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THE NEIGHBORHOOD UNIT CONCEPT AND THE SHAPING OF AMERICAN

LAND PLANNING 1912 – 1968

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INTRODUCTION

Two recent volumes (Sanyal, Vale, and Rosan 2012; Healey and Upton 2010) have

nurtured a small but active scholarly interest concerning leading ideas in urban planning

and design. Contributions wrestle with the ambiguities and contradictions inherent in

ideas as they travel from one "conversation" to another, questioning how and why some

ideas matter (Sanyal, Vale, and Rosan 2012). Healey has called for more research

involving "critical analyses of specific experiences" that "help to identify different ways

of exploring the relation between ideas, practices and outcomes" (Healey 2010, 16). This

paper contributes to the discussion by examining the neighborhood unit concept's impact

on suburban land planning norms in the United States during the middle decades of the

twentieth century. It focuses on a close analysis of professional and governmental texts,

seeking to understand the significant but provisional role that the idea of the

neighborhood unit played in catalyzing the development of land planning practices and

organizations.

The neighborhood unit concept (Figure 1) is a model for residential environments

containing community facilities, parks, local shopping and housing for the population

needed to support an elementary school. It has had a long history in urban planning and

design (Gillette 1984; Silver 1984). Popularized by Clarence Perry in the 1920s (Perry

1

1929), the neighborhood unit concept was partly a descendent of the Garden City tradition introduced in England in the previous generation (Hall 2002), a lineage that was advanced by the interchange between British town planners and their American counterparts - particularly the emigration of Thomas Adams to the United States. Perry's formulation of the neighborhood unit concept fused the social theory of Charles Cooley (1909) and Roderick McKenzie (1923) with his own work in the community center movement (Perry 1921) and recent innovations in real estate development (Perry 1929, 35). Although Radburn, NJ (Stein 1951) is probably the most well known built example of a neighborhood unit development, the concept has had a number of applications, including urban renewal (Perry 1939), new town planning (Glass 1945) and the neighborhood-focused community planning efforts that emerged in the sixties (Silver 1984). More recently it has been advanced by proponents of the New Urbanism (Duany, Plater-Zyberk, and Speck 2000).

Scholarly criticism of the neighborhood unit concept is extensive. Much of it focuses on the neighborhood unit's sociological foundations and its implications of physical determinism. Cooley (1909) saw the neighborhood as a *primary group* – a fundamental unit of social organization through which individuals come to terms with the broader world, and proponents of the neighborhood unit concept asserted that "the ultimate social character and quality of development of neighborhoods and communities is largely predetermined by the way in which land is first laid out in streets, blocks, and lots before being built upon" (Adams in Perry 1929, 3). Banerjee and Baer's research (1984) demonstrated though that residents display little consistency in perceiving their

surroundings as any kind of cohesive social unit. Jacobs (1961) and Alexander (1965) have argued that the neighborhood unit concept fails to capture the emergent complexity of organic social life. Webber (1963) in particular cast doubt on the significance of local proximity in the formation of social ties. Moreover, many scholars (Dewey 1950; Fairfield 1992; Lawhon 2009; Patricios 2002) have in varying degrees refuted claims that the physical design of residential environments in itself has the power to shape social life.

Others have voiced more pointed concerns with applications of the neighborhood unit concept. Both Isaacs (1949b) and Bauer (1945) criticized its racism and elitism.

Dyckman's (1959) discussion of problems in matching school catchment areas to homogenous residential neighborhoods is typical of the innumerable articles assessing particular challenges arising in applications of the neighborhood unit. The merits and demerits of such applications have often been the subject of lively debate (e.g. Meyerson and Mitchell 1945; Holden 1948; Isaacs 1948; Stillman 1948; Wehrly 1948; Goodman 1949; Isaacs 1949a; Riemer 1950).

This paper stems from an appreciation that leading ideas like the neighborhood unit are communicative forms (Bateson 1972) as much as they are concepts in their own right.

They are the frames (Rein and Schon 1991) through which we interpret phenomena and – as the set of texts noted in the previous paragraph suggests – the fora within which we debate meanings and actions. Coming to terms with leading ideas requires an understanding of the texts and conversations in which they form a part and a sensitivity to the ways that ideas shape those texts and conversations. Discussion of the neighborhood

unit concept occurs at multiple levels: below the level of scholarly critique exists a set of discourses that employ the neighborhood unit towards the practical ends of attending to the planning, design, financing and regulation of residential environments. I therefore focus on discursive analysis of texts published by the organizations most responsible for shaping suburban land planning and development in the United States through the middle of the twentieth century. I analyze how use of the neighborhood unit concept in such texts changed over time and compare the values that organizations express through the neighborhood unit concept. This analysis supports inferences addressing how organizations adapted the neighborhood unit concept to serve their needs, how multiple organizations negotiated land planning norms through the neighborhood unit concept, and how organizations negotiated tensions between principles of the neighborhood unit concept and evolving practices in land planning and development.

[INSERT FIGURE 1 HERE]

Despite a number of excellent histories on the subject (Southworth and Ben-Joseph 1995; Listokin and Walker 1989; Weiss, 1987), the neighborhood unit concept's impact on twentieth century American land planning practices has been underappreciated. Weiss' history of early American subdividers for instance mentions the neighborhood unit only in passing (CITE with page number). Yet by the 1960s no less than eighteen professional and governmental organizations – essentially every major organization in North America that had anything to do with urban planning, design, development, or finance – had adopted the neighborhood unit concept in whole or in part (Solow, Ham, and Donnelly

1969). I argue that over the middle decades of the twentieth century the neighborhood unit concept became a shared consensus for improving the quality of residential environments by reorganizing the production of urban space, and that this use of the neighborhood unit concept perversely contributed to the proliferation of suburban sprawl.

The following sections cover creation of the neighborhood unit concept, its use in depression-era federal housing policy, its role in framing post-war land planning and development practices, and changes to the concept as those practices evolved. The paper concludes by assessing the remarkable resilience of the neighborhood unit. The neighborhood unit's long history is useful to contemporary practice both because it teaches us about the development of land planning norms and because it helps us understand the emergence and diffusion of leading urban design ideas.

DEVELOPMENT OF THE NEIGHBORHOOD UNIT CONCEPT 1912-1939

Early development of the neighborhood unit concept reflected a mix of social and practical concerns. As a section of the first Regional Plan of New York, Perry positioned the neighborhood unit concept to be a general model for neighborhood planning applicable to the range of needs of communities in metropolitan New York, including new development, aiding existing communities, and wholesale replanning of blighted urban districts (Perry 1929, 22-24). It was the latter context that consumed Perry's later work. Perry's interest in neighborhood planning grew out of his disillusionment with the community center movement's inability to transform social conditions of slums (Perry 1921). In *The Rebuilding of Blighted Areas* (1933), *Housing for the Machine Age* (1939)

and the tenth and twelfth chapters of *The Neighborhood Unit* (1929) He argued for new public powers of eminent domain to raze slums and assemble plots large enough to develop comprehensively planned neighborhood units from scratch.

