

3

SMART GROWTH

Developing schools that serve as centers of their communities is a concept that also has implications for a second important area of reform in the state of California that embodies the “smart growth” strategies for urban and regional planning. As supported by organizations like the Urban Land Institute and the California Futures Network, these principles address issues impacting the overall quality of life of all Californians. These principles are evidenced through a balance between economic prosperity, social equity and environmental quality. These ends require a long-range planning strategy to accommodate growth in a way that promotes prosperous and livable communities; provides better opportunities for housing and transportation; conserves green space and the natural environment; and protects California’s working farm and forest lands. Following is a list of the California Futures Network’s “smart growth” principles:

- ☉ *Plan for the Future:* Make government more responsive, effective and accountable by reforming the system of land-use planning and public financing.
- ☉ *Promote Prosperous and Livable Communities:* Make existing communities vital and healthy places for all residents to live, work and raise a family.
- ☉ *Provide Better Housing and Transportation Opportunities:* Provide efficient transportation alternatives and a range of housing choices affordable to all residents, without jeopardizing farmland, open space and wildlife habitat.
- ☉ *Conserve Green Space and the Natural Environment:* Focus new development in areas planned for growth while protecting air and water quality and providing green space for recreation, water recharge and wildlife.

“When we drink from the public trough, let’s make leverage the beverage. Each acre of college campus that can be shared with a high school may generate \$2 million in improvements. Each new school in a neighborhood can create the equivalent of a new 2-acre park. But we get these results only if school, park and college leaders are willing to share their turf—literally.”

Bob Niccum
 Director of Real Estate
 and Asset Management
 LAUSD

♥ *Protect California's Agricultural and Forest Lands: Protect*

California's farm, range and forest lands from sprawl and the pressure to convert farmland for development.

One way to achieve these results is to counteract the current model of sprawl development by focusing more effort on the design of more livable cities and towns. By concentrating higher density development in more urban environments, more of the open land currently being consumed by roadways and housing that are the products of "suburban sprawl" can be conserved as "greenfields," which includes farms, forests and natural habitat.

Over the past thirty years, California's growth pattern has consumed tremendous quantities of land for sprawling low-density development. The Central Valley, the nation's most productive and prolific agricultural region, will be threatened if current sprawling land-use patterns continue. Already, more than 12 percent of the Valley's farmland has been paved over. If this pattern of low-density sprawl continues, the Valley will lose more than one million acres of farmland by the year 2040, much of it on the best soil for growing crops. This represents nearly 20 percent of the Valley's remaining farmland (*American Farmland Trust and UC Berkeley*). In the meantime, a significant portion of the California economy stands at risk. Agriculture is California's number one industry. In 1996, California's agriculture and related food processing industries employed over 500,000 people and generated \$75.6 billion in sales (*Center for the Continuing Study of the California Economy*). Losing a million acres of farmland would cost more than \$5 billion annually in lost business for farmers, ranchers, suppliers, processors, and others involved in agriculture.



From 1970 to 1990, the population of Los Angeles increased by 45 percent while the amount of developed land increased by 300 percent (Diamond and Noonan, *Land Use in America*). Similar

development in other metropolitan areas has spawned a massive increase in vehicle trips and vehicle miles traveled by the public, and caused significant environmental harm. Between 1970 and 1995, the state's population increased by 60 percent, from 20 to 30 million people, but the number of vehicle miles traveled (vmt) more than doubled, from 103 billion to more than 270 billion miles of travel per year (*California Air Resources Board*). Overall vmt in the state is projected to nearly double to 488 billion in the next two decades. The resulting air pollution not only has public health impacts; it also affects agriculture by reducing crop yields at an annual cost of hundreds of millions of dollars.

Sprawling developments consume ever-increasing amounts of land, with the car and its attendant infrastructure—streets and highways, street parking and parking lots—taking up at least a third of all developed land. Moreover, this strategy for accommodating growth produces more traffic congestion and loss of productivity; air pollution and its environmental and public health impacts; the loss of open space; the inability of many to reach jobs and services; and the isolation of children from the elderly among other social and environmental problems.

