

CHAPTER 11

Planning, Design, and Management Strategies for Livable Places

As the case studies demonstrate, there are many simple and practical planning, design, and management strategies used by communities to enhance their livability. This chapter presents a process for developing these strategies as well as examples of typical projects and programs that can be developed to address a specific need or problem, including the following:

- Ways to identify whether or not a place is successful, using on-site observations and visual clues;
- Different methods for measuring and systematically identifying these problems;
- A summary of model design, management, and transit-related approaches that can be tried; and
- References to relevant case studies from this report.

This checklist is not intended to be all-encompassing, but rather to serve as a starting point for a community-based planning process. It can be used by professionals and lay people alike; professional planners may find it especially useful in developing more detailed plans and design proposals.

ABOUT PLACE PERFORMANCE EVALUATION

People often ask, “How can we avoid repeating past mistakes and build transit facilities that contribute rather than detract from the livability of our communities?” This section describes one method: “Place Performance Evaluation” (PPE). PPE is a series of tools that professionals and community members can use to measure the overall performance of an existing place (e.g., a bus stop, a train station waiting room, or the site of a future bus transfer center) using specific “livability” criteria.

Evaluation of the issues particular to a place can be undertaken through a variety of techniques. These include systematically observing and recording activities at relevant locations, conducting special interviews with community members to elicit ideas and opinions, distributing community surveys to gather input on a variety of issues, and, in some cases, taking time-lapse film and still photographs to illustrate issues of concern. When communities actually take part in collecting data, there often is a significant increase in the quality of information collected and the level of involvement in project implementation. Users of a place have a great deal of valuable personal experience and knowledge, even though they may never have observed or thought about how others use it. [1]

Evaluation tools include the following.

Systematic Observations. Observation is the best way to learn how a place is used, whether the place is a small neighborhood bus stop or a train station used by thousands of people each day. However, transit planners often focus on operational efficiency—for which there is generally much data—without examining how transit facilities are actually being used. The result is that issues of operational efficiency instead of issues of customer comfort and use become the primary criteria used in transit planning.

Systematic observation techniques are simply tools that help focus casual observations and help document issues or problems that might be overlooked. These techniques also enable an observer to quantify what would otherwise be regarded as intuition or opinion, contributing to a better understanding of the full extent or severity of a particular problem. Observation techniques include behavior mapping, where an observer records the location and type of activities taking place as well as information about

users at regular intervals throughout the day and over a period of time, pedestrian counts of major routes and “tracking” routes or paths taken by users through a space. Time-lapse filming is a more sophisticated tool that can be used to collect this type of information, which also has the advantage of being an effective means of presenting results.

In general, observation techniques help to define, in real terms, how transit can contribute to the livability of a community. For example, when judging the performance of a specific bus stop, or making sure that it is situated in the proper and most convenient location for current and future riders, one would be able to answer questions such as the following:

- How easy is it to get to and from the bus stop to the surrounding neighborhood?;
- Are there places to sit in the shade if it is a hot climate; does it look inviting and attractive; are people waiting comfortably?;
- Is the area “busy”—with activity either at or around the stop or in areas near to the transit stop?; and
- Do people speak to each other or interact with each other; do they seem to know each other or recognize friends?

Surveys and Interviews. In addition to observing how a place is being used, understanding people’s perceptions is also important, particularly the perception of people who do not use a place. The main objective in measuring people’s perceptions should be to find out what people like and dislike about a place and how they think it could be improved. Qualities such as cleanliness, safety, and availability of amenities such as food, newspapers, and restrooms can be rated by transit users if they are asked about a specific place with which they are familiar. These questions should also be posed to area businesses and other adjacent uses, as well as to people living and working in the immediate vicinity.

For the non-users of a place, the questions must be different and should address why they do not use a place and what, if anything, could be done to encourage them to use it. A similar approach is used if a place does not yet exist, such as a new transit facility. Surveying non-users is in many ways more complex than observing or surveying an existing place. However, with today’s computer technology, it is not difficult to conduct mail or telephone surveys and tabulate the results.

Finally, interviews should also be conducted with key individuals and representatives of organizations who could play a role in implementing a project or

program. These interviews are especially important as the first step toward building effective, ongoing partnerships.

Focus Groups. In many situations, small focus group sessions or informal discussions with targeted audiences (such as seniors, students, merchants, or a combination of groups) can be especially useful in the early, exploratory stages of a project before detailed observations and surveys are undertaken. Through these open, informal discussions, which can be guided by the same questions that are used for a survey, people talk and share their ideas about existing projects and programs with others. This invariably leads to numerous creative ideas for improvements that people and organizations can cooperatively undertake.

Community Workshops. Large community meetings are also useful, when properly managed, not only to involve people, hear what they have to say and resolve conflicts, but to challenge people to raise their expectations. To elicit the creativity of the community, to stretch perspectives and encourage bolder thinking, examples from other cities should be sought to demonstrate possibilities that stir people’s imaginations. These examples can also stimulate thought and discussion about additional issues and potential solutions that can be put into action, which is usually most effectively accomplished in smaller focus groups. These groups can then report their findings to the larger reassembled workshop.

DEVELOPING THE VISION

Qualitative and quantitative information about the use of places that is gained from observations, meetings, and surveys can then be combined with information about demographics, transit ridership, and market research information. Together, all this information provides a picture of the broad range of issues that need to be addressed in planning a transit facility or service so that it contributes to the livability of the community that surrounds it. Some of the issues will directly impact transit, while others will not. An understanding and commitment to dealing with both transit and community issues provides an opportunity to develop important working relationships with community organizations, many of which may not have worked with a transit agency before. The result of this process is a vision: ideas for the program, goals of the community, and organizations or individual partners who should be kept informed and involved, very often through some kind of task force or working group, and the “tasks” to be accomplished.

**LIVABLE PLACES:
A CONCEPTUAL MODEL**

Based on its own research as well as quality of life research, Project for Public Spaces, Inc., has developed a simple graphic that describes a model for evaluating the attributes of livable places. These attributes reflect the common issues that people tend to identify when they talk about livability in their communities, and include tangible, statistical aspects as well as the intangible qualities that people feel toward a place or a neighborhood. These attributes, which are presented in Figure 11-1, fall into two categories:

- *Key Attributes* of places are the components which, based on livability research, are essential ingredients of a place: uses and activities, comfort and image, access and linkages, and sociability. These general criteria arise again and again when people talk about the problems and needs of their communities.
- When people describe their communities, they use words like “safe,” “fun,” “charming,” and

“welcoming.” These words describe the *Intangible Qualities* of communities that relate to specific types of attributes.

An important consideration in developing this model was not making value judgments as to the relative importance of different attributes to different communities. Rather, it is up to each community to choose its own priorities. Different socioeconomic situations, living conditions, and political context make each community unique. A community is also in the position to determine the scale of improvement, that is, whether a project or program should be initiated at a “place” versus in a larger neighborhood context.

This model can be extended to include other issues. For example, one of the challenges in creating livable places is the general lack of communication between different city agencies, professions, and interest groups responsible for a place. This model helps to identify groups (chambers of commerce, block associations, and so on) associated with specific attributes that could be approached to participate in a project.



Figure 11-1. This diagram depicts the principal attributes people want in their communities. (Diagram by Project for Public Spaces, Inc.)

STRATEGIES FOR CREATING LIVABLE PLACES

Each of the following sections presents a different attribute from Figure 11-1.

Uses and Activities

“Uses and Activities” are the basic building blocks of any place: they include all the reasons why people come to an area. The types of land uses or activities help determine what makes a place in a community special or unique. Uses and activities do not necessarily have to be inside a structure; public spaces, too, can accommodate a variety of activities.

Very often, transit uses and functions operate separately from other community activities. For example, many bus transfer terminals located in isolated areas have no other use than providing access to other buses. In this situation, where there is little or no other activity taking place, it is less likely that transit is a factor in enhancing livability, other than providing mobility. However, if the bus terminal is more centrally located, and there is a place where one can buy a newspaper, get a snack, visit a farmer’s market, or window shop, then the transit use will be contributing to the overall activity and livability of that area.

Visible Signs of Success

- Many different types of activities are occurring.
- Many different kinds of people and different age groups are using a place (children, elderly, families).
- Activities are not necessarily related to a specific facility or a planned event.
- There are several “choices” of things to do, and it is easy to go from one choice to another.

