Cutting Carbon as well as Commutes

How VTA Can Maximize the Benefits of Santa Clara County's 2016 Transportation Funding Measure

Executive Summary

Transportation has risen to the top of the policy agenda in Santa Clara County, as traffic congestion grows and people don't have adequate alternatives to driving. The Santa Clara Valley Transportation Authority (VTA) is hoping to infuse the transportation system with funding to overcome existing problems and prepare for a growing population.

On June 2nd, the VTA Board of Directors will vote on a spending plan for a transportation funding measure for Santa Clara County. If approved, the half-cent sales tax measure will be on the November 2016 ballot and will need a ⅔ supermajority of voters to pass. The measure would generate approximately $6.3 billion over 30 years.

VTA staff has done considerable work in preparing for this measure, including developing an evaluation of projects on key measures of mobility, environmental impact, health and safety. Based in part on this evaluation, as well as a healthy dose of polls and politics, the VTA Board agreed to an initial draft spending plan on April 22, 2016 (see Table 1), which allocates:

- Over half of the tax revenue for local streets, highway, and expressway projects
- 30-40% for regional rail (depending on whether one considers grade separations a rail project)
- 8% for local transit operations and transit services for transit-dependent people
- 4% for active transportation projects that make it easier and safer for people to walk and bike (VTA's current proposal also includes a complete streets requirement for roadway spending)

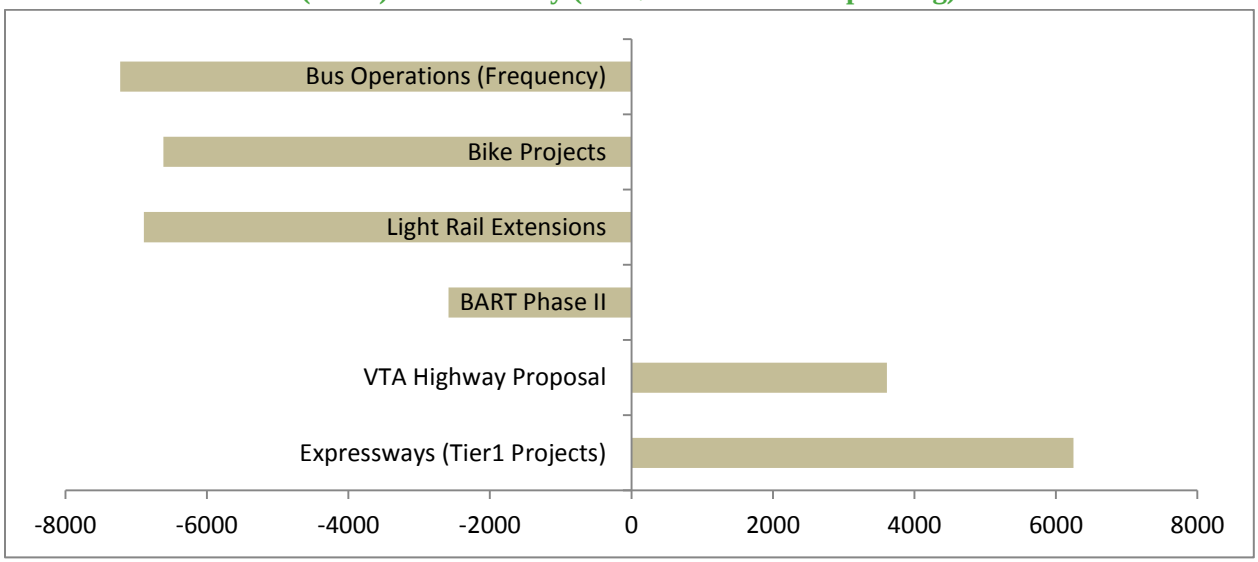
Given that this will be the fourth sales tax for transportation in Santa Clara County (the other three are already in place), it is quite possible that this will be the single largest new transportation funding source that the County will see for a generation. With such limited funding we need to understand how the current proposal can maximize benefits. Since VTA's evaluation only looked at absolute impact and did not consider the cost of the projects, TransForm requested and obtained data from VTA to conduct our own analysis on a per-dollar basis.

