



# **Orange County Toll Roads: Serious Concerns Should Lead to Significant Review by State and Local Officials**

**Donna Arduin and Wayne Winegarden, Ph.D.**

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Cover image and design is a generic representation of a toll road.

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# Executive Summary

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An old business adage holds that a business will never catch up if it must continually make decisions based on cash flow requirements that are detrimental to its long-run viability. Instead the problems with short-term and near-term cash flow considerations must be identified and addressed. This adage appears to be applicable to the 241 and 73 toll roads in Southern California and the two public joint-powers agencies that manage these roads, the Foothill/Eastern Transportation Corridor Agency (FETCA) and the San Joaquin Hills Transportation Corridor Agency (SJHTCA)—known jointly, as the Transportation Corridor Agencies (TCA).

Based on our review, the operations of these toll roads presently appear to be unsustainable and likely have been unworkable from their inception. The original financial plans for the 241 and 73 toll roads were based on overly optimistic growth assumptions and did not leave a financial cushion for TCA to operate under reduced utilization or economic downturns. Subsequent decisions by TCA board members and managers have made matters worse.

Toll rates for the 241 and 73 roads are already among the highest in the country. SJHTCA has increased toll rates at least 12 times since its 1996 opening. However, potential drivers on the 241 and 73 toll roads have exhibited greater price sensitivity than projected, causing drivers to stay on other publicly-funded non-toll roads.

Moreover, taxpayers subsidize TCA's toll roads: Caltrans is responsible for maintenance costs associated with the toll roads, a situation which we believe is unique or extremely rare among toll roads nationwide. The TCA is also the beneficiary of other forms of public subsidies, including (1) \$150 million in public funding for original construction; (2) developer fees (taxes); (3) non-competition agreements granted by the State of California; and (4) access to the tax-exempt public bond market. Although the extensive nature of TCA's reliance on such public subsidies is not readily apparent from a review of TCA's financial activity and/or public disclosures, the existence of subsidies demonstrate that TCA is the direct beneficiary of historical and ongoing public subsidies that may exceed \$1.7 billion to date.

Toll rates are rising to meet TCA's debt obligations, which per mile are far higher than the average for all U.S. toll roads; the debt per mile for FETCA is \$64 million and for SJHTCA is \$136 million, compared to \$17.1 million for all U.S. toll roads.

When the current debt was issued, 47 percent of the debt was issued in the form of capital appreciation bonds, which deferred both principal and interest payments for extended periods of time. A portion of the capital appreciation bonds converted in 2010 so that at least interest was being paid currently; 23 percent of the original bonds remain as capital appreciation bonds, with full deferral of both principal and interest until maturity. This structure permitted TCA to have much smaller debt service payment in the early years but will result in huge increases in annual debt service payments each year through maturity outpacing TCA revenues—unless there are substantial increases in tolls or ridership—and likely forcing a default or another restructuring.

TCA proposes to refinance this debt by extending the repayment period. This has the effect of exacerbating the problem—not managing it. The proposed refinancing would add \$1 billion to TCA's current debt obligation, bringing the total to \$11 billion.

This untenable financial situation is reflective of TCA management; members of its two governing boards frequently make short-sighted decisions intended to solve short-term problems, while making the longer-term problems facing the toll roads (such as long-term financial sustainability coupled with sustainable ridership) even more difficult. These problems defeat the stated purpose of the toll roads, which is to provide a workable alternative to Interstate 5 that provides much needed congestion relief.

The proposed refinancing plan would also postpone indefinitely the date on which use of the roads would be toll-free to the public, as originally promised, because the cost of the refinance will require the tolls to continue indefinitely. Moreover, a planned extension would create additional costs without addressing problems with the current toll roads. Our review found several major areas of concern related to the 241 and 73 toll roads that we believe require further consideration.

Toll rates for the 241 and 73 roads are already among the highest in the country. SJHTCA has increased toll rates at least 12 times since its 1996 opening.

## Recommendations

- The proposed refinancing plan should not proceed without further review by state authorities. The plan is extremely risky and relies heavily on capital appreciation bonds, which have near junk-level ratings and likely will result in downgrades to junk status. To cover this risk, the cost of these bonds may be very high—further increasing the risk to TCA. In our opinion, these bonds may in fact never be paid off.
- Spending money on plans to extend the 241 under these conditions is not justifiable and should cease immediately.
- The board and management of FETCA and SJHTCA should address these serious shortcomings and evaluate additional options before continuing plans to expand or refinance.
- Caltrans should review its subsidy of toll road maintenance, should suspend any agreement that prevents improvements to Interstate 5, and should undertake a comprehensive review to coordinate traffic for the county in a rational, efficient manner.
- Given the demonstrated inability of the FETCA and SJHTCA board to manage risk, the state or another third party should review the finances and operations of the toll roads, and evaluate alternative governance structures and transportation plans.

# Background

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In the 1970s, a number of studies indicated that new roads would be needed to service the rapidly growing population of Orange County.<sup>1</sup> By 1981, planners had completed sketches of what would eventually become the San Joaquin Hills (State Route 73), Foothill (State Route 241) and Eastern (State Route 241, State Route 261, and State Route 133) corridors. However, these roads were not initially conceived as toll roads; rather, they were “envisioned as a free highway funded through state or federal gas-tax revenues,” and it was only in 1984, after recognizing a shortage of gas-tax revenues to fund transportation improvements and the increasing costs of building new roads, that local officials began to review alternative means of funding road projects.<sup>2</sup> The two public joint-powers agencies known as the Foothill/Eastern Transportation Corridor Agency (FETCA) and the San Joaquin Hills Transportation Corridor Agency (SJHTCA) were then formed in 1986 to manage financing, construction and operations of the roads.

## Long-term Viability Jeopardized Due to Short-term Decisions

With respect to the longer-term viability and services that these toll roads are supposed to provide, two key issues are at hand. First, in order to cover short-term revenue shortfalls that have arisen due to traffic volume shortfalls, TCA has raised tolls to relatively high levels that, as illustrated in the Toll Pricing section, appear to be diminishing future ridership and therefore future financial viability.

- SJHTCA has increased toll rates at least 12 times since its 1996 opening and the cash toll rate per mile of \$0.38 is “one of the highest” rates in the country;<sup>3</sup> and
  - FETCA’s “toll rates are currently among the highest for U.S. toll roads at close to 30 cents per mile.”<sup>4</sup>

TCA has raised tolls to relatively high levels that, as illustrated in the Toll Pricing section, appear to be diminishing future ridership and therefore future financial viability.

Second, in order to address short-term financial problems, TCA has been extending the bond payments. This requires TCA to incur billions of dollars in additional debt repayment obligations, including billions for controversial capital appreciation bonds, which allow a borrower to make payments only on interest for an extended period. This has the effect of reducing annual payments in nominal dollars, but vastly inflating the total amount of interest payments over time, as no payments are made against principal obligations. Over 47 percent of the 1999 FETCA bonds were issued as capital appreciation bonds. For both FETCA and SJHTCA, capital appreciation bonds constitute 23 percent of to-

tal outstanding debt.

The original plans for the toll roads contemplated the development of roads that would provide free access for all drivers. The California State Legislature authorized TCA in 1987 to construct the roads as toll facilities to be funded by bonds that would be secured by future toll fees.<sup>5</sup> The payment of tolls—and TCA’s existence as an independent public agency—was designed to sunset on the date on which the bonds were repaid in full.<sup>6</sup>

This “toll free” date has been consistently pushed back. In 1995, FETCA issued bonds that required drivers to pay a toll through the maturity date of the bonds in 2035.<sup>7</sup> In 1999, FETCA issued new bonds that extended the period for which drivers will be required to pay tolls by five years from 2035 to 2040 (i.e., the maturity date of the 1999 bonds).<sup>8</sup> As a consequence of these decisions, the FETCA toll road was not scheduled to provide free access until 2040.

In 2011, SJHTCA amended its bond obligations to further extend the toll period until 2042.<sup>9</sup> These extensions prolong the ability of TCA to operate as a separate government agency. They also add significant risk to TCA’s ability to make the payments required under the back-loaded schedules.

# Market Space and Service Viability is Questionable

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More road infrastructure in this region is necessary. However, competition between the different road alternatives is already fierce, which is indicative of a highly competitive road market space. As an example, FETCA issued a financial “bail-out” payment of \$120 million to SJHTCA as “mitigation” for its construction of the 241 South Extension, on the basis that the extension of State Route 241 would impair traffic volumes on SJHTCA’s State Route 73. This payment can be interpreted as an acknowledgement that different parts of the TCA system are merely moving riders from one road to another.<sup>10</sup>

There is also evidence that sufficient road infrastructure could be generated without an extension of the toll roads. The toll roads experience competition from Interstate 405 and Interstate 5, and Interstate 5 may very well be widened further if FECTA’s non-competition agreement is lifted, raising the question as to whether it ultimately makes sense to have a toll road given the many free competing roads.

