



What Makes a Community Livable?

Livability

101



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About the AIA – The American Institute of Architects

Since 1857, the AIA has represented the professional interests of America's architects. As AIA members, more than 75,000 licensed architects, emerging professionals, and allied partners express their commitment to excellence in design and livability in our nation's buildings and communities. Members adhere to a code of ethics and professional conduct that assures the client, the public, and colleagues of an AIA-member architect's dedication to the highest standards in professional practice.

About the AIA – Center for Communities by Design

The Center for Communities by Design is a catalyst, convener and source of information that helps AIA members work with citizens and other stakeholders to envision and create more sustainable, healthy, safe and livable communities.

To learn more about the AIA Center for Communities by Design, visit www.aia.org/livable

Livability 101 for Communities

Livability 101 offers communities the resources to develop a vision for the future and enables them to be engaged in a successful process with the expertise offered by the architectural profession. As designers of the built environment, architects play an important role in shaping our communities. Their design affects our safety, health, and the environment as well as the quality of life in our neighborhoods, towns, cities, and regions. This publication seeks to strengthen the relationship of citizens and architects by sharing a common vocabulary to create a sustainable framework for building more livable communities.

Livability 101 for Architects

Livability 101 engages architects as members of their communities, to use and share their knowledge, skill, and experience to participate in civic life. Architecture expresses the values of society and has the power to enrich the human spirit and ensure livability for this and future generations. Livability 101 provides architects with the necessary vocabulary and elements needed to empower communities and make decisions that will shape more livable communities.



Helene Combs Dreiling, FAIA, Hon. SDA,
Team Vice President, AIA Community

Salt Lake City is located on the southeastern shore of the Great Salt Lake and to the west of the Wasatch Mountains. The Envision Utah planning process created a quality growth strategy for the entire region.

Courtesy NASA Landsat 7 Science Team and USGS Eros Data Center. From visibleearth.nasa.gov, accessed July 19, 2005.



Effective Planning for Regional Transportation

By Søren D. Simonsen, AIA, AICP, LEED AP

Along with those inalienable rights of life, liberty, and the pursuit of happiness, most Americans consider mobility to be one of their most basic and precious freedoms. This is understandable, as transportation systems support almost every aspect of our lives, from work to recreation.

With the proliferation of the private automobile and the construction of a virtually ubiquitous network of roads and highways during the last century, residential and business developments gradually and easily spread out across the country. Yet, the problems and limitations inherent to this kind of car-based development—commonly referred to as *sprawl*—are now taking their toll through increased traffic congestion, environmental degradation, escalated health risks, and mobility challenges for the young, the old, the poor, and the disabled—or about one-fourth of our population.

Balancing Our Transportation Systems

Clearly frustrating—if not detrimental—to individuals and extremely challenging to local leaders, these problems are a growing concern for the larger business community as well. Trade associations and private companies in major metropolitan areas are increasingly recognizing that a region's economic health depends on a balanced transportation infrastructure. In 1995, for example, the Bank of

America prepared a landmark study that identified the effects of suburbanization, congestion, and transportation problems on business activity and economic development. Although focused primarily on California communities, the study's general conclusions are applicable to any metropolitan region:

- Road-weary commuters spend more time traveling to work and other destinations because of increased vehicle-miles traveled, leading to fatigue and loss of productivity.
- Many workers cannot compete in the job market because transportation alternatives do not provide access to remote job centers.
- The costs of new infrastructure along the urban edge and of mitigating environmental impacts from transportation projects are passed on to businesses and citizens who receive little or no benefit from the new construction.
- The flight of formerly urban businesses to the suburbs, often subsidized by taxpayers, weakens urban central business districts and the entire region.

In addition to this study's highlight of economic concerns, more than two dozen community-health studies undertaken since 1987 have linked air pollution—predominantly unhealthy particulate matter from vehicle emissions—to an increase in urgent

medical care and premature death. The health risks and economic costs of pollution and environmental degradation are staggering.

Working Together to Find Solutions

It is difficult to define a balanced transportation system. Each community and region must recognize its own opportunities and constraints. Most important, community leaders—political, business, and institutional—must work together to achieve the desired health and economic benefits. What is clear, however, is that most communities must vastly increase their efforts to include public transit, bicycle, and pedestrian facilities in order to reach a proper balance.

Fortunately, the public and private sectors in many forward-thinking communities are finding ways to take the incremental steps necessary to develop viable, multimodal regional transportation systems. For example, when the Denver region faced a large shortfall in transportation funds in 2001, the Denver Metro Chamber of Commerce courageously advocated numerous increases in taxes and fees on various products, assets, and services—including gasoline, personal property, drivers' licenses, motor vehicle registration, and toll roads—to build needed public transportation projects (rail transit and highways) over a shorter period, to greatly increase other public transit systems and services, to improve efficiency of highway construction and

maintenance, and to improve transportation-demand management through increased public awareness. They even went so far as to propose the creation of a tax on vehicle-miles traveled. They took such action because they recognized that the consequences of this shortfall in transportation funds—decreases in both quality of life and global-market competitiveness—were far more severe than the effect of the increased taxes.

