consistently used by all agencies within the region, can be used to develop a benchmark and tracking system for monitoring activities and results towards sustainable growth across the region.

A successful sustainability plan entails more than just metrics, though. It must also include the continued development of strategies to make progress towards meeting goals, as tracked by a good set of metrics. This strategy development should be an iterative process, utilizing a learning loop approach to build off feedback gleaned from tracking metrics as well as other qualitative information about barriers to greater progress. This iterative, strategy development process benefits from participation of stakeholders across
agencies and sectors. Rather than developing strategies in isolation, agencies should form partnerships to identify ways that their strategies can be synergistic, and not redundant or conflicting.

**Green Procurement Plan**

Metro has an immediate need to address the issue of owning a comprehensive and coherent green procurement plan. Part of the urgency stems from their strategic plans and the expected volume of future construction projects and associated procurements. One cannot help but acknowledge that in this challenging endeavor lies an opportunity to unify green procurement metrics and processes across the region, through partnerships with other sister and public agencies, as well as private contractors and suppliers. The objective of the partnership is to share procurement challenges, jointly develop green procurement criteria, and set policies to follow these criteria and taking part in the adaptive process involved with adapting them to new engineering and technology advancement.

Examples for such an approach exist, and at different scales. Agencies, contractors, and young and established industries continuously work with each other in selecting green materials. Similarly, contractors and the private industries work together to come-up with innovative ideas for materials and processes to be used on projects procured with public agencies. This is exemplified below.

Pilots for developing and implementing concrete aggregates from recycled materials have been taking place for over two decades. Most recently, the Netherlands paved a one kilometer bike path, a highway stretch, and a parking lot, with asphalt mixed with used toilet paper, which rich cellulose content acts as a strengthening agent, with the added benefit of reducing slipperiness caused by rainwater. The 180,000 tons of toilet paper flushed away per year, traditionally filtered at the wastewater treatment plants and burnt, are now passed through a filter system to produce high quality fiber. The government, with two private manufacturing companies, KNN Cellulose and CirTec, identified an opportunity for a multi-benefit sustainability partnership. Another pilot took place in Bellingham, Washington, where 400 old toilets were used. The public works department developed specifications for recycled aggregates including recycled bricks, tiles, toilets, and other construction waste. In the words of Anthony Freeman, P.E., project engineer for Bellingham “We did it because it was the right thing — and it was fun”, “We got to play mad scientist. I think it [this project] really speaks about local partnerships, though.”

**Additional Opportunities for Sustainability Partnerships**

**Academic Knowledge and Technology Transfer**

Academic research institutions have always expressed the missed opportunities from the disconnect between them and their work and the agencies who are responsible for putting public resources into their optimal use. The Sustainability Partnerships Subcommittee can provide a forum to discuss example of missed knowledge transfer and real-world application of innovative technologies and methods. Case studies of such partnerships will also be investigated to identify successful steps that were adopted and implemented towards opening communication channels between academia and policy and implementation agents.

**Green Freight and Goods Movement**

Projections show that by 2050, global freight transport emissions will surpass those from passenger vehicles. This presents an opportunity for Metro to align and enhance existing Green Freight efforts and work with freight carriers and their customer towards shared efficiency goals. An existing partnership, SmartWay, between the EPA and over 3,700 companies, “representing a broad cross-section of industries -- trucking, rail, barge and air freight, and their customers”, focuses on, collecting and tracking emissions data from the
companies, across their supply chain, and works with global sustainability reporting protocols to “to integrate SmartWay emissions data directly into their guidelines and standards”. The partnership also includes “200 major industry associations, non-governmental organizations, states and localities, and professional trade groups” as affiliates. The partnership tracks its successes through metrics such as energy conservation, emission reductions, and cost savings, resulting from the change in best management practices of its members. Metro has the opportunity to be a leader in Green Freight by working with freight companies and their customers to improve freight transportation efficiencies and advancing supply chain sustainability. As an example, SmartWay can be used to identify those enrolled companies in LA County and include them in the larger conversation of transportation system and countywide sustainability efforts. The Global Green Freight Action Plan is a potential starting point.
**METEO PRIORITY PROJECTS**

**TRANSIT**

- SR-71 widening (Mission to 10 Freeway)
- SR-71 widening (60 to Mission)
- SR-60 / SR-57 interchange
- I-605 / I-10 interchange
- US-101 northbound auxiliary lane
- SR-138 improvements
- US-101 / I-405 interchange improvements

**HIGHWAY/STREET**

- Vermont Avenue BRT
- North Hollywood to Pasadena BRT Transit
- Crenshaw Northern Extension
- Orange Line Improvements
- SCAG Green Line Extension to Norwalk Metrolink Station
- Red/Purple Line Improvements
- Rail to River Active Transportation Corridor
- San Gabriel Valley Regional Greenway Network
- L.A. River Bike Path