Suburban application of the neighborhood unit was advanced by Adams, Bassett, and Whitten (Whitten 1927; Adams, Bassett, and Whitten 1929; Whitten and Adams 1931; Adams 1934). Here the emphasis was on planning the environment surrounding the individual home. Adams explained the importance of neighborhood planning in the following manner:

"It is only when we think of the home as an element in the neighborhood that we realize the importance of city planning in making it a real home. A home is not a detached unit but part of a neighborhood, which in turn is part of a town; and the good quality of the home usually depends at least as much on its surroundings as on its design and construction. Hence the vital importance of ground planning and control of neighborhoods" (Adams 1934, 147).

The emphases on planning and control were equally important; early texts addressed both the physical design of neighborhoods (Adams 1934) and establishment of zoning (Adams, Bassett, and Whitten 1929), protective covenants, and establishment of homeowner associations (Perry 1929).

An important antecedent to Perry and others' work on the neighborhood unit concept was the 1912 national design competition sponsored by the City Club of Chicago (Yeomans 1916; Johnson 2002). The City Club of Chicago competition called for the design of a

neighborhood on a quarter section in an outlying area on Chicago's south side that addressed needs for parks, recreation centers, neighborhood institutions and better housing. The competition brief included a summary of recent Garden City – style development in Great Britain and Germany (Yeomans 1916). Johnson (2002) suggests that it was likely that Perry was familiar with the competition through associations developed at the Russell Sage Foundation. William E. Drummond, an entrant to the competition, may have been the first to use the term "neighborhood unit"; Drummond's scheme illustrated ways to plan a city using neighborhood units as the fundamental building block.

Wilhelm Bernhard's winning entry to the 1912 competition (Figure 2) illustrates early thinking underpinning the neighborhood unit concept (Yeomans 1916) and largely fulfills Perry's six neighborhood unit principles (see Table 1). The scheme breaks down the monotonous Chicago blocks, creating an internal street network organized around a curving collector street. Parks and civic institutions are arranged at the center of the proposal and are linked to commercial facilities grouped along a principle arterial street on the eastern edge of the site. It may be that many of the features that have come to be associated with the neighborhood unit concept were conditioned by site considerations similar to that of the 1912 competition, particularly the arrangement of high-traffic streets to the edge rather than the center of the neighborhood and the 160 acre size (used in Perry's formulation although not in Radburn) based on the quarter section of the United States.

[INSERT FIGURE 2 HERE]

One of the most important roles that the neighborhood unit played in suburban land planning was in illustrating the economic possibilities of progressive subdivision and development. On this point Perry, Whitten and Adams advanced an argument first made by Raymond Unwin in *Nothing Gained By Overcrowding!*, (1918): efficiencies gained by eliminating streets and increasing block lengths and depths made it possible to incorporate community amenities without too much additional cost. The bulk of *Neighborhoods for Small Homes* (Whitten and Adams 1931) and *The Design of Residential Areas* (Adams 1934) were devoted to comparing the per unit cost and amenity level of different neighborhood unit schemes.

[INSERT FIGURES 3 AND 4 HERE]

Figures 3-7 illustrate the progression of this thinking. Traditional gridiron blocks (Figure 3) created deep lots that were too little used and left no area for open space. Shortening lots and increasing the block size created park and playground space on the interior (the model used in Sunnyside Gardens, New York). Perry argued (Figure 4) that combining several blocks instead of merely squeezing lot depths formed space that was more suitable for both apartment buildings and for courtyard space. Whitten extended this idea (Figure 5) through the combination of several large blocks into a neighborhood unit, one that differentiated the interior system of narrow streets and cul-de-sacs from the system of arterial boulevards that proscribed the neighborhood unit's outer edge. Adams then

increased the size of neighborhood unit blocks and studied a series of options for laying out the interior, including hexagonal and cul-de-sac models (Figures 6 and 7) as well as schemes that used double and triple loading of lots stacked behind each other to further reduce the length of street needed per home lot. Here the neighborhood unit was used to develop increasingly elaborate superblocks, the diagrammatic explication of principles realized in Radburn, NJ.

[INSERT FIGURE 5 HERE]

Where Perry was concerned with rehabilitating the social order of the slums of dense industrial cities, land planners in the thirties focused on economics of development (Whitten and Adams 1931; Gries and Ford 1932), particularly for more modestly prices homes that in unregulated land markets were always in danger of being priced out by higher uses. Platting land into large, neighborhood unit-style superblocks that captured value through parsimonious street planning and economies of scale was one strategy of addressing this concern.

[INSERT FIGURES 6 AND 7 HERE]

FRAMING OF FEDERAL HOUSING POLICY 1931-1939

Interest in the neighborhood unit came to the fore during the President's Conference on Home Building and Home Ownership convened by Herbert Hoover in 1931. The neighborhood unit was then institutionalized as federal policy through literature

published by the Federal Housing Administration's Land Planning Division. Both initiatives were a response to the Great Depression, and each reflected a dual mission of improving housing standards and reviving employment in the construction industry. In each case the neighborhood unit was adopted as the core concept advancing this dual mission. In neither case, however, was application of the concept coherent and complete. Instead the neighborhood unit was used pragmatically to disseminate land planning norms to subdividers and home builders that generally operated at a smaller scale than that of a full neighborhood.

Hoover's President's Conference brought together leading experts from a variety of fields to address the best methods of subdivision, homebuilding, residential development and finance. Proceedings of the conference were published in a multi-volume report that made the neighborhood unit the primary model addressing issues concerning a home's surroundings (Gries and Ford 1932). The volumes summarized Perry's research on such matters as the size of the neighborhood unit, neighborhood boundaries, the importance of original planning, and methods of regulation and control. But the President's Conference's use of the neighborhood unit extended beyond Perry's 1929 monograph to include chapters on matters as diverse as utilities, landscape planning, and subdivision layout. The volumes also covered material on the economics of land subdivision, couched within the framework of the neighborhood unit and drawn from the contemporaneous research by Whitten and Adams discussed in the previous section.

