LAO
65 YEARS OF SERVICE

December 9, 2010

Hon. Alan Lowenthal
Senator, 27th District
Room 2032, State Capitol
Sacramento, California 95814

Dear Senator Lowenthal:

In your letter dated November 18, 2010 you asked us to review and comment on a pending public-private partnership (P3) agreement between the California Department of Transportation (Caltrans) and Golden Link Concessionaire LLC for the Presidio Parkway project. So-called P3s are agreements that authorize significant participation of the private sector in the financing, development, construction, and operation of a public project. The P3 agreement for the Presidio project (also known as Doyle Drive) would reconstruct and lease the southern approach to the Golden Gate Bridge to a private partner. The project would replace a deficient structure and roadway that carries a high volume of traffic to and from the Golden Gate Bridge and nearby points of interest. This project is being designed to make significant safety improvements as well as to provide environmental and aesthetic benefits to motorists and the local community. As such, it is a high priority for both the state and the local area, and is scheduled to be built over the next several years. In fact, the first phase of the project is already under construction.

The agreement that you asked us to review would design and construct the second phase of the project. In addition, the agreement would also lease the entire roadway (Phase I and Phase II) to the concessionaire to be privately operated and maintained for 30 years. Caltrans selected Golden Link from among two bidders on this agreement.

Our office has previously recommended that the state use P3 approaches for transportation projects on a pilot basis in order to evaluate the benefits of such procurement approaches. However, as we advised the Legislature during spring 2010 budget hearings, we do not think the Presidio project is a good fit for a P3 procurement approach because the project is already very far along in its schedule and it does not rely on a toll or user fee to fund the work. Overall, our analysis finds that the Golden Link agreement does not meet all the goals Caltrans intended and is not likely to be a good fiscal deal for the state. In light of these findings, we think that the state should consider not signing the contract with Golden Link, and instead build the project with a more traditional approach. In your letter, you requested that we respond to specific questions about the agreement. Our responses to these questions are provided below.

Does the Agreement Meet Caltrans' Stated P3 Goals?

Caltrans has asserted that the Golden Link agreement for the Presidio project will achieve several goals or benefits to the state that would not be achieved with a traditional design-bid-build procurement. You asked us to review the contract documents and determine to what extent the lease agreement achieves these goals and benefits. Generally, we found that the agreement does not appear to achieve as many goals or benefits as Caltrans has claimed. The goals identified by Caltrans are listed below along with our review of the extent to which the agreement meets that goal.

Optimal Transfer of Risk. When making the determination about which projects are best suited for a P3 type of procurement, as opposed to a traditional approach such as design-bid-build, the analysis should consider which risks should be retained by the state and which risks should be transferred to the private sector. In theory, the P3 agreement compensates the private partner for assuming certain risks. Therefore, an analysis of what type of procurement is best for a given project should evaluate both the level of risks transferred and the project's costs under each procurement option.

In its presentations to legislative staff, Caltrans has stated that the Golden Link agreement optimizes the transfer of risk from the state to the concessionaire. However, our review finds that Caltrans is retaining some risks that the department initially implied would be transferred to the concessionaire. For example, under the contract, the state will retain some potentially significant construction risks such as costs or other problems that could result from the discovery of hazardous materials, endangered species, and archeological or cultural artifacts. Caltrans states that it agreed to retain these risks because the concessionaire was not able to access the site when developing its bid because of the ongoing construction work of the Phase I contracts.

More Certainty in the Project Schedule. Caltrans states that the contract meets another important goal by providing greater certainty about when the project will be completed. The department notes that a provision in the pending contract requires the concessionaire to substantially complete the project's construction phase by a specific date. However, there is still some uncertainty regarding when the project will be completed. This is because, under the proposed agreement, circumstances beyond the concessionaire's control called "relief events" could extend the construction completion deadline. In addition, Caltrans reports that it is still negotiating with the concessionaire on various contract issues and that the construction completion deadline could change.

Another aspect of the agreement that could help to make the project construction schedule more certain relates to provisions providing the concessionaire with more flexibility to deal with construction problems that may arise in the field. These provisions could help the concessionaire work through potential delays more quickly. For example, under the agreement, solutions to unexpected construction issues can be approved and implemented quickly, rather than requiring lengthy Caltrans approvals as would be the case in a traditional contract.

