

# Social Capital and New Urbanism: Leading a Civic Horse to Water?

*Thomas H. Sander*

New Urbanism has been ascendant in the last several decades, riding its promise as a strategy to reduce suburban sprawl and automobile dependence, while increasingly fostering stronger communities. The number of neighborhood-scale New Urbanist projects completed or under way rose 37 percent in 2001 to more than two hundred developments in thirty-nine states, up from a 25 percent increase in 1999 and a 28 percent increase in 2000.<sup>1</sup>

But does New Urbanism work? Does New Urbanist design produce stronger communities, viewed through the lens of social capital? This is not an easy research task, so in this article I discuss research challenges as well as possible approaches. Given the complexity of this issue, it is perhaps best to start with a review of social capital and New Urbanism before considering their interaction.<sup>2</sup>

## Social Capital

Most of us have a general sense of how our social ties matter to us personally. Some hyperactive “networkers” in the 1980s or 1990s exhibit a more wholesale embrace of the importance of social connections. The folk wisdom that more people get their jobs from *whom* they know rather than *what* they know turns out to be true.<sup>3</sup>

A burgeoning literature<sup>4</sup> over the last decade shows that social capital<sup>5</sup>—social networks and the attendant norms of trust and reciprocity—is central to many of the collective goods we care about, among them safe streets, healthy and happy citizens, effective education, responsive democracy, and children’s welfare. Thus social ties help us not only *personally* but also *collectively*.<sup>6</sup>

There remains much to understand about social capital, but it is clear that with a base of trust we can engage in reciprocal behavior, doing things for others without any immediate or direct expectation of repayment, with confidence

that we (or others in our group) will ultimately benefit. We tend to develop reciprocity with specific individuals whom we know (friends, family, work colleagues, members of a common group) as well as with larger groups (our workplace, neighborhood, church) and the community at large. This latter generalized reciprocity is especially valuable to communities since, as Robert Putnam has written, it lubricates social interaction in the same way cash is more efficient than barter. You can undertake an action without having to separately negotiate the terms of each exchange.<sup>7</sup>

How does a social network strengthen norms of trust and reciprocity? First, a social network makes it easier for a community to learn who is and is not trustworthy. This increases the cost of being untrustworthy since one might incur a communitywide loss in reputation for the individual gains to be had from being untrustworthy with one community member. In addition, since social capital tends to flow in virtuous circles, each positive collaboration helps inspire and pattern future cooperation.

How do social networks, trust, and reciprocity enhance community well-being? First, they facilitate mobilizing others (whether for a social movement or simply to help a neighbor-in-need). Second, they improve information flow, helping us learn of anything from a job lead to a potential partner or community news or who can be trusted. Third, the existence of trust avoids the necessity of a third-party mechanism (such as government or a lawyer) to reinforce prosocial cooperative behavior. Fourth, in a trusting community, residents engage less in unproductive defensive behavior—watching their back, writing a “defensive memo” at work, locking their doors, and so on.

## New Urbanism

New Urbanism<sup>8</sup> is neither new nor focused just on traditionally urban areas. Building on the Garden City and City Beautiful movements and harking back to livable towns (Charleston, Savannah), New Urbanists believe that “urbanism” can work in a community of any scale and is as appropriate in a new growth area or suburb as in the central city. By *urbanism*, they mean a community that is:

- Diverse (mixed residential, business, and retail developments; and ideally mixed demographics, facilitated, for example, by putting a modest apartment over a garage or above a ground-floor shop)
- Walkable (shops ideally within a five-minute walk of home, walking paths, and streets laid out on a grid pattern, with no cul-de-sacs<sup>9</sup>)
- Not automobile-centric (garage hidden in a back alley, parallel parking rather than in a lot)
- Not gated
- Marked by a clear center and edges

Such a community has accessible and useful public space, has safe and inviting streets (they are narrow and houses have front porches and windows that face the street), and is linked to public transportation.

The New Urbanism came to prominence in 1981 when DPZ (the design firm of Andres Duany and his wife, Elizabeth Plater-Zyberk) built the resort town of Seaside on the Florida panhandle.

When interest in such developments started to mount, seven prominent New Urbanists (architects Peter Calthorpe, Duany, Plater-Zyberk, Elizabeth Moule, Stefanos Polyzoides, and Daniel Solomon, as well as organizer Peter Katz) founded the Congress for the New Urbanism (CNU) to promote and disseminate information about New Urbanism. They held their first congress in 1993, at which 170 designers compared works-in-progress and exchanged ideas about urban and suburban places.

New Urbanists codified central elements of their movement in the CNU charter, developed from 1993 to 1996 and ratified in 1996. The charter articulates design principles at various levels (region, town, street, and so on). Despite the charter, New Urbanism remains somewhat murky at the edges. CNU tries to solidify the core of this movement by issuing awards; showcasing new developments; and networking developers, policy makers, architects, and others. But there is no New Urbanist certification for a site (despite a list kept by *New Urban News*) and some sites claim to be New Urbanist that probably aren't.<sup>10</sup>

The early sites tended to be exclusively “greenfield” developments (on undeveloped suburban or rural land). The vast majority are still greenfield, but there has been an increase in “grayfield” developments (as in converting a mall or industrial plant tract into a New Urbanist development) and “infill” projects (for instance, redesigning and densifying a suburban traffic corridor along New Urbanist principles). In addition, efforts to convert run-down and problem-plagued high-rise public housing into lower-density, mixed-income use have recently (under HOPE VI) been modeled on New Urbanist principles.<sup>11</sup>

### **What Might Be the Connection of New Urbanism to Social Capital?**

The idea that our built environment can importantly shape the quality of our democracy, our lives, and the well-working of our communities has a long lineage.

In the late 1800s, Progressive Era reformers explicitly invented playgrounds to afford a space for socially disconnected urban immigrant youth.<sup>12</sup> Progressive Era leaders also advanced the City Beautiful movement, advocating that beautiful cities could eliminate social ills, inspire moral rectitude among the poor, and attract the upper class to work and spend money in urban areas.

After World War I, the Garden City movement picked up steam in Great Britain and in the United States (as in Radburn, New Jersey),<sup>13</sup> attempting to foster higher quality of life and greater civic connection through clustered housing knit together, with schools and public facilities, by greenways and walkways. They aimed to exploit the best of city and country.

In the 1960s, various North Americans focused on the connection between urban design and civic engagement. In 1961, Jane Jacobs published *The Death and Life of Great American Cities*, criticizing contemporary urban planning for ignoring design that enabled residents to reduce crime by having “eyes on the street.” Her theories were revived by New Urbanists, who lauded the idea of the front porch. Another American, William Whyte, assisting the New York City Planning Commission in 1969, conducted his Street Life Project, demonstrating through time-lapse photography that small public spaces improve urban civic and social life.

This whirlwind tour makes it evident that claiming the built environment can improve civic life is hardly original with the New Urbanists. Nevertheless, some New Urbanist ideas seem especially promising today. For example, given the increased segregation of our communities and the difficulty of building cross-race and cross-class social ties,<sup>14</sup> the HOPE VI mixed-income developments may offer newfound hope. Duany, defending the mandated uniformity of housing styles within HOPE VI sites, commented that you need a “shared syntax of architecture” (similar housing exteriors) to make diverse people comfortable in living cheek-to-jowl.<sup>15</sup> But the interesting question is whether the housing uniformity and physical proximity of diverse populations in a HOPE VI development actually leads to greater cross-race and cross-class social bonds.<sup>16</sup>

### **What Are the Challenges in Seeing Whether It Works?**

There are four central challenges to evaluating whether New Urbanism leads to more social capital: (1) the influence of the outside world, (2) the projects’ infancy, (3) selection bias, and (4) the Hawthorne effect.

