

## **Appendix I**

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## Airport Passenger Facility Charge Increase

### Introduction

The Airport Passenger Facility Charge (PFC) is a federally-authorized charge that may be imposed at a local level by an airport authority for authorized airport-related uses. The PFC is a user fee that may be charged by an airport and collected by the airlines for revenue passengers enplaning (boarding) at airports. Airports are not required to impose this fee on passengers, but the overwhelming majority of California airports collect the maximum \$4.50 charge that can be imposed by airports per enplaned passenger. This PFC could be increased by \$2.50 per passenger enplanement to fund much needed airport projects.

PFCs are approved by the Federal Aviation Administration (FAA) and are used to fund eligible capital improvement projects that support modern and efficient airport facilities. PFCs may be used for a range of airport landside and airside improvements that address both the system preservation and management aspects of airport operations (runway and terminal maintenance, for example) as well as for system expansion (new terminal construction, new runways, etc.). All eligible PFC-based expenditures must be approved by the Federal Aviation Administration. Most projects that are funded by PFCs at airports have not typically been supported by state transportation revenue sources. The \$4.50 cap on PFCs has been in place since 2000. Since that time, the purchasing power of the \$4.50 charge in terms of the cost of capital construction has diminished, and there have been many attempts at the federal level to allow for this cap to be raised.

### Yield Potential

The yield potential from an increased PFC is high. California had almost 86 million enplanements in 2011. Enplanements indicate the number of airline passengers who begin their journey at a California airport. Assuming a \$2.50 increase in the allowable PFCs that could be imposed (one proposal that has been forwarded by airport trade coalitions) could generate upwards of \$200 million a year in additional long-term revenue for needed airport improvements if airports took advantage of the potential revenue charge increase.

PFCs are imposed by the airports and collected by the airlines at the time that the ticket is purchased. Airlines retain approximately 2.4% of the charge for administration and disburse the rest to the airports, generally within 30 days. PFCs may be used on a pay-as-you-go for approved projects, or they may also be used to obtain upfront private market bond proceeds with the future PFCs revenue used to secure the debt.

The amount of projected net annual revenues and projected revenues over 10 years depends on the amount of airports that took advantage of the PFC increase, and assumes that Congress would act to authorize the increase. A rough estimate, based on existing passenger volumes (enplanements) is that a one-dollar increase in the PFC could yield approximately \$80 million per year in additional revenue. These funds would go directly to the airports that imposed the fees and would not be collected by the state.

### Use/Restrictions

Each airport must have PFC-funded projects approved by the Federal Aviation Administration. PFC funds have supported airside projects, terminal area projects, interest costs on airport bonds, access projects

such as roadways, people movers or transit projects, and noise mitigation projects. PFCs have been used to construct new runways and other airfield improvements to significantly reduce delays at some of the most congested airports. PFCs have also been used to build additional gates for new and increased service, increasing airline competition and lowering fares. Over the last 15 years, these investments have allowed airline and passenger services to continue their growth and have provided airports with a vital source of funds for these projects.

Under the current statute, PFCs cannot be used for revenue producing projects such as parking garages, terminal areas used for concessions or leased exclusively by a specific airline for more than five years, and projects that are incompatible with airport sponsor assurances agreed to with the receipt of federal grants.

Airports need greater flexibility in the ways they use local sources of revenue. Airports are increasingly funding more infrastructure, including those traditionally funded by airlines and the federal government, such as baggage systems, gates, expansion of security checkpoints and international arrival facilities. Much of this funding comes from PFCs. PFCs have become a foundation of airport capital investment, funding projects that benefit local communities and meet airline and passenger demands to accommodate future growth and improve levels of service. Airports need to build now to meet the needs of the expected 25% growth in service that the Federal Aviation Administration predicts the airline industry will face over the next eight to ten years when it is estimated that 1 billion passengers will use the U.S. aviation system. Giving local communities the ability to determine the PFC as well as giving airports more freedom to manage their own PFC programs to meet individual airport needs is one of the highest priorities of CA airports.

### Application

Funds will be used solely for projects that benefit and improve the operation of and access to airports, and are strictly limited for that purpose. It is important to note that most projects that are funded by PFCs at airports have not typically been supported by any state transportation revenue sources and no costs to the state are tied to the cost of generating the revenue over time. PFC funds have been used for multiple airport purposes, including preservation, management and expansion of facilities and airport access (including certain transit projects for airport access). Proposed amounts by mode will vary based on the needs and requests of individual airports.

### Sustainability

The PFC is a fixed charge, currently capped at \$4.50. As airport enplanements grow over time the amount of revenue collected will also grow. An increase in the PFC will allow for increased sustainable revenue opportunities for airport development and preservation projects. While there are no direct costs to the state for administrating PFCs, effort is needed in the form of sustained advocacy at the federal level to encourage Congress to increase the current PFC cap.

### Implementation

The effort to implement an increased PFC is high since Congressional action is required. As a result, a long-term implementation period is necessary. The current federal legislation that authorizes the imposition of the PFC charge (and caps it at \$4.50) extends until September 2015. Action to increase the PFC charge would likely need to take place as part of the next reauthorization of the Federal Aviation Administration legislation.

Period for Implementation: 5+ years

Pros	Cons
<ul style="list-style-type: none"> <li>• Direct nexus of user fee and application</li> <li>• No cost to the state for revenue generation</li> <li>• Increase to existing revenue stream (user fee) capped at \$4.50 for the last 12 years.</li> <li>• Increase would accommodate future infrastructure needs at CA airports.</li> <li>• Fee already paid by users of CA airport facilities</li> <li>• Justifiable &amp; reasonable given increasing demand on local airports and state-of-the-art facilities required to handle increased future demand</li> </ul>	<ul style="list-style-type: none"> <li>• FAA approval required for PFC usage and increase</li> <li>• PFCs cannot be used for revenue producing projects or projects incompatible with federal grants</li> </ul>

Conclusion/Recommendation

An increase in the PFC ceiling is among the highest priorities for California airports. It will allow CA airports to have adequate funding for local priorities in such areas as the maintenance and modernization of California’s airport facilities, capacity expansion, safety, and security. There are various airport construction and modernization projects underway or in planning stages at California airports that will create thousands of good-paying jobs and revenues for local and regional economies. Increasing the PFC ceiling will ensure adequate funding of these projects and facilitate both their completion and the creation of much-needed new jobs.<sup>1</sup>

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<sup>1</sup> Reference Materials

- Proposals to raise the PFC have been supported by a wide group of airport industry and trade groups, including the Airports Council International – North America, the American Association of Airport Executives, and the California Airports Council. Airline trade groups (specifically Airlines for America, which represents most of the major commercial aviation providers) oppose the raising of the PFC charge.
- Other References:
  - <http://www.aci-na.org/static/en transit/Passenger%20Facility%20Charges%20Fact%20Sheet%202011%20FINAL.pdf>
  - [http://www.faa.gov/airports/pfc/monthly\\_reports/media/category.pdf](http://www.faa.gov/airports/pfc/monthly_reports/media/category.pdf)
  - [http://www.faa.gov/airports/pfc/monthly\\_reports/media/landside.pdf](http://www.faa.gov/airports/pfc/monthly_reports/media/landside.pdf)
  - [http://www.faa.gov/airports/pfc/monthly\\_reports/media/airside.pdf](http://www.faa.gov/airports/pfc/monthly_reports/media/airside.pdf)

## General Aviation Fuel Excise Tax

### Introduction

Revenue derived from fuel excise taxes of \$0.18/gallon on General Aviation (GA) gas (AVGAS) and \$0.02/gallon on GA jet fuel remains the only source of funding for the California Department of Transportation's Division of Aeronautics to provide matching grants for small and medium-sized airports to leverage additional funding from the Federal Aviation Administration. This analysis does not cover the general sales and use taxes imposed on aircraft jet fuel revenues, which supports the state's general fund and local funds, consistent with the use of other general sales taxes. The matching grant program provides 95% of capital project funding from the federal government, with the local airport providing 2.5% and the State providing the remaining 2.5%. It is imperative that these funds be protected from diversion away from general aviation airports for general fund or other purposes.

### Yield Potential

Yield potential is low. Currently, the yield on existing authorized excise collections are decreasing, due to previous transfers of these funds into the state General Fund and to a reduction in certain fuel sales. Annual revenue has varied between \$5 and \$8 million a year over the last few years.

### Use/Restrictions

The airport projects funded with this revenue have included Airport Land Use Compatibility Plans, safety, security, and other infrastructure improvements.

### Application

AVGAS and GA jet fuel revenues are used by the State through Caltrans Division of Aeronautics for purposes of matching federal grants for local airport general aviation improvements.

### Sustainability

As the yield has been decreasing over the years, this funding source does not appear to be an overall sustainable source of revenue for small and medium-sized airports. The use of Avgas has also been decreasing due to legal challenges because of the alleged environmental impacts of this type of fuel. An additional major source of this instability has been attempts to divert this revenue for General Fund purposes.

### Implementation

Implementation effort is high to increase excise tax. There have been many legislative attempts over the past few years to reduce the sales and use taxes imposed on the overall jet fuel revenues for general aviation and airlines, with substantially more revenue at risk (that does not directly support aviation purposes). The efforts to increase this excise tax would likely face policy, political and procedural obstacles.

Period for Implementation: 5+ years

Pros	Cons
<ul style="list-style-type: none"> <li>• Historically advocated for as an equitable and efficient means of supporting the needs of the aviation sector due to the fact that the government can efficiently collect the fuel taxes without large administrative costs</li> <li>• Stable and predictable source of revenue</li> <li>• Assigned fairly based on operator usage</li> <li>• Easy to pay and difficult to avoid</li> </ul>	<ul style="list-style-type: none"> <li>• Proposal does not adjust for inflation - the AVGAS rate has not increased since January 1994, and the GA jet fuel rate since December 1969</li> </ul>

Conclusion/Recommendation

No action recommended at this time, other than the State Legislature and the Administration should ensure that the existing collection of excise taxes continues to support Caltrans’ Division of Aeronautics grant program and is not diverted to the State General Fund. Additional analysis is needed as to the future predicted revenue streams given a potential future reduction in the consumption of AVGAS.<sup>1</sup>

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<sup>1</sup> Reference Materials  
[http://www.catc.ca.gov/committees/taca/2010/Jun10/Drft\\_Sls\\_Usr\\_Txs\\_Prsnttn\\_060910.pdf](http://www.catc.ca.gov/committees/taca/2010/Jun10/Drft_Sls_Usr_Txs_Prsnttn_060910.pdf)  
[http://www.dot.ca.gov/hq/planning/aeronaut/documents/GrantsandLoans/Grants\\_Loans\\_Status.pdf](http://www.dot.ca.gov/hq/planning/aeronaut/documents/GrantsandLoans/Grants_Loans_Status.pdf)

## Bicycle Tax

### Introduction

A 1% tax on purchase of new bicycles and bicycling accessories would generate a dedicated funding source for bike improvements. These fees could be used for system expansion and to make bicycling a safer and more attractive travel mode through the addition of new bike facilities, of which dedicated bike lanes and cycle tracks would be most desirable. The tax revenue could also be used to finance system preservation to maintain existing striping, signage and attended bicycle facilities.

### Yield Potential

Yield potential is likely Low/Medium. However, a lack of available statistics on bicycle sales in California makes yield potential difficult to estimate. According to the National Bicycle Dealers Association (NBDA), US retailers sold approximately 15.7 million bicycles in 2011. Assuming equal bicycle sales across 50 states, with 12% of the population living in California (2010 Census) and an average bicycle cost of \$465, California could generate approximately \$8.7 million annually from a 1% tax on the purchase of new bicycles.

This revenue would fluctuate based on sales volume. By using the five year average of new bike sales from 2007-2011 (17.4 million units sold), a 1% tax would generate approximately \$9.5 million annually for California. That number could double if accessories are included as well. All revenue should be dedicated exclusively to bicycle facility improvements.

### Use/Restrictions

While cycling has enjoyed wide popularity as a recreational activity for many years, the use of cycling as a daily form of transportation in the U.S. has rapidly gained momentum over the last decade. Cycling is a sustainable form of transportation that offers a multitude of financial and environmental benefits to both individual users and society at large. While many municipalities in California have improved their bicycle infrastructure to date, identifying a dedicated funding stream to support further expansion as well as maintenance of dedicated bicycle facilities has proven challenging. In addition to providing a dedicated source for bicycle facility improvements and ongoing maintenance needs, a tax on bicycle sales is consistent with a user-fee strategy and can counter the claim that bicyclists do not pay “their fair share” for facility improvements. It is essential that these revenues are protected from diversion to other uses. However, most bicyclists are paying sales taxes, property taxes, fuel taxes, etc. to provide their fair share. Most just also happen to be impacting the transportation system and environment and lower levels than those who drive for the majority of their trips.

This fund should be exclusively designated for improvements for the bicycle mode split and revenues should be “return-to-source” at the local or regional level. Historically, funding such improvements has been a contested issue with other transportation funding sources (i.e. raiding the gas tax fund to close gaps in the general fund.) Projects with indirect benefits, such as traffic calming along a major bicycle route, could be considered.

The primary goal of this funding category is to create new bicycle facilities for system expansion. Revenue could also be used for system preservation to maintain existing striping, signage and attended bicycle facilities.

### Application

Local and/or regional: Improvements to bike facilities are in high demand and there is a considerable backlog of projects for dedicated bikeways, safety improvements, commuting and recreational riding. Population centers with higher ridership such as the San Francisco Bay Area may be the best candidates initially for a local or regional tax.

State: California may want to implement a 1% sales tax on all new bicycles to generate a sustainable and dedicated return-to-source fund. Implementation at a statewide level would ensure market equity.

Sustainability

Most new bicycle purchases are discretionary and recession periods impact the bicycle retail industry. While bicycle accessories necessary for daily operation such as tubes and spare parts are in relatively high demand (representing nearly 60% of specialty retailer revenue in 2011 according to the NBDA and accounting for 55% of sales volume for the total market), it is difficult to estimate their total contribution to a proposed tax. In all cases, the sustainability of the revenue source would be impacted by the overall state of the economy.

The bicycle tax should not require significant administration costs, aside from ongoing evaluation of the costs and benefits of the program.

Implementation

Implementation would be a medium/high effort, though it could be legislated within a short term. An implementation strategy must be carefully planned and vetted with bicycle retailers and evaluated periodically to determine any disproportionate impacts on sales. In addition, to gain full support, the bicycle advocacy community would have to agree (at least in part) to the substance of the proposal. The associated costs of implementation would likely be low.

Period of Implementation: less than 2 years

<u>Pros</u>	<u>Cons</u>
<ul style="list-style-type: none"> <li>• Provides dedicated source for bicycle facility improvements bicycle facilities and ongoing maintenance needs of existing facilities</li> <li>• Provides a dedicated and protected funding source for bicycle facilities would provide local and regional agencies with the ability to leverage other funding sources to implement planned bicycle improvements and address the lack of funds for maintaining urban commuter and recreational pathways, which have historically not competed well for other available maintenance funding</li> <li>• Could create incentives for integrated planning</li> <li>• Consistent with a user-fee strategy and can counter the claim that bicyclists do not pay “their fair share” for facility improvements</li> </ul>	<ul style="list-style-type: none"> <li>• A tax on new bicycle purchases could discourage the promotion of a sustainable form of transit through increased user costs and could adversely impact low-income individuals who use the bicycle as a primary mode of transport.</li> <li>• Potential opposition from manufacturers of bicycles/accessories parts and their distributors.</li> <li>• National bicycling support organizations have historically rejected any fee proposals associated with the sale of bicycles, or accessories.</li> <li>• Most bicyclists already paying sales taxes, property taxes, fuel taxes, etc. to provide their fair share</li> <li>• Most bicyclists impact the transportation system and environment at lower levels than</li> </ul>

	those who drive for the majority of their trips
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## Conclusion/Recommendation

Bicycling and bicycle infrastructure are critical components of Sustainable Community Strategies developed as a part of Regional Transportation Plans. While new sources of dedicated funding for bicycle improvements and maintenance remain crucial, taxing bicycle sales must not be viewed as a primary funding solution. The proposed revenues generated will likely be low and could be viewed as complimentary to other funds sources and could create incentives for integrated planning.

However, since bicycling directly assists in meeting statewide GHG reduction goals, as well as other benefits to society as whole, potential impediments to its use should be pursued with caution and with consensus building. Bicyclists already contribute to the transportation system in various ways, while imposing a fraction of wear and tear on the roadway network as compared to auto users. Lastly, bicycle projects are extremely cheap and provide enhanced safety and positive mode share impacts compared to highway, streets and road projects.<sup>1</sup>

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### <sup>1</sup> Reference Materials

- For many talking points both for and against the tax, see this post from Streetsblog.org, “Revisiting the Idea of a Bicycle Tax”: <http://streetsblog.net/2010/03/24/revisiting-the-idea-of-a-bicycle-tax/>
- National Bike Dealers Association—2011 Statistics: <http://nbda.com/articles/industry-overview-2011-pg34.htm>
- US Census: <http://2010.census.gov/news/releases/operations/cb10-cn93.html>
- *Oregon*: A user fee for bikes was chosen as a priority for “additional consideration for further implementation” and possible legislative action. A report presented to the governor in May listed a total 16 possible new ‘non-roadway’ funding mechanisms. The user fee for bikes was one of the possible mechanisms. Article link: <http://bikeportland.org/2012/05/30/user-fee-for-bikes-prioritized-in-funding-report-given-to-governor-kitzhaber-72515>
- *Wisconsin*: In Wisconsin, a four year bicycle registration fee costs \$10.00. A Madison, Wisconsin City Ordinance requires all bicycles used by Madison residents be registered. Bicycles must be registered with the City of Madison, unless they have a current registration in another municipality. (<https://www.cityofmadison.com/bikeMadison/programs/registration.cfm>). There is a user fee at Wisconsin’s Mountain Bay Trail which requires cyclists ages 16 or older must purchase a trail pass. A daily pass costs \$3 and an annual pass costs \$20. The money is used for trail maintenance and operation. ([http://www.co.brown.wi.us/i\\_brown/d/facility\\_and\\_park\\_management/2012\\_mountain-bay\\_brochure.pdf](http://www.co.brown.wi.us/i_brown/d/facility_and_park_management/2012_mountain-bay_brochure.pdf))
- *Hawaii*: The state of Hawaii requires the registration and licensing of all bicycles with a wheel diameter of 20 inches or more. The one time registration fee costs \$15. It is mandatory that the transfer of ownership of a bicycle is reported and a \$5 fee must be paid. All of the fees are put into a bikeway fund that is administered by the County of Hawaii. All money in the fund goes toward bicycle related projects and programs. (<http://hawaii.gov/dot/highways/Bike/Bike%20Plan/pdf/chapter3.pdf>)
- *Georgia*: The state of Georgia’s requires a user fee of \$2 for mountain bikers who would like to ride their bikes at several state parks. (<http://www.sorba.org/node/421>)
- Several states at one time or another have had mandatory licenses and registration for bicycles that have since been abandoned or are not enforced. Pressure from cycling advocates in Minnesota caused the state to repeal its registration program years ago. The town of Davis, California has mandatory bicycle registration that rarely enforced and promoted. University of California at Davis has its own on campus bicycle registration program which requires registration (\$8 registration fee). The money funds the university’s bike program. (<http://www.seattlepi.com/local/transportation/article/Should-bicyclists-be-licensed-to-ride-1259833.php#page-2>)

## Cap and Trade Revenues from Fuels

### Introduction

The Cap and Trade regulation adopted by the California Air Resources Board (CARB) is part of California's efforts under AB 32, the Global Warming Solutions Act of 2006, which directs California to reduce its greenhouse gas (GHG) emissions to 1990 levels by 2020. The Cap and Trade program will set a limit on the total GHG emissions that can be emitted by specific sources within the state; those emitters that plan to emit more than they hold "allowances" for must purchase more allowances through this market-based, auction system. The Cap and Trade regulation is divided into two phases: the first, beginning in 2013, will include all major industrial sources along with electricity utilities; the second, starting in 2015, brings in distributors of transportation fuels, natural gas and other fuels.