The neighborhood unit was used in the President's Conference volumes because it was at the leading edge of research in the planning of residential environments. In drawing on the neighborhood unit, though, the volumes oriented it towards the particular interests of the residential construction industry. Sociological arguments developed in Perry's 1929 monograph were less emphasized. This selective emphasis was reflected not just in the content of the volumes but also in their tone. Editors of the President's conference introduced the term neighborhood unit via values peculiar to developers:

"Permanence and stability are most essential in maintaining good homes and home neighborhoods. It is necessary, therefore, as a part of city planning, to encourage in all ways the design and development of each neighborhood so that it shall be a self-contained unit in the pattern of the city. This has come to be known as the neighborhood unit." (Gries and Ford 1932, 7; italics mine).

The emphasis on permanence and stability echoed language used by subdividers like J.C. Nichols, and it reflected the larger subdividers' interest in rationalizing the residential construction industry (Weiss 1987).

The neighborhood unit's use in the literature of the Land Planning Division of the Federal Housing Administration was more consequential. The FHA established its Land Planning Division to promulgate planning advice to subdividers and homebuilders applying for FHA mortgage insurance. The Land Planning Division disseminated its insurance appraisal policies and planning advice in a series of circulars and technical bulletins that, respectively, explained the policies, procedures, and standards that the FHA required from developments applying for mortgage or construction loan insurance, and provided

supplementary advice and recommendations. The FHA used the neighborhood unit to bridge the twin purposes of the agency – "to encourage improvement in housing standards and conditions" and "to provide a system of mutual mortgage insurance" – described in the preamble to the National Housing Act of 1934. Mortgage insurance depended on an appraisal of a home's value; echoing Adams, FHA literature argued that the value, standards and conditions of the home were as dependent on the value, standards and conditions of the neighborhood as much as they were the home itself (Adams 1934; FHA 1935). By 1939 30% of all housing starts in the US relied on FHA programs, a figure that peaked at three out of every four housing starts during the Second World War before settling at an average of forty to fifty percent (FHA and Veterans Administration combined) in the following decade (Kelly 1959). The FHA's pervasive impact on the housing market, combined with its increasing ability to persuade homebuilders to follow its standards, was the chief reason for the wide adoption of neighborhood unit-style land planning norms in the middle of the twentieth century.

The neighborhood unit came into play because the Land Planning Division drew heavily from the President's Conference and from Thomas Adams' *Design of Residential Neighborhoods* (1934), both of which framed residential planning through the neighborhood unit concept. As Figure 8 illustrates, however, the FHA literature described the principles of the neighborhood unit in a piecemeal fashion rather than as a whole. Figure 8 admonishes builders to provide sites for schools and churches within the development, preferably at the center. The diagram also indicates space for a "business center" (i.e. a shopping center) along the principal collector road at the entrance to the

development. No mention is made of the neighborhood itself, nor of any of the other principles within the neighborhood unit or the connections between principles.

[INSERT FIGURE 8 HERE]

The piecemeal application of neighborhood unit principles was partly a matter of pragmatism. In the 1930s the majority of homebuilders in the United States were akin to general contractors building just a handful of homes each year. Operative builders constructing homes at a rate greater than 100 per year accounted for just 11% of new housing starts in 1938 (Colean 1944). The FHA saw that mortgage insurance could be used to improve housing conditions by linking its issuance to improved subdivision standards, but leaders of its technical staff recognized that "the FHA operation involved cooperation rather than coercion" (Colean 1954) and that the FHA had to develop a system of improving standards that was based on persuasion. Particularly in its initial years the Federal Housing Administration's policies were therefore aimed at the homebuilder and general contractor as much as they were the large subdivider or the municipal planner who were more likely to be leading proponents of land planning innovations.

Here what was important was less the orthodox creation of neighborhood units than the development of good quality (and financially secure) housing irrespective of the size of the subdivision. Thus the text in Figure 8 says "If a subdivision is large enough to warrant consideration of all community requirements...": i.e. a full neighborhood unit is

desirable, but if you were only developing on a small parcel, a more modest development was acceptable.

Nevertheless, the FHA's initially modest imposition of the neighborhood unit on the homebuilding industry would strengthen by the end of the thirties. The contrast between initial and later editions of the circulars is significant. The first version of *Subdivision Development* published in 1935 mentioned the neighborhood only in the last of a series of seven recommended (i.e. not required) standards. It discusses advantages of neighborhood unit development, but only as a provisional encouragement, couching them as "unusual types" of development:

"(7) The design of the subdivision and the manner in which the development is advanced will be such that they lend themselves to the creation of a cohesive, stable, recognizable neighborhood.

Unusual types of subdivision layout, town site, and neighborhood planning will be considered advantageous so long as they meet the other basic requirements. A real neighborhood evolves as a designed unit, fully equipped in its physical development, and organized in its community life for adequate services and many forms of recreation." (FHA 1935)

After a number of revisions, *Subdivision Standards* had by September 1939 given the neighborhood unit a prime role. Here the concept is discussed in the first principle rather than last, and as a necessary rather than recommended or unusual standard:

"I.

Only those neighborhoods which have qualities making for continuity and stability of use over a period of years provide the security essential for long-term mortgage investment.

The subdivision must be more than an extension of streets and blocks of houses. It should be recognizable as a distinct unit within a community, with a definite pattern and definite protection which will permit it to exist as such. It should be so designed as to give to each householder the sense of belonging to a larger unit, to give him the feeling of neighborhood identity, and to cause him to take pride in the maintenance of the neighborhood as well as in his separate property." (FHA 1939; italics in original)

The revisions of FHA circulars and bulletins reflect acceptance of FHA policies by the private development industry (Colean 1966) and the increasing ability of the Administration to impose recommendations on development projects.

Even so, the FHA was more concerned with using the principles of the neighborhood unit to improve the quality of residential developments than they were with the neighborhood unit itself. The extent to which the FHA pushed the real estate development industry to develop residential environments as neighborhood units is illustrated in Figure 9. This pair of images taken from a later edition of *Planning Profitable Neighborhoods* compares an initial subdivision plan (submitted by a developer to the FHA as part of an application of pre-approval for FHA mortgage insurance for prospective homebuyers) with a suggested revision prepared for the site by professional staff at the FHA's Land Planning

Division (FHA 1938). The latter is at least somewhat more reminiscent of the neighborhood unit than the former. It makes use of several of the neighborhood unit principles – the design of unit boundaries, provision of open space, inclusion of a shopping center along the arterial road, and planning of a localized street system – and is clearly planned as a single comprehensive unit. Yet it remains a subdivision and not a complete neighborhood in the sense that Perry articulated.