First, New Urbanist developments and theory don’t operate in a vacuum; they must take root in the real world. For example, New Urbanists strive to create a mixed-use development wherein residents live, shop, and work locally. But do they? Many New Urbanist town residents don’t have employment locally and need to commute. Local developments generally contain retail shops, but rarely are they on the scale of a Wal-Mart, Costco, or Home Depot.<sup>17</sup> There are anecdotal stories of New Urbanist residents getting milk and eggs locally, or patronizing local stores to some extent, but still using a megastore for better prices or a more distant mall to find greater retail store variety. Reports of Celebration, Florida, indicate that the downtown caters more to tourists than residents.<sup>18</sup> Residents can also subvert designers’ intent; some Seaside, Florida, residents built a rear porch (rather than use the front

porch provided) or let their hedge grow far higher to increase privacy.<sup>19</sup> This is why New Urbanism may only be leading a civic horse to water.

Second, it is extremely early in the game. Many New Urbanist developments are not even fully built. Will the towns' character change as the scale increases? If these towns have an especially civic culture, will that survive as owners sell to new residents? Research today is important, but it can be likened to declaring the winner or loser of a ballgame in the first inning. History shows how early prognostication can be wrong. For example, Levittown and other early post-World War II suburbs were criticized as sterile,<sup>20</sup> but Herbert Gans<sup>21</sup> showed just how civic Levittown was. Some "new communities" built in the 1960s and 1970s, such as Columbia, Maryland, and Reston, Virginia, were also heavily criticized initially even though they now seem relatively successful in civic terms.<sup>22</sup> Some residents' early enthusiasm with Celebration quickly soured around disputes with the developer over the character of a new school.<sup>23</sup>

Third is selection bias. New Urbanist developments market themselves as community-friendly towns. Thus, if a New Urbanist development is unusually civic, it may be more of a *marketing* success (in attracting community-minded residents) than an indication of how the town's *design* influenced the residents.<sup>24</sup> The civic engagement of residents of Reston certainly had as much to do with marketing it to potential buyers as a place of engagement and fostering a civic culture as to any specific design element.<sup>25</sup> Residents of (basically New Urbanist) Harbor Town, Tennessee, believed that their high level of social interaction was accounted for by an unusually social mix of residents.<sup>26</sup>

Without randomized experiments of the sort that are rare in social science,<sup>27</sup> the best that researchers can do is to compare the social capital of residents at a New Urbanist site against the historic level of civic engagement at their prior, non-New Urbanist residence.<sup>28</sup> Methodologically, unless there is a waiting list, one cannot know who will move to the New Urbanist community and thus cannot collect information about civic behavior and attitude *before* the person moves. Relying on people's memory of their civic engagement in their prior community once they've moved often leads to distortion of the past (since residents may want to believe they are more engaged now).

In addition to a higher civic mix of residents making the *average* New Urbanist town resident look more civic, the *concentration* of civic-minded residents also enhances the town's social capital. To understand why, imagine the difficulty of mobilizing others if you were a rare social creature in a community. Much as species collapse without a critical population base, civic engagement requires a certain core level of interest, and given its appeal to civic-minded residents a New Urbanist community is more likely to possess it. Thus, even comparing residents' current and prior levels of social capital does not isolate the design impact of the New Urbanist community, since the residents surely find it easier to galvanize others into social activities.

Fourth is the Hawthorne effect. Participants in an experiment want so much to show that interventions work that they change their behavior to make them work.<sup>29</sup> This is similar to the placebo effect, where participants in a medical experiment who are taking a sugar pill with no medicinal effect (but thinking they are taking a pill that has valuable medical impact) show improvement over their baseline condition simply from the power of their positive thinking. Thus, especially in the early years of a New Urbanist community, it is hard to separate out genuine New Urbanist results from residents either wanting to make the experiment succeed or feeling as though they are taking a powerful civic pill.

Armed with this understanding of the difficulties of proving the case, we can now review what data exist on the impact of New Urbanism on social capital.

### Does It Work?

First, I consider general research concerning the impact of demographic heterogeneity, commuting time, and population density on civic engagement—a synecdoche of social capital that focuses not only on social networks and trust but also on associated behavior such as political engagement or volunteering.<sup>30</sup>

New Urbanist developments (through a variety of housing types within each development) aspire to promote greater income and ethnic diversity than in a standard development. Assuming New Urbanists succeed in achieving greater heterogeneity (and there are significant caveats<sup>31</sup>), what is the likely impact on civic engagement? David Campbell has integrated his own interesting analytical research with a rapidly growing body of literature and concluded that diversity increases *political* participation (influencing public policy, motivated largely by self-interest) while decreasing *civic* participation (other forms of civic engagement, social networks, and trust that are motivated largely by norms of reciprocity and social expectations).<sup>32</sup> This suggests that if the New Urbanist community is more diverse, it has a harder time *ceteris paribus* building civic engagement, social networks, and trust.

One hopeful piece of evidence for the New Urbanism comes from Putnam's analysis showing how a longer commute reduces civic engagement. Putnam found that

the car and the commute . . . are demonstrably bad for community life. In round numbers the evidence suggests that *each additional ten minutes in daily commuting time cuts involvement in community affairs by 10 percent*—fewer public meetings attended, fewer committees chaired, fewer petitions signed, fewer church services attended, less volunteering, and so on. In fact, although commuting time is not quite as powerful an influence on civic involvement as education, it is more important than almost any other demographic factor. And time diary studies suggest that there is a similarly

strong negative effect of commuting time on informal social interaction.  
[emphasis in original<sup>33</sup>]

That New Urbanist communities aim to reduce commuting time by combining residence and business, and try to reduce dependence on automobiles through creating a more walkable community, could bolster civic engagement.

Political scientist Thad Williamson also found a negative civic impact from sprawl, although he is less sanguine about the opportunity for boosting civic engagement through reducing sprawl (see his article in this issue of the *National Civic Review*). Analyzing the 2000 Social Capital Community Benchmark Survey,<sup>34</sup> he found that a longer commuting time depresses local-level social trust, and that communities with a high percentage of solo commuters have lower participation in various civic and social activities. Williamson also found that living in the central city positively predicts both an individual's level of political interest and most forms of political participation (especially voting, attending marches, and membership in political or reform organizations). Central city residence, however, was *not* associated with greater attendance at public meetings, active involvement with more voluntary groups, a higher level of social trust, or decreased alienation.<sup>35</sup>

But Williamson differs with Putnam in that, as laudable as he finds the goal of reducing auto dependence or commuting time, he concludes that we are unlikely to reduce average commute time enough to significantly increase America's stock of social capital.<sup>36</sup>

### **What About Research on the New Urbanism Specifically?**

New Urbanism seems a domain with more "success stories" than verifiable successes. However, despite the paucity of evidence, what is known?

First there are studies of new construction. One of the most rigorous and thoughtful evaluations of New Urbanism comes from Barbara Brown and Vivian Cropper, who compared a New Urbanist subdivision ten miles from Salt Lake City, Utah, with a neighboring standard suburban subdivision.<sup>37</sup> The New Urbanist community, in which eighty-one units were built, had accessory apartments over back alley garages that increased density and diversity, small lot sizes, front porches, shallow setbacks, and narrower streets. The town was marketed for its amenities, not as a New Urbanist community, and was thus less prone to attracting especially civic residents. Although the commercial center, the high-density town homes, and the light rail stop had yet to be built,<sup>38</sup> there was within walking distance a community center, a swimming pool, a golf course, and pedestrian paths.

The standard subdivision had 127 houses of similar price and square footage (although on larger lots without accessory apartments) to those in the

New Urbanist community, prominent garages, small entry landings rather than front porches, wider streets, sidewalks, cul-de-sacs, and no commercial area.

Brown and Cropper achieved an impressive 65–67 percent response rate among homeowners (partly by offering a small financial incentive to complete the survey) but were not able to survey accessory apartment renters.

