Subject: SB375 Target Setting

To: ARB, MTC/ABAG/OneBayArea
(ARB SB375 comment submission: http://www.arb.ca.gov/cc/sb375/comments.htm .
(MTC/ABAG SB375 target setting (RAWG, etc) comments submitted to info@OneBayArea.org)

In response to:

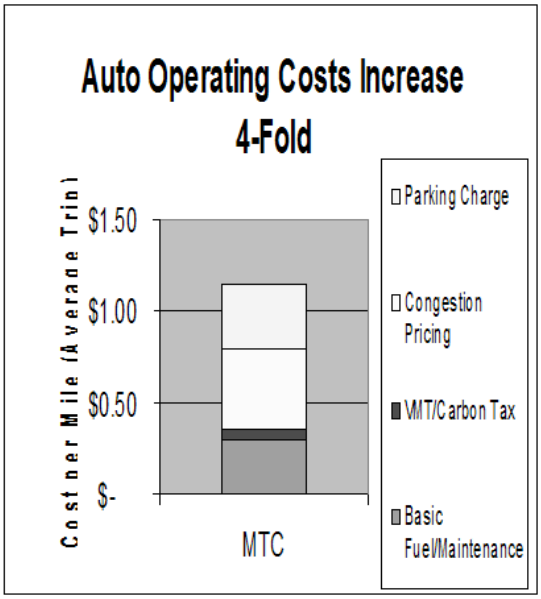
- [OneBay PPT] OneBayArea.org (MTC, ABAG, etc) 7/'9/2010 ARB GHG Target-Setting Principles PPT: http://apps.mtc.ca.gov/meeting_packet_documents/agenda_1521/7_9_10__PC_Targets_Presentation.ppt
- [4 big MPOs] May 18 2010 memo from 4 largest MPOs to ARB: http://www.arb.ca.gov/cc/sb375/mpo/prelimreport.mtc.sacog.sandag.scag.pdf.

Summary:
1. MTC/ABAG are overly-pessimistic about the efficacy of aggressive pricing, contradicting more optimistic Moving Cooler results.
2. The baseline carbon reduction forecast for AB 1493 (Pavley) and Low Carbon Fuels assumes that things will go smoothly, an unrealistic assumption. This forecast should be reduced to reflect more skepticism.
3. It is unfortunate that MTC/ABAG chose politically improbable aggressive pricing strategies, rather than politically viable, negative-cost alternatives that provide similar VMT reduction. A policy comparison table is provided.
4. TDM is more of an essential response to aggressive pricing, rather than being a separate generator of reduced VMT.
5. If 2035 AB32 targets will not be met (60% of 1990), develop a "meet the 2035 AB32 target" scenario.

1. Higher efficacy of aggressive pricing

The Moving Cooler report forecasts 28% less VMT as a response to a $5/gal gas tax increase. VTPI's many TDM/pricing papers also predict large VMT reduction for large price changes. For a similar level of pricing change, ABAG/MTC forecast something on the order of only 5% less VMT (See OneBay PPT, slide 20).

The OneBay PPT, slide 12's "aggressive pricing" envisions the cost of driving increasing by FOUR TIMES. Depending on how you slice things, this is roughly the equivalent of $10 per gallon gas (a larger increase than the Moving Cooler $5/gal gas tax increase:



Further, OneBay PPT, slide 19, under "Pricing" – "consolidates previously assumed VMT, congestion and carbon tax charge in 'Most Ambitious' pricing scenario into single VMT charge of $0.50 per mile." At a base CAFE of 20 mpg, that's also a $10/gal price increase.

QUESTION: What is unique with this Bay Area "aggressive pricing" analysis that results in such a low VMT reduction forecast? What pessimistic elasticity sources have been cited in arriving at this number?