Based on these disturbing facts, there is a growing concern that the traditional means of accommodating growth in California's population is in need of serious reform.

“California is going to grow. The only question is, are we going to grow in a way that promotes a better life for most Californians or are we going to grow in a way that depletes our resources and ultimately undermines the quality of life in our state?”

John Maltbie
County Manager
San Mateo County

4

SMART SCHOOLS MEET SMART GROWTH

The strategies for planning and designing smarter schools coincide with those for planning to accommodate the principles of smart growth. The most viable means for accommodating California's projected population and infrastructure needs for the next two decades is through a combination of more compact suburban development and a renewal of cities and towns. The planning and design of more community-centered schools can enhance the principles of smart growth. By serving as a catalyst for inner-city development, the proper planning of schools can help by:

- 1) Creating magnets for urban development;
- 2) Encouraging the development of inner-city housing and employment opportunities;
- 3) Improving mobility;
- 4) Reducing suburban migration;
- 5) Conserving greenfields.

Likewise, the implementation of smart growth principles supporting more urban development can improve education reform by:

- 6) Encouraging the creation of learning communities within the rich infrastructure of the urban environment;
- 7) Enhancing opportunities for community access and participation; and
- 8) Supporting teachers and school personnel by providing more affordable and attractive places to live and work.



1—Creating Urban Magnets

One of the key ingredients in the development of more viable cities and towns is to provide public facilities that act as magnets for development in inner cities and in already established suburbs. These magnets include things like libraries, parks, fitness and recreation centers, arts centers, and clinics for health and human services. One of the most important of these public facilities is a thriving and healthy system of public education.

2–Encouraging Inner City Housing and Employment Opportunities

The market for inner-city housing for families is in many cases dependent on the quality of inner-city schools. The design of more community-centered schools provides an opportunity for the development of more livable inner-city neighborhoods. To the degree that a larger number of smaller schools can be implemented, opportunities exist to provide access to educational facilities that are within close proximity, or even within walking distance to home. The result can be increased parental participation, less dependence on vehicular transportation and increased quality of life. To the degree that schools can also be designed to serve as social, recreational and cultural centers of their communities, these resources can also be provided with greater access and convenience.

Another factor influencing the development of inner-city housing is employment opportunities. Last year, schools alone employed 327,198 certified staff in the state of California. Schools, especially when combined with other community activities, can offer employment opportunities for administrative staff, teachers and support personnel.

3– Improving Mobility

In 1997-98, K-12 schools in the state of California spent \$1,400,658,122 on transportation. Through the design of smaller schools and more compact neighborhood environments where parents, teachers and school personnel can find affordable housing within close proximity to schools, personal mobility can be enhanced and costs can be reduced. Within the more compact urban context, school transportation can also be more easily coordinated with existing public transit than in other places.

“We know what we have to do: create the best schools we can for L.A.’s urban communities. And more than ever, the stakeholders at LAUSD, the Prop. BB Citizens’ Oversight Committee, the community, and the city and state governments are on the same page. We will do whatever it takes to turn our parks, libraries and schools into vital, community-based institutions. And studies and reports are not enough. I won’t feel a sense of accomplishment until the kids get off those buses and into their new schools.”

Steven L. Soboroff
Chair, Prop. BB Citizens’
Oversight Committee

4—*Reducing Suburban Migration*

Developing schools as centers of community with increased access, community participation and improved academic achievement can help to create more livable communities and neighborhoods in the inner city. Many residents fleeing the inner city for the suburbs are leaving in search of more stable and dependable schools. One way to help reverse the trend of outward migration is to develop schools in cities and townships that encourage community involvement, achieve academic excellence and attract more people to live and raise their families there.

5—*Conserving Greenfields*

Every acre of brownfield developed in the inner city conserves at least one acre of greenfield in the rural environment and, depending on density, possibly more. Five to ten percent of California's urban areas, some 250,000 to 520,000 acres, are brownfields, empty lots and abandoned buildings (*Bank of America et al, Beyond Sprawl: New Patterns of Growth to Fit the New California*).