[INSERT FIGURE 9 HERE]

This is a critical distinction. In the thirties the Federal Housing Administration was not concerned with neighborhood units per se but rather with using the neighborhood unit concept to improve the quality of residential environments that were then being developed largely by small time homebuilders. It was not the *neighborhood* that mattered here but rather the principle of development via comprehensively planned *units*. The neighborhood unit was effective in instigating this change (i.e. shifting the scale of planning and development practices from the lot to the unit), but in the FHA literature the change was not predicated on the development of full neighborhoods. In this sense, the neighborhood unit came to be the theoretical model for developing subdivision units rather than neighborhoods.

A MODEL FOR POST WAR SUBURBAN NEIGHBORHOODS 1947-1954

Diffusion of the neighborhood unit concept accelerated in the years immediately after World War II. The most significant texts employing the neighborhood unit were

Planning the Neighborhood (Solow and Copperman, 1948), published by the American Public Health Association for an audience of urban planners working in local government, and *The Community Builders Handbook* (ULI 1947), published by the Urban Land Institute for the real estate development community. Such texts were primary means of disseminating information to members of professional communities, and in some ways advanced diffusion of land planning norms in a deeper manner than what was possible through the transactional nature of FHA policies and practices. Diffusion was also amplified by articles appearing in the Journal of the American Institute of Architects (Holden 1948; Goodman 1949; Isaacs 1949a), the Journal of the American Institute of Planners (Isaacs 1948; Stillman 1948; Wehrly 1948) and trade magazines like ULI's *Urban Land*. Each professional community adopting the neighborhood unit tailored it to their professional practices and values. Diffusion was not wholly consistent or complete however: differing orientations towards the neighborhood unit and shifts in particular development norms pressured the fidelity of the concept.

Planning the Neighborhood extended the APHA's earlier work on housing (APHA 1938, 1939) to cover public health issues beyond the residential property. Affirmed by the American Institute of Planners and the American Society of Planning Officials, it became the standard text for professional planners working in local government and would remain so for more than two decades (e.g. a 1968 survey found that 80% of professional and academic planners were familiar with Planning the Neighborhood and used it in their work (Solow, Ham, and Donnelly 1969)). Much of its content mirrored and deepened that of the President's Conference on Home Building and Home Ownership. The book

included material on site selection, infrastructure, protection from hazards and nuisances, and access to community facilities, some of which (elementary schools, shops) were located within the neighborhood while others (high schools, employment centers) were expected to be further out in the city or region.

Like the President's Conference, *Planning the Neighborhood* used the neighborhood unit to synthesize and frame this broad set of issues and to give it moral backing. It framed the neighborhood as "the minimum planning unit" (Solow and Copperman 1948,1) echoing Perry in stating "... it is assumed that for planning purposes the extent of the neighborhood will be determined by the service area of an elementary school". *Planning the Neighborhood* also quoted the definition of a neighborhood unit – "that area which embraces all the public facilities and conditions required by the average family for its comfort and proper development within the vicinity of the dwelling" – that Perry had developed in his later work *Housing for the Machine Age* (Perry 1939).

Much more so than the President's Conference or FHA literature, *Planning the Neighborhood* also drew on the sociological argument for the neighborhood unit that Perry had synthesized from Chicago School sociologists. In the preface and introduction to *Planning the Neighborhood* its authors argue "It [i.e. the neighborhood] is the physical and social environment which constitutes the basis for healthful housing, since man is essentially a social animal" (Solow and Copperman 1948, vi) and "The existence of a unified neighborhood is a strong force for the stability and development of individual and family life... While this concept of a neighborhood depends essentially on matters of

physical arrangement, it has social implications in that it aims at promoting the conscious participation of residents in community activities" (Solow and Copperman 1948, 1).

Planning the Neighborhood translated its sociological commitments into physical planning principles by extending Perry's research into sizing walkable neighborhoods (Solow and Copperman 1948, 69-70) and, significantly, by advocating planning and development of neighborhoods that contained a range of housing types (Solow and Copperman 1948, 27).

The Community Builders Handbook played an equivalent role to Planning the Neighborhood within the real estate development industry. The primary text for post-War suburban development, the Handbook was developed by the Community Builders Council of the Urban Land Institute, who represented the interests and values of large-scale land planners and subdividers who by then were transitioning into operative home building (Eskew 1959). ULI worked closely with both industry groups like the National Association of Home Builders and the federal government – including hiring as its first executive director Seward Mott who had previously headed the FHA's Land Planning Division (FHA 1940, Colean 1954).

The *Handbook* was a comprehensive manual that prior to its reformulation in the seventies offered a straightforward cookbook approach to suburban development [cf. ULI 1947; McKeever and Griffin 1977]. The neighborhood unit concept provided the normative framing for the *Handbook* as a whole. This is reflected not just in the section on site planning, where principles of the neighborhood unit were discussed in detail, but

also in the book's overall content, which addressed the planning, development and management of the two components of the neighborhood unit – housing and shops – that were under the developer's purview.

In contrast to the APHA's use of the neighborhood unit concept in *Planning the Neighborhood*, the *Handbook* vocalized the values of the real estate development community. It "emphasized the practical and realistic aspects of community development against the background of sound city and community planning" (ULI 1947, vii), quoting J.C. Nichols for effect: "Let us so plan and build, in order to create stable values and neighborhoods of such permanent character as to endure for generations" (ULI 1947, 38). Absent were the social concerns voiced in *Planning the Neighborhood* and Perry's original monograph.

Figure 10 shows the *Handbook*'s use of the neighborhood unit. The accompanying text quotes Perry's six neighborhood unit principles verbatim while including an original diagram (see also Table 1). The ULI version of the neighborhood unit diagram is roughly in keeping with Perry's in terms of its size, boundaries, and location of the elementary school, but it has a number of differences. The blocks within the neighborhood are longer than Perry's diagram and the street system more curvilinear and less intricate. There is also greater ambiguity in the ULI diagram - both with the size of the neighborhood (the ULI diagram shows no scale) and with the neighborhood boundaries – two sides are delineated simply with dashed lines and not arterial roads.

[INSERT FIGURES 10 AND 11 HERE]

The NAHB literature is informative as well, as much for how it does not use the neighborhood unit as for how it does. *Home Builders Manual for Land Development* (ULI 1950b) was a book developed by ULI under the sponsorship of NAHB's Land Planning Committee. It synthesized a number of "Land Planning Service Bulletins" written by ULI staff and published in various issues of NAHB's trade magazine. The *Home Builders Manual* was aimed at NAHB's 16,000 members, 90% of whom continued to build just a handful of homes a year in 1949 (Maisel 1953, Checkoway 1980). Elsewhere the FHA and the ULI encouraged such builders to group together in a cooperative syndicate to plan and develop neighborhood units (FHA 1938, 1940; ULI 1947). Aimed more at serving its audience rather than advancing particular norms, *Home Builders Manual*, by contrast, did not mention the neighborhood unit at all.

