CALIFORNIA

COMMISSION ON BUILDING FOR THE 21st CENTURY

LETTER OF TRANSMITTAL
COMMISSION ON BUILDING FOR THE 21ST CENTURY

February 27, 2002

When this report was sent to print in early September 2001, the national economy was slowing. While consumer confidence remained high, business spending decreased. The historic growth in the hi-tech industry slowed substantially. Then came a day no one expected: September 11, 2001. Terrorist attacks left over three thousand people dead in New York City, Washington D.C. and Pennsylvania – all victims of four hijacked airplanes that were bound for California.

We, as a nation united, mourned for our loss and sought to help the victims' families. We also stepped up our security in the face of unprecedented threats. In California, the Highway Patrol (CHP) increased its surveillance of the State's vital infrastructure: our bridges, waterways, power grid, major energy plants and public facilities. The CHP increased its patrols at commercial vehicle inspection facilities and border entry points. Governor Gray Davis deployed the California National Guard at California's airports. CHP and many local police officers worked 12-hour shifts in the weeks following the attacks.

In the wake of the terrorist attacks, our national and State recession deepened. The travel and tourism industries were especially hard hit. Across the nation, business revenues declined in many sectors, leading to revenue shortfalls in local, state, and federal governments. Thousands of people lost their jobs.

The recession left California with a projected budget shortfall in 2002 in excess of $12 billion. Governor Davis made tough choices to balance the budget, cutting state spending in November 2001, and recommending reduced spending in 2002.

As part of the proposed 2002-03 Budget, Governor Davis requested that the Commission on Building for the 21st Century ("Infrastructure Commission") review its recommendations in light of the State's changed economic circumstances. What did we conclude from this review? We confirmed that our basic premises – looking beyond this short-term economic downturn – remain fundamentally correct.

In developing this report, the Infrastructure Commission examined the State's needs over the next 20 years in eight categories: educational facilities, energy, housing, land use, public facilities, technology, transportation and water. The Commission examined California's recent progress in improving those facilities, and recommended policies to close the gap between need and investment. As California begins the next phase of work and prepares recommendations for capital spending during the next five years, the economic boost and physical improvements reaped from recent infrastructure investments provide a model worth noting.

Significant new programs approved between 1999-2001 in transportation, energy, housing, parks and water systems and school facilities are creating jobs now. The leadership of Governor Davis and the California Legislature in enacting these programs not only helped close the historic infrastructure gap borne out of years of under investment, but also helped to blunt the recession. Governor Davis pursued a model for long-term planning and investment, committing to build and save in times of surplus.

In 2000, Governor Davis and the Legislature, for example, allocated $6.8 billion in General Fund surplus to transportation, through the Transportation Congestion Relief Program and Transportation Investment Fund, over and above the growing federal and state programs that are funded from our gas tax. Many of these transportation projects are being completed two to four years ahead of schedule because of innovative partnerships the Davis Administration entered into between the government agencies and stakeholders to accelerate the process. As a result of these investments and the focus on fast delivery, California will have a record $6.4 billion worth of transportation projects underway in 2002, helping to drive the economy by creating approximately 156,000 jobs and nearly $17 billion in economic stimulus.

Further, to make quality housing more available and affordable, Governor Davis allocated over $450 million in additional housing dollars in 2000. In 2001, the State of California made more than 900 housing loan and grant awards, totaling over $390 million for housing and community development projects. This is the largest annual investment ever made for housing in the State's history, creating more than 16,200 housing units. The Davis Administration's Housing initiative will add an estimated 105,000 full time jobs, $3.4 billion in wages and $1.7 billion in combined federal, state and local revenues to our economy through 2003.

Concurrently, the State government worked in concert with local school boards to quickly invest $9.2 billion from a school bond passed in 1998 to construct and rehabilitate schools and classrooms. This increased opportunities for our children and for workers who completed the projects. Californians facilitated future investment in our children by passing a ballot measure in 2000 to lower the approval threshold for school bonds to 55 percent.

Californians passed the largest parks and water bonds initiative, $4 billion, in our nation's history.

Californians also worked together to conserve unprecedented levels of energy in 2001, while the Davis Administration accelerated the construction of new power facilities and negotiated long-term contracts. Combined, these policies stabilized energy prices and kept the lights on at a time when experts predicted blackouts.

These recent commitments demonstrate that California has begun to turn the tide of the state's historical infrastructure deficit. However, that long-standing gap cannot be closed quickly. Our challenge is to maintain that momentum, to recognize that these investments help our economy and society, in the short and long run, to make such leadership the norm, rather than an historic breakthrough.

This report recommends several ways to accomplish these objectives. It discusses policy approaches that reflect an integrated view of infrastructure. For example, housing should be energy-efficient, affordable and close to mass transportation. Transportation planning and funding should take into account housing needs. Our thinking must be as integrated as our lives.

The report suggests fiscal tools, such as bond measures to provide funds for safe and affordable housing and high-quality schools for our children. It advocates more energy independence, through construction, conservation and a commitment to generate 25 percent of our energy from renewable sources. It discusses methods to improve the quality of our lives, make better use of our assets and provide equal access to opportunity.

As one significant step, the report recommends that a California Infrastructure Public-Private Partnership be formed to examine this report's recommendations, and analyze strategies for infrastructure development. Their work should include, among other things, an examination of security needs and how to finance them. Ensuring our vital assets' security in their design, building and maintenance must be a paramount concern, as the events of September 11, 2001, illustrated dramatically.

Whether in good economic times or bad, these issues merit our attention. We must continue our efforts to meet our long-term needs. As Governor Davis said, "It is our duty, quite simply, to leave California a better place than we found it."

Secretary Maria Contreras-Sweet
Business, Transportation and Housing Agency
Commission Co-Chair

The Honorable Cruz M. Bustamante
Lieutenant Governor, State of California
Commission Co-Chair

CALIFORNIA COMMISSION ON BUILDING FOR THE 21st CENTURY

Invest for California

Strategic Planning for California's Future Prosperity and Quality of Life

Commission on Building for the 21st Century

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September 2001

The Honorable Gray Davis
Governor
State of California
Sacramento, CA 95814

Dear Governor Davis:

Two years ago, you asked us to explore infrastructure issues that each day affect tens of millions of Californians: the quality of our school facilities, roads and water, the affordability of housing, and the accessibility of our public facilities.

You asked us to look at the future of our state's infrastructure from a human perspective—how the choices we make could help or hinder the everyday activities of California's people, activities that collectively enrich the lives of our state, our nation and indeed, humanity.

Infrastructure touches our daily lives in so many ways - linking us to each other, our land and resources. Consider:

A San Diego father pours his daughter a glass of water as she prepares for a new day at school. His wife, an emergency room doctor, takes the light rail to work where she will save the life of an Oakland truck driver. That truck driver delivers his cargo—one hundred new computers to a Fresno grade school. And, those children learn and grow to become architects of an even better day.

As California rises to meet today's electricity challenge, we are reminded that a sound infrastructure is not something that can be taken for granted. A clean, reliable supply of water; safe, modern hospital and school buildings; an efficient system of highways and mass transit; and access to the latest technological advances are achievable only with thoughtful planning and sustained investment. We must move beyond preservation of infrastructure and take responsibility for expanding and enhancing it, giving Californians the tools to realize their dreams.

A great future for California depends on a great vision today. Among your first acts in office were measures designed to bolster the fabric of our state.

First, you created the Commission on Building for the 21st Century to examine the state of California's infrastructure and recommend ways to keep it strong.

Second, you secured $6.8 billion which has grown to $8.6 billion in additional transportation funds; $450 million more for housing; led a successful campaign to pass $4 billion in parks and water bonds, the largest such measures in our nation's history; and a $350 million library bond. These historic investments will ensure a solid foundation for tomorrow's great ambitions and challenges.

The Commission's membership is diverse, drawing from its experience in business and agriculture, labor and environmental protection, education and public service. But we are united in a common goal—to keep California strong and maintain our unique and special place in the global community: a place where food that feeds millions is bountiful; a place where great new technologies blossom; a place where children's imaginations take flight; a place where affordable homes populate hillsides and cityscapes, against a backdrop of verdant mountains, cool seashores and fertile valleys; a place where millions come to realize their dreams.

The Commission enthusiastically embraced this opportunity to develop a 20-year investment framework for California's infrastructure that builds on the work you have already done.

On behalf of the Commission, we submit to you *Invest for California—Strategic Planning for California's Future Prosperity and Quality of Life*. While this is the final report of our Commission, it can be the first step toward a continually secure and vibrant tomorrow.

Sincerely,

MARIA CONTRERAS-SWEET
Secretary, Business, Transportation
and Housing Agency
Chair

CRUZ M. BUSTAMANTE
Lieutenant Governor
Co-Chair

Governor Gray Davis' Charge to the Commission on Building for the 21st Century

Shortly after taking office, Governor Gray Davis appointed the independent 48-member Commission on Building for the 21st Century through Executive Order D-4-99. The Governor appointed leaders from across the State representing business, labor, the environment, academics, and the government to provide recommendations to the Governor and other public and private sector leaders to address the State's infrastructure challenges over the next 20 years.

THE COMMISSION PROCESS

The Commission created four committees to examine facility, natural resources, technology and transportation infrastructure needs. A fifth committee was formed to develop crosscutting recommendations for financing infrastructure investment strategies. Meetings were held statewide for the full Commission and each of the committees. Over a two and one half year period, a total of 14 full Commission and 46 committee meetings were conducted.

California State Capitol
Sacramento, California

PHOTO CREDIT: CALIFORNIA DEPARTMENT OF TRANSPORTATION

The Commission, in its first report to the Governor in May 1999, described a future whereby Californians could maintain and enhance their high standard for quality of life through: public and private partnerships to plan for this new century; a technologically state-of-the-art school system; an efficient and reliable transportation system; a sufficient supply of adequate and affordable housing; a safe and reliable water system; and world-class parks and open spaces for recreation and tourism. These would be accomplished through an infrastructure financing strategy that fully leverages federal, state, and local financial resources, creates opportunities for creative investment and innovative financing, and provides incentives for ensuring a maximum rate of return to the State on its project choices. In August 1999, the Commission issued an interim report to Governor Davis recommending immediate critical bond priorities for housing, parks and open space preservation, water quality and supply, and transportation. In addition, the Commission developed interim recommendations to expedite transportation project delivery, provide Internet access in schools and establish community technology centers.

This document is the final report of the Commission. It is intended to communicate the most important messages and findings of the Commission to the Governor, the Legislature, and the citizens of California. It distills the results of the Commissioners' best thinking, research, expert testimony, public comment, consultation, analysis, debate and deliberation. This document and interim materials can be found at the website of the Business, Transportation and Housing Agency *(www.bth.ca.gov)*.

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PHOTO CREDIT: R. HOLMES/CALIFORNIA TECHNOLOGY, TRADE AND COMMERCE AGENCY

Mount Tamalpais
Marin, California

I Executive Summary

"It is our duty, quite simply, to leave California a better place than we found it."

Governor Gray Davis, Governor's State of the State Address, 2000

Governor Gray Davis, the Legislature and the people of the State of California should be commended for the investments made in our infrastructure during the past two and one half years. For the first time in decades, our leaders and our people are making the kind of difficult decisions that recognize the critical importance of housing, transportation systems, schools, public buildings, air, land and water resources, and yes, energy, for our economy and quality of life. Recent investments—especially those for education, transportation, housing, parks and water—are historic.

Over two years ago, prior to any whisper of an energy crisis, the Governor appointed the Commission to develop an infrastructure investment strategy for California's future. During the Commission's tenure, the emergence of this crisis has highlighted the impact of infrastructure on the daily lives of every Californian. We have been asked to analyze our State's needs and construct a framework for the State's future investments, absent political considerations. We must, therefore, say something that is almost never popular with those in political life, nor with the people who elect them: recent accomplishments are admirable, but the job is far from done. Our efforts must be sustained.

There have been many reports about infrastructure during the past two decades. They have all called attention to the importance of infrastructure and have documented our underinvestment across a wide range of needs. Yet, the problem of underinvestment remained unsolved as we approached the 21st Century. Despite periodic downturns in the economy, the long-term outlook is bright. As the world's sixth largest economy, California has great strengths: the gateway to Asia and Latin America; a diversified economy; an entrepreneurial and skilled workforce; and, an unparalleled natural environment. Infrastructure provides the foundation for a strong economy and will require responsible, ongoing investment to maximize the benefit of our strengths.

The Commission's work confirms the persistence and seriousness of our infrastructure deficit. Most of these findings are not new. While our gratitude for recent accomplishments is clear, our warning is equally heartfelt that such leadership and partnership must be permanent. In order for our quality of life to be improved and expanded to all Californians, there is no choice but to redouble our efforts and lay the groundwork for that prosperity. We can no longer live off the investments of past generations, for we will sacrifice not only today, but also the future of our children and our grandchildren.

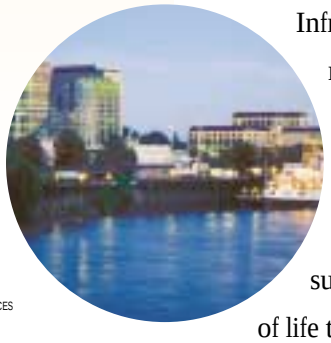


PHOTO CREDITS:
TOP: D. KOLKE/CALIFORNIA DEPARTMENT OF WATER RESOURCES
MIDDLE: CALIFORNIA, LOCAL GOVERNMENT COMMISSION
BOTTOM: J. POIMIROO/CALIFORNIA TECHNOLOGY, TRADE AND COMMERCE AGENCY

Too often, California is a place where teachers, nurses, police and firefighters struggle to find affordable housing for their families, where time spent in traffic rivals time spent at home, and where a majority of our power plants, schools, hospitals, and public buildings are growing old and desperately in need of repair. Over the next 20 years, California will add 6 million jobs and 12 million people who will need at least 4 million new homes. This growth in population will come primarily from children born to existing families, a fact not yet understood by most Californians. For both today and tomorrow, energy is not the only area where we are "living on the edge;" there are other infrastructure challenges in waiting.

PHOTO CREDIT: SAN JOAQUIN, D. KOLKE/CALIFORNIA DEPARTMENT OF WATER RESOURCES

Some California Facts:

- **California's home ownership rate is 49th in the nation.**
- **Each year, California produces 50,000 - 70,000 fewer homes than needed.**
- **In 1999, California motorists spent more than 800,000 hours on congested roads each day, at a daily cost of $8 million.**
- **A majority of our school facilities is more than 25 years old.**
- **We need to build seven new classrooms per day for five years to keep pace with expected growth.**
- **Southern California studies predict that passenger demand in 2020 will exceed current airport capacity by more than 50%.**
- **Brownfields, which are abandoned and contaminated lands and facilities, are estimated to constitute 5-10% of California's urban real estate (260,000 to 520,000 acres).**
- **During the past 100 years, more than 90% of California wetlands have been lost, with negative impacts on water quality, flood protection, and habitat.**
- **In 1999, there were 694 beach closure days and 4,186 beach warning days due to bacterial contamination.**
- **It is estimated that earthquake retrofitting will cost California's 473 hospitals $5-10 billion over 10 years.**
- **Almost 50% of the in-state electrical generation capacity is from facilities that are more than 30 years old.**
- **Nearly three-quarters of the State's courthouses were built prior to 1980 and over half were built before 1970.**

"Only 8 percent of Californians recognize that the single biggest factor contributing to the State's population growth is children born to current residents, according to a recent statewide poll."

Public Policy Institute of California, Special Survey on Growth, May 2001

Century Alameda Child Development Center, owned by Century Housing and operated by Para Los Niños, provides much needed childcare for 120 children of low income and homeless families in downtown Los Angeles.

PHOTO CREDIT: CENTURY HOUSING, CULVER CITY, CALIFORNIA

This Commission recognizes that infrastructure planning and investment is a shared responsibility for all Californians. While the State must play a leadership role, shared responsibility means that an effective investment strategy requires the effort and coordinated planning of all of California's infrastructure investment partners—the federal, state and local governments, regional agencies, private and philanthropic sectors, and most importantly California's people. Over the last two years, we have learned that in good economic times or bad, we need to increase our infrastructure investment, use our existing capacity better, and plan better for our needs across all infrastructure systems.

A New Beginning

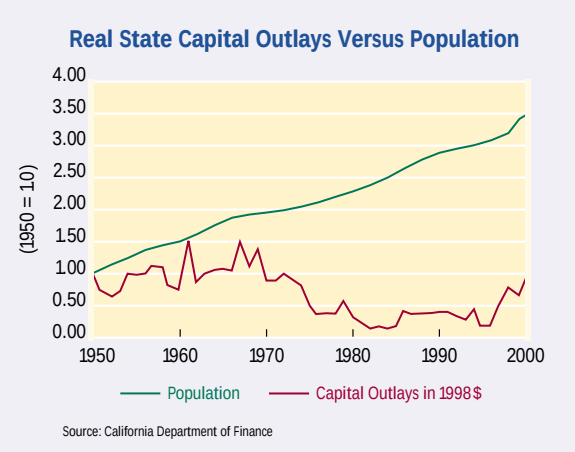
The Commission is optimistic that Californians are up to the challenge. We have seen an important turnaround in the attention given to and action on infrastructure investment over the past two years. As we've stated, Governor Davis and the Legislature approved record levels of direct spending through the State budget. In addition, we've seen significant actions taken by local government, voters and the civic sector, in partnership with the State. Important and indeed historic steps include:

- An increase of more than $8.6 billion to relieve traffic congestion, improve goods movement and maintain local transportation systems
- $450 million in new funding for housing—the first State housing dollars in more than a decade
- 26 new power plants permitted by the California Energy Commission, since January 1999, with 18 under construction by the end of summer 2001
- More than $4 billion in parks and water bonds, the largest commitment of state funding in the nation's history
- Over $230 million dollars allocated for the California Infrastructure and Economic Development Bank, which will leverage approximately $565 million in loans
- A Jobs-Housing Balance Improvement Program, to help cities and counties create more housing in job-rich communities and jobs in housing-rich communities
- Voter approval of $9.2 billion in new school bonds in 1998
- The launching of a five-year, $175 million California initiative to conserve open space, farmland, and critical natural areas, by the David and Lucile Packard Foundation
- Allocation of over $50 million for the State's first comprehensive funding to provide access to persons with disabilities in our State-owned buildings

Meeting the Challenge

As shown in the graph, we have begun a substantial turnaround in infrastructure investment. However, the job of catching up and preparing for the future is far from over. As Californians have done throughout our history, we must rise to today's challenge and create a more prosperous tomorrow.

We must continue to reduce the infrastructure deficit we have inherited. Our systems must be brought to a higher standard to better serve California's residents, visitors, businesses and institutions. We know that we will need substantial new infrastructure capacity to accommodate our growing economy and population. New technologies—such as the Internet and energy-efficient design and equipment—will lead to savings, increased access and improved service, but to achieve these benefits we must invest now.



Our Vision and Guiding Principles

The Commission has set forth a vision and created guiding principles and investment criteria as a framework for its decision-making. The framework is grounded in simple, but traditional California values: continue, protect and improve our existing investments, and build smarter when creating new capacity to meet future needs.

Guiding Principles Framework

I. IMPROVE OUR QUALITY OF LIFE. We need to achieve success in: Economic Growth, Environmental Quality, and Social Equity—to leave a more sustainable California to future generations.

II. MAKE THE BEST OF OUR ASSETS. We need to get the most from our use of natural resources, human capital, investment dollars, and existing infrastructure. To do so, we must use all of these precious resources and investment dollars more efficiently than in the past.

III. PROVIDE EQUAL ACCESS TO OPPORTUNITY. We must invest to ensure that all Californians have equal access to opportunity including the benefits provided by our infrastructure.

"There comes a time and a place when people must step back and reassess their future. For us the dawn of a new millennium is the time. Our majestic State, with the great economic responsibility it carries, is the place; and the pioneering and diverse individuals of California are the people."

Maria Contreras-Sweet
Commission Chair
Secretary, California Business, Transportation and Housing Agency

The 20-Year Investment Framework

The Commission developed a 20-year framework to guide our investments for the future. Our investment framework provides a starting point for the near term, but also guides our process for the long term. In developing this framework, we recognized that infrastructure needs will change, priorities will shift, and new technologies, practices and resources will become available to help us meet new challenges in ways we cannot yet imagine.

To establish current infrastructure investment priorities, the Commission focused on eight building blocks of California's future that merit particular attention: Educational Facilities, Energy, Housing, Land Use, Public Facilities, Technology, Transportation, and Water. Meeting our needs in these areas will require increased and sustained investment, better use of existing capacity, and better planning that recognizes the interdependence of infrastructure systems such as land use, housing and transportation. These investments will improve infrastructure services and efficiency and reduce costs over the lifespan of our facilities.

Urgent and Immediate Priorities

Although all of our infrastructure needs are important, some are so fundamental to our economy and quality of life and are under such severe strain, that they require immediate action. Therefore, the Commission recommends taking action on these particular needs:

- **NEW STATE SCHOOL BOND MEASURE.** Pass a new state bond measure as soon as possible to continue support for repairing and modernizing our K-12 and higher education facilities. To provide schools and modernized school facilities where they are most needed, funding priority should be considered for projects that address per capita need, and incorporate joint-use, resource efficiency, technological innovation and integrated land use planning.

PHOTO CREDITS:

TOP: STANISLAUS RIVER, R. HOLMES/CALIFORNIA TECHNOLOGY, TRADE AND COMMERCE AGENCY

MIDDLE: ANTELOPE VALLEY, CALIFORNIA

BOTTOM: PISMO BEACH, D. KOLKE/CALIFORNIA DEPARTMENT OF WATER RESOURCES

· **STATEWIDE ENERGY INFRASTRUCTURE POLICY.** Pursue a strategy to further diversify our energy supply and provide surplus capacity, including traditional and alternative electricity generation, and sufficient refinery capacity in order to meet our long-term energy goals. Transmission and distribution networks, whether electric grid or natural gas pipeline, must be vigilantly built and maintained. We must support the development, testing and market introduction of new energy technologies and industries for both conventional and renewable sources of power. We must make a permanent commitment to maintaining California's place as a national leader in energy efficiency.

PHOTO CREDIT: SAN DIEGO METROPOLITAN TRANSIT DEVELOPMENT BOARD

San Diego Trolley at Convention Center West Trolley Station, San Diego, California

· **INCREASED HOUSING PRODUCTION.** Provide incentives and regulatory reform measures to increase the supply and affordability of housing throughout our State. Reward communities that meet or exceed their housing production goals. Resolve construction defect and defect litigation issues and reform regulations to redevelop brownfields.

· **LOCAL FINANCING VOTER APPROVAL AT 55% FOR TRANSPORTATION.** We must maintain and build upon our state and local transportation systems. Commitments from the state government must be maintained and increases in federal funding aggressively sought. Another critical component of this funding mix is local. Pass a constitutional amendment to lower the vote threshold to 55% for local bonds and sales tax initiatives to generate revenues for local and regional infrastructure plans. This reform is especially urgent for local transportation agencies whose current sales tax measures are due to expire. Last year voters overwhelmingly approved an initiative enabling school districts to pass bond measures with a 55% supermajority. The proposed 55% approval for transportation should be tied to specific, voter-approved local and regional plans for community development that complement interregional and statewide needs. The 55% threshold would increase local governments' ability to effectively partner with the state and federal governments to make infrastructure investments and appropriately build and care for local systems.

· **STATEWIDE WATER INFRASTRUCTURE PLAN.** Develop and agree upon projections for statewide and regional water needs as a foundation for developing a statewide water infrastructure plan. This plan must be integrated with other infrastructure systems. A long-term plan will help provide a reliable water supply and improved water quality.

Building a Sustainable Foundation for Investment

Palm Canyon Drive, Palm Springs, California

PHOTO CREDIT: R. HOLMES/CALIFORNIA TECHNOLOGY, TRADE AND COMMERCE AGENCY

Sustainability: We must be ever-mindful of the impact of our decisions upon the future health of our people, our environment and our economy. Responsible investments and planning assure the most efficient and strategic use of our assets and our limited financial and natural resources, for today and tomorrow.

The Commission determined that certain crosscutting reforms are required to fund, plan and integrate our long-term strategies across all infrastructure categories. Among the many options presented in the report, the Commission highlights and recommends:

- **A CALIFORNIA INFRASTRUCTURE PARTNERSHIP.** Create a new, permanent, public-private entity, the California Infrastructure Partnership, whose mission will be to support needed and cost-effective infrastructure planning and investment for our future. Through analysis, dialogue and collaboration, the Partnership can be the ongoing mechanism through which, together, we can achieve the vision for California.

- **A CALIFORNIA INFRASTRUCTURE FUND.** Establish a permanent infrastructure investment fund separate and distinct from those funds currently earmarked or budgeted for infrastructure. For much of the past 40 years, infrastructure funding has been uncertain and unreliable. This fund would require a yearly set-aside appropriation from the General Fund. With an annual appropriation initially of at least 1% of General Fund revenues, assuming growth of at least 5% annually in the General Fund, the result could be a commitment of approximately $5 to $10 billion for infrastructure projects over 10 years, beyond the requirements of existing law. Annual and long-term priorities for investments from the fund would be determined through the existing budget process to enable the Governor and the Legislature to respond flexibly to changing infrastructure needs and priorities.

- **STATE-LOCAL FINANCE REFORM.** Reform state tax policy to improve land use decisions. Current tax policy provides a disincentive for housing production, distorts land use decisions, and hampers the ability of local governments to provide necessary services for new residents.

- **RESPONSIBLE LAND USE IN CALIFORNIA'S COMMUNITIES.** Promote policies and practices that balance the competing needs of residential, commercial, agricultural and environmental uses for scarce land resources. Require and provide financial support for regional housing plans to ensure that sufficient housing is available for our people. Expand initiatives for new models of conservation and development. These include transit-oriented development, energy-efficient development, compact and mixed-use development, infill development and creation of urban parks.

Meeting Our Financing Challenge

The Commission recognizes that these recommendations call for a commitment of resources well above the historic level of investment, but infrastructure financing may be easier than it might appear at first glance. California is the world's sixth largest economy. To spend an additional $100 billion on infrastructure over the next decade would require less than 1% of our annual income as a state. In addition, the responsibility of planning and financing California's infrastructure does not rest solely with the State. Rather, it is shared by the State and its partners, including regional and local agencies, the federal government, and the private and philanthropic sectors. In the end, meeting our infrastructure challenge will be a test of our will as a people, not of our wealth as a state.

