Executive Summary

The decisions California's leaders make now in how the state invests in its infrastructure can help California and its people recover from the worst recession since the Great Depression and lay a foundation for a competitive, world-class economy for decades to come.

The way California currently spends its infrastructure dollars lacks a long-term vision and a systematic process for prioritizing projects. The administration and the Legislature have not adequately coordinated departments' activities and their dozens of programs. With the current fiscal crisis only deepening, California's pattern of borrowing money through general obligation bonds and repaying debt through the General Fund to pay for infrastructure investments will force further spending cuts in healthcare, social services, education and public safety programs. To deliver on its golden promise, California must think harder and spend smarter on the roads, bridges, levees, schools, prisons and canals it builds. And it must take better care of its assets so that they continue to serve the Californians of tomorrow.

California once relied on a pay-as-you go method for funding road maintenance and new freeways, using gasoline taxes and sales tax on fuel, the kind of fees and special taxes that force users of the system to make efficient choices. And the people who benefitted directly from freeways helped pay for them. But at 18 cents a gallon, the gas tax no longer keeps up with the cost of maintenance; sales tax revenues on gasoline have been borrowed to bolster the General Fund. While gas tax revenues indeed have increased – by 21 percent – between 1994 and 2008, California highway construction costs rose 200 percent during the same period. Additional sources of revenue are one part of the solution; just as essential are new strategies that ensure greater value for the money invested in a new project and new technologies to manage infrastructure demand.

Despite the increases in infrastructure spending under Governor Davis and Governor Schwarzenegger, the state is still dependent upon infrastructure systems designed in a different time with different technologies. Our immense water system was built when California's population was 14 million, not 38.5 million and growing. Our prison system was built for far fewer than the numbers it holds now. Our freeway system, the envy of the nation when it opened, was not designed for the volume of vehicles it now carries nor was it intended to supplant the rail system for moving cargo from ports to inland cities.

Our freeway system alone is estimated to be worth $300 billion. But at any one time, 27 percent of it is wearing out, as the state budgets only about a quarter of the estimated $6.2 billion in maintenance the system needs each year. Californians are using the system ever more intensely; vehicle miles travelled in the state, estimated at 164 million in 2000, are expected to increase to 207 million in 2010. With this greater volume comes greater delay, giving California the dubious honor of being home to six of the most congested metropolitan regions of the nation's top 25.

The state estimates that in order to have the infrastructure needed to support a thriving, sustainable, competitive economy, California will have to invest $500 billion over the next two decades. The way the state currently funds its infrastructure spending cannot possibly pay for this level of investment.

Providing infrastructure that can deliver government services to support economic growth and California's quality of life is an essential role of government. How should California reconcile the need, the obligation and the funding?

Vision and Strategy

The first answer is to develop a strategy for statewide infrastructure investment that develops a vision for the kind of state that Californians want in the future; identifies needs across the different roles of government and prioritizes these needs according to where an investment can deliver the greatest value.

This will require considerable re-thinking of how the state delivers such public goods as education, transportation, clean water, public safety and public health. The process will require regular and deep engagement with the Legislature. A first step will require a re-orientation toward delivering services in a way that improves outcomes, such as greater educational attainment or improved mobility – a shift from the current model that emphasizes increasing inputs, such as new classrooms or more freeway lanes, which may not deliver the desired outcomes.

Governor Davis made a laudable start in this direction with the Commission on Building for the 21st Century, which produced important recommendations. The Legislature followed by requiring the administration to produce an annual Five-Year Infrastructure Plan for the state. Governor Schwarzenegger expanded on these efforts with two Strategic Growth Plans. They have been important initiatives, though not enough. The projects in the five-year plan are not coordinated or prioritized. Most embody old technology and a focus on inputs, not outcomes. Worse, the Legislature never engaged the administration on the report, its plans or its ideas.

California's leaders have shown themselves capable of launching hugely ambitious programs to meet daunting challenges. Cooperation between the governor and the Legislature created California's policy to reduce greenhouse gas emissions that has made the state a worldwide leader on this issue. One result was the creation of the Strategic Growth Council, made up of key members of the governor's cabinet. Given its facilitative and planning role, this is an appropriate place to develop the state's infrastructure strategy and this strategy should be integrated into California's strategy for achieving the goals of reducing greenhouse gas emissions and more sustainable urban growth. Such a strategy must recognize the role infrastructure can have in enhancing the state's economy, and a strong economy must be recognized as essential to the transformation envisioned by AB 32 and SB 375, the legislation that codifies policy-makers' goals to reduce greenhouse gas emissions and promote sustainable growth.

