

Cities21



May 13, 2013

To: info@OneBayArea.org, eircomments@mtc.ca.gov

Subject: Recommendations for 2040 Plan Bay Area
(http://onebayarea.org/pdf/Draft_Plan_Bay_Area_3-22-13.pdf)

In regards to Plan Bay Area Chapter 6, page 121:

"In some cases, new legislation, updated regulations or additional resources will be needed to fully realize the Plan Bay Area vision and implement the plan's policies and programs. This chapter identifies the most important of these challenges, and proposes steps to address them."

Please consider adding a new Chapter 6 section on Driving Pricing Measures that are outside of the direct influence of the One Bay Area Team, but help achieve the plan's Performance Targets 1, 7, 9A, 9B, and 10C. Driving Pricing Measures encompass both Plan Bay Area "Pricing Strategies" and "Climate Policy Initiatives." Regional advocacy of such policies within RTPs can influence development of statewide legislation and regulation.

As background, OneBayArea's 2010 PPT (<http://www.arb.ca.gov/cc/sb375/meetings/052510/mtcpresentation.pdf>) presented a driving pricing scenario to achieve large GHG reductions. The slide entitled "Auto Operating Costs Increase 4-fold" depicted a combination of {parking charges, congestion charging, and carbon/VMT tax}, raising auto operating cost from \$0.25 to \$1.20 per mile. OneBayArea indicated that "new legislation must be developed" to achieve this scenario. A 2010 memo ("Preliminary Report on Metropolitan Planning Organization (MPO)/Air Resources Board (ARB) Senate Bill 375 (SB 375) Target Setting Analysis" - <http://www.arb.ca.gov/cc/sb375/mpo/prelimreport.mtc.sacog.sandag.scaq.pdf>) from CA's four largest MPOs to CARB, similarly discussed implementing pricing measures to meet GHG reduction targets. In 2010, the 100-member MTC/ABAG SB375 Sustainable Communities Strategy Advisory Panel reached a strong consensus that driving pricing measures were needed.

Within the discussion of Driving Pricing Measures, three policies should be highlighted, the first two being of interest for having higher political popularity and viability compared to the policies that were described by OneBayArea in 2010.

DRIVING PRICING MEASURE 1:

TITLE: Parking Charges + Incentives: Reduce Commuting VMT/GHG by 23%

This measure helps with Performance Targets 1, 7, 9A, 9B, and 10C.

This pricing measure is related to Plan Bay Area's "commuter benefits ordinance" item, but brings about higher VMT/GHG reduction.

A 23% commuting reduction will produce 400,000 new green Bay Area commuters, saving 2B Bay Area VMT per year and 1M Bay Area tons of GHG/year. Transit ridership will more than double. Currently-struggling smartphone mobility services would thrive. HOV lanes will fill up. Traffic will go down. Lonely Bay Area workplace parking spaces encompassing 2,608 acres will be in-filled for higher and better use.

91% of US commuters are provided with free parking – this policy changes this with carrots and sticks. Each employee is charged \$0.25/day for SOV (single occupancy vehicle) commutes. This revenue is used to reward carpool/transit users with \$0.50 per day. Every 3 months, the charge and reward goes up, until the charge is \$2 and the reward is \$3. This cuts SOV from 77% to 54%.

To further increase political viability, the solution is zero-cost to employers. Employees report their commute mode (transit, carpool, SOV) in an on-line commute calendar. Smartphone LBS apps figure out the commute mode and auto-fill the calendar.

The policy has drawn supporting letters from MTC, Sierra Club, SVLG, VTA, samTrans, Transform, and Association for Commuter Transportation. The cost per ton of GHG removed is \$0.