It did, however, include the ULI's version of the neighborhood unit diagram, in a chapter called "Making the Most of Church and School Locations in Subdivision Planning". The chapter provides insight into the changing thinking in subdivision design. It values schools and churches for increasing the desirability of neighboring homes and suggests that homebuilders provide sites for their eventual development in their subdivision plans. But where Perry and Adams placed school and churches in the center of the neighborhood the *Home Builders Manual* noted the auto traffic and outside users that each attracted and suggested strategies to protect single-family homes from their blighting influence. The diagram in Figure 10 shows the elementary school on a large

block integrated with the community park rather than the residential blocks. Churches here are placed not in the center but at the edge of the neighborhood, along the arterial roads. This was very similar to the strategy Perry used in siting shopping centers in the neighborhood. But it highlights a tension between including a mix of uses and shielding the neighborhood from them. Note also that Figure 10 has a clearer separation of uses as well as a land use gradient, with semi-detached homes and apartments each buffering the less intensive residential uses from the more intensive commercial ones. The desire for protection from so-called blighting influences pushed against the norm of a comprehensively planned neighborhood unit.

Spurred in part by federal housing policy, the neighborhood unit concept influenced much of the suburban planning and development activity in the United States in the postwar period. It did so not merely by providing substantive design norms but also by giving shape to nascent professional discourses in public health and real estate development, discourses that were partly conditioned by the evolving structure of the development industry. Yet in drawing on the neighborhood unit both *Planning the Neighborhood* and *The Community Builders Handbook* adapted it to suit their needs. Each highlighted the values and practices germane to their professional communities and obscured those that did not. Moreover, the practices that the neighborhood unit shaped were not static. Both value differences and shifting norms pressured the fidelity of the concept.

GROWTH AND EVOLUTION OF SUBURBAN DEVELOPMENT 1947-1968

Suburban development grew rapidly after WWII and catalyzed structural changes in the home building industry. While in the 1930s the US produced just 2,734,000 housing starts, the total in the 1940s was 7,330,000, the majority of which were built after the end of the war; the US produced 15,068,000 units in the 1950s (Checkoway 1980). Much of this increase was developed by merchant homebuilders like Levitt and Sons who operated at a much higher volume than the core constituency of NAHB. Less than 1% of homebuilders constructed more than 100 houses a year in 1949 but they accounted for 24% of all new home construction (Maisel 1953); by 1959 they accounted for 64% of housing starts (Checkoway 1980). Merchant builders combined the subdivision and marketing operations of older developers like J.C. Nichols with operative homebuilding. They achieved economies of scale by rationalizing residential construction, bringing consultant functions in-house and sourcing materials directly from manufacturers (Eichler and Kaplan 1967). Merchant builders in this time period began operating at a scale beyond that of a single neighborhood unit.

The proliferation of suburbs in the decades following WWII supported a rapidly growing body of professional literature. Trade magazines such as ULI's *Technical Bulletin* disseminated research reports and case examples that increased the sophistication of the suburban development industry. The *Community Builders Handbook* assimilated this information in four major revisions (ULI 1950a, 1954, 1960, 1968) that greatly increased its size. The neighborhood unit concept maintained a prominent place in the *Handbook*. At the same time, new development typologies emerged, and exemplary neighborhoods

presented in the *Handbook* reflected current advances by merchant builders, expanding in scope beyond what was captured by the neighborhood unit concept.

Much of the growth in the *Community Builders Handbook* stemmed from rapidly evolving retail development practices. ULI published two major reports in 1949 (Mott and Wehrly 1949; Hoyt 1949) that expanded the knowledge on the development and operation of centers. The 1954 edition of the Handbook extended content on retailing from a single chapter to an entire section, with separate chapters on market analysis, site planning, architectural design, and operation and management paralleling similar chapters on residential development. Other research (McKeever 1953; Nelson and Aschman 1954) quickly followed.

Though shopping centers in early ULI literature were planned as integral parts of neighborhoods, their orientation soon shifted towards the car. Initial and revised versions of the Hillsdale Shopping Center, built by the California builder David Bohannon (Figures 12, 13) help to illustrate the shift (ULI 1954). Retail buildings in the first version of Hillsdale fronted the streets, framing an entrance to the neighborhood similar to early versions of the neighborhood unit concept (e.g. Figure 1). Parking was relegated to the rear of the lot. The Hillsdale plan that was eventually constructed, however, shifted the buildings to the center of the site. The changes increased the total number of parking spaces without increasing the farthest distance a customer would have to walk between parking space and store. More importantly, it made parking visible to drivers while still on the road. The changes – larger shopping centers, increased parking, and

placing parking in front of the buildings – increased the viability and acceptance of suburban shopping centers, but loosened them from their tight integration into the neighborhood unit.

[INSERT FIGURES 12 AND 13 HERE]

Perry's principles for neighborhood unit shopping facilities contrasted with actual norms of the retailing industry, which generally operated at a larger scale. Content on shopping center development in the later editions of the *Community Builders Handbook* (ULI 1954, 1960, 1968) grew into a three-tiered typology consisting of neighborhood, community, and regional centers. One of the ironies of regional shopping malls in the post war period though was that they employed many of the principles promulgated by the neighborhood unit concept despite advancing the hallmarks of suburban sprawl with their single land use, auto-dependency and increasing gigantism. Developments like the Northland Shopping Center in suburban Detroit and the Southdale Center in suburban Minneapolis (ULI 1954) were planned as a comprehensive unit, ringed by arterial roads, had a form of localized street network within its parking lots, and was centered on community open space. They are examples of the diffusion of neighborhood unit concept principles into other land development typologies.

Radical change was also apparent in suburban developments included as exemplary cases in the *Community Builders Handbook*. Each edition of the *Handbook* included a new development, and each development was placed in the *Handbook* alongside the diagram

of neighborhood unit principles (Figure 10) to show its application in practice. In the first edition the exemplary case was Midwest City, Oklahoma (Figure 14), a neighborhood of modest houses developed in collaboration with the federal government to house war workers during WW II. Midwest City hews pretty closely to the neighborhood unit concept in terms of its size, land use, internal street network, and orientation to a school and civic buildings in its core. In the cases in subsequent editions – Town and Country Estates (ULI 1954) and Belmont (ULI 1960) – institutions became larger, servicing a greater residential area that was built at a lower density. In Belmont, several neighborhood units are grouped together in a single subdivision served by a single regional shopping mall.