Our unifying principle is that auction revenues derived from vehicle fuels should be used to fund transportation system needs in a way that achieves AB 32 objectives and builds on the framework of SB 375 and other GHG reduction strategies. We believe that by integrating investments in new mobility, new infrastructure, and new jobs we can create healthy communities and better quality of life for all – while measurably reducing greenhouse gas emissions consistent with AB 32 and legal requirements for spending allocation revenues.

Cap and trade revenue investments are supported to address both the greenhouse gas reduction goals of AB 32 and critical transportation system maintenance and operation needs identified in the California Transportation Commission's Statewide Transportation Needs Assessment over the next ten years. It should be noted that the use of these cap and trade revenues will be restricted to meeting AB 32 objectives. Further, because auction revenues are derived from mitigation fees, they are subject to the "Sinclair nexus test." *Sinclair Paint Co. v State Board of Equalization* was a court case in which the California Supreme Court ruled that a clear nexus must exist between an activity for which a mitigation fee is used and the adverse effects related to the activity on which that fee is levied. Thus, these revenues will have limitations with respect to the extent they may be expended on needs identified in the statewide assessment.

By targeting revenues and incentives toward local governments in support of regional planning goals we can leverage a cost effective investment portfolio across both transportation infrastructure and efficiency measures to yield the greatest GHG reductions associated with the transportation sector. Allocating funding to promote combining strategies will maximize GHG reduction while reinforcing SB 375, regional blueprints, other regional plans and local innovation.

Implementing SB 375 and other GHG-reducing regional plans outside of metropolitan planning organizations (MPOs) requires rebuilding aging infrastructure within urban infill and rural areas targeted for more intense development. This includes the maintenance and operation needs of local roads, bridges and transit systems, as well as active transportation infrastructure for walking and bicycling. By investing in an integrated transportation system, cost effective GHG reductions can also be achieved from approaches like rural resource infrastructure, intercity rail, and roadway management strategies.

All of these transportation investments can yield even greater GHG reductions when combined with supporting land use strategies.

### Yield Potential

According to the Legislative Analyst's Office, CARB's auctions may potentially generate roughly \$660 million to upwards of \$14 billion. The estimated revenues specific to the fuels sector are undetermined at this time.

### Use/Restrictions

The following use/restrictions are recommended:

- Dedicate the allocation revenues related to fuels to transportation investments. This is consistent with the longstanding policy of the state to dedicate revenues related to motor vehicle fuels to transportation. It also assures political and legal nexus between the costs and benefits of the program.
- Dedicate revenues directly into transit and road operations and maintenance, as well as transit and complete streets infrastructure within existing urban infill and rural communities.
- Structure the investments to favor integrated transportation and land use strategies. Funds should be allocated regionally by population, recognizing that different strategies are needed to achieve GHG reductions in different areas of the state. To maximize cost effective GHG reduction, additional incentives for regions with Sustainable Community Strategies that exceed GHG reduction targets, or equivalent Blueprint Plans or other regional plans. Within each region, funding should be allocated primarily through a competitive grant program based on cost effectiveness of GHG emission reductions from combined land use and transportation infrastructure and operations investments.
- Revenues should be targeted toward implementing SB 375 where applicable, and toward other measurable greenhouse gas reduction strategies, developed within regional transportation plans, for regions not within a Metropolitan Planning Organization or where SB 375 does not apply.
- Improve modeling and verification systems to evaluate GHG reduction potential. Funding should be allocated to the development of performance measurement tools for local and regional actions that will allow evaluation and prediction of the GHG reduction and cost effectiveness of investment and land use strategies.
- There should also be flexibility at the regional and local level to develop the most cost effective ways to meet GHG reduction goals through transportation and land use investments.

### Program Design

- Funding allocated within regions to achieve optimum mix of GHG reductions and co-benefits.
- Funding allocated to MPO's or other regional entity.
- Preference for competitive grants to local entities to incentivize integrated strategies that combine land use changes with infrastructure investment to achieve long term benefits.
- Funding to address local land use strategies and transportation needs that implement the adopted regional strategy within existing urbanized/developed areas.

- Rural areas and areas outside of MPO regions may submit alternative investment strategies to achieve GHG emission reduction and co-benefits through alternative means.
- Funding allocated to the CTC to administer competitive grant program for intercity and interregional.
- Funding for rail and highway operational and maintenance improvements.
- CARB, CTC and Strategic Growth Council will collaborate in the development of standards and criteria for both regional and interregional programs that ensure program compliance while retaining flexibility to meet transportation goals.

### Application:

Revenues from cap and trade auctions may be directed for both state and local use. At the local level, revenues would be distributed to local governments in support of regional planning goals. At the state level, it is possible that some revenues may be directed toward statewide programs such as interregional rail.

### Eligible Uses of Funds

Cap and Trade revenues must implement the AB 32 regulatory program consistent with Sinclair requirements and could be directed towards:

1. Transportation efficiency measures:
  - Network and demand management
  - Transit service and operating costs
  - Road and bridge maintenance, operations and retrofits for compete streets and urban greening
  - Electric Vehicle (EV) charging infrastructure and planning.
  - Multi-modal network connectivity to reduce travel distances and improve access to parks, schools, jobs, housing, markets.
2. Land use incentives and improved transportation options:
  - Funding to develop and implement land use modifications to support regional plans
  - Municipal infrastructure to support Transit Oriented Development and urban infill
  - Transit infrastructure and electrification
  - Multi-use facilities and accommodations for bicyclists, pedestrians and NEVs
  - Multi modal network connectivity within new development
3. Administrative costs and development and use of evaluation, monitoring and verification systems to validate AB 32 compliance including modeling systems to evaluate regional proposals against program criteria, and verification and measurement systems for on-going evaluation and modification of regional programs.

### Sustainability

The revenue stream will continue as long as the Cap and Trade program is in effect, until at least 2020.

Implementation

Regional and local government agencies are already well situated to receive and implement these funds. For instance, SB 375 (Chapter 728, Statutes of 2008) and Sustainable Communities Strategies developed by MPOs and other GHG reduction strategies in other regional plans not subject to SB 375 will provide guidance and structure for implementation and use of the funds. Some additional guidance may be needed from the Air Resources Board or other sources regarding insuring projects meet GHG reduction and/or Sinclair tests.

<p><u>Pros:</u></p> <ul style="list-style-type: none"> <li>• Draws on a new source of transportation revenues, offering multi-year financial stability to communities and regions implementing projects.</li> <li>• Creates flexibility to use funds for needed transit operations and maintenance investments.</li> <li>• Provides funding for road and bridge repair to improve transportation efficiency.</li> <li>• Expands active transportation, complete streets and transportation enhancements</li> <li>• Incentivizes transportation innovation from regional and local government.</li> <li>• Measures meaningful performance to tie transportation investments to GHG emissions reduction, as well as other benefits like health, energy, water, cost-effectiveness, and agricultural resources.</li> <li>• Integrates intercity, rural, and local transit, roads, and active transportation infrastructure with regional land use planning and local project implementation.</li> <li>• Promotes inter- and intra- jurisdictional collaboration between institutions like planning departments, school and medical campuses, special districts and transit agencies.</li> </ul>	<p><u>Cons:</u></p> <ul style="list-style-type: none"> <li>• Funds only exist through the life of the program.</li> <li>• <u>Will impact the price of gasoline and the opportunity to rely on this funding source for core transportation systems currently funded through a gasoline tax.</u></li> </ul>
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Recommendation

Invest auction revenues derived from vehicle fuels to fund transportation system needs in a way that achieves AB 32 objectives and builds on the framework of SB 375 and other GHG reduction strategies.<sup>1</sup>

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<sup>1</sup> Reference Materials

Transportation Coalition for Livable Communities Transportation Funding Concept

## Gas Tax Increase and/or Indexing Tied to Inflation

### Introduction

The most common transportation revenue source in the state is the excise tax (gas tax). This is a flat rate tax that is placed on the consumption of each gallon of motor vehicle fuel sold. Currently, the base gas tax in California for gasoline is 18 cents for each gallon sold. Unlike a sales tax, price has no direct impact to the collections from base gas taxes. However, higher gas prices and vehicle fuel economy standards will likely impact the volume of gasoline purchased due to changes in consumer behavior.

Because excise gas taxes have not been increased since 1994, revenues from this source have not been able to keep up with travel demand or inflation. Construction costs continue to rise over time and vehicle fuel economy standards become more stringent, further reducing buying power. Therefore, it is recommended that, in addition to increasing the gas tax, it may be prudent to index the gas tax to inflation (e.g. Consumer Price Index, Construction Cost Index, percentage of the price of fuel, etc.). This would allow revenues to stay consistent with inflationary pressures and increasing construction costs over time.

### Yield Potential

Preliminary research indicates that the potential revenue generation from this type of transportation revenue source should be considered as “High”. The table below provides projected revenue scenarios and assumptions to help support an increase in gas tax as a high yield revenue generator, but the estimates are rough at best. Caltrans’ Division of Budgets, Revenue Forecasting Branch (Branch), estimates that every 1-cent increase in gas tax would generate approximately \$147 million annually. However, this does not take into account indexing the gas tax to inflation. Indexed to inflation, this same 1-cent increase would be significantly higher. In order to get a more accurate yield potential, further analysis is warranted.

[INSERT REVENUE TABLE]

### Use/Restrictions

Based on current revenue distribution, the additional revenue generated from an increase in gas tax could be used for the state highway system and local streets and roads, primarily to fund system preservation, system management, and system expansion. An increase in gas tax would be a reasonable source to address the specific transportation need because combining the gas tax increase with indexing to inflation would protect existing gas tax revenues from the impacts of inflation, while allowing for additional revenues immediately and long term. The State would receive 65 percent of the tax increase and local cities and counties would receive 35 percent, consistent with the split of the current base excise tax.

### Sustainability

An increase in the gas tax should be sustainable over time if it is indexed to inflation. Although, gasoline consumption is declining from year to year, construction costs continue to rise, and vehicles will have to meet higher corporate fuel economy standards. Indexing the gas tax to inflation will mitigate, but not completely alleviate, these issues.

The costs associated with generating additional revenue through an increase in gas tax should be minimal because the current base gas tax system already exists. While there may be additional costs attributable to the planning and implementation of indexing the gas tax to inflation, the gas tax system infrastructure is presently in place. Currently, the California Board of Equalization administers the gas tax statewide, in which the Branch assumes the majority of the cost and effort for administering the gas tax would be absorbed by their department.

Implementation

In comparison to other transportation revenue sources, implementation for an increase in the gas tax should be considered low because the business processes and existing practices are already in place. Caltrans believes implementation can be done on a short term basis (within a two year horizon), but long term adjustments may be necessary. Costs associated with attaining additional information regarding indexing the gas tax to inflation have not been explored. Moving forward, additional research needs to be completed on what type of index should be used for indexing the gas tax to inflation, as well as how much the gas tax should be increased immediately to restore the transportation system to good operating conditions. Furthermore, any policy recommendations are premature at this time.

Period of Implementation: Less than 2 years with long term (5+ years) adjustments based on inflation research.

<u>Pros</u>	<u>Cons</u>
<ul style="list-style-type: none"> <li>• Collection mechanisms are already in place</li> <li>• Potential for significant revenue generation</li> <li>• The revenue source is constitutionally protected by Article XIX of the California Constitution</li> <li>• Dependent upon the index chosen, it should maintain purchasing power relative to inflation, needs estimates, and construction prices</li> <li>• Ease of implementation and inexpensive to administer (utilizes existing practices)</li> </ul>	<ul style="list-style-type: none"> <li>• General aversion to tax increases by voters; current political and economic climate may be inopportune for a tax increase</li> <li>• Without indexing to inflation, purchasing power of revenues would erode over time</li> <li>• Per gallon tax is disproportionate to wear and tear on the state highway system over time</li> <li>• Gasoline may be partially or fully replaced by other fuels in the future</li> <li>• Motor fuel taxes by themselves are not equitable among vehicle classes (i.e. larger vehicles may pay less in fuel taxes relative to the costs imposed on highways)</li> <li>• Tax is regressive (older cars pay more)</li> </ul>

Conclusion/Recommendation

Costs to preserve the infrastructure that serves transportation needs are soaring, even though construction bids are lower than they have been in years. Ongoing budget shortfalls have forced agencies to defer maintenance, leading to roads and bridges that are in worse shape by the time they are rehabilitated. Investments to preserve transportation systems have not kept pace with the demands on them, and this underfunding has led to the decay of one of California’s greatest assets. As the transportation system grows increasingly unreliable, the state will become less attractive to businesses, residents, and tourists, which will ultimately increase our transportation revenue problems.

The next steps include additional research on how much the gas tax should be increased immediately to restore the transportation system to good operating condition, which index should be used for tying it to inflation, and political strategies on how to approach this type of tax increase.<sup>1</sup>

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<sup>1</sup> Reference Materials

- Legislative Analyst's Office (LAO), *Funding for Transportation Programs: Issues and Challenges*, April 2008
- Mineta Transportation Institute, San Jose State University, *Transportation Financing Opportunities for the State of California (MTI Report 06-01)*, October 2006
- National Surface Transportation Policy and Revenue Study Commission, *Transportation for Tomorrow*, December 2007
- Caltrans Revenue Forecasting and Financial Analysis Branch, *Independent Analysis of Excise Tax Increase*, March 2012
- CHCCI: [http://www.dot.ca.gov/hq/esc/oe/contract\\_progress/cost-index-summary.pdf](http://www.dot.ca.gov/hq/esc/oe/contract_progress/cost-index-summary.pdf)
- CPI: <http://data.bls.gov/cgi-bin/surveymost?cu>
- 2011 SHOPP: [http://www.dot.ca.gov/docs/reports/2011\\_Ten\\_%20Year\\_Shopp\\_Plan.pdf](http://www.dot.ca.gov/docs/reports/2011_Ten_%20Year_Shopp_Plan.pdf)

## Gasoline Sales Tax Reinstatement of Six Percent Diesel Sales Tax Increase of One Percent

### Introduction

Gasoline and diesel fuel taxes are treated quite differently. For diesel, sales tax is applied based on a percentage; however, there are two pieces that create the sales tax: a standard sales tax of 4.75 percent, and an additional incremental tax that fluctuates depending on the year (currently 2.17 percent for 2012-13). Gasoline taxes, however, are not considered a sales tax; rather, are treated as an excise tax<sup>1</sup> and are derived from a fixed price-per-gallon. To generate revenue from gasoline sales tax, legislation would first need to be implemented in order to reinstate the tax.

There are two parts to this particular revenue generator: the reinstatement of gasoline sales tax, and the increase of diesel sales tax. Currently, the revenue derived from gasoline tax is excise tax, which is solely based on each gallon sold and does not fluctuate if gas prices increase. Sales tax, however, is a percentage-based method that would allow the State to generate revenue from both consumer consumption (e.g. number of gallons sold) and by current gasoline prices (e.g. if gas prices increase, so does the sales tax).

Should the state sales tax on gasoline be reinstated, and the state sales tax on diesel be increased, the proposed funding would negatively impact system preservation and system management, while improving funding for system expansion.

### Yield Potential

#### *Reinstatement of Gasoline Sales Tax*

Should California implement a sales tax on gasoline, the revenue generation would be high based on the previous sales tax rate of six percent, and the current consumption. The reinstatement would generate approximately \$2.5 billion in annual revenues. This projection is based on the following assumptions:

- Statewide gasoline base-price per gallon<sup>2</sup> for 2012;
- Projected increase of \$0.14/gallon for each year, based on the last ten years of data;
- Consumption projections based on the average of years 2010, 2011, and partial year of 2012.
- Gasoline sales tax is reinstated at the previous level of six percent.
- Assumption that sales tax distribution would be reverted to the historic methodology (pre-Fuel Tax Swap).

The projected annual revenues over the next ten years include:

2013	\$2,715,235,553
2014	\$2,821,453,806
2015	\$2,927,672,060
2016	\$3,033,890,314
2017	\$3,140,108,568
2018	\$3,246,326,821
2019	\$3,352,545,075
2020	\$3,458,763,329

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<sup>1</sup> Per the Fuel Tax Swap (Assembly Bill 105 of 2011).

<sup>2</sup> Base price per gallon of gasoline includes: Crude oil, refining, distribution, and marketing. Excludes existing excise taxes.

2021	\$3,564,981,583
2022	\$3,671,199,837

*Diesel Sales Tax Increase*

Should the sales tax on diesel increase by one percent, the revenue generation would be considered low. Based on the current consumption and projected diesel fuel prices, the annual revenue generated would be under \$150 million. This projection is based on the following assumptions.