. . . of Problems

- Spaces are empty of people for all or part of the day.
- Security problems are evident (broken windows, graffiti, vandalism).
- Buildings are vacant or underutilized.
- Uses are isolated from each other or cannot be seen.
- Spaces are too small and congested for the number of transit riders present.

Ways of Measuring

- Record the number and type of activities at different times of the day and of the week.
- Survey the community or space users about their perceptions of current uses and activities and what they would like to see there in the future.
- Inventory existing land-use patterns to determine what activities are present or missing.

Approaches to Design

- Create a public space that can be programmed for a variety of uses.
- Provide amenities that support desired activities.
- Provide specific uses and activities in adjacent or nearby structures.

. . . for Management

- Program community events and activities, such as markets and local festivals.
- Develop strategies to lease empty buildings to help revitalize an area.

. . . for Transit

- Make a transit stop the central feature of a place.
- Develop easy transfers between buses or modes of transportation.
- Provide amenities for transit patrons.
- Provide information about attractions in the area.
- Designate a liaison from a transit agency to coordinate with users in the area.
- Train on-site transit personnel (such as ticket agents) to provide information about uses and activities in the areas adjacent to a facility.

Selected Case Study References

- *Green Line Initiative, Chicago*
- *Pioneer Courthouse Square, Portland, Oregon*
- *Woodbridge Station, New Jersey*
- *KidStop, Shady Grove Metro Station, Maryland*
- *Davis Square, Somerville, Massachusetts*
- *Downtown Crossing, Boston, Massachusetts*

Comfort and Image

“Comfort and Image” reflect the subjective experiences of people as they use a place. Issues like safety and cleanliness are often uppermost in people’s minds. Other issues are less consciously acknowledged,

although people are absorbing tremendous amounts of “data” being projected by the environment: scale, character of buildings, sense of safety, and “charm.” People become aware of other specific aspects, however, like the need for a bench when they want to sit down.

Transit patrons are concerned about comfort and image during their entire experience: from the time they enter a station and board a vehicle until they reach their final destination. For this reason, issues of security and cleanliness to a community also affect transit riders. How a transit agency manages its facilities affects a broader area. In the same way, transit facilities can increase comfort in an area; for example, benches used by bus riders can also be used by shoppers if they are in a location convenient for both. Or, an attractive, pleasantly scaled transit facility can contribute to the attractiveness of a whole area.

Visible Signs . . .

. . . of Success

- Spaces are clean and free of litter.
- Seating is located near other activities.
- Users have a choice of places to sit or use, either in the sun or shade; appropriate weather protection is also offered.
- Antisocial activities are not able to dominate use of a space.
- Someone seems to be in charge.

. . . of Problems

- Few places exist for people to sit.
- The environment generally appears unattractive or unsafe.
- Buildings or spaces lack human scale.
- Litter and other signs of lack of maintenance are evident.
- Poor environmental (air, water, etc.) quality exists.
- No one is obviously in charge.
- There is a lack of weather protection.

Ways of Measuring

- Review actual crime statistics and complaints.
- Survey people’s perception of an area (safety, attractiveness, and cleanliness).
- Analyze actual use of amenities such as seating.

Approaches . . .

. . . to Design

- Upgrade the physical appearance of a place with improved materials.

- Add public amenities (seating, telephone, and waste receptacles).
- Provide information (for transit facility and surrounding area).
- Create community-oriented public art.
- Restore or renovate existing buildings.
- Add trees and landscaping.

. . . to Management

- Provide special security programs, such as community policing.
- Increase security presence through uses and activities, or by having someone in charge of the area.
- Upgrade maintenance, including both daily cleaning as well as preventive maintenance of physical facilities.

. . . for Transit

- Ensure customer-friendly operations on and off transit vehicles.
- Initiate special security services for transit riders.
- Establish cooperative efforts with local communities and police.
- Reorganize organizational structure to create station and transit terminal managers.

Selected Case Study References

- *Tohono Tadaí Transit Center, Tucson, Arizona*
- *Station Managers Program, New York City*
- *Port Authority Bus Terminal, New York City*
- *Los Angeles Neighborhood Initiative, Los Angeles, California*
- *Rider Advocate Program, Portland, Oregon*

Access and Linkages

Transportation “access and linkages” are ways to connect places in communities. A successful neighborhood allows access to and linkages between places: a variety of options for people to get from one place to another (that is by walking, transit, bike, or car). Or, said another way, a successful place has a variety of ways to get to it (not just by car).

Access and linkages also refer to how well a specific place, like a transit facility, connects to the immediate area around it, and the ability of people to circulate within that place and to reach different uses. There is a qualitative component to access as well: access is affected by other factors, including physical

elements (a continuous row of stores along a street is more interesting and generally safer to walk along than a blank wall or empty lot) as well as perceptual (ability of people to see a transit stop from a distance).

Visible Signs of Success

- People can easily walk to the place; they are not darting between moving cars to get to the bus stop.
- The interior of the place or transit stop is visible from the outside.
- Sidewalks lead to and from adjacent areas, allowing for convenient pedestrian access.
- Occupants of adjacent buildings use the place.
- Continuity of street-level for uses makes for a pleasant walking environment.
- A variety of transportation options provide access (transit, car, and bicycle).

. . . of Problems

- Traffic is congested or fast-moving, acting as a barrier to pedestrians crossing the street.
- Bicycles are infrequently used as a way of access.
- People are walking in the street or along areas not paved as sidewalks.
- Pedestrian-oriented uses (such as storefronts) are discontinuous, creating an unpleasant walking environment.
- There is insufficient parking.

Ways of Measuring

- Conduct observations, counts, and tracking of pedestrian circulation within and around a place.
- Record the location and finish treatment of sidewalks and number of curb cuts to determine suitability for walking.
- Map the area (to determine which uses generate pedestrian activity).
- Survey pedestrians to determine attitudes and patterns.
- Survey the broader community to determine how and why different modes of transportation are used.
- Conduct parking turnover studies to determine efficiency of use.
- Conduct traffic studies to determine level of use during the day and, the week, as well as occupancy of vehicles.

Approaches to Design

- Widen sidewalk or provide sidewalk extensions at crosswalks, better balancing pedestrian uses with other uses of street (vehicles, transit vehicles, bicycles, and deliveries).
- Construct more clearly marked or more conveniently located crosswalks.
- Make accommodations for bicycle users (bike lanes, lockers, and storage racks).
- Infill vacant lots with structures and uses to create continuity of pedestrian experience.
- Balance on-street parking with other uses.

. . . to Management

- Change traffic signalization or street utilization to improve pedestrian access.
- Improve utilization of parking through changes in enforcement or regulation.

. . . for Transit

- Establish neighborhood shuttle or circulator vehicles.
- Adjust or expand route locations and schedules.
- Create intermodal centers, allowing transfers between transportation modes.
- Establish services for special users (children, teenagers, and the elderly).

Selected Case Studies

- *Pioneer Courthouse Square, Portland, Oregon*
- *Davis Square, Somerville, Massachusetts*
- *Wellston Station, St. Louis, Missouri*
- *Aspen City Shuttles, Aspen, Colorado*
- *Watts Shuttle, Los Angeles, California*
- *GO Boulder, Boulder, Colorado*
- *LINC, Seattle, Washington*
- *Staples Street Station, Corpus Christi, Texas*

Sociability

Because neighborhoods are social places, the attribute of “sociability” is a crucial component of any good community place. When people meet friends, see and greet their neighbors or even feel comfortable interacting with strangers, they tend to feel a stronger sense of place or sense of attachment to their community.

This is generally a difficult quality to achieve around transit facilities, because the type of activity (waiting

USES AND ACTIVITIES

- 1 - Transit is a key use!
- 2 - Plaza becomes opportunity for new small businesses using kiosks and vending carts.
- 3 - Adjacent businesses benefit from spinoff activities.