[INSERT FIGURE 14 HERE]

Northglenn, Colorado (Figure 15), included in the final edition of the *Handbook* (ULI 1968), reflects the continued shift of suburban development patterns away from the neighborhood unit concept. The plan for Northglenn covers an even larger area than that of Belmont. The street network is more dendritic. Elementary schools are not always integrated at the center of neighborhood units. Additional land uses – office, medical, industrial, golf course, civic center and regional shopping – are sited adjacent to the highway interchange on the western side of the development. With Northglenn, the ULI's suburban land planning norms moved far beyond the neighborhood unit concept.

[INSERT FIGURE 15 HERE]

Still, one indicator of the power of the neighborhood unit concept was its applicability to contexts other than residential environments. Robert Boley's (chairman of ULI's Industrial Council in the 1960s) description of development trends was telling:

"By 1960 [urban growth] had transformed traditional land development practices. Lot-by-lot subdivision methods changed to extensive tract undertakings by a single developer. Large-scale, community-type developments became commonplace. With the changes, new land use forms evolved quickly... The shopping center with its sizable site area dominated as the form of new commercial land use. Similarly, the organized industrial district emerged as the land development form applied to new industrial, warehousing, and distribution service locations. Office uses followed the trend." (Boley 1970)

The neighborhood unit concept instigated this trend towards master planned development. In doing so, it continued to shape land planning even as its salience as a design model for residential neighborhoods waned.

RESILIENCE OF LEADING IDEAS 1912 - 1968

Revisions to the neighborhood unit diagram and principles in the *Community Builders*Handbook were modest given the extent of change in suburban land planning. While the level of housing starts moderated in the 1960s, the merchant building industry continued to evolve. The largest merchant builders in the early sixties developed a few thousand homes in a year (Eichler and Kaplan 1967). More than 160 "new communities" of more

than 1,000 acres each were being constructed in the US (McDade 1964). Like Northglenn, the programs of the new communities incorporated a broader range of urban land uses including industrial and office parks. Changes in FHA policies spurred development of multi-family housing (Davidson 1973). A number of merchant builders converted to public corporations and began to develop operations in multiple urban regions (Eichler and Kaplan 1967). Revisions to *The Handbook* such as they were reflected a tension between rapidly evolving development practices and earlier innovations first introduced via the neighborhood unit concept that had long since become commonplace. In this context the neighborhood unit concept served less as an innovation to the development industry than it did a convention of FHA policy and a typical expectation of municipal planners (ULI 1968).

Still, an indication of the neighborhood unit's staying power is that the first revision of ULI's neighborhood unit diagram (Figure 11) was not until the final edition of the *Handbook*. Changes in the diagram were less radical than the differences between Midwest City and Northglenn. In a minor nod to context, the 1968 edition provides four versions depicting layouts based on land use mix, street arrangement, topography, or utility lines. More importantly, the revised diagrams expanded in size to cover a full square mile of the Jeffersonian grid, with each depicting several neighborhoods within a single subdivision much like the Belmont development cited in the 1960 edition of the *Handbook*.

The text of Neighborhood Unit Principles was still more resilient. The *Community Builders Handbook* quoted the six principles from Perry's monograph almost verbatim. Each successive edition maintained the six principles with only slight modifications; at no time did the *Handbook* add or remove principles or otherwise change Perry's overall framework. Because the text here changed rarely if at all, we can conclude that what revisions did occur were intentional and therefore offer clues concerning the evolution of land planning norms.

Table 1 compares each of the six Neighborhood Unit principles as written in Perry's 1929 monograph and the first (1947) and last (1968) edition of the *Community Builders*Handbook. Three sets of changes were particularly significant. Modifications to the third and fourth principles reflected a shift to consolidate open space into a single site aligned with an institutional structure (i.e. the elementary school) capable of maintaining it. The enlargement of shopping centers increased their trade area beyond a single neighborhood, causing the fifth principle to be revised from "One or more shopping districts..." in Perry's formulation to "If warranted by the population served..." in the final edition of the Handbook. Finally, the principle on local streets was revised to incorporate contemporary practices including "... a system of collector streets and minor loop and cul-de-sac streets..."

Each of these precise changes reflected decisions on the part of the editors of the *Community Builders Handbook* to bring the neighborhood unit concept closer to the logic of contemporary suburban land planning practices. They were subtle alterations made

without seeking to challenge the appropriateness of the neighborhood unit concept itself. In holding onto the concept through twenty years of rapid change, the *Handbook* at once validated and deformed the neighborhood unit.

[INSERT TABLE 1 HERE]

Despite its persistence in the *Community Builders Handbook*, by the sixties enthusiasm for neighborhood unit had waned. Planning scholars questioned the scientific validity of the neighborhood unit concept (Solow, Ham, and Donnelly, 1969; Banerjee and Baer 1984). The scope of suburban land planning and development had greatly broadened in the middle of the twentieth century. Ambitious planners and developers now looked to other ideas, including new towns and planned unit development, to frame innovations in land planning (McDade 1964; Eichler and Kaplan 1967). After the 1968 edition the Urban Land Institute reformulated the *Handbook* into a series of volumes of individual land use typologies that decoupled suburban development from neighborhood unit style land planning while attending to a wider range of land uses. The subsequent *Residential Development Handbook* (ULI 1978) included the neighborhood unit not as a defining concept but as one of a number of development models. The neighborhood unit, for a time, lost its salience as a guiding model for land planning and development.

New Urbanism's rehabilitation of the neighborhood unit (Duany, Plater-Zyberk, and Speck 2000) with its renewed focus on walkability and a strengthened public realm is largely welcome. Still, the movement occasionally verges on treating the neighborhood

unit concept as a Platonic ideal, something deeply intrinsic to human experience. This orientation glosses over the specific, contingent roles that the neighborhood unit played in shaping twentieth century American land planning norms, roles that are quite different between 1930, 1960, and today. Between 1912 and 1968 the neighborhood unit concept bridged planning, design, development and policy-making communities to improve standards in the construction of residential environments. It did so by helping to shift the scale of development to an area as a whole rather than by subdivided lot. It proved effective because of its ability to interact with practices in complex, reciprocal ways (Easterling 1999). Providing both substantive information and a normative model, the neighborhood unit concept shaped land planning norms, facilitated execution of policies, framed new institutions, and became associated with the changes that it helped to bring about, all within the evolving structure of development and governance in the United States.

Leading ideas like the neighborhood unit concept become symbolic artifacts, touchstones for the practices and norms that they help bring into being. In the ongoing unfolding and creative destruction of land planning practices, leading ideas go in and out of fashion.

They convey particular meaning for a time before the context is lost. Lesser ideas disappear; leading ideas adapt, morphing to serve additional purposes when subject to a new light.