In the late 1990s, faced with regional road congestion and air-quality problems, the Metro Atlanta Chamber of Commerce formed the Metropolitan Atlanta Transportation Initiative (MATI). In 1998 MATI successfully lobbied the Georgia legislature and state governor to create a regional agency responsible for planning and allocating resources for highway and transit projects within the purview of the Georgia Regional Transportation Authority.

More recently, the Metro Atlanta Chamber of Commerce issued a resolution that (1) identified transportation corridors with unacceptable levels of congestion, and (2) advocated the *flex trolley*—a bus rapid-transit system operating in dedicated corridors within existing roadways that can serve as a cost-effective interim step to providing expanded rail networks. These recommendations by the business community have increased the political capital that local and state policymakers need to make the tough appropriation decisions that, in turn, will result in the implementation of more suitable regional transportation initiatives.



Denver's business community has been a recent champion of transportation improvements, especially public transit. The 16th Street Transit Mall has become a major character-defining feature of the downtown over the past two decades.

Courtesy Jim Leggett, FAIA

Implementing a Region-wide Approach

In addition to establishing alliances between the public and private sectors, civic leaders must coordinate with neighboring political jurisdictions when developing regional transportation plans. This is particularly true for large metropolitan areas where adjacent jurisdictions inextricably share both the opportunities and problems associated with transportation systems.

“Envision Utah,” a grassroots regional planning initiative in the Salt Lake City metropolitan region, illustrates some of the positive outcomes of such a broadly coordinated effort. This large-scale visioning process was launched in 1997 by a coalition of business, civic, and political leaders. Their purpose was to study the long-term effects of growth based on uncoordinated local planning efforts over a 10-county metropolitan region, and recommend policy changes that would preserve and enhance the region's quality of life. Issues of particular concern included prosperity of business and industry; conservation of natural, recreational, and agricultural open space; improvement of air quality; better



Residents, business owners, and city officials in Layton, Utah, gather to discuss a community vision for transit oriented development near a proposed commuter rail station. The workshop was sponsored by Envision Utah, as part of a region-wide campaign.

Courtesy Cooper Roberts Simonsen Architecture



Stakeholders from the Salt Lake metropolitan area gather to discuss values and choices for future growth. This regional planning workshop, sponsored by Envision Utah in 1999, focused on strategies to integrate land-use planning with transportation and public transit system improvements.

Courtesy Cooper Roberts Simonsen Architecture

delivery and more efficient use of water, energy, and other vital resources; and appropriate housing and transportation choices for a rapidly growing and changing population.

Business leaders, elected officials, executives and staff from state and local agencies, and numerous community stakeholders—totaling more than 17,000 in all—took part in a visioning and strategic-planning process over a two-year period. Through initial surveys and town meetings, they explored the effects of various transportation and land-use decisions based on models of current planning trends and of alternative growth-management approaches. Later, participants helped evaluate specific strategies for the implementation of a preferred growth scenario, including identification of the types of public and private cooperation that would be most effective in executing the recommendations.

The coalition’s report, “Envision Utah Quality Growth Strategy,” unveiled in January 2000, identified specific planning measures, including:

- Promote the development of a region-wide transit system (including public and private buses, light rail, and commuter rail, among other options) that is effective and convenient.
- Foster transit-oriented housing and commercial development that incorporate and encourage various forms of public transportation.
- Encourage both new and existing developments to include a mix of uses in a pedestrian-friendly design so that walking is an attractive option.
- Support the development of a network of bike-ways and trails for recreation and commuting.



Envision Utah conducted a region-wide, grass-roots planning initiative to allow public input into choices for future growth and development in the Salt Lake City metropolitan area. The three scenarios pictured here illustrate the relative impacts of planning choices on quality of life values such as transportation, open space conservation, housing, and infrastructure costs.

Illustrations courtesy Envision Utah

According to the report's transportation modeling, such recommendations could result in a projected reduction of 2.4 million vehicle-miles traveled per day by 2020, as compared to the status-quo baseline scenario. At the same time, average speeds would increase by 12.5 percent, commute times would decline by 5.2 percent, and transit trips would increase by 37.5 percent. These systemic improvements came with a proposed reduction in road spending of approximately \$3.5 billion and an increase in transit spending of \$1.5 billion, for a net savings of

\$2.0 billion. And, over the next 20 years, 171 square miles of land would be saved from development.

Since the *Quality Growth Strategy* was released, a new light-rail system opened in 2000 and was expanded in 2002 and 2003. As a result, the region has already seen a major increase in transit spending. With the support of "Envision Utah" stakeholders, and the overwhelming success of the early phases of the light-rail system, more than 100 miles of major rail and bus rapid-transit projects

are now in the works. In addition, over 200 miles of regional, nonmotorized trails for commuting and recreational use by bicyclists and pedestrians have been planned, substantial portions of which are now in development or have been completed. Even more important, many communities have adopted updated general plans and zoning ordinances that offer more compact development alternatives to support and enhance these transportation systems, and address other health, safety, and quality-of-life issues for area residents.