- Statewide diesel base-price per gallon for 2012;
- Projected increase of \$0.15/gallon for each year, based on the last ten years of data;
- Consumption projections based on the average of years 2010, 2011, and partial year of 2012.

The projected annual revenues over the next ten years include:

2013	\$ 99,321,836
2014	\$102,701,812
2015	\$106,081,789
2016	\$109,461,766
2017	\$112,841,742
2018	\$116,221,719
2019	\$119,601,696
2020	\$122,981,672
2021	\$126,361,649
2022	\$129,741,626

Use/Restrictions

*Reinstatement of Gasoline Sales Tax*

Should the gasoline sales tax be reinstated, there would be specific limitations on how the revenue was distributed. Pursuant to Article XIXB of the California Constitution, the gasoline sales tax revenue would be distributed in the following manner:

- 20% to public transit and mass transportation;
- 40% to transportation capital improvement projects;
- 20% to streets and highway maintenance, rehabilitation, reconstruction, or storm damage repair conducted by cities, including a city and county; and,
- 20% to streets and highway maintenance, rehabilitation, reconstruction, or storm damage repair conducted by counties, including a city and county.

*Diesel Sales Tax Increase*

Should the diesel sales tax be increased by one percent, it would directly impact the STIP and the State Transit Assistance. Similar to the reinstatement of the gasoline sales tax, this revenue would not rehabilitate existing roadways.

Sustainability

Revenue stemming from both the reinstatement of gasoline sales tax and the increase in diesel sales tax would fluctuate over time. However, since this methodology relies both on increasing fuel prices and

consumption, it would be able to sustain revenue for a short time, but will ultimately decline over future years. The decline is attributed to the increase in fuel-efficient and alternative fuel vehicles.

It is unknown what the cost of generating the revenue over time would be, and what the cost and effort of administration would be.

Implementation

*Reinstatement of Gasoline Sales Tax*

The effort to implement the reinstatement of gasoline sales tax would be high. The primary reason for this is because legislation would need to be changed, and the corroboration between Department of Finance, State Controller’s Office, and Caltrans would need to take place to ensure that all of the details are taken into consideration before implementing the changes. The period to implement this change would be relatively short term. The cost and effort of implementation is unknown. The actions necessary to reinstate the sales tax would be at the State level only.

*Diesel Sales Tax Increase*

Similar to the gasoline sales tax, the period to implement this change would be relatively short term.

Period for Implementation: Less than 2 years

<p><u>Pros</u></p> <p><i>Reinstatement of Gasoline Sales Tax:</i></p> <ul style="list-style-type: none"> <li>• Sales tax would be applied to all gasoline consumers. However, consumers who own fuel-efficient and alternative fuel vehicles would be less-impacted.</li> </ul> <p><i>Diesel Sales Tax Increase:</i></p> <ul style="list-style-type: none"> <li>• The increase in diesel sales tax would be fair and applied equally to all diesel fuel users. Those who would be affected the most would be commercial vehicles, farming vehicles, and vessels.</li> </ul>	<p><u>Cons</u></p> <p><i>Reinstatement of Gasoline Sales Tax:</i></p> <ul style="list-style-type: none"> <li>• Would not likely gain public support, as the economy continues to struggle.</li> <li>• Could further weaken the economy by straining individual consumers.</li> <li>• There would need to be major changes to current legislation in order to reinstate sales tax on gasoline, such as the Fuel Tax Swap (AB 105 of 2011). In order to reinstate the gasoline sales tax, a two-thirds majority vote would be needed from the legislature.</li> <li>• Could result in the cancellation of the current excise tax, which generates approximately \$900 million annually to the State Highway Account (SHA)<sup>3</sup>. The SHA is the sole funding source for rehabilitating damaged and aged roadways.</li> <li>• Would not fund the State Highway Account; rather, it would fund other programs unrelated to roadway rehabilitation.</li> </ul> <p><i>Diesel Sales Tax Increase:</i></p> <ul style="list-style-type: none"> <li>• Requires a majority vote. Obtaining these votes could be difficult and could hinder the success of implementing the increase</li> </ul>
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<sup>3</sup> As stated in the 2012-13 Governor’s Budget.

Conclusion/Recommendation

*Reinstatement of Gasoline Sales Tax*

Although the potential revenue would be significant to California's transportation system, it would not fund the proper programs needed to rehabilitate the current roadways. In addition, the impact it could have on the struggling economy could worsen the situation by implementing another tax to consumers.

*Diesel Sales Tax Increase*

Similar to the reinstatement of gasoline sales tax, the diesel sales tax increase would not fund the rehabilitation of the current roadways. In addition, the negative perception of tax increases coupled with the relatively low revenue generation would not provide a sound solution to the current transportation budget.<sup>4</sup>

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<sup>4</sup> Reference Materials

- Gasoline and Diesel Fuel Update, U.S. Energy Information Administration, Independent Statistics and Analysis. <http://www.eia.gov/petroleum/gasdiesel/>. July 23, 2012 and July 30, 2012.
- Fuel Taxes Statistics & Reports, California State Board of Equalization. <http://www.boe.ca.gov/sptaxprog/spftrpts.htm>. July 30, 2012.
- Official California Legislative Information. Assembly Bill 105 of 2011, [http://www.leginfo.ca.gov/cgi-bin/postquery?bill\\_number=ab\\_105&sess=CUR&house=B&author=committee\\_on\\_budget](http://www.leginfo.ca.gov/cgi-bin/postquery?bill_number=ab_105&sess=CUR&house=B&author=committee_on_budget). July 31, 2012.
- 2012 Governor's Budget. <http://www.ebudget.ca.gov/pdf/GovernorsBudget/2000/2660FCS.pdf>. July 31, 2012.
- California Constitution, Article XIXB. [http://www.leginfo.ca.gov/.const/.article\\_19B](http://www.leginfo.ca.gov/.const/.article_19B). July 31, 2012.

## Heavy Duty Vehicle Fees/Weight Fees

### Introduction

The Commercial Vehicle Registration Act (CVRA) changed the way the California Department of Motor Vehicles (DMV) registers commercial vehicles and some trailers. The CVRA weight fee is due to registered commercial motor vehicles operated either singly or in combination with a declared gross vehicle weight of 10,001 pounds or more. The majority of the weight fees are composed of CVRA and non-CVRA registration fees, prorated International Registration Plan, and special plate vehicles. In fiscal year 2009/2010, there were 448,000 CVRA and 5,057,000 non-CVRA registered trucks. The average price for CVRA registration was \$750.28 and non-CVRA registration was \$85.05. As of 2011, the revenue from the heavy duty vehicle fees were redirected by legislation to pay off current general obligation bond debt service for specified voter-approved transportation bonds. This is one of the many changes that occurred due to the Fuel Tax Swap. Any additional increases in heavy duty vehicle fees would be redirected to fund bond service debt and, unless willing to change existing legislation, increasing the fee will have no effect on closing the projected ten-year transportation funding shortfall.

### Yield Potential

The potential for revenue generation would be relatively low. Currently, revenues collected through the annual vehicle registration operated and managed by the DMV from heavy duty vehicles raises over \$900 million annually. If fees were raised by 10%, the additional annual yield would raise approximately \$90 million more. In fiscal year 2009-2010, the average fee for CVRA was \$750.28 and non-CVRA was \$85.05. A 10% increase would equate to an approximate \$75 increase for CVRA and \$8.51 for non-CVRA registration fees.

### Use/Restrictions

Prior to recent legislation, revenues were used for system preservation. However, legislation directed weight fees to fund bond debt service. Unless legislation is enacted to protect any new heavy duty vehicle fees from diversion to debt service payments, use for system preservation or other transportation needs is not possible.

### Sustainability

Since vehicle registration is a necessity for California commercial vehicles to do business, revenue from heavy duty vehicle fees has been sustainable. The recession impacted the revenues by less than 10%. As the economy begins to grow again so will demand for products and a portion of those products will be moved in California where commercial vehicle registration will be paid. The cost of this revenue is ultimately levied on the consumer through an increase in consumer product prices.

### Implementation

Implementation effort to enact legislation to raise the heavy duty vehicle weight fee and protect new revenues from diversion from the State General fund is high and likely to take more than two years. Once legislation is enacted, implementation is low since the heavy duty vehicle weight fee process is already administered by the DMV.

Period for Implementation: Less than 2 years for time increase or long term (5+ years) to do multiple increases up to a target

<u>Pros</u>	<u>Cons</u>
<ul style="list-style-type: none"> <li>• Vehicle fees are a consistent and reliable source of revenue</li> <li>• Existing revenue stream has general support to redirect fees or increase fees for addressing system preservation needs</li> <li>• Provides a nexus for commercial vehicles to pay their fair share of the wear and tear on the roads</li> </ul>	<ul style="list-style-type: none"> <li>• Since the heavy duty vehicle weight fees were redirected to fund bond debt service, unless willingness exists to change existing legislation, increasing the fee will have no effect on closing the identified ten-year transportation funding shortfall</li> <li>• Cost is ultimately levied on the consumer through an increase in consumer product prices</li> </ul>

Conclusion/Recommendation

Since the heavy duty vehicle weight fees were redirected towards bond debt service, unless willingness exists among state, regional and local stakeholders to unite for purposes of changing existing legislation, increasing the fee will have no effect on closing the identified ten-year transportation funding shortfall.<sup>1</sup>

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<sup>1</sup> Reference Materials

*DMV*

<http://www.dmv.ca.gov/commercial/cvra.htm>

[http://www.dmv.ca.gov/vr/fees/weight\\_over.htm](http://www.dmv.ca.gov/vr/fees/weight_over.htm)

*Caltrans Chart C*

[http://www.dot.ca.gov/docs/CHART\\_C\\_12-13.pdf](http://www.dot.ca.gov/docs/CHART_C_12-13.pdf)

## National Freight Program

### Introduction

A national federal freight program is recommended to assist in identifying and funding critical regionally and nationally significant public transportation projects outside port leased areas. The national freight program could be implemented with or without new federal revenue sources (beyond current sources such as the federal Highway Trust and General Fund). A formula-based national freight program was included in the original U.S. Senate passed bill for transportation reauthorization. A national freight program, funded by the federal Highway Trust Fund and/or General Fund, was also identified as a possible new funding source for freight transportation projects (outside of harbor district leased areas) in the Southern California Association of Governments' (SCAG) 2012 Regional Transportation Plan.

A new federal fee mechanism should be considered to fund the program. The most appropriate fee mechanism is a facility user fee, such as a vehicle-miles-traveled (VMT) fee. The next best fee is simply diesel fuel taxes, as a proxy for VMT, and should be indexed to inflation to generate increased revenue over time consistent with inflation.

A port infrastructure, container, or other statewide freight fee is not recommended. Most, if not all, goods movement stakeholders do not recommend or support a national container or cargo value fee, in which the latter would simply be a surrogate for increased U.S. Customs Duties. Neither of these fee mechanisms represents a true transportation system user/use fee. SCAG commissioned a study, *Port and Modal Elasticity Study, Phase II* (Leachman & Associates LLC, September 14, 2010), that describes the elasticity of intermodal rail container movements to increased costs and/or fees. Based on this study, a statewide and/or regional fee is not recommended as it would unfairly result in the diversion of intermodal containers to other U.S., Mexican, and Canadian ports, eliminating jobs and reducing State and local fees and income. Furthermore, California port revenue would be reduced, thus impairing the ability to fund critical port infrastructure.

### Background

The Transportation Research Board (TRB) recently prepared a report evaluating fee mechanisms to address national freight needs (National Cooperative Freight Research Program-Report 15, Dedicated Revenue Mechanisms for Freight Transportation Investment), and recommended the following three funding options: 1) fuel fee increases and/or with indexing; 2) existing heavy duty vehicle fees; and/or 3) a vehicle-miles-travelled fee (VMT). Reasons for opposition to a national container fee are as follows (also see *National Cooperative Freight Research Program-Report 15*):

- Containers moving across wharves and on trains at international land borders unfairly and incorrectly represents nexus for landside transportation impacts (and associated improvement projects) throughout the U.S., and thus unfairly burdens shippers with responsibility of paying for highway projects throughout the U.S.
- Container movements to/from ports and the first point of rest/last point of departure are typically within 20-30 miles or so, and have little nexus on many other regional facilities, and thus should not be responsible for transportation projects throughout the nation.
- One sector (e.g. shippers) should not bear the burden for the entire county.

- It would be very difficult, and probably impractical to accurately and precisely attribute the amount of international import and export cargo, including transloaded cargo, using virtually all roads and highways throughout the entire U.S., which theoretically should be the basis for any user fee.
- At any roadway and highway location throughout the U.S., international cargo, including transloaded cargo, is most likely much less than pure domestic cargo.
- There are many more types of heavy-duty trucks not moving cargo, and a container fee would severely understate the complete nexus.

### Yield Potential

To be determined; insufficient research and analysis available at this time.

### Use/Restrictions

Projects conceived to be eligible as part of a national freight program would include publicly-owned roadways and highways, including port area roadways and port-owned rail infrastructure outside of leased areas. Railroad-highway grade separation projects should also be eligible. The types of eligible projects would ultimately be dependent upon the type of fee mechanism; e.g.; if a national sales tax were imposed to fund such a program (which has been contemplated), perhaps privately owned rail infrastructure might be eligible depending upon the specifics of the sales tax collected. , as these projects are paid for by private industry funds via port tariffs, fees, and lease agreements. Moreover, current State law prohibits the use of State Highway Account funds on private infrastructure.

Any VMT fee would be applied to all vehicles as freight cannot, and should not, pay for the entire impact on the transportation system, including on-going operations and maintenance costs. Moreover, freight projects funded with truck VMT would also benefit all other vehicle types. It would be impractical and unfair to have different funding mechanisms for projects that are used by trucks and autos. For private industry acceptance of a new fee such as a VMT, the fee and program would need to be nexus based; i.e., actually derived using estimated (or actual) and projected VMT, and the corresponding system preservation and expansion needs over time.

Additionally, fee rates should be structured to accurately account for the differential in impact of the various vehicle types on transportation system capacity and pavement wear. Ideally, the fee rate would be computed based upon specific projects. An initial list of projects could be defined with a specific rate based upon their costs/schedules. Fees should be collected nationwide, pooled, and distributed back to the projects Rates could be altered over time to reflect the completion/addition of projects. However, this type of program may be overly complex to implement, and moreover, may not be acceptable to elected officials and the general public. .

An alternative would be to make these same computations as the basis for a starting VMT rate, collect it nationwide independent of the specific projects similar to the gas tax, and then program/apportion/distribute/earmark in a similar manner as the Highway Trust Fund. Fees collected by the federal government would need to be applied universally across the country, and not be time or geographic area specific. When attempting to structure a fee program it is important to recognize that the trucking companies/drivers that would pay the VMT fee are not part of the decision-making process for shipper logistics (ergo, which port is used), and thus should not be subject to differential fees around

the country. The mere differentials in VMT, not the fee rate it; will generate the necessary differential in funding. Other levels of government could elect to impose other project-specific (tolls) or geographic specific fees (county sales tax) to supplement federal fees.

Projects or types of projects do not need to be defined in order to select the best fee program/mechanism. A reasonable and fairly accurate nexus approach that entails identifying all sources of impact (whether traffic or rail) on transportation project locations, with pro-rata shares established is important. Moreover, the nexus approach is somewhat, and should be, independent of the fee collection mechanism. For example, for a typical roadway project, it's quite easy to establish the traffic volume or VMT sources, and truck shares from empirical data. The difficulty arises in continuous collection of this data for collection of fees, which is why a VMT fee is the most fair and pure type of fee. It also places the burden of the user to seek reimbursement of such expense (or not) via their rates/contracts, and thus such fee collection does not interfere with business practices and market forces. Alternatively the fee could be assessed against the beneficial cargo owner (BCO)/consignee, but that's not compatible with certain types of fees (e.g., for VMT, tracing the ultimate consignee is quite burdensome because of the various entities involved in the transactions and the bills of lading).

### Sustainability & Implementation

Long-term system preservation and expansion need cost estimates could be used as the basis for the initial VMT rate. These needs could be refined/updated annually by states and/or the federal government to possibly adjust the rates over time. As very little analysis has been done, and little or no discussion has taken place at the federal level with Congress or the Administration, it is considered premature at this time to present any rough estimates of the cost of implementing a VMT system. In the *TRB National Cooperative Freight Research Program-Report 15*, an implementation timeframe was estimated for only heavy duty vehicles (5-8 years), and thus is somewhat misleading as the VMT applies to all vehicles. The TRB report does contain a discussion on system revenue potential, costs, and implementation issues.

Period for Implementation: 5+ years

### Conclusion/Recommendation

As a federal freight program (whether funded with new revenue sources or not) was part of the U.S. Senate passed bill for transportation reauthorization (MAP-21), and SCAG has contained such a program in the 2012 RTP, advocacy for such a program should continue. Many stakeholder groups across the country support a federal freight program, including the Freight Stakeholders Coalitions that include: American Association of State Highway and Transportation Officials (ASHTO), Association of American Railroads (AAR), Waterfront Coalition, American Association of Port Authorities (AAPA), and the Coalition for America's Gateways and Trade Corridors (CAGTC; in which California's ports and SCAG are member agencies). It is recommended that the State, working with many other agencies and constituents, begin an exploratory dialogue on a VMT fee, for all vehicle types.<sup>1</sup>

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<sup>1</sup> Reference Materials

- SCAG 2012 Regional Transportation Plan (Adopted April 2012)
- SCAG Port and Modal Elasticity Study, Phase II (Leachman & Associates LLC, September 14, 2010)
- National Cooperative Freight Research Program-Report 15, Dedicated Revenue Mechanisms for Freight Transportation Investment (Transportation Research Board, 2012); [http://onlinepubs.trb.org/onlinepubs/nctfp/nctfp\\_rpt\\_015.pdf](http://onlinepubs.trb.org/onlinepubs/nctfp/nctfp_rpt_015.pdf)

**Parcel Taxes (for transportation uses)**

Introduction

Property taxes on land and building values are generally the principal source of revenue for local governments. Portions of local property taxes are authorized widely for use by special districts and authorities, including transit agencies and school districts. Unlike real estate transfer taxes (discussed separately), property taxes can provide an annual versus one-time funding source for public transit or other uses. Traditionally, support for transportation has been derived from sources other than property tax to avoid competition with other basic public services, such as health, education, police, and fire protection. With existing sources of transportation funding being reduced or eliminated, parcel tax assessments for transportation could provide a valuable tool to reduce the gap between costs and available existing revenues.