COMFORT AND IMAGE

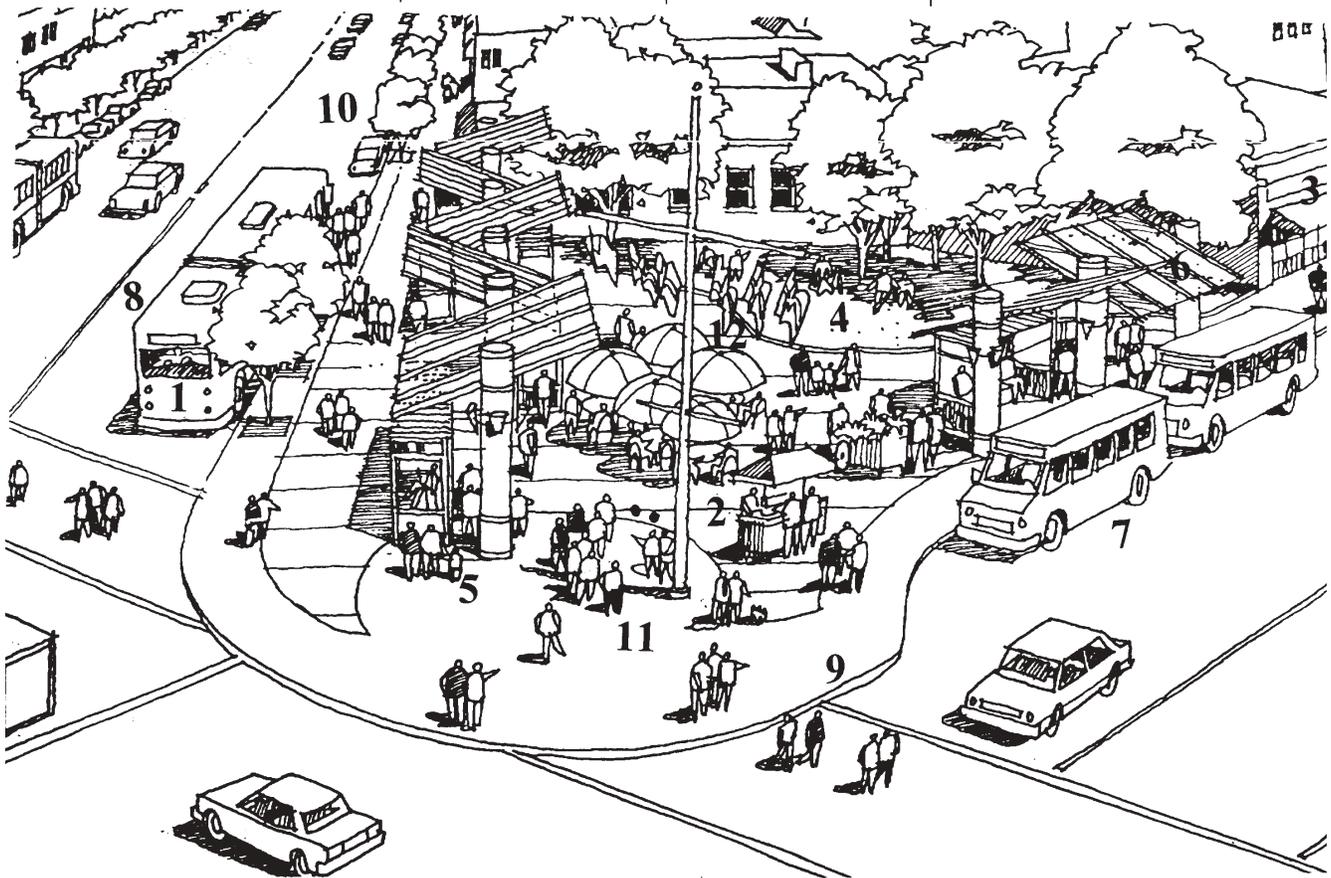
- 4 - Plaza provides variety of places to sit and attractive landscaping.
- 5 - Information kiosk about local services and transit.
- 6 - Shelters provided by transit riders, who can also wait in the plaza.

ACCESS AND LINKAGES

- 7 - Community vans connect to variety of local destinations.
- 8 - Regional buses connect to other communities.
- 9 - Sidewalks widened to improve pedestrian access.
- 10 - Streetscape amenities improve connection to adjacent retail area.

SOCIABILITY

- 11 - Plaza provides setting for a variety of community events.
- 12 - With combination of transit and retail activities, plaza and cafe becomes a social gathering place.



Figures 11-2 and 11-3. Proposed LINC Neighborhood Transit Center (Figure 11-2) and proposed development near a historic station in San Bernardino, CA (Figure 11-3) illustrate place-making principles. (Credit: Project for Public Spaces, Inc.)

USES AND ACTIVITIES

1 - Historic train station renovated for commuter rail & Amtrak.

2 - Existing shopping center redesigned to create new space for local businesses.

COMFORT AND IMAGE

3 - New community plaza created with variety of amenities.

4 - Retail business and direct visual access help improve security.

5 - New trees and landscaping make area more attractive.

ACCESS AND LINKAGES

6 - Station re-opened for new commuter rail.

7 - New bus stop connects to downtown.

8 - New grand stair connects plaza and retail center.

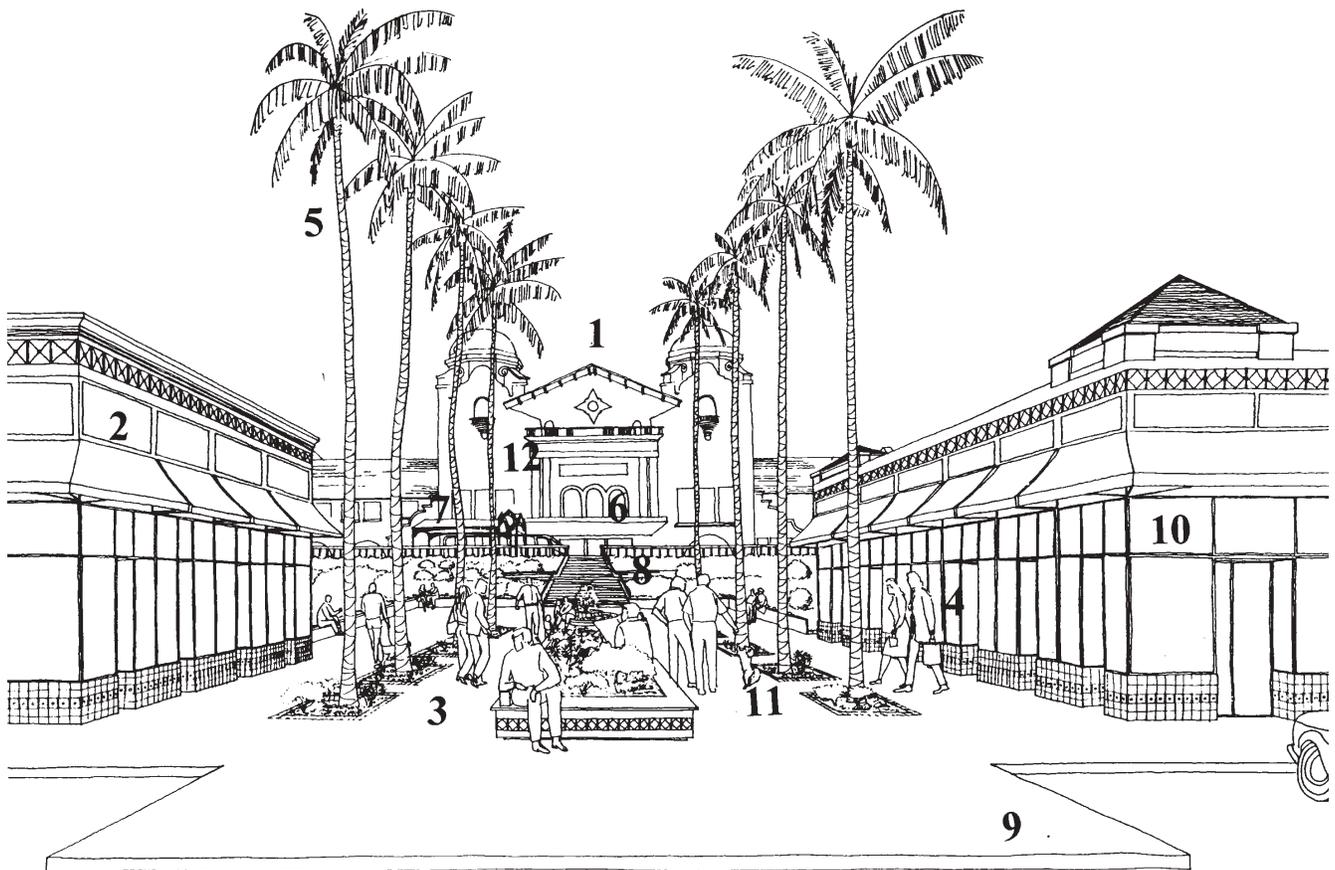
9 - Pedestrian improvements to parking lot improve access.