Achievement of Cost Certainty. Caltrans states that using a P3 procurement for this project meets another goal by providing the state with greater certainty about the total cost of the project. However, it is not possible to determine at this time exactly what the state will pay under this contract. Some of the factors that determine the payment amounts are not yet known, such as the interest rates for the project's initial financing and future inflation rates, which could change the project's cost. In addition, the concessionaire could encounter a variety of situations during construction, such as the discovery of archeological resources, that would increase costs. Similarly, over the course of the proposed 30-year operations and maintenance lease, certain events, such as the enactment of a change in state law that resulted in increased costs to the concessionaire, would be passed on to the state. More information about specific types of factors that could increase or decrease state costs are provided later in this letter.

Reduced Initial Investment of Transportation Funds. Caltrans states that the contract reduces the amount of funding the state must commit to the project in the near term, freeing up funds to be used on other projects. Our review finds that the agreement would in fact reduce the amount of state funds that must be spent during the project's construction phase by up to a couple hundred million dollars. This could allow Caltrans to build other projects sooner, which would increase benefits to motorists. However, Caltrans has not provided us information about which projects it would advance with these funds, or the time or costs savings associated with those projects. Thus, the benefits to the state cannot be measured at this time.

Lifecycle Cost Efficiency. Caltrans asserts that the overall cost of procuring and maintaining the project over its useful life is less expensive under the P3 agreement than it otherwise would be. This is based on Caltrans' net present value (NPV) analysis that shows a lower NPV cost for a P3 approach to the Presidio project. However, based upon our own analysis, we disagree with Caltrans' conclusion that the agreement results in a lower lifecycle cost. As described in detail in another section below, we have concluded that a traditional design-bid-build procurement would be less expensive in this particular case than under the Golden Link agreement.

Improved Maintenance Performance. Caltrans claims that the Presidio project will be maintained to Caltrans' maintenance standards, or, in some cases, to a slightly higher standard. This is potentially a benefit to the state, particularly given that Caltrans does not maintain the state's highways to its own standards and, as a result, much of the system is in below-average condition. At this time, however, it is not clear that the agreement will provide the concessionaire sufficient incentives to satisfy the terms of the agreement. The agreement includes monetary penalties if the concessionaire fails to maintain this stretch of highway to Caltrans' standards. However, in many cases the penalties are minor.

In What Ways Does the Agreement Provide a Transfer of Risk?

You asked us to identify major project risks that are transferred to the concessionaire. These are discussed below.

Design-Construction Risk. Our review found that the transfer of "design-construction interface" risk is the most significant risk transfer in the agreement. The design-construction interface is a term that refers to how the design will be implemented by the contractor to ensure that the project is built properly given such factors as site conditions, construction materials, availability of equipment, and connectivity with other parts of the project roadway. This is a critical risk factor. On a project of this size, Caltrans estimates that about 40 percent of the project's total risk is related to the design-construction interface. Our review of the agreement finds that Caltrans has initially transferred most of this type of risk to the concessionaire. This risk transfer is achieved through provisions in the contract that make the concessionaire responsible for designing and constructing the project to completion by a specific date. Failure to achieve substantial completion of the project by this date would be a concessionaire default, which could result in termination of the contract.

The amount of risk associated with the design-construction interface that is ultimately transferred to Golden Link will depend on the resolution of construction issues if, and when, they arise. Because the project is not yet fully designed, it is possible that disputes could arise between Caltrans and the concessionaire regarding whether a feature of the project was part of the initial bid, or if it constitutes an increase in the scope of work. For example, the concessionaire could build part of the project in a way that excludes some aesthetic feature Caltrans intended to be part of the project. If it is determined that the design feature is an increased scope of work, then the state would effectively be compelled to pay the additional costs and in essence take back that risk. Because of the project's location within a national park and the complexity of its stakeholders, it is likely that these types of design issues will arise.

Other Risks. In addition to the design-construction interface risk described above, our review of the agreement found that the state retains many other risks related to the project. Figure 1 summarizes these risks and how they are shared between the state and the concessionaire.