6—*Building Learning Communities*

Every community is a rich, information-filled database in full motion, where math, science, language arts and social studies are embedded in a set of resources that we use every day to explore, discover, innovate and produce. Integrating schools with their community in a way that enhances opportunities for mentorships, internships, shared facilities and other uses of the physical, cultural, social, economic and organizational environment as a teaching tool can be accomplished in suburban as well as rural environments. However, these opportunities are more accessible in the urban context of cities and towns where these community resources are more dense and proximate.

7) Increasing Community Participation and Access

Developing schools that serve as the center of their communities requires collaboration between students, parents, educators and community leaders and residents. Increased participation in the planning and implementation of more integrated and accessible school facilities provides opportunities to develop stronger and more lasting interactions and relationships among all community stakeholders.

8) Supporting Teachers and School Personnel

Developing smaller schools and affordable housing in the urban environment provides opportunities for teachers and school personnel with limited incomes to live within close proximity to public transit, or even within walking distance to their work. Opportunities also exist through tax increment and other financing strategies to encourage developers to create affordable and subsidized housing for all school personnel.

“For the first time in a generation, we have the money in Los Angeles to build schools that can actually help children learn better right in their own communities. Whether we succeed now in doing what is right for our children will be our legacy as leaders in this city, and I hope everyone will pay attention to how we proceed.”

Bill Allen
President and CEO
Economic Alliance of the
San Fernando Valley

5

CASE STUDIES

There are many programs and projects in the state of California and elsewhere that exemplify some of the goals outlined for smarter schools and smarter growth strategies. A recent “New Schools • Better Neighborhoods,” symposium in Los Angeles produced some interesting examples. Attending the symposium were a group of about 150 local and statewide leaders. The subjects for discussion were broad in scope, from vision and goals to policy and regulation. Presentations and panels focused on exploring obstacles and opportunities for an expanded vision of schools that could better serve students, educators, neighborhoods and communities. Included were some local case studies that address these issues in ways that were both informative and insightful.

Cahuenga Elementary School—Los Angeles, California

The Director of Real Estate and Asset Management for the Los Angeles Unified School District, whose responsibilities include managing the process for school site selection, presented the first case study. In his presentation, the director reviewed the recently selected site for a proposed new Cahuenga Elementary School, which falls within one of the most overcrowded attendance areas in the Los Angeles Unified School District. Over 1600 students living within Cahuenga’s attendance area are bused to other locations every day. The director of real estate had worked in earnest to meet the goals for the site selection process. The process had proceeded by the book, following a “Site Acquisition Flow Chart” developed by the school district’s real estate branch. The chart stipulates 124 functions, notifications, meetings and actions required for the approval and acquisition process. Included are three meetings with the neighborhood.

A community meeting was held on November 9, 1998 to explain the need for the new 1600 student school and to invite community suggestions for possible locations. Six people attended. A profes-



sional real estate consulting firm was employed to drive each block in the study area and identify three potential locations. In February 1999, staff reviewed the recommendations. No community suggestions were received. The staff recommended, by consensus, a 4.75-acre site that currently houses 21 single-family homes and an 8-unit apartment building. The site was approved by the Los Angeles Board of Education in March 1999. Six and a half million dollars were set aside for site acquisition.

Meanwhile, the Beverly-Kingsley Neighborhood Association had been meeting to discuss the new school project. The site selected by the school district included 19 of the community's most prized Craftsman bungalows that had long been nurtured by the neighborhood. At the symposium, the neighborhood association presented an alternative community-designed plan that would redistribute the 1600 students into three smaller schools. The proposed sites would eliminate some of the community's most blighted properties and put the schools closer to the heaviest concentrations of students.

Camino Nuevo Charter Academy—Los Angeles, California

The Cahuenga case study became even more interesting after a second neighborhood case study was presented. The director of a neighborhood non-profit organization called Pueblo Nuevo Development led this case study. In collaboration with other community leaders and organizations, Pueblo Nuevo is proposing to create the Camino Nuevo Charter Academy, a 240 student charter school. As proposed, the Academy would occupy an existing 1/3-acre shopping center site in the MacArthur Park neighborhood. Recreational activities will be accommodated through a joint-use arrangement with MacArthur Park, which is three blocks away. The total capital costs for the project are estimated at \$650,000 for site acquisition and another \$350,000 for construction, or an average of about \$4,200 per student.