Yield Potential

The yield potential is estimated at medium. Based on a sample rate of \$50 assessed on each parcel, this type of tax could generate \$470 million annually statewide. Over 10 years, this type of tax could generate \$4.7 billion. The mode and purpose of the tax would depend upon the measure approved by the voters.

Use/Restrictions

Only known restrictions are that it would require two-thirds voter approval to be passed (unless this threshold was reduced by state legislative action). Appears to be a reasonable source since the funding is tied to something tangible and reoccurring like property taxes. Proposed uses could vary depending on need but would need to be included in the local or state ordinance language. Potentially could be used for system preservation, system management or system expansion.

Sustainability

This funding source would be sustainable over time since funds are not “one-time” and would be generated annually through property tax assessments. Costs would include those associated with ordinance approval and the annual administrative costs would be minimal.

Implementation

The implementation time period is estimated at high and would take place over the long term. The implementation costs would vary depending on local/regional size and a two-thirds voter supermajority approval would be required.

Period for Implementation: 5+ years

<u>Pros</u>	<u>Cons</u>
<ul style="list-style-type: none"> <li>• Tax is flexible and could be implemented at either the state or local levels.</li> </ul>	<ul style="list-style-type: none"> <li>• Effectiveness would decrease over time as transportation system costs increased.</li> <li>• A nexus is desirable to analyze the relationship between parcels and transportation infrastructure.</li> <li>• Flat fee of \$50 would not be tied to inflation and would directly affect real estate costs for home buyers and renters</li> </ul>

Conclusion/Recommendation

Implementation requirements are high and would take several years to implement. However, this could be implemented at the state or local levels so implementation is flexible.<sup>1</sup>

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<sup>1</sup> Reference Materials

- AC Transit -- Parcel Tax. Est. \$29.3 million per year, or \$293.4 million over 10 years. This is used for capital and operations for transit.
- AC Transit -- Property Tax (percentage). Est. \$65 million per year (base year 12-13), or \$772.5 million over 10 years (escalation included)
- BART -- Property Tax (percentage). Est. \$29.7 million per year (base year 12-13), or \$337.4 million over 10 years (escalation included).

## Parking: Correct Disabled Placard Abuse and Recover Lost Revenue

### Introduction

This revenue source would recover losses from illegally exempt parkers. Some studies estimate that between 50-90% of users of disabled placards do not have a qualifying disability. Both data-driven and anecdotal reports of placard abuse signal the need to reduce the number of unlimited free-parking disabled placards in circulation. Other states and cities, notably in Virginia have adopted an “All may park, all must pay” policy which emphasizes the need to provide proximal and easily accessible parking spaces, as well as flexible payment options. However, the incentive to avoid parking payment is removed. Dr. Donald Shoup has suggested that enhanced revenue from such a program can be put toward the betterment of paratransit services for the disabled community.

### Yield Potential

Given the current extent of placard abuse, the yield potential is high. In the case of Alexandria, the subsidy to the disabled community would increase ten-fold if an “all may park, all must pay” policy is implemented. It is difficult to provide exact revenue estimates given that enforcement is difficult; anecdotally, however, abuse is widespread and thus revenue potential is great.

### Application

State: Allow cities to recover lost revenue from widespread disabled placard abuse and to raise revenue for financing new or improved transportation services for the disabled community. This effort requires a change to state legislation. Currently cities and municipalities in California cannot charge for disabled parking. California law provides free parking to individuals with disabilities. The vehicle of a person with a disability must display either a distinguishing license plate or distinguishing placard, both of which can be obtained on a permanent or temporary basis from the Department of Motor Vehicles (DMV). The person with the disability must also be present at the time of parking. Cities and municipalities in California cannot charge for parking spaces identified with blue curb paint, which are exclusively for the use of people with disabilities.

### Use/Restrictions

Cutting down on disabled placard abuse is necessary to recover lost parking meter revenue, which is used for a variety of purposes and supports the transportation system as a whole. A police survey from the City of Alexandria found that disabled placard abuse accounts for 90 percent of lost meter revenue, and a UCLA study estimated a yearly revenue loss of \$125,000 from one block alone. The problem has increased over time as more individuals have been granted disabled placards; a 2011 article from the LA Times estimates that 1 in 10 drivers now hold disabled placards, representing a significant increase over previous decades and far outstripping the actual number of people with qualifying disabilities. If parking fees were to be imposed on all users, including the disabled placard users, estimated revenue recovery could be used to directly support services that benefit people with disabilities such as expanded paratransit offerings and more accessible sidewalks and transit facilities.

The program could also be designed as a two-tier system like the one currently in place in Michigan, where only people who are severely impacted by their disability (e.g. people in wheelchairs, with lung conditions or who cannot walk more than 200 feet without stopping) qualify for free curbside parking; others may park in reserved spaces nearby in off-street facilities and are required to pay. According to the program description: “After enactment of the new law only 10,000 people, or two percent of the previous 500,000, were allowed to park for free. The Michigan law gives free parking only to those most in need, requires a doctor’s certification with the application process, and uses a new yellow placard, a clear differentiation from the traditional blue disabled badge.”

This funding source would fall under system management, in that it better allocates a scarce resource (reserved parking spots for people with disabilities). It could also be used for system expansion by providing funding to services that directly benefit people with disabilities (e.g. paratransit, curb cuts, elevators on transit and implementation of other accessible services.)

### Sustainability

Ending disabled parking abuse would recover significant losses in parking revenue, bringing metered parking revenue more in line with actual usage and providing cities with a growing and sustainable funding source. Efforts to change current state law and generate local support for implementation could be considered an initial cost. Additional costs of administering a two-tiered program as described above should be taken into account. Revenue from an “all may park, all must pay” system would likely differ from that of a two-tiered system; each should be weighed separately.

### Pros/Cons

#### *Pros:*

Implementing a more refined placard-issuing policy would enable the true number of people who are qualified placard holders to find convenient curb spaces more easily, enforce compliance with parking regulations, maintain proper market-pricing of on-street parking, and create a reserve to subsidize better transportation facilities and services for the people with disabilities. The reclaimed revenue source, derived from abusers of disability placards, could be used to fund transportation services and facilities for community members with disabilities. Such funds would further promote disability rights and the state-wide universality of accessible services. They would also generate additional parking revenue from drivers who will no longer be able to abuse the system.

#### *Cons:*

Many advocates for people with disabilities have warned against mandatory parking fees. In spite of current placard abuse, advocates are wary of enacting a policy that would make life more difficult for people who may already be disadvantaged. As mentioned above, providing subsidies to people with disabilities who need them could be one way to mitigate these costs, as well as by dedicating recouped revenue to services that directly benefit this population.

### Implementation

Implementation could be classified as Low/Medium. While parking reform is relatively straightforward in theory, it requires significant political support. Lessons learned from successful programs in other cities, such as Arlington, VA (where all who park must pay) and Michigan (where higher impacting qualifying conditions are set for placard holders) should be taken into account. Enforcement and administrative costs of any new program are also a factor.

Greater political support at the state level is crucial to advance progress on this issue. State support could also fund additional research that would help make a strong case to change the law, as well as provide a more accurate estimate of potential revenue.

Period for Implementation: Less than 2 years

### Conclusion/Recommendation

Implementing a more refined placard-issuing policy would enable the true number of qualified disabled placard holders to find convenient curb spaces more easily, enforce compliance with parking regulations, maintain proper market-pricing of on-street parking, and create a reserve to subsidize better transportation facilities and services for people with disabilities. The reclaimed revenue source, derived from current abusers of disability placards, could be used to fund transportation services and facilities for the community members who are disabled. Such funds would further promote disability rights and the state-wide universality of accessible services. They would also generate additional parking revenue from non-qualifying drivers who are compelled to pay to park.

There are two primary options for implementation: first, a system where all users pay for curbside parking as in the case of Arlington, VA; and second, a two-tiered system where a higher standard is set for free curbside parking, such as in the case of Michigan. Both cases should be evaluated when designing a system to meet the needs of California's cities.<sup>1</sup>

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#### <sup>1</sup> Reference Materials

Shoup, 2011. "Ending the abuse of disabled parking placards." [http://www.uctc.net/access/39/access39\\_almanac.pdf](http://www.uctc.net/access/39/access39_almanac.pdf)

Williams, 2010. "Meter payment exemption for Disabled Placard Holders as a Barrier to Managing Curb Parking."

<http://shoup.bol.ucla.edu/MeterPaymentExemptionForDisabledPlacardHolders.pdf>

LA Times: "Placards can bring a curbside surprise." <http://articles.latimes.com/2011/may/22/local/la-me-disabled-parking-20110522>

Michigan Disability Brochure: [http://www.michigan.gov/documents/disability\\_brochure\\_33616\\_7.pdf](http://www.michigan.gov/documents/disability_brochure_33616_7.pdf)

Application for Disabled Placard (Michigan): [http://www.michigan.gov/documents/bfs-108\\_16249\\_7.pdf](http://www.michigan.gov/documents/bfs-108_16249_7.pdf)

California Disability Access Information: [http://www.disabilityaccessinfo.ca.gov/transport.htm-driving\\_&\\_parking](http://www.disabilityaccessinfo.ca.gov/transport.htm-driving_&_parking)

**Tire Tax / Oil Change Fee**

Introduction

Tire taxes and oil change fees are new potential sources of transportation funding that have never been implemented in California. Currently only fees for tire disposal are collected by the Board of Equalization and distributed to CalRecycle. These new user fees attempt to more closely align taxes collected with the use of the transportation system. In other words, the more one drives, the more often one must change tires and engine oil. This new revenue source should primarily benefit highways and local roads, and could be used for any purpose (preservation, management, or expansion). However, dedicating these user fees to preservation may be the most direct use of these new funds.

Yield Potential

The yield potential of a tire tax and/or oil change fee is expected to be relatively low/moderate based on what is politically feasible to implement.

The tire fee is based on data received from the Board of Equalization. Assuming that the same parameters used to collect the disposal fee are used for assessing a fee to fund transportation projects, revenues are shown below for the past 5 years.

Fee Per New Tire Sold

Year	Tires Sold	\$2	\$5	\$10
2007	31,700,349	\$63,400,698	\$158,501,745	\$317,003,490
2008	28,265,358	\$56,530,716	\$141,326,790	\$282,653,580
2009	25,628,614	\$51,257,228	\$128,143,070	\$256,286,140
2010	27,082,294	\$54,164,588	\$135,411,470	\$270,822,940
2011	27,667,638	\$55,335,276	\$138,338,190	\$276,676,380

Average \$56,137,701 \$140,344,253 \$280,688,506

Source: BOE, California Tire Fee Return. Lynn Garcia, Business Taxes Specialist

Based only on State Highway Vehicle Miles Travelled (VMT), available at <a href="http://traffic-counts.dot.ca.gov/">http://traffic-counts.dot.ca.gov/</a> , annual VMT is about 168 billion assuming oil is changed every 5,000 miles, below are some estimates on annual revenue generation.	Oil Change Fee
Proposed Fee	
\$1 per oil change	\$33,600,000
\$3 per oil change	\$100,800,000
\$5 per oil change	\$168,000,000

Based on these numbers, the tire tax could generate over \$560 million over ten years with a \$2 fee and \$2.8 billion with a \$10 fee. The oil change fee could generate \$336 million over a 10 year period at \$1

fee level and \$1.68 billion at the \$5 fee level. These figures could be low because they do not include travel on the local road system, which would increase the VMT and hence the number of tires and oil changed. However, interstate truck traffic may also choose to perform maintenance out of state, thereby avoiding these user fees. Further, some drivers may choose to change their own engine oil, and could thereby avoid paying the oil change fee. The entire amount generated could be used for system preservation on the highway and local road systems.

Use/Restrictions

The revenue generated would ideally be used for highway and local road system preservation, since VMT is a good measure of wear and tear impacts to the road system.

Application

These new and innovative user fees may be implemented on a statewide or regional basis.

Sustainability

These revenue sources are relatively stable, since tires and oil changes are a required part of good vehicle maintenance. New vehicles produced have longer intervals between oil changes, as do cars that use synthetic oil. Also, the fee amount would have to be strategically selected since a high fee may cause some drivers to change the engine oil themselves, thereby avoiding the fee.

Under a flat fee scenario, revenues would not be indexed to inflation and could decrease due to technological advances causing oil to be changed less often or as oil free electric cars become more popular. However, these changes are relatively minor, and these revenue options would continue to warrant consideration as a viable new revenue stream for transportation purposes.

Administration of the new tax could be folded in with various environmental taxes already collected on tires and engine oil. In both cases, there are recycling fees, to which these additional user fees could be added. The cost of collection and administration would therefore be relatively minor.

Implementation

The effort and period to implement is moderate since implementation requires legislation. The costs and effort of implementation is relatively minor, as programs for collection are already in place. For implementation, the state must approve a statewide law mandating the collection of these user fees, or allow regions to implement these taxes with voter approval.

Period for Implementation: 5+ years if legislation is needed

<u>Pros</u>	<u>Cons</u>
<ul style="list-style-type: none"> <li>• Attempt to more closely align taxes collected with transportation system use.</li> <li>• Direct nexus between user fee and system preservation need</li> <li>• Easy to collect and projected revenue amount is known.</li> </ul>	<ul style="list-style-type: none"> <li>• Drivers may defer oil changes or change own oil to avoid fee</li> <li>• Interstate truck traffic may also choose to perform maintenance out of state, thereby avoiding these user fees</li> <li>• Not indexed to inflation</li> <li>• Declining VMT</li> <li>• May impact users that do not operate vehicles on highway system</li> </ul>

	• May be politically difficult to obtain support
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Conclusion/Recommendation

Tire tax and oil change fees provide a good nexus to roadway use and therefore may be widely accepted. However, in the current political environment, it may be difficult to pass necessary legislation to implement the fee. Collection of these fees would not be difficult, since mechanisms are already in place to collect environmental disposal fees on these items. Revenue generation potential is moderate, and could be used to better preserve the highway and local road systems.<sup>1</sup>

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<sup>1</sup> Reference Materials

- [http://www.boe.ca.gov/sptaxprog/ca\\_tire\\_fee.htm](http://www.boe.ca.gov/sptaxprog/ca_tire_fee.htm)
- <http://www.boe.ca.gov/pdf/pub91.pdf>
- [http://www.boe.ca.gov/sptaxprog/tax\\_rates\\_stfd.htm#2](http://www.boe.ca.gov/sptaxprog/tax_rates_stfd.htm#2)

## Toll Roads/High Occupancy Toll Lanes

### Introduction

Toll Lanes allow motorists to pay for the ability to avoid traffic by guaranteeing free-flow conditions in those lanes when compared to the general-flow lanes. This is achieved through variable pricing where the toll fluctuates based on the demand for the facility. Given the declining revenues per mile-driven of the federal and state gas tax, as well as increasing congestion on highways, regions are increasingly considering the use of Toll Lanes and/or those shared with carpools (so-called High Occupancy Toll “HOT” lanes) as a new revenue source as well as a means of reducing congestion and improving facility safety within the tolled corridors. After construction, maintenance and operation of the facility, potential uses for this toll revenue include system preservation, facility expansion and enhancements, toll subsidies for low-income motorists, and operational subsidies for public transportation operations and environmental mitigation in the corridor.

### Yield Potential

The potential for revenue generation is Medium to High for Toll Lanes based on current projections. Table X.1 summarizes the estimated revenues and uses of Toll Lane projects in California’s major metropolitan regions. Each region is projected to generate in excess of \$100 million per year to pay for management of the facility. A portion of the dollar amounts shown in the table are reflected in Regional Transportation Plans. Therefore, care must be taken in developing assumptions for the use of toll revenue to pay for unmet transportation system needs.

In addition, toll facilities may be under consideration in other areas of the state, to better accommodate interregional travel, for instance.

Administering agencies are planning to use net revenues for improvements to public transportation service in the corridor. The revenues shown in Table X.1 are derived from the adopted Regional Transportation Plans from the largest metropolitan planning organizations and reflect the annual estimated toll revenue over a 10-year period.

**Table X.1 Revenue Estimates and Use of Toll Lane Revenue**

Region	Annual Estimated Toll Revenue	Use
MTC	\$378 million	Preservation; expansion; management
SANDAG	\$146 million	Management
SCAG	\$610 million	Preservation; expansion; management

### Use/Restrictions

Revenues can be used to construct, maintain, and operate the facility and to expand the Toll Lane network within a region in the early years of implementation. Excess revenues can then be used to subsidize public transportation service in the corridor. In the Bay Area, this second phase may not happen during the first ten years of the program.

Application

Toll lanes and HOT lanes in California are currently a Federal, State, and Regional option. In Los Angeles County for example, the Express Lanes Project is a result of a Federal demonstration project to test the efficacy of HOT Lanes in reducing congestion and financing transportation improvements in the corridor. In other areas of California, such as the San Francisco Bay Area, Orange County, and San Diego County, toll lanes and HOT lanes are deployed or planned along Interstate Highways and State Routes and are administered by the regional agency (San Francisco Bay Area, SR-91 Corridor in Orange County, and the I-15 Corridor in San Diego County) or by joint-powers authority (as in Orange County on the SR-71, SR-133, SR-241, and SR-261). State law, as authorized by Senate Bill 4, allows Caltrans and regional agencies to enter into public-private partnerships, including those financed by tolling, through 2017. Federal law also provides federal funds to be used to create a tolled-facility.

Sustainability

Tolls can have a defined sunset date, or they can be an ongoing as a sustainable source of revenue over time. Unlike fuel taxes, the increasing fuel efficiency of vehicles should not impact the revenue stream of Toll Lanes. Additionally, inflation should not be a major threat to Toll Lane revenue since in most cases the tolls can be adjusted relatively easily.