The Utah New Urbanist residents demonstrated a statistically significant higher rate of neighborliness (knowing neighbors, borrowing from neighbors, visiting, speaking and socializing with neighbors, watching neighbors' homes, and expressing willingness to improve the neighborhood), but no statistically significant higher sense of community (measured on a twelve-item scale measuring self-reported feelings of membership, perceived ability to influence the nature of the neighborhood, shared emotional connections, and needs fulfillment) than their standard suburban counterparts.<sup>39</sup> The survey controlled for difference in length of residency between the New Urbanist and standard suburbs and for the level of preexisting ties in the neighborhood.<sup>40</sup> The only cautions on the survey are, first, that there still may have been some selection effects both among the New Urbanist residents (that is, the design may have attracted civic-minded residents even if the site was not expressly marketed that way) and the standard suburban residents (those seeking more privacy). Both of these could exaggerate the design impact of New Urbanism. Second, the survey did not control for any differences between the suburban and New Urban communities, other than tenure in community and preexisting ties.<sup>41</sup>

Joongsub Kim compared Kentlands (an acclaimed New Urbanist development near Gaithersburg, Maryland) to Orchard Village (a neighboring standard subdivision).<sup>42</sup> Kentlands was two-thirds occupied at the time of research and had completed a retail (mall-like) development but not its downtown retail center. Kim's survey found a statistically significant higher level of a chance encounter with a resident from another section of the community and higher participation in community activities.<sup>43</sup> But Kim found no statistically significant evidence that Kentlands' residents interacted more with next-door neighbors or cared more for other residents—the other two types of social interaction measured.<sup>44</sup>

The plus of Kim's study is that he employed Orchard Village as a comparison (although he did not control for any demographic differences); the minus is that his results were likely confounded by selection effects (that is, Kentlands marketing attracted more social and civic residents and Orchard Village probably attracted a far less civic mix) and concentration effects (it was easier to socialize with others since the random Kentlands resident was more social).

Bruce Podobnik, of Lewis and Clark College, compared a Portland New Urbanist development, Orenco Station, against an established neighborhood in northeast Portland.<sup>45</sup> Orenco Station is in the affluent, high-tech, western region of Portland metropolitan area known as Oregon's "Silicon Forest." The residents began occupying the site in summer 2001. It contained a town center with a coffee shop, grocery store, numerous restaurants, other retail

establishments, a central park and a clubhouse with pool; other portions of the site were under construction. Like most New Urbanist sites, the development was pedestrian-friendly and had small lot sizes, high density, and common spaces and parks. Orenco Station residents were more likely (59 percent) than northeast Portland residents (45 percent) to report that their community was friendlier than their prior residence was. Seventy-eight percent of those in Orenco Station reported a greater sense of community than in their prior neighborhood, compared to 46 percent in northeast Portland who felt this way. Finally, 40 percent of households participated in formal or informal groups, versus 30 percent in northeast Portland.

However, there are some methodological concerns about this study. First, there are substantial questions about whether northeast Portland is an appropriate comparison.<sup>46</sup> Second, there are likely to be significant selection effects from the Orenco Station residents since the marketing and design catered to civic-minded residents. For example, only one resident of Orenco Station complained of a lack of privacy despite the site's high density. Third, the face-to-face interviews may lead respondents to be less candid, but given that this interviewing approach was employed in both Orenco Station and northeast Portland, it shouldn't explain differences between the two communities.

"Insights from the Front Porch" reports on Harbor Town, a largely New Urbanist community neighboring downtown Memphis, Tennessee.<sup>47</sup> Researchers mapped the social networks of twenty-one Harbor Town respondents and concluded that people who lived on publicly used spaces (such as a square, or a riverfront park that attracted residents from throughout the community) tended to have far more geographically dispersed friendships than people who lived away from such a site. The report also suggested—consistent with the experience of Andrew Ross, who lived in Celebration, Florida, for a year—that the lack of privacy in New Urbanist design may force residents to be congenial with most residents and simultaneously encourage them to save their closest friendships for those living further away.<sup>48</sup>

Harbor Town was also compared with Riverwood Farms,<sup>49</sup> a conventional suburb of similar vintage located thirty minutes from Memphis. Slightly over a quarter of Riverwood residents reported a lack of neighborhood feeling (26 percent) versus fewer than 5 percent of Harbor Town respondents. One quarter of Riverwood respondents felt "isolated from others in their community," significantly higher than the 15 percent who felt isolated in Harbor Town. Harbor Town residents had larger social networks among neighbors, even though residents of both neighborhoods had a similar number of close neighbor friends and neighbors they visited with regularly.<sup>50</sup>

The plus of this study was the existence of the Riverwood comparison group, but the minus is that there may have been significant selection effects in that Harbor Town attracted especially civic-minded residents and Riverwood likely attracted people who were much less so inclined. The 21 percent response rates were relatively low, and the study did not examine or control

for demographic differences between Harbor Town and Riverwood respondents. The Harbor Town study, in its focus on “neighborhood” networks and friends, also did not examine whether Riverwood residents made up for their smaller neighborhood social networks by having more social friends outside the neighborhood than in Harbor Town.

In Florida, a mail-in survey<sup>51</sup> conducted by the twelve-year-old son of husband-wife authors of a book on Celebration revealed that 72 percent of Celebration reported knowing more neighbors there than in their previous residence, a third said they knew everyone on the street, and two-thirds said they knew some people on their street. Approximately 70 percent participated in block parties, one quarter participated in the PTA, and 60 percent attended community meetings. These numbers are high compared to nationwide averages, but (1) the survey did not control for the demographics of Celebration, (2) the methodology of the survey is not provided so one does not know if only the most civic slice of Celebration was reached, (3) there is no group against which Celebration is compared, and (4) the question asking how many neighbors are known relies on respondents’ (unreliable) memory.

Finally, in a different vein, Keith Hampton at MIT did a lost-letter experiment in which researchers dispersed sixty lost letters in each of seventy-one urban communities and measured the percentage of letters returned unopened.<sup>52</sup> (Lost-letter results tend to track with levels of communitywide social capital since they reflect residents’ willingness to expend energy to benefit an anonymous “other.”) There were only two New Urbanist communities in the sample (Celebration and Seaside), but Celebration led the entire survey with 86 percent of letters returned. Seaside’s performance was 65.4 percent, slightly above the average, among the seventy-one communities, of 59.4 percent. Although Hampton has not yet published results controlling responses for the town’s demographics, early analysis leads him to expect that the performance of Seaside and Celebration on average, controlling for their demographics, was on par with a standard middle-class suburb.<sup>53</sup>

## HOPE VI

Leslie Pollner studied the two HOPE VI developments in the Roxbury community in Boston, Mission Main and Orchard Gardens. Orchard Gardens is 43 percent African American, 39 percent Hispanic, and 18 percent other. Mission Main is 46 percent African American, 26 percent Hispanic, and 28 percent other. The Boston sites are at the high end of HOPE VI nationwide in the percentage of public housing residents (83 percent at Mission Main, and 85 percent at Orchard Gardens).<sup>54</sup> Pollner found an unimpressive level of bridging social capital at the Boston sites: “The delimited interaction reported by residents . . . as evidenced by the fact that community involvement rarely exceeds neighborly pleasantries and favors . . . reflects a lack of ‘investment’ in and identification with their HOPE VI development as a community. In

particular, there appear to be two communities co-existing at each site with ‘old’<sup>55</sup> residents viewing the development as a ‘home’ and newer residents viewing the development as a ‘stepping stone’ to more permanent accommodations.<sup>56</sup> Moreover, not one resident interviewed at the Boston HOPE VI sites had learned of a job from another resident, partly because of the relative absence of bridging social ties.<sup>57</sup>