A Call to Action

This report is not an end, it is a beginning, a chance to end the cycle of infrastructure deficits, a chance to end the uncertainty about whether California will have enough housing, enough schools, enough water and enough transportation capacity for our residents and businesses.

Adopting these and other recommendations will require a bold new spirit of partnership and commitment among all Californians. Only if we act now and act together, will we leave a legacy to our children and grandchildren worthy of the California Dream.

PHOTO CREDITS:

TOP: YOSEMITE, CALIFORNIA, LOCAL GOVERNMENT COMMISSION

MIDDLE: METRO RAIL RED LINE, LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY

BOTTOM: PASEO NUEVO STREET, SANTA BARBARA, CALIFORNIA, LOCAL GOVERNMENT COMMISSION

II What is Infrastructure and Why is It Important?

What is Infrastructure?

"We are all builders. We know that to have a good structure, you must build a sound foundation. Infrastructure is the foundation of California's economy and a viable quality of life, and unless we provide for it in a timely manner, our foundation will crack, and crumble, and our State's future will not be as our parents saw it 40 years ago."

Gary Hunt, Commissioner, March 2001, CBIA Conference

Most of us have a good sense of what infrastructure is, although few of us have ever been asked to define it or think about how it affects our daily lives. This Commission defined infrastructure as *the basic resources and systems required for Californians to be mobile, secure, and productive in order to enjoy a high quality of life*. Residents, businesses and other types of institutions use and are served by infrastructure. Quality of life and productivity are directly affected by the availability and quality of infrastructure.

In today's economy and society, infrastructure can be defined by three core components:

- "Bricks and Mortar" infrastructure, which represents the most tangible physical elements such as public facilities, housing, transportation systems, power plants, transmission lines, and other improvements.
- "Resource" infrastructure, such as forests, parks, rivers, beaches, wetlands and energy sources that comprise our natural assets and systems.
- "Information" infrastructure, which includes technology and systems that provide access to the Internet, intellectual property, archives, digital content and the means to communicate information and ideas.

PHOTO CREDIT: GRIMM/LOS ANGELES VISITORS AND CONVENTION BUREAU

Los Angeles Convention and Civic Center, California

In addition to these forms of infrastructure, which are the focus of this report, there is also a "human infrastructure," that includes our workforce. This human infrastructure—California's people—requires sustained investment in our education and workforce development systems. These investments will help people access and use infrastructure of all types to enhance their quality of life and economic opportunity. In addition, these investments will provide the workforce, in both the public and private sectors, with the necessary skills to design, plan, build and manage the new infrastructure of the 21st century.

Why is Infrastructure Investment Important?

Infrastructure investment is absolutely fundamental to meeting the challenges of growth and changing needs in today's economy and society. Strategic infrastructure investments will enable us to achieve economic, environmental and quality of life goals concurrently. For example, we all know transportation networks are critical for moving people and goods and keeping California's economy competitive, but wise transportation investments will also reduce the time we spend in traffic and away from our families, give us more transportation choices, and improve the quality of the air we breathe. Investments in school facilities, including making the latest technology accessible to all our students and teachers, will improve our communities and provide opportunities for children and workers to be successful in California's 21st century economy. And these school investments will help California develop and attract the best workers by providing good schools for their children.

The Commission identified eight core investment categories—the eight building blocks identified below—that merit particular attention in meeting our current needs and laying the foundation for our future. This report uses these categories to frame its policy and implementation options and complementary financing approaches. Due to the importance of all infrastructure, the categories have been placed on equal footing and listed in alphabetical order throughout the report.

"An investment in infrastructure is an investment in California's future. The State's schools, highways, bridges, water systems, public safety facilities, and natural resources are the framework for individual and collective quality of life. Without a strong framework, both the public and private sectors of the economy will falter."

1999 Capital Outlay and Infrastructure Report
California Department of Finance

The Eight Building Blocks that Contribute to California's Prosperity and Quality of Life

Educational Facilities	Energy	Housing
Land Use	Public Facilities	
Technology	Transportation	Water

Andrea Landeros,
First Place 8th Grade,
2001 Poster Contest Winner,
Ventura County
Transportation Commission

PHOTO CREDIT: VENTURA COUNTY TRANSPORTATION COMMISSION

"Our goal has to be to provide the highest quality craftsmanship to protect local, regional and State investments in infrastructure. Insisting on the highest qualifications for contractors and the best training for our journeyman and apprentice construction workers is the only way to meet that goal."

Robert L. Balgenorth,
Commissioner
State Building and Construction Trades Council of California, AFL-CIO

The infrastructure categories do not stand as separate elements. For example, in order to build a home, many systems are essential.

- **Land must be zoned and approved for building our homes.**
- **Water supply must be available and connected to our homes.**
- **Power must be generated and transmitted to our homes.**
- **Schools must be available for our children.**
- **Roads and transit must connect our homes to work, services and recreation.**

We will get more leverage from our investments and resources when we recognize the interconnectedness of the eight building blocks and target our investments to achieve maximum synergy across them. In fact, when specific attention is given to careful planning and coordination, these investments will address several infrastructure needs simultaneously. For example:

- The New Schools/Better Neighborhoods program in Los Angeles, California, demonstrates how school construction serves multiple community goals through joint-use, including libraries, parks, playgrounds and community facilities.
- Housing located next to transit corridors and connected to shopping and public facilities achieves housing, mobility, air quality and neighborhood improvement goals simultaneously.
- Cost-effective investments in renewable energy sources meet energy and environmental protection goals at the same time.
- Brownfields, which are abandoned and contaminated lands and facilities, are a potential economic development resource. When reused, they produce new jobs and healthier neighborhoods, increase local tax revenues, and reduce pressure to develop on prime farmland or habitat. According to the National Governor's Association, each $1 invested in brownfield development by a state yields as much as $100 in economic benefits.

Finally, when investments are targeted to make better use of existing infrastructure investments and to meet multiple investment objectives, they will contribute to revitalizing our communities and increasing economic vitality for communities at risk or in decline.

Cleanup of Damson Oil Corporation in Venice, California Before and After

PHOTO CREDITS: CALIFORNIA CENTER FOR LAND RECYCLING

Infrastructure in the 21st Century

Workplaces and lifestyles will change dramatically in the coming decades. Major shifts in social, economic, technological and environmental patterns will affect the way we live, work, and play. Such change creates new and different demands for infrastructure services. It will be important to identify these new requirements early on so that we can plan for and invest in appropriate infrastructure services.

In addition, California is undergoing profound demographic change, with an increasingly dynamic, diverse population. The 2000 Census shows that California is the first large "majority-minority" state with no majority racial or ethnic group, and we are increasingly multi-cultural. Future population growth will result primarily from births to existing families rather than migration or immigration. There is great diversity among California's regions, not only in terms of population growth trends and characteristics, but also varying economic conditions and geography.

These changes will affect infrastructure in the following ways:

- As we become a more multi-lingual society, we need to plan for and provide services to increasingly diverse communities.
- By 2015, the percentage of children under age 18 will grow to levels not seen since the 1970s, increasing the demands for schools, recreation and child serving facilities.
- The population over age 65 also will grow rapidly, beginning in 2011, as Baby Boomers enter retirement age, thus changing our housing, transportation and health facilities needs.
- Studies show that Generation X, between the ages of 24 and 35, is a growing market for new housing and community design with urban amenities.
- One out of every two Californians lives in the Los Angeles region. The Central Valley is projected to become the second most populous region in the State. Future infrastructure investments must support where the population is living and is going to live.
- The typical workweek no longer exists; 45% of the workforce now works evenings, nights, weekends or rotating hours which changes the demand for transportation, child care facilities and services.
- As medical practice, research and technologies advance, people with disabilities will lead active lives and seek to be fully integrated into the community.

Asian Pacific Islander California Complete Count Census Day 2000, Sacramento, California

Roseville, California

PHOTO CREDITS:
TOP: D. KATAGUE/DITAS ARTWORKS
BOTTOM: JEFFREY SPENCER

III Who is Responsible for Infrastructure?

B Sharing Responsibility

"Many historic accomplishments of the last century were the product of partnerships with private companies, universities and other governments that brought together the talent needed to do something that no one had done before. The Internet is one example."

"Better.Gov: Engineering Technology Enhanced Government," November, 2000
Little Hoover Commission

PHOTO CREDIT: D. KOLKE/CALIFORNIA DEPARTMENT OF WATER RESOURCES

Building and financing the state's infrastructure is a shared responsibility, accomplished through and by various investment partners. Government cannot bridge the infrastructure gap alone. California state government (the State), local governments, regional agencies, private and nonprofit entities, philanthropic organizations, and the federal government are all important partners in meeting our large and diverse infrastructure needs. All partners must contribute to the planning, financing, development, monitoring, maintenance, and improvement of infrastructure. Building the foundation for California's future prosperity is not solely the responsibility of the State.

THE ROLE OF THE PUBLIC SECTOR

The State has a unique role in this partnership. It is responsible not only for direct investment of resources, where appropriate, but also for providing a vision and a policy framework for cohesive, cost-effective planning and investment by all partners. The State must leverage and link with other public and private institutions for maximum infrastructure benefits, including increasing the ability of other partners such as local governments to participate more fully in financing infrastructure improvements. State and local governments are also responsible for engaging the diverse partners to enable full and effective coordination across infrastructure systems. The federal government is an important partner in program, regulatory and funding support, and its support should reflect the significance of California in the national and world economies.

THE ROLE OF THE PRIVATE SECTOR

Today's businesses, including the agricultural community, recognize that it is in their best interest to invest in California's infrastructure. Ensuring sustainability, quality of life and continued economic growth for California creates a healthy environment for a growing business and its employees. An investment in California's infrastructure is an investment in economic prosperity. Most of California's infrastructure, such as housing, is built and financed by the private sector. It is often the source of innovative solutions and best practices. The private sector often provides statewide and regional leadership required to elicit change in public policy, and widespread application of new techniques and technologies. Such leadership was instrumental in the recent successful efforts to pass Propositions 12 and 13, the parks and water bonds, and Proposition 39, lowering the vote threshold for local school bonds.

THE ROLE OF THE EDUCATION, PHILANTHROPIC AND NONPROFIT SECTORS

Creative thinking, applied research, and deeper and broader understanding of our issues at the grassroots level is often provided by our educational and philanthropic institutions. These institutions provide innovative ideas, have the confidence of Californians, and provide important leadership in helping us to make tough choices. The philanthropic sector also provides a long-term vision and seed funding for innovative projects. Nonprofit community-based organizations play an important role in implementing these projects at the local level.

THE ROLE OF THE MEDIA

California's newspapers, radio and television are powerful instruments for public education on complex issues. Their involvement will help inform California voters about the smart choices we can make to meet our needs more effectively. Many journalists track the progress and performance of infrastructure planning and investment and help provide accountability and democracy in the process.

THE ROLE OF INDIVIDUALS

Individuals have a civic responsibility to understand and engage in the decision-making process as it involves investment of our resources and affects our quality of life. Individuals must support their local, regional, and state leadership to make the best long-term decisions for our communities. As we have learned through the energy crisis, individual choices and behavior have a great impact on how we use and conserve our resources.

Unique Roles of State and Local Government

As the primary provider of public services and facilities and a major infrastructure investor, the public sector has critical responsibilities that cannot be filled by other partners.

ENSURE ACCESS TO PUBLIC GOODS

The public sector must facilitate or provide access to essential services and shared resources, such as energy, water and telecommunications. At a minimum, policy and regulations must protect consumers and structure equitable markets for these goods.

"Our regional stewardship develops shared solutions. This represents the potential of broader ownership of our region's future, where everybody assumes responsibility for our economic, environmental and social well-being. It signals a shift from fragmented decision-making to higher-leveraged, more integrated, collaborative approaches."

Silicon Valley 2010, Joint Venture: Silicon Valley Network, 1998

PHOTO CREDITS:
TOP: SAN JOSE, CALIFORNIA, LOCAL GOVERNMENT COMMISSION
MIDDLE: FRESNO, R. HOLMES/CALIFORNIA TECHNOLOGY, TRADE AND COMMERCE AGENCY
BOTTOM: LAWRENCE HALL OF SCIENCE, U.C. BERKELEY, R. HOLMES/CALIFORNIA TECHNOLOGY, TRADE AND COMMERCE AGENCY

PROVIDE PUBLIC SERVICES

Government is the provider of most public services. For example, to obtain a driver's license, people must interact with government facilities and employees. Local governments are the access points for health and human services, planning and building services. It is the obligation of the public sector to provide good service, sensitive to the diverse needs of its customers, and access options at a fair price.

LEAD IN INNOVATION AND NEW MODELS

The public sector can provide strong leadership in fostering adoption of innovative techniques and practices, such as the Governor's Executive Order for Sustainable Buildings.

The Joe Serna Jr. California Environmental Protection Agency Headquarters building and courtyard in Sacramento, California, incorporate energy-efficient design and civic art and architecture.

PHOTO CREDIT: CITY OF SACRAMENTO

> "Building California's Sustainable Future, A Blueprint for State Facilities"
>
> **EXECUTIVE ORDER D-16-00, GOVERNOR GRAY DAVIS.**
>
> **The State invests $2 billion annually for design, construction and renovation and more than $600 million annually for energy, water and waste disposal at state funded facilities. The goal of this initiative is to site, design, deconstruct, construct, renovate, operate and maintain state buildings that are models of energy, water and materials efficiency, while providing healthy, productive and comfortable indoor environments and long-term benefits to Californians.**

BUILD FACILITIES THAT BUILD COMMUNITIES

State and municipal entities have a unique role in providing facilities for public services. Effective public sector investments positively impact the overall community through sensitive design integrated within the fabric of the community. Civic architecture can create centers of community focus and stimulate economic activity. In some of the most compelling examples, great civic architecture gives new life and pride to communities. Public facilities and buildings, such as transportation systems and schools, also impact how and where growth and development occur and support community revitalization efforts.

DEVELOP EFFECTIVE POLICY AND REGULATORY FRAMEWORKS FOR INFRASTRUCTURE INVESTMENT

Policies and funding structures inherently create requirements and incentives that directly impact infrastructure investment decisions. The public sector must design frameworks to ensure the desired results, perform mandated functions such as environmental and disability accessibility reviews, and monitor the impact of policy decisions on an ongoing basis. It is the role of government to ensure compliance with these requirements and recommend policies to meet evolving needs.

Different Partnership Roles for Different Infrastructure Types

Partnership roles vary depending on the types of infrastructure under development. For example, to fund, design and build educational facilities involves an extended process and many partners at different stages of development:

- The State oversees the state funding allocation process, enforces environmental regulation and sets design standards.
- Local government and school boards provide local funding, facilitate community collaboration for siting and design, and endorse appropriate joint-use opportunities for the facility.
- Educators, parents and community members pass the state and local school bonds and support the effort.
- Contractors and their workers build the school.

This Commission strongly believes that a committed and sustained partnership among the public and private sectors and the people of our State, is essential to understand, adopt and implement the full breadth and depth of the Commission's recommendations included in this report. All of us, all Californians, bear the responsibility for building the infrastructure of the 21st Century.

PHOTO CREDIT: LA JOLLA, CALIFORNIA, SCRIPPS RANCH AND THURGOOD MARSHALL MIDDLE SCHOOL COMMUNITY RECREATION CENTER JOINT USE FACILITY, J. BRADY/ROESLING NAKAMURA ARCHITECTS INC.

IV Today's California: Opportunities and Challenges

"From the gold rush to the silver screen to the silicon chip, Californians have been inventing the future ever since the early days of our statehood… in our schools, in studios, in high-tech firms all across this State—California continues to invent the future. My friends, our best days still lie ahead."

Governor Gray Davis,
Admissions Day Rally,
September 8, 2000

Six Years of Strong Economic Growth

California has enjoyed six years of strong economic growth. We saw an increase of more than 2 million jobs in that time, a dramatic recovery from the recession of the early 1990s. In 2000, exports produced by California firms reached record levels—$129.7 billion, up 21% from a year earlier—and new venture capital received by California firms—$40 billion—was nearly double the previous record in 1999.

The strong economy had a positive impact on the standard of living of most residents. In February 2001, California's unemployment rate dropped to 4.5%—the lowest level since the late 1960s. Following four straight years of above average gains in total personal income, per capita income in California reached $32,275 in 2000—above the national average and ranking the State 8th nationwide—the same ranking as in 1990.

Wages for the lowest paid 10% of California workers rose by more than 10% above the rate of inflation over the last five years. The poverty rate fell to 13.8% in 1999—down from 18.2% during the early 1990s recession. The strong economy allowed several increases in the minimum wage, enabled public spending on education to rise significantly, and supported increases in critical human services, including health care coverage for poor children and services to improve the quality of life for the elderly and persons with disabilities.

However, in spite of the economic prosperity enjoyed by Californians and overall improvements in the standard of living this past decade, many residents have not shared in this prosperity, and the disparities between the rich and the poor are widening. Many working families are struggling just to maintain their standard of living. The disparities are reflected in differences between communities in regions like the Silicon Valley and the San Joaquin Valley.

The state's future economic health and quality of life depends on the vitality of its communities and opportunities for all Californians. In 2001, we saw a softening of the U.S. and California economies, due in part to market

PHOTO CREDITS:
TOP: LOS ANGELES BUSINESS TEAM
MIDDLE: LOS ANGELES, C. CAREY/CALIFORNIA FILM COMMISSION
BOTTOM: NAPA VALLEY, D. KOLKE/CALIFORNIA DEPARTMENT OF WATER RESOURCES

corrections in the technology sector, a key driver of the California economy. While our overall economy will experience periodic cycles of growth and slowdown, the Commission's investment strategy is based on the belief that California has strong long-term economic prospects and will continue to prosper if we continue to invest. Moreover, communities "at risk" economically represent emerging market investment opportunities and will bring multiple benefits to the State through sound investments.

"California has the largest and most diverse economy in the nation and remains the industrial powerhouse of the West, providing 13% of the U.S. Gross Domestic Product. California's $1.35 trillion economy currently ranks sixth among the nations of the world, just ahead of Italy and China."

Lon Hatamiya
Secretary, California Technology, Trade and Commerce Agency

Substantial Opportunities Ahead for California's Economy

California credits its entrepreneurs and workers for recent economic gains. Their ingenuity and productivity have put the State in leadership positions in most of the high wage, high growth industries in the world.

The Commission believes that California firms can and will maintain these leadership positions in high growth industries, *if we invest wisely in meeting our infrastructure challenges.* Continued economic leadership will allow Californians to see rising living standards and provide our best chance to further reduce poverty and stimulate economic opportunity for all residents.

Port of San Diego, California

PHOTO CREDIT: J. SPENCER / CALIFORNIA DEPARTMENT OF TRANSPORTATION

While future growth projections are inherently uncertain, economists are unanimous that the state should expect substantial continued economic growth. The California Department of Finance projects that over the next 20 years, we should expect 6 million more jobs and 12 million more residents, who will need at least 4 million new homes. The projected levels of growth are large because 1) the U.S. is still growing and 2) California has the competitive strengths to capture an above average share of new jobs in fast growing sectors like high tech manufacturing, software and foreign trade.

It is likely that California will record lower job and income increases in 2001 than in recent years. However, the Commission does NOT believe that this is a reason to pull back on investing for the future. Any current slowdown will be brief and is not an indicator of inherent long-term weakness in the state's key economic sectors. Delay will only put us further behind in improving our own quality of life and future prosperity, and impede our long-term economic advantage.

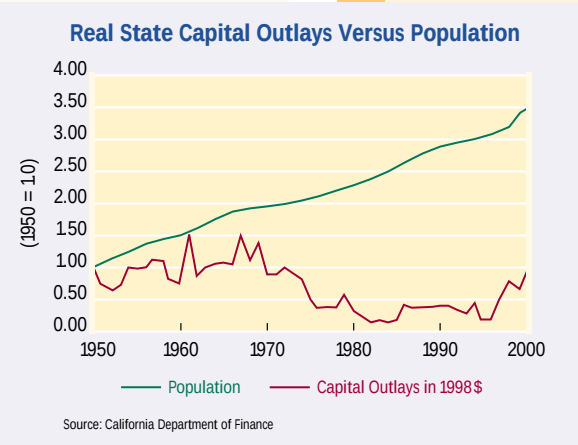
Our Infrastructure Deficit

"We owe our modern prosperity in large part to the legacy of the last generation of Californians—the schools, highways, and institutions of higher learning that they paid to build…The Business Roundtable is issuing a challenge to a New California to make a similar commitment to the future."

"Building a Legacy for the Next Generation," 1998
The California Business Roundtable

A number of State and private organizations have estimated infrastructure needs in recent years. While estimates vary, the California State Treasurer has placed the level of magnitude at $82 billion over the next decade. The California Business Roundtable has estimated it at more than $90 billion, with State and local revenues able to meet only about half of these needs. Whatever the actual numbers, all parties agree that California faces a significant current deficit in these critical investment areas, compounded by the need to prepare for the next 12 million Californians.

The accompanying graph depicts the gap between past levels of infrastructure spending by the State and its growing population, but also the positive upswing of the last two years.



Some California Facts:

- **California's home ownership rate is 49th in the nation.**
- **Each year, California produces 50,000–70,000 fewer homes than needed.**
- **In 1999, California motorists spent more than 800,000 hours on congested roads each day, at a daily cost of $8 million.**
- **A majority of our school facilities is more than 25 years old.**
- **We need to build seven new classrooms per day for five years to keep pace with expected growth.**
- **Southern California studies predict that passenger demand in 2020 will exceed current airport capacity by more than 50%.**
- **Brownfields, which are abandoned and contaminated land and facilities, are estimated to constitute 5–10% of California's urban real estate (260,000 to 520,000 acres).**
- **During the past 100 years, more than 90% of California wetlands have been lost, with negative impacts on water quality, flood protection, and habitat.**
- **In 1999, there were 694 beach closure days and 4,186 beach warning days, due to bacterial contamination.**
- **It is estimated that earthquake retrofitting will cost California's 473 hospitals $5–10 billion over 10 years.**
- **Almost 50% of the in-state electrical generation capacity is from facilities that are more than 30 years old.**
- **Nearly three-quarters of the State's courthouses were built prior to 1980 and over half were built before 1970.**

Long-standing underinvestment has led to increased traffic congestion, a decline in housing affordability, increased airport delays, and the never-ending challenge of providing enough classrooms for the state's K-12 and higher education students. Each day Californians experience the consequences of this underinvestment.

While the state has had some notable infrastructure successes, such as improved air quality and open space protection, recent polls indicate that most residents feel our quality of life is declining despite the economic gains. Notwithstanding the major new investments that have been made over the past two years, the state continues to face a serious long-term challenge that we must address boldly and on a sustained basis.

To solve the infrastructure problems of today and prepare for California's future, our infrastructure investments need to:

1. FIX IT FIRST. California faces substantial public investment demands to repair and replace many of the state's existing public facilities. Physical elements of infrastructure need consistent ongoing maintenance throughout their lifecycle to maximize use and ensure timely replacement.

2. SEIZE OPPORTUNITIES OFFERED BY INNOVATION AND TECHNOLOGY. As times change, technology improves and new approaches emerge. Computer technologies enable increased automation and productivity. New materials, products and building techniques increase the longevity of physical structures and decrease operating costs. Modifications of existing structures must accommodate innovative new standards, such as smaller class sizes and disability access. We need to invest in these opportunities to capture the benefits of increased efficiency and improved service delivery.

3. EXPAND EXISTING CAPACITY. Though it is clear that California will need to invest in building new infrastructure to meet the needs of our growing economy and population, it is also possible to increase our infrastructure capacity without always having to build more facilities. For example, e-Government opportunities provide new service options with reduced physical requirements.

The Commission was charged by the Governor to develop an investment framework for our future. The Commission is committed, as is the Governor, to compensating for past deficits and preparing for future growth so that Californians can enjoy a better today and leave to their children a better tomorrow.

PHOTO CREDITS:

TOP: TRAFFIC MANAGEMENT CENTER IN DISTRICT 7, LOS ANGELES, J. SPENCER/CALIFORNIA DEPARTMENT OF TRANSPORTATION

BOTTOM: OAKLAND, CALIFORNIA DEPARTMENT OF TRANSPORTATION

V The Vision for 2020

"Sustainable development ensures that all members of present and future generations can achieve economic security, social well-being, quality of life and preserve the ecological integrity on which all life depends."

"Latinos and a Sustainable California: Building a Foundation for the Future," Latino Issues Forum San Francisco, California January, 1997

The Commission envisions a California in 2020 where every Californian enjoys great economic opportunity and an outstanding quality of life, including a healthy and attractive environment. By embracing the idea of sustainable development, our actions and investments today provide ourselves and our children an undiminished set of opportunities which they, in turn, will pass on to our grandchildren and future generations.

The Commission believes that Californians can do even better than just pass on our current opportunities and resources. We believe that carefully planned infrastructure investments will enhance the economy, environment and quality of life and broaden the impact of our prosperity. These investments will make communities thrive where today there is despair and poverty. We must also do a better job of building new communities. These investments will improve our ability to live within our means by using resources such as land, air, water and energy more wisely, even as the State continues to grow.

In order to achieve the vision for California, we realize we cannot invest on the basis of cost versus benefit alone. We must also consider qualitative criteria important to all Californians. These policy values must be incorporated in future investment decisions along with traditional economic analysis.

ACCESS	Ensuring all Californians' access to services and facilities
CULTURAL AND ARTS PRESERVATION AND ENHANCEMENT	Preserving and enhancing the State's artistic, historical and cultural assets while ensuring access to those assets for all Californians
ECONOMY	Ensuring the continued development of California's economy and livable wages for Californians
EDUCATED AND SKILLED WORKFORCE	Providing the infrastructure to develop and fully employ an educated and skilled workforce that is matched to the needs of the State
HOUSING AFFORDABILITY	Planning for and ensuring an adequate supply of housing that is affordable for all Californians

The Commission is neither pro-growth nor anti-growth, but we accept that significantly more people will be living in the state by 2020. We envision a California that will grow over the next 20 years and still have a better economy, environment, and quality of life than we enjoy today. The Commission recognizes that even with the best use of land and infrastructure in existing developed areas, additional development will be needed in new and existing communities. Our challenge and opportunity is to apply new standards and practices in all future infrastructure investment to create more livable and sustainable communities.

Careful planning and strategic investments can succeed in growing our quality of life at the same time that California's economy and population continues to expand.