Discussion:

- While high Bay Area incomes will tend to increase per capita VMT, high Bay Area traffic congestion reduces the utility of SOV driving, hence decreases VMT.
- Most Bay Area jobs are "suburban." Suburban job sites may be charactertized as "isolated within a zoned-only-for-employment area, with poor transit options." Shoup and others studied 1970s mandatory Southern California "pricing + TDM" policies for Los Angeles-area defense employers. These employers had similar isolated, poor-transit job sites. Shoup found a large commute shift away from SOV to ridesharing. It should also be noted that 2010 high tech smartphone and social networking ridesharing (Avego, nuride, ZimRide, GoLoco, etc) provides a vast improvement over the ridesharing landscape of the 70s.
- Hence, Bay Area suburban commute VMT reduction should be high under aggressive pricing.

RECOMMENDATION: More research, symposiums, peer-reviewed documentation, and debate on VMT reduction policies & efficacy is warranted. Some members of the Moving Cooler study & review teams could be brought in.

2. AB 1493 (Pavley) and Low Carbon Fuels (LCF) forecasts are overly-optimistic.

In OneBay PPT, Slide 9, AB 1493 (Pavley) for increased mpg and Low Carbon Fuels (LCF) provide huge carbon reductions. The full success of these two items is not assured, and these forecasts should be reduced to a more skeptical baseline. There is no guarantee that either of these items will turn out optimally.

It is prudent that SB375 targets will be revisited and adjusted every 4 years, allowing for monitoring of AB 1493 and LCF. However, baseline 2010 target setting should take a more skeptical view to these two items.

MPG under AB 1493 will surely increase more rapidily if aggressive pricing is implemented, increasing motivation to purchase a new fuel efficient vehicle. It is not as clear that high mpg cars will sell if there is not an accompanying aggressive pricing policy. To re-state this, current $3 per gallon gas prices do not motivate much improvement in MPG, whereas aggressive pricing equivalent to $10 per gallon has a very, very strong high-mpg auto purchase motivation. It has been rumored that the auto makers would prefer higher gas prices as a way to more easily meet CAFE.

RECOMMENDATION: Please consider reducing AB 1493 & LCF forecast based on skepticism, possibly by 33%.

3. MTC/ABAG should choose politically-viable, negative-cost aggressive pricing strategies

In OneBay PPT, Slide 24, MTC/ABAG state "Past RTPs have shown pricing and land use can dramatically change travel behavior – but significant local consensus-building and new legislation will be needed." But then MTC/ABAG develop aggressive pricing based on policy items that poll absymally. Such an aggressive pricing strategy may be self-defeating.

In [4 big MPOs] ABAG/MTC state, "Needless to say, these pricing and land use assumptions are not considered realistic." But this is arguably because ABAG/MTC have chosen self-defeating policies.

A more politically viable aggressive pricing policy set worth considering (there are many others worth considering):

- Pricing: Pay-as-you-drive (PAYD) auto insurance for 8%+ VMT reduction (http://www.cities21.org/cms/SierraClubPAYDresolution.pdf) - this proposal addresses auto insurer resistance encountered in 2009 CA regulations.
- Pricing: $2 Daily Workplace Parking Charge + $4 Cashout for 23% commute VMT reduction (http://www.cities21.org/cms/index.php?page=parking-charges) – endorsed by Sierra Club with supporting letters from SVLG and Association for Commuter Transportation.
- LU support: Unbundled residential parking pricing
- LU support: Surface parking redevelopment approvals streamlining
- LU support: Parking maximums

- LU support: Carbon Reducing Housing Preference (http://www.cities21.org/workerHsng.htm). For new apartments and condos, the policy selects residents with fewer cars who will drive less. Results in 15% less GHG per dwelling unit.

This policy set above will deliver large per capita CO2 reduction at a **negative cost**, producing many benefits which will play well to corporate interests and fiscal conservatives:

- much less traffic congestion, resulting in higher worker productivity
- compelling new applications of smartphone technology to reduce congestion
- compelling new applications of US DOT IntelliDrive "tolling and e-payment" telematics capabilities
- etc, etc, etc.