Looking at social capital more generally, Pollner found relatively frequent favors performed for each other, or in some cases neighbors checking on each other, but almost all respondents reported that it is hard to get to know neighbors and that there is a low sense of community engagement. The tenant task force at Mission Main, whose members wanted to plan social activities, was saddled with financial issues. The Orchard Gardens task force was preoccupied with a new school opening in 2003. Some residents reported not getting involved in their community from a misimpression that participating in community organizing or tattling on neighbors could jeopardize their residency at the development.<sup>58</sup> Pollner’s analysis underscores the complexity of designing an environment to foster bridging social capital, and it buttresses Marshall Gans’s position that “neighbors are found, but friends are chosen, and class, race, and life stage, not proximity, appear to be the key factors in this process.”<sup>59</sup>

Art Naparstek, in *HOPE VI: Community Building Makes A Difference*,<sup>60</sup> describes interesting and exemplary community building activities occurring at seven HOPE VI sites. But his design—looking at the best examples and not controlling for the dramatic demographic changes before and after HOPE VI, a focus only on the assets in each community, and so forth—makes it hard to sort out both how representative the seven cases are of HOPE VI in general or of their communities. Second, if a community did change from HOPE VI, the approach makes it hard to assess how much resulted from a change in inhabitants rather than the physical design of the communities.

### **Retrofitting Existing Developments**

Although it is not common, sites redesigned along New Urbanist principles may be interesting for analysis, since they minimize selection effects by having a relatively constant population before and after the renovation.

Diggs Town, a barracks-style public housing project in Norfolk, Virginia, is such an example.<sup>61</sup> The site was riddled with drug dealers, trash-strewn spaces, and crime, primarily because units lacked any private outdoor space, common space was often not publicly visible, there were large “no man’s land” areas that no one took ownership of, and the site was inaccessible to automobile traffic. In the 1990s, Diggs Town was redesigned along New Urbanist lines: front porches were added (to provide eyes on the street), units were given individual addresses and private front and rear yard space with a picket fence delimiting boundaries, the “superblocks” were broken into smaller units, and the streets were relaid to facilitate auto traffic.

The changes resulted in significant anecdotal improvement. Police calls dropped from twenty-five to thirty per day to two to three per week. Yards were much better kept up and commonly were planted and cared for by the individual owners. However, the authors note that one of the challenges of assessing the physical redesign of Diggs Town alone is that “Diggs Town’s revitalization came packaged with a host of social interventions.”<sup>62</sup>

The Washington Elms (Cambridge, Massachusetts) public housing is another such site.<sup>63</sup> Approximately two hundred units in three-story garden-type buildings were renovated in the 1980s so that units had a private entry rather than a common corridor, and multiple units shared a common rear space, entered only from the individual units’ rear door. Washington Elms experienced a significant drop in crime in the ensuing years. Interestingly, however, although the management of Washington Elms ascribed the drop in crime to the redesign, a paper by Laura Siegel (albeit based on an extremely small random sample of four residents) found that residents felt the design changes led to *less* social capital, and that the drop in crime was unrelated to the design changes.<sup>64</sup> Residents said it was now harder to know neighbors, the new semi-private backyards were rarely used, and they lamented the loss of common benches and truly common space.<sup>65</sup>

## Conclusions and Implications for Future Research

The evidence to date about the civic impact of New Urbanism is not yet compelling, although the Brown and Kim studies come close to showing that the design may have some effect on neighborliness. Researchers should look for an opportunity to better bolster New Urbanist claims. There are some questions worth probing and three distinct categories worth analyzing further: the rehabbing of existing sites, HOPE VI projects, and New Urbanist developments in general.

**Questions Asked.** The studies tend to ask about “sense of community,” neighborhood behavior, or neighborhood social networks. Studies could benefit from a broader list of social capital questions: asking about the degree of bridging relationships (those crossing lines of race or class), so-called “radius of trust” questions (asking about the degree of trust with others in various circles: “your neighborhood, your town, your workplace,” and so on), political engagement, volunteering and philanthropy, involvement in voluntary groups, and so on. A list of these questions can be found in the Social Capital Community Benchmark Survey we conducted in 2000.<sup>66</sup> A broad list would help researchers understand such questions as whether social networks lead to a higher level of trust; whether informal socializing translates into political engagement, volunteering, or civic engagement; whether the social networks are primarily with bonded “like individuals” or bridged with others across race or class; and whether stronger neighborhood social networks are at the expense of social networks outside the neighborhood.

**What Are Some Promising Design Methodologies?** The foregoing analysis suggests some areas for future research to advance our understanding of the relations between New Urbanist communities and social capital.

*Rehabbing of Existing Sites.* Researchers should search for more examples on the order of Diggs Town and Washington Elms. Though they may be rare, they are an optimal research site since the population stays relatively constant before and after the rehabbing, and thus it is far easier to isolate the impact of the design change on civic attitudes and behaviors through careful before-and-after measurement. However, at least in their early years these projects still have to deal with the Hawthorne and placebo effects outlined earlier.

*HOPE VI Projects.* The HOPE VI program is an important stream of New Urbanism, given America's increased residential segregation, and the difficulty of developing bridging social ties across major cleavage such as race or class. Pollner's analysis of the Boston Mission Main and Orchard Gardens projects is discouraging in its suggestion that these sites have not built much bridging social capital. The question is whether the Boston experience is the norm or the exception. It seems plausible, given the variation of design from one HOPE VI site to another, that results at other sites might differ. Here are a few areas (and some possible questions) that might make the experience at other sites different from Boston's:

- *Places for shared interaction.* Do market units and subsidized units share common walkways? Do these units exit on different sides of a building or the same? Are there other common spaces to foster mingling?<sup>67</sup> Are there settings (gymnasium, day care facility, school, community center) for the entire HOPE VI unit that could foster bridging relationships?<sup>68</sup>

- *Floating units.* Some HOPE VI sites have specific units in the complex that are always for subsidized residents, and others commit to an overall ratio of subsidized and market-rate but "float" which units are subsidized or market-rate every time a unit turns over.

- *Demographic mix of residents.* How does the long-term commitment of Mission Main or Orchard Park residents compare with that at other sites, and what is the frequency of turnover?<sup>69</sup> How long have the residents lived there?<sup>70</sup> Does Boston's heavier weighting toward economically poor residents affect the social interaction at the site?

- *Residents' councils.* An interesting potential proxy for the level of bridging social capital at these HOPE VI sites may be whether there is one housing association for the whole development, or a housing association for public housing residents and another for market-rate units. The residents are legally entitled under HUD regulations to a separate housing association (although there has been some talk of potentially changing this), and some of the variation site to site may have much to do with the attitudes of the housing authority managers at the local sites.<sup>71</sup> Nevertheless, sites that have a well-working residents' association for *all* residents may either have an easier time

building bridging social capital or evince the site's commitment to working together.

- *Social organizing.* Is there any entity that receives funding to plan social activities for the whole housing complex? Are the Boston results on lower bridging social capital and community engagement the result of the tenant task forces at Boston's two HOPE VI sites having to focus on nonsocial issues (such as financial issues or the opening of a school)?

*For the Bulk of New Urbanist Developments.* Most sites are not rehab and are not HOPE VI. They run into all the same design problems suggested earlier (selection bias among both the New Urban residents and the standard suburban residents, sites early in their development, concentration effects, and so on). Two lines of research may be helpful in trying to overcome these design problems.