SOCIABILITY

10 - New community center/catering hall created.

11 - Plaza provides space for small events.

12 - Grand station lobby becomes space for community activities.



Figures 11-2 and 11-3. (continued)

for a bus or train) is not often a social experience; in addition, the vehicles themselves can create barriers to the sociable use of a space, through noise, fumes, and so forth. However, successful transit stops that integrate other uses and activities help to create an environment where socializing can naturally take place.

Visible Signs of Success

- People use the place (or facility) regularly by choice.
- Users know each other by face or by name.
- “Triangulation” occurs (an event occurs causing strangers to talk to each other).
- People bring their friends and relatives to see the place or they point to one of the elements with pride.
- People are taking pictures; many photo opportunities are available.
- Strangers make eye contact; people smile and display affection.
- There is a mix of ages and ethnic groups that generally reflects the community at large.
- People tend to run into someone they know.
- People tend to pick up litter when they see it.

. . . of Problems

- People do not interact with other users of the place.
- There is a lack of diversity of people using a place.

Ways of Measuring

- Record people’s use and behavior at different times of the day, week, and year.
- Record the location of activities.
- Survey people about perceptions of a place.
- Identify the number of people who volunteer to help or just assume responsibility for a particular area.

Approaches to Design

- Develop public gathering places to accommodate a variety of community activities.

- Arrange amenities to encourage social interaction (groupings of seating, moveable seating, etc.).
- Provide a variety of uses in adjacent buildings to attract a diversity of people.

. . . to Management

- Stage special events and activities to draw people.
- Encourage community volunteers to assist with improvements or maintenance of a place.

. . . for Transit

- Integrate transit stations into spaces where socializing and community activities take place.
- Design facilities so that there is room for social activities to occur.

Selected Case Study References

- *Pioneer Courthouse Square, Portland, Oregon*
- *Downtown Crossing, Boston, Massachusetts*
- *Davis Square, Somerville, Massachusetts*
- *South Station, Boston, Massachusetts*
- *Staples Street Station, Corpus Christi*

PUTTING IT ALL TOGETHER

To create livable places in communities requires that many physical aspects of place be orchestrated at the same time as the planning process described in Chapter 10, which, as has been seen, is equally important to the final results. Each of the case studies has “put it all together” in different ways. The two examples shown here apply place-making strategies to two very different communities: LINC in Seattle (see Case Study 9-2) and a historic train station in San Bernardino.

ENDNOTE

1. Two publications by Project for Public Spaces are especially useful in understanding and applying different observation and survey techniques. They are *What Do People Do Downtown* and *User Analysis for Park Planning and Design*. Both are available for purchase through PPS at 153 Waverly Place, New York, NY 10014.

CHAPTER 12

Conclusions and Next Steps

Historically, transit has played a crucial role in advancing the livability of American communities. For nearly a century, until the late 1950s and early 1960s, transit was a potent force in spurring the development of communities and shaping community life, as well as providing the connections within communities that brought people together. Increased emphasis on automobile travel changed this situation. However, as the case studies show, transit is once more fostering communities where people can come together in a hospitable and livable environment.

History, however, is not exactly repeating itself. The old horse-drawn and electric trolley cars of the past now have a modern, more comfortable counterpart in light rail. Technology is not the only thing that has changed. Communities today face new challenges, conditions, and needs. As the programs presented demonstrate, innovative approaches can knit together communities and restore their livability—when they are designed in response to local needs through a partnership process that links transit agencies with the communities they serve.

Recent changes in federal transportation planning processes are very supportive of this new partnership role. While obstacles remain, all of the initiatives presented were able to overcome these obstacles to achieve improvements in transit and community livability that, in many cases, exceeded expectations.

The chapters—each presenting different livability themes—offer evidence of the potential for this approach to enhance many different facets of community life. They show the powerful role that transit can play in the creation of livable communities by doing the following:

Creating Places for Community Life. Livable communities are communities where people socialize and come together, which reinforce a sense of common purpose and establish centers for public life. Transit facilities are themselves activity focal points. The tran-

sition from transit stop to public space involves linking together activities that already take place or could take place in most communities.

Acting as a Catalyst for Downtown and Neighborhood Renewal. Livable communities are communities that have accessible and convenient commercial centers that support a community economically and socially. Commercial districts in downtowns and neighborhoods have traditionally been among the most important destinations for transit services. It is not a coincidence that the economic decline of these districts has been mirrored in the decrease in transit ridership across the United States. At the same time, transit facilities—whether they are simple bus stops or major stations—can act as “ground zero” for the rebirth and revitalization of downtowns and neighborhoods.

Creating Opportunity for Entrepreneurship and Economic Development. Livable communities are communities that offer economic opportunity to all citizens. Transit brings the foot traffic necessary to support small businesses and provides access to jobs. In today’s society dominated by retail chains in far flung suburban locations, support for small, independently owned businesses and entrepreneurs is essential for the long-term economic growth of most communities.

Improving Safety and Amenity. Livable communities are communities where people no longer fear for their personal safety and feel comfortable in a public environment. With the loss of places where people feel comfortable has come the perception by many that transit facilities are places to fear and avoid, even though statistically they are usually safe and virtually free of crime. As a perceptual problem, the solution to crime cannot be separated from other livability issues and, in particular, from the need to create an en-

vironment where people feel comfortable and safe. Making transit facilities an asset and an amenity is an important step in improving safety.

Making Communities Accessible and Convenient.

Livable communities are communities where people have a variety of transportation alternatives. The basic mobility function of transit is, indeed, integral to the livability of a community. Special services and approaches are emerging to enable transit to serve a community more effectively and efficiently, while encouraging new land-use policies that center around transit as a fundamental choice.

Shaping Community Growth. Livable communities are communities where growth enhances community life, not destroys it. Mismanaged growth erodes all aspects of a community: its accessibility and convenience, its centers of public life, its sense of safety and amenity. Transit can act as a focal point for reorganizing urban growth and creating mixed-use centers. It can also be an essential component of new land-use policies that set the stage for future, more livable places for people to live and work.

This report presents a compelling picture of what has been accomplished across the United States. It reveals the common threads that can link these separate themes into a more holistic vision of transit's role in enhancing community livability. The case studies and examples are presented in order to stimulate other communities throughout the United States to undertake similar innovative transit programs to address their own particular livability needs. At the same time, the work in the communities that the case studies have presented is by no means finished. Most of the projects presented, exemplary as they are, could be improved or built upon to generate even greater community im-



Figure 12-1. The Big Blue Bus, Santa Monica, CA, circa 1955. (Credit: The Big Blue Bus)

provement—whether it be minor design modifications or a major new development.

What must be done now is to raise widespread awareness of the viability of these programs as springboards for rekindling the kinds of comfort, activity, and convenience that enhance community life. The programs described herein can act as a beacon for future initiatives, along with other livability-oriented transit programs taking place that still need to be investigated. In addition, other, untried transit innovations must be applied, tested, and evaluated, and those already in place have to be tried in other settings and situations.

Clearly, what is needed is a broad campaign to advance such efforts and integrate the community partnership approach into the way transit agencies plan, design, and build transit. In fact, this approach needs to be applied to transportation planning in general. It is hoped that communities and transit agencies alike will find this report a useful tool in this vital effort.

APPENDIX A

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- TCRP Project B-10: Role of Passenger Amenities and Transit Vehicle Characteristics in Building Ridership*.
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TCRP Project H-4A: Strategies for Influencing Choice of Urban Travel Mode.

TCRP Project H-4B: Transit Markets of the Future—The Challenge of Change.

TCRP Project H-4E: Sustainable Transportation.

TCRP Project H-8: Using Public Transportation to Reduce the Economic, Social, and Human Costs of Personal Immobility.

TCRP Project H-10: The Costs of Sprawl—Revisited.

