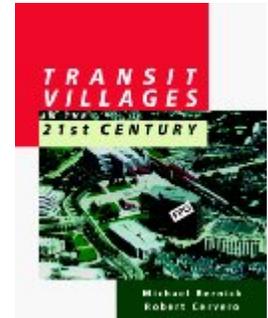


**Michael Bernick, Robert Cervero.** *Transit Villages in the 21st Century*. New York: McGraw-Hill, 1997. xii + 387 pp. \$42.95, cloth, ISBN 978-0-07-005475-2.



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*Transit Villages in the 21st Century* is an attempt to make a case for a return, particularly in areas of new growth, to the high-density, rail-based type of development found in many American cities prior to World War II--and still found today in a number of European and Asian cities. The book, like the general new urbanism movement of which it is a part, promotes the transit village concept as a "reaction to the perceived declining quality of urban and suburban living." As authors Micheal Bernick, director of the San Francisco Bay Area Rapid Transit District, and Robert Cervero, professor with the Department of City and Regional Planning at U.C. Berkeley Traffic jams, note, "faceless sprawl, and disconnected land uses are among the many reasons Americans are looking for new and different paragons of suburbia" (p. 1).

*Transit Villages* is divided into five parts. Part I, "Transit Villages: Retrospective and Prospective," describes the fundamental elements that make up transit village design and also describes four "early transit villages": New York in 1898, Los Angeles in 1910, San Francisco-Oakland in 1910,

and Shaker Heights in 1920. Part II, "The Case for Transit Villages," begins with a brief presentation of the general history of the rise and fall of the streetcar and then goes on to present some empirical evidence regarding the relationship between transit village design and travel mode choice. Parts III and IV present case studies, with Part III focusing on American examples (San Francisco, Washington, D.C., Southern California, and New York) and Part IV focusing on international examples (Stockholm, Tokyo, and Singapore). Part V, "Into the Future," discusses some of the challenges with respect to implementing transit villages.

The authors see the transit village concept as "an organizing principle for creating places--built environments, social environments, and economic environments--that embrace and evolve around mass transit systems" (p. xi). The authors review the necessary elements of transit-oriented design in general, as promulgated by Peter Calthorpe, Andres Duany and Elizabeth Plater-Zybeck, Peter Katz, and others [1]: a mobility-enhancing environment, including higher densities (which help support transit) and bike paths; pedestrian friend-

liness, including human-scale design, porches, sidewalks, attractive landscaping, tree-lined streets, on-street parking, and back alleys; alternative suburban living and working environments, including mixed-use development; and a focus on common places, such as public squares and civic centers.

The key to the transit village concept, and the chief element these authors bring to the new urbanist discussion, is the transit station area (the "transit village"). Bernick and Cervero envision suburban development occurring in high-density clusters, like "pearls on a necklace" (p. 111), or, to use Kenneth T. Jackson's phrasing, "beads on a string"[2]--along a rail line extending from a metropolitan core outward. The crucial element to the planning of these station areas is adherence to the "3-D" principle: density, diversity, and design. Influenced more by Ebenezer Howard's Garden City than Le Corbusier's Radiant City, these new urbanists advocate an increase to moderate densities of 10 to 15 dwelling units per acre (dua), as opposed to the average planned suburban density of 5 to 6 dua or the 120 to 150 dua of Corbu's Radiant City (p. 84) [3]. Again, the notion here is that higher densities help support transit by providing enough ridership to make the transit line worthwhile.

The diversity requirement means mixed-use development in the transit station area. Thus, transit riders could, ideally, stop off at a grocery store, the post office, and the Laundromat, all before picking up their children from the nearby day-care center and then walking five minutes (or perhaps taking a short bus ride) to their home. The crucial element here is that the transit village not extend more than a quarter mile, or a five-minute walk, from the transit station (p. 5).

The third "D"--design--means that the transit village needs to incorporate design elements that encourage transit ridership and walking. These include grid-like street patterns, pedestrian amenities (tree-lined sidewalks), well-sited transit

shelters, and retail stores at the ground floor of buildings of varying heights.