TransForm found that spending on transit and active transportation improvements perform well on all of the metrics analyzed, while the expressway and highway projects proposed by VTA will significantly increase vehicle miles traveled (VMT), carbon pollution (CO2), and local air pollution (PM 2.5). In fact, the expressway and highway spending will negate much of the VMT and pollution reduction benefits that we gain from the BART and bicycle project spending in the measure.

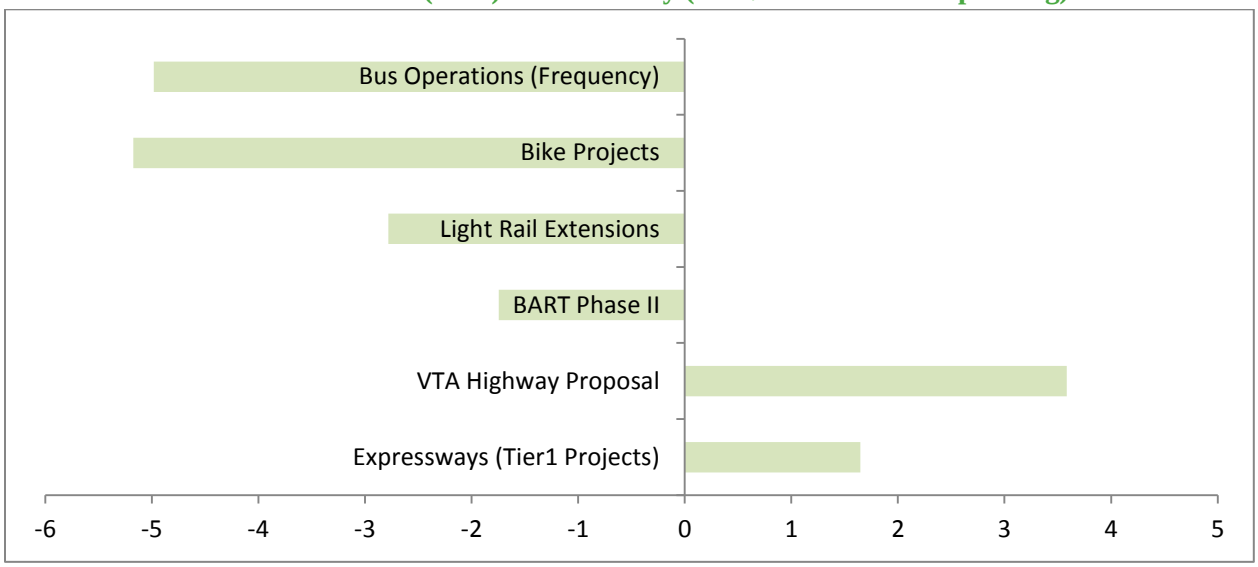
Benefits/Impacts of Envision SV Projects Per $100 Hundred Million in Spending

Metric	Expressways (Tier1 Projects)	VTA Highway Proposal	BART Phase II	Light Rail Extensions	Bike Projects	Bus Operations (Frequency)
VMT Per Weekday	6249	3610	-2584	-6892	-6616	-7224
VHT Per Weekday	-498	-146	-150	-516	-513	-676
Metric Tons CO2 per Weekday	2	4	-2	-3	-5	-5
Metric Tons of PM 2.5 (/1,000) Per Weekday	1	20	-9	-13	-15	-32

Vehicle Miles Traveled (VMT) Per Weekday (Per $100 Million in Spending)



Metric Tons of Carbon Pollution (CO2) Per Weekday (Per $100 Million in Spending)



An alternative funding scenario developed by TransForm, with more funding for local transit and active transportation projects, performed far better than VTA's draft funding proposal, including over 90 times the VMT reduction benefits and four times the CO2 reduction benefits.