Salt Lake City residents and business owners created a vision for transforming a poorly designed highway corridor near a new light rail station, into a vibrant and inviting business and residential transit oriented development district.

Photo simulations courtesy Cooper Roberts Simonsen Architecture and © Steve Price



Choices we make about urban design and transportation systems can have far-reaching effects. Salt Lake City's Main Street in the early 20th century is very similar to today's Main Street.

Historic photo © Utah Historical Society; Current photo courtesy Cooper Roberts Simonsen Architecture

A Model for Others

The broad coalition of support for and participation in “Envision Utah”—by businesses, residents, and state and local officials—has significantly and positively affected the approach to transportation planning in this region. This process of integrating transportation and land-use planning through meaningful involvement of stakeholders continues to guide major transportation planning efforts in the Salt Lake region. And the grassroots coalition and public process developed by “Envision Utah” is now being used as a guide for similar regional planning measures in Chicago, Los Angeles, Austin, and other major metropolitan areas. As regions recognize the tremendous need and compelling reasons for a multimodal transportation network of streets, transit, trails, and highways, and utilize a broad coalition of business and political leadership to implement systems that provide balanced transportation options, the mobility needs of all can be met while ensuring the health and well being of communities and regions for generations to come.

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Innovative Efforts to Curb Car Use

By Ellen Vanderslice, AIA

While embarking on long-range planning for regional transportation, civic leaders can also take smaller steps now to help mitigate some of the traffic problems already in their neighborhoods. For example, *car-sharing*—pioneered in Europe in the 1980s—has now become a viable service in nearly two dozen U.S. cities, from Boston to Los Angeles. Car-share vehicles are parked all around a city, and members of the service can rent them for hourly intervals as needed, making a reservation by phone or the Internet. People who join a car-sharing service tend to drive less and use other transportation options more than they did when they owned a car. Car-sharing makes sense: those who use Zipcar, for example, report that they save over \$400 per month when compared to



car ownership and drive approximately 80% less than they did before using car-sharing.

TravelSmart, another program developed in Europe and Australia in the 1980s and 90s, starts with brief telephone surveys to identify people willing to try changing a few trips, and then provides them with information about their particular transportation options. This simple but effective program—now being piloted in several U.S. cities, including Cleveland and Sacramento—has resulted in switching about one out of every seven driver-only car trips to another mode.



AIA's 10 Principles for Livable Communities

1. Design on a Human Scale

Compact, pedestrian-friendly communities allow residents to walk to shops, services, cultural resources, and jobs and can reduce traffic congestion and benefit people's health.



Good sidewalks create an environment where people feel comfortable walking.

2. Provide Choices

People want variety in housing, shopping, recreation, transportation, and employment. Variety creates lively neighborhoods and accommodates residents in different stages of their lives.



Farmers' markets bring a community together, provide healthy food, and support the local economy.

3. Encourage Mixed-Use Development

Integrating different land uses and varied building types creates vibrant, pedestrian-friendly, diverse communities.



First-floor retail and commercial uses, like this restaurant at the base of an office building, contribute to street life.

4. Preserve Urban Centers

Restoring, revitalizing, and infilling urban centers take advantage of existing streets, services, and buildings and avoid the need for new infrastructure. This helps to curb sprawl and promote stability for city neighborhoods.



A former auto shop is converted to a neighborhood supermarket.

5. Vary Transportation Options

Giving people the option of walking, biking, and using public transit, in addition to driving, reduces traffic congestion, protects the environment, and encourages physical activity.



Bike lanes and sidewalks are important elements of transportation infrastructure.

6. Build Vibrant Public Spaces

Citizens need welcoming, well-defined public places to stimulate face-to-face interaction, collectively celebrate and mourn, encourage civic participation, admire public art, and gather for public events.



A small canal flows through the Lurie Garden at Chicago's Millennium Park.

7. Create a Neighborhood Identity

A “sense of place” gives neighborhoods a unique character, enhances the walking environment, and creates pride in the community.



The arch in Washington Square Park in New York City makes this an instantly recognizable place.

8. Protect Environmental Resources

A well-designed balance of nature and development preserves natural systems, protects waterways from pollution, reduces air pollution, and protects property values.



Wetlands help control storm water runoff in Ladera Ranch, California.

9. Conserve Landscapes

Open space, farms, and wildlife habitat are essential for environmental, recreational, and cultural reasons.



The Bay Trail waterfront promenade along Chrissy Field in San Francisco.

10. Design Matters

Design excellence is the foundation of successful and healthy communities.



Frank Gehry's amphitheater at Chicago's Millennium Park.

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