APPENDIX B

A Review of Livability Research

From the research conducted for this study, there seem to be three different schools of thought on quality-of-life research, research that actually reflects the approaches of different disciplines (economists, sociologists, and geographers) who have conducted the research.

THE STATISTICAL APPROACH

One school of thought states that quality of life can be measured statistically through variables available from census data, climate information, economic measurements, demographics, and other government statistics. For example, one team of economists developed a sophisticated model using census data on climate, environmental, and urban conditions to rate 253 urban counties. Their highest ranked: Pueblo, Colorado; Norfolk, Virginia; and Denver-Boulder, Colorado. Their lowest ranked: Birmingham, Alabama; Milwaukee, Wisconsin; and St. Louis, Missouri. [1]

Many popular publications have taken this same approach to quality of life: rating and comparing hundreds of towns and cities across the United States. With names like *Places Rated Almanac: Your Guide to Finding the Best Places to Live in America*, these books appeal to Americans looking for that greener grass or corporations thinking about relocating to a more “livable city.” Unfortunately, comparisons between cities are based solely on the variables an author selects, which are subjectively weighed relative to other factors. Even with more sophisticated models, the results of such approaches are questionable, because the statistics selected for analysis ultimately pre-determine the outcome.

Not surprisingly, different authors have come up with radically different ratings for the same cities. “Comparing the rankings of some cities in *Places Rated* with those in the *National Metropolitan Area Study* is like comparing dirt to diamonds: The ranking

for Midland, Texas shot up from 258 in *Places Rated* to 1 in the new survey. Rochester, Minnesota, jumped from 200 to 7 overall. These results are so encouraging that the city plans to incorporate them in a marketing program for the area . . .” [2]

Of course, the volatility of these factors should warrant suspicion about their value—although people in communities (especially those given low marks) take them quite seriously. The authors of *Places Rated* report, “We get a lot of mail about our book. Some of it ticking.” [3]

This outpouring of community pride, whether the city is rated high or low, shows that there is a great deal more to livability than a collection of statistics, and that community perceptions need also to be considered. For example, in the 1987 *Places Rated*, Austin was given a very low rating for climate; however, surveys of residents of Austin show that people do not dislike their climate. [4] In addition, as one author pointed out about these rating systems, “Is climate more or less important than the number of jobs, the employment level, in the community? In practice, researchers usually give each factor the same weight. This is the most unrealistic but most convenient thing to do. These factors are not equally important in the mind of the individual.” [5]

THE PERCEPTUAL APPROACH

The realization that quality of life can vary according to “the mind of the individual” has led to the next most common approach to studying community livability: surveys that ask people to actually rate quality of life in their own city or region. As one analyst pointed out, these surveys are more useful because “Quality of life means different things to different people . . . (It) is in the eye of the beholder.” [6] Surveys of this type have been done in hundreds of communities, as well as on a national level. In a cross section of

Americans asked to define quality of life, in fact, the main response was “getting good things, living well, and enjoying peace, security, and happiness.” [7]

While it is hard to argue with these principles, city-specific surveys are more useful because they can form a basis for understanding how people rank different factors about livability. For example, in a study by Donald Appleyard, San Francisco residents were asked to state what was most important to them when choosing a street to live on. “The two most dominant concerns were “cleanliness” (86%) and “crime” (86%). . . . (The extremely high emphasis on “cleanliness” and “appearance” was further confirmed by widespread mention of “neighbors keeping up property” (78%), “attractive appearance” (74%) and “greenery” (71%). . . . It was much higher than mention of social or economic qualities. Access to public transport (79%) was the third most common priority. This was considered substantially more important than other aspects of access. Of these others, “good walking conditions” was followed by “access to shops” and “parks.” Access to parks, sixteenth on the list, was very much lower than expected. . . . Of the traffic-related emissions, “minimal air pollution” (75%) was the fourth priority overall, while “peace and quiet” was the tenth, followed by “safety from traffic.” [8]

“What people want from a residential and street environment,” Appleyard concludes, “may be security, peace and quiet, comfort, cleanliness, attractive appearance, privacy, territorial control, convenience, good parking, street life, neighborliness, or other amenities. Expectations can significantly affect perceptions and satisfaction. . . . The more affluent are likely to be more critical of their streets because they know of other choices, whereas lower-income groups may be satisfied with what they have.” [9]

In a larger survey of New York State residents, people were asked to rank the importance of different factors in helping a person decide where to live. [10] “Not surprisingly, the sample of New Yorkers chose economics as the most significant feature of the place they would like to live, followed by climate, crime, housing, education, health care and environment, recreation, transportation, and finally, the arts.” [11]

Surveys of community perception of livability have been compiled into a unique publication that compares 261 separate surveys that evaluated both local government services and quality of community life throughout the United States. Published by the International City Managers Association, this book, *Citizens Surveys: How to Do Them, How to Use Them, What They Mean*, by Thomas Miller and Michele Miller, standardizes the results of these surveys so that future studies would have a benchmark for comparison. [12]

Miller and Miller asked what distinguishes a community whose residents gave high marks to quality of life in the community. What they found is that “The community where quality of life is more likely to be rated high is the one that has outcommuters (is a suburb), has between 10,000 and 250,000 residents, has lower crime rates, has residents with higher incomes and more education, and provides good services as evaluated by the residents themselves. Almost half of the variation in ratings of community quality can be explained by a community’s size, perceived level of local government service, wealth, and proximity to a metro employment center.” [13] However, Miller and Miller could not find a correlation between general perceptions of quality of life in a community and the rankings of specific city services.

From the 261 surveys, Miller and Miller developed what they call “percent to maximum” norms for different categories of quality of life. In other words, they adjusted the findings of different surveys (which used different types of rankings), so that results could be compared. A city conducting a new survey can therefore see how it compares with other cities asking the same question. A few examples follow:

Quality of City	76.8 PTM*
Parks	72.3
Police	71.8
Education/Schools	69.4
Safe Community	68.1
Transit/Bus System	61.9
Planning	57.5
Traffic and Light Timing	55.9
Shopping Opportunity	54.8

*Percent to maximum

The overall evaluation of community services showed that the average rating was 67.2. It is important to note that transit/bus systems are typically rated significantly lower by residents than other services, such as parks, police, and schools (perhaps because so few people across the United States use transit on a regular basis).

One of the conclusions that one can draw from this work is that, as one reviewer noted, “Most people tend to like what they have and the places in which they live, wherever they live. Most Americans think that the quality of life which they enjoy is better than that of other people living in other parts of the country.” [14]

A 1995 “Quality-of-Life Poll” conducted by the Regional Plan Association and the Quinnipiac College Polling Institute compared quality of life issues in the New York City region with Atlanta, Dallas-Fort Worth, Seattle, and Los Angeles. It is interesting to note that there is virtually no difference in opinion

between the five cities about the “very important issues” to quality of life. A minimum of 80% of those surveyed in all the cities said these issues were clean air and water, safe streets, race relations, and quality public schools. A minimum of 50% (and usually at least 60%) said greenery and open space, sense of community, uncongested roads and highways, and low state and local taxes.

Perhaps more revealing, however, was the response to a question about the “one or two things you like about your local community.” In all five cities—a minimum of 45% responded, “a strong community”; 20–30% responded, “access or convenience”; and less than 15% said, “low crime,” “environment,” or “recreation or culture.” Indeed, this strong appreciation about “sense of community” as well as “access and convenience” is one that can provide support for new thinking about how transit initiatives need to be more closely allied with efforts that build a “sense of community.” [15]

Despite their value, surveys of quality of life have their limitations. The way that quality-of-life questions are asked will determine the type of response. Many quality-of-life surveys, for example, focus more on “personal well-being”: family life, job satisfaction, salary, recreational opportunities, etc. They do not ask about “shared community factors. . . . which are drowned out” by a focus on people’s personal lives. For example, one survey in Austin that asked about “your quality-of-life” and another one that asked about “Austin’s quality-of-life” yielded significantly different results. In the personal well-being survey, quality-of-life satisfaction was increasing; in the city survey, it was declining. [16]

Another limitation: quality of life measured at the citywide scale will not reflect variations within one city. What is valued in one neighborhood may not be of importance in another. Indeed, people often feel more positive about their own neighborhood than about the city as a whole.