PHOTO CREDITS:

TOP: PACIFIC GROVE, CALIFORNIA, JEFFREY SPENCER

MIDDLE: PATTERSON, R. HOLMES/CALIFORNIA TECHNOLOGY, TRADE AND COMMERCE AGENCY

BOTTOM: LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY

INFRASTRUCTURE EFFICIENCY (AFFORDABILITY)	**Ensuring that California plans for efficient and effective use of its existing and future infrastructure to maintain the State as an affordable place to live and conduct business**
MOBILITY	**Enhancing the mobility of California's people and goods**
PERSONAL TIME	**Protecting Californians' personal time and time spent with family, on recreation or self-improvement**
PROTECTED ENVIRONMENT	**Protecting and restoring the environment, preserving open spaces, and conserving natural resources**
SAFETY	**Enhancing the safety of the State's infrastructure**
TECHNOLOGICAL ADVANCES	**Taking advantage of California's leading position in the 21st Century economy to educate our citizens and provide innovative solutions to our infrastructure challenges**

VI Guiding Principles

The Commission urges that long-range planning and development of California's infrastructure be guided by the preceding policy values and the following principles.

Definition of Sustainability
"…to meet the needs of the present without compromising the ability of future generations to meet their own needs."

"Our Common Future,"
The Bruntland Commission,
United Nations 1987

1. Improve Our Quality of Life

2. Make the Best Use of Our Assets

3. Provide Equal Access to Opportunity

PHOTO CREDITS:

TOP: SACRAMENTO,CALIFORNIA, LOCAL GOVERNMENT COMMISSION

MIDDLE: AMTRAK STATION AT JACK LONDON SQUARE, OAKLAND, CALIFORNIA, LOCAL GOVERNMENT COMMISSION

BOTTOM: FRESNO, CALIFORNIA, CENTER FOR ADVANCED RESEARCH AND TECHNOLOGY

1. Improve Our Quality of Life

"In the new era of limits, we must bend the trends by redesigning the State... Instead of simply building infrastructure wherever we can, the limitations we face require us to build things in the right places and, in the process, conserve the right resources. This is a much more difficult task—but, ultimately, it is one that will allow California to thrive, rather than struggle, as our population continues to grow."

William Fulton, Solimar Research Group

With significant growth projected for California's future, we need to achieve success in all three "**E**"s to support future generations:

- **E**conomic Growth
- **E**nvironmental Quality
- Social **E**quity

PHOTO CREDIT: LOCAL GOVERNMENT COMMISSION

Main Street, Ventura, California

FOSTER STEWARDSHIP. Ensure a legacy for future generations by using natural resources efficiently, preserving environmental quality, developing self-sufficiency, and nurturing economic growth to ensure continued prosperity.

PLAN BETTER. Recognize that infrastructure systems are complex and interdependent. Ensure that local, regional and statewide entities collaborate on problem solving and integrate disparate planning efforts, such as for land use, housing, transportation and water.

DEVELOP REGIONAL STRATEGIES. California is home to an array of unique and diverse regions with specific needs and capacities. Many areas of infrastructure investment require coordination among neighboring communities to be successfully implemented and achieve maximum return on investment.

SHARE RESPONSIBILITY. Work together with all sectors of the community to achieve our goals. Incorporate diverse perspectives and talents from all Californians, the public, private and nonprofit sectors.

BUILD QUALITY PLACES. Build communities with enduring value—places that make residents proud. Provide more choices in community and building plans and design, including urban, suburban, and rural areas; foster development that creates a sense of community; ensure access to open space; and preserve historic places.

CASE STUDY

Planning for Quality of Life: Envision Utah

Envision Utah is a public/private community partnership focused on the effects of long-term growth in northern Utah. Formed in 1997, the partnership includes 130 leaders from state and local government, businesses, developers, conservationists, landowners, academics, church groups and citizens. Strong public input is key to development and implementation of the State's Quality Growth Strategy. The partnership is supported by Quality Growth Efficiency Tools, a technical committee made up of representatives from key department heads of state and local governments, regional planning agencies and the private sector, to assist in the analysis of trends, projections and alternative growth scenarios. The Partnership provides the tools, training and resources to public and private sector planners to implement the strategies. A public education campaign is a core part of the mission—"Envision Utah, It's a difference we can make TOGETHER."

Source: Envision Utah

2. Make the Best Use of Our Assets

"We need to think about water, transportation and even school construction in a resources context—these facilities can and should provide multiple values for our society. Parks can function as spreading basins for groundwater recharge; greenways along roads can provide trails and access as well as reduce air pollution; schools can double as community centers."

Mary Nichols, Secretary, California Resources Agency

In order to flourish in the future, we will need to get the most from our use of natural resources, human capital, investment dollars, and existing infrastructure, including our older communities. To do so, we must use all of our precious resources more efficiently than we have in the past.

IMPROVE PERFORMANCE. Use technological advances, processing improvements, and other innovations to deliver effective solutions as quickly and cost-effectively as possible. Better planning and better data are critical to the success of these efforts.

USE NATURAL RESOURCES EFFECTIVELY. Employ practices that make the most of our finite supply of land, water, and other natural resources and our existing natural resource infrastructure, particularly through conservation, "green" building, and improved site design.

IMPROVE PUBLIC SECTOR EFFICIENCY. To achieve high performance, encourage and support creative thinking by public agencies and employees. Encourage new technology applications and improved planning, execution and management techniques, such as lifecycle costing and management. Look to other public and private organizations for new techniques and best practices. Ensure accountability for results.

OPTIMIZE USE OF FACILITIES AND ASSETS. Achieve maximum efficiency from facilities and other assets through joint-use and multiple-use strategies, especially in partnership with the public and nonprofit sectors.

MAXIMIZE OUR FINANCIAL RESOURCES. Make our dollars go as far as possible by understanding and using our leverage opportunities, such as providing seed capital for public-private partnerships and applying creative financing strategies.

Interior Perspective
Capitol Area East End Complex,
Sacramento, California

PHOTO CREDIT: CALIFORNIA DEPARTMENT OF GENERAL SERVICES

CASE STUDY

Improved Public Facilities: Capitol Area East End Complex, Sacramento, California

The East End Complex creates joint use facilities, employs resource efficient building techniques, and provides a new community amenity to the Capitol Park area of downtown Sacramento. The $392 million, 1.5 million square foot, five building complex will house approximately 6,000 employees, including the Departments of Health Services and Education, and is the largest state government office building project in California's history. The complex will also have a conference training center and child care facilities.

In 1999, the Secretary of the State and Consumer Services Agency convened a multi-agency Task Force and directed them to incorporate sustainable building measures into the bid documents for the East End Project. The Task Force consisted of representatives from six state entities. The buildings include energy efficient lighting and natural lighting systems, low flow irrigation systems, recycled building materials, and photovoltaic panels to shade cars and generate electricity. The buildings also provide opportunities for tenants to be resource efficient through: recharging stations for electric vehicles, facilities for bicycle users, and office recycling centers.

The complex creates an eastern gateway to Capitol Park, has a $2.8 million art program budget highlighting California's values and culture, and is projected to save taxpayers $400,000 annually in energy savings.

Source: California State and Consumer Services Agency

3. Provide Equal Access to Opportunity

"California is home to a diverse population. Over the next 20 years, California's challenge is to make proper investments in all infrastructure that promote quality of life and prosperity for all Californians."

Grantland Johnson, Secretary, California Health and Human Services Agency

To fully realize California's potential, both human and economic, the opportunity to achieve personal prosperity and quality of life must be extended to all Californians.

PHOTO CREDIT: CALIFORNIA DEPARTMENT OF TRANSPORTATION

PROVIDE REAL CHOICES. Provide people a variety of options at reasonable prices. For example, make housing affordable in desirable neighborhoods, be it suburban, urban or rural, and provide transit options that are viable alternatives to personal auto use.

OFFER LIFELONG LEARNING. Provide facilities that offer quality educational experiences that prepare children and workers alike to participate in the global economy. Provide opportunities for the existing workforce to upgrade skills for upward mobility in this dynamic economy.

PROVIDE AFFORDABLE ACCESS TO PUBLIC GOODS. Provide affordable access to necessities such as education, housing, water, and energy. Provide easy access to basic services required to interact successfully with society, including transportation and telecommunications. Many California communities traditionally have experienced underinvestment. Investing in these communities will provide real economic growth and community benefit.

CASE STUDY

Computer Access in Public Schools: Digital High School Program, Arcata, California

With this program, Arcata High School integrated technology into instruction, curriculum development and assessment. A school-wide network allows access to the Internet and software programs from classrooms and the school library/media center. Students can access the school network from any computer with Internet capability. Every student has storage space for his/her work reserved on the network, and can work on school projects and assignments from computer pods available in each department, individual classrooms, libraries or at home. All students take a required computer applications class during freshman year as a basis for classes in subject content areas, computer programming and graphic design. Teachers develop lessons that include the application of technology, and collaborate with business and community partners so that students receive the best possible preparation for career, education or employment options following graduation.

Source: Office of the California Secretary for Education

VII The Eight Building Blocks of California Infrastructure

The Building Blocks

The Commission focused on eight key elements of a comprehensive infrastructure plan and the report is organized to address each of them specifically. We recognize, however, that these are interconnected systems, and that planning and investing for each of them must be done with optimum coordination and integration.

The Eight Building Blocks that Contribute to California's Prosperity and Quality of Life

Educational Facilities	Energy	Housing
Land Use	Public Facilities	
Technology	Transportation	Water

PHOTO CREDIT: VENTURA COUNTY TRANSPORTATION COMMISSION

Andrea Landeros, First Place 8th Grade,
2001 Poster Contest Winner, Ventura County Transportation Commission

Current Issues and Strategic Options

The following sections of the report present a summary of the key issues relevant to each infrastructure category and recommended implementation strategies and options. Because the task is so large, the Commission has chosen to highlight a very focused set of issues and strategies as a starting point for the State's proposed investment strategy, recognizing that other priorities will emerge in the future. Each section presents:

GOAL FOR 2020– what we hope to achieve over the next 20 years

TODAY'S ISSUES– a distillation of the key issues assessed by the Commission

SOME CALIFORNIA FACTS– a snapshot of the status of infrastructure conditions, our needs and some planning assumptions

ACTIONS TAKEN– examples of some important initiatives that are underway as a result of actions or investments by the Governor, the Legislature and other partners; these are not all-inclusive but illustrative of the many steps taken over the past few years to address our infrastructure deficits and prepare for the future

INVESTING FOR CALIFORNIA'S FUTURE– priorities and opportunities the Commission identified for meeting our needs

RECOMMENDED OPTIONS– the proposed near-term and long-term strategies to address our urgent issues and future needs

CASE STUDIES– examples of specific best practices and innovative approaches to problem solving that are being used in California and elsewhere that support the proposed strategies and provide information resources

PHOTO CREDITS:

TOP: CARPINTERIA, CALIFORNIA DEPARTMENT OF PARKS AND RECREATION

MIDDLE: HORTON PLAZA, SAN DIEGO, V. MENESES/CALIFORNIA DEPARTMENT OF TRANSPORTATION

BOTTOM: SANTA MONICA, CALIFORNIA, LOCAL GOVERNMENT COMMISSION

Crosscutting Strategies

"We must foster policies and initiatives that make these infrastructure building blocks work together. The new millennium home, for example, must be affordable, energy-efficient, technology-enabled and close to mass transportation. Our thinking must be as integrated as our lives."

Maria Contreras-Sweet
Commission Chair
Secretary, California Business, Transportation and Housing Agency

In the following sections, policy and implementation strategies are identified for each of the eight building blocks, organized by type of strategy—financing and fiscal policy, improved planning, barrier removal, and improved implementation and use. These strategies have been developed within the framework of the Guiding Principles for infrastructure development. Many of the strategies and the underlying issues are common across the categories and they are summarized as follows:

FINANCING AND FISCAL POLICY

- Aggressively invest to reduce maintenance backlogs.
- Use debt financing or pay-as-you-go methods appropriate to the particular investment requirements of specific infrastructure systems, linked to the ability of taxpayers or fee-payers to support the systems from which they will benefit.
- Use new or reformed state fiscal policy incentives to influence the behavior of local governments, regional agencies, and the private sector to achieve better use of resources and more sustainable patterns of development.
- Improve the ability of the Legislature and voters to use the full range of fiscal tools needed, including reduced super-majority vote thresholds.

IMPROVED PLANNING

- Develop statewide goals and guidelines for all specific infrastructure areas.
- Provide incentives for communities to link their planning with statewide, regional and other local planning efforts.
- Tie State funding incentives to implementation of these integrated regional plans.
- Improve data sources and tools needed for planning and management of infrastructure systems.
- Utilize lifecycle costing and management as the basis for capital planning, closely tied to AB 1473 (Assemblymember Robert M. Hertzberg) the State Five-Year Capital Budget Planning process.

BARRIER REMOVAL

- Systematically audit and refine government practices to ensure they produce the desired outcome.
- Review regulatory requirements to ensure applicability to today's infrastructure needs.

R. HOLMES/CALIFORNIA TECHNOLOGY, TRADE AND COMMERCE AGENCY

Lake Merritt, Oakland, California

T. PARKER/AICP

Transit-oriented development, North Hollywood, California

- Streamline the entitlement process to reduce the time and cost required to build needed infrastructure such as housing, energy, public facilities, and transportation, especially when expanding current facilities or building in existing communities.
- Create fair markets and regulatory conditions to protect consumers and encourage private sector investment.

IMPROVED IMPLEMENTATION AND USE

- Use technology and innovation to reduce the need for additional physical facilities or capacity.
- Use modern asset management strategies that optimize use, maintenance and improvement of existing infrastructure.
- Use non-building strategies, where efficient, to ensure future flexibility to meet new needs and enable adoption of new technologies and innovative techniques and practices.
- Increase the efficiency of facilities through joint-use and mixed-use techniques.
- Improve operational efficiency of facilities and sites, through "green" planning, building and site design and high-performance systems.

In addition, link funding, incentives, and policy options where appropriate, to criteria that will help California move toward a more sustainable economic prosperity and quality of life. The State has been applying this linkage in major programs such as the California Infrastructure and Economic Development Bank, consistent with best practices in other states and regions. Some elements could include:

- Better use of land and resources, including existing infrastructure
- Livable communities objectives
- Collaborative regional plans
- Integrated approaches across infrastructure systems, such as transit-oriented and mixed-use development
- Compliance with State General Plan Guidelines
- Improved environmental quality
- Improvements for economically disadvantaged areas

"Partnerships with the federal, State and local government provide tools for diversification and financial support for cities such as Orange Cove. This spirit of cooperation and support creates opportunities for jobs, housing, infrastructure development and economic advancement for those people who live and work in our city. Our partners also include the Tule Indian Tribe. With this support, we were able to develop our new wastewater treatment facility. With the support of the Business, Transportation and Housing Agency, we provided housing for farmworker families that make up 90% of our community. Working together, nothing is impossible."

Victor P. Lopez
Mayor, City of Orange Cove

PHOTO CREDIT: J. BACA/SIEGEL DIAMOND ASSOCIATES

"Danza Indigenas" public art at the Metrolink station in Baldwin Park, California

Educational Facilities

GOAL FOR 2020

Provide state-of-the-art schools, colleges and community learning facilities to assure access to lifelong learning opportunities for all Californians.

"Schools should be places where creative configurations of space expand their use to encompass early learning and adult education; where learning occurs "after hours," at night and on weekends; where school-to-school partnerships, links with businesses and collaboration with higher education are encouraged and supported. They should enable learners of all ages and serve as centers for lifelong learning."

—**"What If: New Schools, Better Neighborhoods, More Livable Communities"**
Stephen Bingler, Metropolitan Forum Project, 1999

Today's Issues

In the dynamic global economy of the 21st century, California's greatest competitive advantage is our educated workforce. Lifelong learning, skills upgrading and training are essential. The quality of facilities, from classrooms to administrative space, directly impacts achievement; therefore our educational facilities must provide the best possible learning environment for students of all ages and their educators. We must also be mindful that appropriate child care facilities help provide the foundation for a solid education.

DEFERRED MAINTENANCE

California has an aging education infrastructure. Most facilities are more than 25 years old. Existing capacity and the quality of the learning environment in these facilities have been diminished by years of deferred maintenance and a failure to modernize.

CAPACITY DEMANDS

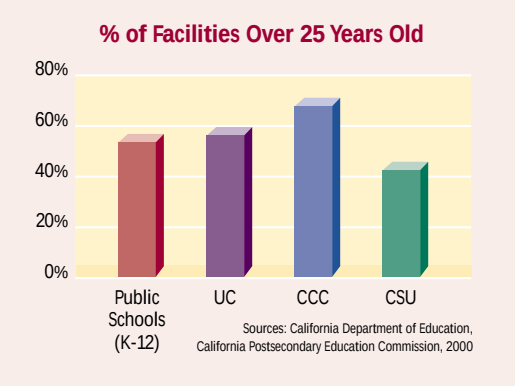
California's growing and diverse population and the need for lifelong learning have increased the demand for greater physical capacity at all levels of education. For example, higher education must be able to accommodate unparalleled enrollment growth over the next two decades. Additional capacity is necessary to meet the goal of increased access to opportunity, especially at the level of higher education. Important educational initiatives such as smaller class sizes and new technology requirements must also be accommodated.

"California must make meaningful investments in educational facilities. School children, college students, and adult learners all need state-of-the-art facilities to be well-prepared to meet the challenges of the 21st century."

Kerry Mazzoni, Secretary
Office of the California
Secretary for Education

Some California Educational Facilities Facts:

- **We need to build seven new classrooms per day for five years to keep pace with expected growth.**
- **According to the California Department of Education, K–12 facilities need $19.06 billion in funding between 2000–2005, $9.69 billion in new construction and $9.2 billion in deferred maintenance and modernization.**
- **In 10 years, K–12 enrollment is expected to be 24% higher and higher education enrollment is expected to be 36% higher.**
- **About one in three California school children attends an overcrowded school or a school in need of modernization.**
- **One-fifth of California's population spends the day inside a school facility.**
- **The Los Angeles Unified School District will grow by over 100,000 students in the next 10 years. This will require them to build the equivalent of a school district larger than Long Beach Unified, the State's third largest district.**



CASE STUDY

A New Learning Model: Center for Advanced Research and Technology (CART), Fresno, California

CART is a technology-based high school and a project of Fresno's two largest school districts, governed by school officials and business leaders. It was designed as a comprehensive model to transform secondary education. The 75,000 square foot state-of-the-art facility, designed as a high performance business atmosphere, is organized around four career clusters, including engineering and advanced communication. Within each cluster are several career-specific laboratories in which students complete industry-based projects for academic credit. These projects are completed in collaboration with partners from the local, national and international business community. This education model provides future opportunities for students in the expanding areas of high-tech business and agricultural firms.

Source: Center for Advanced Research and Technology, www.cart.org

NEW FACILITIES REQUIREMENTS

The learning paradigm is changing, rendering many existing facilities obsolete, regardless of physical condition. New facility requirements include the ability to create flexible space configurations, healthy and safer buildings, and smaller facilities that are integrated with the community. Innovative uses of educational facilities are needed to extend the learning environment and take better advantage of existing community resources. New facility requirements for K–12 and higher education also include the ability to use technology applications and to gain access to technological advances such as high-speed Internet connectivity. In addition, expansion of research facilities and residential housing for faculty and students on college campuses is needed to accommodate increased enrollments.

PHOTO CREDIT: QUATROCCHI KWOK ARCHITECTS

Skyhawk Elementary School, Santa Rosa, California

THE RESOURCES CHALLENGE

In 1998, California passed a $9.2 billion school bond measure, the largest voter approved measure for education in U.S. history—$6.7 billion for K–12 and $2.5 billion for higher education. For K–12, the funding was allocated as follows: $2.9 billion for new construction, $2.1 billion for modernization, $1 billion for deferred maintenance and $700 million for class size reduction. As of April 2001, $8 billion was invested in new schools and school improvements. $1.2 billion in funds remain; however, it is estimated that the funding needs for K–12 and higher education facilities will exceed $40 billion over the next eight years, leaving a large funding gap.

Center for Advanced Research and Technology, Fresno, California

PHOTO CREDIT: CENTER FOR ADVANCED RESEARCH AND TECHNOLOGY

"The University of California's student enrollment is projected to grow by more than 40 percent in a little more than a decade. Fulfilling our commitments to California's youth—and playing our role in fostering the State's future economic success—requires that we invest now in the facilities needed to educate this extraordinary surge of students."

Richard C. Atkinson
Commissioner, President, University of California

Actions Taken

- **$9.2 billion in school bonds passed by voters is being invested.**
- **With the support of the Governor, the voters passed Proposition 39 in 2000, to lower the vote threshold for local school bonds from two-thirds to 55%.**
- **The Governor included $180 million from the General Fund in his 2000-2001 budget for planning and initial construction of the new U.C. Merced campus.**
- **$810 million was provided in 2000-2001 for education technology, including $402 million for the Connecting California Schools program and $200 million for education technology.**
- **In 2000-2001, the Legislature approved the Governor's proposal to provide $75 million annually over four years to the University of California to launch three California Institutes for Science and Innovation at several U.C. campuses. In 2001-2002, the Legislature approved the Governor's proposal to add a fourth institute which would receive funding over the subsequent four years.**

Century/LIFT (Learning Initiatives for Today) provides tutoring for 300 youth, grades 1–12, primarily in Century-financed affordable housing developments such as the Angelina Apartments in Los Angeles, California. Century/LIFT recruits tutors from local school districts, colleges and the community and involves parents in program activities.

PHOTO CREDIT: CENTURY HOUSING, CULVER CITY, CALIFORNIA

CASE STUDY

Public-Private Supported Charter Schools: Animo Leadership High School Lennox, California

The Animo Leadership High School opened in August 2000 to provide a rigorous college preparation curriculum to a diverse student body, including immigrant students, who often do not have college educated role models. Emphasis is placed on developing leadership skills and participation in community service. Students attend a longer school day and more days per calendar year to meet the demands of the curriculum. Governor Gray Davis presented the school with $250,000 from the State's Charter School Revolving Loan Fund to launch the school. The school was founded by Steve Barr, activist-founder of "Rock-the-Vote," community residents, school district teachers and officials, and Loyola Marymount University educators. Classes are held on the University of West Los Angeles campus, laptops are provided to all students by Apple Computer, and transportation is provided by the Oscar de la Hoya Foundation and the school.

Source: Office of Governor Gray Davis

CASE STUDY

Community Centered Learning: Western Placer Unified Master Plan, Placer County, California

The Western Placer Unified School District 's master plan, "Project Build," supports the District's instructional strategies within the context of the whole learning community. During the planning process, it was recognized that the natural environment could be used as a learning tool. A developer donated 170 acres of prime real estate, including a Native American archeological site. The developer also donated 2,000 Mandarin orange trees, which will eventually provide revenues of more than $400,000 per year for the District. The project is managed through an innovative environmental studies curriculum, providing students environmental and ecological training in non-traditional surroundings. As a result of the "Project Build" planning process, the District now owns or has access to more than 5,000 acres of natural land for educational use. Additionally, the Western Placer Education Foundation was created.

Source: "What If: New Schools, Better Neighborhoods, More Livable Communities," Stephen Bingler, Metropolitan Forum Project, 1999

Investing for California's Future

The Commission has identified the following priorities for meeting our educational facilities needs:

- *Joint uses with other community partners, such as community centers, public libraries or departments of parks and recreation*
- *Resource efficient buildings, to improve operational efficiencies and incorporate principles of sustainability into a healthy learning environment*
- *Efficient use of land and resources, with planning for educational facilities integrated with other community needs*
- *Schools as centers of community and communities as centers of learning*

Recommended Options

The following recommended options will help achieve our priorities:

FINANCING AND FISCAL POLICY

- Pass a new state sponsored K–12 and higher education facilities bond.
- Ensure that a priority for state funding is the improvement of existing educational facilities, many of which are located in communities of need.
- Employ alternative financing strategies such as lease and lease-purchase to supplement traditional sources of school funding.

IMPROVED PLANNING

- Develop state policy and guidelines for the development of schools as centers of communities, including techniques such as joint-use, transit-oriented development, land and resource efficiency, and community and business partnerships.

PHOTO CREDIT: CALIFORNIA DEPARTMENT OF PARKS AND RECREATION

- Require that facilities siting is consistent with local general plans and state safety requirements.
- Facilitate the adoption of new design models such as "green" site design and building techniques.
- Identify methods to increase the availability of faculty and student housing for higher education.

BARRIER REMOVAL

- Remove current regulatory barriers regarding physical standards that limit the joint use of facilities.
- Streamline school construction regulations to reduce review time and cost.

IMPROVED IMPLEMENTATION AND USE

- Aggressively reduce the maintenance backlog by setting annual maintenance goals and by using lifecycle maintenance programs for all facilities.
- Build new facilities and retrofit existing facilities to incorporate changing educational needs and new learning models, such as technology-assisted education and distance learning.
- Encourage full use of all existing and new facilities to maximize capacity, through year-round operations, joint-use facilities and after-hours programs.

CASE STUDY

Revitalization and Joint Use: Village at Indian Hill, Pomona Unified School District , California

The District bought a 66-acre urban mall, with 750,000 square feet of space. In cooperation with the Los Angeles County Fair, Cal Poly/Pomona, Cisco, Apple and other partners, they designed a long-range plan for meeting the community's education challenge. The District issued Qualified Zone Academy Bonds, a federal bond package for school districts with improvement projects. The space was renovated to house two elementary schools, a technology development center and a professional development center.

Source: Coalition for Adequate School Housing (CASH)

"Over the long term, building for quality must be a critical focus. We need to construct high-quality facilities that will endure for future generations of students."

Dr. Charles B. Reed, Chancellor
California State University

PHOTO CREDIT: SAN JOAQUIN DELTA COMMUNITY COLLEGE

Cisco Networking Academy at San Joaquin Delta Community College, Stockton, California

Energy

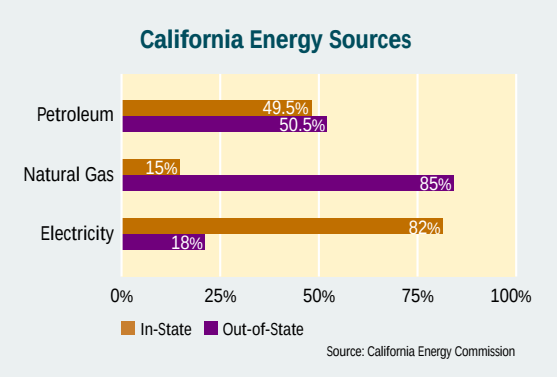
GOAL FOR 2020

Ensure that all Californians have more reliable, affordable, and cleaner energy. Achieve a diversified energy base and increase the share of renewable sources of power to 25% of the total.