"Before looking at the emerging transit villages of today, it is worth going back in time, back to the late 19th century and early 20th century when rail transit networks sprouted throughout America's cities and suburbs," declare the authors at the outset of their chapter on "America's Early Transit Villages." They draw from works such as Kenneth T. Jackson's *Crabgrass Frontier*, Robert Fishman's *Bourgeois Utopias*, and Spencer Crump's *Ride the Big Red Cars* to paint a picture of America's railroad suburbs that emerged during the interurban era around the turn of the century [4]. These railroad suburbs, like the "streetcar suburbs" that had been developing for decades, grew around transit lines that typically had been put in place by entrepreneurs who speculated in both real estate and transportation. In other words, land development and public transportation infrastructure occurred hand-in-hand. The transit lines frequently preceded the real estate development. "It would never do," remarked Henry Huntington, president of Pacific Electric, "for an electric line to wait until demand for it came. It must anticipate the growth of communities and be there when the homebuilders arrive--or they are very likely not to arrive at all ..." [5].

Proponents of the transit village concept today pin their hopes on Huntington's philosophy: if we build it, they will come. But, will they? And, more importantly, if they do come, will they drive less and use transit more? Bernick and Cervero are more prepared to address this question than were earlier new urbanists. In Part II of their work, "The Case for Transit Villages," they attempt to meet the various criticisms of transit-oriented design head on.

Their quick overview of the "rise and fall of America's transit industry" is balanced and informed. Its purpose is to provide a context for the "rail renaissance" of the present era. The problem is that the rail and streetcar suburbs of yore were

built by real estate-transit syndicates--investors who had an interest in both sides of the equation (land development and transit). Bernick and Cervero fail to make clear that that relationship does not exist today. Public transportation services are provided by public agencies, while development is in the hands of private entrepreneurs. It is difficult to imagine any level of coordination between the two today that would rival that of the streetcar-era.

In a section entitled "Ridership Hopes and Disappointments," Bernick and Cervero are forthcoming with the results of studies by transportation economists such as Don Pickrell and John Kain [6] that show that rail ridership projections in the present era have fallen far short of the actual numbers: "The most egregious forecast error was for Miami's 21-mile Metrorail system, which was expected to carry 239,900 weekday passengers several years after opening, six times higher than the actual 35,400 daily passengers recorded" (p. 63).

Bernick and Cervero counter critics such as Pickrell and Kain with the argument that rail has performed so poorly because people have not been paying the full cost of automobile travel and thus have had no incentive to switch to transit. That rail is only part of a larger package that would include congestion pricing, transportation demand management, densification, etc., is an argument that Bernick and Cervero could in fact make more emphatically. They also refer to rail advocates such as Hank Dittmar, executive director of the Surface Transportation Policy Project in Washington, D.C., who maintain that rail "is a long-term investment, and evaluating it at three years or even five years of age is like judging a human in fact at that age--it's mostly potential"[7].

The "long-term investment" argument of rail advocates is problematic and risky. They need to convince their fellow voters to approve a very expensive undertaking that probably won't live up to its promises for perhaps a generation (or

more). They also need to convince voters that the money they spend on a future investment could not be better spent on something else in the here and now. One way to appeal to American voters is to appeal to their sense of entitlement. Bernick and Cervero and other new urbanists are beginning to realize that this is the angle they must take. They must stress that transit-oriented design is not about "forcing people out of their cars" or "social engineering" to achieve a visionary's ideal. It is about "choice." Americans must have the right to choose! Transit-oriented design can provide that choice. Without it, Bernick and Cervero argue, development will proceed as it has, and Americans will have no option but to drive along an ever-sprawling landscape. "It could very well prove that the benefits of transit villages have less to do with transportation and more to do with providing more choices on where to live and how to travel," they conclude (p. 67).

