Housing the Next Ten Million
Visions for California’s Central Valley

Harrison Fraker

Ten million additional people are projected to live in California’s Central Valley by the year 2040. This is equivalent to adding the population of New York City or fourteen San Franciscos to the Central Valley—no trivial challenge.

“Housing the Next Ten Million,” a competition sponsored by the Great Valley Center and the American Institute of Architects, California Council, solicited design and development concepts for accommodating this growth. It challenged entrants to envision solutions for sustainable development and responsible growth. That includes addressing issues of preserving farmland and protecting the valley’s underlying ecosystem, and recognizing the valley’s changing demographics and socio-economic realities. These challenges represent an extreme the kinds of problems that are faced by many American urban regions.

While the magnitude of the problem produced bold proposals (such as high-rise biomorphic megastructures), the jury was attracted to solutions that focused on adding growth and value to existing communities, especially those that tried to maintain and enhance a local sense of place when considering development on such a large scale. In such schemes, the existing landscapes of rivers, stormwater systems and canals provided a promising vocabulary of new civic amenities, strengthening local identity and a sense of place within the region.

The jury took a strong ideological stand by giving the first award in the New Growth category to a proposal (Daniel G. Paretek Urban Design, Berkeley) that places all new development within a clearly articulated growth boundary. Using Modesto as a case study, it showed how the boundary can be delineated by creating a dedicated open space—a park around the city at the location of important rivers—that provides a natural amenity between the city and preserved agricultural lands beyond.

Growth is concentrated in urban villages within the city—an intensification of Modesto’s existing plan for residential villages. Each village is located near an existing neighborhood service center and allows modestly higher density and mixed-use development. The proposal converts the city’s existing irrigation canal system into a green network of pedestrian and bike paths that connect the urban villages to each other and to the river systems around the city.

The winning Redevelopment proposal (Blackbird Architects, Santa Barbara) follows similar principles. The entry makes a compelling case that redevelopment at slightly higher densities, when designed well, can produce wonderful neighborhoods, and is one of the most attractive ways of accommodating growth without losing the small-town quality of the Central Valley.

The scheme takes a 300-block, underdeveloped area of Fresno and weaves it into a compelling mixed-use fabric that includes more than 6,000 new housing units. The backbone of the plan is a greenway organized around the restored creeks and ponds that substitute for storm sewers. A grid of residential blocks, streets and alleys is overlaid on the greenway. The streets tie back to the city grid and the alleys are transformed into a secondary open space system of pedestrian paths, oaks, and natural drainage that connects to the greenways.

The winning Infill entry (Stephen M. Wheeler and Michael Lane, Berkeley) focuses on the building scale, proposing types that can be developed on individual lots within a grid of streets and blocks. The idea is to fill in—carefully adding duplexes, townhouses and single family homes in selected blocks while retaining existing neighborhoods—and is new. But this scheme skillfully demonstrates how adding garage apartments can improve the safety, livability and potential of alleys, and how townhouses or duplexes can fill in vacant lots in ways that improve the physical fabric and scale of streets. It shows how increasing density can have a positive effect on neighborhood quality.

The winning entries in the Small Agriculture Community (Russell D. Naylor, Darren Barboza, Heddie Chu, Rafael Herrin and Wing Lee, Ai Architects, San Francisco) and the Housing Prototype categories
(Matthew Lamp, Lily Lim and Eric Zachriesson, Chicago) illustrated simple, yet powerful, low-cost alternatives to common speculative house construction. The Naylor team proposal uses lightweight, pre-manufactured farm building components to make a simple, flexible, loft-type shelter that can be expanded to accommodate extended families. The units can be clustered around community facilities made from similar building components, creating a cohesive, supportive community. This has already been a successful model for farm workers in the valley.

By contrast, the Housing Prototype entry proposed a low-tech approach that uses site materials. It demonstrates this idea on a prototype urban block, constructing rammed-earth walls from the underrun, using site-cast or locally manufactured hollow-core concrete panels for floors and roofs, and gathering topsail to create community gardens in the center.

The plan proposes modest units on small lots, using principles of passive solar heating and natural cooling with outdoor gardens and patios that take advantage of the best aspects of the valley climate while limiting its liabilities. This concept can work for individuals or groups who want to pool their resources and share labor.