WORKS CITED

- Adams, Thomas. 1934. *The Design of Residential Areas: Basic Considerations, Principles, and Methods*. London: Oxford University Press.
- Adams, Thomas, Edward Bassett, and Robert Whitten. 1929. "Problems of Planning Unbuilt Areas." In: *Regional Survey of New York and Its Environs, Vol. 7* New York: Committee on the Regional Plan of New York and Its Environs.
- Alexander, Christopher. 1965. "A city is not a tree." Architectural Forum 122 (1): 58-62.
- American Public Health Association. 1938. *Basic Principles of Healthful Housing*. Chicago: American Public Health Association.
- American Public Health Association. 1939. *Practical Standards of Modern Housing*. Chicago: American Public Health Association.
- Banerjee, T. and W. C. Baer. 1984. *Beyond the Neighborhood Unit: Residential Environments and Public Policy*. New York: Plenum Press.
- Bateson, Gregory. 1972. Steps to an Ecology of Mind: Collected Essays in Anthropology, Psychiatry, Evolution, and Epistemology. San Francisco: Chandler.
- Bauer, Catherine. 1945. "Good Neighborhoods." *Annals of the American Academy of Political and Social Sciences* 242: 104-115.
- Boley, Robert. 1970. *Industrial Districts: Principles in Practice*. Washington: Urban Land Institute.
- Checkoway, Barry. 1980. "Large Builders, Federal Housing Programmes, and Postwar Suburbanization." *International Journal of Urban and Regional Research* 4 (1): 21-45.
- Colean, Miles L. 1944. *American Housing, Problems and Prospects*. New York: Twentieth Century Fund.
- Colean, Miles L. 1954. "The Impact of Government on Architecture in the United States."

 American Institute of Architects Journal 22: 147-154.
- Cooley, Charles H. 1909. *Social Organization: A Study of the Larger Mind*. New York: Charles Scribner's Sons.
- Davidson, Harold A. 1973. *Housing Demand: Mobile, Modular, or Conventional?* New York: Van Nostrand Reinhold.
- Dewey, R. 1950. "The Neighborhood, Urban Ecology, and City Planners." *American Sociological Review* 15 (4): 502-507.
- Duany, Andres, Elizabeth Plater-Zyberk, and Jeff Speck. 2000. Suburban Nation: the Rise of Sprawl and the Decline of the American Dream. New York: North Point Press.
- Dyckman, J. W. 1959. "Comment on Glazer's School Proposals." Journal of the American

- Planning Association 25(4): 191-196.
- Easterling, Keller. 1999. Organization Space: Landscapes, Highways, and Houses in America. Cambridge, MA: MIT Press.
- Eichler, Edward P. and Marshall Kaplan. 1967. *The Community Builders*. Berkeley: University of California Press.
- Eskew, Garrett Laidlaw. 1959. *Of Land and Men: the Birth and Growth of an Idea*. Washington: Urban Land Institute.
- Fairfield, J. D. 1992. "Alienation of Social Control: The Chicago Sociologists and the Origins of Urban Planning." *Planning Perspectives* 7 (4): 418-434.
- FHA (Federal Housing Administration). 1935. Subdivision Development: Standards for the Insurance of Mortgages on Properties Located in Undeveloped Subdivisions. Circular No. 5 published January 10, 1935. Washington: Federal Housing Administration.
- FHA (Federal Housing Administration). 1938. *Planning Profitable Neighborhoods*. Technical Bulletin no. 7. Washington: Federal Housing Administration.
- FHA (Federal Housing Administration). 1939. Subdivision Development: Standards for or the Insurance of Mortgages on Properties Located in Undeveloped Subdivisions. Circular No. 5 published September 1, 1939. Washington: Federal Housing Administration.
- FHA (Federal Housing Administration). 1940. Successful Subdivisions Planned as

 Neighborhoods for Profitable Investment and Appeal to Homeowners. Land Planning
 Bulletin No. 1. Washington: Federal Housing Administration.
- Gillette, H. 1983. "The Evolution of Neighborhood Planning from the Progressive-Era to the 1949 Housing Act." *Journal of Urban History* 9 (4): 421-444.
- Glass, Ruth. 1945. "Social Aspects of Town Planning." Architectural Review 97: 67-71.
- Goodman, P. 1949. "Some Dim Remarks on Neighborhood Planning." *Journal of the American Institute of Architects* 12: 147-149.
- Gries, J. M., and J. Ford, eds. 1932. *Planning for Residential Districts*. Vol. 1. Washington: President's Conference on Home Building and Home Ownership.
- Hall, Peter. 2002. *Cities of Tomorrow: An Intellectual History of Urban Planning and Design in the Twentieth Century*. 3rd ed. Malden, MA: Wiley-Blackwell.
- Healey, Patsy. 2010. "Introduction: The Transnational Flow of Knowledge and Experience in the Planning Field." In *Crossing Borders: International Exchange and Planning Practices*, edited by Patsy Healey and Robert Upton, 1 26. RTPI Library 19. London: Routledge.
- Healey, Patsy, and Robert Upton, ed. 2010. *Crossing Borders: International Exchange and Planning Practices*. RTPI Library 19. London: Routledge.

- Holden, A. C. 1948. "Planning the Neighborhood." *Journal of the American Institute of Architects* 10: 229-235.
- Hoyt, Homer. 1949. "Market Analysis of Shopping Centers." *Urban Land Institute Technical Bulletin*.12.
- Isaacs, Reginald. 1948. "The Neighborhood Theory: An Analysis of its Adequacy." *Journal of the American Institute of Planners* 14: 15-23.
- Isaacs, Reginald. 1949a. "The Neighborhood Theory in Planning." *Journal of the American Institute of Architects* 11: 102-107.
- Isaacs, Reginald. 1949b. "The 'Neighborhood Unit' is an Instrument for Segregation." *Journal of Housing* 5: 215-219.
- Jacobs, Jane. 1961. The Death and Life of Great American Cities. New York: Random House.
- Kelly, Burnham. 1959. *Design and the Production of Houses*. American Council to Improve Our Neighborhoods Series in Housing and Community Development. New York: McGraw-Hill.
- Lawhon, L. L. 2009. "The Neighborhood Unit: Physical Design or Physical Determinism?" Journal of Planning History 8 (2): 111-32.
- Listokin, David and Carole Walker. 1989. *The Subdivision and Site Plan Handbook*. New Brunswick: Rutgers State University of New Jersey Center for Urban Policy Research.
- Maisel, Sherman J. 1953. *Housebuilding in Transition: Based on Studies in the San Francisco Bay Area.* Publications of the Bureau of Business and Economic Research, University of California. Berkeley: University of California Press.
- McDade, Thomas. 1964. "50 'New Communities'." Urban Land 23.
- McKeever, J. R. 1953. "Shopping Centers: Principles and Policies." *Urban Land Institute Technical Bulletin* 20.
- McKeever, J. R. and N. M. Griffin. 1977. *Shopping Center Development Handbook*. Washington: Urban Land Institute.
- McKenzie, R. D. 1923. *The Neighborhood: a Study of Local Life in the City of Columbus, Ohio.* Chicago: University of Chicago Press.
- Meyerson, M. D. and R. B. Mitchell. 1945. "Changing City Patterns." *Annals of the American Academy of Political and Social Sciences* 242: 149-162.
- Mott, S. H. and M. S. Wehrly. 1949. "Shopping Centers: an Analysis." *Urban Land Institute Technical Bulletin* 11.
- Mumford, Lewis. 1954. "The Neighborhood and the Neighborhood Unit." *Town Planning Review* 24: 256-270.