From MTC's supporting letter, "There is no question that the provision of free parking is a huge incentive for people to drive to work. A 2000 survey of Bay Area commuters found that while 77 percent of commuters drove alone when free parking was available, only 39 percent drove alone when they had to pay to park. Additionally, among commuters with free parking, only 4.8 percent commuted by transit. By contrast, among commuters without free parking, 42 percent commute by transit." From the set of US employers with free workplace parking, there are four virtuous outliers: Google Mountain View at 52% SOV, Genentech South SF at 58%, Facebook Menlo Park at 59%, and Microsoft Redmond at 62% SOV. All four outliers spend much more on commute benefits than can be expected from marginally profitable firms. Traditional free-parked corporate commute trip reduction programs are comprised only of incentives without a driving price increase for SOV. These programs are disappointingly ineffective, often yielding only 1% commute shift.

From the Findings and Declarations of the stalled bill SB518 (California Senator Lowenthal's parking bill), "Eliminating subsidies for parking has enormous potential to reduce traffic congestion and greenhouse gas and other vehicle emissions by reducing vehicle miles traveled. If drivers must pay the true cost of parking, it will affect their choices on whether or not to drive. In the short term, changes to parking policy can reduce traffic congestion and greenhouse gas emissions more than all other strategies combined, and they are usually the most cost-effective." Free suburban office parking paid for by employers and provided freely to employees represents a perverse \$7.58 per day incentive for SOV commuting: employers pay for valuable parking space land that they give away to SOV commuters - transit commuters receive no such free land.

Similar parking charges + incentives policies were implemented twice in the late 1980's, at Twentieth Century Corporation in Los Angeles and at CH2M Hill in Bellevue Washington. SOV mode share decreased from 89% to 64% as a result of these policies.

- 10 min youtube + 3 page description with policy insights:
<http://www.cities21.org/cms/index.php?page=we-solve-for-x-submission>
- Notes from policy discussions with Don Shoup, FHWA, CARB, MTC, SCAG:
<http://www.cities21.org/dpww/parkingPolicy.htm>
- CA Legislative Counsel has helped to develop draft CA bill language.

Plan Bay Area Performance Targets

Policy increases GHG saved, so assists Target 1.

Policy helps with "falling short" Target #7 (reduce low-income budget necessary for transportation & housing - page 101). Compared to a gas tax increase, this policy is economically "progressive," meaning "a transfer of wealth from higher-income workers to lower-income workers." This is because higher income workers are more likely to commute by solo driving than lower income workers. The policy will not penalize low-income graveyard shift grocery/hospital workers and other low-income workers who have few alternatives to driving. The draft CA bill envisions developing "exception rules" to handle such cases. The Environmental Defense Fund has studied social equity impacts of policies to increase driving costs/pain. Their report concluded that exceptions have to be carved out of such policies to ensure social equity. The draft bill envisions fair, compassionate exceptions developed via a transparent process.

Policy helps with "falling short" Target 9A – increase non-auto mode share - page 103.

Policy helps with "falling short" Target 9B – reduce per capita VMT by 10% - page 103.

The policy generates \$750M per year in new revenue for public transit and other commute alternatives. This may help with Performance Target #10C (transit maintenance) and will provide much-needed transit agency budget improvement. The issue of developing increased Bay Area transportation funding is mentioned in the funding examples in Chapter 6.

DRIVING PRICING MEASURE 2:

TITLE: Prop 103-compatible Pay-As-You-Drive (PAYD) Auto Insurance

This measure helps with Performance Targets 1, 7, 9A, and 9B.

With PAYD auto insurance, drivers who drive less (and emit less GHG) save money. If humans lived in a rational world that was serious about reducing GHG, PAYD would be one of the first policies to be adopted. PAYD can be characterized as a "no-brainer" climate protection policy. Cost per GHG ton reduced is essentially \$0 - demand reduction policies tend to be extremely cost-effective. 13 states have included PAYD in their Climate Action Plans

California's auto insurance market is constrained by Proposition 103. Other states can implement a larger range of insurance policies, whereas CA pursues public policy consumer fairness objectives such as limiting redlining. CA Department of Insurance allows insurers to offer PAYD policies, but GHG reduction from such policies to date has been small.