First, New Urbanist sites may retain a waiting list of people interested in a unit when one becomes available (or at least individuals who have toured the site). These individuals may be a good research pool since they may have a civic disposition similar to that of current or ultimate residents but are probably not currently living in a New Urbanist community. Researchers could compare the civic attitudes and behaviors of people on the list to those in the New Urbanist development, standardizing for demographic differences (income, race, marital status, years lived in the community, and so on). Another approach would be to gather baseline civic measurements of those on the list and then follow up with individuals who move into a New Urbanist development to see how their behavior differs three to five years after they buy a unit.<sup>72</sup>

Second, the Utah and Kentlands analyses are interesting, but the former is not regarded as an exemplary New Urbanist community and the latter clearly attracted an especially civic lot. As the number of New Urban communities increases, researchers should look for a highly regarded New Urbanist community that does not expressly market itself as "community-oriented" and conduct some of the same controlled analyses that Brown and Cropper, and Kim, did but with a broader list of social capital questions. Such a methodology could minimize the selection effect biases and maximize the benefits from New Urban design.<sup>73</sup>

## Notes

1. *New Urban News*, 2001, 6(7), although far more developments claim to be New Urbanist.

2. The author is grateful for the assistance of Liz Moderi in tracking down many of the articles cited in this article. See Plas, J. M., and Lewis, S. E. "Environmental Factors and Sense of Community in a Planned Town." *American Journal of Community Psychology*, 1996, 24(1), 109–143; Nasar, J. L. *The Evaluative Image of the City*. Thousand Oaks, Calif.: Sage, 1998; Duany, A., and Plater-Zyberk, E. *Suburban Nation: The Rise of Sprawl and the Decline of the American Dream*. New York: North Point Press, 2000. For a countertake on this, see Talen, E. "The Social Goals of New Urbanism." *Housing Policy Debate*, 2002, 13(1), 165–188. Talen's textual analysis of the twenty-seven principles in the *Charter of the New Urbanism* shows that none explicitly focus on community (other than some descriptive statements about how these

principles might improve community). But—given that New Urbanists' charter principles by their nature focus on design, in the hope that strong design leads to a strong and social community—it seems quite understandable that community plays a supporting and not a starring role.

3. See Burt, R. S. *Structural Holes: The Social Structure of Competition*. Cambridge, Mass.: Harvard University Press, 1992; and Burt, R. S. "Contingent Value of Social Capital." *Administrative Science Quarterly*, 1997, 42, 339–365.

4. An international social science literature search found 20 articles on "social capital" prior to 1991, 109 between 1991 and 1995, and 1,003 between 1996 and March 1999. Winter, I. "Major Themes and Debates in the Social Capital Literature: The Australian Connection." In I. Winter (ed.), *Social Capital and Public Policy in Australia*. Melbourne: Australian Institute of Family Studies, 2000.

5. As with other forms of capital, not all forms of social capital are interchangeable. Fleeting social ties (weak ties) and deep personal relationships are both forms of social capital, but the former type is much better for finding a job and much worse for social support.

Social capital, again like other forms of capital, can be used for negative purposes. Chemistry (a form of human capital) can be used to build a useful new polymer or to construct weapons. Similarly, although most social capital is put to positive purposes, it could be used to organize either disaster relief aid or a con game.

One clear difference between social capital and financial capital is that the former is strengthened with use and atrophies with disuse, whereas the latter compounds when unused but disappears when used.

6. For greater detail about what societal goods social capital predicts, see section four in Putnam, R. D. *Bowling Alone: Collapse and Revival of American Community*. New York: Simon & Schuster, 2000.

7. Putnam (2000).

8. Also called "traditional neighborhood design."

9. It is interesting to note that the cul-de-sac, although potentially lengthening a pedestrian trip, is often cited by its residents as a great vehicle for meeting their immediate neighbors. Brown, B. B., and Werner, C. W. "Social Cohesiveness, Territoriality, and Holiday Decorations: The Influence of Cul-de-Sacs." *Environment and Behavior*, 1985, 17, 539–565; Kim, J. "Creating Community: Does the Kentlands Live up to Its Goals?" *Places, Quarterly Journal of Environmental Design*, 2000, 13(2), 48–55.

10. See, for example, the debate about whether Otay Ranch in the San Diego suburbs was New Urbanist, given its six-lane access road, or whether Laguna West (a highly regarded development initially designed by one of the fathers of New Urbanism, Peter Calthorpe) near Sacramento had strayed from its roots. Egan, T. "A Development Fuels a Debate on Urbanism." *New York Times*, June 14, 2002, p. A16. Specifically, there is debate about whether some of the communities examined in this article are New Urbanist—for example, Harbor Town (built by a developer trying to recapture the feeling of an older Southern neighborhood rather than as a New Urbanist town, despite many such features), the Utah subdivision examined by Barbara Brown (which has some New Urbanist design elements, but not others), Diggs Town (designed by Ray Gindroz, a later leader of New Urbanism, but, according to some, relying more on Oscar Newman's principles of "defensible space" than New Urbanist design), the Washington Elms redesign (also potentially based more on Newman than New Urbanism), and so on.

11. The HOPE VI program began as a demonstration in 1992 and originally focused primarily on mixed-income and lower-density development. More recently, designs have increasingly focused on adopting New Urbanist principles.

12. "Sand gardens" appeared intermittently throughout New England in the 1890s, with swings and sand piles. By 1904, Los Angeles became the first city to establish a Playground and Recreation Department. Two years later, the Playground Association of America was founded to facilitate organized, structured, and controlled play for urban youth in municipal playgrounds.

13. The Garden City movement was based on a book written approximately three decades earlier: Howard, E. *Tomorrow: A Peaceful Path to Real Reform*. London: S. Sonnenschein, 1898.
14. See "Ethnic Diversity Grows, Neighborhood Integration Lags Behind," a report of the Mumford Center at the State University of New York at Albany, Apr. 3, 2001, showing that residential segregation persists, particularly between blacks and whites, in cities and suburbs nationwide according to the 2000 census.
15. Comment made at the Exploring (New) Urbanism Conference at Harvard's Loeb School of Design, March 1999. It is possible that Duany meant a *common* syntax of architecture rather than a shared one since the HOPE VI architectural style probably draws much more heavily from an upper-middle-class architectural palette.
16. The HOPE VI projects, in addition to mixing incomes, contain far fewer subsidized housing units than the housing projects they replace. Those displaced from the HOPE VI sites are typically given vouchers to find housing elsewhere. This article focuses on the social capital impact of HOPE VI design, but a full social capital cost-benefit analysis would examine not only the social capital and bridging social capital created at the new HOPE VI site but also the social networks displaced by the development. Little research has been done on displaced social networks, but Kingsley and colleagues have examined where those displaced from the HOPE VI site moved to; Kingsley, G. T., Johnson, J., and Pettit, K.L.S. "HOPE VI and Section 8: Spatial Patterns in Relocation." (Prepared for the Office of Public and Indian Housing, U.S. Department of Housing and Urban Development.) Washington, D.C.: Urban Institute, 2001. See also Larry Keating's article critical of the social networks among residents of Techwood/Clark Howell Homes who were displaced by Atlanta's Centennial Place HOPE VI development; Keating, L. "Redeveloping Public Housing: Relearning Urban Renewal's Immutable Lessons." *Journal of American Planning Association*, Autumn 2000, 66(4), 384–397.
17. Four New Urbanist projects near the nation's capital did recently manage to build 30,000–55,000 square foot grocery stores, but this is the exception; *New Urban News*, July–Aug. 2001, 6(5). A Portland development also managed to fit in a Home Depot (166,000 square feet); *New Urban News*, Apr. 2001, 6(3). The obstacles are twofold: few "big box" retailers are willing to abandon their fondness for automobile-friendliness and large parking lots; and the scale of such a store, unless it is sited on the periphery, is hard to work into a New Urbanist development without compromising the community's character.
18. *New Urban News*, 2001, 6(8).
19. See Iovine, J. V. "Boom v. Bungalow in Seaside." *New York Times*, July 10, 1997, p. C1.
20. See Riesman, D. *The Lonely Crowd: A Study of the Changing American Character*. New Haven: Yale University Press, 1961; Whyte, W. H. *The Organization Man*. New York: Simon and Schuster, 1956.
21. Gans, H. J. *The Levittowners: Ways of Life and Politics in a New Suburban Community*. New York: Vintage, 1967.
22. Bloom, N. D. *Suburban Alchemy*. Columbus: Ohio State University Press, 2001.
23. It is ironic that Celebration's political engagement seems to have occurred in spite of the Disney Corporation's planning, not because of it. The latest example is residents' engagement in opposition to Disney's plan to add one thousand hotel rooms to Celebration's master plan; Tobin, T. "A 'Real Town' Revolt." *St. Petersburg Times*, July 28, 2002.
24. One can similarly understand "selection effects" among those who live in a standard suburban subdivision (sometimes used in comparison with a New Urbanist community). The standard suburb is likely to disproportionately attract those valuing their privacy, since the design leads to less social interaction (with more time in a car, less time spent walking, a larger lot size, and so on).
25. Bloom (2001).
26. "Insights from the Front Porch: Creating Better Communities." (Working draft.) Princeton, N.J.: Looney Ricks Kiss, July 16, 2002, p. 37.
27. The author knows of no randomized housing example. Xav Briggs, in evaluating a Yonkers, N.Y., experiment that enabled inner-city minorities to apply for vouchers to live in