Figure 1

The Presidio Parkway Project
Summary of Other Risks and How They Are Shared

Type of Risk	Caltrans Percentage of Cost[a]	Concessionaire Percentage of Cost[a]
Financing		
Cost from interest rates on federal loans could be greater than anticipated	100%	—
Cost from interest rates for private financing could be greater than anticipated	85	15%
Securing state and federal funds for availability payments	100	—
Construction		
Discovery of endangered species	100	—
Discovery of archaeological, paleonto-logical, or cultural resources	100	—
Preexisting hazardous materials such as site contamination	Percentage depends on the extent of cleanup required	Percentage depends on the extent of cleanup required
Unknown utility lines discovered during construction	100	—
Construction delays caused by owners of utilities such as sewer lines	100	—
Delays in getting major permits	100	—
Federal authorities may require costly landscaping because the project is in a national park	Percentage depends on final landscaping cost	Percentage depends on final landscaping cost
Operations and Maintenance (O&M)		
Captial costs of increased required maintenance	100	—
O&M costs of increased required maintenance	—	100

[a] Generally, percentage costs apply after an agreed upon amount under the terms of the contract has been spent by the concessionaire.

Under What Circumstances Could Payment Amounts Change?

You asked that we determine under what circumstances the payments made by the state to the concessionaire could be changed. Under the agreement, the state would pay the concessionaire a “milestone” payment of $173 million when the new highway is open to traffic. The state would also make availability payments for 30 years that are based on this stretch of highway being available to motorists. The estimated base availability payment is $28.5 million each year. Our review found several major factors could increase or decrease these amounts, as listed below.

Interest Rates at Financial Close Could Increase or Decrease Total Project Cost. In the agreement, the concessionaire is responsible for financing the construction of the project. In order to do so, the concessionaire plans to make an equity investment, obtain loans from other parties, and issue bonds. The interest rates paid on the loans and bonds are factors in determining the amount of the annual availability payments that the state will make to the concessionaire. The $28.5 million estimate is based on estimates of the interest rates that the concessionaire expects to pay. At financial close—the time when all the financing arrangements are finalized—the interest rates will be updated to reflect the actual rates at that time. Thus, the annual payment amount that would be paid to the concessionaire for 30 years could increase or decrease depending on interest rates at the time of financial close, which would likely be in the summer or fall of 2011.

Availability Payments Would Be Adjusted for Inflation. Under the pending agreement, the availability payment will be adjusted annually for inflation. Currently, the project's total estimated cost includes projected inflation adjustments of about 2 percent each year. The actual inflation adjustments will be calculated annually based on the current level of the Consumer Price Index (CPI). Specifically, 15 percent of the availability payment amount will be subject to adjustment each year based on the CPI. The remaining 85 percent of the payment amount is not subject to inflation adjustments. We note that, over the last 30 years, the average annual growth in the CPI has been 3.7 percent.

Relief Events Could Increase Project Cost. As noted earlier, the amount paid to the concessionaire can increase due to relief events or circumstances beyond the concessionaire's control. For example, if archeological or cultural artifacts are discovered at the project location, the concessionaire would most likely be entitled to extra payments to compensate for increased costs related to special handling of the artifacts and construction delays caused by the extra work. Similarly, if Caltrans chose to increase the scope of work to be performed on the project, the concessionaire would be entitled to additional compensation. Caltrans has the option of making these increased payments by increasing the annual availability payments, or by making direct payments to the concessionaire. It is likely that there will be at least some relief events on this project, but it is unknown as this time to what extent they would increase the project's total cost.

Inadequate Construction Performance Could Result in Decreased Payments. The payment amounts owed the state's P3 partner could be decreased under the terms of the agreement if Caltrans determined that the concessionaire constructed non-conforming work. For example, if concrete is poured such that it is not as strong as the standards require, the concessionaire must either fix the work or compensate Caltrans by accepting reduced payments.

Inadequate Operations and Maintenance Performance Could Result in Decreased Payments. The availability payment amount can decrease if the concessionaire fails to operate and maintain the highway to certain standards. These standards range from making the road available for public use to safety-related issues. For instance, the payment amount can decrease if one or more lanes of the road are closed. However, our review finds that these potential reductions in payments are not substantial. Specifically, if the concessionaire were to close all but one lane of the roadway for two hours every workday during peak travel times, the state would reduce the availability payment by only about 6 percent. Similarly, availability payments would be reduced by relatively minor amounts if specific safety issues, such as debris blocking traffic, are not resolved within a specified time period.