Both of these housing models demonstrate the economic value of applying building technologies that are place-based. By using local material, local labor (which has the added value of allowing significant sweat-equity by the homeowner and/or the community) and components manufactured locally, the internal economic benefit is multiplied many times over.

Unanswered Questions

While the winning projects reflected the jury's consensus that solutions should focus on enhancing existing communities, several honorable mention projects raised questions about whether infill and redevelopment can accommodate the amount of growth projected.

One entry (Udo Greinacher, Kiril Stanilov) proposes a string of new towns along the foothills on either side of the valley. The new growth would avoid the most valuable farmland; in many areas it would follow the
already highly engineered landscape of major aqueducts, but it would require significant investment in
new highways. The jury supported the compact develop-
ment diagrammed for each town, but had difficulty
understanding what created their need and location.
In contrast, the entry by Liveonemile Plise, Karen Plise
proposes significant urban growth on prairie farm
land in the foothills east of the valley’s major cities.
The growth would be tied to stops on the proposed
high-speed rail line from San Diego to Sacramento.
This strategy seemed to be new town and old town
together, implying that new development and rede-
velopment can be managed for mutual benefit.
The competition revealed glaring weaknesses in our
understanding of the problem of accommodating
"the next ten million." The jury could not determine
with confidence how much growth existing commu-
nities could actually absorb through infill, redevelop-
ment and modest density increases. How much
underutilized land is there? How much intensification
and increase in density is appropriate? How many
new towns are needed? How much expansion of
existing urban boundaries is necessary?
There is very little understanding about where the
pressure for residential or employment growth will
actually occur, or what kinds of jobs will be created.
Almost all the entrants focused on major communi-
ties, leaving hundreds of unincorporated towns, small
villages and rural communities out of the equation.
In the end, the Great Valley Center’s director, Carol
Whitehead, got her wish. The competition raised the
discussion about alternative solutions to current pat-
terns of sprawl and big box commercial and about
creating a more robust civic fabric—so that lists
communities together through a more livable public
realm and increases density.
Throughout the jury process there was concern about
how local politics would make it difficult to imple-
ment the winning design ideas. It is likely that effec-
tive processes for community participation, collaboration among communities and regional plan-
ing will be more difficult to come by than promising
design ideas. But the fact that remarkably diverse
jurors could reach such a strong consensus about
desirable design qualities and planning concepts sug-
gests that when alternatives are carefully laid out,
consensus can be forged.

The Organic Approach

Deborah Gans

"Organic" is a word that one uses with hesitation. It
conjures biomorphic forms confused with nature,
undone emotional connections with freedom
and the metaphorical analogy that overreaches in its admis-
sibly humanistic goals.

Today, organic forms are seemingly present in the
gorgeous folding surfaces that flow from our computers.
They are accompanied by a discourse that offers their
super-continentality for the compensation for cul-
tural shifts; they do not directly address. "The Organic
Approach" was a search for critical tools that could
overcome more zesty representation and confront
the discontinuities in our cultural fabric among classes,
places and infrastructures and their symptomatic con-
ditions of megalopolis, ecological crises and warfare.

The name of the conference—with "organic," as the
modifier of "approach"—was very much the point, we
were searching for models of exploration rather than a
model of form. As Zeke Kuz traced in the
nineteenth-century German roots of this distinction,
organic meant the finding of form (Ursandwich) not
the giving of it (Eiland)

The invited participants offered conflicting ideas
about this concept, but they returned to a common
set of concerns: the problem of democracy, the prob-
lem of technology and the problem of the city, most
broadly framed as the relation of nature to culture.

The Organic and Democracy

How can organic architecture facilitate, as well as rep-
resent, aspects of democracy? Gunther Behnisch
described his forty-year attempt "to reduce constraints
and enhance freedom" through a practice he considers
collaborative in its process and non-deterministic in its
objects. Describing buildings made from contingencies,
layers and fragments, he simultaneously maintained
the inherent position that glass can achieve the
desired transparency of democratic culture: through
open interior space and permeable boundaries, this
glass architecture attempts to merge building with
landscape or the freedom of the street. His parlament
in Bonn (under construction for 15 years and aban-