For example, in New York City, the Commonwealth Foundation asked a random sampling of New Yorkers about their perceptions on “quality of life” in New York (this predates the Regional Plan survey mentioned above). The survey evaluated the city on scores of issues ranging from safety, to air quality, to appearance, to general subjects like “as a place to raise a family.” While it may not come as a great shock to most non-New Yorkers, perceptions about the city were extremely negative. Two-thirds rated New York City as “negative” as a place to live, and only one-third said “positive.” Other negative factors were extremely high: safety on the street (88% negative), cost and quality of housing (85%), street cleaning and garbage collection (67%), and so on.

Only 21% were “positive” about New York City as a place to raise a family. [17]

What is interesting, however, is the difference in these perceptions compared with surveys PPS has conducted in individual New York City neighborhoods. For example, in a survey conducted in 1991 of residents of the Sutton area, located on the Upper East Side of Manhattan, only 17% rated safety and security as the most important neighborhood improvement and 6% rated cleanliness and garbage collection as the most important. Most people felt safe both during the day (96%) and in the evening (67%). [18] While the Sutton area is regarded as one of the most desirable neighborhoods in the city, the difference between the surveys cannot be explained simply by demographics or location. Indeed, the issue is that people feel more positive about the place that they know and are familiar with than with the city as a whole.

This is borne out in the responses to many other PPS surveys, which show that people generally feel safe in places they use. For example, in Belmont Shores, California, 79.1% of residents considered their shopping district safe during the day, and 52.1% felt it was safe during the evening. 67.9% of Brooklyn Heights residents felt that safety on Montague Street was good during the day, 25.7% felt it was fair, and 80.5% thought it was good or fair in the evening. In Hoboken, New Jersey, 80% deemed downtown safety good or excellent in the day, while 67% felt the same about safety at night. In Springfield, Massachusetts, 53.5% of surveyed pedestrians gave safety during the day a “good” rating, 36.8% said it was fair, and 60.3% said evening safety was good or fair. [19]

Perceptions of quality of life are clearly not fixed, and can almost be viewed as a kind of “moving target.” “For example,” one researcher writes, “an easy commute to work and easy access to the workplace can change as growth brings the traffic congestion they tried to escape five years ago.” [20]

Finally, quality-of-life surveys may not adequately account for why people feel as they do. Factors influencing livability are often at a very small scale, and people may not be conscious of how these almost trivial aspects of their daily lives influence them—especially if the livability survey focuses on broad issues at the citywide scale. In his introduction to a series of papers published in *The City Journal* about Quality of Life in New York City, noted urban analyst Roger Starr writes:

Cities should be comfortable places. People should be able to expect good things from the cities where they live, trivial as well as major things: a cheerful wave from a neighbor, the replacement of their garbage can covers by the refuse collectors, a prompt and pleasant ride—perhaps even a seat—on the bus or subway, a

good education for their children, an unbroken lock on their front door. All of these simple hopes combine a major expectation: that life will be increasingly fruitful in the future because its essence, the quality of life, will continue to improve.

In an uncomfortable city, by contrast, people expect bad things to happen: to find trash deposited on the sidewalk in front of their homes, to be subjected to the verbal assault of a mugger, to discover that their car stereo has been stolen, to face constant reminders of poverty and depression. All too often, this is the image people have of New York today.

The term "quality of life" has come into common use as the impression continues to spread that in big cities, and perhaps above all in New York, the specific circumstances the term comprises are in fact getting worse not better. A deterioration in the quality of life affects people in subtle ways. One may fear auto theft because one's best friend's car has been stolen—or because the garbage collector has made a mess of the sidewalk in front of one's home. If the city doesn't care about one aspect of its citizens' lives, they infer, it probably doesn't care about others. Thus, poor garbage collection implies careless policing, inadequate schooling suggests the deterioration of the city's infrastructure, official tolerance of aggressive panhandling hints that citizens are vulnerable to theft or violence.

In an almost subliminal way, urban residents sense the connection between signs of deterioration they glimpse around them and the potential for other kinds of harm. . . . Understanding precisely what causes the public to perceive such decay is essential if the government and other organizations are to establish rational priorities for making the city more comfortable. [21]

PLACE-BASED APPROACH

Although people's perceptions about quality of life enhance understanding of the purely statistical approach, geographers and many urban experts alike argue that there is still something missing: an approach to defining quality of life and livability that includes people's often deep attachment to the places where they live and work. This spotlight on "place" and desire for "strong community" adds another dimension to understanding quality of life, a dimension that actually helps bring the whole discussion into clearer focus.

Susan Cutter, a geographer, perhaps summed it up best when she wrote: "A geographical definition of quality of life incorporates the concept of individual well-being but focuses more on places rather than individuals. . . . From a practical standpoint, geographical quality of life is the measurement of the conditions of place, how those conditions are experienced and evaluated by individuals, and the relative importance of each of these to the individual." [22] This approach avoids value judgment as to whether a place is the "best" or the "worst" and recognizes that "everyplace is different and has good and bad attributes." [23]

This approach to livability involves holistic understanding of a place: concrete, quantifiable, and statistical measurements as well as people's perceptions about the place. Cutter suggests that "The art—science to some—of evaluating quality of life in a place involves two states: a goal state and an appraisal state." Goals are what people would like to have in a place, while appraisals measure what is actually there. Quality of life is the "measured" difference between the two. These measurements must take into consideration objective measurements (climate, socioeconomic data, etc.) as well as the more subjective attachment that people have to places: What is the image of the place? What experiences do people associate with a place? How do they feel about it? As Cutter writes, "Often, our individual image of a place overtly or covertly biases our evaluation of quality of life found there." [24]

Social ecologists take this approach further to explain how human activities are influenced by the physical space or place in which they occur as well as how neighborhoods become locations for groups of people and their activities. As early as 1946, observers like Walter Firey were exploring the implications of these factors—especially the sentimental values people associate with places. He writes of his research in Boston where he discovered that "land can be put to uneconomic and even dis-economic uses—all because certain values have become attached to a locality and have in that way found symbolic representation." [25] He continues:

Boston, more than most other cities, has a great many historic sites which serve as "reminders" of its civic identity. The presence of old colonial dwellings, venerable cemeteries, ancient public buildings, hallowed churches, and distinctive neighborhoods exerts a definite civic-building influence upon the residents of a community. Out of such an influence emerges the kind of sentiments upon which real citizen participation depends—loyalty, a feeling of belongingness, and a purposefulness that goes beyond individual ambitions. Boston needs these sentiments. Through them it can win the interest and support of its people in civic improvements. Without them it can only appeal to the varied special interests of pressure groups to accomplish its objectives. Sentiment is one of the surest community-building forces that any city can have. . . . No city or metropolitan plan would be complete which overlooked this. [26]

Herbert Gans, a sociologist and urban planner, studied a Boston neighborhood a decade later while it was in the midst of massive redevelopment. Gans writes that the social and community networks are essential to the neighborhoods being disrupted. "Since relocation procedures do not allow for the transfer of the social system, the shock of the reloca-

tion process itself is likely to affect negatively a number of people who have never lived anywhere except in the West End, and where social and emotional ties are entirely within the neighborhood.” [27] Unfortunately, he was absolutely right.

George Hemmens adds a third dimension to the relationship between spaces and activity—that of time. He indicates that people’s decisions as to whether or not to undertake an activity (like shopping) are influenced by the location of the activity as well as the time of day and the length of time an activity takes. This model brings into clearer focus the role that transportation plays. “If facilities for a particular activity are relatively inaccessible that activity will likely be performed infrequently. And it may be that an activity will have a longer duration when access is difficult than when access is easy.” [28]

The interrelationship between places and activities makes the place-based approach to livability a practical tool: it allows people to take concrete steps to improve their lives by improving the places where they live and work. As one city planning researcher Dowell Myers suggests, “planners, local officials, and interest group leaders must negotiate knowledge about local quality of life.” [29] He recommends a “community trend” approach that stresses that quality of life is part of an ongoing development process and that encourages participation of local citizens as part of the “negotiation” process. “The data that result form a realistic description of the community’s quality of life, broadly enough based that all segments of the community can accept it as a basis for subsequent decision making.” [30]

The place-based approach also recognizes that here is an interactive relationship between places and people, and that places influence us in ways we are often not aware. Tony Hiss, in *The Experience of Place*, put it this way: “These places have an impact on our sense of self, our sense of safety, the kind of work we get done, the ways we interact with other people, even our ability to function as citizens in a democracy. In short the places where we spend our time affect the people we are and can become.” [31]

Livability of Places: Literature Review

Over the last three decades, during which time concerns about livability have grown, there has emerged a new understanding of how people experience and perceive places in their communities. This literature also focuses on specific measures that can be taken to improve the livability of important places in communities: streets and sidewalks, parks, plazas, and the public environment. Much thought has also been given to the role of communities in making their public environments work more effectively.