Under What Conditions Can the Contract Be Terminated?

You have asked that we identify what circumstances allow either the developer or Caltrans to terminate the P3 agreement. As listed below, our review indicates that six different provisions in the contract, each with their own consequences, allow for termination of the contract.

- ***Caltrans Convenience.*** Caltrans is authorized to terminate the contract at its sole discretion if it determines that termination is in the department's best interest. In this case, Caltrans would be required to make substantial payments to the concessionaire, including (1) payment of the project's debt costs, (2) repayment of the equity investment, (3) payment of the concessionaire's expected profit of about 20 percent (pretax) per year through the termination date, and (4) various other costs.
- ***Failure to Achieve Financial Close.*** Caltrans or the concessionaire can elect to terminate the contract if the concessionaire fails to meet the financial close deadline, which is expected to be August 31, 2011. The financial close deadline is the time by which the concessionaire must have secured all financing for the project, including investments, bonds, loans, or other debt. If the agreement is terminated under this provision, Caltrans would be required to pay for the project work already performed, up to certain limits. The concessionaire would be required to pay Caltrans liquidated damages in the amount of $15 million.
- ***Extended Relief Events.*** If relief events arise that disrupt the construction or operation of the project for an extended period of time, the concessionaire and Caltrans have the right to terminate the contract if both parties agree to the termination. In that case, the state would be required to pay (1) the project's debt costs, (2) repayment of the equity investment, (3) an amount of profit equivalent to 5 percent per year through the termination date, and (4) various other costs.
- ***Developer Default.*** Caltrans may terminate the contract in the event of a default by the concessionaire. Default can happen if the concessionaire fails to perform major duties required by the contract within specified timeframes. In this case, Caltrans would generally be required to pay the concessionaire the lesser of (1) the work performed as of the termination date, or (2) 80 percent of the project debt.
- ***Caltrans Default.*** If Caltrans fails meet its major requirements under the contract or orders work to be stopped on the project, the concessionaire may terminate the contract. In this case, Caltrans would be required to compensate the concessionaire as if Caltrans had terminated the contract for convenience, as described above.
- ***Section 143 Litigation.*** If a court determines that the agreement is not valid under Section 143 of the California Streets and Highways Code (the state's P3 law), then the agreement will be terminated. Similarly, if a lawsuit challenging the validity of the agreement under Section 143 is pending as of March 2011, either Caltrans or the concessionaire can terminate the agreement. Depending on the timing, Caltrans would

be required to compensate the concessionaire as if the termination occurred because of failure to achieve financial close, or as if it were caused by an extended relief event. Currently, a lawsuit challenging the agreement under Section 143 has been filed against Caltrans. It is unclear whether this litigation will be resolved before March 2011.

What Discount Rate Should Be Used for This Type of Transaction?

You asked that we comment on what discount rate would be appropriate to assume for this project. In general, the total cost of projects that span many years are typically adjusted into present value terms to reflect the principle that money available at the present time is worth more than money available in the future due to factors such as inflation and uncertainty. The discount rate used in this type of analysis is a sensitive and critical factor that can dramatically affect the outcomes of a fiscal analysis. The discount rate selected should consider such factors as the anticipated inflation rate during the lifecycle of the project, borrowing costs, and the Legislature's valuation of the future. A higher discount rate places a lower value on future costs, whereas a lower discount rate places a higher value on future costs.

Caltrans' analysis of the project applies an 8.5 percent annual discount rate to the costs of the project through the 30-year lease period. While there is no one "right" discount rate that should always be applied in such analyses, we think the state should place a high value on the impacts to future generations. Therefore, we generally tend to think that relatively lower discount rates are appropriate for use by state government. Accordingly, we believe a discount rate of 5 percent would be a more reasonable approach than the 8.5 percent discount rate used in this case by Caltrans.

What Is the NPV of the P3 and Design-Bid-Build Options?