a suburb, had to try to construct a representative control group through snowball sampling; the methodology is described in Briggs, X. "Brown Kids in White Suburbs: Housing Mobility and the Many Faces of Social Capital." *Housing Policy Debate*, 1998, 9(1), 177–221. A scientific control group would be much tougher to create for a New Urbanist town where new residents are not all coming from the same neighborhood.

28. There is reason to believe in general that incoming residents of a New Urban community were not especially engaged, in civic terms, in their prior neighborhood; if they were, they would be giving up more by moving.

29. The phenomenon takes its name from Western Electric's Hawthorne plant in Chicago, where production increased between 1927 and 1932 because workers increased their productivity as a result of being singled out to take part in the experiment, rather than because of any of the productivity-enhancing methods that were tested.

30. The studies mentioned on the impact of heterogeneity, commuting time, and density are all with large sample sizes and on communities that have been around for a long time and thus avoid the "early in the game" and Hawthorne-effect problems already mentioned. There may still be selection effects in that more civic residents choose to live in a dense or urban environment. Moreover, they are not as directly on point as the studies specific to New Urbanism in the next section of this article.

31. New Urbanist developments tend to command a premium per square footage of living space. See, for example, Eppli, M., and Tu, C. *Valuing the New Urbanism*. Washington, D.C.: Urban Land Institute, 1999, showing that the eight New Urbanist communities studied commanded a 4–25 percent price premium. This price premium may be a short-term trend, as interest in New Urbanism exceeds the available supply, or it may be longer-term market validation that potential residents believe a New Urbanist town is a more livable community. Regardless of the explanation, this price premium has diminished the ability of New Urbanist communities to attract socioeconomic diversity. The experience of "new towns" is also instructive: built a generation ago with population density similar to that of New Urbanism (Columbia, Maryland, as an example) and consciously seeking income and ethnic diversity, they have shown limited ability to achieve this diversity until several decades later as the housing stock ages. See Forsyth, A. "Irvine, Columbia, and The Woodlands: Planning Lessons from Three U.S. New Towns of the 1960s and 1970s." *Journal of the American Planning Association*, forthcoming.

32. Campbell, D. E. "Getting Along Versus Getting Ahead: Contextual Influences on Motivations for Collective Action." Thesis, Government Department, Harvard University, 2002. Prior to Campbell's thesis, there were two findings. On the one hand, a rapidly growing body of economics literature found less social capital of various sorts in more ethnically heterogeneous communities, controlling for all the standard factors such as race, income, education, marital status, and so on; see for instance Alesina, A., Baqir, R., and Easterly, W. "Public Goods and Ethnic Divisions." *Quarterly Journal of Economics*, 1999, 114(4), 1243–1284, showing that public goods expenditure is inversely related to an area's ethnic heterogeneity. Alesina and La Ferrara find group participation lower when ethnic, racial, and income heterogeneity are higher; Alesina, A., and La Ferrara, E. "Participation in Heterogeneous Communities." *Quarterly Journal of Economics*, 2000, 115(3), 847–904. The same researchers also show trust is lower when racial and income heterogeneity is higher; Alesina, A., and La Ferrara, E. "Who Trusts Others?" *Journal of Public Economics*, forthcoming. Costa and Kahn show that group participation is lower when ethnic, racial, and especially income heterogeneity is higher; Costa, D. L., and Kahn, M. E. "Understanding the Decline in Social Capital, 1952–1998." National Bureau of Economic Research working paper 8295, 2001. Glaeser and colleagues find that trust is higher among Harvard undergraduates when race and nationality are the same; Glaeser, E., Laibson, D., Scheinkman, J., and Soutter, C. "Measuring Trust." *Quarterly Journal of Economics*, 2000, 115(3), 715–1090. Harris and colleagues show the state spending on education in this country is lower when the share of elderly is rising; Harris, A. R., Evans, W., and Schwab, R. "Education Spending in an Aging America." *Journal of*

*Public Economics*, 2001, 81(3), 449–472. Luttmer claims that support for welfare spending in the United States is higher if a greater share of welfare recipients are from their own racial group; Luttmer, E. “Group Loyalty and the Taste for Redistribution.” *Journal of Political Economy*, 2001, 109(3), 500–528. Poterba asserts that state spending on education is lower in the United States when the share of elderly is rising and when they are from a different racial group than school children are; Poterba, J. “Demographic Structure and the Political Economy of Public Education.” *Journal of Policy Analysis and Management*, 1997, 16(1), 48–66. Vigdor finds a lower U.S. Census response rate in counties where ethnic heterogeneity is higher; Vigdor, J. “Community Composition and Collective Action: Analyzing Initial Mail Response to the 2000 Census.” Unpublished manuscript, Duke University, 2001. Karlan finds lower NGO loan default rates in Peru with higher cultural homogeneity; Karlan, D. “Social Capital and Group Banking.” Unpublished manuscript, Massachusetts Institute of Technology, 2002. La Ferrara shows that income inequality reduces group membership in Tanzania; La Ferrara, E. “Inequality and Group Participation: Theory and Evidence from Rural Tanzania.” CEPR discussion paper no. 2433, 2002. Lindert finds that income inequality across OECD countries explains reduced expenditures on social programs; Lindert, P. “What Limits Social Spending?” *Explorations in Economic History*, 1996, 33(1), 1–34. Miguel and Gugerty show that lower schools were of lower quality and less well funded, and water well maintenance was worse, in more ethnically heterogeneous communities in Kenya; Miguel, E., and Gugerty, M. K. “Ethnic Diversity, Social Sanctions, and Public Goods in Kenya.” Unpublished manuscript, University of California, Berkeley, 2002. Costa and Kahn show that the desertion rate was higher in the U.S. Civil War union army when age and occupational diversity in the army “company” was greater; Costa, D. L., and Kahn, M. E. “Cowards and Heroes: Group Loyalty in the American Civil War.” National Bureau of Economic Research working paper 8627, 2001. Goldin and Katz find that high school expansion historically was greatest in the United States where income, ethnic, and religious homogeneity were greater; Goldin, C., and Katz, L. “Human Capital and Social Capital: The Rise of Secondary Schooling in America, 1910 to 1940.” *Journal of Interdisciplinary History*, 1999, vol. 29, 683–723. This list was compiled by Dora L. Costa and Matthew E. Kahn, in “Civic Engagement and Community Heterogeneity: An Economist’s Perspective” (prepared for the Conference of Social Connectedness and Public Activism, Harvard University, May 2002). That paper also found that ethnic heterogeneity explained the lower voting rate in California primaries and elections; and that volunteering, membership, and trust among those age twenty-five to fifty-four were lower in heterogeneous communities, especially with high wage inequality.