"…California has the diverse tools and technologies necessary to propel a revolution in energy. These new technologies, many of which rely upon the wind and sun for fuel, are the equivalent of the wireless cell phones and portable laptops that replaced traditional grid-connected phones and huge mainframe computers…The current crisis is an opportunity to reap the benefits of technological progress this State has fostered over the past two decades. At the same time, California can push the next generation of sophisticated clean power technologies into the mainstream."

—Peter Asmus, Sacramento Bee, January 21, 2001

Today's Issues



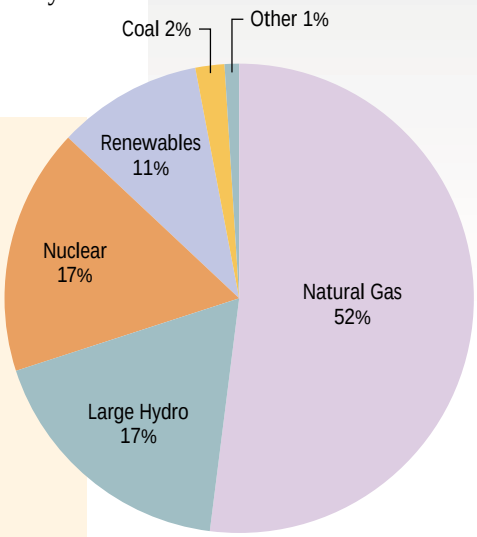
The electricity crisis of 2001 is the *second time in three decades* that California, and indeed the nation, has experienced such an energy challenge. California rose successfully to that challenge in the 1970s and 1980s by becoming a leader in energy efficiency and the development of new and alternative technologies. Californians have embraced conservation efforts and even greater results can be realized in the future. Until 1999, very little new electricity generation capacity was developed, while overall demand for electricity continued to increase. Long-term energy infrastructure issues relate to increasing supply and transmission capacity, managing demand, maintaining generation and transmission facilities and improving the policy and planning environment. To achieve sustainability, Californians must think differently about energy infrastructure.

"More than one-third of the U.S. energy is used to heat, cool, and light our living and working spaces. If these buildings were built and operated with off-the-shelf, cost-effective, and high-efficiency technologies, energy consumption could be cut by 50 to 80 percent."

The Energy Foundation

Some California Energy Facts:

- **Only two states consume less energy per capita than California.**
- **Due to its size, California is the 11th largest energy user in the world.**
- **The annual impact of all energy efficiency programs has been equal to 15% of total statewide energy consumption.**
- **Almost 50% of California's in-state electrical generation facilities are more than 30 years old.**
- **In 2000, the cumulative savings from California's appliance and building efficiency standards was $20 billion.**
- **Approximately 50% of California's energy consumption results from transporting both goods and people.**
- **Projected requirements for 2020 energy needs are: 40% more electrical capacity, 40% more gasoline, and close to 20% more natural gas.**
- **In 2003, California consumers are projected to need 15.8 billion gallons of gasoline. Without additional refinery capacity, between 950 million and 1.6 billion gallons of gasoline and blending components will need to be imported.**
- **11% of California's energy supply is renewable and this figure is projected to grow to 17% by 2010.**
- **California imports 85% of its natural gas supplies.**



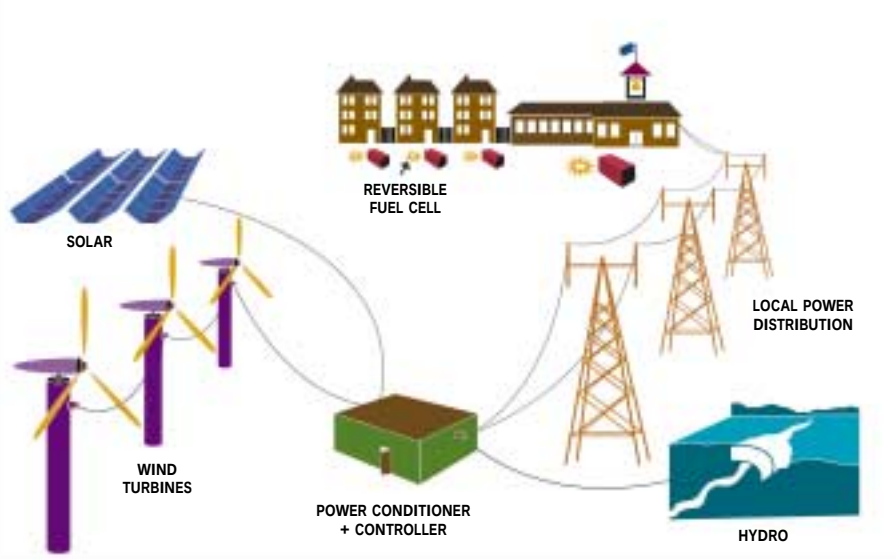
Share of Current In-State Power Generation Fuel Mix

Source: RAND Corporation, February 2001

DISTRIBUTED ENERGY SYSTEMS:

There is great potential for distributed energy generation systems, especially renewable or clean energy systems. Developed primarily in Europe, many communities in the United States are now developing similar programs, focused in many cases on co-generation (the combined production of heat and electricity) using renewable energy. This chart illustrates how a local distributed energy system could work.

USING RENEWABLES TO SUSTAIN DISTRIBUTED POWER AND HEATING NEEDS



Source: Isherwood, April 11, 1997

"Through the use of new technology, California now has 40% of the world's geothermal power plants, 20% of the installed wind capacity, and 70–80% of the world's solar electricity generation."

California Energy Commission
June 2000

Actions Taken

- **Since Governor Davis took office, 26 new power plants have been permitted by the California Energy Commission, with 18 under construction or in operation for a total of 7,927 megawatts, of which an estimated 4,000 will come on line by the end of summer 2001.**
- **California allocated $540 million for renewable energy technologies between 1998-2001.**
- **California is a leader in energy efficiency funding. The California Public Utilities Commission allocates over $300 million annually to these measures: retrofits for commercial lighting systems and cool roofs; loan guarantees for renewable energy projects; funding for use of alternative fuels in the agriculture and water pumping industries; and resources for the California Alternative Energy and Advanced Transportation Financing Authority.**
- **In 2001, the Governor signed SB 28X, (Senator Byron Sher), which has expedited power plant siting while maintaining environmental protections.**
- **The California Consumer Power and Conservation Financing Authority was created in 2001 to market up to $5 billion in new bonds for new projects; it also has the power to build and operate generation facilities.**
- **Improvements to the natural gas and electricity distribution systems are currently underway and will reduce bottlenecks and improve service and control of the systems.**
- **In 2001, California instituted measures to subsidize the development of small, local generation facilities, known as distributed energy systems, which use renewable sources or efficient gas technology to generate power onsite.**

Investing for California's Future

The Commission has identified the following priorities for meeting our energy needs:

- *Meeting the short-term energy needs of all Californians through conservation, efficiency, and immediate action to increase supply and avoid shortages, within the context of the State's long-term energy goals*
- *Increasing the supply and diversity of power generation sources and transmission methods*
- *Supporting the deployment of new technologies that provide clean and reliable sources of power and the most efficient and cost-effective uses of energy*
- *Assuring the continued supply of petroleum-based fuels, while encouraging the development of renewable and alternative energy and transportation fuels*
- *Creating fair markets and regulatory conditions to protect consumers and encourage private sector investment*

Recommended Options

The following recommended options will help achieve our priorities:

FINANCING AND FISCAL POLICY

- Create and implement a comprehensive statewide energy infrastructure policy that meets California's future needs for reliable and affordable energy.
- Provide timely and consistent permit review and incentives to upgrade generation and transmission facilities with state-of-the-art technologies, such as metering and other real-time pricing mechanisms.
- Establish an "Energy Seed Capital Fund" and/or an "Energy Investment Fund" targeted to energy, transportation and environmental business development opportunities, with a focus on early product research and development, operating through equity investments.
- Use the California Infrastructure and Economic Development Bank and other financing mechanisms to support development of regional and community distributed generation capacity and the purchase of energy savings equipment, retrofits, etc.

CASE STUDY

Renewable Energy in Public Facilities: Santa Rita County Jail, Dublin, California

At the jail, the first batch of 4,700, 4-foot by 4-foot PowerLight solar panels, were switched on in June, 2001 to produce 65 kilowatts of power. Once complete, the system will be the largest array of rooftop panels in the Western Hemisphere and will produce 500 kilowatts, saving the county $300,000 a year in energy costs. Of all county buildings in Santa Rita, the jail has the largest roof and is the largest user of electricity. The solar array will generate the most power during the hours when the need is greatest.

Source: San Francisco Chronicle, June 13, 2001.

Solar panels used to reform hydrogen from water, to be used as fuel for zero emissions vehicles. SunLine Transit Palm Desert, California

PHOTO CREDIT: J. SPENCER/ CALIFORNIA DEPARTMENT OF TRANSPORTATION

CASE STUDY

Potential for Renewable Power Generation

Renewable sources of energy offer a viable diversification option and provide economic development opportunities, especially when leveraged by public incentives or as a return on investment for a public finance model. Wind power is one sector with great potential. Germany is the world's largest producer, followed by the United States. Denmark generates 13% of its energy from wind, and is the world's leader in this sector, through building upon initial innovations developed in California. Other facts on wind generation potential:

- **The world total production now exceeds 17,000 megawatts, up from 7,600 megawatts in 1997, an average growth of 31% per year.**
- **In 2000, more than 4000 megawatts were installed worldwide, with 5,000 megawatts projects planned for 2001.**
- **Wind installations come on line fast (less than one year) and are easily integrated into the existing grid.**
- **Europe's goal is to produce 100,000 megawatts by 2030.**
- **Wind generated electricity costs have dropped and continue to decrease.**

Sources: European Wind Energy Association, American Wind Energy Association, National Wind Technology Center, Sandia National Laboratory, Danish Ministry, National Renewable Energy Lab

- Increase incentives for development of transportation-related alternative energy and alternative vehicles markets, including fuel cell technology.
- Invest in new technologies and systems (e.g., state and private universities centers of excellence) to develop and commercialize new technologies and applications.
- Develop a cost accounting system that calculates the actual value of renewable and non-renewable resources and energy conservation, efficiencies and generation.
- Seek to include real time metering in new building standards to allow consumers to track energy use and encourage conservation during peak demand time.

IMPROVED PLANNING

- Identify mismatches and imbalances in regional energy supply and demand, and provide incentives for regional planning and monitoring; ensure that energy planning is linked to land use, housing, water, transportation and other infrastructure planning, incorporating conservation and efficiency strategies.

PHOTO CREDIT: CALIFORNIA DEPARTMENT OF PARKS AND RECREATION

Windmills at Pacheco Pass State Park, Merced County, California

- Link California State Government energy planning and infrastructure development to the capital budget planning process (AB 1473) and other investment programs and include lifecycle costing analysis.
- Provide resources to targeted local governments to prepare energy elements as part of their General Plans.
- Provide technical assistance to local and regional planning agencies to implement the California Energy Commission's PLACE^{3}S Geographic Information System (GIS) model.
- Ensure that adequate market data is available to State agencies, including the California Energy and California Public Utilities Commissions, to allow them to monitor developments and trends in electricity and natural gas markets in order to promote long-term planning activities.
- Reorganize state entities to facilitate a coordinated effort in energy policy, planning and implementation to eliminate redundancies and inefficiencies.

BARRIER REMOVAL

- Develop regulatory and financing strategies that will bring down the cost of product development, testing, and market introduction for new energy technologies and industries.
- Reconsider current tax rates for decentralized power systems and other initiatives that decrease risks and costs.
- Seek to eliminate barriers to the development of California's natural gas resources.
- Develop an efficient permitting process to ensure that statewide energy interests are met, including siting of electricity generation and transmission, and natural gas transportation and storage.

IMPROVED IMPLEMENTATION AND USE

- Implement the Sustainable Building Initiative for State-owned and leased facilities (see Public Facilities section for description); use as demonstration models, and provide incentives and technical assistance for implementation by the private sector, local governments and other entities.
- Assess potential for use of State-owned land and facilities, military bases, etc. for possible siting of generation and transmission facilities.
- Explore joint use of State-owned assets such as highway corridors for placement of transmission lines.
- Develop enhanced model building ordinances, building standards, subdivision design standards, and other planning tools for energy efficiencies, including different land use models to reduce dependency on automobiles. Work with public and private sector partners, including local government, the utilities, and the planner/builder/developer community to foster adoption of new models and best practices.
- Transition State and local governments into expanded use of alternative and renewable fuels.
- Explore opportunities for off-peak work times for public employees, where possible, to reduce peak energy demand. Offer incentives for public and private sector employee participation.

CASE STUDY

Incentives for Energy Efficient Vehicles: Los Angeles, California

To promote the use of environmentally clean and energy-efficient vehicles, Los Angeles city officials have begun offering free parking without restrictions, to anyone driving super ultra low-emission vehicles (SULEVs) or Zero-Emission vehicles (ZEVs). This pilot program, whose development was spearheaded by Los Angeles City Councilman Alex Padilla, commenced in April 2001, and will be in effect for one year. All qualifying vehicles will be identified by clean air vehicle decals issued by the California Department of Motor Vehicles that allow certain single-occupant electric and alternative fuel powered vehicles to use the High Occupancy Vehicle (HOV) lanes.

Source: Office of Councilman Alex Padilla, City of Los Angeles

PHOTO CREDIT: J. SPENCER/CALIFORNIA DEPARTMENT OF TRANSPORTATION

Electric vehicles recharging at California Department of General Services parking facility, Sacramento, California

Housing

GOAL FOR 2020

Ensure that the housing needs of all Californians are met by increasing the supply, choice and affordability of homes in all communities.

"Together with education and job creation, safe, decent, and affordable housing is the necessary third ingredient to foster and sustain a vibrant community."

—Governor Gray Davis, Governor's Budget Summary, 1999-2000

Today's Issues

California is facing an extreme housing shortage. We have not built enough housing for more than a decade and what we have is too expensive for most Californians. Decent, affordable housing is a fundamental element of the American Dream and California's economic prosperity. We must do a better job of providing desirable, affordable housing choices in livable communities throughout the State.

SUFFICIENT HOUSING SUPPLY

A major barrier to increased housing production is the current state-local fiscal structure. This fiscal structure prevents many local governments from realizing reliable and adequate funding sources to provide services and infrastructure for new residents. Instead, local governments are encouraged to seek retail over housing development for retail sales tax generation.

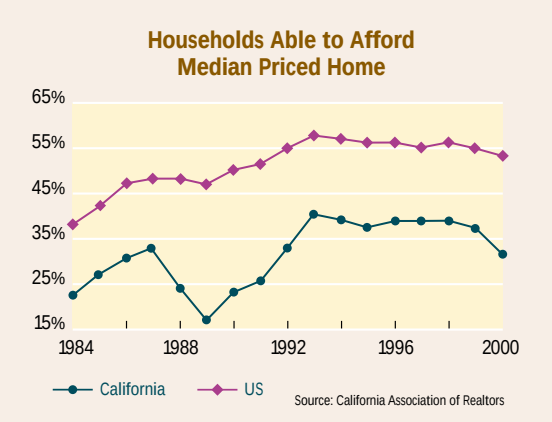
Another barrier is the residential entitlement process, which often results in extensive delays for approvals and environmental reviews.* Local governments are often overly reactive to "Not In My Back Yard" (NIMBY) concerns about new housing development, even when the development is consistent with approved General Plans.

"Should annual rates of housing production during the next twelve years mirror those of the last twelve, the future of California will be one of extreme shortages."

John Landis, Professor,
U.C. Berkeley, "Raising the Roof,"
for the California Department
of Housing and Community
Development (HCD)
May 2000

Some California Housing Facts:

- **California has a housing shortage that is growing each year—our current deficit is approximately 400,000–500,000 homes, increasing by 50,000–70,000 each year.**
- **California has nine of the nation's 10 least affordable housing markets.**
- **California home ownership rate is 49th in the nation (56% compared to the national average of 67%).**
- **Between 1997 and 1999, San Francisco created seven new jobs for each new housing unit built, Los Angeles 6:1, Orange County 5:1. The recommended ratio is 1.5:1.**
- **Almost half of all California renters and 91% of low income renter households spend more than the recommended 30% of their income on rent.**
- **40% of children in renter households live in overcrowded conditions.**
- **According to HCD, about 40% of cities and counties do not have housing plans in compliance with California State law. At present, there are few sanctions for lack of compliance except legal action.**



* For details, refer to "Raising the Roof," www.hcd.ca.gov.

"I learned about this program from research I had done on the Internet looking at various first-time homebuyers programs. I talked with my loan office and got introduced to CHFA and the partnership programs with the City of Pasadena which provide down payment assistance and closing cost assistance. Without this help, I would not have been able to afford this (house) because of my salary plus my responsibilities with a child, my little daughter. The house payment I now have for this two-bedroom townhouse is less than the rent I was paying on a one bedroom apartment."

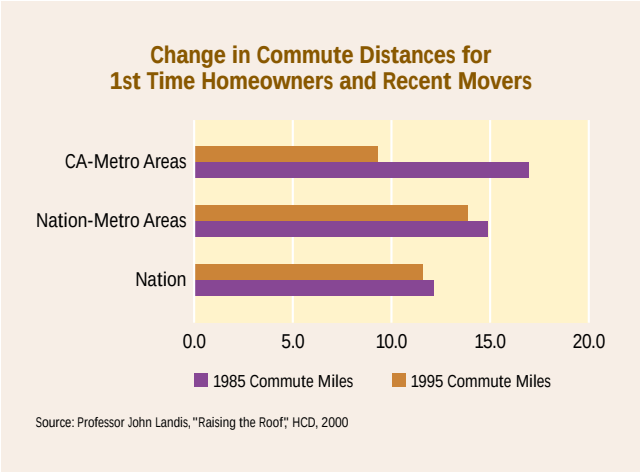
David Bradford
Participant in the California Housing Finance Agency (CHFA) Affordable Housing Partnership Program (AHPP)

The result is higher prices when housing is finally built. Housing production has been impeded by disputes over long-standing construction defect and related defect litigation issues. For these and other reasons, many cities, counties and regions do not meet housing needs as established by State housing planning targets.

HOUSING AFFORDABILITY

California faces housing affordability challenges for renters and owners at most income levels. The expansion of this crisis from low-wage workers to other income levels demonstrates the impact that this shortage has on an expanding number of Californians. First, for more than two decades, low-income Californians have had difficulty finding decent, accessible, affordable housing. Low-income households pay too great a share of their income on rent, more people are living in overcrowded conditions and for most, home ownership is not even a possibility.

Second, for an increasing number of middle income families—including households headed by teachers, nurses and firefighters—insufficient production of homes and rental units results in high prices and the cost of home ownership is out of reach.



LOCATION AND DEVELOPMENT PATTERNS

Housing production has not kept pace with job growth, in quantity or by location. Increasingly, people must live far from work to find affordable housing, which increases commute time and cost, and decreases personal and family time. Long distance commutes also exacerbate the limited options for senior and child care. Housing in more distant locations is less likely to be served by transit, and shopping and services are not easily accessible because current zoning regulations separate commercial and residential land uses.

New housing developments also tend to be built at densities too low to produce a sufficient supply of housing on available land. At the same time, abandonment of older existing communities wastes prior infrastructure investments and diminishes the quality of life for those left behind.

These development patterns erode a sense of community and make it difficult to meet future housing needs. Modest increases in density will allow communities to maximize limited land resources and infrastructure investments as well as reduce the cost of producing housing. Changes in zoning codes, improvements in community design, and restoration of underutilized and sometimes contaminated urban lands will help meet our housing needs and create more livable communities.

"Housing is the linchpin for sustainable growth in California, and a good state housing program is the underpinning of a cost-effective infrastructure investment program."

Sunne Wright McPeak,
Bay Area Council, 2000

Century Housing's Villages at Cabrillo, a collaboration with U.S. Vets, is an unprecedented residential social services complex on the former U.S. Naval 26-acre housing site in Long Beach, California

PHOTO CREDIT: CENTURY HOUSING, CULVER CITY, CALIFORNIA

Actions Taken

- **In 2000-2001, $450 million in new funding for housing—the first state housing dollars in more than a decade. This initiative included funding for the nationally innovative Jobs-Housing Balance Improvement Program, Interregional Partnership Program, Downtown Rebound and multi-family rental unit production.**
- **California Housing Finance Agency (CHFA) met the Governor's $1 billion annual goal to finance mortgages for low to moderate-income first-time homebuyers in both 1999-2000 and 2000-2001.**
- **Since May 2000, the State Treasurer has committed $560 million for low-and moderate-income home loans through the Pooled Money Investment Account's (PMIA's) purchase of Community Reinvestment Act mortgages.**
- **In 2000, the State Treasurer, through the California Debt Limit Allocation Committee, adopted sustainable development and community reinvestment criteria for the allocation of $1.6 billion annually, which includes low cost financing for affordable housing.**
- **The Governor, the Legislature and voters approved $500 million in General Obligation Bonds to provide farm and home loans to eligible California veterans.**

CASE STUDY

Creating Livable Communities: State Incentives in Minnesota

The Metropolitan Livable Communities Act of 1995, passed by the Minnesota State Legislature, relies on incentives to promote walkable neighborhoods, affordable housing, and brownfields cleanup. The funds for the program come from a reallocation of existing tax sources. The Metropolitan Council, a regional planning and operating agency, administers the program. Communities that apply for funding through the program must first choose to participate in a housing incentives program and work toward housing goals developed in cooperation with the Council. To date, the program has awarded $69 million in financial support for projects throughout the region, which has resulted in almost $2 billion more in additional public and private funding.

Source: Urban Land Magazine, April, 2001

PHOTO CREDIT: LOCAL GOVERNMENT COMMISSION

Mixed-use development: Located in the Uptown District of San Diego, California, this transit-oriented development consists of transportation, retail and housing

Investing for California's Future

The Commission has identified the following priorities for meeting our housing needs:

- *A statewide housing production goal of at least 200,000 units per year, within 5 years*
- *Financial incentives for increased housing production linked to goals for regional housing plans and sustainable development criteria*
- *Strengthened State Housing Element law*
- *Reform of the state-local fiscal structure*
- *Convening of stakeholders to resolve the construction defect and defect litigation issue*
- *Removal of regulatory barriers*
- *Improvement of the process for planning and locating new housing*
- *More efficient use of land resources*

Recommended Options

The following recommended options will help achieve our priorities:

FINANCING AND FISCAL POLICY

- Reform the State-local fiscal relationship so that communities can promote increased housing production and the services to support new residents. Provide incentives for efficient use of land to meet regional housing planning goals. Incentive options include: swap State-share property tax for local-share sales tax; cap the 1992 property tax shift, with economic triggers; and/or implement regional tax revenue sharing.
- Use bond financing to support ongoing construction of affordable housing.
- Expand funding and incentives for brownfield cleanup, redevelopment and infill development.
- Establish a permanent housing incentive fund to reward communities that increase housing production, building on California's Jobs-Housing Balance Improvement Program.

IMPROVED PLANNING

- Provide incentives for local and regional efforts to engage in multi-disciplinary and interregional planning.
- Target State programs and resources to communities with housing elements in compliance with State Housing Element law. Consider State sanctions if incentives do not promote compliance.
- Adopt proactive environmental enhancement initiatives, such as multi-species Habitat Conservation Plans (HCPs), to balance expanded housing production with environmental quality.

BARRIER REMOVAL

- Convene stakeholders to resolve the construction defect and defect litigation issue. Complementary preventative strategies to consider: efficient dispute resolution mechanisms, home buyer warranties, and increased resources for the training of construction workers and building inspectors.
- Support a State-backed liability insurance pool to make insurance available to small and mid-size housing contractors.
- Streamline and improve the residential entitlement process.
- Promote the use of Master Environmental Impact Reports (EIRs) and specific plan EIRs; provide a new funding mechanism to ensure their use.
- Streamline the California Environmental Quality Act (CEQA) and other permitting processes to expedite housing construction while ensuring that the original intent of protecting the environment is maintained.

"Too many Californians are locked out of the American dream of home ownership. California has one of the lowest home ownership rates of any state in the country. We must begin to develop housing priorities and policies to open wider California's door to economic expansion and prosperity."

"Housing: California's Foundation for Economic Growth," California Department of Housing and Community Development (HCD)

CASE STUDY

New Housing Sites: Mountain View, California

In a creative reuse of existing facilities, a 1960s vintage strip mall in Mountain View, California, recently became a transit-oriented, mixed-use neighborhood called The Crossings. The 18-acre site, originally a struggling mall, now includes stores, offices and more than 500 dwelling units—apartments, condominiums and single-family homes. Housing density at the site is nearly 30 units per acre. The project, completed in 1998, is adjacent to a new CalTrain commuter station. The Congress for New Urbanism sees great potential for use of older malls as infill sites for housing and other uses.

Source: Urban Land Magazine, February 2001

PHOTO CREDIT: T. PARKER / AICP

The Crossings transit-oriented development in Mountain View, California

CASE STUDY

Housing Trust Funds Supported by Commercial Real Estate

Currently, about 40 cities around the country have some kind of housing trust fund to guarantee a reliable and predictable source of local funding for housing. Thirteen cities and counties, including San Diego, San Francisco, Sacramento and Santa Monica, have housing trust funds, and at least 10 more cities are considering them, due to spiraling housing costs connected to rapid job growth. One funding mechanism is a jobs-housing impact fee on developers of commercial space. Funds are used to build affordable housing or help people to obtain housing. California State law requires that a "nexus" study be conducted to establish the connection between job growth and housing demand. Most recently, leaders in Sonoma County began the process of exploring a nexus study to address an emerging housing crisis—Santa Rosa was among the five least-affordable housing markets in the nation last year.

Source: Urban and Environmental Policy Institute, Occidental College
Santa Rosa Press Democrat, February 6, 2001

IMPROVED IMPLEMENTATION AND USE

- Provide technical assistance and incentives so that underused lands can be recycled for housing production. Incentives could include entitlement "fast track" and funding for brownfield cleanup.
- Foster development of appropriate zoning codes to support new models of development, such as mixed-use and higher density development in both new and existing communities.
- Promote innovative housing finance products such as location-efficient mortgages, energy-efficient mortgages and credit enhancement programs.