In evaluating how California can deliver services by outcomes, the state must free itself from thinking solely in terms of increasing supply to meet ever-growing demand. One avenue is to develop strategies that encourage people to use a service more efficiently, or use less of it, allowing the state to avoid building more. This strategy, known as demand management, has been put to great use by utilities in California and the United States as well as by cities and countries around the world.

California's overreliance on general obligation debt for infrastructure spending has obscured the reality that all costs for projects ultimately must be repaid. More borrowing adds to the level of annual debt service paid out of the General Fund. State Treasurer Bill Lockyer, in the Office of the Treasurer's annual Debt Affordability Report, issued in October 2009, estimated that debt service outlays would surpass 10 percent of the General Fund budget in the 2013-14 budget if already authorized bonds were sold in the market and the state were able to sell as-yet unauthorized bonds envisioned by the governor's second Strategic Growth Plan. In testimony to the Legislature in December 2009, the treasurer noted that if the proposed water bonds were approved and issued, debt service outlays would reach an estimated 10.98 percent of the General Fund budget in Fiscal Year 2013-14. Given the state's steep drop in revenues over the past two years and the Department of

Finance's projection of three more years of structural budget deficits, more borrowing will mean more spending cuts to programs. Prioritizing infrastructure over programs is a policy choice, and one the Legislature may want to make, but it is a choice that must be made explicitly and not by default.

The state's increasing use of general obligation bonds has contributed to the habitual under-budgeting for maintenance of parks, prisons, roads and levees, as bond measures typically authorize spending for construction costs, but leave unsaid how the state will pay to maintain and operate a project afterward. A policy of chronic deferred maintenance results in higher costs for repair and reconstruction; its short term benefits come at the expense of the taxpayer and those who must endure deteriorating highways, schools and water systems. In developing a strategic plan for infrastructure, the state must not only identify and prioritize infrastructure needs, but calculate as well the true cost of projects to be created to address these needs.

Need To Look Past Borrowing to New Revenue Sources

Absent higher taxes or greater general obligation bond borrowing, California will need to find other sources of money to build new freeways, dams and university classrooms. Though the state benefitted from federal stimulus money in 2009, it is unrealistic to believe this could be a substantial source of money in the future to support sustained infrastructure investment.

The state's strategy should identify the source of revenues that will be used to repay financing costs of construction, as well as operating and maintenance costs, and as part of this process, identify which projects are best suited to the use of user fees or special taxes. General obligation bonds should be reserved for infrastructure needs that lack a source of repayment or where equity or a broad public good, such as education or public health, is a consideration.

Economists and public finance experts point to user fees as a source of revenue that directly links the benefits of using a public service and the cost of providing it. Moreover, user fees can be enlisted in demand management approaches, such as congestion pricing on freeways or block pricing for water. Designed properly, such strategies can help government meet several goals at once. Tolls for single passenger car use of high occupancy vehicle lanes can increase revenue, improve mobility and reduce air pollution, as can time-of-day pricing of tolls for entering central city districts, as seen in Singapore, London, Milan and Stockholm.

California pioneered demand management in the United States with congestion pricing on State Route 91 Express Lanes in Orange County, the nation's first toll road with no toll booths. This system, along with State Route 125, Interstate 15 in San Diego County and the San Francisco Bay Area bridges, use the FasTrak transponder system to electronically collect tolls. I-15 uses data from the transponders to assess traffic congestion, feeding the data into a dynamic electronic pricing system that can change tolls every two minutes to reflect changes in demand. All are examples of how technology can aid, and propel, new ways of managing infrastructure to lower costs and improve quality.

California needs a strategy and vision for its infrastructure future, and it needs new sources of revenues to pay for it. It also needs more choices in how it can deliver projects. SB 4 X2, legislation enacted as part of the February 2009 budget package, has opened up this opportunity by allowing an unlimited amount of projects to be delivered through public-private partnerships through 2017.