The non-competition agreement granted by the state to FETCA requires the state to use its best efforts to refrain from any capital project on the state highway system within the non-competition zone which would have the purpose or reasonably foreseeable effect of significantly adversely affecting TCA’s toll operations.<sup>11</sup> This policy has the impact of artificially reducing the amount of competition to TCA in the region.<sup>12</sup> With such an artificial support to the toll roads, the information necessary to truly understand whether the economic value created by the toll roads is worth the investment is difficult to ascertain.

Additionally, the purpose of the toll roads is to relieve traffic congestion while requiring less gas tax revenues and giving users a choice between paying extra money versus spending more time. Interstate 5 is a publicly owned and operated road that is fully supported by the state gas tax. Thus, the toll roads are receiving a public subsidy that insulates them from competition from a road that is completely publicly subsidized. As such, the non-competition agreement further thwarts possible efficiency gains that could be attained through enhanced cooperation across the two road systems (e.g. expanding Interstate 5 using the toll roads as efficient overflow assets for those individuals that value the time saved more than the money expended).

However, the non-competition agreement assumes that the extension of 241 South to Interstate 5 would be completed by 2012.<sup>13</sup> Since that did not occur, the validity of the non-competition agreement may be in doubt. In addition to current revenue shortfalls, future operating performance may therefore be adversely impacted should the non-competition agreement be found to have expired, thereby freeing up Caltrans to make improvements to Interstate 5.<sup>14</sup>

What is also troubling is that the TCA does not appear to have quantified or disclosed the value of the benefits that arose to TCA from the state’s non-competition agreement. FETCA’s experts, however, previously opined in 2005 that the construction of the 241 South extension would have a negative im-

fact of over \$300 million on SJHTCA toll roads in present value dollars if the 241 South extension was constructed by 2012.<sup>15</sup> Based on a reasonable assumption that any action taken by the state that would compete with the 241 South extension would similarly damage SJHTCA, it would be possible to assert that the state's non-competition agreement results in a subsidy to TCA in an amount at least equal to the \$300 million that FETCA previously computed with respect to the impact of the 241 South extension on the SJHTCA toll road. Thus, the subsidy relating to the state's grant of the non-competition agreement is substantial.

From an investment perspective, an optimal environment is one that offers some competition, but the free alternatives lack in quality relative to the toll roads (e.g. lower quality road, long commute times). These advantages are not clear in Southern California, raising questions regarding the quality of this area as a choice, in the first place, due to the amount and quality of the free competition.

Toll roads operate effectively in a competitive environment where free alternatives do not easily replace the full toll road. Instead, the toll road satisfies the needs of those willing to compromise in the interest of reducing the time the trip takes. Long-distance highways with few free rivals, such as the turnpikes in New Jersey, Ohio and Pennsylvania, have fared better for this reason.<sup>16</sup> The presence of Highway 91, Highway 55, and Interstate 5 accordingly present tremendous obstacles to the stability of the Foothill Toll Road, which only cuts four miles from the 31-mile commute between suburban Corona and commercial Irvine, but is among the most expensive highways per mile in the nation.<sup>17</sup> Similarly, State Route 73, the first publicly operated toll road in Southern California that opened to traffic in 1996, faces Interstate 405 and Interstate 5 as alternatives.<sup>18</sup>

With such an artificial support to the toll roads, the information necessary to truly understand whether the economic value created by the toll roads is worth the investment is difficult to ascertain.

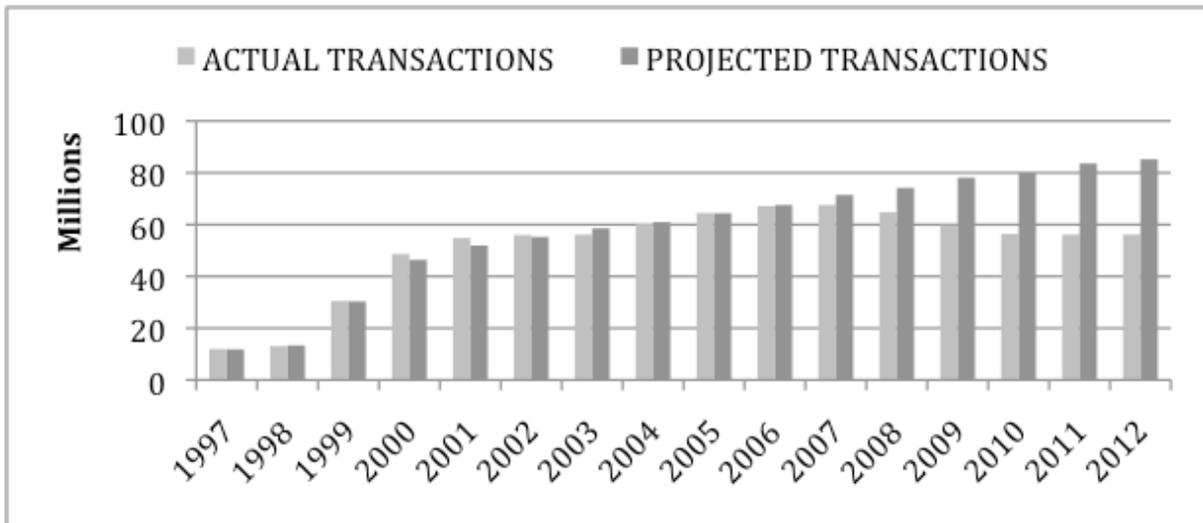
TCA continues to seek an extension of the 241. However, there is scant evidence that the viability of the 241, which is currently questionable, is improved with the extension. Not only would completing the extension be expensive, the problem with free alternatives still exists. In fact, if the non-competition agreement has expired as of December 2012, the potential competition for the toll roads could be even greater with the widening of Interstate 5.

## Displayed Price Sensitivity of Travelers

The toll roads have lacked the ability to repay its debt obligations every year since 2006.<sup>19</sup> As illustrated by Figure 1 and Figure 2, this is due to the roads failing to meet traffic and revenue projections—evidence that the price sensitivity of users is greater than anticipated.

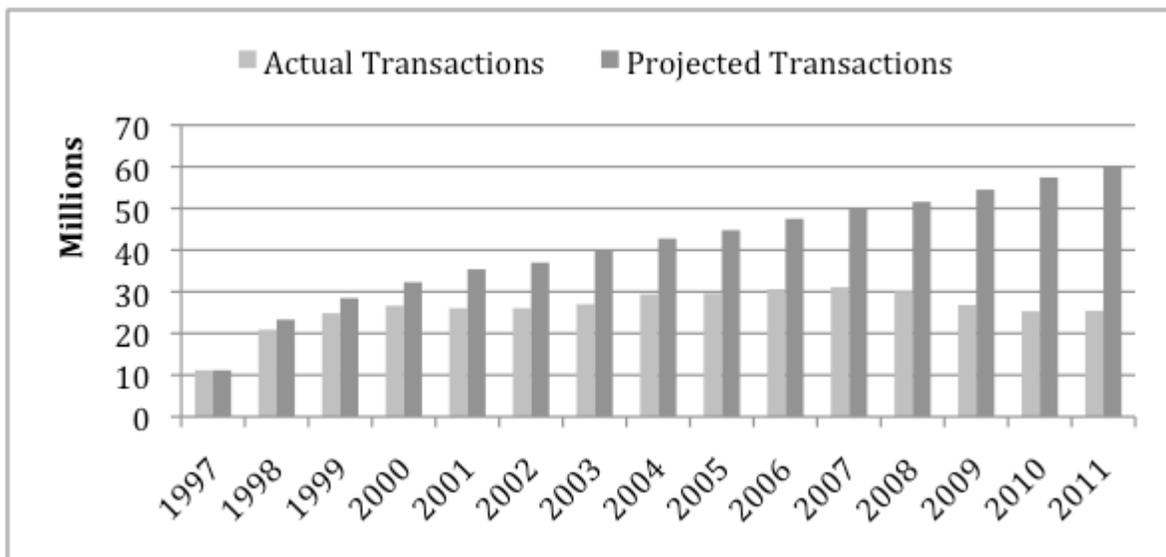
**Figure 1**

Actual vs. Projected Annual Transactions, Foothill/Eastern Toll roads (241)  
1997 – 2012