There are however significant challenges to the financial efficacy of Toll Lanes. Toll Lanes have large up-front costs due to construction and capital costs. As a result, there may not be net revenue available until the facility is fully-paid for by the toll revenue. However, once the capital and ongoing operations and maintenance costs are covered, Toll Lanes have the potential to provide substantial revenue for transportation improvements beyond the tolled facility. Operational costs of Toll Lanes include toll collection, lane monitoring and toll enforcement, and lane management. Toll Lanes will need to consistently demonstrate value to the user. The allowance of vehicle exemptions from tolls (i.e., alternative fuel vehicles or high-occupancy vehicles) not only diminishes toll revenue but may also increase congestion in Toll Lanes.

Pros/Cons

As a user fee, Toll Lanes are an economically efficient and equitable means of paying for transportation improvements when they are applied to improvements related to the tolled facility. Motorists traveling in and outside of the Toll Lanes, and public transportation patrons along the corridor realize benefits from the toll revenues. Toll Lanes allow those willing to pay for the ability to drive in free flow conditions to do so, while freeing capacity in the parallel general flow lanes (if available). High-Occupancy Toll Lanes also benefit non-motorists by allowing faster travel of public transportation vehicles. HOT lanes can also provide revenue that can be used to improve service and/or further subsidize fares. If there is a downside to Toll Lanes it is that they can be difficult to implement due to the perception of social justice or other pricing issues (i.e., the impact on lower-income individuals) for those traveling on the affected corridor.

Implementation

The public outreach effort required to implement Toll Lanes is extensive. Particularly in areas without toll roads, there is a substantial need for research and public education on several issues: the existence of electronic tolling, the attractiveness of a tolled facility, the potential for traffic spillover impacts, social equity issues, the various forms of government oversight, etc. There are also logistical challenges if the proposal is to convert existing lanes to Toll Lanes. As a result, Toll Lane projects often require several years to research and conduct public outreach and education. Additionally, Toll Lanes typically require cooperation between a number of agencies at different levels of government.

Period of Implementation: 5+ years

Conclusion/Recommendations

Toll Lanes can be an effective revenue source to finance transportation improvements along a corridor, or within a region. Toll Lane implementation requires a Medium- to Long-Term effort to implement, and may provide significant revenues over a long period provided that tolling authorities are able to establish and maintain policies that protect the value of the facility by limiting its use to free-flow or nearly free-flow conditions.

## Vehicle Registration Fee

### Introduction

State funding sources generally include motor fuel taxes, special fuel taxes, vehicle registration fees, and driver's license fees. State funding for transit projects is available through the State Transportation Improvement Program and more recently through the state Proposition 1A (Constitutional protections for transportation funding) and 1B (Transportation Bond) approved by the voters in 2006. Vehicle Registration Fee (VRF) money also is available as a potential funding source. Vehicle Code Section 9250 describes vehicle registration fees authorized for collection. Examples of vehicle registration fees used for transportation projects and programs that are currently authorized include:

- AB2766 Fees: Health and Safety Code 44223 (also known as AB 2766-Sher from the 1990 State Legislative Session) and Section 44225 allows an Air Pollution Control District (APCD) to collect a motor vehicle registration fee surcharge of up to \$6, of which 40 percent of \$4 is diverted to implement projects that reduce mobile source emissions. Any increase beyond the \$6 cap would require new state legislation.
- SAFE Fees: Section 2555 of the Streets and Highways Code (Vehicle Code Section 9250.7) authorizes a service authority for freeway emergencies (SAFE) established under Government Code Section 22710 to impose a service fee of one dollar (\$1) on vehicles registered to an owner with an address in the county that established the service authority.
- SB83 Fees: Section 65089.20 of the Government Code (Vehicle Code 9250.4f), as enacted as part of SB 83 (Hancock, 2009), authorizes a countywide transportation planning agency to collect up to \$10 for transportation projects, if approved by voters in that county.

### Yield Potential

The yield potential of fees currently authorized is low since each dollar from the VRF represents \$29.6 million dollars annually within the state (based on total fee paid vehicles as of June 2011 registered in California). However, an additional \$50 or \$100 VRF (for example) would contribute roughly \$1.5 billion and \$3 billion, respectively, to transportation related projects or \$15-30 billion over 10 years.

### Use/Restrictions

VRF fee increases are a reasonable revenue source since the fee is paid by road system users directly tied to transportation projects.

Application      The VRF can be applied at either a State or Local level.

### Sustainability

Source is sustainable over time since funds are not "one-time" funds, would be assessed annually, and increases as the number of vehicles increase. Cost to implement, with the exception of a measure that requires voter approval, would be minimal since an existing VRF structure is already in place.

### Pros/Cons

Fee directly relates to transportation since it is a fee on vehicle use and revenues would increase with increases in number of vehicles registered. However, fees are not tied to inflation so the impact could lessen over time. Fee is not consumption based (on a per mile basis) or based on impact to the transportation system, for example, so the impact may not be equitably shared amongst drivers.

Implementation

The implementation requirements are low and short-term for counties with VRFs under existing minimums that do not require voter approval. Longer-term implementation would be required for updated state legislation to raise the fees. Additionally, with Proposition 26 (2010) the authority of agencies to implement fees without 2/3 voter approval is questionable.

Period for Implementation: Less than 2 years for existing VRFs and 5+ years for new VRFs

Conclusion/Recommendation

Vehicle registration fees are a reasonable revenue mechanism for funding certain transportation projects and programs. During the 2012 Legislative Session, the State Legislature approved SB 1455 extending the authority to collect certain vehicle registration fees through 2023.

SB83 fees are currently restricted to countywide transportation planning agencies that are also designated as Congestion Management Agencies (CMA). Recommend legislation be amended to give authority to both CMAs and all single-county Regional Transportation Planning Agencies. Recommend increasing the maximum fee to more closely reflect the cost to operate and maintain the transportation system – e.g. \$50-\$100 per vehicle. Clarification is required to determine whether increasing the fee requires a simple majority voter approval, as stated in statute, and is exempt from the Proposition 26 2/3 voter threshold requirement.

Recommend APCDs increase existing rates to at least \$6 where there is a nexus between air pollution reduction and transportation projects. Update state legislation to increase the allowable fee and extend the time of collection beyond 2023, possibly as part of implementation of AB32 to specifically address GHG impacts of transportation projects.

SAFE Fee: Especially for smaller regions, the existing \$1 per vehicle fee is insufficient to fully cover the cost of motorist aid services. Authorize SAFEs to increase fees to up to \$2 and update eligible uses of funds, as was proposed in SB 1418 (Wiggins, proposed 2010; became inactive in the Assembly).

## Transportation System User Fee

### Introduction

Californians pay a Vehicle License Fee (VLF) with their annual vehicle registration in lieu of a tax on vehicles as personal property. The VLF formula is based on a percentage of the vehicle purchase price or the market value of the vehicle when acquired. The VLF decreases with each registration renewal for the first 11 years of the vehicle's life. Currently, the VLF is applied at 0.65 percent of the vehicle purchase price or market value. Historically, the fee has varied in range from 0.65 to 2 percent.

The current VLF revenues are applied to non-transportation related programs including public safety, public health, social services, fire protection, public works, and cultural activities. A proposal for a new 1 percent user fee with revenues dedicated solely to transportation programs, including, but not limited to, local streets and roads maintenance and rehabilitation, statewide transportation infrastructure, and transit programs, could be developed as follows:

- Create a new user fee, independent of the current VLF but administered in the same manner, which consists of a percentage fee on registered vehicles in the amount of 1 percent dedicated solely to transportation programs. The new user fee would be capped at an appropriate level. A two-thirds vote of each house of the legislature would be required to put a measure on the ballot for a tax increase, followed by approval of a majority of statewide voters. Alternatively, an initiative could be generated by petition signatories, followed by approval of a majority of statewide voters.

Should the decision be to implement a dedicated 1 percent for transportation programs, the fee could also be administered by *restructuring* the current VLF. This option would maintain the current 0.65 percent allocated for general funding purposes and would add an additional 1 percent for transportation programs placing the new rate at 1.65 percent not exceeding the historical amount of 2 percent. This option would require a constitutional amendment to change the existing VLF which would require a two-thirds vote of each house of the legislature followed by approval of a majority of statewide voters.

### Background

Prior to 1935, many city and county governments levied personal property taxes on motor vehicles and collected these taxes as part of the county property system. In 1935, the Legislature sought greater efficiency and uniformity and preempted locally levied property taxes on vehicles. In the 1970s, the state collected and allocated VLF funds to cities and counties without restriction on use. In the early 1980s, the Legislature included in its budget solutions the temporary shifting of hundreds of millions of dollars of VLF from cities and counties. In 1986, the voters passed Proposition 47, which required VLF revenues to be allocated to cities and counties only. But the Legislature retained the authority to alter the tax rate, the assessment schedule, and the allocation of revenues among cities and counties.

From 1948 to 2004, the VLF tax rate was 2 percent. In 1998, a bill was passed that reduced the tax from two percent to 1.5 percent. In 1999, the law was amended to further accelerate the tax reduction. From 1998 to 2004, when the VLF rate was less than 2 percent, in order to keep the Legislature whole, the state "offset" the reduction in VLF to cities and counties by contributing General Fund revenues equal to the amount of the reduction.

As part of the 2004 budget agreement, the Legislature repealed the "offset" system and reduced the VLF maximum tax rate to its current rate of 0.65 percent. The offset revenue known as the backfill to

cities and counties was replaced with additional property tax revenues. The new property tax amounts grow annually with the change in assessed valuation in each jurisdiction.

In 2004, voters approved Proposition 1A, which prevents the Legislature from reducing the additional property tax received by cities and counties in lieu of VLF. Proposition 1A also prevents the Legislature from reducing the VLF below 0.65 percent without providing a compensating amount of revenues.

In 2010, the voters passed Proposition 22, which, among other things, prohibits the state from changing property tax or VLF allocations to reimburse a local government when the Legislature or any state agency mandates a new program or higher level of service on that local government.

#### Yield Potential

According to the Department of Motor Vehicles, in 2011 California had more than 30 million fee-paid registered vehicles. Using the Department of Finance's calculation as \$10,000 as the average value of a vehicle, under the current VLF rate, the fee generates an average of \$1.95 billion dollars per year. If a new VLF was introduced at 1 percent, it would yield an additional \$3 billion annually in revenue for transportation-related expenditures (road and highway maintenance and transit).

#### Use/Restrictions

A new transportation system user fee (TSUF) is a reasonable source of revenue since there is a nexus between the fee paid and road system users. Currently TSUFs are not allocated for transportation system improvements or maintenance.

#### Application:

State/Local applications. The creation of a new TSUF of 1 percent would have to make its way through the Legislature but could be drafted to dedicate funds to transportation purposes and could include protections to guarantee that the funding collected is used for its intended purpose.

#### Sustainability

VLF and TSUF funds are sustainable over time and not considered "one-time" funds. However, the VLF and TSUF decreases in relationship to the depreciation of the vehicle over time, although, in the aggregate, revenues tend to increase as new car sales and increasing vehicle prices raise the per vehicle average in revenues collected. The cost to implement, with exception of a constitutional amendment that would require state approval, would be minimal since an existing VLF structure is already in place.

Period of Implementation: Less than 2 years

#### Pros/Cons

A new TSUF would dedicate about \$3 billion in new revenues for transportation programs and would require minimal implementation measures since the fee is modeled after the existing VLF program. However, a new user fee would require a majority statewide voter approval. Furthermore, a proposed new fee could present a potential conflict between the future eligible uses such as city/county needs versus against future transportation needs.

A restructured VLF, much like a newly proposed user fee, also would contribute nearly \$3 billion in new revenues solely dedicated to transportation programs and would require minimal implementation efforts to implement a 1 percent dedication in addition to the current 0.65 percent, as the VLF is an existing measure. A constitutional amendment would be required to set aside revenues for

transportation related programs, which requires two-thirds legislative approval and majority voter approval. Additionally, barriers to amend the current VLF include hesitation by the original VLF authors/sponsors to accept changes to the original intent of the measure.

Recommendation

It is recommended that a new 1 percent user fee for transportation related improvements/developments be pursued.

## Vehicle Miles Traveled Fee – Regular and Heavy Duty

### Introduction

Vehicle Miles Traveled (VMT) refers to the number of miles vehicles traveled over a given time period, and is routinely used to measure traffic and to calculate traffic statistics. A VMT mileage-based fee could be used to replace the traditional fuel-based excise tax (gas tax), i.e. Revenue would be derived from miles driven instead of fuel consumption.

The Statewide Transportation Needs Assessment spotlights a transportation funding shortfall of nearly \$300 billion over the next ten years. A VMT fee could be a more reliable option for funding transportation projects instead of the current method of using excise taxes. The primary reason behind this assumption is that excise tax revenue is based on consumption, and consumption is expected to continue to decline as vehicles become more fuel-efficient and consumers turn to alternative fuel vehicles. A VMT fee would not be affected by either of these trends.

California and other states have generated VMT fee proposals which involve the use of a Global Positioning System (GPS), or a similar device, to log driver miles, when they drive, and where they drive. In addition, depending upon the technology used, fees could vary by the time of day, location, or type of vehicle. Congestion pricing could be implemented to help modify driver behavior thereby reducing traffic and providing air quality benefits. Reports from pilot projects showed a reduction in miles driven during peak hours and an overall reduction in miles traveled when these measures were in place.

### Yield Potential

The yield potential for this proposal would be high. Excise taxes on gasoline and diesel amount to roughly \$3.5 billion annually, with two-thirds diverting to the State Highway Account (SHA) and the remainder directed to cities and counties for streets and roads. It is assumed that the disbursement of revenue would be similar with the VMT fees. Current discussions regarding VMT fees suggest setting initial fee rates at a “revenue-neutral” level, or an equivalent replacement of current fuel taxes. Depending upon the technology used, fees could vary by the time of day, location, or type of vehicle thereby affecting the amount of revenue collected. Based on current increases in population and VMT, revenues would escalate as well.

Projected revenues for this proposal are difficult to predict at this time; however, recent studies have reported the potential to generate significant revenue. “Well Within Reach: America’s New Transportation Agenda”, a 2010 University of Virginia report, indicates that a fee of one cent per mile would equal revenue generated by fuel taxes, and a two-cent per mile fee would yield enough revenue to support long term transportation investments at the appropriate level.

### Use/Restrictions

The revenue generated by this proposal could be used to fund system preservation, system management and system expansion. As mentioned above, a VMT fee would be a more stable source of revenue for transportation purposes versus the more volatile excise tax which is tied to consumption.

### Application

This proposal could be an option at the State or Federal level.

Sustainability

Because the VMT fee would be mileage based, it is a more sustainable revenue source over time versus the traditional fuel-based tax. This is due in large part to fuel-based taxes being driven by consumption. As vehicles become more fuel efficient, and alternative fuels (which are not subject to current fuel taxes) become more widely used, consumption will continue to decline thereby decreasing the amount of fuel tax revenue collected.

Although VMT fees are a practical option for revenue generation, the cost to implement the system may be significant depending on the technology used. In addition to capital costs for equipment, annual operating costs for metering, payment collection, and the cost of enforcement must be considered. At the state level, the Oregon Department of Transportation estimated capital costs of approximately \$33 million for deployment in their state. For a national system, the cost is estimated at \$10 billion. Costs would vary based on the type of technology and the scope and scale of the system.

<u>Pros</u>	<u>Cons</u>
<ul style="list-style-type: none"> <li>• Potential to more accurately match revenues to expenses on a scale of system wear and tear by basing fees on weight as well as mileage.</li> <li>• Addresses the long-term viability of the gas tax, since current revenue collection methods do not account for alternative fuels or improvement in fuel efficiency.</li> <li>• Revenue not likely to decline as cars become more fuel-efficient.</li> <li>• Potential to generate congestion and environmental benefits through pricing strategies.</li> </ul>	<ul style="list-style-type: none"> <li>• Reduces the incentive for drivers to purchase fuel-efficient vehicles.</li> <li>• Tracking devices may escalate concerns over privacy.</li> <li>• Implementation costs and challenges.</li> <li>• Cost of installation of GPS devices and fueling station equipment.</li> <li>• Cost of enforcement (e.g., tampering with equipment).</li> <li>• Potential opposition from interest groups.</li> </ul>

Implementation

The effort to implement this option would be mixed. It would be revenue neutral at first, but could rise with increases in vehicle miles traveled, and certainly would not have the negative impact of gas tax revenues as the state moves to more fuel efficiency or alternative fuels. Fee collection would most likely involve using specially equipped gasoline fueling stations to read an automobile’s mileage count, which would charge drivers a fee for each mile driven since their last fueling. Phasing would occur over time, where non-equipped vehicles continued to pay the gasoline tax, while equipped vehicles would pay the VMT fee. As an interim step, fees could be implemented based on self-reporting of miles on an annual basis along with vehicle registration. A related method for implementation may include a pay as you drive mechanism whereby insurance products are used to track miles driven and provide the basis for fee collection.

Full implementation would be long term, and would require- at the state level- legislation in order to assess the fee or tax. Costs would vary based on the type of technology and the scope and scale of the system. Cost would include capital costs for equipment. Annual operating costs for metering, payment collection, and the cost of enforcement must also be considered. Data to show the cost of implementing a VMT fee system is sparse and inconclusive.

Period for Implementation: 5+ years

### Conclusion/Recommendation

While studies on VMT fees have been conducted in several states, to date, no state has developed a comprehensive system. There are questions regarding the implementation, as well as what technology to use. Privacy concerns have been raised by opponents concerned that movements would be tracked and stored. In addition, there are questions regarding the cost effectiveness and efficiencies of such a system. Despite these concerns, there is a general consensus that a VMT system should be viewed as the leading alternative to funding highways. A VMT fee would provide a more stable revenue stream than traditional fuel taxes because a VMT system is not based on consumption or fuel prices, which are both volatile in nature, and would not be impacted by more fuel-efficient vehicles or alternative fuels. In addition, a VMT system is viewed as a more equitable option, as it is based on a driver's actual mileage, regardless of vehicle type or fuel type used.