PHOTO CREDIT: CALIFORNIA RURAL COMMUNITY ASSISTANCE CORPORATION

Oak Forest Apartments affordable rental housing in Arroyo Grande, California

PHOTO CREDIT: LOCAL GOVERNMENT COMMISSION

St. Francis Terrace provides affordable and senior housing in Sacramento, California

PHOTO CREDIT: CALIFORNIA RURAL COMMUNITY ASSISTANCE CORPORATION

Los Adobes de Maria, migrant housing in Santa Maria, California

Specific Financing Strategies to Increase the Supply of Housing for Low-Income Families:

- **Increase the annual allocation for the low-income housing tax credit from $50 million to $70 million per year to match recently-enacted increases at the federal level and continue to match federal levels in the future.**
- **Remove barriers to full expenditure of the 20% set-aside of tax increment financing that Community Redevelopment Agencies (CRAs) must allocate for affordable low-income housing. Barriers cited include: difficulties in dealing with multiple funding sources; concerns about increased impacts; and over-subscription of the federal tax credit program. Enforce CRA requirements and make sure CRA projects are built and implemented expeditiously.**

PHOTO CREDIT: LOCAL GOVERNMENT COMMISSION

Bridgecourt housing in Emeryville, California

- **Advocate the repeal of the "10-year Rule" which currently limits recycling of mortgage prepayments into new single-family mortgage revenue bonds.**
- **Facilitate adoption of local housing trust funds, as employed by 13 California cities, including San Diego, San Francisco, Sacramento and Santa Monica. At least another 10 cities are considering them.**

Other Strategies to Increase the Supply of Housing for Low-Income Families:

- **Strengthen State Housing Element law and increase community education to ensure implementation of plans, unless formally amended.**
- **Increase the amount of land zoned for multi-family housing through incentives.**
- **Ensure that regulations accommodate needs for a variety of housing types, such as second units.**

CASE STUDY

Energy-Efficient Mortgages: California Housing Finance Agency (CHFA)

CHFA has rolled out its newly implemented FHA Energy Efficient Mortgage and announced its addition to the first time homebuyer loan program. In response to the Governor's energy initiatives, this new effort from CHFA will help homebuyers save money on their utility bill as they reduce their borrowing costs for their home energy efficiency improvements (water heaters, insulation, double paned windows, etc.). Improvement amounts eligible for financing are either 5% of the property's value (not to exceed $8,000) or $4,000, whichever is greater.

Source: California Housing Finance Agency

"From homeless individuals struggling to find shelter, to families being priced out of neighborhoods, helping people find safe, affordable housing is one of the key challenges facing California people."

John Burton
President pro Tempore
California State Senate

Land Use

GOAL FOR 2020

Use and preserve land resources responsibly to enhance our environment and quality of life and accommodate growth, now and for future generations.

"Land is a precious resource to be treasured, not a commodity to be squandered. Land is unique for its physical features (hills, valleys, waterways), the life it supports (plants, wildlife, and humans), and for its immovable nature… It is because of its uniqueness that land creates a sense of place and a feeling of connection to the rest of the earth…Truly, we do not inherit the land from our forebears as much as we hold it in safekeeping for our descendants."

— "Land Recycling and the Creation of Sustainable Communities", California Center for Land Recycling, 1998

Today's Issues

Land is a finite natural resource and literally provides the physical foundation for the state's built and natural environment. Our land supports our homes, schools, stores, industries, hospitals and public facilities…our communities. Our land also includes our farms, parks, open space and wildlife habitats.

Historically, there has been substantial conflict over what lands should be developed, what land should be preserved and how we should steward all our lands. California is projected to grow by 12 million people over the next 20 years which poses substantial new challenges for land use decision-making. We need to plan better so that we use land most efficiently to build quality places and preserve our important natural assets.

"The future of California looks very different from the past and therefore the future of planning and development must look very different as well."

"Land Shortage Will Change How We Grow"
William Fulton,
April 4, 2001

STEWARDSHIP

California has a long-standing tradition of environmental leadership as exemplified by our State commissions and conservancies that protect Lake Tahoe, our parks, our coast, prime agricultural lands and other important land resources. However, we face many challenges in the stewardship of our natural resources. Past land use practices have led to the loss of important assets and contamination of our lands, watersheds and coastal areas.

Some California Land Use Facts:

- **Several regions with the greatest predicted population growth—Los Angeles, Orange and Santa Clara counties—will lack sufficient vacant lands to accommodate projected household growth through 2010 based on current development patterns.**
- **Between 1970 and 1990 the population of Los Angeles grew by 45%, but the developed land area grew by 200%.**
- **In San Diego, older neighborhoods average 5.5 houses per acre, while current plans for development allow for 2.4 units per acre.**
- **Estimates for providing infrastructure to Central Valley cities through 2040 with current low density development patterns indicate a $1 billion deficit.**
- **The empty and contaminated lots and abandoned buildings in inner cities and older suburbs, called brownfields, are estimated to constitute 5–10% of California's urban real estate (260,000 to 520,000 acres).**
- **California is converting an average of 42,500 acres of agricultural land and open space to urban uses each year.**
- **Over the past 100 years, more than 90% of California wetlands have been lost, with negative impacts on water quality, flood protection, and habitat.**
- **Currently, 5% of California's land mass is urbanized.**

PHOTO CREDIT: CITY OF LONG BEACH

Livingston Park
Long Beach, California

Brownfields are under-utilized assets and negatively impact the community. Agriculture must have land resources to be sustained economically. Healthy watersheds are critical for habitat, water quality and supply; clean beaches and rivers are important recreation assets. We need to improve our use and management of resources on both publicly and privately owned lands. To do so, we need better data and improved science and practices. Today's stewardship provides the legacy for the future.

INEFFICIENT DEVELOPMENT PATTERNS

Current development patterns are characterized by relatively low density and dispersed distribution of housing, commercial buildings and other facilities. One manifestation is that jobs and housing are not close to one another, resulting in long commutes, diminished family time, and increased costs for families and businesses. At the same time, disinvestments in the urban core of many of our major cities and older suburbs wastes prior investments and impairs economic growth. There is adequate land to accommodate growth in existing communities and on undeveloped and environmentally appropriate lands, but only if we use our land more efficiently.

POOR PLANNING AND CONFLICTS OVER DEVELOPMENT

PHOTO CREDIT: D. MCCULLOH/GEOGRAPHICS

Sunny Mead Ranch
Moreno Valley, California

Economic and population growth creates intense competition for land. Poor planning results in conflicts between development and conservation needs. Local and regional land use planning is often not coordinated with planning for housing, water, transportation, and other key areas. Approximately one-third of our cities and counties have not developed a plan or policy for growth in their General Plans in the last 10 years. Thus, these areas may be unprepared to deal with future growth. Though better planning is a high priority, many communities lack sufficient resources to update General Plans and participate in integrated regional planning.

The implementation of the California Environmental Quality Act (CEQA) is sometimes used inappropriately to prevent needed development. Citizen concerns about growth and environmental impacts have led to initiatives to limit growth, often called "ballot-box planning." This situation dilutes the ability of public officials to provide policy direction and the ability of local governments to plan effectively for the future.

The State Role in Land Use

The State plays an important role in broadly determining the character, pace and location of development and conservation in many ways, such as:

- Tax policies that set a framework for how local governments make land use decisions
- Setting the process rules for local and regional agencies in land use planning for housing, transportation and natural resources protection; for how school districts plan and site new schools; and for how cities and special districts are created and annex land
- The planning, building and funding of public facilities, such as freeway and rail corridors, colleges and universities, schools, water projects, courts, hospitals, and prisons
- Directly regulating activities affecting State-owned lands or unique natural or economic resources, such as the California coastline, water quality, and sensitive habitats
- By providing incentives and a framework for local governments to engage in regional planning and comply with State General Plan guidelines
- By purchasing and managing important lands

PHOTO CREDIT: R. HOLMES/CALIFORNIA TECHNOLOGY, TRADE AND COMMERCE AGENCY

Heavenly Valley, Lake Tahoe, California

The Local Role in Land Use

Local governments have a strong role in land use planning and decision-making, as reflected by the General Plan and Zoning Ordinance processes. The Housing and Land Use Elements which set community housing production and land use targets, are core components of the General Plan. To ensure the best use of land resources, the local role should include:

- Developing strong community consensus for sustainable growth
- Reflecting community consensus in the General Plan and Capital Improvements Program (CIP)
- Participating in regional consensus building for sustainable growth
- Forming partnerships with other government and non-government organizations to solve regional problems
- Planning proactively to avoid ballot box planning, which often inadvertently moves one jurisdiction's problems to another jurisdiction
- Investing in older neighborhoods and central city areas

CASE STUDY

Private Sector Preservation of Sensitive Lands: Hidden Ranch, California

Hidden Ranch is an 807-acre parcel located in Black Star Canyon between Irvine and Corona in Orange County, which is under intense pressure for development. The site is home to various natural species of plants and animals that a private investment firm is interested in preserving. In a new model of land conservation, the Laguna Beach group will receive conservation credits for dedicating Hidden Ranch as a preserve, then sell the credits to public agencies and developers that need them to offset planned construction on other sensitive lands. The National Audubon Society will manage the preserve and investors will ensure a $1 million endowment over the next five years.

Source:
F. Scott Richard
Los Angeles Times,
May 14, 2001

Actions Taken

- **In 2000, at the recommendation of this Commission and with the support of the Governor and the Legislature, more than $4 billion in parks and water bonds were placed on the ballot and approved, constituting the largest such state investment in the nation's history (Propositions 12 and 13).**
- **Governor Davis sponsored legislation for an $85 million low-interest loan program for the Cleanup Loans and Environmental Assistance to Neighborhoods (CLEAN) program, administered by the California Environmental Protection Agency, Department of Toxic Substances Control. The California Pollution Control Financing Authority received $10 million targeted for projects in at-risk communities.**
- **In 1999, the David and Lucile Packard Foundation launched a five-year, $175 million California initiative to conserve open space, farmland, and critical natural areas.**
- **The State Treasurer is implementing a new $2.5 million Smart Growth grant program to assist fiscally constrained local governments to build planning capacity for sustainable development.**
- **Over $230 million dollars has been allocated for the California Infrastructure and Economic Development Bank which will leverage approximately $565 million in loans.**

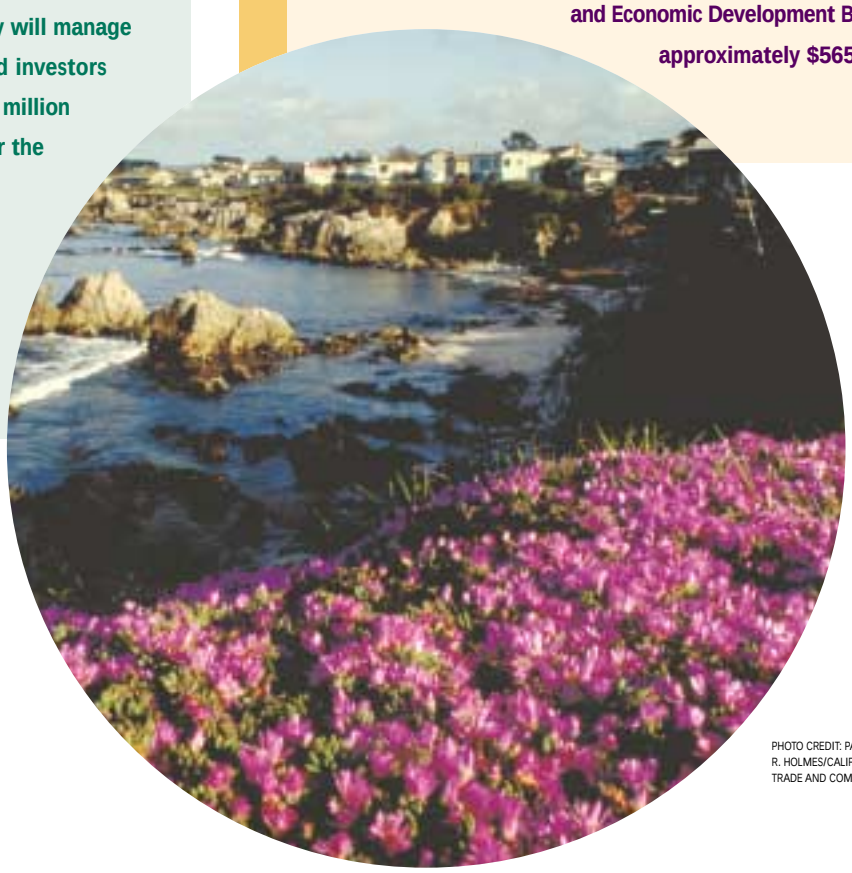


PHOTO CREDIT: PACIFIC GROVE,
R. HOLMES/CALIFORNIA TECHNOLOGY,
TRADE AND COMMERCE AGENCY

Investing for California's Future

The Commission has identified the following priorities for meeting our land use needs:

- *Increased commitment to stewardship*
- *Reform of the State-local fiscal structure*
- *Increased efficiency of land use through cleanup of contaminated lands, better community design and new models of development in existing and new communities*

PHOTO CREDIT: CALIFORNIA DEPARTMENT OF TRANSPORTATION

- *Support for integrated local and regional planning in conjunction with updated General Plans*
- *Improved science, data systems and practices for using and managing land resources*
- *Use new models for responsible development, where environmentally appropriate*

Recommended Options

The following recommended options will help achieve our priorities:

FINANCING AND FISCAL POLICY

- Reform the State-local fiscal relationship to provide incentives for communities to make better long-term land use decisions. Incentive options include: swap State-share property tax for local-share sales tax; cap the 1992 property tax shift, with economic triggers; and/or regional tax revenue sharing.
- Increase State funding for brownfield cleanup and reuse initiatives.

CASE STUDY

Regional Integrated Planning: Riverside County, California

Riverside County Integrated Plan (RCIP) is a three year comprehensive, integrated planning effort to determine future conservation, transportation, housing and economic needs in Riverside County. This innovative project, the first of its kind in the nation, was developed as a response to the impact of rapid growth on the County's quality of life. Guiding principles are: project elements are related and integrated; financing is everyone's responsibility; and the process is stakeholder rather than government driven. The project simultaneously addresses what traditionally have been three separate planning efforts in the areas of conservation, transportation and land use, using a consensus rather than a traditional conflict model. RCIP will protect the natural environment, including watersheds, by conserving habitat and open space through a Multi-Species Habitat Plan. Traffic congestion will be addressed though the Community and Environmental Transportation Acceptability Process, a multi-modal effort. RCIP will balance land use by updating the County's General Plan.

Source: RCIP 2000

CASE STUDY

Sustainable Planning: Bay Area Regional Livability Footprint Project

The Bay Area Alliance for Sustainable Development—made up of over 40 Bay Area public, private and nonprofit organizations—and the five regional agencies led by the Association of Bay Area Governments, have been working together since 1999 to develop a region-wide, bottom-up process to create a sustainable smart growth land use vision for the Bay Area. In Fall 2000, they merged the public outreach portions of their projects. Together, this ground-breaking partnership is planning a series of workshops throughout the Bay Area, beginning in September 2001. Their workshops will use PLACE^{3}S—a desktop GIS model developed by the California Energy Commission—to map land use decisions. The goal of these workshops is Bay Area-wide consensus on the best ways for the region to accommodate projected growth and the fiscal and regulatory incentives local governments, developers, neighborhood groups and others need to support these new development patterns.

Source: Association of Bay Area Governments

IMPROVED PLANNING

- Provide matching funds and technical support to help communities update General Plans within the next five years, consistent with state standards and guidelines.
- Provide incentives for collaborative, integrated regional and sub-regional planning initiatives linked to sustainable development criteria and State General Plan guidelines, such as the Riverside Comprehensive Integrated Plan process.
- Build the planning capacity of local government and regional agencies through better state data, technical assistance, and planning grants.
- Continue funding of the Resources Agency's California Continued Resources Investment Strategy Project (C-CRISP) to support responsible planning for investments in our infrastructure.
- Adopt State inter-agency planning models, such as the Tri-Agency Partnership on Environmental Permitting for Transportation, and build upon them to collaborate with regional and local planning agencies.
- Fund landscape-scale planning for natural resource conservation, such as multi-species Habitat Conservation Plans (HCPs) and the Natural Communities Conservation Planning (NCCP) process.

PHOTO CREDIT: D. WINKLER/CITY OF HUNTINGTON BEACH

Interpretive education assists students in understanding the value of protecting limited natural resources through habitat conservation planning

PHOTO CREDIT: 2001 DAVID SANGER

Crissy Field, San Francisco
Before and After

BARRIER REMOVAL

- Use scientifically accepted standards to govern brownfield assessment and cleanup.
- Streamline the California Environmental Quality Act (CEQA) and other permitting processes to promote responsible land use planning while ensuring that the original intent of protecting the environment is maintained.

IMPROVED IMPLEMENTATION AND USE

- "Green" our cities through investments that optimize our use of energy, water, and other resources. Improve livability of urban areas by development of urban parks, recreation areas and other amenities.
- Provide funding and support for best practices in zoning and building codes so communities can achieve more efficient land use and adopt new models of development, such as mixed-use and transit-oriented development.
- Develop framework Geographic Information System (GIS) data sets, such as roads, typography, land cover, hydrography and imagery for use by state, regional and local government entities.
- Develop and implement a State watersheds policy to guide and partner with regional watershed conservation and development plans.
- Increase solid waste treatment capacity through conservation, recycling, and new technologies.
- Continue to purchase critical land for the State parks and natural reserves and to ensure these resources are appropriately maintained.

CASE STUDY

Greening our Cities:
Crissy Field Conversion,
San Francisco, California

Crissy Field, part of the former Presidio Army base, was for years a 70-acre parcel of asphalt, aging barracks, and chain link fences along the bay, east of the Golden Gate Bridge. Through private contributions and civic volunteers, Crissy Field, now part of the Golden Gate National Recreation Area, has been brought to life as an urban park in one of the largest urban ecological restorations ever. The Army removed 87,000 tons of contaminants; 70 acres of asphalt and concrete were crushed and used as fill for new pathways and parking lots. Volunteers replanted the area with native plant species, and re-created a salt marsh. More than 100 bird species have been sighted, some that haven't been seen in that area for 100 years. The conversion was led by the nonprofit Golden Gate National Parks Association with an $18 million donation from the Haas Family Funds. The family trust worked in partnership with the community and the National Park Service to create a resource for all of the Bay Area's diverse communities.

Source: Marilee Enge
San Jose Mercury News
April 17, 2001

Public Facilities

GOAL FOR 2020

Provide sufficient, attractive and safe public facilities accessible to all Californians.

"The widespread adoption of sustainable building principles would result in significant long-term benefits to the California environment, including reductions in smog generation, runoff of water pollutants to surface and groundwater sources, the demand for energy, water and sewage treatment services and the fiscal and environmental impacts resulting from the expansion of these infrastructures…I do hereby establish a state sustainable building goal and issue this order to become effective immediately."

—Governor Gray Davis, Executive Order D-16-00, August, 2000.

Today's Issues

Public facilities are the places where government performs its most essential function—service to people.

DEFERRED MAINTENANCE AND FUTURE CAPACITY NEEDS

A significant proportion of California public buildings—including courts, health care facilities, libraries, museums and public office buildings—was built in the mid-twentieth century. These facilities are suffering from years of deferred maintenance due to limited and inconsistent State and county funding. This is especially true for historic public buildings. Beyond the need to maintain and preserve our current inventory, additional capacity will also be required to meet the needs of growth and to provide access to services in currently underserved areas. The Department of General Services estimates that over the next 10 years, up to 6 million square feet of additional space will be needed by the State to provide public services. The Joint Task Force on Court Facilities estimates another 5.8 million square feet of court space is needed over the next 20 years.

MODERN BUILDING REQUIREMENTS

Societal changes and the new economy are changing facilities requirements. Public facilities serve as anchors of our communities, and as such, building design and the inclusion of art and other aesthetic qualities contribute to community culture and identity. An aging population will demand a variety of access options for services and

"Thoughtful planning for the construction and financing of safe, accessible courthouses is critical to the public's trust and confidence in the fair accessible administration of justice…Today, California has a wonderful opportunity to shape our justice system for the next century in a way that will meet the needs of our growing and increasingly diverse population by fostering strengthened public safety, family stability and an environment conducive to economic growth."

Chief Justice Ronald George,
Commissioner
California Supreme Court

Some California Public Facilities Facts:

- **The State owns, leases and operates over 200 million square feet of office and warehouse space, excluding trial courts, state correctional facilities and higher education.**
- **California State government expends more than $600 million annually for energy, water and waste disposal costs to operate its buildings.**
- **The median age of state office and warehouse facilities is approximately 20 years old.**
- **Nearly three-quarters of the State's courthouses were built prior to 1980 and over half were built before 1970.**
- **Only 45% of California courts' usable area is located in buildings rated functionally and physically adequate by the Joint Task Force on Court Facilities.**
- **There is a $2 billion backlog in required maintenance and modernization for the State's libraries.**
- **It is estimated that earthquake retrofitting will cost California's 473 hospitals $5–10 billion over 10 years.**

PHOTO CREDIT: D. McCULLOH/GEOGRAPHICS

Riverside County Courthouse and joint-use facility in Riverside, California

CASE STUDY

Funding Public Facilities: California Infrastructure and Economic Development Bank

The Bank provides financing through its Infrastructure State Revolving Fund Program to serve the diverse infrastructure and public improvement needs of local government entities. To date, 14 projects totaling $99 million have been approved. Successful applicants have included cities, counties, redevelopment agencies, a charter school, a flood control district, ports, and an airport district. Projects have included: police headquarters, a community center, storm drainage and flood control, water supply, technology infrastructure for research and business parks, city streets and a performing arts educational facility. There will be substantial impacts from leveraging state resources including the potential for over 6000 new jobs, environmental benefits, and increased provision of public services.

Source: California Infrastructure & Economic Development Bank

have increased needs for mobility when using public buildings. Hospitals and health-care facilities must be prepared to serve more patients and deliver services with new technologies and practices. The services provided by public facilities have changed as well. For example, the nature of court caseloads requires an environment which ensures cultural sensitivity, accommodation of increasingly complex litigation matters involving technologies and scientific evidence and the provision of social services such as drug counseling.

As our ongoing transformation into an information-based society continues, public servants will increasingly use new technologies and engage in new working models. Buildings must be equipped with reliable connectivity to information and communications, and re-configurable space to support team-based activities and joint-use capabilities. It is not possible to fully anticipate all future facility needs. Therefore, we need to build flexible, high performance, physical environments. To achieve operational efficiencies and full utilization of public buildings, new building practices and techniques must be adopted. High performance and green building technologies provide an opportunity to make better use of our resources, such as energy, materials and water, and reduce operating costs.

SAFETY

Since the main function of public facilities is service to people, government has a special responsibility to ensure that these facilities are safe for employees and users. For example, due to the age and condition of many public buildings, there is significant safety risk from earthquakes in seismic zones. Most hospitals, especially in rural areas, are struggling to meet unfunded, but mandated, modernization requirements of the Earthquake Safety Law of 1994. It is estimated that one-half to three-quarters of the state's hospitals will not be able to obtain financing for these modifications in the

PHOTO CREDIT: LOCAL GOVERNMENT COMMISSION

City Hall, Suisun, California

"Green building incorporates… high efficiency design for energy, water, waste and lighting systems, deployment of alternative energy strategies, use of recycled and recovered building materials, improved indoor air quality and natural lighting, and parking facilities for electric vehicles, carpools and bicycles."

Capital Area East End
Complex Project Overview,
Sacramento, California

financial markets. California courts also have significant safety issues. Facilities need to be modified to provide separate circulation of prisoners, staff, jurors and the public. Overall, there is increased demand for structurally sound, more accessible, healthier and safer indoor environments. Indoor environmental quality has also been linked to worker productivity and health. For example, the U.S. Environmental Protection Agency ranks indoor air quality among the top five environmental risks to public health. If these health and safety issues are not addressed, there will be a potential for increased insurance and liability issues.

Actions Taken

- **In 2000, the Governor signed Executive Order D-16-00 to facilitate the incorporation of sustainable building practices into the construction and management of state facilities.**
- **In 2000, the Governor, the Legislature and the voters passed a $350 million bond for public library construction and renovation (Proposition 14), which gives preference to library projects that pursue joint-use with schools.**
- **The California Infrastructure and Economic Development Bank has received $230 million dollars in general funds to provide loans for construction of local public facilities. These funds will leverage approximately $565 million in loans.**
- **In 2000, the California Integrated Waste Management Board initiated a "green building" construction grant program, which allocated almost $800,000 in funding to 16 projects for planning and construction of local government facilities.**
- **The State Judicial Council implemented single-source state funding of the courts allowing statewide policies to drive budget priority.**
- **On June 1, 2000, California's new energy efficient building standards went into effect. These standards are considered the most energy efficient building standards in the world, which will save an estimated 200 megawatts per year for the first five years, and 1000 megawatts per year thereafter.**
- **The California State and Consumer Services Agency, in cooperation with the California Arts Council, has initiated the "Excellence in Public Buildings Initiative" to improve the process to design, construct and deliver quality buildings. This effort includes integrating art into the earliest stages of the design process.**
- **In October 2000, the Governor appointed an interagency task force to coordinate implementation of the Americans with Disabilities Act (ADA), including the use of funds for architectural barrier removal in State-owned buildings.**

"State government must lead by example and begin the process of altering the way we currently design and construct our buildings. This new process must look at a building's costs over its lifetime and include such features as energy efficiency and increased employee health and productivity. It must also promote excellence in public architecture through the incorporation of the arts, sustainability, accessibility and community integration as key elements."

Aileen Adams, Secretary
California State and Consumer Services Agency

PHOTO CREDIT: MARY ANN SULLIVAN

Public facilities reflect community values: The San Juan Capistrano Library, modeled after the San Juan Capistrano Mission, California

CASE STUDY

Telemedicine: University of California, Davis Health System (UCDHS) Sacramento, California

The UCDHS Telehealth Program seeks to improve health care in rural communities using telecommunications and technological solutions. UC Davis partners with more than 50 remote sites, such as community hospitals and clinics, primarily in Northern and Central California to provide residents and their physicians with access to specialized medical care and education. The Telehealth Program uses high-speed data lines linked to video units at the UC Davis Medical Center to allow physicians and patients to have a live interactive consultation with a UC Davis specialist by simply dialing him or her up on video. The program provides expert consultation in over 30 different clinical specialties. The program also provides radiology consultation through imaging technologies, real-time remote monitoring of patient vitals, interactive monitoring from the home, and distance education to healthcare providers.

Source: University of California, Davis Health System (UCDHS)

Investing for California's Future

The Commission has identified the following priorities for meeting our public facilities needs:

- *Aggressively reducing our maintenance backlog*
- *Designing, siting and constructing public facilities more efficiently; employing techniques such as joint-use, high performance design, energy and resource efficient practices and public-private partnerships*
- *Expanding capacity through e-Government and other non-physical options*
- *Using public facilities to serve as anchors to community development, revitalization and the enhancement of civic life through better planning and design with community participation*

Recommended Options

The following recommended options will help achieve our priorities:

FINANCING AND FISCAL POLICY

- Wherever possible, site public facilities near public transit.
- Fully fund the public facilities called for in AB 1473 the Capital Budget Planning process.
- Maximize revenue generation from public facilities using a fully inventoried database of State assets.
- Mandate lifecycle costing, as opposed to lowest initial cost, in the funding of public buildings.