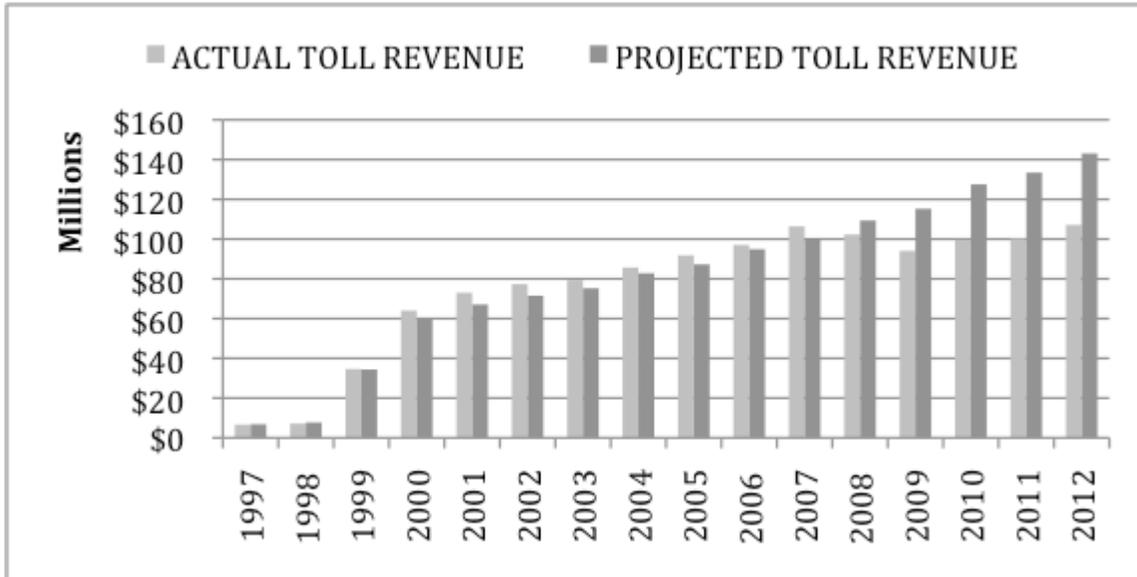
**Figure 2**

Actual vs. Projected Transactions, San Joaquin Hills Toll roads (73)  
1997 – 2011



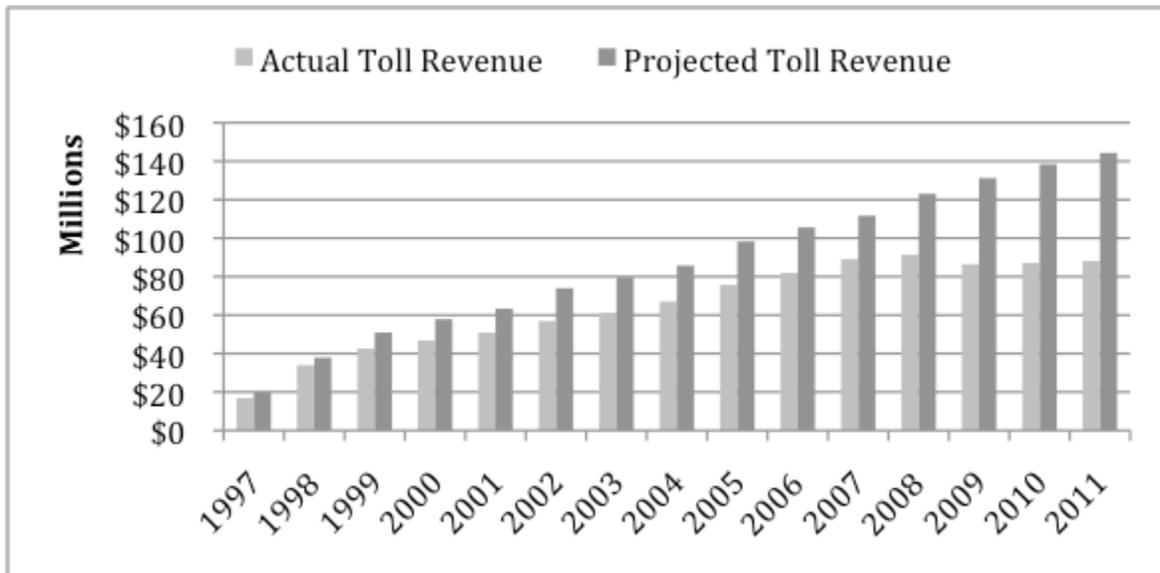
**Figure 3**

Actual Toll Revenue vs. Projected Toll Revenue, Foothill/ Eastern Toll roads  
1997 - 2012



**Figure 4**

Actual Toll Revenue vs. Projected Toll Revenue, San Joaquin Hills Toll roads  
1997-2011



As illustrated by Figures 1 and 3, FETCA's 2012 traffic volume of 56.2 million trips represented only 65.9 percent of the agency's original projections, and FETCA's revenues represented only 74.9 percent of their initial projections.<sup>20</sup> Meanwhile, Figures 2 and 4 illustrate that SJHTCA's 2012 traffic volume of 25.5 million trips was only 42.5 percent of their original projection, and SJHTCA revenues fulfilled only 61 percent of expectations.<sup>21</sup>

Some of the lower traffic usage compared to projections is due to the economic recession. "Even with the U.S. recovering since June 2009 from the longest recession since the Great Depression of the 1930s, the economic downturn disproportionately affected commuters from inland Southern California who take toll roads to jobs in Orange County," said Michael McDermott, a managing director at Fitch Ratings in New York.<sup>22</sup> "Riverside County, immediately east of Orange County, had a 12 percent unemployment rate in October, according to the state Employment Development Department.<sup>23</sup> Orange County had an unemployment rate of 7.2 percent in October, below the 9.8 percent statewide rate, according to the state Employment Development Department.<sup>24</sup> Nationally, the rate was 7.9 percent, the Bureau of Labor Statistics reported. While the recession certainly had an impact, it is not clear that the recession is solely responsible for the underperformance of the number of transactions. Other factors include the economic value of the route to drivers and toll rates.

## Economic Value of Route

Since 1981, State Route 241 has been on Orange County's Master Plan of Arterial Highways to plan for future growth in Southern Orange County, alleviate traffic congestion on Interstate 5 and provide traffic redundancy in the area in case of emergency.<sup>25</sup>

The final arbiter of the economic value of any toll road is riders' willingness to pay a toll that is high enough to cover all maintenance, operational, and capital investments necessary to support the road. If this is not the case—which appears to be reality for Route 241—then the cost of the toll roads are greater than the economic value that the toll roads provide.

## Financial Viability

The toll roads have not met financial expectations, and, in fact, are facing significant financial difficulties. Expanding the toll roads will significantly increase these financial difficulties.

The bond-rating agencies recognize SJHTCA as the only toll road with a "junk bond" rating, and FETCA with a "BBB-" rating, the lowest possible investment grade rating.<sup>26</sup> The agency's financial capacity to support additional revenue bond debt given these rating levels is limited<sup>27</sup>

The financial metrics of concern include:

- **Toll Rate Increases:** In order to compensate for traffic volume shortfalls, TCA has implemented rate increases and charge toll rates far beyond original rate projections:
  - SJHTCA has increased toll rates at least 12 times since its 1996 opening and the cash toll rate per mile of \$.38 is "one of the highest" rates in the country;<sup>28</sup>
  - FETCA's toll rates are currently among the highest for U.S. toll roads at close to 30 cents per mile.<sup>29</sup>

- **Debt per Mile:** TCA's average debt per mile of \$64 million for FETCA (36.6 miles) and \$136 million for SJHTCA (15 miles) are dramatically in excess of the \$17.1 million average debt per mile for all U.S. toll roads.<sup>30</sup>
- **Debt per Trip:** The average debt per each toll transaction during FY 2012 for FETCA was \$41.62<sup>31</sup> and SJHTCA was \$81.80,<sup>32</sup> amounts that are significantly in excess of the \$8.44 average debt per each transaction for all toll roads located in the United States.<sup>33</sup>
- **Comparison to Other Roads:** Toll rates are rising to meet TCA's debt obligations, which per mile are far higher than the average for all U.S. toll roads: The debt per mile for FETCA is \$64 million and for SJHTCA is \$136 million, compared to \$17.1 million for all U.S. toll roads. Based on the inclusion of maintenance costs, average operating ratio (i.e., operating expenses to revenues) are 50.9 percent for all roads and 33.9 percent for roads opened after 1989. The operating ratios of FETCA and SJHTCA, which do not include maintenance fees, are only 20.9 percent and 13.6 percent, respectively. (See pages 39 and 43). In sum, the study clearly illustrates the public subsidies of TCA and FETCA are greater than other toll roads because toll road revenues are not being reinvested in maintenance and repair. Instead, all amounts are going to pay the staggering debt service obligations and pay other expenses.