The term "public-private partnerships" covers a broad range of relationships, most of which represent greater private sector involvement than the state has regularly employed. California had an early lead in this area in 1989, when it passed AB 680, which allowed four such projects, of which State Route 91 and State Route 125 were the only two built. The practice, widely used in Australia, Spain, Italy, the United Kingdom and Canada, has been controversial in the United States, mainly because of fear that private profit can come only at the taxpayer's expense.

Though public-private partnerships can be used to help finance a project, their main benefits are in speeding delivery, saving money by combining the design and building processes, introducing new technology and management models, and by maintaining the condition of a project over the life of the contract or lease.

Experts from governments that have engaged in public-private partnerships said that such arrangements rarely account for more than 15 percent of the infrastructure projects undertaken by the government. But the approach can have wide influence simply by challenging conventional thinking, introducing competition and opening up options for projects that the state may otherwise not be able to build. If SB 4 X2 has presented California with an opportunity, it also has created an important test for the state.

The inclusion of public-private partnerships as an option requires a sophisticated skill set for state government managers engaged in such deals, and will require new ways of thinking about project delivery, its benefits, risks and its costs. A major benefit of such partnerships is that expectations of performance, deadlines, costs and benefits all can be laid out in a contract. Such contracts also are an excellent vehicle to assign various risks involved in projects to the party best able to handle them. In this way, the state can take on the risk of delay for environmental review while the private sector party could take on the risk of sharp increases in construction materials.

California has experienced financial professionals and highly qualified engineers who can help work through many of the issues and choose the best options for projects.

But identifying, assessing and assigning risks – set forth in the contract – is a new skill set for most government agencies, making the contract a major source of risk in itself. The state should take advantage of the expertise it has in state service and augment its team with expert, experienced negotiators to handle contract negotiations until it can develop a center of excellence that can handle these sophisticated tasks on a centralized basis for all departments pursuing infrastructure projects though public-private partnerships.

California has no shortage of energy or innovators. Or opportunity. Already, the staff at Caltrans and at the California Transportation Commission are quickly learning new approaches and business practices to take advantage of the options presented to them through public-private partnerships. They are asking for the tools to help them try new approaches.

California's leaders need to give them those tools as well as a vision and strategy for how the state will meet its infrastructure challenges to create a strong and sustainable economy. California's leaders must find new ways to pay for infrastructure to ensure the next generations will not bear the cost for the public benefits consumed by this generation. And they must insist on ensuring that Californians benefit from the innovations that have improved public services around the world.

Recommendation 1: The governor and Legislature should conduct statewide infrastructure strategic planning and needs prioritization that assesses needs across state operations and sets an infrastructure vision for California that gives equal priority to both environmental and economic growth goals.

- ❑ The Legislature should expand the role of the Strategic Growth Council beyond its current coordination of state policies and activities for green house gas reduction and sustainable regional planning to include infrastructure planning that supports both economic growth and the state's environmental goals.
    - ✓ The Strategic Growth Council should synthesize the information received from agencies and departments to create an integrated and overarching infrastructure strategic plan that sets a broad vision for California's future, benchmarks for implementation and measureable goals toward progress. This plan should replace the current five-year infrastructure plan.
    - ✓ Building on the state's current five-year infrastructure planning process, the infrastructure strategic plan must integrate and prioritize projects by how they can support economic growth and meet state goals for reducing greenhouse gas emissions and urban sprawl. There must be a rational and transparent process for identifying and prioritizing the most urgent needs. Resource limitations mean that choices must be made among competing goals. The Strategic Growth Council must recognize that such choices must be made, with emphasis on long-term goals, return on the investment of limited dollars, as well as other fiscal constraints. The plan should include recommendations for financing as well as alternative strategies that can achieve the same goals, such as demand management.
    - ✓ The council's charge should be made explicit in recognizing that the state cannot meet its ambitious environmental goals without the support of a vibrant economy that can generate the wealth needed to fund such a transformation.
    - ✓ The governor should require state agencies and departments to report to the Strategic Growth Council with their assessments of infrastructure needs and developing trends; infrastructure priorities; ways the department is or could be maximizing existing resources; and suggestions for policy, financing, and technological changes that could help deliver the projects more efficiently.