Eric Oliver’s research represented the other pole, showing how diversity can enhance civic engagement. Using a five-part measurement—attending community board meetings, attending voluntary association meetings, voting in local elections, contacting local officials, and engaging in informal civic activity—he found that more economically heterogeneous and well-off suburbs showed a higher level of civic engagement than more economically homogeneous communities. His results are consistent with a “conflict model” of political participation that anticipates a higher level of political engagement where people anticipate clear community-level conflict concerning political outcomes. The results combined 1990 census data with the 1990 American Citizen Participation Survey. See Oliver, J. E. “The Effects of Metropolitan Economic Segregation on Local Civic Participation.” *American Journal of Political Science*, 1999, 43(1).

Campbell notes that increased diversity may or may not increase voting, since it is both a civic norm and a self-interested act; voting tends to be highest both in the most diverse communities (where people vote to “get ahead”) and the most heterogeneous ones (where people vote to “get along”) (Campbell, 2002).

33. Putnam (2000), p. 213.

34. The survey data were collected through a comprehensive twenty-five-minute phone survey of thirty thousand Americans in forty communities. The survey was conducted under the auspices of the Saguaro Seminar: Civic Engagement in America project of the John F. Kennedy School of Government at Harvard University, funded by the Ford Foundation and a

consortium of some thirty community foundations and other local funders. These survey data are available at [www.ropercenter.uconn.edu/scc\\_bench.html](http://www.ropercenter.uconn.edu/scc_bench.html).

35. Williamson, T. "Sprawl, Politics, and Political Participation: A Preliminary Analysis." *National Civic Review*, 2002, 91(3). Kevin Leyden, in a much smaller survey of 750 residents in Galway City, Ireland, found that those in more walkable neighborhoods were more likely to know their neighbors, participate politically, trust others, and socialize with friends in pubs or in each other's homes. The results controlled for age, children at home, extent of television watching, religious attendance, years in neighborhood, level of education, and strength of involvement with a political party; Leyden, K. "Social Capital, Suburbia, and Traditional Neighborhoods: Does Neighborhood Design Matter?" Under review, *Journal of the American Planning Association*. Jack Nasar found somewhat to the contrary that residence high-density was unrelated to sense of community; Nasar, J. "Neo-Traditional Development, Auto-Dependency and Sense of Community." In M. Amiel, R. Bertrand, and J. Vischer (eds.), *Proceedings of the 28th Conference of the Environmental Design Research Association*, Edmond, Okla.; Environmental Design Research Association, 1997, pp. 39–43. Lance Freeman found that residential density alone didn't predict larger neighborhood social networks, but reducing the percentage of residents driving alone did; Freeman, L. "The Effects of Sprawl on Neighborhood Social Ties: An Explanatory Analysis." *APA Journal*, Winter 2001, 67(1), 69–77.

36. Notably, high density alone, even in conjunction with public transportation, does not lead fewer residents to drive; in three well-regarded "new towns" (having density in accordance with New Urbanist principles) a higher percentage of residents drive to work alone than the relevant state averages (Forsyth, forthcoming). New Urbanist residents who drive to work have a greater choice of routes from the grid layout (which depends far less on common arterial feeder roads), but this benefit in reducing commuting time may, in some cases, be offset by the fact that narrow roads and higher density lengthen the time it takes to access a main highway.

37. Rob Steuteville of the New Urban News believes that the "New Urban" community studied is more a hybrid than true New Urbanist for two primary reasons. First, it fails the "Popsicle" test (at least until the town center is built) since a kid could not currently walk to get a Popsicle while avoiding fast-moving cars. Second, the scale is too small to create alternative "streetscapes" amid the standard subdivision into which the "New Urban" community is interwoven (Steuteville's comments are from an e-mail to the author, July 30, 2002). However, the choice of community helped avoid selection effects, as explained in the text; Brown, B. B., and Cropper, V. L. "New Urban and Standard Suburban Subdivisions: Evaluating Psychological and Social Goals." *APA Journal*, Autumn 2001, 67(4), 402–419.

38. Brown believes that the commercial center, when built, may not lead to much of an increase in foot traffic since it will be sited both on the lowest point of hilly terrain and just off the freeway access road, inviting car trips rather than pedestrian traffic. It is possible that the retail establishments themselves, however, will foster greater opportunity to see neighbors (private correspondence with author, July 12, 2002).

39. Brown attributes these results to the infancy of the New Urbanist neighborhood; informal socializing changed rather rapidly while neighborhood attachment took longer (private correspondence with author, July 12, 2002).

40. Adjusted means for neighboring behaviors were 0.20 for standard suburban subdivision versus 0.14 for the New Urban community, significant at  $p < .05$  (Brown and Cropper, 2001).

41. For example, the New Urban community had higher levels of education and income, both differences that would have driven a higher level of social capital in the New Urban community independent of any impact of the community's design (Brown and Cropper, 2001). However, Brown indicates that the results on neighboring still hold, even controlling for income and education (private correspondence with author, July 30, 2002).

42. Kim (2000). Kentlands and Orchard Village had fairly similar demographics, although Kentlands residents' scores were boosted by a higher percentage of residents planning on staying indefinitely, a higher percentage of stay-at-home mothers, and a higher percentage of

members of the long civic generation (those born prior to 1931). Orchard Village's scores were elevated by residents with longer average length of residency (5.4 years vs. 3.7 years for Kentlands) and a slightly higher percentage of homeowners (95.7 percent vs. 87.5 percent in Kentlands). The response rates of 44 percent in Kentlands and 37.2 percent in Orchard Village were relatively similar. Kim, J. "Sense of Community in Neotraditional and Conventional Suburban Developments: A Comparative Case Study of Kentlands and Orchard Village." Dissertation, University of Michigan, 2002.

43. The mean number of "chance encounters with residents from other sections" was 3.92 for Kentlands and 3.49 for Orchard Village, significant at  $p < .001$ . The mean for participation in community activities was 3.68 for Kentlands and 3.49 for Orchard Village, significant only at the  $p < .05$  level (Kim, 2002). These differences are only modest. The lower level of chance encounters in Orchard Village likely results from a less walkable community and a lack of public spaces that encourage congregating.

44. Kim suggested that these were not statistically significant since there was still significant social interaction among Orchard Village cul-de-sac residents, and that Orchard Village still demonstrated significant social support (Kim, 2002).

45. "Portland Neighborhood Survey: Report on Findings from Zone 2: Orenco Station." Jan. 20, 2002. The interviews were done face-to-face by trained graduate students and achieved a response rate of 38 percent in Orenco Station. See also Podobnik's article in this issue of the *National Civic Review*.

46. For example, 95 percent of Orenco Station residents were white; the proportion was 44 percent in northeast Portland. The median annual income of Orenco residents was \$63,000, \$27,000 in northeast Portland. Orenco residents had lived in their community for 1.5 years on average, compared to 7.8 in the comparison sample. These demographic differences alone could have generated substantially different social capital results. Alarming, despite Orenco's marketing itself as a diverse community, 65 percent of Orenco residents expressed satisfaction with the existing level of diversity and 83 percent of the respondents were satisfied with the existing age-level diversity, despite a majority of the population being over age forty; "Portland Neighborhood Survey" (2002).

