



Subject: Next Generation Transportation Demand Management

<input type="checkbox"/> Action	<input type="checkbox"/> Consent	<input checked="" type="checkbox"/> Information	<input type="checkbox"/> R&F	<input type="checkbox"/> Report	<input type="checkbox"/> Workshop
Prepared by: Sabrina Bradbury			Approved by: Matt Carpenter		
Attachments: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N					

- 1. Issue:** What approach should SACOG take to a Next Generation Transportation Demand Management (TDM) Program?
- 2. Recommendation:** This is an information and discussion item to provide SACOG staff direction and feedback on the direction of a future TDM program.
- 3. Background:** Transportation Demand Management (TDM) focuses on moving people by more efficiently utilizing existing transportation infrastructure through projects and programs. Examples of programs are the promotion of carpooling, vanpooling, transit, bicycling, walking, telecommuting, and flexible work schedules as well as the implementation of policies, incentives and disincentives to get people to drive less. Among SACOG's most well-known programs are May is Bike Month, the Ready, Set, Ride Commute Challenge, and Try Transit Campaign that coincided with the opening of the Golden 1 Center. In 2016, the SACOG Board of Directors adopted a TDM Strategic Plan that set the course for the region's TDM programs and projects to be more performance-based and innovative, and produce more measurable reductions in vehicle miles traveled (VMT).
- 4. Discussion/Analysis:** For the past 10 years, SACOG's TDM Program was included as a Transportation Control Measure (TCM) in the State Implementation Program (SIP) for air quality. Because of this TCM requirement, SACOG funded a regional TDM program with a \$1.2 million annual carve-out of federal Congestion Mitigation and Air Quality funds available to SACOG over the 10-year period. The SIP has been updated and now does not include TDM as a required TCM. Therefore, SACOG is not required to continue to fund the program beyond June 30, 2018. However, the TDM program is ripe with opportunities to innovate. TDM is responsible for a small but increasingly important percentage of the off-model Vehicle Miles Traveled (VMT) reductions that SACOG claims to help meet our regional greenhouse gas target set by the California Air Resources Board. TDM programs and pilot projects can also play an important role in supporting and integrating smart mobility and next generation transit efforts.

The board has expressed interest in the following areas: establishing the region as an innovator and new mobility testbed, advancing next generation transit efforts, and meeting

challenging greenhouse gas (GHG) targets. Staff recommends continuing a TDM program for two fiscal years beginning July 1, 2018 through June 30, 2020. Attachment A outlines potential program design options for a Next Generation TDM Program. Attachment B provides a highlights summary of TDM Strategic Plan implementation efforts that have occurred in the last 16 months. Additional detail will be provided as part of a proposal for extending the TDM program.

Staff requests committee member feedback and input on the redesign of the TDM program. This will help inform a more detailed proposal for future consideration by the Committee and Board.

- 5. Fiscal Impact/Grant Information:** There is no fiscal impact for this information item. Staff will provide a subsequent item to include funding recommendations.

ATTACHMENTS:

Attachment A - Future of SACOG's TDM Program

Attachment B - TDM Strategic Plan Implementation Update

Future of SACOG's Transportation Demand Management Program

The mobility landscape is changing and SACOG's Transportation Demand Management (TDM) program is a part of that change. The SACOG Board of Directors adopted a Transportation Demand Management (TDM) Strategic Plan in October of 2016 that put the TDM program on a path to become a more performance based and innovative program that produces measurable results. Since the TDM program will no longer be a Transportation Control Measure (TCM) in the State Implementation Plan after June 30, 2018, there is an opportunity to shift the program even further to one that is more creative, nimble, performance-based, ambitious, and emphasizes pilot testing. Given board member interest in establishing the region as a testbed for innovation, advancing next generation transit efforts, and needing to meet challenging greenhouse gas (GHG) targets, staff recommends continuing the TDM program. The TDM program is ripe with opportunities to innovate and it is responsible for a small but increasingly important percentage of the off-model Vehicle Miles Traveled (VMT) reductions that we claim to help meet our regional GHG target. It can also play an important role in supporting and integrating smart mobility and next generation transit efforts.