PHOTO CREDIT: UNIVERSITY OF CALIFORNIA DAVIS HEALTH SYSTEM

The University of California Davis Medical Center in Sacramento, California

IMPROVED PLANNING

- Compile and maintain a usable inventory of State assets.
- Develop long-range facilities strategic planning that incorporates whole-building approaches and lifecycle costs.
- Provide incentives for adoption of high performance and green building technologies by the public and private sectors.

BARRIER REMOVAL

- Develop policies and practices to expand the use of "green building" techniques, such as the use of "green accounting," to make sustainable investments financially attractive and promote adoption of performance metrics that demonstrate benefits.
- Address procurement and leasing policies that limit the ability of the State to specify certain building elements and/or requirements.
- Remove the mandate for seismic retrofits for hospital facilities that are not located in seismic zones.

IMPROVED IMPLEMENTATION AND USE

- Develop and implement comprehensive programs to aggressively reduce deferred maintenance backlogs, addressing special needs such as hospital seismic retrofits and unique requirements of trial courts.
- Increase leverage of State dollars through joint-use, lease purchase and public-private partnerships.
- Provide incentives for widespread implementation of Executive Order D-16-00, The Sustainable Building Initiative, as a model for the private sector and local governments.
- Develop artistic quality standards and aesthetic considerations for public buildings.
- Focus public facilities development and leasing in existing commercial and mixed-use districts to assist with community revitalization.
- Utilize e-Government and mobile facility initiatives to increase capacity and accessibility of government services, especially to rural areas (e.g., mobile units for health care).
- Use technology and private sector models to benchmark, monitor and diagnose building systems performance for resource usage.
- Develop and implement statewide building performance and construction standards, as well as energy codes for the design, construction, operation and maintenance of state facilities.
- Include high performance design and building techniques in higher education architecture and engineering system curricula.

CASE STUDY

Green Building for the Private Sector: Conde Nast Building, New York City

The Conde Nast Building at Times Square has galvanized the green building movement in New York City. This is the tallest green building in the country. It uses fuel cells and solar panels to produce clean power and has an advanced air pollution filtration system. Following on the success of the building, the State of New York passed a green building tax credit in 2000, for a total of $25 million through 2009, with the Real Estate Board and the Natural Resources Defense Council playing a major role in its passage. This is the first state tax credit for environmentally sustainable buildings. According to the architect, "For a relatively limited investment of public funds, New York has made a wide field of developers, architects and engineers aware of sustainable building techniques."

Source: Urban Land Institute, "Multifamily Trends," Spring 2001

PHOTO CREDIT: LOCAL GOVERNMENT COMMISSION

The Turtle Bay Museum Visitor's Center South in Redding, California was constructed using straw bale construction techniques

Technology

GOAL FOR 2020

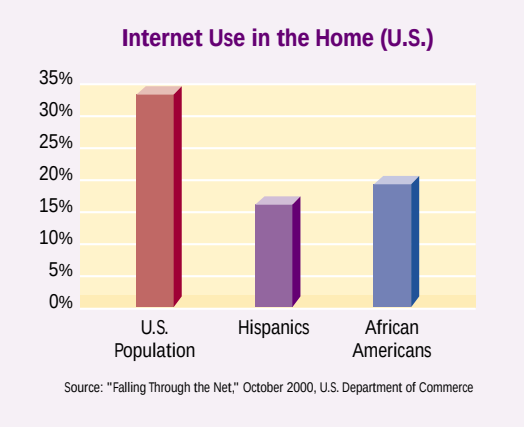
Ensure that technology infrastructure is available to maximize the benefits of the knowledge-based economy and to increase the quality of life for all Californians.

"Telecommunications technology presents opportunities never before imagined for every community and its citizens. Education, health, public safety and public access to government are only a few applications where information holds the potential to improve daily lives and empower communities. These opportunities will only be achieved by competitive, affordable, accessible services available to all communities and its citizens regardless of size, location or socio-economic factors."

—Telecommunication 101 Infrastructure Partnership Project, Bay Area Economic Forum

Today's Issues

Telecommunications infrastructure and technology workers are the foundation of the information-based economy. California's leadership position in the new economy and its ability to attract intellectual and financial capital is dependent upon a network of infrastructure elements—of which the ability to access and use advanced technology is a key component. Information technology (IT) also has the potential to help address many of the challenges facing California today—transportation, safety, economic growth, education, health care, community development, emergency preparedness and others. While California has emerged as the center of the new economy, the opportunities provided by technology must be expanded to a larger share of our citizens.



THE DIGITAL DIVIDE

Internet access and usage correlates to income and education levels and is divided along socioeconomic and, in some cases, ethnic and cultural lines. This trend, the "digital divide," is generally defined as the measurable and growing gap between different communities and individuals in terms of access to the Internet and other productive technologies, educational achievement, and employment opportunities. California's existing telecommunications network provides Internet connectivity with a computer, software and an Internet Service

"There's been so much focus on the boxes and wires to connect the Internet that we almost forgot to ask what people are getting once they connect. We found a strong desire among people for practical, local information about their neighborhoods that seems to fly in the face of the way the Internet is moving in terms of national portals."

Wendy Lazarus
Founder of
the Children's Partnership

Some California Technology Facts:

- **46% of households with income of less than $40,000 have Internet access, whereas 81% of households with income of more than $80,000 have Internet access.**
- **Californians are more likely than U.S. adults to use the Internet, 61% to 56%, however, Central Valley residents trail at 50%.**
- **Latinos are less likely than non-Hispanic whites, 45% vs. 69%, to use the Internet.**
- **Three in four Latinos with college degrees, 78%, use the Internet, similar to all Californians with college degrees.**
- **According to the national study, "Falling Through the Net," people who have a disability were only half as likely to live in homes with Internet access than those without a disability. In addition, only 25% of people without a disability have never used a computer, whereas almost 60% of people with at least one type of disability have never used a computer.**

PHOTO CREDIT: JEFFREY SPENCER

CASE STUDY

Community Technology Centers: Computers in Our Future (CIOF)

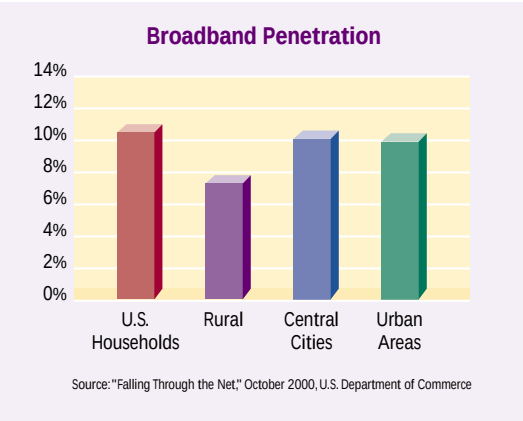
CIOF operates in 11 communities across California providing technology access and training for 24,000 low income residents. CIOF has succeeded at reaching those who have been bypassed by technology—80% of program participants are people of color, and 60% of adult users have a high school education or less. With seed funding from the California Wellness Foundation, the program is also financed with over $1.6 million in corporate support as well as city and county funds.

Source: Richard Chabran, University of California, Riverside

Provider (ISP). However, for many Californians, a lack of skills, knowledge, financial resources or a disability limits accessibility. Limited culturally diverse content and applications on the Internet are also cited as reasons for decreased participation rates by some groups. In addition, high-speed broadband service, such as Digital Subscriber Line (DSL), is often required to achieve the full benefit of the Internet. Currently, access to broadband service is focused on central cities and urban areas, which poses a challenge to rural areas.

DEVELOPING THE PHYSICAL INFRASTRUCTURE

Infrastructure development is essential to maintaining and strengthening California's leadership in IT and to ensuring that all its citizens and industries reap IT's potential benefits. Telecommunications and technology infrastructure serve as the data highway for the knowledge-based economy. Today's infrastructure has resulted primarily from private sector build out. Differing speeds of data access through land-line connections and wireless technology exist in different geographic locations. More users and businesses are coming online everyday to become active participants in the knowledge-based economy, and as new network-based services are deployed, there is a rapidly growing need for business and private users to be connected anytime, anywhere—at home, at work, and while on the move. These trends will result in an exponential growth in data traffic and data speed requirements. Meeting this demand will require additional wire-line connections as well as continued development of wireless Internet infrastructure.



To address these infrastructure needs, new types of networks will be required. Metropolitan Area Networks (MANs) connect and integrate business, government, non-governmental agencies, schools, and residents. These high-speed networks have the capability to be customized by the communities they serve. Dispersed Area Networks (DANs) connect Californians in rural, tribal and other geographically dispersed areas throughout the State. Both types of networks have potential to increase telecommunications access to many more Californians.

PHOTO CREDIT: FRESNO, CALIFORNIA, CENTER FOR ADVANCED RESEARCH AND TECHNOLOGY

"Information literacy: the ability to access, interpret, and respond to information."

Digital Divide Network

E-GOVERNMENT

California has become a national leader in the provision of online government services. The State government must continue to move "online" to increase service choices and reduce costs through e-Government. These programs allow Californians to find information independently and to interact with their government outside of business hours. There is also potential to reduce traffic congestion and save time and energy.

ENCOURAGING ENTREPRENEURSHIP

California's leadership in the global economy is based on a long history of innovation and entrepreneurship. Entrepreneurship is fostered initially through strong educational institutions, propelled by robust public and private sector applied research efforts, and solidified by a nurturing business climate. Continued and increasing support for each of these components will provide the platform for future innovations and entrepreneurial ventures.

Actions Taken

- **In 2000, the Governor and Legislature funded $215 million to improve access to computers and technology for students in the classroom; over $350 million to complete implementation of the Digital High School program; and $425 million to be used, at each school district's discretion, toward providing teacher training, connectivity, computers, or other facility improvements in California's public schools.**

- **In January of 2001, Governor Davis launched My California, a dynamic, customizable, fully integrated web portal whose architecture provides a framework for enterprise development within state government and gives immediate access to government information and a suite of new applications.**

- **In 2000, the Governor provided $32 million to expand the Internet2 to K–12 schools, thereby creating the most advanced K–20 education network in the world.**

- **In 2000-2001, the Legislature approved the Governor's proposal to provide $75 million annually over four years to the University of California to launch three California Institutes for Science and Innovation at several U.C. campuses. In 2001-2002, the Legislature approved the Governor's proposal to add a fourth institute which would receive funding over the subsequent four years.**

CASE STUDY

Providing Internet Access through Libraries: InFoPeople

The California State Library developed the InFoPeople project more than 5 years ago and began installing Internet enabled workstations in public libraries. By the end of the 5th year, 510 of California's 1060 public library sites have one or more InFoPeople workstations. InFoPeople also provides training for library staff and community partners through mandatory workshops on general computer and Internet use. It also provides a Distance Education Program for rural library sites.

Source: The California State Library

PHOTO CREDIT: STEPHEN P. TEALE DATA CENTER

"My California" Homepage, State of California

CASE STUDY

Building the Digital Network Infrastructure: City of Chicago, Illinois

The City of Chicago recognized the importance of supplying high speed bandwidth to all classes of users with sufficient network capacity. The Metropolitan Planning Council identified incentives and strategies to encourage new investment in a consistent, productive manner. They include:

- **Tax incentives such as accelerated depreciation and tax credits for service providers to build infrastructure in underserved areas**
- **Use of Transportation Investment Funds funds to encourage retrofitting of existing buildings into high tech facilities**
- **Public-private community partnerships to share network infrastructure across government, health care organizations, educational institutions, libraries and municipalities**
- **Cost sharing techniques, such as leveraging publicly owned easements to lower costs, bundling needs of multiple communities in a single procurement, expanding infrastructure cost sharing programs such as Special Service Area arrangements (SSAs)**
- **Information resources to communities interested in increasing telecommunications infrastructure investment**

Source: The Digital Network Infrastructure and Metropolitan Chicago, Northwestern University, September, 1998

Investing for California's Future

The Commission has identified the following priorities for meeting our technology needs:

- *Creating fair and competitive markets and regulatory conditions to protect consumers, encourage private sector build out, and nurture entrepreneurial ventures*
- *Encouraging investments in the Internet backbone and encouraging markets to establish minimum broadband standards*
- *Increasing public sector service options through technology*
- *Continuing to facilitate public and private sector partnerships with academia to bring promising new technologies to market*
- *Providing Internet access and opportunity for technology skill development to the general public through community-based resources, such as schools, libraries and community technology centers*

Recommended Options

The following recommended options will help achieve our priorities:

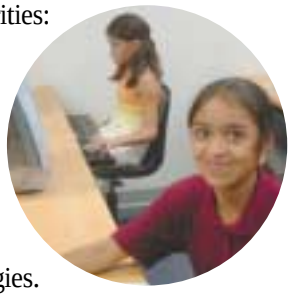


PHOTO CREDIT: J. HURTADO/ COMMUNITY DIGITAL INITIATIVE AT UNIVERSITY OF CALIFORNIA, RIVERSIDE

FINANCING AND FISCAL POLICY

- Create tax and regulatory incentives to deploy infrastructure to rural and economically disadvantaged areas.
- Create public-private partnerships that result in affordable access to advanced telecommunications and network technologies.
- Fund research infrastructure for higher education institutions to facilitate training and create new opportunities for scientific advances.
- Continue to use the California Teleconnect Fund to support discounts for advanced services to schools and libraries.

IMPROVED PLANNING

- Develop a Statewide business plan for integrating advanced technology into all aspects of the public infrastructure, including but not limited to educational facilities, government buildings, transportation systems and public rights-of-way.
- Incorporate technology and telecommunications requirements and ensure facilities flexibility in the modernization and development plans for State facilities.
- Incorporate maintenance requirements, upgrades and training into technology planning and funding.
- Integrate Geographical Information System (GIS) as a state and local planning tool for the construction and maintenance of public infrastructure.

BARRIER REMOVAL

- Resolve the issues between local governments, service providers and communities related to rights-of-way and construction associated with infrastructure development.
- Work with the Federal Communications Commission and California Public Utilities Commission to facilitate interconnection of networks and promote competition to accelerate deployment of advanced services.
- Work with private sector partners to make it simple and affordable for all community organizations to provide content and services.
- Promote social policies that recognize that access to services via the Internet, including hardware, software, education and training, is important for all residents and businesses in California.

IMPROVED IMPLEMENTATION AND USE

- Complete efforts to ensure all classrooms have Internet access as started by the Digital High School program.
- Offer Internet access and technology training opportunities in community-centered locations, such as libraries, schools and community technology centers.
- Promote access to the Internet in the home.
- Encourage the design of technologies for easy use by children, the elderly, and persons with disabilities.
- Establish the State government as the leader and role model in implementing technology applications to improve the access to and efficiency of government services. Create "magnet" public sector Internet destinations, such as public benefits registration, to speed the exposure to Internet technologies and development of skills in the general population.
- Work with private and public sector partners to increase availability and simplify access to community resources and information (e.g., access to local government, bill payment for local services, and community events listing).
- Use public-private sector partnerships to: cross-fertilize technology ideas, knowledge and skills; and foster commercial viability of innovative solutions.
- Encourage the development of MANs and DANs either by private sector or nonprofit partnerships, possibly facilitated by e-rate funds.
- Deploy reliable and integrated public sector technology systems to ensure effective data management and communications for uses such as: continuous access in emergency situations and connectivity of law enforcement and justice systems.
- Adopt State standards and guidelines for use of technology in State facilities.

CASE STUDY

Computer Recycling Corporation (CRC)
Santa Clara, California

The CRC has collected, refurbished and redistributed over 20,000 computers to schools in the San Francisco Bay area, since its founding. CRC works with volunteers, students, interns and California Department of Correction inmates. They accept donations of computers (working or not), books and software from individuals and companies throughout California. They also provide technical training for high school and college students, participate in national collection efforts and offer sales of surplus parts to the general public. Their Computers and Education project provides loaner and free computers to schools and nonprofits. The nonprofit agency has affiliate locations in Santa Clara, Santa Rosa, San Francisco and Palm Springs.

Source: Computer Recycling Corporation, www.crc.org

Community Digital Initiative at University of California, Riverside

PHOTO CREDIT: J. HURTADO/COMMUNITY DIGITAL INITIATIVE AT UNIVERSITY OF CALIFORNIA, RIVERSIDE

Transportation

GOAL FOR 2020

To give people and businesses affordable, reliable and convenient transportation choices that will improve mobility and reduce congestion.

"More than ever, transportation is the critical link between California and economic success in the 21st century. We need to invest money, yes, but we need to do it wisely."

—Governor Gray Davis

Today's Issues

California, the sixth largest economic entity in the world, could not function without its multimodal mix of roads, freeways, bridges, ports, rail and airports. Our State is a crucial gateway for America's world trade and a magnet for tourism. The speed at which our modern economy moves has vastly heightened the need for mobility and accessibility. The economy operates on tens of millions of minute-by-minute social and economic decisions that now include just-in-time delivery, minimization of inventories, the pressure of world competition and the need to have people and goods at the right places at the right time.

Our $300 billion highway system is California's transportation backbone. But our state's multimodal network faces three long-term investment challenges: 1) reducing congestion for millions of California commuters; 2) improving the state's ports, airports and supporting infrastructure to move a growing volume of international trade and travel, and; 3) increasing mobility options for all travelers by providing real alternatives to auto travel. Californians are frustrated with increasing congestion and the impact it has upon their quality of life. At the same time, California is facing the need for greatly

"Regular maintenance of local streets and roads is a smart investment. The California Transportation Commission notes that periodic resurfacing is relatively cheap at $100,000 per lane mile or less, but rehabilitation of damaged roadbeds can cost as much as $500,000 per lane mile."

California State Legislature
Smart Growth Caucus

Some California Transportation Facts:

- **Annual delays cost Californians as much as $2.8 billion in wasted time and excess fuel consumption and contribute to air pollution.**
- **Three of the top 10 most congested metropolitan areas in the nation are in California.**
- **80% of Southern California commuters drive to work alone.**
- **60% of our county roads are in poor condition.**
- **Southern California studies predict that passenger demand in 2020 will exceed current airport capacity by more than 50%.**
- **Driving on roads in need of repair or improvement costs each California motorist an average $354 annually in extra vehicle operating costs.**
- **In the Central Valley, Highway 99 is the major north/south route for moving goods and people, yet it still has not been fully developed to freeway standards.**
- **Between 1995 and 2000, ridership on nearly all California transit systems experienced double-digit growth.**
- **The Pacific Surfliner, between Los Angeles and San Diego, is the only intercity railroad service capable of reaching speeds above 80 miles per hour, and then, only on portions of the corridor.**

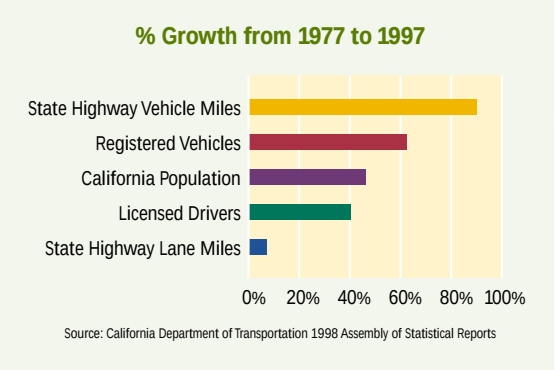
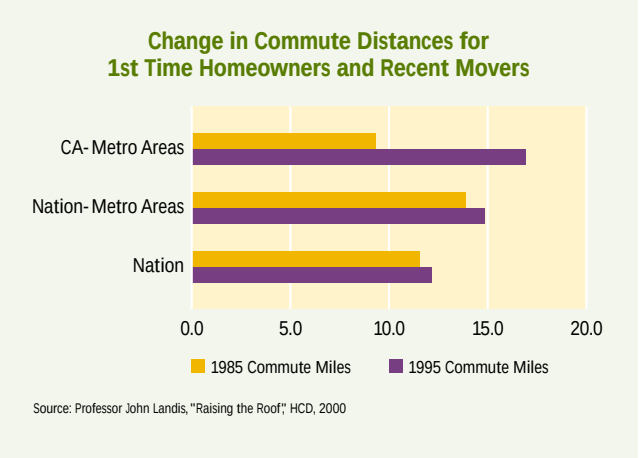


PHOTO CREDIT: SAN FRANCISCO, R. HOLMES/CALIFORNIA TECHNOLOGY, TRADE AND COMMERCE AGENCY

"I figured out I spent 2,048 hours working last year… I spent 1,100 hours commuting. I spent 608 with my kids. I spent twice as much time driving as with my kids."

David Bafford,
Construction Manager
who commuted from the
Central Valley to Silicon Valley,
"In the Other California,
A Land Rush Continues,"
New York Times,
December 27, 2000

expanded airport capacity to reduce delays and prepare for growth in air travel. To keep our economy growing in the future, we will need to build more of every type of transportation infrastructure. California will require more transportation investment and better integrated regional and statewide planning. However, an increasingly complex decision-making and permitting process, coupled with the expensive nature of transportation capital projects, makes this challenge all the more urgent and difficult.



AGING INFRASTRUCTURE

Only recently have transportation investments been brought up to higher levels to keep pace with our needs. This must become a permanent effort. Deferred maintenance and lack of new capacity exacerbate the cost of maintenance and construction as transportation infrastructure is stretched beyond its capacity. Maintenance backlogs have led to higher system repair and vehicle maintenance costs, especially on local streets and roads. There are multiple barriers to delivering transportation projects, including the simple physical impossibility of building in some areas of the state, community resistance and environmental permitting issues. In addition, current law severely restricts the State oversight role in regional transportation planning by requiring a simple up or down vote on entire programs.

PHOTO CREDIT: LONG BEACH, CALIFORNIA, LOCAL GOVERNMENT COMMISSION

CONGESTION

The Los Angeles, San Francisco and San Diego regions rank among the nation's 10 most congested areas. Even with the planned investment of billions of dollars in new transportation infrastructure, today's plans will not provide sufficient relief from congestion. The fear of increasing traffic is one reason that many Californians now regularly oppose new housing developments. In addition, transportation emissions are one of the largest contributors to air pollution and ozone levels.

PHOTO CREDIT: CALIFORNIA DEPARTMENT OF TRANSPORTATION

Congestion has become interregional in nature. The high concentration of jobs and high cost of housing in coastal areas leads workers to commute across county lines from affordable housing in the inland areas. It is not uncommon for commuters from the Central Valley to cross two or more counties to reach their jobs in Silicon Valley. Such land use patterns contribute to roadway congestion and limit opportunities for transit and demand management strategies. Moreover, land that could be used for potential transportation rights of way, such as high-speed rail, is being lost to development. Dispersed land use patterns also increase the goods movement demand on our transportation systems. Historic investments by the current administration in highway congestion relief, transit and interregional commuter and intercity rail will have a positive impact, but cannot solve the problem without changes in land use planning and decision-making.

EROSION OF FUTURE TRANSPORTATION FUNDING

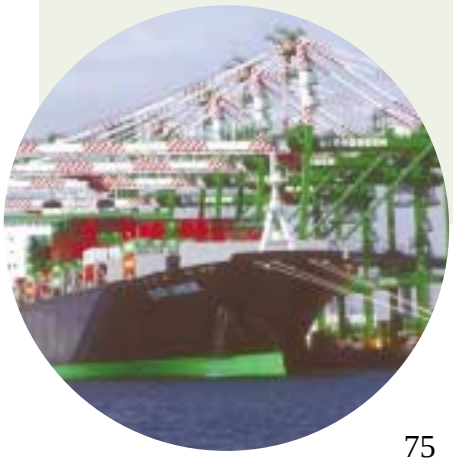
The value of our current gas tax is steadily eroding because it does not keep up with inflation—it remains at the same amount per gallon. Increasing use of alternative fuels and fuel blends that enjoy federal tax subsidies is also reducing revenues. Constitutional provisions also limit the use of gas taxes for many types of transportation. While state sales taxes rise with gas prices, many local sales taxes directed to transportation will expire in the near future and will require another local voter approval. The current legal split of statewide transportation resources limits the State to 25% of the total, severely restricting the State's ability to meet inter- and intra-regional and statewide transportation priorities.

CASE STUDY

Regional Transportation Systems: Port Authority of New York and New Jersey

The Port Authority of New York and New Jersey is a bi-state authority with control over seaports, airports, bridges, tunnels, and transit systems that interconnect the two states. It was created in 1921 to resolve longstanding interstate conflicts over common harbors and waterways. It was the first authority of its kind in the Western Hemisphere and the first interstate agency to be created under a clause in the Constitution permitting compacts between states. In the 1940's, the Port Authority leased three airports, Newark, and what are now LaGuardia and John F. Kennedy Airports. It also participates in trade promotion and construction projects of significant economic importance such as the World Trade Center.

Source: Port Authority of New York and New Jersey www.panynj.gov



Port of Los Angeles, California

PHOTO CREDIT: PORT OF LOS ANGELES

CASE STUDY

Automated toll systems: FasTrak™

Electronic toll collection (ETC) systems are an example how to ease commutes throughout the state. ETC eliminates the need for a driver to stop and hand cash to a toll collector. Instead, electronic sensors read small transponders to identify the user and deduct the toll from a special account. The net result is faster commutes, less congestion and improved air quality. California implemented its FasTrak™ system at all its toll bridges in 2000. It took only a few months for public use to increase to 20% of all peak period traffic crossing the seven bridges in the San Francisco Bay Area.

Source: California Department of Transportation

LIMITED CHOICES

PHOTO CREDIT: CORONADO BRIDGE, SAN DIEGO, CALIFORNIA DEPARTMENT OF TRANSPORTATION

While the car remains our primary transportation of choice, Californians have limited alternatives. Existing mass transit systems fail to provide an alternative that matches the performance of auto travel for most trips. The burden of poor transit alternatives falls most heavily on Californians who cannot use or easily afford auto travel. There are many barriers to and few incentives for regional and statewide integration of transportation, land use, housing and economic development,

PHOTO CREDIT: CENTURY HOUSING, CULVER CITY, CALIFORNIA

Seniors using the More Than Shelter for Seniors™ shuttle bus which is available to take residents to doctor appointments, shopping excursions or recreational group trips

PHOTO CREDIT: 2000 E. HAAS/WWW.NYCSUBWAY.ORG

San Francisco Municipal Railway at Pacific Bell Park

which would result in better use of land and access to transportation options. In addition, transportation modes are not well connected on an interregional level and fail to provide viable, efficient point-to-point personal and freight movement options.