## DEBT LEVELS ARE UNSUSTAINABLE:

In May, 2012, a major credit rating agency revised FETCA's credit rating to "negative" based on concerns over FETCA's low traffic volume, continuing ability to increase toll rates, and FETCA's significant debt service obligations.<sup>34</sup> The ratings agency also noted that further adverse implications on the FETCA debt may result from "a decision to increase leverage to support the Foothill South project that meaningfully reduces financial flexibility."<sup>35</sup> Thus, the ability of FETCA to fund the 241 South extension would appear to be subject to significant risk based on FETCA's current financial position. The use of existing funds and/or taking on hundreds of millions or perhaps even billions of dollars in additional debt would significantly exacerbate TCA's financial risks.

FETCA's proposed deferral of repayment obligations appears to create even greater risk as to FETCA's financial viability over the long-term. FETCA management indicates that the proposed refinancing is advisable to free up cash flow that may be required to meet "economic challenges" in the near term. The proposed short-term reduction in FETCA's debt service obligations, however, would extend the repayment period and increase aggregate debt service obligations by over \$1 billion over the life of the bonds. More specifically, the further deterioration in FETCA's viability is suggested by a variety of measurements, including the following:

- The proposed repayment schedule that increases payments by 3.5 percent year (per TCA 12/13/12 agenda) is projected to increase total debt service payments from FY 2013 and beyond of approximately \$1.050 billion. The actual increase in debt service obligations could be far greater than the \$1 billion threshold because FETCA is evaluating even greater deferral of repayments (i.e., repayment schedule based on increase of only 2.5 percent in repayments<sup>36</sup>). In comparison, the 2011 amendment to the SJHTCA repayment schedules resulted in an \$870 million increase in aggregate debt service obligations from 2013 and beyond.

- In comparison, debt service obligations on OCTA's 91 Express Lanes are \$259 million (based on the 91 Express Lane's outstanding debt of \$170 million [or \$17 million per mile]). Thus, FETCA's proposal to increase debt services obligations by over \$1 billion pursuant to the refinancing represents a 405 percent increase over the amount of 91 Express Lane's aggregate debt service obligations.
- The estimated increase in debt service obligations of \$1.050 billion from the FETCA refinancing would increase TCA's aggregate debt service obligations to \$11.438 billion, an amount that is almost 44 times larger than OCTA's 91 Express Lane debt service obligations of \$259 million.
- The debt service obligations per mile for comparable governmental-based "start-up" toll roads (as designated by Moody's) ranges from \$26 million to \$130 million per mile. The proposed refinancing would result in debt service obligations for TCA that are far in excess of these comparable roads. FETCA's total debt service obligations per mile would increase from \$150 million to approximately \$178 million. The 2011 SJHTCA amendment increased total remaining debt service obligations per mile from SJHTCA from \$261 million to \$320 million.

## COSTS HAVE EXCEEDED PLANS BY LARGE AMOUNTS

Problems with cost over-runs have existed throughout the toll roads' existence. Original plans for the toll roads estimated costs of \$858 million, which have since risen to more than \$4 billion (the total includes \$2.3 billion spent to date, plus an estimated \$1.7 billion for the proposed 16-mile extension of the 241).

Furthermore, TCA forecast that 48.5 percent of the cost of the TCA roads would be paid by developers.<sup>37</sup> TCA's original projections regarding funding from developers, however, overstated the funding to be received from developers, and underestimated the costs to be borne by the drivers.

TCA's projections regarding the amount of development impact fees available to fund the toll roads have also been subject to extensive revisions and significant fluctuations. The original 1985 estimates indicate the toll roads would receive \$416 million in funding from development impact fees, an amount equal to 48.5 percent of TCA's then-estimated cost of the toll roads.<sup>38</sup> Based on a 1990 study, TCA subsequently revised its forecasts to indicate that the toll roads would receive \$1.6 billion in funding from the development impact fees.<sup>39</sup> In 1997, TCA revised its estimates again to indicate projected development impact fees of \$1.2 billion.<sup>40</sup>

Even with the development fees coming in higher than projected, in 1997 TCA disclosed that the funding provided by developers for construction would equal only (i) 17.5 percent of the cost of the SJHTCA toll road (and only 4.19 percent of the total cost of the SJHTCA toll road including debt service costs and (ii) 30 percent of the cost of the FETCA toll road (and only 9.28 percent of the total cost of the FETCA toll road including debt service costs).<sup>41</sup> The actual rates are substantially less than the 48.5 percent of cost recoveries included in TCA's earlier projections. TCA also noted that the development impact fees would have been substantially higher if TCA's calculations of the development impact fees included (i) updated construction cost estimates for the toll road, (ii) the costs of post-construction debt service, and/or (iii) the

actual developer share of traffic on the toll road generated from new development and determined in the consultant's study."<sup>42</sup>

The development impact fees available to TCA are also subject to ongoing litigation between TCA and Orange County relating to the amount of development impact fees to be paid by concessionaires at John Wayne Airport.<sup>43</sup>

Additionally, TCA's failure to use proper forecasting and the lack of transparency regarding timely updates of estimates has created significant financial risk regarding responsibility for construction costs (e.g., developers vs. drivers), and consistently understated project costs to be funded by users of the toll roads.

In order to remedy its failure to maintain cost recovery ratios, the bond obligations were amended during 2011 to reduce the debt service coverage ratio to 1.0 times the debt service payment obligations. In exchange for the reduced coverage ratios, SJHTCA granted significant concessions to the bond holders. The concessions resulted in an increase in SJHTCA's total required debt service payments by over \$850 million based on the deferral of \$430 million in principal repayments for up to 19 years.<sup>44</sup>

Problems with cost over-runs have existed throughout the toll roads' existence.

In July, 2011, TCA reported that the 15.1 mile 241 South extension would cost \$1.733 billion to complete,<sup>45</sup> an amount that:

- Represents an average cost of \$115 million per mile; and
- Is comparable with the per mile cost of high speed rail.<sup>46</sup>

More recently, FETCA announced a proposal to build the 241 South extension in separate segments along the same corridor previously rejected by the regulatory agencies.<sup>47</sup> The first segment under the revised proposal provides for a five mile extension of the existing 241 South ending at Oso Parkway extension) at a cost of \$200 million.<sup>48</sup>

The TCA financial statements for June 30, 2004 indicate that the costs of the TCA roads transferred by TCA to the State of California Department of Transportation ("Caltrans") totaled \$2.3 billion (\$1.045 billion for SJHTCA and \$1.245 billion for FETCA). Thus, the \$2.3 billion of actual costs incurred by TCA for the construction of the toll roads represent an amount that is almost three times the original cost estimates of \$858 million for the roads. Further, based on TCA's estimate of \$1.733 billion to complete the 241 South extension, the total costs of the TCA roads would exceed \$4 billion, an amount that is almost five times beyond the original \$858 million cost originally contemplated for the roads. The current debt level (\$4.418 billion) represents a 515 percent increase over the original \$858 million cost estimate to construct the TCA roads.

## PUBLIC FUNDING CONTINUES TO FLOW TO TCA

In addition to funding provided by the bondholders, TCA received \$151 million in public funding during the construction phase. The SJHTCA toll roads received approximately \$111 million in public funding pursuant to a California Transportation Commission grant (\$40 million) and funding from the State and Local Partnership Program (\$71 million for the purpose of funding a portion of the construction costs of connecting the SJHTCA road to Interstate 5).<sup>49</sup> FETCA received an additional \$35 million from the State and Local Partnership Program.<sup>50</sup>

Caltrans is responsible for certain capital improvements required for the operation of the TCA roads – something that is highly irregular for private toll roads nationwide.<sup>51</sup> The current budget for major capital improvements that are necessary to preserve and protect the state highway system (per the Caltrans' 2012 State Highway Operation and Protection Program (“SHOPP”) projects list)<sup>52</sup> include an estimated \$54 million in budget allocations for capital improvements to the toll roads. Despite the fact that the mid-1990s completion date of the TCA roads is long after the date of construction of many Orange County highways, the capital allocation to TCA per the 2012 SHOPP is equal to 35 percent of the total SHOPP capital improvement allocations for all of Orange County.<sup>53</sup> The 35 percent allocation to the TCA roads for capital improvements per the SHOPP projects list for 2012 is far in excess of TCA's 20 percent proportionate share of the Orange County highways.<sup>54</sup> Thus, the allocations to TCA are approximately double the costs allocated to the other Orange County roads.<sup>55</sup>

The \$2.3 billion of actual costs incurred by TCA for the construction of the toll roads represent an amount that is almost three times the original cost estimates of \$858 million for the roads.