Strategic Plan Update:

The TDM Strategic Plan identified three major goals to guide the program through a 20-month period that will end June 30, 2018 with the sunset of the TCM. In the last 16-months staff completed the following actions to make the program more innovative, performance-based and cost-effective:

- Launched a TDM Innovations Grant program
- Launched a TDM Mini Grant program
- Created a partnership with University California Davis Institute for Transportation Studies (UC Davis ITS) to develop a performance measurement plan and conduct some performance measurement of pilots and campaigns
- Worked with Transportation Management Organizations to identify clear deliverables in contracts
- Scaled back investment in regional behavior change campaigns while maintaining participation levels
- Contacted MPOs, cities, counties, and other entities to learn more about which TDM programs and activities are most cost effective in order to inform our current and future programs
- Monitored national TDM initiatives and current research for innovative ideas to bring to our region
- Delivered regional quarterly workshops that encourage a wide range of stakeholder participation on topics including: first/last mile solutions, marketing/outreach, and behavior change through placemaking and pop-ups, also known as tactical urbanism

The mission of the TDM program is to reduce vehicle trips and miles traveled by implementing cost-effective and innovative programs, services, projects, strategies, and policies that encourage and enable people to change their travel behavior. This mission, and the goals below, were developed through the TDM strategic planning process in 2016. Attachment B provides greater detail about the implementation of the TDM Strategic Plan organized by the three major goals.

1. Leverage existing and new partnerships to maximize technological opportunities, raise awareness of programs/services, and offer improved and new cost-effective programs/services that support alternative mode use and behavior change.

2. Better integrate TDM with planning and project delivery both to improve the land use/transportation planning process and promote new multimodal infrastructure when it is completed.
3. Collect and analyze data to make smart investments that focus on long term behavior change.

Next Generation TDM – Opportunity for Redesign & Transformation

While SACOG is no longer required to fund TDM as a TCM, we have an opportunity to completely redesign the TDM program to double its focus on innovative, performance-based programs that could create lasting behavior change. Below are draft options for three different TDM programs that staff has developed to frame the policy discussion around what a TDM program might look like beyond June 30, 2018. In each of the proposals below, there is an increased focus on innovation and performance measurement. The program activities listed under each proposal are designed to give board members a framework for discussing possible TDM investments. The activities are meant to serve as examples and are not an exhaustive list.

With all of the options, the Board will need to decide what level of funding it would like to allocate to the program. Historically the program has been funded with a carve out of Congestion Mitigation and Air Quality (CMAQ) funds that flow to the region and can be used for many different programs and infrastructure projects. Staff recommends continuing this practice while continuing to look for additional-and potentially more flexible-revenues for the TDM program to ensure that we are able to continue to innovate, test new technologies and strategies for changing travel behavior, and claim the off-model adjustments that help us achieve our GHG reduction goals. Cap & Trade, Capitol Valley Regional Service Authority for Freeways and Expressways, Caltrans planning grants, Office of Traffic and Safety grants, and Senate Bill 1 are potential funding sources that could replace or supplement CMAQ contributions to the program.

Option 1 – Nimble TDM Program

Overview: This proposal would provide grants for tried and tested traditional programs that we know to be effective TDM activities, while also providing funding for Innovations Grants, Mini Grants, and an ongoing Civic Lab curriculum focused on how to innovate, develop pilots, measure their success, and iterate. Guidelines for traditional program grants would prioritize employer and residential programs that offer direct incentives or disincentives such as employer parking pricing initiatives, fare free transit, employer shuttles, subsidies for alternative modes of transportation, residential packages that include free transit passes, and leasing/rental company programs that offer a suite of TDM benefits to residents. The Nimble TDM option includes funding to host one regional campaign, TDM workshops, and a trip planning/ridematching website, but scales back these investments to focus most of the funding on competitive grant programs and prize competitions (Innovations Grants, Mini Grants, Civic Lab, and grants for traditional TDM programs).

Performance Measurement: Performance measurement would be the responsibility of the grant awardees with limited support from SACOG staff.

Activities not included: Option 1 discontinues the fall behavior change campaign, vanpool subsidy program, and external performance measurement contract (grant recipients would still be required to measure their performance). Option 1 does not assume an innovative role aside from Civic Lab and the grant programs.

Risk: Grant applicants may need more assistance with performance measurement, research, and development of pilots than resources available.

Option 2 – Innovative TDM

Overview: Option 2 embraces new mobility by emphasizing innovation, testing and iteration. In this option, SACOG would provide funding some funding to residential programs because they are relatively untested in our region, and would direct most of the resources toward innovative grant programs and launching new initiatives in TDM. This option would prioritize funding for projects like Rancho Cordova’s Connections to Transit pilot, West Sacramento’s On Demand Micro Transit pilot and Sacramento Metropolitan Air Quality Management District’s On Demand Schoolpool and Carpool pilot. We would fund a New Mobility Incubator Challenge to encourage private sector start-ups to compete in mobility-related categories for funding to pilot projects within our region. Additionally, we would create suburban employer campus hubs that take several employers and develops an internal hub of shared mobility services, and we would hire an Innovator in Residence focused on tracking new transportation innovations to spur ideas for our region. This option would also continue the Civic Lab curriculum. We would host or curate events that encourage private sector participation in creating more robust innovation in the field, similar to existing Hacker Lab or Transportation Camp events. Strategic partnerships would be developed to execute these activities.