Longer-range travel choices are limited as well. The lack of reliability and speed, owing primarily to the need for increased capacity and necessary track and signal improvements, hamper the performance of the state's intercity rail corridors.

Increase in Delays at Major Airports (1997-2000)

	% Increase in Delays	
	Arrivals	Departures
Los Angeles	13%	47%
Burbank	46%	69%
San Francisco	73%	71%
Oakland	35%	31%
San Diego	34%	43%
Sacramento	32%	60%
San Jose	46%	41%
Santa Ana	16%	49%

Source: Federal Aviation Administration, Consolidated Operations and Delay Analysis, Systems Detail Report

AIRPORT AND PORT NEEDS

Access and capacity limitations at our ports and airports threaten the state's position in international trade and tourism. Airport delays have increased significantly in recent years throughout the state. Despite recent capacity additions at many airports, more capacity is still needed and regional expansion plans remain hotly contested in the Los Angeles, San Francisco and San Diego regions. The Central Valley and rural California are largely unserved by viable air transportation.

Large volumes of truck traffic related to trade, along the border and at ports of entry, add to delay. For example, in Los Angeles, over 7,000 trucks a day travel on local roads and highways from the Ports of Long Beach/Los Angeles to various points in the nation. In San Diego and Imperial counties, over 21% of the trucks crossing the international border are either coming from or destined to an out-of-state position in international trade and tourism.

The global economy, which relies upon reduced inventories and just-in-time production and delivery, has heightened the urgency of an efficient, reliable multimodal goods movement system. As California moves to regain preeminence in the business of space transportation, special infrastructure needs for production, launch, operation and recovery must be considered.

Actions Taken

- **In 2000, the Governor's Traffic Congestion Relief Program and the Transportation Investment Fund provided an historic $8.6 billion for transportation from the State General Fund.**
- **The State transportation budget, almost $10 billion annually, has increased over 50% in just two years.**
- **The Davis Administration initiated "Fleet Greening" programs at the Departments of Transportation and General Services, replacing their fleets with alternative fuel vehicles to reduce air polluting emissions.**
- **In 2000, Santa Clara and Alameda county voters approved sales tax measures to fund $2.5 billion in regional transportation improvements.**

PHOTO CREDIT: LOS ANGELES INTERNATIONAL AIRPORT RESTAURANT, CALIFORNIA, J. BERKOWITZ/LOS ANGELES WORLD AIRPORTS

CASE STUDY

Transit-Oriented Development: Richmond Transit Village, Richmond, California

The City of Richmond, in partnership with many State, local and private interests, broke ground in 2000 on Phase I of a $62 million mixed-use pedestrian-oriented village that integrates living, working, retail and cultural activities with a multimodal transit station. The 16-acre site is a former BART (Bay Area Rapid Transit) parking lot, which was freed up for development when a parking garage was built. The village will include 228 standard and live-work town homes for sale and rent, a retail center, performing arts and cultural center, and a transit center with bus, rail and BART access to AMTRAK. Funding and team partners include: AC Transit (federal funding), AMTRAK, BART, Contra Costa Transportation Authority, Federal TEA-21 (Livable Communities), H.U.D. Economic Development Initiative grant, the Richmond Redevelopment Agency, the Olson Company, Union Pacific Railroad, and Caltrans.

Source: City of Richmond Redevelopment Agency

Investing for California's Future

The Commission has identified the following priorities for meeting our transportation needs:

- *Empowering local governments to generate transportation funding*
- *Pursuing substantial increases in funding for goods movement in the coming Federal reauthorization of the Transportation Equity Act for the 21st Century (TEA-21) and all future transportation program authorizations*
- *Improving local and regional planning to link jobs, housing, recreation and services with transportation*
- *Increasing transportation choice and inter-modal connectivity for goods and people*
- *Applying new technologies and techniques to increase the lifespan of transportation assets and fully use existing and new capacity*
- *Protecting the State's investment in roads and other systems through an increased commitment to maintenance*
- *Maintaining the current trend of increased investment in transportation infrastructure*

Recommended Options

The following recommended options will help achieve our priorities:

FINANCING AND FISCAL POLICY

- Support a constitutional amendment to lower the vote threshold to 55% for local revenue initiatives to support local transportation priorities, linked to integrated community and regional planning.

PHOTO CREDIT: C. FOX/SAN MATEO COUNTY TRANSIT DISTRICT

San Mateo Transit bus and Bay Area Rapid Transit intermodal station at Daly City, California

- Unite California interests to successfully seek federal support for our transportation priorities in the reauthorization of TEA-21, the Federal Aviation reauthorization and other federal transportation programs, including an increased share of federal transportation funding.
- Change the allocation for State Transportation Improvement Program funding to increase the State's share of funding from 25% to 50% in order to ensure improved statewide and interregional transportation planning and implementation.

IMPROVED PLANNING

- Develop guidelines to prioritize State investments and incentives as part of the Interregional Transportation Strategic Plan.
- Provide incentives to areas that integrate land use, housing and transportation through local General Plans, regional transportation plans and interregional cooperation.
- Identify resources to improve mobility and access to ports and airports.

BARRIER REMOVAL

- Streamline the California Environmental Quality Act (CEQA) and other permitting processes to expedite the transportation project delivery while ensuring environmental protection and enhancement.
- Seek delegation from federal agencies to incorporate federal environmental requirements into state environmental processes.

PHOTO CREDIT: C. FOX/SAN MATEO COUNTY TRANSIT DISTRICT

IMPROVED IMPLEMENTATION AND USE

- Promote public and private efforts to reduce commuter congestion including incentives for carpooling and transit ridership, locating facilities to minimize impact on transportation, shifts that reduce peak period driving and operating vehicle fleets to minimize transportation impacts.
- Continue incremental improvements to the state's intercity rail system, while preserving our options for a potential high-speed rail network.
- Create super-regional airport authorities reporting to a statewide aviation authority to plan for more efficient use of existing and new airport capacity. The primary regions could include the Bay Area, Central Valley, Los Angeles basin and San Diego.
- Investigate pricing and other strategies as potential tools to manage highway demand, respecting the economic impact that such strategies may have on commuters.
- Use technologies to enhance the life, capacity and safety of transportation systems including traveler information systems, automated toll systems, innovative construction techniques and materials, and automated highways and vehicles.
- Provide State incentives to develop better connectivity between modes and regions.
- Implement innovative strategies to increase transit ridership. Options include: regional transit "smart cards," transit station cars and car sharing pilots, transit-oriented development, and increased investment in system improvements.
- Encourage lending institutions to offer home financing options that promote housing near transit, known as location-efficient mortgages.
- Respect the role of transportation facilities in and around our communities by emphasizing landscaping, art and other aesthetic qualities in maintenance, design and construction.

CASE STUDY

Integrated Planning: Oregon Transportation Growth Management Program

The program helps local governments manage the effects of growth and is a key component of the Governor's efforts to promote quality communities throughout Oregon. It is a joint effort of the departments of Transportation and Land Conservation and Development. The program's mission is to enhance Oregon's livability, foster integrated land use and transportation planning, and encourage development that results in compact, pedestrian, bicycle, and transit friendly communities. The four main components of the program include:

- **Grants and Technical Assistance to Local Governments**
- **Quick Response Teams to help with planning and urban design**
- **Smart Development Code Assistance to help revise development code language**
- **Education and Outreach**

Source: Oregon's Approach to Smart Economic Growth, Oregon Economic and Community Development Department, June 12, 2000

The Commission's Transportation Committee has developed a set of criteria and performance measures for evaluating transportation proposals, geared toward improving project delivery and maximizing investments. They could be utilized by a government agency in evaluating a proposal for a transportation project (facility) or corridor. The criteria are listed in alphabetical order.*

CONGESTION RELIEF. The extent to which the project would reduce commute travel times and costs of delay in urban areas during the "rush hour" peaks.

CONNECTIVITY. The extent to which the facility bands and coordinates with other transportation facilities, various transportation modes, user needs (such as pick-up and drop-off points), non-transportation facilities, other regions of the state, international and national trade routes, etc.

CONVENIENCE/COMFORT. Factors include the ability of the traveler to get to the facility at the beginning of the trip and continue to travel (if necessary) after exiting the facility; enjoyability of the travel; comfort on the facility; noise; odors; protection from heat, cold, rain, etc.; ability to perform functions other than operating the vehicle during the trip, such as reading and utilizing a computer, conversing, listening to music, watching television, and using the telephone; privacy, etc.

COST. The internal and external costs to the public for planning, designing, constructing, maintaining, operating, and using the facility. The present value of any future cost and whether other sources of funding could be obtained and leveraged to increase the overall investment.

EFFICIENCY. The effectiveness of the facility as measured by its use, such as cost per trip, time or speed per trip, cost per person or person-mile, cost/speed of goods movement, reliance on other facilities, etc.

EVOLVING TECHNOLOGY. The extent to which the facility can be enhanced and improved in the future if anticipated new technology is developed; the feasibility or probability of such technology being developed, the cost of developing or applying such technology, and the extent to which such technology will improve or add benefit to the facility.

FLEXIBILITY. The continued usefulness of the facility based on ability to adjust to changes in future transportation needs, destinations, modes, and facilities; environmental considerations, and ability to move one or a number of people and goods.

INDIVIDUAL MOBILITY. The facility's ability, by itself or in coordination with other facilities, to enable the individual traveler to go where and when he/she wants, with or without luggage or equipment, including the ability to engage in side trips or multiple stops for varying lengths of time.

LONGEVITY. The extent to which an incremental capital, operational, or maintenance investment can extend the useful service life of a facility; forestall the need for its replacement and thus reduce future capital outlay costs and system degradation.

POTENTIAL FUTURE DISRUPTION. Sensitivity and susceptibility of the facility to labor stoppages, sabotage, earthquakes and other natural disasters, future fuel or material shortages, deterioration, maintenance problems and cost versus durability, etc.

PROJECT DELIVERY. The steps that would be required to implement the project from planning through post-construction operation, the feasibility or likelihood of ultimate implementation, and the elapsed time until the facility is usable.

PUBLIC ACCEPTANCE. The extent to which the public supports, accepts, is concerned about, or opposes the mode of transportation, the cost, the funding mechanism, or other factors.

QUALITY OF LIFE IMPACTS. The extent to which the facility adds to or reduces air and other pollution, its appearance, its contribution to improved or deteriorating quality of life, its contribution to economic growth and other opportunities.

SAFETY. Personal and vehicular safety in accessing the facility at the start of the trip and traveling on at the end of it; safety of the vehicle/facility from accidents and other hazards; and safety of the individual traveler while using the facility.

SPEED/TRAVEL TIME. The total time required for individuals to begin and end their trips, including waiting and travel time for connecting facilities. This should be compared to the total travel time if the facility is not constructed and/or if another alternative facility were implemented. Total trip time, not just time spent on the proposed facility, should be evaluated.

USE OF EXISTING CAPACITY. The extent to which the facility adds to or enhances existing facilities and increases the usage of underutilized facilities.

* The Commission's Recommendations on Expediting Transportation Project Delivery are incorporated into this report by reference and can be found at the Business, Transportation and Housing Agency website at www.bth.ca.gov.

Water

GOAL FOR 2020

Ensure a reliable supply of affordable high quality water to meet the needs of residents, businesses, agriculture and the environment.

"Much of what we value about California is connected to our water environment. Protecting this environment, efficiently and effectively putting water to good uses and ensuring adequate and safe water supplies are essential to sustaining the California dream. We can have it all; water for people, fish and wildlife, industries and agriculture, but not without cost. Whether it be time, talent or money, these investments are fundamental to ensuring California's prosperity."

—Winston H. Hickox, Secretary, California Environmental Protection Agency

Today's Issues

People, wildlife, agriculture and recreation depend upon water for existence. Our diverse industrial economy requires a reliable, high quality water supply. Water is a key component of all life and has been the subject of struggle and competition throughout our State's history. In order to meet our water needs, California must provide reliable and efficient water infrastructure systems.

WATER SUPPLY

Our water supply will continue to be strained based on expectations for future demand due to growth and competing needs for water sources. Future economic and population growth will significantly expand the use of our already limited water supply and we currently do not know whether supply will meet our needs. Today, our groundwater basins are over-drafted and surface storage alone cannot meet future water demand, especially during droughts. In addition, our long-term future water supply may be less predictable due to factors such as climate changes, which could lead to smaller snow-packs and earlier melting in the Sierras. There will be increasing competition for water from the Bay-Delta system among agricultural, urban and environmental needs, and new or expanded reservoirs proposed by CALFED will take many years to construct. In Southern California, the 4.4 Plan requires that we reduce our dependence on

"Since the 1960s, there have been no real additions to our water infrastructure. It is my belief that unless we begin to build an infrastructure, then we're going to be in the same situation with water as we are today with electricity."

U.S. Senator Dianne Feinstein, Capital Alert, "Californians Try to Find Common Ground on Water" February 2, 2001

Some California Water Facts:

- **In 1999, there were 694 beach closure days and 4,186 beach warning days due to contamination.**
- **It can take 20 years (or longer) to develop and finance a supplemental water supply for new developments.**
- **Over 500 bodies of water have been listed as impaired.**
- **About 22 million people, two-thirds of California's population, rely on the Bay-Delta for all or some portion of their drinking water.**
- **About 894 gallons of water are needed to grow the food for the daily diet of an average person. On an annual basis, an individual's water use is about 326,310 gallons.**
- **From 1985-1998, California agriculture's use of developed water supplies dropped approximately 12%, due in part to the use of water efficient irrigation techniques like sprinklers and micro-drip.**
- **In 2001, the State Water Project delivered 35% of the water entitlements of its customers because of below normal runoff to state reservoirs.**

Mono Lake, California

PHOTO CREDIT: D. KOLKE/CALIFORNIA DEPARTMENT OF WATER RESOURCES

the Colorado River from our current level of 5.2 million acre-feet (MAF) per year to 4.4 MAF per year over the next few decades. Conjunctive use programs represent an opportunity to increase the amount of water captured and stored for use, while maintaining an environmental balance.

"Building new communities faster than water supplies can be acquired to serve them puts existing businesses, agriculture, residents, and the environment at risk, especially during future droughts. Early linkage between land use and water supply planning is essential because today it can take 20 years (or longer) to develop and finance a supplemental water supply."

East Bay Municipal Utility District

WATER PLANNING

The California Department of Water Resources (DWR) oversees the state's water resources, but comprehensive broad-based planning is difficult due to gaps in data and the complexity of the state's water delivery systems. Current conveyance, treatment, water facilities ownership and oversight are fragmented; there are thousands of separate water authorities that serve the state's population. This fragmentation increases the difficulty of having a coordinated approach for assessing and delivering adequate water supply and employing sharing techniques. We also have limited information on water supply in groundwater basins. Many communities do not plan for and assess the impact of increased development and water needs on the region's water supply. Communities must also plan for and manage flood risk. Current site design and land use patterns contribute to flood risk through channeling of high volumes of runoff and reduced water percolation.

PHOTO CREDIT: D. KOLKE/CALIFORNIA DEPARTMENT OF WATER RESOURCES

Core sampling the Sierra snowpack to determine water levels, Sierra Nevada Mountains, California

WATER QUALITY

Maintaining and improving residential, industrial and environmental water quality is essential. In developed areas, contaminants have entered groundwater and surface water through sources such as leaking underground storage tanks and septic systems, as well as contaminated soils. Low-density development patterns increase runoff and lawn treatment techniques contribute to water contamination. In non-urban areas, pesticides, nutrients and salts have entered groundwater and surface waters. Overlogging and improper mine closures in rural areas have changed the natural landscape and impacted water quality. Urban runoff and sewer overflows from aging and inadequate infrastructure have resulted in beach closures, ocean water pollution and fresh water contamination. The control of nonpoint source pollution (polluted run-off from surface areas like roads, lawns and fields) continues to be a challenge. Wastewater treatment facilities will require significant investment in order to increase capacity and merely maintain today's quality standards for the future. Innovative, regional site-specific treatment approaches will be needed, as well as the mechanisms to fund them.

"The passage of California's Parks and Water Bonds represents a historic downpayment on the future quality of life in our State."

Governor Gray Davis

PHOTO CREDIT: CALIFORNIA DEPARTMENT OF PARKS AND RECREATION

Actions Taken

- **Last year, at the recommendation of this Commission and with the support of the Governor and the Legislature, the voters approved Proposition 13, the water bond. A combination of Proposition 13 and General Funds has been allocated for improved water supply and quality; protection of watersheds, coastal waters and groundwater resources; drought protection; and flood control and protection.**
- **The Governor, the Legislature, the Federal government and business, agricultural, environmental and urban stakeholders adopted and have begun to implement the historic CALFED plan for improving water supply and quality from the Bay-Delta and restoring this important ecosystem.**
- **California's Colorado River Water Use Plan outlines how the State will reduce Colorado River use to 4.4 MAF per year.**
- **The Governor's Advisory Drought Planning Panel completed a contingency plan for mitigating the impacts of critical water shortages.**
- **Through financial incentives and implementing legislation, the State has encouraged groundwater storage and the conjunctive use of surface and groundwater supplies.**

CASE STUDY

Creative Uses of State Revolving Loan Funds

- **In California, the Nature Conservancy received a State Revolving Fund loan from the California State Water Resources Control Board to purchase more than 120,000 acres of ranchland, place conservation easements on the land and then resell it to a ranching company to assist with repaying the loan.**
- **The City of New York set aside $260 million for land acquisition and conservation easements in areas needed to protect its water supply. Of this total amount, $27 million was granted from the State Revolving Fund.**
- **In Ohio, the Water Pollution Control Loan Fund provided over $1.1 million in loans to a housing development company for a wide variety of structural and other best management practices that protected an important watershed. Also in Ohio, water-related funds have been used for brownfield remediation. The State Water Revolving Fund program provided a loan for the cleanup of contaminated groundwater and soils in a 20-acre industrial site in Cleveland to prepare the area for commercial reuse.**

Source: Livable Places Update, Local Government Commission's Center for Livable Communities

CASE STUDY

Above Ground Water Storage: Diamond Valley Lake, California

This is the largest earthen dam project in the United States. It was started in 1995 by the Metropolitan Water District and is currently in operation. Diamond Valley Lake provides 800,000 acre-feet of water capacity. The reservoir has increased the amount of water that can be stored above-ground in Southern California by almost 50%, up to 2 million acre-feet of storage capacity. The reservoir improves the stability of the Southern California water supply and will reduce the power required to pump water over the northern mountains.

Source: Los Angeles Times
April 15, 2001

"Manufacturers and other large employers need to join with farmers, water districts and environmentalists to link development with water planning."

San Jose Mercury News
Editorial, June 20, 2001

Investing for California's Future

The Commission has identified the following priorities for meeting our water needs:

- *Continuing to provide Legislative support for water planning and infrastructure development*
- *Implementing CALFED and Proposition 13, the State water bond*
- *Employing water conservation, recycling and reclamation techniques*
- *Expanding use of water transfers*
- *Conducting statewide, integrated research and planning for water infrastructure, especially for water and land use planning*
- *Implementing water storage through groundwater banking, off-stream storage and conjunctive use techniques*

Recommended Options

The following recommended options will help achieve our priorities:

FINANCING AND FISCAL POLICY

- Secure local and federal financial commitments to CALFED.
- Create state incentives for conservation and implementation of Best Management Practices (BMPs) for business, residential and agricultural uses, such as gray water irrigation, low flow appliances and drip irrigation systems.
- Develop additional incentives to encourage locally controlled groundwater management.
- Leverage matching funds from the federal and local governments and other third party sources.

PHOTO CREDIT: METROPOLITAN WATER DISTRICT

IMPROVED PLANNING

- Complete the update of the 5-year California Water Plan, scheduled for release in 2003.
- Create and agree upon projections for statewide and regional water needs and an assessment of supply as a foundation for developing a statewide water infrastructure plan.
- Determine the structural components needed to address nonpoint sources of pollution.

PHOTO CREDIT: CLAUDE LAVAL CORPORATION

Drip irrigation system protected by sand media filters, Fresno, California

- Develop and implement statewide watershed policy with support for collaboration with local watershed interest groups.
- Implement policy that requires future development to identify reliable and sufficient water supply.
- Provide incentives to conduct regional water planning and floodplain management.
- Integrate water supply planning with land use planning and other infrastructure in general plans.

BARRIER REMOVAL

- Seek delegation from federal agencies to incorporate federal environmental requirements in state environmental processes.
- Streamline CEQA to expedite the delivery of projects while ensuring that the original intent of protecting the environment is maintained.
- Streamline the process for water transfers, while mitigating possible adverse third party impacts.
- Clarify the wheeling statute for water transfers, which facilitates transfers between water agencies and districts at "fair compensation" when unused capacity is available.
- Consolidate retail and wholesale water agencies and districts.

CASE STUDY

Water Flow Technology for Water Conservation: Air Injection Irrigation

Farm operations, forestry and landscape/recreation managers are using advanced water technology in the areas of communications and automatic control systems, global positioning systems, pumping, filtration, piping, and plant and soil operations. Water efficiency rates increase from approximately 40% to over 70%, and in some cases up to 85%, with the use of advanced water flow technology and management. For example, air injection irrigation systems represent a recent technological breakthrough. They create tiny bubbles that mix throughout subsurface drip irrigation water. The injected air results in an improved soil environment and increases in root masses and crop yields. Tests of the new technology revealed a 39% increase in crop yield. The Center for Irrigation Technology at California State University, Fresno is working with the Central California Futures Institute, the Fresno Business Council, the University Business Center and the Great Valley Center to partner with water technology companies in research, development, education and market development of water flow and process technology.

Source: Central California Futures Institute, April 2001

CASE STUDY

Institutional Water Conservation: University of California, Santa Barbara

The University of California, Santa Barbara implemented an institutional water-efficiency program that led to significant water and cost savings. Through cost-effective indoor and outdoor conservation efforts, total campus water use was reduced by nearly 50% between 1987 and 1994, even as the campus population increased. Total cost savings to the campus for the years 1989 through 1996 from efficiency improvements were approximately $3.7 million, excluding energy and maintenance savings.

Source: "Sustainable Use of Water: California Success Stories," Pacific Institute, January 1999

IMPROVED IMPLEMENTATION AND USE

- Continue implementation of the CALFED Bay-Delta Program.
- Begin implementation of the 4.4 Plan, which includes lining of the All American and Coachella Canals and implementing groundwater storage programs.
- Encourage conjunctive use of surface and groundwater supplies, especially in the Central Valley and Southern California.
- Increase the capacity of existing facilities or build new water treatment facilities and collection systems (sewers).
- Develop additional standards for "green" site design and landscaping to reduce runoff.
- Utilize technology and innovation to improve efficiency in existing water systems.
- Complete the federally and State-funded Sacramento-San Joaquin Rivers Basin Comprehensive Study, which includes flood damage reduction and ecosystem restoration measures for the Central Valley.
- Increase capacity to manage storm water, urban water runoff and combined sewer overflow.
- Provide public education on conservation practices and pollution prevention practices.

PHOTO CREDIT: D. KOLKE/CALIFORNIA DEPARTMENT OF WATER RESOURCES

Kern-Friant Canal, Los Angeles, California

Elements of the CALFED Program:

- **LONG-TERM LEVEE PROTECTION PLAN.** Provides significant improvements in the reliability of levees.

- **WATER QUALITY PROGRAM.** Makes significant reductions in point and nonpoint source pollution for the benefit of all water uses and the Bay-Delta ecosystem.

- **ECOSYSTEM RESTORATION PROGRAM.** Provides significant improvements in habitat, restoration of critical ecological processes and species populations, and reduces conflict with other Bay-Delta system resources.

- **WATER USE EFFICIENCY PROGRAM.** Encourages water recycling and efficient use of water for agricultural purposes, urban purposes, and managed wetlands by providing support and incentives at the local level, including expanded planning, technical and financial assistance.

- **WATER TRANSFERS PROGRAM.** Provides a framework of actions, policies and processes to facilitate, encourage, and streamline an active and properly regulated water market that will allow water to move between users, including environmental uses, on a voluntary and compensated basis.

- **WATERSHED PROGRAM.** Promotes locally-led watershed management activities and protections relevant to achieving CALFED goals through financial and technical assistance.

- **STORAGE.** New groundwater and/or surface storage will be developed and constructed, together with aggressive implementation of water conservation, recycling, and a protective water transfer market. Evaluate and determine the appropriate mix of surface water and groundwater storage, identify acceptable projects and initiate permitting and construction if program linkages and conditions are satisfied.

- **DELTA CONVEYANCE.** Since CALFED will depend on the existing Delta conveyance system with some modifications, evaluate its effectiveness, and add additional conveyance and/or other water management actions if necessary to achieve CALFED goals and objectives.

Source: CALFED Bay-Delta Program website: www.calfed.ca.gov

VIII Financing Infrastructure for the 21st Century

PHOTO CREDITS:

TOP: METRO RAPID BUS, LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY

MIDDLE: BAY AREA,CALIFORNIA DEPARTMENT OF TRANSPORTATION

BOTTOM: VALENCIA, CALIFORNIA, LOCAL GOVERNMENT COMMISSION

This report has documented the effects of our accumulated infrastructure deficit. The Davis administration, the Legislature and the people of California have begun to reverse the decline through a substantial increase in infrastructure investment. However, existing revenue sources will not meet current and projected needs due to increasing costs for maintenance, repair, and new infrastructure development, the expiration of local sales taxes, and the erosion of other existing revenue streams, such as gasoline taxes.

Californians will need to significantly increase and sustain infrastructure investments to implement the recommendations of the Commission and prepare for our future. In addition, we will need to improve how we plan for and coordinate these investments to obtain the greatest leverage and achieve the greatest impact.

Cost-reduction strategies must be implemented, existing revenue streams must be maintained and enhanced and, when necessary, new revenue sources must be created to ensure sustained funding. Investments must be targeted and leveraged with equity and efficiency to achieve the best use of limited resources. Planning must be coordinated across public and private sectors.

Proposed Investment Criteria

The Commission developed criteria to guide decision-makers in optimizing finite investment resources within the framework of the Commission's Guiding Principles:

- **MAXIMIZE RETURN ON EXISTING INFRASTRUCTURE INVESTMENT**
  Protect our existing infrastructure by investing in both deferred maintenance and modernization; use technology, expansions, upgrades, and techniques such as demand management and conservation strategies.
- **STRIVE FOR MAXIMUM LEVERAGE OF EVERY STATE DOLLAR SPENT**
  Augment the value of State funds by leveraging those funds whenever possible and by stimulating the investment of other resources through contributions, matches and explicit public-private investment partnerships.
- **IMPLEMENT INTEGRATED INFRASTRUCTURE STRATEGIES**
  Use financing methods that serve crosscutting or multiple rather than single-purpose needs. The State's direct funding of infrastructure must be fully coordinated with regional and local infrastructure spending.