Our office has previously recommended that the state use P3 approaches to procure transportation projects on a pilot basis in order to evaluate the benefits of such procurement approaches. One potential benefit of P3 procurement is a reduction in the costs of capital projects.

You asked us to evaluate whether the P3 agreement for the Presidio project results in such a reduction of costs to the state. Specifically, you asked that we calculate the NPV of the P3 procurement at a discount rate that we think is appropriate for this project. You also asked that we calculate the NPV if the project were instead to be procured with a traditional design-bid-build contract. Based on these calculations, you asked us to compare whether the P3 agreement is more or less cost effective than using a traditional procurement.

In response to your request, we calculated the NPVs using a 5 percent discount rate. As shown in Figure 2, the NPV of the P3 procurement at this rate is $594 million. This amount includes the costs paid to the concessionaire, plus other state costs associated with the project. At the same discount rate of 5 percent, the cost of a traditional design-bid-build procurement would be $601 million, or about the same.

Figure 2

Traditional Procurement Likely to Cost Less Than Golden Link Agreement for Presidio Project

(In Millions, Assuming 5 Percent Discount Rate)

Scenario	Golden Link Agreement Cost	Traditional Procurement Cost	Net Costs (+)/ Net Savings (-)
Engineer's cost estimate	$594	$601	$7
20 percent below estimate	594	527	-67
30 percent below estimate	594	490	-104
40 percent below estimate	594	453	-141

However, due to the highly competitive bidding environment, Caltrans is currently receiving bids well below engineers' cost estimates. Caltrans recently stated that on average the department is awarding contracts at about 30 percent below the project's estimated cost. Some projects have been awarded with even greater levels of bid savings, such as a reported 40 percent savings on Phase I of the Presidio project. It is not possible to know exactly what level of bid savings Phase II of the Presidio project would achieve if it were procured using a traditional design-bid-build contract. However, in light of the bid savings on other projects, we think it is reasonable to assume that the project could be awarded for 20 percent to 40 percent below the engineer's cost estimate. Accordingly, Figure 2 shows the NPV of a traditional procurement for the project at various potential levels of bid savings. As shown in the figure, if Caltrans were to achieve even a low level of bid savings, the project would be more cost-effective to procure using a traditional design-bid-build approach.

Does the Agreement Raise Other Issues That Pose Risk or Liability to the State?

According to Caltrans, the agreement was developed by combining pieces of various other contracts, many portions of which were developed by consultants working for the department. This is in contrast to a typical Caltrans contract, which is developed using standard documents. Because the P3 agreement is made up of various components that were individually developed, it is possible that the documents will have inconsistencies or will fail to address an important issue when the agreement is implemented as a whole.

How Does LAO Recommend That the State Minimize the Risks Posed by Some Provisions?

We were not able identify specific ways to minimize the risks posed by some provisions of the agreement. This is largely because our review finds that this particular project is not well-suited for a P3 procurement and the ability to transfer risk is impaired because of certain project-specific factors. For example, the ongoing construction work of Phase I of the project limited the bidders' access to the site, preventing them from obtaining all the information necessary to develop comprehensive bids on this project. This situation means that some additional construction risks would be borne by the state under the agreement. We also identified potential risks related to how the various components of the contract will work together as a whole. Short of rewriting the entire contract, we do not think these potential risks can be easily minimized by changes in the agreement.

Conclusion

Our analysis finds that the Golden Link agreement does not provide the level of risk transfer that Caltrans initially implied it would. Our review of the agreement indicates that the state is not likely to achieve any significant benefits from procuring this project as a P3. On a fiscal basis, it is likely that procuring the project with a more traditional procurement approach would result in lower total costs to the state. Given the lack of benefits of procuring this particular project under a P3 approach, the state should consider not signing the contract. If the P3 agreement were not signed, the state could still complete the Presidio project on schedule using traditional pay-as-you-go funding. At this early stage, the state would likely be required to pay a minimal stipend to the concessionaire as compensation for the cost of developing their bid.

If you have any questions or would like to discuss this matter further, please contact Jessica Digiambattista at 319-8363 or Jessica.Digiambattista@lao.ca.gov.

Sincerely,

Mac Taylor
Legislative Analyst