For other states, PAYD can cut personal auto driving GHG and VMT (vehicle miles traveled) by 8%. Under Proposition 103, CA PAYD can cut GHG and VMT by 3.2%, providing the equivalent motivation to drive less as a \$0.70/gallon gas tax increase. State Farm's CA "Drive Safe and Save" PAYD policy achieves this 3.2% GHG reduction. The State Farm policy can be characterized as "modest flavor" PAYD. AAA (Auto Club of SoCal) has a "weak flavor" CA PAYD-like policy that produces minimal GHG reduction. 3.2% CA personal auto driving reduction calculates to 3.7 billion less VMT per year and 1.8 million CO2 tons reduced.

While CA PAYD cannot reduce GHG as much as other states, CA is one of the more aggressive states in adopting climate regulation, providing an opportunity to increase PAYD market penetration ahead of other states. CA Insurance Commissioner Jones is pro-climate and has "sought ideas on how to work with the industry to help protect the environment, diminish climate change, and properly evaluate environmental risks." Jones understands the benefits of PAYD and understands the difference between State Farm (3.2%) and AAA (0%) flavors. It is possible that Jones will advance measures to increase the adoption of modest flavor PAYD.

Implementation Details for Modest-Flavor, Proposition-103-compatible CA PAYD:

1. A high mandatory miles rating factor level of 31%, based on a strong actuarial case that a) miles are more correlated to losses than current policies. For example: 32% driver safety record, 31% number of miles driven, with the final 37% distributed between "years driving experience" and the optional factors. 31% provides equivalent driving reduction motivation of a \$0.70 per gallon gas tax increase.

Weak-flavor PAYD, such as offered by the Auto Club, should not be allowed. If a driver reduces annual driving mileage from 12,000 miles to 500 miles, they only save a few dollars.

Modest-flavor PAYD, such as State Farm's CA PAYD, saves drivers \$400 when they reduce annual mileage from 12,000 to 500. Spreadsheet analysis (<http://www.cities21.org/cms/StateFarmPAYD.xls>) shows that State Farm provides driving reduction motivation that would produce between 3.2% and 3.9% CA statewide VMT reduction (equivalent of \$0.70 per gallon gas tax increase).

2. Billing a minimum of 3 times per year. This would be based on a "miles correlation" finding: loss is highly correlated to miles driven, and hence, miles driven must be made more visible to drivers in order to increase safety. While some insurers believe frequent billing is burdensome, other industries bill efficiently 12 times per year. US DOT Connected Vehicle, GM OnStar, and Microsoft/Ford Sync are enabling technologies. Automakers might even testify in favor of the policy.

3. Mandate "verified miles," eliminating estimated miles, based also on the "miles correlation" finding.

4. Require a maximum mileage band of 100 miles (necessary given frequent billing), based also on the "miles correlation" finding.

Economic Benefits of PAYD - References

- Brookings Institution's The Hamilton Project, "Pay-As-You-Drive Auto Insurance: A Simple Way to Reduce Driving-Related Harms and Increase Equity." Significant net economic gains ensue from PAYD. http://www.brookings.edu/~media/Files/rc/papers/2008/07_payd_bordoffnoel/07_payd_bordoffnoel.pdf
- "Safe Travels: Evaluating Mobility Management Traffic Safety Impacts" (www.vtpi.org/safetrav.pdf). This report investigates the safety impacts of mobility management strategies that change how and the

amount people travel. It evaluates the safety impacts of various types of strategies including improvements to alternative modes, pricing reforms and smart growth land use policies. Evidence summarized in this report indicates that per capita traffic crash rates tend to increase with per capita vehicle travel, and mobility management strategies can provide significant safety benefits. This analysis indicates that mobility management is a cost effective traffic safety strategy, and increased safety is one of the largest benefits of mobility management.

DRIVING PRICING MEASURE 3:

TITLE: The 2015 extension of California Cap and Trade to cover “combustion of transportation fuel”

This measure helps with Performance Targets 1, 9A, and 9B.

Best regards,

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