In addition to current allocations, prior Caltrans SHOPP capital improvement budgets for 1998 through 2010 included an allocation of an additional amount of \$67 million for capital projects relating to the TCA roads. Thus, TCA has received approximately \$122 million in allocations of funds for SHOPP capital projects since 1998 that could have instead been allocated to improving and repairing non-toll roads that are available to all members of the public.<sup>56</sup>

TCA's receipt of capital improvement funds from the state in excess of amounts that would otherwise be expected based on the age and size of the TCA roads appears to arise in large part from issues relating to TCA's original construction of the roads. The agreement between Caltrans and TCA, however, prohibits Caltrans from seeking any recourse against TCA as a result of any design defects unless TCA deviated from California standards without the written approval of Caltrans.<sup>57</sup> As described below, two such examples of required subsidies relate to ongoing remedial expenditures required to be incurred by the State to comply with orders from the

California Regional Water Quality and Control Board<sup>58</sup> to reduce water pollution relating to (1) TCA's failure to develop a water discharge process that complied with environmental standards<sup>59</sup> or (2) TCA's failure to construct functional water filters along the SJHTCA toll road.<sup>60</sup>

## FINANCIAL MISMANAGEMENT AND WASTE HAVE LED TO FINANCIAL RISK

TCA's current precarious financial position appears to result from various factors, including, (i) lack of oversight and/or responsibility that is facilitated by TCA's lack of transparency, (ii) unchecked spending that is facilitated by TCA's receipt of significant debt proceeds and a repayment schedule that defers significant principal and interest payments for many years and (iii) the lack of internal controls, systems and processes necessary to contain costs and maintain accountability. Specifically:

- **Continued Spending on Overhead and Non-Core Expenses:** TCA's budget commitment over the past 4 years indicate that over one-third of FETCA expenses represent marketing, consulting, legal and costs relating to the 241 South extension along the same corridor previously rejected by regulators.<sup>61</sup>
- **Excessive Debt:** The current estimate of \$1.7 billion for the entire extension would require TCA to incur up to \$1.7 billion in additional capital costs. The additional costs would be equal to almost one-third of TCA's already staggering debt level of \$4.4 billion and require debt payments over time that would exceed \$11 billion.
- **Generous Compensation Packages:** A recent media report indicated that the compensation package for the TCA Chief Executive Officer exceeded \$300,000, an amount reported to be 50 percent greater than compensation provided to the head of Caltrans who is responsible for all of California's highways.<sup>62</sup> And as noted above, multiple refinancing processes have lengthened the tenure of TCA as an independent bureaucracy. If the debt were fully paid off, the roads would become free to drivers and TCA operations would be absorbed by Caltrans.
- **Governance Impacted by Dual and Conflicting Interests:** TCA's financial mismanagement appears to be, in part, a product of a governance structure that does not appear to properly address dual (and potentially conflicting or incompatible) interests that may improperly influence the assessment of matters where the interests of SJHTCA and FETCA and/or the underlying participating municipal agencies are conflicting and/or not directly aligned. The lack of independence between FETCA and SJHTCA is created by: (i) an overlap of participating agencies in SJHTCA and FETCA,<sup>63</sup> (ii) the presence of common board members (e.g. 5 of the board members are common directors to both FETCA and SJHTCA as of June 30, 2011), (iii) TCA's use of a shared centralized management by each of FETCA and SJHTCA team and (iv) the frequently conflicting and/or dual interests of SJHTCA, FETCA, the participating member agencies, and the communities served by the toll roads (i.e., so-call "areas of benefit").

Despite such dual and/or conflicting interests between FETCA and SJHTCA, the TCA governance process does not appear to include adherence to a conflict of interest process. Thus, certain governing board members common to both FETCA and SJHTCA would frequently vote in matters for each of FETCA and SJHTCA even where the issue triggered a conflict of interest between FETCA and SJHTCA. By way of example only, various board members appeared to include in the review and approval process whereby FETCA agreed in 2005 to pay SJHTCA \$120 million for damages that may result to SJHTCA from the construction of the 241 South extension<sup>64</sup> (see further discussion above in "Bail Out of SJHTCA").

## Operational and Maintenance Costs Analysis

The following bullets summarize other operational concerns with respect to the toll road:

- **The total maintenance budget for Caltrans** fiscal year 2013 includes \$1.454 billion.<sup>65</sup> In addition, Caltrans District 12, which covers the TCA roads and the rest of Orange County, represents one of Caltrans' larger districts with 968 employees.<sup>66</sup> The District 12 employees represent almost 5 percent of Caltrans' 20,439 total personnel.<sup>67</sup> Based solely on pro-rata allocation estimation methodologies comparing TCA's total center line miles and lane miles to Caltrans' budgeted costs and/or total employees, the estimated maintenance costs for the TCA roads may range from approximately \$5 million per year<sup>68</sup> up to \$15.2 million per year.<sup>69</sup> Of course, the actual maintenance costs for the TCA roads may be significantly different and should be further identified and evaluated in order to more precisely quantify the true costs to the taxpayers for the subsidies provided to TCA in the form of maintenance.
- **Storm Water Filters:** A study conducted by Caltrans shortly after the construction of the SJHT-CA toll road concluded that systems originally installed by TCA for filtering pollutants along SR 73 from storm runoff "did not function properly ...and were not appropriate for the project in the first place."<sup>70</sup> Caltrans determined that the design of the filters improperly incorporated a horizontal installation of the filters (rather than vertical) that allowed sediment and pollutants to build up on top and create a layer over the drain.<sup>71</sup> Caltrans also determined that the "system was too costly to maintain" and would require almost \$1 million a year in maintenance costs (in comparison with TCA's estimates of \$139,000 per year).<sup>72</sup> A 2001 cease and desist order from the California Regional Water Quality Control Board (CRWQCB) - San Diego Region required Caltrans to repair or replace the filters.<sup>73</sup> In 2002, Caltrans reported the commencement of a \$13 million project to repair or replace the filters. The cost of the project was estimated to exceed 15 times of the costs incurred by TCA in the original construction of the systems.<sup>74</sup>
- **Groundwater Treatment:** FETCA's SR 261 includes a section of the road that is built beneath the existing water table. During the construction phase, TCA proposed to discharge the water into Peters Canyon Wash.<sup>75</sup> Following litigation challenging TCA's initial water discharge plan, however, TCA entered into an arrangement with Irvine Ranch Water District ("IRWD") and/or the Orange County Sanitation District to discharge the groundwater during the construction period through the sewer system.<sup>76</sup> In order to treat the water during the post-construction period, TCA constructed a gentrification plant at Walnut Avenue. The facility was constructed by TCA at a reported cost of \$3 million<sup>77</sup> and was designed to treat the water on-site in order to permit discharging the water into Peters Canyon Wash.<sup>78</sup>
- **The actual costs to Caltrans to operate the groundwater treatment** facility (\$302,000 per year),<sup>79</sup> significantly exceeded original TCA estimates (\$100,000 per year).<sup>80</sup> In addition, the inability to meet selenium content standards<sup>81</sup> required the subsequent shutdown of the de-nitrification facility. As a result, pursuant to an order from the CRWQB, the water is required to be discharged at a higher cost through the sewer system under a contract with the Orange County Sanitation District and/or IRWD.<sup>82</sup> The IRWD receives \$600,000 per year<sup>83</sup> from Caltrans for dewatering services. Thus, the Caltrans' costs of discharging the wastewater appears to exceed TCA's original estimates by at least \$500,000 per year.