“New schools could replace the blight that plagues inner city communities like South Central L.A. Many neighborhoods are held hostage to the crime and violence clustered around hundreds of vacant lots, abandoned buildings and nuisance businesses. Building new schools presents an opportunity to mobilize parents, youth, seniors and business owners in the effort.”

Karen Bass
Executive Director
Community Coalition for
Substance Abuse Prevention
Los Angeles, CA

As the panel of Pueblo Nuevo representatives continued their presentation, comparisons with the Cahuenga Elementary School, where the cost per student would probably exceed \$4,000 just for land acquisition, became obvious. Including the cost of construction, the total cost per student for Cahuenga could exceed \$22,000—more than five times as much as the Camino Nuevo Academy project. Even though the quality of space at a renovated shopping center may not compare as favorably with that of a brand new facility at Cahuenga, the lower cost and lack of complexity of the smaller project, and the opportunity to house large quantities of students in smaller, more intimate educational settings provided a compelling comparison. Given the large quantity of small faltering shopping center sites available throughout the Los Angeles region, the lack of disruption to existing residents and improvements to the urban fabric of the adjoining commercial streets presented other clear advantages for planning at a smaller scale.

TreePeople—Los Angeles, California

One of the most compelling case studies presented at the symposium came from another not-for-profit environmental group known as TreePeople. Rather than addressing issues related to a single school, this case study addressed environmental issues that apply to all Los Angeles school sites. The TreePeople organization has been developing an integrated environmental planning model for school sites that amalgamates beneficial qualities from multiple resources. One focus of their work has been on asphalt paving, which is an enormous source of heat at schools and also a contributor to flooding and pollution. A large proportion of a recent facilities bond was allocated for repaving asphalt at LAUSD schools, one of the largest amounts of pavement under one ownership within the Los Angeles watershed. With the help of scientists at the U.S. Department of Energy and Lawrence Livermore Labs, TreePeople determined that by planting trees to help shade and cool the



buildings, a net savings of 12-18 percent in energy could be achieved, and that these cost savings alone would be more than enough to pay for installing and maintaining the additional natural landscape. As a result, the School Board has agreed to replace more than 30 percent of the asphalt on each campus with trees and greening. The TreePeople team is currently exploring how more natural landscape can also curtail runoff, reducing the construction of expensive storm water drainage structures and pollution abatement, resulting in reduced capital and maintenance costs for other state and municipal agencies.

In many ways, all of the Los Angeles case studies share a similar kind of David vs. Goliath subtheme. In the face of limited resources and policy hurdles, battles by neighborhood associations and environmental groups have ensued against the behemoth Los Angeles Unified School District and its policies. But one of the most endearing qualities of the case study presentations was the spirit of camaraderie that prevailed through the many alternating moments of frustration and revelation. No one stood up to blame the LAUSD's Director of Real Estate for what seemed to some like an impending boondoggle at Cahuenga. The director, with clearly honorable intentions, came off more as a victim than a perpetrator. Sympathy also prevailed for the plight of Pueblo Nuevo in their quest for approvals and charter school status. The director of TreePeople rose to heroic status as his programs and their convincing financial justifications have begun to chip away at the fiduciary Achilles heel of the embedded Los Angeles school bureaucracy.

The New Schools • Better Neighborhoods symposium case studies present compelling examples of how a more systemic and community-based approach to the design of educational facilities can maximize the social, environmental and financial return on public investment. But in addition to addressing community needs and concerns, new environments for learning must also accommodate

“We have to discard the concept that schools must be structured and constructed exactly as in the past. The Board...must be open to innovative thinking in both areas. The community-centered school, an idea that surfaced decades ago, should be reconsidered. It develops the school as the veritable center of community services, a boon to both children and the neighborhood.”