47. "Insights from the Front Porch: Creating Better Communities." (Working draft.) Princeton, N.J.: Looney Ricks Kiss, July 16, 2002. The report notes that although Harbor Town "was not specifically or consciously designed using New Urbanist principles, it contains many New Urbanist elements, which includes a mixed-use town center, traditional neighborhood streetscapes that invite walking, neighborhood squares, and a variety of housing types situated on small lots" (Preface, p. 2). Their conclusions drew on a postoccupancy evaluation of Harbor Town based on a forty-six-question mail survey sent to all 1,592 Harbor Town households (from which they got a 21 percent response rate); interviews with seven apartment residents and fourteen homeowners, and seven original developers of Harbor Town; a focus group of eleven children, ages five to fourteen, in the Harbor Town Montessori School; and direct observation, at varied times of the weekday and weekend in retail areas and public spaces, of how residents interacted with their environment. Interestingly, Harbor Town residents believe they live in a diverse community; but residents are overwhelmingly white (89 percent) compared to neighboring Memphis (55 percent), and almost two-thirds of Harbor Town residents had annual income of \$75,000 or greater. Three quarters of residents did not have children (probably resulting from fact that the community was not marketed to children owing to lack of such infrastructure at the time the site was built).

48. Ross, A. *The Celebration Chronicles*. New York: Ballantine, 1999; "Insights from the Front Porch" (2002).

49. The authors do not reveal all the demographics of Riverwood Farms, so one cannot assess how comparable it is. They do note similar housing prices, and that Riverwood had a much higher percentage of families with children (55 percent, versus 17 percent in Harbor Town). They received responses to their mail survey from 110 house residents and 36 apartment

dwellers in Harbor Town and 161 Riverwood residents. Both towns had a 21 percent response rate (“Insights from the Front Porch,” 2002).

50. Although 85 percent of respondents in both communities labeled themselves as outgoing, Riverwood respondents socialized less with neighbors than Harbor Town’s. The average Riverwood respondent knew eighteen neighbors, and some knew none, whereas the average Harbor Town respondent knew twenty-six of his or her neighbors, and all Harbor Town residents knew at least two neighbors. Both communities were close in the number of neighbors visited: seven for Riverwood and eight in Harbor Town. Residents in both towns reported five close neighborhood friends on average (Insights from the Front Porch, 2002).

51. The survey of households, which the authors label “fairly professional” (p. 257), received 268 responses, or more than 50 percent of households settled at the time of the survey; Franz, D., and Collins, C. *Celebration, U.S.A.* New York: Holt, 1999.

52. Sixty stamped and addressed letters were “lost” in a specific geographic area: twenty in phone booths (if applicable), twenty in stores, and twenty on public walkways. The lost letters tried to cover the downtown core of each area, a suburb, and a low-income inner-city area, where applicable. All U.S. letters were addressed to a post office box in Des Moines, Iowa; all Canadian and international letters were addressed to a post office box in Brandon, Manitoba. Full information on the procedure is available at <http://web.mit.edu/knh/www/lostletter/lostletter.html>.

53. Private e-mail correspondence with author, July 15, 2002.

54. HUD (the U.S. Department of Housing and Urban Development) recommends one-third of new units for public housing, one-third for tax-credit or subsidized housing, and a third for market-rate or homeownership housing; (HUD, “FY 2001 HOPE VI Demolition and Revitalization NOFA.” Washington, D.C.).

55. “Old residents” refers to those living at the site prior to the HOPE VI renovation.

56. Pollner, L. “The HOPE VI Program: Developing Social Capital and Community in Public Housing.” Unpublished paper submitted for API 420: Social Capital and Public Affairs, Kennedy School of Government, May 22, 2002. Pollner conducted detailed conversations with only ten residents, but the sample was representative of community segments in both developments, and if anything it tended to oversample those heavily involved in their community. Pollner makes clear that without any baseline measurement, it is impossible to determine whether the low level of interaction and involvement is higher or lower than it would have been without this development. Bridging social capital aside, Pollner did find that the physical design made residents more willing to take responsibility for their housing units and take pride in where they lived. Some residents got actively involved in their community (serving on tenant task forces), but most did not; “Residents across all categories—market rate and subsidized, new and old—noted that it was difficult to meet people and to get other residents to participate in more formal community activities” (Pollner, 2002, p. 11). Pollner’s results are consistent with the less scientific outcomes reported in “A Mission to Share Address Is All Some Have in Common,” *Boston Globe*, June 8, 2001, p. B1.

Pollner’s findings are also consistent with the literature, pre-HOPE VI, showing the difficulty of developing bridging social capital, even in a model mixed-income housing site. For example, James Rosenbaum and colleagues found only superficial bridging relationships across race and income being formed at Chicago’s Lake Parc Place (Rosenbaum, J. E., and others. “Lake Parc Place: A Study of Mixed-Income Housing.” *Housing Policy Debate*, 1998, vol. 9, no. 4, 703–740). Brophy and Smith found limited ability to create bridging social capital at seven successful mixed-income developments, including two in Boston. The two Boston sites (Harbor Point and Tent City) and Ninth Square (in Oakland), which attracted 26 percent, 37 percent, and 28 percent of market-rate residents respectively, had minimal interaction between the subsidized and market groups, and Harbor Point tensions led to automobile vandalism (Brophy, P. C., and Smith, R. N. “Mixed-Income Housing: Factors for Success.” *Cityscape*, 1997, vol. 3, no. 2, 3–32).

57. Pollner (2002), p. 23.
58. Pollner (2002), p. 13.
59. Quoted in Briggs (1998), p. 188.
60. *HOPE VI: Community Building Makes a Difference*. Feb. 2000. Prepared for the U.S. Department of Housing and Urban Development. The book does not focus on bridging social capital.
61. The analysis of this project comes from Bothwell, S. E., Gindroz, R., and Lang, R. E. "Restoring Community Through Traditional Neighborhood Design: A Case Study of Diggs Town Public Housing." *Housing Policy Debate*, 1988, 9(1), 89–114.
62. Bothwell, Gindroz, and Lang (1988), p. 108.
63. The site was remodeled along lines consistent with New Urbanism and thus affords an opportunity to assess the impact of some of these design elements, even though no one at the time labeled it a New Urbanist remodeling.
64. It may have been due to independent factors such as the nationwide drop in crime occurring at this time.
65. Siegel, L. "Washington Elms and Social Capital." Paper presented for API-420, Kennedy School of Government, spring 2002.
66. See [www.ksg.harvard.edu/saguaro/communitysurvey](http://www.ksg.harvard.edu/saguaro/communitysurvey).
67. One HUD official indicated that these sites rarely have a common place to obtain mail since it might serve as a vestige of the indignities of prior public housing.
68. The demographics of the site can substantially drive the opportunity for a common facility to create bridging relationships. For example, Charlotte's First Ward Place/Autumn Place (formerly Earle Village) has a community center with indoor and outdoor play space for children. This is theoretically a natural setting for bridging relationships to occur, yet there are no market-rate residents in First Ward/Autumn Place with children.
69. For example, in Atlanta's Centennial Park (formerly Techwood/Clark Howell Homes), 74 percent of subsidized residents wanted to live there five years or more, but only 23 percent of market-rate residents. Part of this transience is surely driven by the high percentage of students in market-rate units, but it nonetheless affects the ability to build social networks (Abt Associates. "Case Study Interim Assessment of the HOPE VI Program: Case Study of Techwood Homes and Clark Howell Homes in Atlanta, Georgia." Final report. Mar. 23, 2001.)
70. Seventy-five percent of residents had lived at Atlanta's Centennial Park for twelve months or less (Abt Associates (2001).
71. Witness Atlanta's Centennial Park, which has so far allowed only a residents' association for the entire Centennial Park complex, as opposed to the managers of Seattle's Holly Place, who have refused to furnish a list of subsidized-unit residents to those residents who want to start a separate association among the subsidized-unit people. The Holly Place managers, however, did agree to notify new subsidized-unit residents of the existence of this public housing resident association and to tell new residents how to contact them.
72. Researchers would need to control for how long people have lived in the community since it often takes time to develop civic roots.
73. None of the approaches suggested for a new New Urbanist site address the concentration effect issue, since it is presumably easier to build social capital in a place where most people want to be social.

*Thomas H. Sander is the executive director of the Saguaro Seminar: Civic Engagement in America project at the John F. Kennedy School of Government, Harvard University.*