- Breach of Bond Agreements:** The terms of the 1993 bonds required SJHTCA to maintain adjusted net toll revenues (i.e., the sum of tolls and investment earnings less expenses) equal to 1.3 times the amount of SJHTCA’s annual debt service payment obligations.<sup>84</sup> Based on the failure of SJHTCA to generate sufficient revenues, SJHTCA breached its obligations under the bond documents relating to such debt service coverage ratios. In order to remedy its failure to maintain such ratios, the bond obligations were amended during 2011 to reduce the debt service coverage ratio to 1.0 times the debt service payment obligations. In exchange for the reduced coverage ratios, SJHTCA granted significant concessions to the bond holders. The concessions resulted in an increase in SJHTCA’s total required debt service payments by over \$850 million based on the deferral of \$430 million in principal repayments for up to 19 years.<sup>85</sup>
- The historical subsidies have resulted in a transfer of funds from FETCA to SJHTCA in various forms, including FETCA’s financial “bail-out” payment of \$120 million to SJHTCA as “mitigation” for FETCA’s construction of the 241 South extension. FETCA made the payment to SJHTCA based on the potential that the extension of SR 241 would impair the traffic volumes on SJHTCA’s SR 73.<sup>86</sup>
- Reliance on Public Subsidies:** TCA’s public relations and marketing communications frequently identify the toll roads as “examples of public-private partnerships that ease traffic by building new infrastructure at no cost to taxpayers.”<sup>87</sup> TCA’s representation regarding the absence of taxpayer costs, however, do not appear to properly reflect the extensive nature of subsidies provided to TCA in the form of funding for the original construction, ongoing capital improvements, maintenance, fee assessments by TCA’s member agencies to developers and a non-competition agreement from the state.
- The toll roads and the responsibility for the maintenance and upkeep were transferred from TCA to the State of California immediately upon TCA’s completion of the construction of the toll roads, thus, the costs paid by the public are not clearly reflected in the TCA financial statements. Further, TCA’s lack of transparency further precludes the ability to easily identify the actual extent of public subsidies that benefit TCA. Although the extensive nature of TCA’s reliance on such public subsidies is not readily apparent from a review of TCA’s financial activity and/or public disclosures, the existence of subsidies demonstrate that TCA is the direct beneficiary of historical and ongoing public subsidies that may exceed \$1.7 billion to date.

If the debt were fully paid off, the roads would become free to drivers and TCA operations would be absorbed by Caltrans.

# Conclusion

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This review clearly raises significant concerns about the toll roads' sustainability, cost to taxpayers, and ability to relieve traffic congestion. TCA should address the numerous issues raised here before continuing plans for expansion or refinancing. State officials would be well within their duties to taxpayers and to drivers to review the finances and operations of the toll roads, and to consider alternative governance structures and transportation plans for the region.

## Recommendations

- The proposed refinancing plan is extremely risky and relies heavily on capital appreciation bonds, which have near junk-level ratings and likely will result in downgrades to junk status. To cover this risk, the cost of these bonds may be very high—further increasing the risk to TCA. In our opinion, these bonds may in fact never be paid off. The proposed refinancing plan should not proceed without further review by state authorities.
- Spending money on plans to extend the 241 under these conditions is not justifiable and should cease immediately.
- The board and management of FETCA and SJHTCA should address these serious shortcomings and evaluate additional options before continuing plans to expand or refinance.
- Caltrans should review its subsidy of toll road maintenance, should suspend any agreement that prevents improvements to Interstate 5, and should undertake a comprehensive review to coordinate traffic for the county in a rational, efficient manner.
- Given the demonstrated inability of the FETCA and SJHTCA board to manage risk, the state or another third party should review the finances and operations of the toll roads, and evaluate alternative governance structures and transportation plans.

This review clearly raises significant concerns about the Toll roads' sustainability, cost to taxpayers, and ability to relieve traffic congestion.

# Endnotes

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- 1 <https://www.thetollroads.com/>
- 2 “Foothill/Eastern Audited Financial Statements.” *TheTollroads.com*. Transportation Corridor Agencies, 30 June 2011. Web.
- 3 Fitch Affirms San Joaquin Hills Corridor, CA’s \$2.08B Revs at ‘BB’; Outlook Stable, May 16, 2012, *Business Wire*
- 4 (Moody’s Affirms Baa3 And Stable Outlook For Foothill/Eastern Transportation Corridor Agency, Moody’s Investor Service, December 11, 2011
- 5 SB 1413 (1987) (amendment to Government Code §66484.3 (“The bill would further authorize the entities participating in the joint exercise of powers agreement to set and collect toll charges to pay for the costs of major thoroughfares”).
- 6 Second Amended and Restated Joint Exercise of Powers Agreement for FETCA and SJHTCA, Section 10.1
- 7 Footnote 6 in FETCA audited financial statements for FYE 6/30/11
- 8 Footnote 6 in FETCA audited financial statements for FYE 6/30/11
- 9 Id.
- 10 “Mitigation Payment and Loan Agreement By and Between the Foothill/Eastern Transportation Corridor Agency and the San Joaquin Hills Transportation Corridor Agency.” October 13, 2005.
- 11 Section 21.6(a) Cooperative Agreement by and between Caltrans and FETCA, May 13, 1993, as amended by Amendment No. 1, May 12, 1994, Nos. 2, and 3 December 8, 2003)
- 12 Map of Non-Competition Zone at Exhibit B to Cooperative Agreement (south of 91; east of 55 and corridor extending east of 241)
- 13 Cooperative Agreement between State of California- Department of Transportation and FETCA, May 13, 1993, Section 2.16(c) (“This agreement is based on the assumptions that construction of the San Joaquin Hills Transportation Corridor (with three lanes in each direction over its entire length) will be completed by 1999 and the Eastern Transportation Corridor (with two lanes in each direction over its entire length) will be completed by the year 2007 and that PROJECT will be completed- by 2012. Should any of these events not occur, other projects not herein identified may be implemented by STATE or others within the Non-Competition Zone as substitute service for the greater 1-5 corridor”; see also, Recital (2) “PROJECT” relates to construction of “State Highway improvements ... on proposed Route 241 from its connection with INTERSTATE 5 in San Diego County to proposed Route 231 (Eastern Transportation Corridor)”
- 14 Cooperative Agreement between State of California- Department of Transportation and FETCA, May 13, 1993, Section 2.16(c) (“This agreement is based on the assumptions that construction of the San Joaquin Hills Transportation Corridor (with three lanes in each direction over its entire length) will be completed by 1999 and the Eastern Transportation Corridor (with two lanes in each direction over its entire length) will be completed by the year 2007 and that PROJECT will be completed by 2012. Should any of these events not occur, other projects not herein identified may be implemented by STATE or others within the Non-Competition Zone as substitute service for the greater INTERSTATE 5 corridor”; see also, Recital (2) “PROJECT” relates to construction of “State Highway improvements ... on proposed Route 241 from its connection with INTERSTATE 5 in San Diego County to proposed Route 231 (Eastern Transportation Corridor)”

- 15 Analysis of Mitigation and Loan Payments to the San Joaquin Hills Transportation Corridor Agency, report of The PFM Group to FETCA (“The traffic and revenue projections also included a limited assessment of the impact of the construction of the Foothill-South Corridor on the traffic and revenues of the San Joaquin Hills. The Foothill-South Corridor essentially parallels the San Joaquin Hills, west of Interstate 5. The effect of this parallel corridor, according to the traffic and revenue report, is to reduce traffic on Interstate 5, thereby freeing capacity on Interstate 5 to attract traffic away from San Joaquin Hills. The revenue impact of Vollmer Associates, the traffic and revenue consultant, extrapolated by TCA staff, shows a negative impact upon San Joaquin Hills’ revenues of over \$300 million through 2043. San Joaquin Hills has considered opposing the construction of Foothill-South unless the Foothill-Eastern provided compensation for the diminution of revenues. Supervisor Bill Campbell offered the idea of mitigation payments and a tentative agreement of payments totaling \$120 million from Foothill-Eastern to San Joaquin Hills was reached. Two \$15 million payments are to be made in FY2006. Three payments of \$30 million are required to be made by the end of fiscal years 2007, 2008 and 2009. PFM assumes that absent the mitigation payments, San Joaquin Hills would seek to stop the Foothill-South project from moving forward. Using a discount rate equal to the loan rate, the Foothill-Eastern mitigation payments from FY2006-FY2009 have a present value of approximately \$113 million. The projected revenue impact upon San Joaquin from the Foothill-South completion in 2012 through repayment of the Foothill-Eastern loan in 2043 has a present value of \$126 million. This analysis shows that Foothill-Eastern is not overcompensating San Joaquin Hills for its projected loss of revenue from the construction of Foothill South”
- 16 Ibid.
- 17 California Toll roads Hampered by Freeways, Bloomberg, January 3, 2012
- 18 KPMG Independent Auditors report, 2004, page 2. “In 1996, the State Route 73 Toll Road opened to traffic, the first publicly operated toll road in Southern California. Today, approximately 90,000 transactions are recorded on the State Route 73 Toll Road every weekday, serving as an important, time-saving alternative route to Interstate 405 and Interstate 5 Freeways.” (The quote above that says 80,000 transactions are recorded per day is from the 2011 report)
- 19 Revenue projections nominally increased from 102.3 percent in 2006 to 105.9 percent in 2007 before trending down to current levels (<http://www.tollroadsnews.com/node/5933>)
- 20 Ibid.
- 21 <http://www.tollroadsnews.com/node/5933>
- 22 California Toll roads Hampered by Freeways, Bloomberg, January 3, 2012
- 23 <http://www.labormarketinfo.edd.ca.gov/cgi/databrowsing/localAreaProfileQSResults.asp?selecte-darea=California&selectedindex=0&menuChoice=localAreaPro&state=true&geogArea=0601000000>
- 24 Ibid.
- 25 <https://www.thetollroads.com/whatshappening/241completion.php>
- 26 Fitch Affirms CA’s Foothill/Eastern Transportation Corridor Revs at ‘BBB-’; Outlook Negative, May 16, 2012, Business Wire
- 27 Ibid.
- 28 Fitch Affirms San Joaquin Hills Corridor, CA’s \$2.08B Revs at ‘BB’; Outlook Stable, May 16, 2012, Business Wire
- 29 Moody’s Affirms Baa3 And Stable Outlook For Foothill/Eastern Transportation Corridor Agency, Moody’s Investor Service, December 11, 2011