In their attempt to demonstrate the land use-transportation connection (i.e., "how built environments shape transit riding"), the authors conducted a matched-pair analysis of seven San Francisco Bay Area neighborhoods. The "transit neighborhood" member of each pair was laid out and built prior to 1945; built primarily along a streetcar line; and laid primarily according to a grid. The "auto neighborhood" member of each pair was laid out and built up after 1945; generally laid out in areas without rail, either in the present or the past; and laid out primarily according to a curvilinear, cul-de-sac pattern. The transit neighborhoods made, on average, 9.7 percent of all work trips by transit and 10.4 percent by walking or bike, while the auto neighborhoods made, on average, 6.5 percent of all work trips by transit and 3.8 percent by walking or bike.[8]

The authors are cautious in their interpretation of these results, but they do not point out the most common problems with such analyses. First and foremost is the selection bias. Individuals were not randomly assigned to live in a transit

versus an automobile neighborhood. Instead, non-random socioeconomic factors put them there. In this San Francisco study, the transit-neighborhood occupants were younger, wealthier, and more likely to be in managerial or professional occupations than those in the auto neighborhoods. This suggests that these transit neighborhoods are gentrified. Would such people choose to live in a \*suburban\* transit village development? If the authors had studied pairs from a different metropolitan area, they might have found entirely different results. The transit neighborhoods might have been occupied by poorer, working class (or unemployed) nonwhites. What might have motivated these folks to "transit-oriented living"? Is it their preference for transit? Is it their desire to live in high-density developments? Is it that they shun the vacuity of sprawling suburbs? No. It is poverty and racism that has dictated their "choice."

It is this point of view that underlies the criticism of many observers who label transit-oriented design and the transit-village concept as "boutique" design. Bernick and Cervero attempt to respond to this criticism from three fronts. One, they include--but briefly and not very convincingly--some discussion of the benefits of transit-oriented design that can accrue to the poorer inner city resident, as part of larger attempts to bridge the "spatial mismatch problem" (also known as the "jobs-housing imbalance"). Second, they accuse the "boutique" critique of "accepting the current settlement patterns and pricing arrangements" (p. 132). This reiterates their rejoinder to Pickrell and Kain, that rail investment is (a) only part of a larger package that would also include pricing and that (b) the goal is to affect settlement and travel patterns over the (very) long term.

Their third response to the "boutique" critique is that transit villages already exist and that they are not only viable as communities but successful in achieving a high level of transit share. To illustrate this point, the authors present find-

ings from visual preference studies that show that Americans prefer moderate-density mixed-use developments to suburban sprawl (at least they prefer \*slides\* of such developments). They also present case studies of emerging or existing transit villages in the U.S. and abroad.

The case studies are interesting and instructive, particularly in light of the authors' decision to include studies of some transit villages that did not pan out (e.g., Westlake-MacArthur Park in central Los Angeles), and to be careful to note that examples such as Singapore "cannot be easily repeated elsewhere," that they have "not been costless," and that, in some cases, their implementation has required a "semi-autocratic government whose presence creeps into virtually all facets of everyday life" (p. 347). Their inclusion is provided to "open our eyes to different possibilities and portray transit villages on a much larger canvas" than that represented by most of the U.S. experience (p. 287).

Bernick and Cervero close with a discussion of some general principles that must guide the implementation of transit villages. An understanding of these principles is crucial to an understanding of the transit village, or transit-oriented design, concept. These principles (p. 353) include:

1) "New rail investments, by themselves, do not automatically translate into significant land-use changes," nor, it should be added, do they automatically translate into significant mode shifts. This is one of the most important points that should be stressed even more by these authors and that certainly should be better understood by both proponents and opponents of transit-oriented design.

2) "Transit-oriented development as long term commitment"--that is, the transit and land-use investments in rail and transit-oriented design are more likely to pay off in the long term than in the short term.

3) "Critical mass in suburban/inner-city community building"--that is, higher-density, mixed-

use development should be the guiding principle behind suburban development. It should also guide inner-city community building, but Bernick and Certero have improved only marginally over the other new urbanists in making a convincing argument for how transit-oriented design can address inner-city problems."