- ✓ The infrastructure strategic plan should include recommendations for legislation, state agency actions and budget changes needed to implement the chosen priorities and should be submitted to the Legislature biennially in January, at the beginning of each two-year legislative session.
- ✓ The Strategic Growth Council should be expanded beyond its current membership to include other state agency leaders with significant involvement in infrastructure development. Currently, the council includes the following members:
  - Director of the Office of Planning and Research, Chair.
  - Secretary of the Business, Transportation and Housing Agency.
  - Secretary of the Environmental Protection Agency.
  - Secretary of the Health and Human Services Agency.
  - Secretary of the Resources Agency.
  - One public member appointed by the governor.

  The following members should be added to the council:
  - Director of the Department of Finance.
  - Secretary of the State and Consumer Services Agency (which houses the Department of General Services).
  - Secretary of the Labor and Workforce Development Agency.

- ❑ State agencies should consult local and regional entities in their respective areas to assess local needs and priorities, and catalog these needs so that they can be prioritized by the governor, the Strategic Growth Council and the Legislature.
- ❑ Each house of the Legislature should establish an infrastructure planning committee to review the Strategic Growth Council's infrastructure strategic plan and provide a forum for dialogue with state and local infrastructure partners through legislative hearings. The Legislature should respond to the strategic plan through its legislative and budget processes. The governor and Legislature should align program funding to incentivize state goals set in the infrastructure strategic plan.

- ❑ The Legislature and relevant state agencies should work to streamline funding for local infrastructure development, whether from state or federal sources, in order to eliminate duplication, facilitate project delivery and ensure that money can be used for project costs rather than compliance costs.

Recommendation 2: The governor and Legislature should restructure the processes for planning for and meeting the state's infrastructure needs to reflect the true costs of infrastructure projects and the need to explore alternatives to General Fund revenues to repay money borrowed to finance projects.

- ❑ The state should expand its options to generate revenues to repay project financing costs, such as user fees or special taxes, and ensure such revenues are dedicated to the purpose defined in the infrastructure strategic plan and not redirected to other parts of the budget.
  - ✓ In planning for new infrastructure projects, the state should adopt a life-cycle cost approach to provide a more complete estimate of a project's total cost, taking into account all costs of building, maintaining, operating and owning the infrastructure over the projected life of the asset.
- ❑ The governor and Legislature should incorporate demand management strategies and approaches such as joint-use arrangements to make better use of existing infrastructure assets and reduce the need to build new infrastructure.

Recommendation 3: The state should increase its capacity for creating public-private partnerships at the state and local levels to increase efficiency, reduce costs and speed delivery of projects where such an approach is appropriate. Such partnerships may include the use of private financing in cases where it can reduce a project's overall cost or reduce risk to the state.

- ❑ The state should partner with private entities where doing so would benefit the state through reduced costs and delivery time and improved project quality and performance; the governor and Legislature should set broad goals for such partnerships, then provide the authority for state and local agencies to enter into partnerships.
- ❑ In implementing SB 4 X2 and creating the Public Infrastructure Advisory Commission, the state should do the following to maximize the likelihood that its initial public-private partnership results are successful:

- ✓ Retain experienced professionals to represent the state on any public-private partnership deal in order to fairly negotiate vis-à-vis the private sector.
- ✓ Conduct a value-for-money analysis of each project in order to determine whether the project should be done as a public-private partnership.
- ✓ Delineate the risks borne by each partner and how the state has shifted risk to its private sector partner where appropriate.
- ✓ Utilize performance measurements that will allow evaluation of the results of each project.
- ✓ Calculate infrastructure costs for all projects, whether by public-private partnership or otherwise, over the life-cycle of the asset, taking into account all costs of building, maintaining, operating and owning the infrastructure over the projected life of the asset.

- ❑ Ultimately, the governor and Legislature should create a statewide center of excellence to both advise and represent state and local agencies that seek to enter into public-private partnerships.
  - ✓ The center should be able to provide all public-private partnership expertise – from assistance with deciding whether a public-private partnership is appropriate to implementing and managing the public-private partnership agreement – for a state or local government entity and should be able to charge the entity a reasonable fee for its service.
  - ✓ The center should have the ability and resources to compete with the private sector for experts to represent the state in its transactions with the private sector, and it should follow all of the above recommendations regarding public-private partnership projects.