- 30 U.S. Toll roads: Rising Leverage, Toll Rates Keep Outlook Negative Despite Signs of Economic Recovery, Moody's Investor Service, January 18, 2012
- 31 Based on debt of \$2.338 billion and 56.173 million transactions for FY 2012 per [https://www.thetollroads.com/aboutus/investorinformation/transactiontables/fe\\_annualresults.php](https://www.thetollroads.com/aboutus/investorinformation/transactiontables/fe_annualresults.php)
- 32 Based on debt of \$2.079 billion and 25.425 million transactions for FY 2012 per [https://www.thetollroads.com/aboutus/investorinformation/transactiontables/sj\\_annualresults.php](https://www.thetollroads.com/aboutus/investorinformation/transactiontables/sj_annualresults.php)
- 33 Toll Road Debt Rises 19 percent: Moody's The Bond Buyer July 27, 2011
- 34 Ibid.
- 35 Ibid.
- 36 FETCA Powerpoint
- 37 Major Thoroughfare and Bridge Fee Program, July, 1985 at 7
- 38 Ibid. (1985 Major Thoroughfare and Bridge Fee Program for SJHTCA and FETCA (indicates development impact fees equal to 48.5 percent of estimated costs of \$858 million)
- 39 TCA Board minutes for November 10,2011 (incorporating SJHTCA Resolution S97-05, June 12, 1997, and FETCA Resolution F97-08, June 12, 1997 (indicates development impact fees equal to 48.5 percent of revised cost of the toll roads (\$1.057 billion for SJHTCA and \$2.245 billion for FETCA)
- 40 Ibid. (indicates development impact fees equal to 30 percent of revised cost for FETCA and 17.49 percent of revised cost for SJHTCA (updated cost of \$1.5 billion for SJHTCA and \$3.057 billion for FETCA)
- 41 FETCA Board meeting, November 10, 2011 (citing Resolution F97-08) June 12, 1997
- 42 TCA Resolution S97-05, June 12, 1997 (as described in Cross-Complaint And Petition For Writ Of Mandate By Cross complainant And Petitioner San Joaquin Hills Transportation Corridor Agency, February 12, 2012
- 43 Ibid.
- 44 Moody's Downgrades To B 1 From Ba2 San Joaquin Hills Agency Revenue Bonds; Outlook Negative, Moody's Investor Service, June 8, 2011 ("[o]verall future debt service costs increase from a total of \$4.14 billion pre-restructuring to nearly \$5 billion post restructuring")
- 45 Transportation Corridor Agencies - Economic Benefit Analysis 241 Completion Project, Beacon Economics LLP, July, 2011 at 5
- 46 The revised plan for high speed rail reflects a total cost of \$68.4 billion and a cost of \$131.53 8 million per mile See e.g., California High Speed Rail Authority "2012 Revised Business Plan Fact Sheet" ("completion of the Phase 1 blended system will cost \$68.4 billion) and "Executive Summary" at ES-13 (Phase 1 Blended section is 520 miles with endpoints in San Francisco and Los Angeles/Anaheim
- 47 May 30, 2012 letter from Bob Filner, United States Congressman, 51st District, to Lt. General Thomas P. Bostick, U.S. Army Corps of Engineers ("TCA's contradictory statements smack of formal project segmentation")
- 48 Fitch Affirms CA's Foothill/Eastern Transportation Corridor Revs at 'BBB-'; Outlook Negative, May 16,2012, Business Wire
- 49 Case Studies of Transportation Projects Using Federal Credit, Federal Highway Administration
- 50 Ibid.
- 51 Section 2.10 of the Cooperative Agreement between FETCA and Caltrans (TCA roads are conveyed to the State following constructions and approval of substantial completion of work
- 52 Summary spreadsheet of SHOPP projects relating to TCA roads (SR 73, 133, 241 and 26) (complete copy of 2012 SHOPP budget is available at Pursuant to Government Code 14526.5, the California

Department of Transportation (“DOT” or CALTRANS”) is required to “prepare a state highway operation and protection program [SHOPP] for the expenditure of transportation funds for.” The 2012 budgeted project list by SHOPP includes projected costs for fiscal years (“FYE”) 2012/13 through 2015/16

- 53 The \$54 million of project costs allocated to TCA roads in the 2012 SHOPP account for approximately 35 percent of the entire SHOPP project costs allocated to Orange County (\$153,828 million).
- 54 TCA’s 51 center line miles account for 19 percent of the county’s 275 center line miles; TCA’s 420 lane miles account for 22 percent of the county’s 1,907 lane miles. See TCA road information at [https://www.thetollroads.com/assets/objects/27/Toll\\_Roads\\_IBTTA\\_4pg\\_forweb.pdf](https://www.thetollroads.com/assets/objects/27/Toll_Roads_IBTTA_4pg_forweb.pdf); see “State of the Pavement Report,” 2007, California Department of Transportation, Division of Maintenance for Orange County highway mile information
- 55 Costs for other Orange Country roads are equal to (i) 41 percent of the costs allocated to TCA per center line mile and (ii) 52 percent of the costs allocated per lane mile. See TCA road information at [https://www.thetollroads.com/assets/objects/27/Toll\\_Roads\\_IBTTA\\_4pg\\_forweb.pdf](https://www.thetollroads.com/assets/objects/27/Toll_Roads_IBTTA_4pg_forweb.pdf); see Orange County highway mile information at “State of the Pavement Report,” 2007, California Department of Transportation, Division of Maintenance for Orange County (Dollars are in OOOs).
- 56 The \$122 million is broken down as follows:

<sup>63</sup> The \$122 million is broken down as follows:

	Capital Costs	Costs	Total Costs
Total TCA Capital Improvement Allocations - SHOPP Projects List 2012 (in 000s)	\$ 40,160	\$ 14,371	\$ 54,531
Total TCA Capital Improvement Allocations - SHOPP Projects List 1998 - 2010 (in 000s)	51,033	16,190	67,223
	\$ 91,193	\$ 30,561	\$ 121,754

- 57 Section 2.10 of the Cooperative Agreement between FETCA and Caltrans (TCA toll roads “shall be maintained and repaired by the State”
- 58 SHOPP budget allocations include \$24.224 million for stabilizing slope and revalidation on SR 73, \$19.843 for construction of groundwater transmission line at Walnut Avenue pumping plant
- 59 California Regional Water Quality Control Board, Santa Ana Region, Order No. R8-2003-0083, Water Discharge Requirements for Transportation Corridor Agencies/California Department of Transportation District 12, Eastern Transportation Corridor, Section 14- Denitrification Facility, August 22, 2003
- 60 California Regional Water Quality Control Board, San Diego Region, Cease and Desist Order No. 2001-198, July 18, 2001
- 61 FETCA budgets available at <https://www.thetollroads.com/aboutus/investorinformation/financialreports>.
- 62 Toll roads’ CEO earns \$301,304; Transportation Corridor Agencies leader initially declined to provide pay information, Orange County Register, April 20, 2012; see also, O.C. Tollway Agencies Pave Way To Lofty Pay And Generous Perks; Compensation: Top Officials Earn Well Over \$100,000 And Enjoy Extras Such As A Low-Interest Loan And Up To 2 112 Months Annual Paid Leave. Los Angeles Times November 26, 1995
- 63 Second Amended and Restated Joint Exercise of Powers Agreement creating the Foothill/Eastern Transportation Corridor Agency Second Amended and Restated Joint Exercise of Powers Agreement creating the San Joaquin Hills Transportation Corridor Agency. The members of the TCAs consist of public agencies that have territorial jurisdiction within areas that are adjacent to the toll roads (so-called “areas of benefit”). Each of the TCA members appoints a member of its legislative body to serve

on the governing board of the respective TCA. Based on the overlap in the areas of benefit for the toll roads, seven public agencies are members of both FETCA and SJHTCA (Dana Point, Irvine, San Clemente, San Juan Capistrano, Santa Ana, County of Orange 3rd and 5th Districts). The overlap of agencies that fall within the areas of benefit of both FETCA and SJHTCA traditionally results in a high percentage of directors who are common to both FETCA and SJHTCA)