Valerie Fields
LAUSD Board of Education

new strategies for educational delivery where curriculum is more interactive, hands-on and project based. In the words of one student: “Tell us why we need to know it—make it real or just forget it.”

One example of this kind of educational innovation is being developed in San Francisco’s Exploratorium museum. The following is a description of that program followed by some other community-based educational facilities case studies from across the state of California:

Exploratorium—San Francisco, California

The Exploratorium is a museum of science, art and human perception located in the Palace of Fine Arts in the Marina district of San Francisco. In addition to thousands of hands-on exhibits available to the general public, the museum also operates a wide range of educational outreach projects.

The Science Explorer is an outreach program that allows students of all ages to explore and create projects in their own home. A detailed publication provides opportunities to use everything from the refrigerator to the kitchen sink to learn the principles of math and science and a wide range of other educational content.

Another program called the Learning Studio is an experimental multimedia and communications lab. The Learning Studio works primarily with teachers, Exploratorium staff and artists, providing opportunities to share considerable knowledge and expertise through the development of creative interactive multimedia and telecommunications. Projects have included the world’s first Internet video conference, a plane in the stratosphere and a special interactive event for the international celebration of Pi Day.

The extension of the Exploratorium’s resources through the Science Explorer and Learning Studio programs illustrate an opportunity for other organizations to serve as extended learning centers



through the application of current developments in project-based learning and multimedia and telecommunications technology.

Hayward Unified Master Plan–Hayward, California

A recently completed educational facilities master plan for the Hayward Unified School District presents a different opportunity for thematic learning. Hayward, California is a community of about 112,000 people (1990 census) on the east side of the San Francisco Bay. There are more than 88 different ethnic groups represented in the community. The school system teaches to more than 43 languages. The Hayward community has decided to celebrate its rich cultural diversity through the development of future educational facilities. The decision was made through an eighteen month community-based planning process that included more than 100 parents, students, educators and other stakeholders. As a result, a new site needed to accommodate approximately 400 students will be developed as a fine arts multi-cultural museum, academy and cultural center.

In addition to its formal education function, current plans call for the new facility to serve as a tourism attraction for the entire Bay Area and as a national center for research in multi-culturalism. An innovative new integrated curriculum will be the focus of the academy’s academic program, with extensions to serve all of the community’s existing Pre-K-12 and Higher Ed learning sites.

“Investments need to be made in healthy, efficient and sustainably-designed schools, with the community as a full partner in the process, decision-making and outcome to make schools centers of learning and neighborhoods.”

Lillian Kawasaki
General Manager,
L.A. City Environmental
Affairs Department

Western Placer Unified Master Plan–Placer County, California

The Western Placer Unified School District has developed a similar master plan. Known as “Project Build,” the plan supports and enhances the district’s instructional strategies within the context of the whole learning community. During two school terms, over 100 community members, faculty and staff, administrators, parents and students formed a committee to explore and investigate community resources that impact facilities development. In

addition, the school district has incorporated the planning process into the curriculum, teaching students to design, draw and make models in preparation for better communication with architects who will be designing the area's new schools.

One local real estate developer learned through the "Project Build" planning meetings that the natural environment could be used as a powerful learning tool. The developer then donated 170 acres of prime real estate, including a Native American archaeological site, to the district. The same developer also donated 2,000 mandarin orange trees that will be planted on the site. At the end of seven years, the mandarin grove is projected to provide revenues of over \$400,000 per year for the district. The agricultural project will be managed through an innovative environmental studies curriculum from which students will receive academic and ecological training in non-traditional surroundings. A primary component of the master plan calls for even more extensive use of existing community resources for learning.



The Western Placer Education Foundation, which was formed as an outgrowth of the planning process, has acquired over \$3 million in grants and resources to support the development of an integrated environmental/arts curriculum. The district now owns or has access to more than 5,000 acres of natural land for educational use.

As a result of the "Project Build" planning process, the district is also moving to implement a shared 10-14 grade level Lincoln High-Sierra Community College Learning Center. The center will address the growing need for a seamless educational program to educate and train high school and community college students for careers in the region's burgeoning high-tech industry.