An early such observer was Jane Jacobs, who, in 1961, wrote the remarkable *The Death and Life of Great American Cities*. Her works opened people’s eyes to the complexity of their surroundings, and the fact that environment does influence how we think about and use our communities. Until her book, most descriptions about cities lamented their ills and evils: density, poverty, crime. Urban planners were often more interested in how to tear it down through redevelopment, rather than build it up. Ms. Jacobs was interested in celebrating the city and studying “how cities work in real life, because this is the only way to learn what principles of planning and what practices in rebuilding can promote social and economic vitality in cities, and what practices and principles will deaden these attributes.” [32]

Ms. Jacobs explained what many, if not most, people who lived in cities already knew: that cities were a place of great melting pots of social interaction, and that they were largely safe and supportive places to live. She did not achieve this argument, however, in great sweeping generalizations, but in startling detail based simply on seeing how all types of public spaces and places actually work for people. For example, she wrote about the sidewalk: “A good city street neighborhood achieves a marvel of balance between its people’s determination to have essential privacy and their simultaneous wishes for differing degrees of contact, enjoyment or help from the people around. This balance is largely made up of small, sensitively managed details, practiced and accepted so casually that they are normally taken for granted.” [33]

Other journalists, urban analysts, and researchers—many without formal training—have further contributed to the understanding of the livability of communities and those “taken for granted” influences of which Jane Jacobs wrote. Many, like James Kunstler lament the loss of sense of place caused by suburban sprawl. Others discuss more broadly the value of public places: “Cities were invented to facilitate exchange of information, friendship, material goods, culture, knowledge, insight, skills and also the exchange of emotional, psychological and spiritual support . . . if we are to grow into our fullest potential, we need what other people can give us . . . mutual enrichment . . .” [34]

Still others, like William H. Whyte, have focused on what makes places in cities work and offer suggestions for how they can be better designed or managed to be more effective places for people. Mr. Whyte, an early pioneer of studying how people use public spaces, quantified many of Ms. Jacobs’ observations and developed criteria for creating successful, well-used public spaces. He pioneered the use of time lapse filming and systematic observations, and his contribution was to describe how the design of

public spaces actually determines whether people will use a space or not. Mr. Whyte is highly critical of architects who design spaces to be seen but not used. He has said that it is difficult to design a public space that will not be used by people, but what is remarkable is how often this has been accomplished. [35] Mr. Whyte's books go on to elaborate on the successful ingredients for a public space that works for people: amenities, shade, activity generators like food service, visible access to the street, and so on.

The need for communities to define their own problems and priorities in terms of improving livability clearly makes it essential that the community be actively involved. Indeed, the livability literature stresses the importance of involving communities in a step-by-step process of renewal of places and spaces—a process where “micro” changes cumulatively add up to “macro” results in their improvement and development. Roberta Gratz, in *The Living City*, goes beyond the concept of the importance of public space to community life to discuss the process of change that has worked to rebuild places as hearts of community. She writes that change should begin with the community itself, often in small steps and writes about “urbanism” as the art of understanding the city. Urbanists, who “understand and practice that art . . . learn how a city works through intimate contact with it. Experience, observation, common sense, and human values are fundamental to an urbanist's view of city issues. *Urbanists focus on the micro before wrestling with the macro and understand that, in reality, the macro only changes for the better in micro steps. . . .* Innovation and ingenuity are the prevailing characteristics. Perseverance in the face of naysayers and determination in the face of obstacles are prerequisites. Step by step, essential and natural growth follows and spreads until larger areas prosper over time. Any look, therefore, at rebirth of cities inevitably spotlights areas rebuilt from the bottom up by citizen activists, urbanists whether residents, business people, design professionals, or small developers who understand what makes a real place work, who are the ones actively involved and getting things done.” [36]

In addition to research and publications that focus on the design process and design elements of places, there has been, over the past decade, a new understanding of the value of management of public spaces as a tool for changing public perceptions. PPS's own work, *Managing Downtown Public Spaces*, was developed for downtown organizations to take on a larger role in terms of maintenance, security, public events, marketing and promotion, and public-space amenities. The development of management districts, funded by special taxes that are agreed to by property owners, has flourished across the country in both

large cities and small towns as more and more local organizations take responsibility for making sure their commercial districts are safe, attractive, clean, active, and comfortable. Many of these districts, like the Grand Central Partnership around Grand Central Terminal in New York City, include important transit and transportation facilities.

There are many, many more examples of livability of place research: Donald Appleyard's seminal work on creating livable residential streets; Christopher Alexander's innovative “patterns” for making more humane environments; Mark Francis' and Clare Cooper Marcus' guidelines for all kinds of urban open spaces; Anton Nelessen's “visual preference” methods to help communities decide what character and design elements they want in their public environment; Anne Vernez Moudon, Allan Jacobs, and Raquel Ramati's separate books on achieving great commercial streets. All of these writers—as well as other researchers in the field of environment and behavior—essentially support the same conclusion: that our public environment and spaces greatly influence how we use our communities and perceive them—the extent to which we socialize, are economically successful, and even work together on shared actions and activities.

Project for Public Spaces Research on Places

Project for Public Spaces, founded in 1975, has also conducted a great deal of the work in this field to reveal the perceptions and interactions of people in the public places they customarily use. An outgrowth of Mr. Whyte's “Street Life Project,” PPS has studied how people use public spaces and what they need in order to feel comfortable in public environments in more than 500 communities throughout the United States and abroad. PPS accomplishes this by gathering information through time-lapse filming, systematic behavioral observations, customized interviews, and user-oriented surveys.

With these tools, PPS examines people's uses and activities, experiences and opinions of the small-scale, site-specific places intrinsic to the fabric of urban neighborhoods, such as plazas, street corners and transit stops, as well as impressions of whole neighborhoods, such as downtowns, residential, and commercial districts. The comments elicited in surveys and interviews not only help PPS determine the kinds of improvements people require and want in these places, but they also provide important clues to what people consider essential for making their communities livable.

Attitudes about what makes an area livable may vary from place to place in response to divergent conditions like climate, as when in Corpus Christi, Texas, 84% of people surveyed at a bus stop cited shade as important for a new bus transfer center. Nonetheless, PPS has found that many “wish lists” are surprisingly similar in hundreds of questionnaires answered by diverse communities. For example, food stores and services appear to be highly desirable to community residents: 69% indicated they shop in the Greenmarket at a plaza on 9th Avenue and West 57th Street in Manhattan, and 96% of people surveyed at the Corpus Christi bus stop wanted a place to buy snacks and drinks. Of those surveyed in Pittsfield, Massachusetts, the following were either desirable or very desirable downtown: 55% said more butchers, bakeries, and other food stores, 57% said more ethnic food restaurants, and 81% said more moderately priced restaurants. In Tucson, Arizona, 23.4% thought that food (eat-in and take-out) businesses were needed downtown.

Similarly, greenery and park environments are indicated to be in demand in communities as different as Red Hook in Brooklyn, New York, where 59% of those surveyed favored a waterfront park and 45% suggested children’s playgrounds for a neighborhood pier, and Manhattan’s Upper East Side Sutton Place community, where 45.9% of surveyed residents felt more trees, flowers, greenery, and children’s play areas would improve the area’s plazas. Again, in surveys of that same Sutton community (very urban) and the vastly different suburban Belmont Shores in Long Beach, California, vehicular traffic problems, such as congestion, noise, and vehicle speeds were rated by both as the most important area for improvement. Another need often mentioned is for entertainment, such as movies, theater, concerts, and nightclubs, in surveys of communities ranging from 81.2% in Springfield, Massachusetts, to 43.2% in Tucson, Arizona, to 51% in Montague Street in Brooklyn Heights, New York.