Performance Measurement: Pilot projects and programs would be measured through contracts managed by SACOG.

Activities not included: This option does not include regional campaigns, grants for traditional employer TDM programs, or a trip planning/ridematching database.

Risk: There would not be any regional programs that local TDM partners could leverage and no grant funding for some traditional programs known to reduce VMT. This could result in local city, county, and transportation management organization programs not having sufficient funds to continue operating.

Option 3 – Hybrid TDM

Overview: In the Hybrid TDM option we would take aspects of the Nimble and Innovative proposals and invest heavily in TDM as a whole. This combination of robust innovation efforts, tried and tested traditional programs, and enhanced research and development work would offer a strong regional program for partners to leverage and utilize while continuing to move the program into uncharted territory. We would launch many of the innovation activities, including a TDM consultant service for new businesses in the region and the New Mobility Incubator Challenge where we would offer prizes for private sector to propose solutions to transportation related problems. We would convene and coordinate partner efforts including those related to smart mobility technology, next generation transit, and pilot testing. We would provide startup funding for an ongoing vanpool subsidy program in which we would report vanpool miles to the National Transit Database (NTD) to claim available funding in future years. It takes approximately two years for NTD funds to flow to the region. NTD funding would create an ongoing revenue stream for a program that would sustain itself in future years. We would also provide a carpool subsidy program in a potential partnership with Transportation Networking companies to offer an incentive to start private-sector carpooling services in the region. We would put out a solicitation for a contractor to offer a regional emergency ride home program to all employees in the region, not just those that are members of TMOs, which is the existing practice.

Performance Measurement: Option 3 would include an external performance measurement contract as well additional research and development activities to ensure we are collecting solid data to inform future iterations of activities.

Activities not included: Option 3 does not include smaller-scale activities in the Innovation and Traditional categories like the Innovator in Residence, regional campaigns, or employer-focused grant programs.

Risk: Identifying sufficient funding to do to all of the activities will be challenging, but it would come with the largest VMT reductions.

Summary

These options could be mixed and matched in a variety of different ways to form a truly unique and innovative TDM program. These examples are not meant to constrain board members to selecting one option over another but to instead encourage dialogue around the possible paths this program could take. Regardless of the direction the board chooses to take the program, there will be a need to adapt to the new mobility landscape around us, which continues to change rapidly with new technologies and mobility options.

Next Generation TDM Program Options

CATEGORIES	Current TDM Program	Option 1	Option 2	Option 3
	Fiscal Year 17/18	Nimble TDM	Innovative TDM	Hybrid TDM
Innovation				
Innovations Grants	x	x	x	X
Mini Grants	x	x	x	
New Mobility Incubator Challenge			x	x
Suburban Employer Campus Hubs			x	x
Transportation Camp/Hacker Lab Event (s)			x	x
Innovator in Residence Internship Program			x	
Transportation Ordinance Pilots			x	
Regional New Business Transportation Consultants			x	x
Ongoing Civic Lab Program		x	x	x
Tested Traditional Programs				
Traditional TDM Program Grants	x	x		x
-Employer Programs Grants	x	x		
-Residential Programs Grants		x	x	x
-Schools Programs Grants				x
May is Bike Month (spring campaign)	x	x		
Ready Set Ride (fall campaign)	x			
Trip Planning & Ride Matching Website	x	x		x
Vanpool Subsidy	x			x
Carpool Subsidy				x
Regional Emergency Ride Home				x
Program Marketing	x			x
Research & Development				
Performance measurement	x		x	x
Tracking State of Practice	x		x	x
Hosted Workshops & Partner Coordination	x	x		x

Transportation Demand Management Strategic Plan Implementation Update

Goal 1. Leverage existing and new partnerships to maximize technological opportunities, raise awareness of programs/services, and offer improved and new cost-effective programs/services that support alternative mode use and behavior change. (Actions 1-3)

Objective 1A. Sharpen the focus and efficiencies of SACOG's Traditional TDM Programs.

Objective 1B. Enhance user experience and increase mobility options through technology-based solutions.