- 64 Tollway spared from default, Orange County Register, November 11, 2005 (“The cash-rich Foothill/Eastern (241/133) Toll Road agreed Thursday to lend its financially struggling southern cousin, the San Joaquin Hills (73) Toll Road, \$1 billion so it doesn’t default in future years. Officials of the Foothill/Eastern also promised to give the San Joaquin Hills road \$120 million in compensation should the Foothill/Eastern build its proposed 16-mile extension -- a move that would reduce the number of drivers willing to pay a toll to use the San Joaquin. Officials with the San Joaquin had threatened to try to stop the extension with a lawsuit-- even though six people sit on both agencies that run the legally separate toll-road systems ... The Foothill/Eastern, after a sometimes-bitter public discussion Thursday among its board members, voted 12-2 to approve the deal; one member was absent at the vote. The San Joaquin then, with little talk, approved it unanimously. Several Foothill/Eastern officials said they had concerns, because their legal loyalty was to their toll road, and the deal will end up costing their agency money. Under the agreement, the Foothill/Eastern will pay the \$120 million in compensation over the next four years. If that toll road’s extension, from near Rancho Santa Margarita to the San Clemente area, falls through, the \$120 million reverts to a loan. Up to \$1 billion would be lent to the San Joaquin, beginning in 2011 as needed. It would be paid back at about 3 percent”
- 65 Governor’s Budget; full copy available at <http://www.ebudget.ca.gov/StateAgencyBudgets/2000/2660/departments.html>
- 66 District 12 reported 968 employers per the State Agency Reporting Center report dated August, 2011
- 67 Governor’s Budget; full copy available at <http://www.ebudget.ca.gov/StateAgencyBudgets/2000/2660/departments.html>
- 68 TCA’s 51 center line miles represent 34 percent of the State’s 14,877 center line miles (per Caltrans’ 2007 “State of the Pavement Report”), which would translate to \$5 million in estimated annual maintenance costs based on a proportionate allocation of Caltrans’ maintenance budget of \$1.454 billion
- 69 District 12 employees (968) represent 4.74 percent of total Caltrans maintenance personnel hours (20,439) (per Governor’s FY 2013 budget), which translates to annual maintenance costs applicable to the TCA toll roads of \$12.8 million (based on a proportionate allocation of TCA’s 18.55 percent of Orange County’s center line miles (51 miles out of 275 total Orange County highway miles) or \$15.2 million (based on a proportionate allocation of TCA’s 22.07 percent of Orange County’s lane miles (or 420 miles out of 1,903 total Orange County highway miles)
- 70 Caltrans to Fix Drains on Tollway; Environment: State water regulators lean on the agency to correct dozens of faulty filters along the San Joaquin Hills route. Los Angeles Times July 19, 2001
- 71 Ibid.
- 72 Ibid.
- 73 Cease and Desist Order No. 200 1-198
- 74 Caltrans Still Lagging on Water Pollution Abatement, Los Angeles Times May 13, 2002
- 75 Los Angeles Times December 3, 1998, Group Sues To Stop Potential Flow Of Nitrates Into Bay
- 76 Report entitled “Construction of a New Tollway Below the Groundwater Table with Nitrate Remediation,” Scott M. Taylor, William Frost & Associates

- 77 Identification and Assessment of Selenium and Nitrogen Treatment Technologies and Best Management Practices Report, March 30, 2007, Orange County Nitrogen and Selenium Management Program. (“[C]osts for a 0.7 [million gallon day] facility constructed with the 261 Toll Road in Irvine (note that the facility is currently not operated and diverting water to the sanitary sewer instead). The approximate capital cost was \$3 million. Total annual costs for labor for operation and maintenance of the facility, associated process equipment, sample analysis, process chemicals including methanol, phosphoric acid, and sodium bisulfite costs were \$302,000”
- 78 California Regional Quality Control Board, Order No. R8-2003-0083, August 22, 2003
- 79 Identification and Assessment of Selenium and Nitrogen Treatment Technologies and Best Management Practices Report, March 30, 2007, Orange County Nitrogen and Selenium Management Program
- 80 Report entitled “Construction of a New Tollway Below the Groundwater Table with Nitrate Remediation,” Scott M. Taylor, William Frost & Associates
- 81 California Regional Quality Control Board, Order No. R8-2003-0083, August 22, 2003; see also, “Improving Newport Bay Watersheds,” report dated August 6, 2010 (“Caltrans built a denitrification filter system to reduce nitrogen concentrations from its permanent groundwater dewatering facility for the underpass. Unfortunately this system, while successful in meeting permit requirements, was later shutdown due to other concerns, thereby requiring a different solution. Caltrans is currently achieving its nitrogen reduction target by diverting all dewatering effluent from the site out of the watershed”); see also, Identification and Assessment of Selenium and Nitrogen Treatment Technologies and Best Management Practices Report, March 30, 2007, Orange County Nitrogen and Selenium Management Program.
- 82 California Regional Quality Control Board, Order No. R8-2003-0083, August 22, 2003
- 83 Excerpt from Irvine Ranch Water District Budget for FYE 2013
- 84 Notice to Municipal Securities Rulemaking board of Significant event (Modification to bondholders Rights by Amendment of Terms of Certain Bonds
- 85 Moody’s Downgrades To B 1 From Ba2 San Joaquin Hills Agency Revenue Bonds; Outlook Negative, Moody’s Investor Service, June 8, 2011 (“[o]verall future debt service costs increase from a total of \$4.14 billion pre-restructuring to nearly \$5 billion post restructuring”)
- 86 Mitigation Payment and Loan Agreement, October 13, 2005
- 87 New California Toll Road Utilizes Fastrak® System,» TCA Press Release, December 4, 2007

# About the Authors

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## DONNA ARDUIN

Donna Arduin, president and co-founder of Arduin, Laffer, & Moore, is one of the nation's most successful veterans of state budget management and tax reform, and, as Budget Director, led toward responsibility the budgets of Michigan, under Governor Engler; New York, under Governor Pataki; Florida, under Governor Jeb Bush; and California, under Governor Schwarzenegger. She established a reputation for bringing government spending under control through long-term policy planning and fiscally conservative budgeting; her Governors have consistently received high marks on the Cato Institute's fiscal report cards during her tenure with their administrations.

She recently consulted for Florida Senator Marco Rubio, Governor Rick Scott and California gubernatorial candidate Meg Whitman.

Ms. Arduin is further noted for creating the nation's first interactive "e-budget," implementing performance-based budgeting, simplifying property taxes and reducing the size of state governments.

A graduate of Duke University, Ms. Arduin graduated magna cum laude with honors in economics and public policy. Prior to her career in the public sector, she worked as an analyst in New York and Tokyo in the private financial markets for Morgan Stanley and Long-Term Credit Bank of Japan.

## WAYNE WINEGARDEN, PH.D.

Wayne Winegarden has more than 20 years of experience in public policy, economic research, and business. His expertise lies in applying quantitative and macroeconomic analysis to create greater insights for policy leaders, and corporate strategy and planning for decision makers. He has advised Fortune 500 companies, state legislators, political candidates, as well as small business and trade associations. He founded Economic Solutions and Laffer Associates strategy services; managing staff, budget, and corporate development.

Currently, he is Partner at Arduin, Laffer & Moore Econometrics, which advises federal, state, & municipal leaders, political candidates, and private sector clients, on economic, fiscal and state policies. The firm analyzes the impacts of policy upon markets, identify trends and opportunities, and inform strategy that optimizes performance.

Prior to Arduin, Laffer & Moore Econometrics, Dr. Winegarden was a managing director at Laffer Associates from 2008 to 2012. He was also a manager at Philip Morris International and Philip Morris Management Corporation where he analyzed economic and fiscal issues. His teaching experience includes Marymount University and George Mason University.

Dr. Winegarden received a B.A. in Economics and International Relations as well as a Ph.D. in Economics from George Mason University.

# About Pacific Research Institute

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The Pacific Research Institute (PRI) champions freedom, opportunity, and personal responsibility by advancing free-market policy solutions. It provides practical solutions for the policy issues that impact the daily lives of all Americans, and demonstrates why the free market is more effective than the government at providing the important results we all seek: good schools, quality health care, a clean environment, and a robust economy.

Founded in 1979 and based in San Francisco, PRI is a non-profit, non-partisan organization supported by private contributions. Its activities include publications, public events, media commentary, community leadership, legislative testimony, and academic outreach.



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