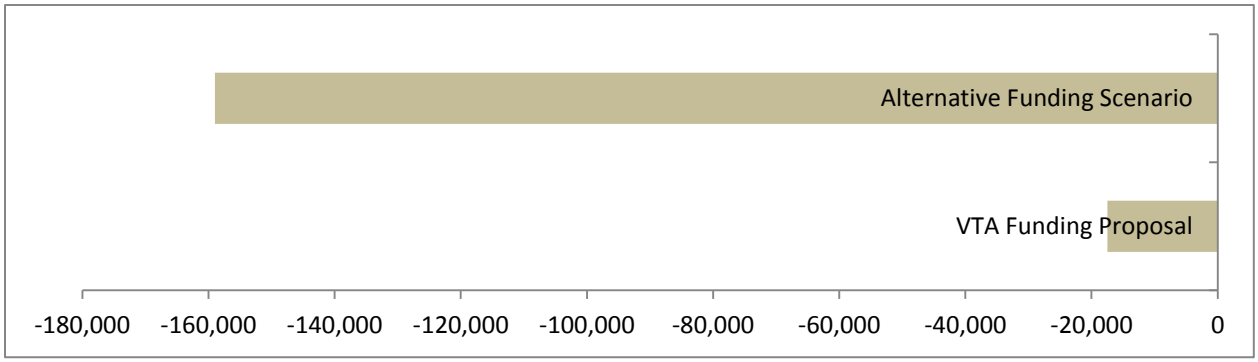
VTA and Alternative Project Allocations

Project	**VTA Staff Proposal (In $ millions)**	**Alternative Funding Scenario (In $ millions)**
VTA bus operations and services for transit-dependent	500	1,000
VTA transit capital (LRT)		500
BART	1,500	1,250
Highway/expressway capital	1,500	400
Bike/ped improvements (Active transportation)	250	600
Total	3,750	3,750

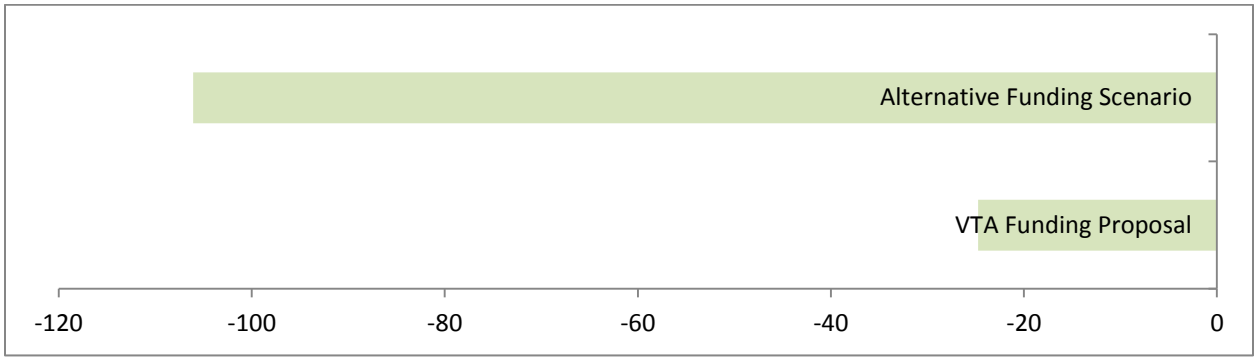
Results of VTA and Alternative Project Allocations

Metric	VTA Funding Proposal	Alternative Funding Scenario
Vehicle Miles Traveled (VMT) Per Weekday	-17,471	-158,979
Vehicle Hours of Travel (VHT) Per Weekday	-11,751	-15,587
Carbon Pollution (CO2) Per Weekday	-25	-106
Particulate Pollution (PM2.5/1,000) Per Weekday	-177	-552

Vehicle Miles Traveled (VMT) Per Weekday



Metric Tons of Carbon Pollution (CO2) Per Weekday



It's not too late to craft a measure that is a win not just for mobility, but also for climate, health, equity, and the economy. **To craft a measure that will achieve a better return on our investment, we recommend that VTA:**

- Shift funding from highway and expressway programs to local transit, bicycle, and pedestrian projects and programs. This report shows why it is critical to boost funding levels for VTA's core bus network in particular.
- Include performance-based language in the funding measure to ensure that projects funded by the highway and expressway programs not only reduce congestion but also reduce vehicle miles traveled (VMT). VMT reduction strategies can include provision of improved transportation options, operations that promote carpooling, congestion pricing, and supporting new, tech-enabled services that increase vehicle occupancy. This should include competitive grants instead of projects that are dictated now, to take advantage of the innovation in the transportation sector.
- Give priority in the bicycle and pedestrian funding for projects that take place in Communities of Concern as well as those in proximity to schools.[1]

[1] The Metropolitan Transportation Commission (MTC) defines Communities of Concern as communities in the Bay Area that face particular transportation challenges, either because of affordability, disability, or because of age-related mobility limitations.