Below is a table comparing political viability of different pricing strategies:

policy name	perceived gas price increase per gallon	expected VMT change	employer perceived economic impact	commuter perceived economic impact	Applies to	Reference
$14 per ton "carbon allowance"	$0.13	0%	large loss	small loss	All VMT!	extrapolate Hamilton project
$50/ton carbon allowance	$0.45	2%	larger loss	medium loss	All VMT!	extrapolate Hamilton project
$0.05 VMT fee (much more pain than current gas tax)	$1.00	5%	neutral	medium loss	All VMT!	extrapolate Hamilton project
$200/ton carbon allowance	$1.81	9%	huge loss	big loss	All VMT!	extrapolate Hamilton project
PAYD, $1K/yr, 12K mi auto ins	$1.67	8%	neutral	neutral	All VMT!	Brookings Hamilton Project PAYD report
$4 cashout	$3.33	10%	$880M CA loss	nice gain	commuting	APA Book: Parking Cashout by Shoup. VTPI too
$2 parking charge + $4 cashout	$5.00	23%	in-fill profit	progressive green redistribution	commuting	$2 Daily Workplace Parking Charge + $4 Cashout. http://www.cities21.org/TRB_Paid_Parking2.pdf
Moving Cooler 2050 $5/gal gas tax increase	$5.00	28%	huge loss	big loss	All VMT!	Moving Cooler report: http://www.movingcooler.info/

20 mpg (2010 combined light truck and auto) is assumed. CAFE will increase gradually with AB 1493

Politically, employers perceive the short run negative impact, rather than large long-term benefits

RECOMMENDATION: More research, polling, symposiums, peer-reviewed documentation, and debate on political viability of aggressive pricing strategies. ABAG/MTC ask for new aggressive pricing legislation to be developed, and surely part of that effort is an analysis of political viability of different strategies.

RECOMMENDATION: Change concluding 2010 SB375 target setting documentation to reflect a range of different aggressive pricing policies, with supporting prose that explains that there is a wide range of political popularity between different policies.

4. TDM is more of an essential response to aggressive pricing, rather than being a separate generator of reduced VMT

TDM is really in the service of pricing and it is problematic to have a separate line-item claiming significant VMT reduction from non-pricing TDM programs. Once strong pricing mechanisms are implemented, then regional ridesharing, TMAs, and corporate commute coordinators, and home-office ergonomics experts supporting telework will become very popular. These are important programs, but a stronger argument should be made if there is an unique VMT reduction coming from TDM.

RECOMMENDATION: Revisit the argument for a separate line-item for VMT reduction from TDM.

5. Assuming proposed SB375 targets do not meet the 2035 AB32 target (overall GHG reduction to 60% of 1990), develop a "meets 2035" SB375 scenario.

Comments by environmental advocates to date express disappointment in unambitious SB375 targets put forth by MPOs, creating the expectation that the overall 2035 AB32 target will not be met.

AB32 2020 and 2050 targets are:

- 2020: 1990 levels by 2020
- 2050: 20% of 1990 levels by 2050

Assuming that the AB32 GHG goal for 2035 is the midpoint between 2020 and 2050, then the 2020 AB 32 target is 60% of 1990 GHG.

Backcasting. Within this context, “backcasting” refers to taking the 2035 GHG reduction goal and then working backwards to a series of policies to achieve those goals. Former Berkeley professor Martin Wachs authored, "How Can Transport Become More Sustainable?" (3.6MB, pages 54-62, http://onlinepubs.trb.org/onlinepubs/conf/CP37.pdf.) He explains the concept of "backcasting" or backwards forecasting. Most regional plans only allow an "incrementalist" approach and do not work backwards to a series of policies to achieve quantified objectives. "In other <international> cases, planning models were used, as they have rarely been in the United States, to 'backcast' rather than to forecast. That is, certain environmental and travel goals were developed for the target year of the plan, and the models were used to test alternative policies and consequently to select policies that would lead to the desired outcomes." "Despite such urgings and many revisions to planning regulations included in the national highway program, progress in reforming the regional transportation planning process has been limited. We appear to be unable to achieve the dramatic institutional changes that would be needed to make regional planning more capable of addressing sustainability."

RECOMMENDATION: Assuming that the adopted 2035 SB375 targets do not protect the climate sufficiently according to AB32, develop a parallel scenario that meets AB32, with stronger policies. Develop recommendations on how to close the policy gap between the adopted policies and the required-to-meet-AB32 policies.

Best regards,

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