The next step would be to explore the possibility of converting to a VMT system for revenue generation. This would include determining the following: amount of the fee; whether or not the VMT system would enhance or replace the existing revenue streams; where the fee would apply (i.e. what roads, highways or areas); and what technology would be used.<sup>1</sup>

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#### <sup>1</sup> Reference Materials

Congressional Budget office:

<http://www.cbo.gov/sites/default/files/cbofiles/ftpdocs/121xx/doc12101/03-23-highwayfunding.pdf>

Mineta Transportation Institute:

[http://transweb.sjsu.edu/PDFs/research/2909\\_10-04.pdf](http://transweb.sjsu.edu/PDFs/research/2909_10-04.pdf)

State of Connecticut General Assembly:

<http://www.cga.ct.gov/2012/rpt/2012-R-0029.htm>

National Surface Transportation Infrastructure Financing Commission:

[http://financecommission.dot.gov/Documents/NSTIF\\_Commission\\_Final\\_Report\\_Exec\\_Summary\\_Feb09.pdf](http://financecommission.dot.gov/Documents/NSTIF_Commission_Final_Report_Exec_Summary_Feb09.pdf)

## Change in Voter Threshold for Transportation Special Taxes

### Introduction

Local transportation measures can take several forms--most commonly a half-cent sales tax increase, but also vehicle license fee or property tax increases are allowed under current law. Over the last 25 years, voters in 20 different California counties have approved local transportation sales taxes to pay for transportation projects. In 2012, 19 counties are currently so-called "self-help" counties that have voted to increase their countywide sales taxes by ¼ percent to 1½ percent to fund a program of transportation improvements. Additionally, five Bay Area counties have successfully passed ballot measures to increase vehicle registration fees by \$10 for transportation purposes. The uses of these revenues include: highway and road capacity and maintenance improvements; capital construction/system expansion; system management and maintenance; public transportation capital and operations; and bicycle and pedestrian infrastructure.

Since 1990, court rulings requiring two-thirds voter approval of special tax measures have made it extremely difficult for counties without an existing program to enact such measures. Most of the counties that have placed measures on the ballot but have not achieved a two-thirds vote are the smaller, urbanizing or rural counties that do not have as high a level of traffic but still have substantial transportation needs.

A constitutional amendment is required to change the voter threshold for special transportation taxes. Over the years, several proposals have been considered by the Legislature, the most recent being Assembly Constitutional Amendment 23 (Perea), but none have reached the ballot. ACA 23 would amend the State Constitution to lower the constitutional vote requirement from two-thirds to 55 percent for approval of a special tax that will provide funding for local transportation projects. A similar 55 percent voter threshold exists for school bonds.

### Yield Potential

The indirect yield potential for this policy change is medium to high, up to \$570 million annually, depending on which counties enact local transportation special taxes and at what level.

While the change in the threshold would not directly generate more revenues, it would substantially increase the likelihood of adding new self-help counties in California. According to the Self-Help Counties Coalition's website, existing transportation sales taxes as of 2007/08 generated more than \$4.5 billion per year in revenues. According to 2009-10 estimates by 17 of the "aspiring counties" actively seeking a new transportation measure, a one-half cent sales tax across all of these counties would generate \$314.6 million annually.

Existing vehicle registration fees for transportation projects (in Alameda, Marin, San Francisco, San Mateo, Santa Clara counties) generate approximately \$39 million per year. As noted above, these measures were approved by a majority vote before the voter threshold was raised. If all counties had an additional \$10/vehicle fee for transportation projects, it would raise approximately \$296 million per year (based on 75 percent collection on 39.25 million registered, fee-paying vehicles), or a net addition of \$257 million per year in new transportation revenues.

### Use/Restrictions

Projected revenues by mode and purpose will depend largely on the expenditure plans developed by each local or regional government and approved by the voters. Typically, the largest share of funding is

dedicated to highway capacity/safety improvements, but local road maintenance also generally receives an important share of funds. In most counties, transit capital and operations and bicycle and pedestrian facilities also receive a share of funding.

Application

By changing the threshold for transportation special taxes (including sales taxes and vehicle license fees), this measure will potentially facilitate new revenues in counties without transportation special taxes, as well as in counties seeking to add additional locally-generated transportation revenues.

Sustainability

The level of sustainability of such measures will vary by county. In many counties, in order to achieve voter approval, a sunset date for measures is included. Typically, these measures expire after 30 years. However, most counties with an approved transportation sales tax have been able to renew their measures. For that reason, local transportation measures have the potential to be highly-sustainable. As California moves closer toward a service-based economy, taxes from durable goods may diminish; however, over time services may also be subject to sales taxes. Vehicle registration fees may offer less volatility, although they do not raise as much money.

<u>Pros</u>	<u>Cons</u>
<ul style="list-style-type: none"> <li>• Funds are targeted to transportation and cannot be shifted to general funds</li> <li>• Substantial revenues are generated for a variety of transportation improvements</li> <li>• Revenue measures usually exist for two to three decades, providing a long-term source</li> <li>• Generally, sales taxes grow over time; less so with vehicle registration fees</li> <li>• Areas with existing measures could add to them, so virtually all regions can benefit</li> <li>• Stable funding also allows the opportunity to secure bond financing to advance projects.</li> <li>• Changing the threshold reduces the opportunity for a small minority of voters to control transportation investment decisions that are supported by a large majority of voters.</li> </ul>	<ul style="list-style-type: none"> <li>• Approval by the legislature and a statewide vote is required to change the threshold</li> <li>• The measure is considered by some to be a “new tax” and therefore can be politically unpopular</li> <li>• Counties must still have their own election to enact the new revenue measure</li> <li>• Most taxpayer associations do not support the change</li> <li>• Sales taxes can be considered a regressive tax; however, basic expenses are exempt</li> </ul>

Implementation

The difficulty in approving a constitutional amendment to lower the voter threshold for local transportation measures is considered high because of its necessity to have a two-thirds approval within the state Legislature and then approval by a majority of voters. The difficulty for an individual jurisdiction to approve a special transportation tax even with the 55 percent threshold depends on the local culture and circumstances, ranging from low to high. The proposal does enjoy widespread support, however; more than 35 organizations have registered their support for ACA 23 to reduce the voter threshold for transportation measures.

Period for Implementation: Less than 2 years

Conclusion/Recommendation

Given its potential to raise a substantial amount of revenues over a long-term in many regions of California, it is recommended that reduction of the voter threshold for transportation special taxes be a top priority for statewide adoption by the Legislature, the voters and countywide agencies.<sup>1</sup>

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<sup>1</sup> Reference Materials

<http://www.uctc.net/papers/737.pdf>  
<http://www.metro.net/projects/measurer/>

California Department of Motor Vehicles, Estimated Vehicles Registered by County, 2011.  
[http://www.dmv.ca.gov/about/profile/est\\_fees\\_pd\\_by\\_county.pdf](http://www.dmv.ca.gov/about/profile/est_fees_pd_by_county.pdf)

Self Help Counties Coalition, Transportation Sales Tax revenues  
<http://selfhelpcounties.org/pdf/TransportationSalesTaxInfo.pdf>

## Benefit Assessment Districts

### Introduction

Benefit assessment districts allow a public agency to construct and maintain improvements, such as traffic signals, parks, and others community amenities. Project costs are assessed within the boundaries of the designated benefit area of the county or city.

Benefit assessment districts have several advantages: they tie financing of specific projects to beneficiaries; they allow different levels of infrastructure and services to vary with different demands for these public goods; and they allow an area that wants better infrastructure the ability to fund desired improvements itself. There are certain disadvantages, however, including potential fragmentation of infrastructure and services varying between those areas that want to pay for the improvements and those that do not. Local jurisdictions have the authority to create benefit assessment districts. A nexus study and local agency approval would be required and would require a new program structure to administer.

### Yield Potential

The yield potential is small and revenue assumptions are unknown.

### Use/Restrictions

Only known restrictions are that benefit assessment districts would require a nexus study and local agency approval. Proposed uses could vary depending on need. Use for system preservation, system management or system expansion is unknown but it is unlikely that such assessments would be used for large projects. There is a greater potential that assessments would be used to fund small transit projects or bike/pedestrian infrastructure projects.

### Application

Benefit assessment districts are created by Local Governments.

### Sustainability

Annual administrative costs would be minimal. The assessments are typically generated for specific purposes and are not sustainable long term. However, these districts may be appropriate in order to develop individual project where other funding sources are limited or unavailable.

### Pros/Cons

A nexus would be required and any kind of flat district fees would not be tied to inflation so effectiveness would decrease over time. Could prove for easy implementation in obtaining funds for small projects with no other identified funding source.

### Implementation

Short term since no supermajority is required and low to medium implementation requirements. Local jurisdictions have the authority to implement an assessment district but a nexus study would be needed.

Period for Implementation: Less than 2 years

Conclusion/Recommendation

Local Governments may want to consider creating benefit assessment district(s) particularly since implementation requirements are lower than required to implement parcel taxes. However, revenue generation may be minimal since districts would typically be smaller than local jurisdictional size.

## Community Facilities Districts

### Introduction

Community Facilities Districts (CFDs) are allowed under the provisions of California Government Code Section 53311 (known as the “Mello-Roos Community Facilities Act of 1982). Districts formed under this act are more commonly referred to as “Mello-Roos” districts, community facilities districts, or “CFDs.” The act allows public agencies and cities to form a CFD to fund capital infrastructure and services. It is not clear whether statutes would currently allow the use of CFDs to fund transit operations or other transportation expenditures.

### Yield Potential

The mode, purpose, and yield of the tax would depend upon adoption of the CFD.

### Use/Restrictions

It appears that CFD’s would require approval of new state legislation in order to use revenues for transportation purposes, particularly transportation operating dollars.

### Application

Community Facilities Districts are created by Local Governments for capital infrastructure and other service purposes.

### Sustainability

Costs are likely minimal and could include those associated with district approval and annual administrative costs.

### Pros/Cons

A nexus would be desirable but would add to the costs. CFD application to transportation is not currently understood or believed allowed. CFD’s (like Benefit Assessment Districts) may only be appropriate for small projects or bike and pedestrian infrastructure projects (or transit operations if allowed). Any city can establish a CFD under the Mello-Roos Law. However, it appears that statutes do not currently allow the use of CDFs to fund transit or other transportation programs or projects.

### Conclusion/Recommendation

Clarification is required to determine whether statutes allow the use of CFDs to fund transit operations and other transportation expenditures. If necessary to allow CFDs to fund transportation related expenses, generate support at local and regional levels to enact legislative modifications

## Cordon Pricing

### Introduction

Cordon pricing is a system in which vehicles entering a defined geographic area, typically a city center, are assessed a fee during peak travel hours. The fee can vary to best manage traffic flow but is generally set at a flat rate and capped at a specific dollar amount per day. Cordon pricing is primarily intended to speed traffic flow throughout the city, but has several additional benefits. Desired outcomes include decreased automobile congestion and environmental impacts, enhanced transit, bicycle and pedestrian service, and development of a dedicated, locally controlled revenue stream.

The intended mode is primarily auto and truck traffic, though virtually all modes are impacted. This new revenue source falls under system management, but could also be considered system expansion if funding is provided for alternative modes.

Due to the difficulty of expanding roadway capacity and the laws of triple convergence (new roadway capacity is eroded by drivers shifting trips from different times, routes and modes) transportation planners and economists have long argued that congestion pricing is the only way to effectively decrease congestion on roadways. This congestion imposes particularly severe costs in California's urban centers, where it is virtually impossible to manage limited capacity through means other than demand management.

While the primary goal of cordon pricing is to reduce traffic congestion and mitigate its various impacts, co-benefits include providing a revenue source for improvements to alternative modes. This could occur in the form of enhancements to transit service and bike/pedestrian improvements. While this new revenue source is primarily dedicated to system management, it could also be considered system expansion if funding is provided for alternative modes.

### Yield Potential

Potential for revenue generation is high. The San Francisco County Transportation Authority (SFCTA) recently completed a study on the feasibility of a congestion pricing program in San Francisco, finding that it could be a highly effective way to manage the City's transportation system more efficiently and support future growth, while at the same time creating a funding stream for all modes of transport.

According to the SFCTA study, implementation of the Northeast Cordon program (the most desirable of several cordon pricing scenarios outlined in the report) would generate approximately \$60-80 million per year in revenue, which would be reinvested in the transportation system with special emphasis on enhancements to transit service. A breakdown of funding recipients by mode has yet to be developed. Treasure Island will also have a peak hour toll for automobiles entering the Bay Bridge. The SFCTA estimates that between the two programs, up to \$2.5 billion dollars can be generated over the coming 28 years, or approximately \$90 million dollars per year for San Francisco.

### Use/Restrictions

Local governments can decide how cordon pricing programs can be managed. The state should support such pilot efforts and could set restrictions that funds generated be used to support alternative modes of public transit, bicycling and walking in the area in and around the cordon.

Application

Local/regional: Cordon pricing is a form of congestion pricing that would be implemented in the state's urban centers. While various forms of congestion pricing are in the works throughout the state, San Francisco is currently pursuing a cordon pricing study due to the high volume and concentration of trips to and from the central business district during peak periods. San Francisco has conducted a detailed study of cordon-based congestion pricing with the goal of implementing a pilot project in the next five years.

Sustainability

Assuming demand for travel to and from large urban areas remains high and gas prices remain at or near current levels, cordon pricing is likely to be a sustainable funding source. Cordon pricing is best administered through electronic toll collection and entails a variety of operating and administrative costs. These include startup costs (capital and soft costs), periodic renewal and replacement of capital cost elements, performance and accuracy of detection and transaction processing, leased communications and IT maintenance costs, variable expenses and an additional contingency of 25 percent of variable operating expenses, all of which were factored into the SFCTA study. These figures are unlikely to significantly increase over time.

Pros/Cons*Pros:*

It is widely accepted that congestion is a serious problem, and cities must adopt new and innovative solutions to address it. There are various advantages to cordon pricing and many have already been borne by evidence in cities like London and Stockholm. These include decreased congestion on the roadway network and associated cost and time savings; fewer traffic incidents due to less congestion; improvements in air quality and reduction in chronic diseases caused by pollution; improvements in quality of life; economic benefit to merchants within the cordon area; more successful business districts that are more easily accessible by all modes of transport, and dedicated funding sources for transit and bicycle and pedestrian improvements.

*Cons:*

There are a variety of challenges to implementing cordon pricing, and some users may be harmed by the study. In particular, merchants and employers fear being negatively impacted (though in London the opposite has been observed). Cordon charges could also be seen as regressive. Discounts to low-income drivers who, in the case of San Francisco, represent only five percent of motorists during peak trips, are one way to mitigate this impact. Typically the most economically disadvantaged segments of the population are already using public transit and bicycling for example, and so stand to benefit from such a pricing program. Roadway users, who value time a great deal, can also be low-income users who benefit from decreased congestion and easier access to multiple jobs.

Upfront capital costs to plan for and administer the program are also significant. One method of overcoming political or business opposition is through the pilot program approach. Capital and startup costs can be recovered during an initial phase of program evaluation. Often times (as seen in Milan, Stockholm, London, and Singapore), benefits realized from decreased congestion, enhanced modal alternatives and dedicated locally-controlled funding streams outweigh perceived or real detrimental program impacts.

### Implementation

The effort to implement cordon pricing is Medium/High. This is due to the necessity of political support and the logistics of developing and monitoring the system itself.

The SFCTA gives an idea of the challenges involved with implementation:

“The implementation of a congestion pricing program requires the establishment of a lead agency, to carry out various functions including administering and collecting pricing fees; applying for, accepting and administering state, federal, local agency or public grant funds for purposes of implementing the charging system; issuing bonds to finance large capital expenditures such as improved travel options and periodic major investments; enter into contracts, cooperative agreements, and direct funding agreements with private parties and governmental agencies, including City departments and regional agencies, in order to implement the charging program and deliver the associated mobility improvements; and monitor performance and re-set the fee level, as well as modify contractual relationships and investment program as necessary and appropriate over time to achieve program objectives.”

Period for Implementation: 2 years to 5 years

### Conclusion/Recommendation

In light of its potential benefits including congestion relief and revenue generation, cordon pricing has the potential to be a major contributor to California’s congestion, environmental and funding problems. San Francisco, San Diego, Sacramento, San Jose, and Los Angeles could be candidates for implementing some kind of cordon or peak hour roadway pricing scheme. Cordon pricing and other demand-based management strategies are widely seen as the only solution to effectively manage congestion. Cordon pricing can have a host of benefits aside from congestion reduction. Most importantly for this study, it can be a significant revenue generator that can be dedicated to the transportation system as a whole.

Support of these locally sponsored cordon pricing proposals at the State and Federal levels is essential to ensure that projects can be effectively and appropriately implemented without institutional or legislative barriers.<sup>1</sup>

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<sup>1</sup> Reference Materials

SF County Transportation Authority: MAP Study.  
<http://www.sfcta.org/content/view/302/148>

## Developer Impact Mitigation Fees

### Introduction

Developer impact fees, both regional and local, are assessed on new development to pay for transportation infrastructure needs, as governed by AB1600 (1987). Fees are required by city, county, and regional jurisdictions to defray all or a portion of the public financial burden of providing new transportation infrastructure improvements to mitigate impacts and support increased demand as a result of new development.

Jurisdictions must establish fees which have a rational nexus with the impact for which they are meant to mitigate. Jurisdictions fee structure and allocation is generally applied to local, state, and federal roadway and highway expansion and/or creation projects. The fees do not support mitigation of existing deficiencies and a reasonable relationship between the imposed fee and the actual increased demand on the transportation system due to development must be established.

### Yield Potential

Potential for revenue generation depends on the regional and local development demand; in some areas this may be low, others medium. Fortunately, fee revenue potential has been strongest during boom periods when it is most needed.

One challenge in establishing the yield potential of impact fees is due to the varied road impact fee structure among jurisdictions ranging from \$1,100 to over \$26,000 per unit in California. This, combined with declining development demand, has pushed jurisdictions to reevaluate their fee structure and related capital improvement plans to more accurately understand the potential of impact fee revenue. Based on the National Impact Fee Survey completed in 2011 the average *local road* impact fee assessed in California was \$6,486.

Based on projections from the Department of Housing and Community Development, there is demand for an average of 123,142 housing units statewide through 2019-2022. Experience tells us that supply generally lags behind projections, so let's estimate 100,000 units are developed annually. At \$1000 per unit, an impact fee program implemented statewide would generate an average of just over \$100 million per year, or \$1 billion over 10 years. At \$2500 per unit, the fees would generate an average of \$250 million annually, or \$2.5 billion in 10 years.