Recommended Options

The Commission proposes five major funding strategies for addressing the State's immediate infrastructure challenges and providing a framework for a long-term investment strategy. These strategies must be used in combination in order to fully meet our needs. They are described below:

1. CREATION OF THE CALIFORNIA INFRASTRUCTURE FUND

Establish a permanent infrastructure investment fund separate and distinct from those funds currently earmarked or budgeted for infrastructure. For much of the past 40 years, infrastructure funding has been uncertain and unreliable. This Fund would require a yearly set-aside appropriation from the General Fund. With an annual appropriation initially of at least 1% of General Fund revenues, assuming growth of at least 5% annually in the General Fund, the result could be a commitment of approximately $5 to $10 billion for infrastructure projects over 10 years, beyond the requirements of existing law. The goal should be to increase the General Fund commitment over time to ensure a permanent revenue stream. Annual and long term priorities for investments from the Fund would be determined through the budget process to enable the Governor and the Legislature to respond flexibly to changing infrastructure needs and priorities.

The Commission acknowledges that this set-aside would decrease the proportion of the discretionary budget available to meet non-infrastructure needs, but believes that this commitment is essential to assure that we do not continue our infrastructure deficit. In the event of an economic slowdown or recession, and General Fund revenues fall below 5% growth, a trigger mechanism could temporarily suspend this set-aside requirement.

"California's leaders have come together to focus on the infrastructure needs of the State. This report sends a clear message that California is once again OPEN for business."

Keith Brackpool
Commissioner
Cadiz Incorporated
June 2001

PHOTO CREDIT: CALIFORNIA TECHNOLOGY, TRADE AND COMMERCE AGENCY

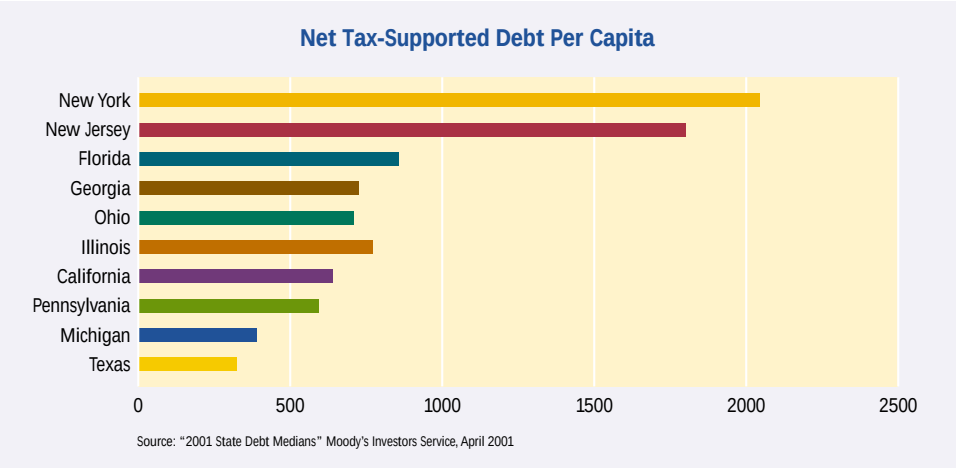
San Diego, California

"The actual amount of debt the State can afford to issue will depend on the performance of the economy, thus underscoring the importance of infrastructure investment strategies that sustain economic growth. Debt capacity also will be affected by any changes in expenditure demands on the State's revenues."

"California's 2000 Debt Affordability Report," Office of the State Treasurer

2. INCREASED USE OF GENERAL OBLIGATION BONDS

The issuance of additional debt will be necessary to support Commission recommendations in specific infrastructure areas, such as school construction. When deemed financially prudent by the Office of the State Treasurer and the California Department of Finance, additional bonds should be issued whose funds are earmarked for future infrastructure projects. Credit rating agencies often view 6% as the maximum desirable allocation of General Fund revenues to debt principal and interest repayment. At the time of this writing, the State is operating at a debt ratio at nearly 4%. The State Treasurer's Office estimates that at the current ratio, the State can support approximately $39 billion in general obligation debt over the next 10 years.



If the State were to increase the percentage of General Fund revenue earmarked for debt service to 5% over the next five years, the amount of debt that could be supported would increase to approximately $54 billion. If the State increased its commitment to 6%, the amount of debt that could be supported would reach $69 billion. While it may not be practical or desirable to increase the debt service share of the State's General Fund budget at present, the capacity should be consistently reviewed for future needs. This option was also noted in the California Department of Finance's 1999 Capital Outlay and Infrastructure Report.

California is in a good position relative to other states in terms of net tax-supported debt, and could prudently increase its debt obligations. Based on data from Moody's, California is 19th nationally and 7th lowest among the top 10 most populous states in terms of debt per capita.

PHOTO CREDIT: CALIFORNIA STATE UNIVERSITY, SONOMA

Jean and Charles Schulz Information Center housing the California State University, Sonoma Library and the Information Technology Services

3. ENHANCED PARTNERSHIPS

The State can maximize the potential for increased investments locally and regionally by using its role to leverage resources and link a broad range of partners. Acting as a facilitator, the State can:

- Encourage public-private partnerships across all infrastructure categories and projects, especially to leverage private and philanthropic investments. As an example, the State Treasurer has proposed the establishment of a State-chartered investment fund, the 21st Century Fund, that would invest in underserved, emerging markets in California. The fund would be capitalized with State General Fund monies to be matched with foundation and private funding. Research shows that $300 million in public investment over the next four years would leverage approximately $1.4 billion in private and philanthropic investment.

The State of Florida partners with developers by offering a financial incentive to build infill projects and other developments that promote the greater use of public transit facilities and infrastructure.

- Assist regions with projects of regional and national significance, such as the Alameda Corridor East, to obtain federal funding through the Transportation Infrastructure Finance and Innovation Act of 1998 (TIFIA) and various other innovative financing tools.
- Provide expanded technical assistance to local governments and agencies on cost-effective and innovative financing strategies.
- Partner with community and nonprofit organizations and the philanthropic community to maximize federal funding opportunities such as discretionary grants.

4. INNOVATIVE FINANCING STRATEGIES

These strategies are divided into two areas: maximizing the efficiency of current resources and developing new revenue streams. The implementation of these strategies must be fully aligned with the State Five-Year Capital Budget Planning process (AB 1473 – see Option 5 for detail).

MAXIMIZE EFFICIENCY AND ALLOCATION OF AVAILABLE RESOURCES:

Arkansas, Massachusetts, New Jersey, New Mexico and Ohio have leveraged federal funds by issuing Grant and Revenue Anticipation Vehicles (GARVEE bonds) to finance transportation projects.

- Aggressively expand demand management and conservation programs. While many efficiencies have been realized, especially in the areas of water and energy use, far greater savings can be achieved. Real-time pricing and other mechanisms can be explored for managing demand for many types of infrastructure, including transportation, especially during peak hours of use.
- Optimize the efficiency and effectiveness of federal dollars by issuing grant anticipation notes (GANs) whenever possible. In addition, the State should seek opportunities to use large, regularly anticipated federal grants to securitize new bonds.
- Revise the state-local fiscal relationship. (See the Housing and Land Use categories for description.) This strategy would result in more housing production and would support more effective regional and cross-jurisdictional planning and investment collaboration, which would lower infrastructure costs in the future.
- Aggressively pursue California's fair share of federal assistance programs in general and, in particular, for targeted funds for projects of regional and national significance such as the CALFED water project.
- Identify new options to sell bonds backed by guaranteed future revenue sources. Many states have found innovative ways to develop new bond capacity out of existing resources. For example, the states of Alabama and Alaska successfully securitized their tobacco settlement funds.
- Increase experimentation in the management of infrastructure financing and delivery mechanisms. For example, the California Infrastructure and Economic Development Bank can establish a continuous process for assessment of criteria for project eligibility.
- Revisit the concept of Infrastructure Financing Districts (IFDs). IFDs are taxing districts that allow for the use of tax increment financing for specified public improvements on substantially rural or undeveloped land. Authorized under California State Law since 1990, there has only been one such district formed. The minimal use of IFD statute is largely due to the significant lag time between the formation of such a district and the point at which that district's tax base can begin to pay for itself.

EXPLORE NEW REVENUE STREAMS:

The Commission again makes note that our State faces its infrastructure challenges without enough resources to meet current or future needs. Even many existing revenue streams cannot be counted upon for the long term. For that reason, we do not feel that we will have done our job without the recognition that new or expanded revenue streams—fees, taxes or the sale and/or lease of assets—should be part of the ongoing public debate on how we provide for our infrastructure needs. Any revenues from such mechanisms should be dedicated to infrastructure development. The Commission has debated a wide range of options. The following could be explored by local and state policymakers and stakeholders.

- Local Revenue Voter Threshold: The Governor and Legislature should support passage of a constitutional amendment to lower the voter threshold to 55% for local bonds and sales tax initiatives to generate revenues for local and regional infrastructure projects. This reform is especially urgent for local transportation agencies whose sales tax revenue may soon expire.

- Access Fees: To the extent allowable under federal law, particularly Section 253 of the Telecommunications Act of 1996, the development of new revenue streams from the telecommunications industry based on the use of the State's rights of way should be considered, as long as such policy meets with California's goal to accelerate deployment of advanced telecommunication services to all Californians. Additionally, in an effort to capture revenue lost by local government entities as a result of increased use of satellite technologies to provide broadcast and telecommunication services, the State should consider developing new revenue streams by deploying similar fee structure upon those providers.

- A Dedicated "Infrastructure Fee" on Car Rentals: While California does impose a vehicle license fee on car rentals of $1.95 per day on top of a flat 8% sales tax, the cost of renting a car in California is actually lower than it is in many other states.

PHOTO CREDITS:
TOP: SAN FRANCISCO, CALIFORNIA, BLUE AND GOLD FLEET
MIDDLE: CHICO UNIFIED SCHOOL DISTRICT
BOTTOM: T. PARKER/AICP

- Radio Spectrum Rights: Most school districts and universities use only a portion of their FCC-allocated bandwidth. Some have been leasing their excess bandwidth to large telecommunications companies, although there is some question as to whether they are receiving fair market value for this coveted asset. Additional research is needed to determine the feasibility of the State forming a "Spectrum Rights Authority," whereby participating school districts and universities could pool their available bandwidth and lease or sell those assets en masse to the highest bidder.

- Charge on Automobiles and Automotive Parts: One possible method to compensate for the projected erosion of fuel tax revenue is to place an infrastructure charge on automobiles and automotive parts. Based on 1999 data from the California State Board of Equalization, a 1% charge added to new and used automobile sales could yield $446 million dollars per year.

The State of Vermont levies a statewide real property transfer tax on the purchase price of property other than a purchaser's principal residence, as well as a tax on the purchase of a principal residence, at a rate differential.

- A State-Level, Real Property Transfer Tax: Presently, counties and cities throughout California levy a real property transfer tax at a modest rate. A state-level transfer tax could help reduce what may be a disproportionate burden on new homeowners and balance it with revenues from long-held properties.

PHOTO CREDIT: N. HANSON/CALIFORNIA ENERGY COMMISSION

Sacramento Memorial Auditorium retrofitted for seismic safety, accessibility and energy efficiency, Sacramento, California

5. CONSISTENCY AND COORDINATION WITH THE CAPITAL BUDGET PLANNING PROCESS

The State has embarked on a five-year strategic planning process for capital budget planning across state agencies, to be coordinated by the California Department of Finance, pursuant to the passage of AB 1473. To maximize state resources, infrastructure investments should be linked to the efficient and effective use of funds across infrastructure categories. Therefore, infrastructure investment planning should be consistent with and linked to the capital budget planning process as the basis for developing a long-term state investment plan. The process should ensure coordination across state agencies, and ensure that state policies used as the basis for investment decisions are consistent with one another.

"Planning and executing the joint use of public facilities—reducing the duplication of similar functions and services—is a smarter, better use of taxpayer money."

Joel Fox,
President Emeritus,
Howard Jarvis
Taxpayers Association

State Capital Budget Planning Process: Details of AB 1473

This bill, sponsored by Assemblymember Robert M. Hertzberg and signed by the Governor in 1999, requires that the State submit an annual five-year proposed capital improvement plan to the Legislature that includes proposed capital improvement projects and their proposed funding sources, beginning in 2002. The plan must contain:

- **Identification of infrastructure needs requested by agencies**
- **Aggregate funding for transportation**
- **Infrastructure needs for K-12**
- **Instructional facility needs for U.C., C.S.U. and the Community Colleges**
- **The cost of providing infrastructure, sources of funding, and the impact on the State's debt position**

The plan does not need to specify projects for funding but may recommend "the type and quantity of infrastructure to be funded." The goal is to require state policymakers to undertake a comprehensive review of California's capital facilities needs, establish a clear set of priorities, and adopt an annual plan to serve as a budget blueprint for financing those priorities over the next decade. The bill replaces an existing requirement for the Director of Finance to prepare an annual report on major capital outlays. It is intended to complement the approval of individual capital projects through the existing budget process.

IX As We Go Forward

Building For Our Future

"The next wave of investments should be designed with the vision to meet the vastly changing needs of the next 50 years and should not be a mere replication of the type of facilities that were built to serve Californians in the last 50 years."

Philip Angelides, Commissioner
California State Treasurer
"Smart Investments, California's Debt Affordability Report," 1999

During the past two and one-half years of intense research and analysis, the Commission recognized that meeting infrastructure needs in the 21st century will require different approaches from those used in the past. Infrastructure planning is a dynamic field, and must be responsive to changing needs, fluid economic and financing conditions, emerging new technologies, and evolving constitutional, legislative, and regulatory policy frameworks. Specifically, the Commission learned that:

- The interconnectedness among the individual infrastructure elements requires a close coordination of planning and investment across the elements.
- The unique characteristics of California's communities and regions require that infrastructure investment plans be tailored to the particular needs and capacities of these communities and regions, while being guided by the statewide interests of California's people and economy.
- Achieving the greatest possible outcomes from finite resources requires a rigorous application of return-on-investment principles.
- Sustaining economic opportunity and a better quality of life for future generations of Californians requires that all levels of government, with the private and philanthropic sectors, share responsibility and work in partnership to meet these needs.

Moreover, the complexity of infrastructure analysis, planning and action requires a highly sophisticated capacity to assess, govern, manage, deliver, and evaluate. Because the State is not the sole provider of infrastructure, the substantial capacity that exists beyond state agencies, in our universities, communities, for-profit companies, and nonprofit organizations must be leveraged. Our plans and actions must also maintain constant focus on the full range of infrastructure issues and recognize the closely linked and interdependent nature of all infrastructure.

PHOTO CREDIT: B. LLOYD/JUDICIAL COUNCIL OF CALIFORNIA

Lamareaux Justice Center in Orange County, California

Next Steps

Every "Blue-Ribbon Commission" comes upon its moment of truth, and so it is for the Governor's Commission on Building for the 21st Century. Faithful to its charge by the Governor, the Commission has prepared a 20-year framework for comprehensive infrastructure planning and investment for the State of California. It is intended to serve as a catalyst for action, both to meet the challenge of immediate needs and for the longer term. We now need to move forward aggressively to assure that the strategies adopted and implemented will be of the highest quality and achieve the greatest return-on-investment for the citizens of California.

The Commission is not a permanent entity and its mission is fulfilled with the completion of this report. For this blueprint to achieve the vision articulated by the Commission, vigilant and sustained support is needed to assure that California never again fails to meet its infrastructure responsibilities. To do so, we must change the way we invest for today and tomorrow—for ourselves and as our legacy to future generations. Therefore, the Commission proposes to pass the torch to a new entity, one that in spirit and deed will carry forward the commitment and ideas—and still unanswered questions—of this Commission.

With an abiding concern for the well being of future generations of Californians, the Commission recommends the establishment of the California Infrastructure Partnership (CIP).

PHOTO CREDITS:

TOP: J. BERKOWITZ/LOS ANGELES WORLD AIRPORTS

MIDDLE: D. WINKLER/CITY OF HUNTINGTON BEACH

BOTTOM: SACRAMENTO, CALIFORNIA DEPARTMENT OF TRANSPORTATION

California Infrastructure Partnership

MISSION

The California Infrastructure Partnership would engage and help coordinate the full array of leading California individuals and organizations responsible for assuring high quality, cost-effective, long-term and comprehensive infrastructure planning and investment, in order to sustain and enhance California's economic prosperity and quality of life for current and future generations.

CASE STUDY

Governor's Community Solution Team

Oregon's Governor formed the Community Solutions Team (CST) in early 1996 to integrate state agency action and services that most impact the built environment and the livability of local communities and regions. Those agencies include the Departments of Land Conservation and Development, Transportation, Environmental Quality, Housing and Community Services and Economic Development. The program recognizes the need for overlapping expertise, coordinated state action and flexible service delivery mechanisms because problems in communities are unique, interconnected, complex and often unpredictable. Other state and federal agencies are invited to participate. Examples of projects conducted by Regional CSTs include: downtown revitalization that stresses pedestrian amenities and bicycle accessibility, and environmental clean-up of former industrial sites, to create opportunities for affordable housing in rapidly growing communities.

Source: Oregon Economic Development Department

FUNCTIONS

CIP will not be an implementing agency, meaning that it will not have project funding authority. CIP will perform the following functions in order to carry out its mission.

- **RESEARCH AND ANALYSIS.** Study the full range of issues involved in infrastructure planning, financing, delivery, and evaluation. This work may be conducted by the Partnership itself, but it will also rely substantially on the analytic work of others, including the State's academic and public policy partners. For example, the Partnership could conduct research on investment opportunities in California's underserved, emerging markets.

PHOTO CREDIT: CALTHORPE ASSOCIATES

Local youth and parents participate in a community design workshop for Easter Hill, a transit-oriented/mixed-use development in Richmond, California

- **BEST PRACTICES.** Examine the practices and results of other states, countries and regions, and assure that California avails itself of state-of-the-art policies and techniques for infrastructure planning, financing, delivery and management.
- **POLICY RECOMMENDATIONS.** Deliberate, adopt, and recommend long-term policy goals and strategies. The Partnership will not engage in short-term policy debate and decisions.
- **MONITOR.** On a regular, timely basis, monitor the adequacy of infrastructure systems and the extent to which California's needs are being met. The CIP may issue report cards to inform policymakers and the general public about our progress in meeting these needs.
- **COOPERATION.** Work closely with the California Department of Finance, which is responsible for managing the State's capital budget planning process (AB 1473), the Governor's Office of Planning and Research, and other state agencies responsible for planning and delivery of infrastructure elements.
- **RECRUIT AND ENGAGE PARTNERS.** Because infrastructure is a shared responsibility, engage the full range of sectoral and institutional partners and encourage them to assume and carry out their responsibilities.
- **CONVENE.** Bring together issue-specific or other groups to assess data, develop recommendations, and build support for infrastructure planning and investment.

- **COMMUNICATE.** Through sophisticated techniques and technologies, assure that its work is easily available and understandable to all interested parties and regularly communicate the results of its work to the full array of interested audiences: the Governor, Legislature, State agencies and other stakeholders; the general public; the private sector; the financial community; and the media.

In addition to the mission and functions of the CIP, there will be governance, organizational and funding issues to be considered. These issues can be explored as part of the assessment of potential models and best practices. They include:

- **GOVERNANCE AND STAFFING –** board composition, appointing authority, core staff, including loaned staff and contracting opportunities.
- **FUNDING SOURCES –** start-up funding, core funding, and sources for a permanent funding stream, including public, private and philanthropic sources; procedures for financial reporting.
- **REVIEW AND RENEWAL PROCESS –** annual performance assessments; communications process; review of authorizing legislation.

ORGANIZATIONAL MODELS

In general, three types of models to choose from are envisioned for the Partnership's mission, each with its own rationale. However, the Commission favors the Public-Private Partnership model.

1. STATE AGENCY. Entirely housed within state government, with its governing Board serving in an advisory capacity, this model would have standing with other state agencies and elected officials, but might also be constrained by bureaucratic rules and fail to engage the interest of the private and philanthropic sectors.

2. PRIVATE ORGANIZATION. More likely to operate in an entrepreneurial manner, the CIP might also fail to sufficiently engage the leadership of the public sector, and raise questions about its accountability.

3. PUBLIC-PRIVATE PARTNERSHIP. An organization, with a majority of appointments to the governing board by the Governor and Legislature, and additional appointments made by the board itself. This model is likely to engage the public and private sectors.

CASE STUDY

Public-Private Partnership Model: New Jersey Future (NJF)

New Jersey Future is a non-partisan, nonprofit organization, chartered in 1987 to improve the State's quality of life. A research and advocacy organization, its original mission was the creation and adoption of the State Development and Redevelopment Plan, a blueprint for revitalizing the State's older suburbs, towns and urban areas while preserving its remaining open spaces. NJF launched the nation's first Sustainable State process, bringing together government, business, nonprofits and citizens to identify solutions to the most pressing challenges facing New Jersey. NJF has a 34 member Board of Trustees, representing state, regional and local government officials, the private sector, members of the State Planning Commission, academics, and civic and environmental leaders. Major funders include many foundations, Rutgers University, and corporations, including AT&T, Bristol-Meyers Squibb Co., and Colgate-Palmolive Co.

Source: New Jersey Future

A MODEL FOR SHARED RESPONSIBILITY

The Commission recommends that the Governor further examine models of such partnerships in California and other states and adopt a California Infrastructure Partnership to fit California's unique needs.

The California Infrastructure Partnership is not intended to substitute for gubernatorial leadership on these issues, but to help strengthen that leadership, while generating input and participation from all our state's infrastructure partners. The Governor, through his Cabinet, the Department of Finance, and the Office of Planning and Research (OPR), assures full coordination across the Executive branch on infrastructure planning and investment, and that effort should be supported and strengthened. The Partnership can assist the Governor and the whole Executive branch in joining together with the other levels of government and the private and philanthropic sectors to assure a fully coordinated partnership among those who share this responsibility.

For example, the five-year capital budget planning process established through AB 1473 is intended to provide longer-term and comprehensive infrastructure planning among State agencies. But much of that work will be carried out in partnership with regional agencies, local government, and the private sector, as co-investor or implementer. The Partnership can help the Governor to assure full coordination with the AB 1473 process across sectors and at the local and regional levels. By helping to correlate and knit together the planning responsibilities of public and private agencies and commissions, the Partnership will in effect help oversee the creation of a statewide plan for infrastructure investment.

PHOTO COURTESY OF: PAGE DESIGN INC., SACRAMENTO, CALIFORNIA

In addition, government by itself cannot and should not be responsible for meeting all of the State's infrastructure needs. The state's needs must be seen as a whole, with the partners working together to meet those needs, guided by State policy and leveraging State resources to achieve the best outcomes for communities, regions, the State, and all those who are served by infrastructure.

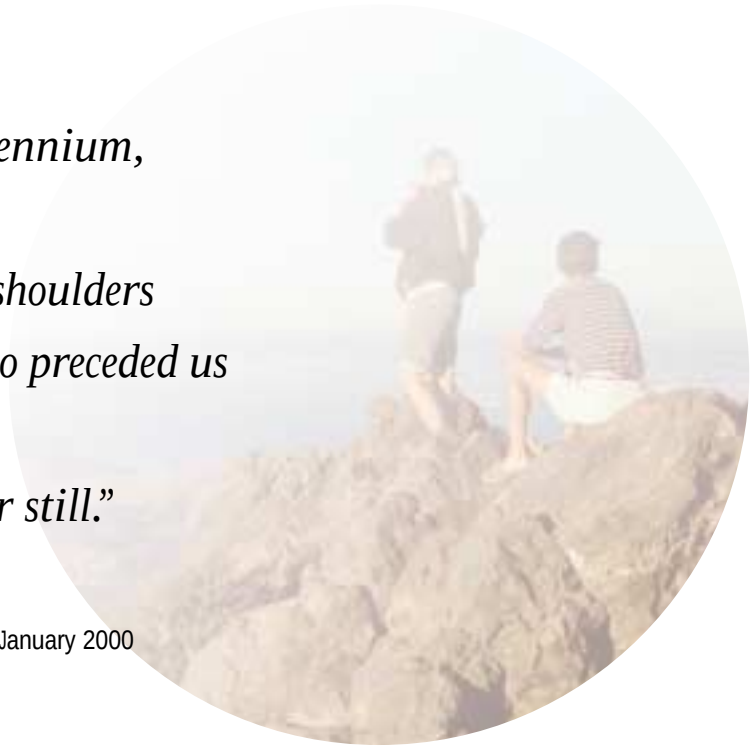
A Call To Action.

We, the members of the Governor's Commission on Building for the 21st Century, call upon all Californians to help create and maintain the infrastructure we will need to support California's economic progress and quality of life for the next generation, and for generations to come. No one else will do it but us, and none of us can do it without each other.

Join us.

"As we enter the door
to this new millennium,
it is our privilege
to stand on the shoulders
of those who preceded us
and our duty to
reach higher still."

Governor Gray Davis,
State of the State Address, January 2000



Acknowledgements

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A Million Thanks

This report could not have been produced without the extraordinary commitment of many wonderful people. Truly, this is the product of an outstanding public-private partnership—a testament to the heights that government can reach when it incorporates the best thinking from every corner of our State.

Since January 1999, when Governor Gray Davis signed Executive Order D-4-99, he called upon an independent group of leaders to make recommendations about California's infrastructure. He challenged us to think boldly and offer well thought-out recommendations we stand behind. What resulted is a final product that speaks to people and government at all levels. Many thanks to my colleagues on the Commission for their efforts and their voice.

The Commission has been fortunate to have the assistance of dozens of private, public and nonprofit sector policy experts, academics, think tanks, State agencies and departments, and other professionals. A special thanks goes to them for serving as experts to the Commission. I would like to also acknowledge my colleagues on the Cabinet and their staff, the Governor's Office and my Co-Chair, Lt. Governor Cruz Bustamante and his staff for their work over the last two and one-half years.

This report fulfills the mission of the Commission on Building for the 21st Century—to find solutions for the everyday challenges faced by all Californians. Thank you all for accomplishing our goal.

MARIA CONTRERAS-SWEET
Secretary
California Business, Transportation
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Please refer to the inside front cover for the full list of Commissioners

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