Not surprisingly, security comes up often, although sometimes it is not as high a priority as might be expected because people already feel safe in familiar areas. For example, in a survey of the Upper East Side Manhattan area between 59th and 96th Streets, having a secure/safe neighborhood was ranked highest in importance by 58.4% and at the Corpus Christi bus stop, 44% of those interviewed suggested a security guard for the new bus transfer center. Cleanliness also is cited frequently, like in Red Hook, Brooklyn, where it was a concern of 64% of surveyed residents, and in Pittsfield, Massachusetts, where making downtown cleaner and more attractive was the second most desirable improvement of surveyed pedestrians. Another prevalent concern is parking, for example, of

those surveyed, parking was a concern to 36% in Hoboken, New Jersey, 29% in Pittsfield, Massachusetts, 25.8% in Tucson, Arizona, and 17.1% of merchants in Brooklyn Heights. [37]

Out of such suggestions and expressed needs emerges a pattern of broader livability issues, such as comfort, convenience, accessibility, social opportunities, safety, activity, and relaxation. People have a vision, in their own minds, about what a place should be; it becomes a fairly easy task for them to suggest ways that the place could change to better meet with their ideal view of it. What is amazing is that there is so much consensus within communities, despite differences in age, income, and other demographic factors.

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The Role of Transit in Creating Livable Metropolitan Communities

Concerns about livability are shared by every type of community, in inner cities, small towns, and rural areas. This handbook explores how communities are working in partnership with transit agencies on locally initiated projects and programs to create livable “places” and build transit ridership.

WHAT MAKES A LIVABLE PLACE?

COMFORT AND IMAGE

the subjective experiences of using a place, such as safety and cleanliness.

USES AND ACTIVITIES

why people come to an area and what makes a place in a community special or unique.

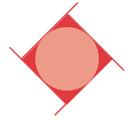


SOCIABILITY

the qualities that make a good place to meet people and create a sense of community.

ACCESS AND LINKAGES

Creating Places for Community Life



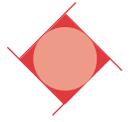
Transit can support the creation of places—public spaces, streets and buildings—helping to enliven their usage and making them centers for a wide range of community activities.

A Jazz Festival and Community Market are weekly events at the NJ Transit East Orange Train Station, East Orange, New Jersey.



Pioneer Square in Portland, Oregon, has become Portland's "living room" as well as the hub of the light rail and bus system.

Catalyst for Downtown and Neighborhood Renewal



Transit can serve as a key force in the revitalization of neighborhoods and center cities.

Residents work together on small projects, like tree planting and transit improvements, as part of the Los Angeles Neighborhood Initiative (LANI).



Davis Square in Somerville, Massachusetts, has undergone major revitalization since the opening of a subway station in the late 1980's and the introduction of attractive public space improvements.



Creating Opportunity for Entrepreneurship and Economic Development



Transit can help create new businesses and improve access to job opportunities.

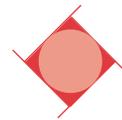
Downtown Crossing in Boston, a central transit hub served by all major subway lines, is the heart of the downtown retail district and features a vibrant marketplace with pushcart vendors.



An abandoned factory complex adjacent to the Wellston light rail station in St. Louis is getting new life as a business incubator and job training center.

on, St. Louis Post-

Improving Safety and Amenity



Transit can help make communities safer, in part by making them more comfortable and attractive.

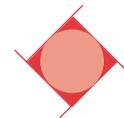


In Portland, Oregon, transit amenities have contributed to the revitalization of downtown.



New York City has initiated a station manager program to help keep stations clean and safe, as well as improve customer service.

Making Communities Accessible and Convenient



Transit services and facilities can be tailored to meet community needs while providing a viable alternative to the private car.

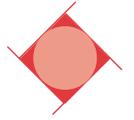


In cities ranging from Aspen, Colorado, to Seattle, Washington,



small shuttle buses are providing more flexible and convenient service to communities.

Shaping Community Growth



Transit can be a key component of efforts aimed at reducing sprawl and encouraging development of mixed use centers.

Tucson's Tohono Tadaí transfer center is one of a series of facilities intended to improve amenities and safety for passengers and improve links to surrounding communities.

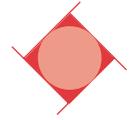


Photos: Carter Allen, Photography



New bus transfer centers in Corpus Christi not only improve service for customers but provide a focal point for developing stronger districts around them.

Implementation Through Partnerships



Community groups and transit agencies have found that by working in partnership, they can improve the livability of their community and increase transit ridership.



Denver celebrates the opening of its Sixteenth Street Transit Mall in 1982, built and operated by a unique public private partnership that has helped to guide the dramatic resurgence of downtown.

Photo: Downtown Denver Partnership



Volunteers initiated and largely implemented the rebuilding of the Old Pueblo Trolley in Tucson by restoring cars, laying track, and operating the carsó connecting a university to a revitalizing commercial district and developing a new tourist attraction for the city.

THE TRANSPORTATION RESEARCH BOARD is a unit of the National Research Council, which serves the National Academy of Sciences and the National Academy of Engineering. It evolved in 1974 from the Highway Research Board, which was established in 1920. The TRB incorporates all former HRB activities and also performs additional functions under a broader scope involving all modes of transportation and the interactions of transportation with society. The Board's purpose is to stimulate research concerning the nature and performance of transportation systems, to disseminate the information that the research produces, and to encourage the application of appropriate research findings. The Board's program is carried out by more than 400 committees, task forces, and panels composed of more than 4,000 administrators, engineers, social scientists, attorneys, educators, and others concerned with transportation; they serve without compensation. The program is supported by state transportation and highway departments, the modal administrations of the U.S. Department of Transportation, and other organizations and individuals interested in the development of transportation.

The National Academy of Sciences is a private, nonprofit, self-perpetuating society of distinguished scholars engaged in scientific and engineering research, dedicated to the furtherance of science and technology and to their use for the general welfare. Upon the authority of the charter granted to it by the Congress in 1863, the Academy has a mandate that requires it to advise the federal government on scientific and technical matters. Dr. Bruce M. Alberts is president of the National Academy of Sciences.

The National Academy of Engineering was established in 1964, under the charter of the National Academy of Sciences, as a parallel organization of outstanding engineers. It is autonomous in its administration and in the selection of its members, sharing with the National Academy of Sciences the responsibility for advising the federal government. The National Academy of Engineering also sponsors engineering programs aimed at meeting national needs, encourages education and research, and recognizes the superior achievements of engineers. Dr. William A. Wulf is president of the National Academy of Engineering.

The Institute of Medicine was established in 1970 by the National Academy of Sciences to secure the services of eminent members of appropriate professions in the examination of policy matters pertaining to the health of the public. The Institute acts under the responsibility given to the National Academy of Sciences by its congressional charter to be an adviser to the federal government and, upon its own initiative, to identify issues of medical care, research, and education. Dr. Kenneth I. Shine is president of the Institute of Medicine.

The National Research Council was organized by the National Academy of Sciences in 1916 to associate the broad community of science and technology with the Academy's purpose of furthering knowledge and advising the federal government. Functioning in accordance with general policies determined by the Academy, the Council has become the principal operating agency of both the National Academy of Sciences and the National Academy of Engineering in providing services to the government, the public, and the scientific and engineering communities. The Council is administered jointly by both Academies and the Institute of Medicine. Dr. Bruce M. Alberts and Dr. William A. Wulf are chairman and vice chairman, respectively, of the National Research Council.

Abbreviations used without definitions in TRB publications:

AASHO	American Association of State Highway Officials
AASHTO	American Association of State Highway and Transportation Officials
APTA	American Public Transit Association
ASCE	American Society of Civil Engineers
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
FAA	Federal Aviation Administration
FHWA	Federal Highway Administration
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
IEEE	Institute of Electrical and Electronics Engineers
ITE	Institute of Transportation Engineers
NCHRP	National Cooperative Highway Research Program
NCTRP	National Cooperative Transit Research and Development Program
NHTSA	National Highway Traffic Safety Administration
SAE	Society of Automotive Engineers
TCRP	Transit Cooperative Research Program
TRB	Transportation Research Board
U.S.DOT	United States Department of Transportation