### Use/Restrictions

Local developer impact fees have been around for many years, but regional, or multi-jurisdictional, programs are a somewhat more recent occurrence. Regional programs are customized in how the covered area is defined – some programs include all the cities and the county, others are sub-areas of a county, still others are multi-county.

Both regional and local development impact fees are required by local jurisdictions to defray all or some of the infrastructure cost directly related to new development impact. Under AB 1600, there must be a demonstrated nexus between the new development and the transportation need, usually done via a traffic model. Fees are generally assessed on a per Development Unit Equivalent (DUE) basis to fund a specific list of projects and dollar amounts.

Uses for the fees are somewhat limited by the AB 1600 requirement to connect the new development with the improvement. Highways, interchanges, and local road expansion are generally the use of these fees. Other projects that may meet nexus requirements are multi-modal facilities, bicycle and pedestrian facilities, and park and ride lots. Existing deficiencies are specifically prohibited from this funding. It is possible, though unlikely, that some very limited transit, system preservation, or management projects may meet the nexus standard. Ultimately the jurisdiction must effectively administer fee revenue in a manner which clearly establishes the connection between the development and fee imposed to mitigate development impacts.

#### Application

Developer impact fees are implemented by local and/or regional governments.

#### Sustainability

Development impact fee sustainability is at the mercy of the housing and growth market trends. The recent economic downturn has proven historic high fee revenue levels are not sustainable. However, because fee revenue and development fluctuate in parallel, fee revenue generally increases with development ensuring support for infrastructure expansion when it is most needed and most cost effective.

One challenge of fee program sustainability is cash flow. Because development rates can vary wildly over time, it is difficult to predict receipts and very costly to bond against future impact fee proceeds. As a result, most projects funded by these programs are done once sufficient monies are on hand, which can be many years after the improvement is needed to support the new development that paid for it. The bigger issue, however, is the balance of impact fees versus larger issues such as housing affordability. Schools, water, safety, courts, and parks are amongst those entities looking to impose developer impact fees to provide funding for those needs. At some point, the total of all the fees can push the price of the home or building past what the market will bear.

Administration of development impact fee programs varies greatly across local jurisdictions. Collection of fees is generally straight forward and performed by local jurisdictions having land use authority. On average 1%-3% of fee revenue is used to support impact fee administration costs. The more effectively a jurisdiction is in establishing accurate forecasts and maintaining up to date traffic model data the more efficient the program will be. Jurisdictions having consistent and accurate factors to be applied to the rational nexus determination will limit potential challenges and litigation.

#### Pros of Development Impact Fees

- Impact fees ensure new development pays a fair share of the cost of public infrastructure.
- Impact fees are generally accepted by jurisdictions and constituents as a fair and balanced means of offsetting public cost related to impacts of new development.
- Impact fees based upon sound comprehensive and capital improvement plans have proven to be successful tools ensuring growth does not negatively impact existing infrastructure and that jurisdictions are able to accommodate growth effectively.
- Impact fees offset new infrastructure costs related to development allowing a greater proportion of general revenue funding to be used for maintenance and repair of existing infrastructure.
- Fee programs have flexibility to be established through local elections or through local legislative action, providing jurisdictions the flexibility to designate projects, revenue levels, and administrative approaches that best meet their communities' needs.

- When incorporated into local jurisdiction capital improvement, comprehensive, and transportation planning efforts fee revenue can be used as a tool to leverage state and federal funding mechanisms to further project delivery.

#### Cons of Development Impact Fees

- Fee revenue is tied to the housing/development market which is highly volatile and poses challenges to planning and forecasting.
- High impact fees are generally passed on to homebuyers and reflected in high home prices and affordability.
- California impact fees are the highest in the country and vary greatly within the state creating jurisdictions which have a greater or lesser development interest and the potential for disproportionate growth.
- Fees cannot be used to alleviate pre-existing deficiencies.

#### Neutral Issue

- Requires regional cooperation and consensus on project list and funding level.

#### Implementation

The average effort and related cost necessary to administer an impact fee program ranges from medium to high based on jurisdiction size, development pressures, and political environments. The South Placer Regional Transportation Authority's (SPRTA) Regional Transportation and Air Quality Mitigation Fee program was put together at an inflation-adjusted cost of approximate cost of \$120,000. With strong motivation and broad consensus, the implementation can be done within two years. A nexus study, with traffic modeling is required for both local and regional fee programs. Additionally, for regional fee programs an implementing entity, usually a Joint Powers Authority (JPA) of local jurisdictions, must be formed to impose and administer the funding.

The period necessary to implement should allow for significant planning and preparation. First the jurisdiction should rely on general planning efforts to identify where, if, and when development should occur. Jurisdiction must outline how fees will be collected, accounted for, and effectively administered well in advance of beginning a fee program. Use General and comprehensive plans to determine the level of service the community will accommodate while maintaining the desired quality of life and community character. Establish early and often communication with all parties including elected officials, residents, developers, and others that fee revenue will only support impacts from new development. Establish fee schedules which will support impact mitigation but will not deter development or impose fees which are unduly correlated with the expected infrastructure needs.

Period for Implementation: Less than 2 years

#### Policies and Recommendations

- Establish state enabling legislation which would identify consistent fee program standards which can be applied across all jurisdictions while allowing local jurisdictions to establish policies necessary to effectively administer fee revenue in a manner which is appropriate for a given jurisdictions desired future.
- Identify potential benefits accrued to the developer and public as a result of fee payment.

#### Conclusion

Local development impact fees have been and continue to provide an effective means of offsetting impact to public infrastructure as a result of new development. Fee revenue assists local jurisdictions in funding transportation projects and furthers economic development. While fee revenue remains volatile, it continues to provide support during those times when it is most needed during peaks in development activity. When tied to up-to-date comprehensive capital improvement plans, fee programs can serve as a fundamental funding mechanism for local jurisdictions.<sup>1</sup>

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<sup>1</sup> Reference Materials

1. Most California jurisdictions (Counties and Cities) currently administer some form of development impact fee program.
2. Documentation
  - a. American Planning Association. Policy Guide on Impact Fees. Board of Directors: APA, 1997.
  - b. State of California Business Transportation and Housing Agency. Pay to Play Residential Development Fees in California Cities and Counties. Department of Housing and Community Development: Division of Policy Development, 2001.
  - c. League of California Cities. A Short Overview of Development Impact Fees. Peter N. Brown City Attorney, Graham Lyons Deputy City Attorney: City of Carpinteria, 2003.
  - d. Duncan Associates. National Impact Fee Survey: 2011. Clancy Mullen, 2011.
  - e. El Dorado County. 2012 Capital Improvement Plan. El Dorado County Department of Transportation, 2012.
  - f. California Housing and Community Development. California Housing Production Needs 1997-2020. 2012
3. Existing Regional Fee Programs
  - a. Riverside County Transportation Uniform Mitigation Fee (TUMF)
  - b. South Placer Regional Transportation Authority (SPRTA) Regional Air Quality and Mitigation Fee Program

## Parking: Demand-Based Pricing

*Revenue options include using a demand-based pricing scheme for on-street metered and publically owned garage spaces. It also includes amending the state vehicle code (22507.2.) to allow residential parking permit revenue to be used for transportation improvements in preferential parking districts.*

### Introduction

*Demand-based pricing:* Demand-based pricing is currently being evaluated as part of a pilot project in San Francisco known as *SFPark*. This is the one of the first efforts worldwide to adopt parking reforms as a key part of congestion management. This strategy is also primarily used for system management, though funds can be used for expansion of other modes (i.e. transit) as well.

*Residential Parking:* Currently, cities with preferential parking districts (PPD) can only charge for cost recovery and cannot use revenue to fund other transportation improvements. There is strong evidence that fees in these districts are far below their market rate in many cities and that if residents paid market rates that local revenues could be significantly increased and vehicle ownership could drop. A more carefully planned fee structure could not only better manage demand, but also be used to fund other transportation improvements within those neighborhoods. Carsharing also becomes an alternative for many people willing to give up an automobile.

Parking revenue would be used primarily for system management of the roadway network and parking supply. It could also be used for system preservation and expansion of other modes such as transit, walking and bicycling.

### Yield Potential

*Demand-based pricing:* In San Francisco, revenue from the *SFPark* project is returned to the SFMTA to support transit services. While the total potential for direct revenue generation is medium, co-benefits can be significant. Co-benefits come in the form of reduced time cruising for parking, reduced emissions and traffic congestion, and greater economic vitality in pilot areas. The benefits in increasing parking accessibility, decreasing cruising and creating environmental benefits are high.

Given that *SFPark* is a pilot project, it is difficult to estimate project net annual revenues over the next 10 years. These estimates will become more apparent as the project is fully implemented over the next few years.

*Residential parking:* Yield potential could be classified as Low/Medium. For example, currently San Francisco issues approximately 80,000 residential parking permits annually at a cost of \$100 each (each household is allowed up to four permits.) A new permit system could be designed as a tiered system where the first permit is kept at relatively low cost, but additional permits escalate in price to achieve optimal parking availability. Revenue could potentially triple to \$240,000 a year. Exact revenue projections are difficult to determine but would be designed to minimize burden on residents while maximizing parking supply. All revenue would be dedicated to transportation enhancements within the PPD.

### Use/Restrictions

*Demand-based pricing:* The *SFPark* program is designed to make it easier for drivers to park by utilizing real-time demand-based data. Parking rates are calculated based on demand and adjusted over a

defined period of time (no more than once per 30 days) to ensure that there are always one or two spaces available per city block.

By making it easier for drivers to park quickly, demand-based pricing cuts down on needless cruising for parking, which has been estimated as high as 50% of total auto traffic in some US cities at certain times. This has important spillover effects for the transportation network as a whole: fewer double parked vehicles mean that transit moves more efficiently; less hazards are present for bicyclists; etc. Funding for duplication of the *SFPark* program to other cities in California could extend these revenue generation, economic and environmental benefits around the state.

*Residential Parking:* Currently, cities with PPDs can only charge for cost recovery and cannot use revenue to fund other transportation improvements. There is strong evidence to believe that these fees are far below their market rate. A more carefully planned fee structure could not only better manage current demand, but also be used to fund transportation improvements within the PPD. This could include improvements to bike lanes, transit shelters, transit service, etc.

The California Vehicle Code (CVC) Section 22507.2 requires amendment to support this change. Currently the section reads: “The local authority may charge a nonrefundable fee to defray the costs of issuing and administering the permits.” This could be amended to read: “The local authority may charge a nonrefundable fee to defray the costs of issuing and administering the permits as well as to manage parking, increase mode shift and generate funds for transportation enhancements within those districts.”

#### Application

State: Currently, cities with PPDs in residential areas can only charge for cost recovery and cannot use revenue to fund other transportation improvements within those districts. This would require a change to California Vehicle Code Section 22507.2. Cities without PPD’s can also consider setting them up as a way to manage parking and generate neighborhood and business district revenue.

Local: Demand-based parking pricing programs modeled after lessons learned from pilot programs (i.e. *SFPark*) to be expanded where potentially most effective, such as in the state’s city centers and urbanized areas where parking may be difficult to find, build or accurately price. For those cities in California with existing metered parking areas, the transition would be toward expanded hours and 85% occupancy goals with demand pricing. For cities with free curbside parking, the transition would be toward charging market rate prices to achieve 85-90% occupancy and generate new local revenue.

#### Sustainability

*Demand-based pricing:* Provided that the cost of driving does not rise astronomically, demand to drive and park in urban areas will remain strong in California. Revenue generation is unlikely to be high from demand-based pricing, but all California cities can stand to grow locally controlled revenue, create turnover and economic benefit and improve co-benefits through congestion management, business district access and a local funding stream.

The upfront cost to running demand-based pricing systems involve the purchase of meters and monitoring equipment, costs of monitoring and administering the program, and communicating the benefits of the program to stakeholders, etc. However, it is likely that many of these costs, particularly those that relate to technology, will diminish over time as new batteries are introduced (extending meter life), knowledge improves and best practices are identified.

*Residential Parking:* While additional parking revenue would fluctuate slightly according to parking demand, residential parking fees would likely be a sustainable revenue source over time. Costs involved with administering the program should not be significantly higher than that of existing residential parking programs. The budget necessary for additional staff time to review program performance periodically would represent an additional cost.

<p><u>Pros:</u></p> <p><i>Demand-based pricing:</i></p> <ul style="list-style-type: none"> <li>• Considered the cutting edge of congestion management</li> <li>• Parking policy can be a key congestion management strategy</li> <li>• An effective way to not only cut down on cruising and its negative environmental impacts, but also can provide a dedicated source of funding for transit enhancements, improving the transportation network as a whole, and residents’ quality of life.</li> </ul> <p><i>Residential parking fees:</i></p> <ul style="list-style-type: none"> <li>• Helps to address some of the common pitfalls of preferential parking zones as currently conceived in many cities in California by better managing limited supply through pricing.</li> <li>• Increases assurance that parking is available for area residents.</li> <li>• Additional funds can be used for transportation enhancements in the designated zone.</li> </ul>	<p><u>Cons:</u></p> <p><i>Demand-based pricing:</i></p> <ul style="list-style-type: none"> <li>• Some residents will be negatively impacted by the additional installation of variable-rate meters under such a program, particularly where meters have been installed in residential areas.</li> <li>• Significant capital cost to start the program, as well as ongoing monitoring and maintenance costs, cost of staff time, etc.</li> <li>• Any program which disrupts the status-quo (free parking at 99% of destinations) will likely be met by opposition.</li> </ul> <p><i>Residential parking fees:</i></p> <ul style="list-style-type: none"> <li>• Some residents may pay higher costs to store their vehicles on the street.</li> <li>• Non-residents may be compelled to pay to park in formerly free areas, especially in cases where finding parking is difficult.</li> <li>• Parking reform will necessitate staff time to administer the project.</li> </ul>
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Implementation

*Demand-based pricing:* Implementation effort could be considered high given the level of technical expertise involved. Any demand-based pricing program must be developed over the long-term. Support to mitigate these costs from the state and ideally the federal government (for pilot projects like SFPark) is essential. These costs must be weighed against potential benefits, which, as described above, are significant.

*Residential parking:* Implementation effort could be classified as low. There are many examples of innovative solutions in preferential parking districts in municipalities throughout California that cities can follow to help identify solutions to best suit their needs. This is a case of the state stepping aside to allow local governments to best decide how to manage programs and resources. Staff time to design and implement a residential parking policy should be taken into account. As mentioned earlier, the state vehicle code must be amended to allow for revenue to be dedicated to transportation enhancements.

Period for Implementation: Less than 2 years for residential parking, and 5+ years for demand-based pricing

Conclusion/Recommendation

*Demand-based pricing:* Demand-based pricing is an excellent idea in theory and its benefits are outlined extensively by the work of Professor Donald Shoup. In practice, *SFPark* has already proven to be an effective method of congestion management for San Francisco. Washington D.C. has also successfully implemented a similar demand-based parking program. Other cities should take note of the program’s successes and failures. In the meantime, the state and federal policy makers should be active partners in supporting demand-based pricing strategies, as these strategies not only present a new revenue source, but also have direct positive impacts on the transportation system as a whole.

*Residential parking:* Preferential parking districts are in need of reform in many California cities. Changes to the state vehicle code should be made to allow parking revenue to be used for transportation enhancements in affected neighborhoods. Market based fees can be used to better manage demand and lead to quality of life improvements for all residents.<sup>1</sup>

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<sup>1</sup> Reference Materials

Nelson/Nygaard study for the City of Glendale on Preferential Parking District Program:  
[http://www.ci.glendale.ca.us/planning/pdf\\_files%5CMobilityPlan%5CStudySessionsHearings/Nov17,2010/2010\\_05-19\\_%20GlendalePrefParkingPeerReviewFINAL2.pdf](http://www.ci.glendale.ca.us/planning/pdf_files%5CMobilityPlan%5CStudySessionsHearings/Nov17,2010/2010_05-19_%20GlendalePrefParkingPeerReviewFINAL2.pdf)

SFCTA (2009). “San Francisco On-Street Parking Management and Pricing Study – Final Report.”  
<http://www.sfcta.org/content/view/303/149/>

SFPark: Post Launch Implementation Summary and Lessons Learned: <http://SFpark.org/resources/SFPark-post-launch-implementation-summary-and-lessons-learned-web/>

## Real Estate Transfer Taxes

### Introduction

Real estate transfer taxes (RETT), also referred to as deed recordation taxes, are imposed on the sale or transfer of real property. The fees usually are based on or measured by the consideration paid for or the fair market value of the real estate. Thirty-five states already use RETTs to generate revenue. Some of the uses in other jurisdictions in California and Oregon for revenues derived from RETTs include: affordable housing programs, open space, parkland acquisition and maintenance, and transportation infrastructure.

### Yield Potential

The yield potential is unknown. The level of revenues generated depends on the rate, though in the San Diego and other regions, the high level of real estate valuations also would influence the amount of revenues. Currently, the maximum tax is being assessed at \$0.55 per \$500 in San Diego County, which is split evenly with \$0.55 per \$1,000 for each city and \$0.55 per \$1,000 for the County. Any additional tax increase for non-charter cities would require new state legislation. Other cities in California may not be assessing the maximum amount.

A charter city can forgo its right to half of this tax (known as a “conforming tax”) and subsequently can levy a “nonconforming tax” in its place. There does not appear to be a limit on the amount a charter city can charge for a so-called nonconforming tax. Current examples of this practice vary from \$1.10 per \$1,000 in Riverside to as high as \$15 per \$1,000 in Berkeley and Oakland.

### Use/Restrictions

California law allows up to a maximum of \$0.55 per \$500 of the value of the property being conveyed. The only known restrictions are that increases beyond the \$0.55 rate would require state legislation. In terms of use, RETTs have been applied to transportation infrastructure.

### Application

In California, RETTs may be imposed only at the local level by cities and counties.

### Sustainability

Not sustainable since funds are “one-time” funds. Any increase would depend on real estate turn-over. Annual administrative costs could be minimal.

### Pros/Cons

Real-estate valuation would determine potential revenues which may differ by area or region. There may be some opposition to the imposition of RETTs precisely because property owner tax bills may be considered high due to higher property values.

### Implementation

No additional local authority given beyond current district rules so implementation timeframe is long term.

Period for Implementation: 5+ years

### Conclusion/Recommendation

It is recommended that the state legislature consider increasing the RETT threshold above the current \$0.55 rate.