The actions under this goal include working with Transportation Management Organizations (TMOs) to strengthen performance measurement, forming new partnerships, launching new grant programs, making low-cost updates to SacRegion511.org and SacRegionCommuterClub.org, and running commute change awareness campaigns on smaller budgets to maximize existing resources. Staff examined the benefits of offering 1-2 Emergency Ride Home (ERH) to all employees in the region, not just those that are members of TMOs, but TMOs could offer additional ERH vouchers to members, and assessed the cost versus financial returns of reporting vanpool mileage to the National Transit Database. Both of these programs would be very cost-effective investments should the board be interested in funding them. Based on national research, the most cost-effective tool to change single-occupancy car commuting continues to be parking pricing.

Through conversations with regional partners and other MPOs, we have found that residents are very interested in a one-stop website or application where they can plan trips and potentially pay for mobility services all in one place. Currently there is not a free application or website (such as Google Maps or Transit App) that has fully integrated ride matching with transit, ride hailing, bike share and all the various modes of travel, but this is the direction the market is heading. There are a variety of private sector firms that are partnering with public sector organizations and/or offering services that are much closer to a one-stop solution than what we currently have in the region. Until such a website/app is purchased or developed for free, there is limited value in creating a regional marketing and advertising strategy and therefore this action has not been completed. Currently, other regions all have some form of ride-matching database and trip planning tool that they promote and use as at least part of their methodology to measure vehicle miles traveled (VMT) reductions resulting from their programs. Most MPOs agree that it won't be long before there is a free or low-cost one-stop solution and that it's best not to spend resources developing something unique to any single region.

Staff is continuing to rethink investments in campaigns and direct incentives while examining the TDM field for innovations and new ideas. We have been testing various targeted marketing and communications strategies in our campaigns and we continue to track the influence they are having on behavior change. Through the TDM Innovation Grants and Civic Lab efforts we have been reaching out to private partners to encourage them to test new ideas in our region in order to leverage and maximize public funds.

Goal 2. Better integrate TDM with planning and project delivery both to improve the land use/transportation planning process and promote new multimodal infrastructure when it is completed. (Action 4)

Objective 2A. Support Blueprint and MTP/SCS Implementation Efforts that Increase Travel Choices, Connectivity, and Accessibility.

TDM activities typically focus on encouraging the use of transportation options that exist today, but TMOs report feedback about additional options people would like to have today and in the future. Therefore, staff has been working with members and partners to better inform planning efforts to ensure that multi-modal projects are being planned and delivered in order to maximize TDM efforts. Internally, TDM staff have worked with the Project Delivery Team at SACOG to send emails to Commuter Club registrants in specific geographies when a new bike or pedestrian project is completed or where people live and work near transit stops. We continue to identify opportunities to promote alternative modes in areas where a variety of transportation options exist and not just blanket promotions to people who may or may not have options beyond driving.

We have expanded the TDM Task Force contact list to include different sectors and have tripled attendance at meetings by securing speakers on topics that align with TDM implementation, pilot projects, and, marketing/communication efforts. We have worked with the Intelligent Transportation Systems (ITS) Partnership to identify opportunities where TDM can leverage the work of the ITS Master Plan and Architecture updates to provide residents travel information to help them plan trips and drive less often or take routes that have less traffic.

Goal 3. Collect & analyze data to make smart investments that focus on long term behavior change. (Actions 5-7)

Objective 3A. Evolve to Become a Truly Performance-Based Regional Program

Objective 3B. Diversify TDM Funding Sources and Leverage External Funds to Implement Creative, Innovative and Long-Term Efforts

Data collection and performance measurement in TDM programs continues to be challenging for all programs across the country, in large part because there are so many different factors that influence behavior and it is difficult to tease out exactly which programs are having the greatest impact. As such, SACOG has continued to fund May is Bike Month and Commuter Club websites while exploring other technologies that may serve as better data collection and analysis tools. There are websites and applications on the market that come with reporting and customer relations management features that can be very useful in measuring program effectiveness.

One low-cost way we collected data is via electronic surveys to campaign participants to assess the effectiveness of May is Bike Month, Try Transit and Ready Set Ride campaigns. We found that at least 25% of survey respondents say our TDM campaigns have an impact on getting campaign participants to change from driving alone to other modes of transportation. It should be noted that these are not scientific polls of all residents in the region and therefore do not give us a full picture of the broader awareness and impact of our campaigns, informational web pages, and employer programs. Collecting robust data like that will require more survey work, which is very expensive. The Household Travel Survey that will be completed later this year will provide some excellent benchmark data against which we can compare our TDM surveys and further assess the effectiveness of our programs. The work with UC Davis ITS includes identifying methods and technologies that are more affordable than scientific polling that will allow us to collect this information via big data and existing sources, and then analyze it as efficiently as possible.