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**“OPERATION SHOVEL READY” PRIORITY PROJECTS – NON-MEASURE R**

- I-710 south early action – sound walls
- I-710 south early action - interchanges
- I-605 corridor arterial intersection improvements
- SR-138 widening
- I-405 Crenshaw Blvd. ramp improvements
- SR-138 local interchange improvements
- I-110 southbound auxiliary lane
- I-605 / SR-91 interchange improvements
- I-605 / SR-60 interchange improvements
- I-605 / I-5 interchange improvements
- I-710 / SR-91 interchange improvements
- I-5 HOV/HOT lanes

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**“OPERATION SHOVEL READY PRIORITY PROJECTS – MEASURE R**

- Airport Metro Connector 96th St. Transit Station
- East San Fernando Valley Transit Corridor
- West Santa Ana Branch Transit Corridor
- South Bay Metro Green Line Extension
- Gold Line Eastside Transit Corridor Phase 2
- Purple Line Extension Phase 3
- Sepulveda Pass
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<th>MEASURE M PRIORITY PROJECTS</th>
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<tr>
<td>• I-5 Truck and Carpool Lane Additions</td>
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<td>• SR-71 Lane Additions: I-10 to Rio Rancho Rd</td>
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<td>• SR-57/SR-60 Interchange Improvements</td>
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<td>• I-105 Express Lane Additions: I-405 to I-605</td>
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<td>• Sepulveda Pass Express Bus Transit Corridor</td>
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<td>• I-710 South Corridor Zero Emission Truck Lane</td>
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<td>• I-605/I-10 Interchange Improvement</td>
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<td>• I-5 South Corridor Lane Additions: I-605 to I-710</td>
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<td>• I-405 South Bay Curve Bottleneck Improvements</td>
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<td>• I-110 Express Lanes Extension to I-405/I-110 Interchange</td>
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<tr>
<td>• SR-60/I-605 Carpool Interchange Improvements</td>
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<td>• I-405/I-110 Express Lane Interchange Improvements</td>
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<td>• High Desert Multi-Purpose Corridor: SR-14 to SR-18</td>
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<td>• Las Virgenes/Malibu Transportation Improvements</td>
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<td>• North County Transportation Improvements</td>
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<td>• I-605 Corridor “Hot Spot” Interchange Improvements</td>
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<td>• Crenshaw/LAX Light Rail Track Enhancement Project</td>
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<td>• LA River Bike Path Extension: Canoga Park to Glendale</td>
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<td>• LA River Waterway and Bike Path: Elysian Valley/Maywood</td>
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<td>• City of San Fernando Bike Path</td>
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LA METRO SUSTAINABILITY COUNCIL

A CALL FOR VOLUNTEERS

EARTH DAY 2018

Council Members and Community Guests:
Earth Day is April 22nd and as you know, the Sustainability Council will be active at several great events around Los Angeles County. If any Council member is interested in offering a helping hand, here are a list of events and information:

1. **Earth Day Grand Park** – 200 N. Grand Ave., Los Angeles, CA 90012
   Thursday, April 19, 2018 from 9:00 am – 2:00 pm
   Sustainability Council is joining Grand Park, Music Center and LADWP in partnership.
   A select number of school groups will be transported to attend the event. L.A.’s residents, workers and visitors’ ideas and solutions on how to live clean and go green. The annual event features performances, tours, plant giveaways and demonstrations of the latest in green technology, which are all free to the public (and to a select number of school groups). For this event Metro is providing educational and fun giveaways to fill 500 school backpacks for 500 LA County students.
   *No volunteers are necessary for this event, but Council members are encouraged to wear their t-shirts proudly and enjoy the festivities.*

2. **Earth Day LA Sanitation** – 6150 Piedmont Avenue, Los Angeles, CA 90042
   Saturday, April 21, 2018 from 10 am to 2 pm,
   LA Sanitation will hold its third annual citywide Earth Day LA event at Highland Park. There will be City vehicles for kids to explore, games to play, prizes to win, seeds to plant, 50+ exhibitors to visit, and fun for all ages. Free beverages and snacks are available while supplies last. All exhibits will be related to City services and sustainability. Join us for earth-friendly fun in a festival setting! There is no charge for admission, and all are welcome.

   *LA Sanitation Earth Day event. Need help taking materials over, boxes of materials to give away, setting up the booth and staffing the booth. Two to three at a time. As the event is 4 hours long, you can volunteer for an hour or two, and then enjoy the music and food and other activities.*