4) "Proactive role of the transit agency and local government; assumption of risk by the public sector"--this is crucial if for no other reason than there may well need to be a high degree of participation by the public sector in the absence of the transit-real estate syndicate of a century ago. But this participation is likely to involve heavy tax-supported subsidy, and the political difficulties associated with such a subsidy may be challenging to overcome.

*Transit Villages* is quite appropriate for students of transportation policy and planning or for anyone interested in transit-oriented design and the debates surrounding it. It is well written, with useful footnotes and academic citations, many interesting photographs and other illustrations, useful tables and figures, and an approach that covers principles and theory, history, empirical analysis, and case studies. The work would be useful both as an introductory text and for more advanced students, who may be equipped to challenge some of the book's policy and modeling assumptions. One might want to balance it with readings by Anthony Downs, for instance, who places a greater emphasis on addressing transportation problems through pricing [9] and on addressing inner-city poverty through more direct means than transit-oriented design.[10] One might also want to remind students that attending to the vision of transit-oriented design in either the suburbs ("neosuburbanism," to borrow from Jane Holtz Kay [11]) or as a form of inner-city revitalization may only delay or prevent a consideration of more pressing--and more complicated and politically problematic--urban problems. Let us not lose sight of the trees for the forest.

## Notes

[1]. Calthorpe, P. *The Next American Metropolis: Ecology, Community, and the American Dream*. Princeton, N.J.: Princeton Architectural Press, 1994; Duany, A., and E. Plater-Zyberk. *Towns and Town-Making Principles*. Ed. by A. Krieger and W. Lennertz. Cambridge, Mass.: Harvard University Graduate School of Design; New York: Rizzoli, 1991; Katz, P. *The New Urbanism*. New York: McGraw-Hill, 1994.

[2]. Jackson, K. T. *Crabgrass Frontier: The Suburbanization of the United States*. New York: Oxford University Press, 1985, p. 101.

[3]. An overview of Ebenezer Howard and Le Corbusier can be found in Fishman, R. *Urban Utopias in the Twentieth Century: Ebenezer Howard, Frank Lloyd Wright, and Le Corbusier*. Cambridge, Mass.: The MIT Press, 1982; Hall, P. *Cities of Tomorrow: An Intellectual History of Urban Planning and Design in the Twentieth Century*. New York: Basil Blackwell, 1988.

[4]. Crump, S. *Ride the Big Red Cars*. Los Angeles: Crest Publications, 1962; Fishman, R. *Bourgeois Utopias: The Rise and Fall of Suburbia*. New York: Basic Books, 1987; Jackson. *Crabgrass Frontier*.

[5]. Page 21, quoted in Crump. *Ride the Big Red Cars*, p. 44.

[6]. Pickrell, D.H. *Urban Rail Transit Projects: Forecast Versus Actual Ridership Costs*. Cambridge, Mass.: Transportation Systems Center, U.S. Department of Transportation, 1989; Kain, J. "Choosing the Wrong Technology: Or How to Spend Billions and Reduce Transit Use." *Journal of Advanced Transportation* 21 (1988): 197-213.

[7]. Quoted on p. 65, from Dittmar, H. "Is Rail Right for Your Community? Asking the Right Questions, Measuring the Benefits." Paper presented at the Railvolution Conference, Portland, Oregon, September 17, 1995, City of Portland, Federal Transit Administration, and the Surface Transportation Policy Project.

[8]. Figures are derived from data presented in Figures 5.3 and 5.4, p. 110, and are based on 1990 data.

[9]. Downs, A. *Stuck in Traffic: Coping with Peak-Hour Traffic Congestion*. Washington, D.C.: Brookings Institution; Cambridge, Mass.: Lincoln Institute of Land Policy, 1992.

[10]. Downs, A. *New Visions for Metropolitan America*. Washington, D.C.: Brookings Institution; Cambridge, Mass.: Lincoln Institute of Land Policy, 1994.

[11]. Kay, J. H. Comments during presentation of "Dismantling the Dream: Hardtoppers, Road-Stopppers, and the Activist Agenda, 1960 and 1990," Paper presented at the Seventh National Conference on American Planning History, sponsored by the Society for American City and Regional Planning History, Seattle, October 25, 1997.

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