Cesar Chavez Elementary School—San Diego, California

The Cesar Chavez Elementary School was developed through a community-based planning process involving a cross-section of the community's predominantly Hispanic population. The new facility serves its larger community through a number of extended uses. The health center doubles as a community clinic; a parent center serves as a community meeting room; a library media facility is open in the evening and on weekends for community instruction and tutorials; the cafeteria serves as a community meeting hall; and playgrounds double as a Class III soccer field.

The architectural design includes many educational innovations to serve contemporary teaching practices, but goes even further to celebrate the community's predominantly Mexican-American heritage. A 350 foot long mural of a cosmic Indian is incorporated in the paving of the complex's large academic yard. On one facade of the Library/Administration building is a reference to the logo of the United Farm Workers, and on another is a colorful Quetzal Indian headdress. A two story, multi-striped serpent includes references to the Anasazi farmer and the Aztec astronomer. An Incan tapestry is designed into the classroom wing and storytelling facades of family, cooking, gardening and the jaguar world are incorporated into the walls of the cafetorium. Through its architectural design, the school serves as an interpretive center for students, a cultural resource for the community and a 21st century landmark.

“The inclusion of Family Resource Centers when building [schools] will provide needed infrastructure for both community development and increased support for students. [These] centers [could] provide convenient full-day access to a broad range of family focused services and programs, improve the educational environment, increase participation and leadership opportunities in the community, strengthen neighborhoods, and promote the health and well-being of children and families.”

Michael Shannon
Center for Healthier
Children, Families
and Communities
UCLA

6

PLANNING SMARTER

These and other recent projects represent an approach to planning and community development that is more integrative and participatory in nature. At the core of the strategy is the recognition that sharing resources is often smarter than duplicating resources and that working together can produce greater gains than working in isolation.

The evolution of a more integrative and efficient community-based planning strategy opens up significant opportunities for maximizing the resources of the community as a whole. Imagine the educational, social, environmental and financial benefits of the case studies presented if these ideas were implemented in districts and cities throughout the state. Imagine the efficiency that could be created in a community where all of its assets are integrated. Imagine the impact if all of the community's physical, cultural, social, economic, organizational and educational resources could be planned together in a way that maximizes the collaborative benefits of each. Over the past ten years, architects have been developing and implementing a technique for integrating community resources called the Concordia model, where all community assets are organized into six interdependent environments.

The first of these environments contains the community's physical resources that encompass the total of the community's built and natural assets. These assets include all of the community's buildings, bridges, highways and telecommunications infrastructure as well as natural resources like parks and other outdoor recreation areas.

The second component of the interdependent community system encompasses the community's cultural resources. Included in this category are programs and artifacts related to the expression of individual and communal values and aesthetics.



The third component encompasses social resources that include a wide spectrum of the health and human resource assets required to maintain a healthy community infrastructure.

The fourth component of the total community system is the economic environment. Represented here are programs and activities related to business and commerce. Included are activities ranging from regional and local economic development programs to innovations and initiatives developed by private entrepreneurs.

The fifth category of community assets encompasses organizational resources. Included in this category are the various components of community governance, including the school board, city and county boards of supervisors, Rotary Club, Lions Club and a myriad of other civic organizations. This category identifies how decisions made on behalf of the community-at-large are developed, deliberated and implemented.

The sixth component includes all of the community's educational resources, encompassing a wide variety of learning assets. Included in this category are all Pre-k to 12, community college and university educational delivery systems. Also included in this comprehensive category are all of the community's civil service training and skills development programs along with similar programs in the private sector.

These six resources include a wide cross-section of the community's most vital learning and living assets. Although they can be seen as independent components of every community system, it is the quality of their interaction that can contribute to the community's overall health and well being. In the best scenario, educational information interacts with economic information, cultural and social data, and other available data to the point where all interactions are linked in a contiguous living web of interactive data and knowledge. When this web has been achieved, the

“Schools shouldn’t be just schools; they should be centers that spawn the civic fabric and provide ideas and places for people to meet. They should become village centers.”

Connie Rice
The Advancement Project
Los Angeles, CA