- Mumford, Lewis. 1961. The City in History. San Diego: Harcourt.
- Nelson, R. L. and F. T. Aschman. 1954. "Conservation and Rehabilitation of Major Shopping Centers." *Urban Land Institute Technical Bulletin* 22.
- Olmsted, F. L. 1927. "The Importance of Community Recreation Centers in Connection with Park Development." *Planning Problems of Town City and Region: Proceedings of 1927 National Conference on City Planning*: 233.
- Park, R. E., E. W. Burgess, and R. D. McKenzie. 1925. *The City*. Chicago: University of Chicago Press.
- Patricios, N. N. 2002. "The Neighborhood Concept: a Retrospective of Physical Design and Social Interaction." *Journal of Architectural and Planning Research* 19 (1): 70-90.
- Perry, Clarence. 1921. *Ten Years of the Community Center Movement*. New York: Russell Sage Foundation.
- Perry, Clarence. 1929. "The Neighborhood Unit, a Scheme of Arrangement for the Family-Life Community." In: *Regional Survey of New York and Its Environs, Vol. 7* New York: Committee on the Regional Plan of New York and Its Environs: 2-140.
- Perry, Clarence. 1933. The Rebuilding of Blighted Areas: a Study of the Neighborhood Unit in Replanning and Plot Assemblage. New York: Regional Plan Association.
- Perry, Clarence Arthur. 1939. *Housing for the Machine Age*. New York: Russell Sage Foundation.
- Perry, Clarence, Wayne D. Heydecker, Earnest P. Goodrich, Shelby Harrison, Thomas Adams, Edward M. Bassett, and Robert H. Whitten. 1929. *Regional Survey of New York and Its Environs* vol. 7 New York, Committee on Regional Plan of New York and Its Environs.
- Ramsey, C. G. and H. R. Sleeper, eds. 2000. *Architectural Graphic Standards*. 9th ed. New York: John Wiley & Sons.
- Rein, M. and Donald Schon. 1991. "Frame Reflective Policy Discourse." In *Social Sciences and Modern States: National Experiences and Theoretical Crossroads*, 262-289. Cambridge: Cambridge University Press.
- Riemer, S. .1950. "Hidden Dimensions of Neighborhood Planning." *Land Economics* 26 (2): 197-201.
- Rogers, E. M. 2003. Diffusion of Innovations 5th ed. New York: Free Press.
- Sanyal, Biswaprya, Lawrence J. Vale and Christina D. Rosan, eds. 2012. *Planning Ideas That Matter: Livability, Territoriality, Governance, and Reflective Practice*. Cambridge, Mass.: MIT Press.
- Silver, C. 1985. "Neighborhood Planning in Historical Perspective." Journal of the American

- *Planning Association* 51 (2): 161-174.
- Solow, A. A. and A. Copperman. 1948. *Planning the Neighborhood*. Chicago: American Public Health Association.
- Solow, A. A., C. C. Ham, and Donnelly, E. O. 1969. The Concept of the Neighborhood Unit: Its Emergence and Influence on Residential Environmental Planning and Development.Pittsburgh: University of Pittsburgh Graduate School of Public and International Affairs.
- Southworth, Michael and Eran Ben-Joseph. 1995. "Street Standards and the Shaping of Suburbia." *Journal of the American Planning Association* 61(1): 65-81.
- Stein, Clarence. 1951. Toward New Towns for America. Cambridge, MA.: MIT Press.
- Stillman, S. 1948. "Neighborhood Unit Planning: a Useful Method of City Planning." *Journal of the American Institute of Planners* 14 (3): 42-43.
- Unwin, Raymond. 1918. Nothing Gained by Overcrowding!: How the Garden City Type

 Development May Benefit both Owner and Occupier. London: Garden Cities and Town

 Planning Association.
- ULI (Urban Land Institute). 1947. *The Community Builders Handbook*. Washington: Urban Land Institute.
- ULI (Urban Land Institute). 1950a. *The Community Builders Handbook*. J. C. Nichols Memorial ed. Washington: Urban Land Institute.
- ULI (Urban Land Institute). 1950b. *Home Builders Manual for Land Development*. Washington: National Association of Home Builders.
- ULI (Urban Land Institute). 1954 *The Community Builders Handbook*. Members ed. Washington: Urban Land Institute.
- ULI (Urban Land Institute). 1960 *The Community Builders Handbook*. Executive ed. Washington: Urban Land Institute.
- ULI (Urban Land Institute). 1968. *The Community Builders Handbook*. Anniversary ed. Washington: Urban Land Institute.
- ULI (Urban Land Institute). 1978. *Residential Development Handbook*. Washington: Urban Land Institute.
- Webber, M. 1963. "Order in Diversity: Community Without Propinquity." In *Cities and Space:*The Future Use of Urban Land. Edited by L.Wingo. Baltimore: Johns Hopkins Press.
- Wehrly, M. S. 1948. "Activities and Comment: Comment on the Neighborhood Theory." *Journal of the American Institute of Planners* 14 (4): 32-34.
- Weiss, M. A. 1987. The Rise of the Community Builders: The American Real Estate Industry and Urban Land Planning. New York: Columbia University Press.

- Whitten, R. 1927. A Research into the Economics of Land Subdivision: With Particular Reference to a Complete Neighborhood Unit for Low or Medium Cost Housing. Syracuse, NY:

 Syracuse University School of Citizenship and Public Affairs.
- Whitten, Robert, and Thomas Adams. 1931. *Neighborhoods of Small Homes: Economic Density of Low-Cost Housing in America and England*. Cambridge, MA:Harvard University Press.
- Yeomans, A. B. 1916. City Residential Land Development. Chicago: University of Chicago Press.