## Statewide Infrastructure Bond

### Introduction

No discussion of funding tools to bridge the funding gap for state transportation needs would be complete without considering a statewide General Obligation (GO) bond package. An initial amount of up to \$10 billion is recommended for discussion purposes. Transportation infrastructure is a critical state asset and an important and appropriate investment of state revenue. Much like the historical approach to state GO bonds issued for school facilities, the state should endorse and become accustomed to semi-regular bond issuance for transportation infrastructure purposes.

The bonds could be used for all modes of transportation, but should be reserved for capital improvements to conform to normal bonding practices where debt is secured by underlying capital assets. GO bonds would be an appropriate instrument for investment in system preservation and system expansion; but not likely for system management or operations.

### Yield Potential

The potential for revenue generation is high, or approximately \$10 billion per individual bond issue, or \$1 billion per year assuming a 10-year bond program. According to data from the Strategic Growth Plan Bond Accountability website, [www.bondaccountability.ca.gov](http://www.bondaccountability.ca.gov), Proposition 1B has so far attracted local and federal matching funds on a greater than one-to-one ratio. Assuming \$10 billion is allocated among modes following the proportions in the 2011 Statewide Needs Assessment, the bond initiative could provide \$3.3 billion for public transit, \$3 billion for Highways (fungible, similar to Regional Improvement Program), \$2.4 billion for Local Roads, \$1 billion for the various modes of Goods Movement, \$121 million for intercity rail, and \$56 million for sustainability/non-motorized projects and programs. Following the proportions of Preservation vs. Expansion in the Statewide Needs Assessment, approximately \$650 million could potentially be produced for System Preservation, and \$350 million for System Expansion. While expansion projects are normally more attractive to policy-makers and voters, in difficult economic times, there may be a higher relative importance placed on taking care of current assets and making do with what's on hand. This could translate into public support for an initiative which includes significant system preservation spending.

### Use/Restrictions

Use of the funding amounts by mode from the 2011 Statewide Needs Assessment study are a reasonable starting point for discussion, as they are based on needs data reported directly by regional programming agencies throughout the state. One caution in using these modal shares, however, is that the unfunded portion of the need which the bond initiative seeks to address is not necessarily in proportion to the total need by mode. Table 1-1 of the 2011 Statewide Needs Assessment indicates that the overall statewide funding need is 45% funded (55% unfunded). However, since revenues are not split out by mode, it is not determined how much of the needs for each mode are funded. For example, seaport needs could be 60% unfunded, while airports could be 40% unfunded.

Bond proceeds are proposed to be used for system preservation and system expansion, but not for system management purposes. This is because typically bond proceeds are used for tangible, long-term capital improvements that will last and protect the value of an asset for the duration of the bond issue, rather than management considerations, which may be shorter-term in nature.

Application

The infrastructure bond initiative would be implemented at a statewide level.

Sustainability

Although GO bond issuance generally represents a one-time investment of resources, the state has some history of semi-regular GO bond issuance for some statewide infrastructure purposes, such as school facilities. It is generally assumed that the state will propose a new school facilities bond every few years and the voters have historically supported this approach. New transportation infrastructure bonds could be proposed to more-or-less coincide with the completion of previous bond-funded programs, similar to the manner in which the state has historically proposed school facilities-related bonds.

The principal state cost for GO bonds is debt service. While not insignificant, these costs are fairly well-known, predictable, and largely understood. Capital investment in transportation infrastructure is not only an appropriate state investment, but one of the most reasonable investments when considering incurring manageable debt. Investment in transportation infrastructure is largely considered one of the best generators of living-wage jobs and related local and state taxes, especially when appropriate multipliers are considered. In addition, under favorable market conditions – as we are enjoying now, during the current economic downturn – costs for these critical improvements are low and the state can realize a tremendous “bang for the buck.”

There is a reasonable, if variable, limit to prudent bonded-indebtedness. In recent years, some would argue the state has exceeded that reasonable limit. Debt service costs will likely be a factor in any discussions regarding new GO bonds.

Once a GO bond is passed by the voters, identified administering entities, such as the California Transportation Commission (Commission), and implementing local entities, will incur on-going program administration costs throughout the life of a specific project, or the life of the program. These costs and efforts are likely to be more significant early in the process and diminish as the program is implemented and funds are allocated and expended. Frequently, reasonable administrative costs are authorized to be funded by the bonds themselves, thus alleviating the costs, if not the effort.

Pros/Cons

The economic equity and overall fairness of the proposed bond initiative depends on many factors, including the programs and projects that are funded, the funding source(s) used to pay the debt service, and the types of jobs created by the expended funds. The package that is under consideration could provide funding for many modes of transportation, and thus have a good likelihood of producing a fair outcome. As general obligation bonds, the source of funds envisioned for debt service would be the State General Fund. General Fund revenues include funding from state income tax, sales tax, and other sources in smaller proportions. Income tax is progressive in California, while sales tax is relatively progressive, thus on balance drawing on General Fund revenues may be considered a reasonably equitable approach.

In recent years, debt service on GO bonds has been paid for by the diversion of various types of transportation revenues. Currently, vehicle weight fees are used. Expenses previously paid for by weight fees are in turn paid for from the State Highway Account, which is funded through excise taxes on fuel. Thus, ultimately, debt service for Propositions 1A and 1B is paid for taxes levied on fuel purchases. Fuel taxes are generally regressive, as fuel expenditures do not vary directly with wealth.

However, since weight fees are fully pledged to Proposition 1A and 1B debt service, a potential future bond package, should it occur in the not-too-distant future, would truly be funded by the State General Fund. Because the State Legislature has very limited resources to meet its many General Fund obligations, there may be limited eagerness on the part of state legislators to consider GO bonds for transportation. On the public side, however, there may be good support. Proposition 1B passed with 61.4% of the vote in 2006. [http://www.sos.ca.gov/elections/sov/2006\\_general/sum\\_amended.pdf](http://www.sos.ca.gov/elections/sov/2006_general/sum_amended.pdf) Proposition 1A, the High Speed Passenger Train Bond Act, passed with 52.7% of the vote in 2008. [http://www.sos.ca.gov/elections/sov/2008\\_general/7\\_votes\\_for\\_against.pdf](http://www.sos.ca.gov/elections/sov/2008_general/7_votes_for_against.pdf). On balance, a bond package is fair and is worth pursuing, though perhaps at modest funding levels.

#### Implementation

The level of effort required to implement a bond initiative is anticipated to be relatively high. In order to effectuate a GO Bond for these purposes, it is likely that legislation will need to be introduced and passed by the Legislature; signed by the Governor; put on an appropriate statewide ballot; and passed by the voters. After passage, various guideline development processes will likely need to be implemented by the Commission and other state agencies, departments or boards.

The time required to initiate a bond package would be long-term, most likely exceeding two years. The cost of implementation, if successful, would likely be medium, and include some kind of statewide campaign, assuming legislation is passed and the measure is put before the voters. The hard campaign costs would be borne, however, by private sector interests. Public costs would include ballot review and preparation by the Attorney General and Secretary of State; election considerations by County Registrars; time and effort for support of the measure by public officials. In addition, if passed by the voters, the general fund debt service for the bonds could be considered significant, but reasonable. The following steps are required to bring about an infrastructure bond package:

- a. Introduction of Legislation;
- b. Passage by the Legislature;
- c. Signed into law by the Governor;
- d. Placed on a statewide ballot and put before the voters;
- e. Development and implementation of related statewide campaign;
- f. Development of related guidelines (assuming passage by the voters);
- g. Review of applications and allocation of funds;
- h. Audit of programs.

A number of policy considerations would likely be included in the development of appropriate legislation, and could include achieving significant environmental benefits, supporting the development of sustainable communities' strategies, and mitigating local impacted community concerns.

Period for Implementation: 5+ years

#### Conclusion/Recommendation

Infrastructure bond programs are a viable way to provide significant funding for transportation capital needs. Since implementation requires approval of both state legislation and a statewide initiative, it may be most effective to keep the size of each bond package manageable, while bringing forward new bond initiatives every five to ten years. This approach can keep constituents familiar with and thus more familiar and comfortable with planning ahead for transportation needs. The composition of the next bond package in terms of modes is something that will require discussion by many stakeholders and

policy-makers. The transportation modal needs data that have been collected as part of the 2011 Statewide Needs Assessment are an excellent starting point for these discussions.

Next Steps would begin with further fleshing out a transportation infrastructure preservation and expansion bond package. If time permits one step worth considering would be to extend the work of the Statewide Needs Assessment by determining the proportion of need for each transportation mode that is projected to be unmet over the next ten years. The following step would be to seek an author and begin drafting the appropriate legislation.<sup>1</sup>

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<sup>1</sup> Reference Materials

Proposition 1B was supported by the following organizations, as well as others:

- Automobile Club of Southern California (AAA) [www.calif.aaa.com](http://www.calif.aaa.com)
- California Air Resources Board [www.arb.ca.gov](http://www.arb.ca.gov)
- California Alliance for Jobs [www.rebuildca.org](http://www.rebuildca.org)
- [California Chamber of Commerce](#)
- California Highway Patrol [www.chp.ca.gov](http://www.chp.ca.gov)
- [California Taxpayers Association](#)
- California Transit Association [www.caltransit.org](http://www.caltransit.org)
- California Transportation Commission [www.catc.ca.gov](http://www.catc.ca.gov)

## Public Private Partnerships (P3s)

### Introduction

Public agencies throughout the nation are currently analyzing and seeking alternative options for meeting transportation investment needs, including public-private-partnerships (P3s). P3s are contractual agreements formed between a public agency and a private sector entity that allow for greater private sector participation in the delivery and financing of transportation projects. There are many different types of P3 models and degrees to which the private sector assumes responsibility. Additionally, different types of P3s may be more applicable for development of new facilities while others may be more suitable for the operation or expansion of existing assets. For the purpose of this report, the discussion will focus on P3s involving private partners to finance, construct, operate and maintain new highway capacity as well as recent utilization of availability payment models.

Under a concession delivery model, a public agency would award a long-term contract to a private firm or consortium of firms to design, build, finance, operate and maintain a revenue generating project (e.g., a tolled road) for a specific term. The benefits of the concession model include full life-cycle costing which transfers operations and maintenance cost risks to the private sector and creates incentives for the private sector to make tradeoffs between higher upfront capital costs and lower long-term operations and maintenance costs. Adding the financing element to this model means that in the best case, the public agency would not be financially liable for the project and it would be up to the private sector to raise the necessary funds, manage the construction and assume the traffic and revenue risk on the project.

Under an “availability payment” P3 project structure, the public agency would contract with a private sector partner to design, construct, operate, and/or maintain a highway for a contracted period of time. Availability payments are often used for highway projects that are not expected to generate adequate revenues to pay for their own construction and operation, either because the highway is not tolled, or the tolls are not forecast to generate sufficient income. This requires that the public agency have sufficient and credible non-toll sources of funding to make all required availability payments. Under availability payment structures, the public agency generally retains the revenue risk rather than the private partner.

Availability payments may be structured in a variety of ways. In certain cases, no payments may be made until after construction is complete. Alternatively payments may be predicated on particular construction milestones. Project sponsors may also define how the periodic payments are to be made, and may also set a maximum payment cap based on agreed-to operating and maintenance performance standards.

Availability payments have been used extensively in Canada, Europe, and Australia, but are just beginning to gain interest in the United States. The Presidio Parkway P3 project in San Francisco is using an availability payment structure, incorporating construction milestones and ongoing availability payments. It is the first transportation P3 in California under the recently enacted P3 statute, Streets and Highways Code Section 143.

Yield Potential

Ultimately, revenue to pay for a P3 project will need to be generated from the public (e.g., tolls, taxes, or other user-fees). Private entities contribute resources with the expectation of being repaid with a market-appropriate profit. When P3s are successful, the private partner is able to make a profit while also generating benefits for the public sector that may not have been achievable otherwise. P3s have been of considerable interest to transportation agencies in recent years as they offer an opportunity to accelerate the delivery of much needed projects—raising the upfront capital necessary for construction.

Use/Restrictions

Although construction and long term preservation can cost less under a P3 model, transaction costs are usually much higher due to legal fees, financing costs, and procurement expenses. Generally, the higher transaction costs of P3s mean that the use of P3s is limited to mostly a small segment of transportation projects—typically large and complex projects with stable revenue streams.

Conclusion

P3s allow public agencies to leverage future revenue streams for up-front capital in the form of private investment. With such access to financial resources, P3s can accelerate project delivery. These arrangements, however, do not eliminate the need for additional transportation revenue.<sup>1</sup>

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<sup>1</sup> Reference Materials

FHWA Office of Innovative Program Delivery  
<http://www.fhwa.dot.gov/ipd/p3/index.htm>  
<http://www.fhwa.dot.gov/ipd/forum/>

## Transportation Infrastructure Finance and Innovation Act (TIFIA)

### Introduction

Although not a funding source, the TIFIA program provides direct federal loans, loan guarantees, and standby lines of credit to finance transportation projects of national and regional significance. Demand for this program has grown in recent years given flexible repayment terms at often competitive interest rates. Today's interest rate, for example, is 2.62 percent for a 35-year loan (as of August 3, 2012). In general, the TIFIA interest rate is equal to the Treasury Rate on the date of execution of the TIFIA credit. Moving Ahead for Progress in the 21st Century (MAP-21) allows 10 percent of the TIFIA program's budget authority to be provided to rural infrastructure projects at a reduced interest rate (one-half of the Treasury Rate).

A wide range of transportation projects are eligible, including highway, transit, railroad, intermodal freight, and port access projects. Projects seeking TIFIA assistance must meet certain statutory threshold requirements for project costs. Generally, eligible project costs must total at least \$50 million or \$15 million in the case of intelligent transportation system (ITS) projects. MAP-21 requires a minimum of \$25 million in total eligible project costs for rural infrastructure projects.

MAP-21 also provides for a greatly expanded TIFIA program--authorizing \$750 million of budget authority for FY2013 and \$1 billion for FY2014. The maximum share of project costs that can be financed through TIFIA increases from 33 percent to 49 percent. For a line of credit, the maximum amount remains at 33 percent of eligible project costs.

In addition to authorizing more funding, MAP-21 made some significant statutory changes to the TIFIA program, including but not limited to, enabling related project grouping secured by a common pledge to meet project cost threshold requirements; confirmation of use for availability payment public private partnerships; and early contingent commitments with "master credit agreements" for single projects or a program of projects secured by a common revenue pledge. These and other structural reforms are anticipated to further foster partnerships that attract private investment as may be appropriate and/or enable projects to proceed at an earlier date at potentially reduced lifecycle costs (including debt service costs).

### Yield Potential

Nationally, MAP-21 authorizes \$750 million of budget authority for FY2013 and \$1 billion for FY2014. This translates into approximately \$6.9 billion and \$9.2 billion of lending capacity in each of these fiscal years respectively, compared with approximately \$1.2 billion of annual lending capacity under prior law. Additionally, the increase in the maximum share of project costs that can be financed through TIFIA (up to 49 percent of eligible costs) effectively provides for greater leveraging potential.

### Use/Restrictions

Any type of project that is eligible for federal assistance through existing surface transportation programs (highway projects and transit capital projects) is eligible for TIFIA credit assistance, including ITS projects. Additionally, the following types of projects are eligible: international bridges and tunnels; intercity passenger bus and rail facilities and vehicles; publicly owned freight rail facilities; private facilities providing public benefit for highway users; intermodal freight transfer facilities; projects that provide access to such facilities; service improvements on or adjacent to the National Highway System; projects located within the boundary of a port terminal under certain conditions. MAP-21 expands

eligibility to include related projects grouped together, providing individual components are eligible and are secured by a common pledge. In total, project capital cost must be at least \$50 million or \$15 million in the case of ITS. MAP-21 requires a minimum of \$25 million in total eligible project costs for rural infrastructure projects.

Project sponsors seeking TIFIA assistance must submit an application acceptable to the Office of the Secretary of Transportation and must satisfy applicable state and local transportation planning requirements. Each project must have a dedicated revenue source to repay the TIFIA loan (e.g., tolls, user-fees, sales tax revenues, availability payments, etc.) and must be determined as creditworthy by USDOT.

### Conclusion

Demand for TIFIA credit assistance between FY2010 and FY2012 has been oversubscribed by a ratio of more than 10 to 1. Letters of interest for FY2012 were submitted by 26 applicants nationally, representing funding demand that greatly exceeds available contract authority.

To date, the use of TIFIA credit assistance in California, has involved a handful of projects (e.g., Southbay Expressway also known as the SR125 toll road, Transbay Transit Center, and Presidio Parkway using availability payments). Since the implementation of the American Recovery and Reinvestment Act in 2009 (ARRA), USDOT has received appropriations for discretionary grants called, "Transportation Investment Generating Economic Recovery" or TIGER Grants. Under TIGER II, Los Angeles Metro's Crenshaw/LAX Transit Corridor received a TIFIA Payment of \$20 million. Under TIGER III, Riverside County Transportation Commission's (RCTC's) SR 91 extension project received a TIFIA payment of \$20 million as well.

With recent MAP-21 reforms and expansion of the TIFIA program, California project sponsors will likely increase the use of TIFIA financing. Leveraging opportunities are even greater with the use of "master credit agreements" secured by a common revenue pledge such as local sales tax revenues. Consistent with the America Fast Forward initiative, TIFIA has been part of the strategy that Los Angeles Metro, for example, plans to use to accelerate projects using a pledge of Measure R (half-cent sales tax revenue) upon approval of its extension. In conjunction with local sales tax initiatives and/or other transportation revenues including tolls/user-fees currently being contemplated throughout the State, generally low-interest costs and flexible repayment terms of TIFIA federal credit assistance should prove to be valuable in the financing and delivery of transportation projects.<sup>1</sup>

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### <sup>1</sup>Reference Materials

- Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21)
- Federal Register, Vol. 77, No. 147, July 31, 2012
- [http://www.fhwa.dot.gov/ipd/pdfs/tifia/fy2013\\_tifia\\_nofa\\_073112.pdf](http://www.fhwa.dot.gov/ipd/pdfs/tifia/fy2013_tifia_nofa_073112.pdf)
- FHWA Office of Innovative Program Delivery
- <http://www.fhwa.dot.gov/ipd/tifia/index.htm>