

Transit Supportive Home Loans: Theory, Application, and Prospects for Smart Growth

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Abstract

This article discusses mortgage lending programs aimed at lower-income buyers looking to purchase homes in compact, transit-accessible neighborhoods. Unlike traditional lending formulas, the transit supportive home loans consider the transportation cost savings from living in transit-friendly neighborhoods and applies these savings to a larger mortgage calculation. However, little has been published positioning the concept against the broader goals of smart growth, describing the application of the product, or commenting on its prospects.

The first part of this article therefore draws heavily from the literature on smart growth to present the theoretical foundations of the transit supportive home loans and how they address growth management program goals. The second part describes the application of the concept, and the third examines the prospects for this tool and briefly comments on circumstances likely to bedevil its widespread adoption or overall impact.

Keywords: Accessibility; Mortgages; Sprawl; Transportation

Introduction

A burgeoning population seeking relatively affordable housing is placing high demands on outlying, auto-dependent residential markets. Simultaneously, public policies addressing housing, transportation, and land use aim to increase homeownership, decrease drive-alone travel, and harness outlying development. A relatively new mortgage lending procedure aims to address these public policy aims synergistically by allowing low- and moderate-income households the opportunity to purchase homes in transit-accessible neighborhoods that would otherwise be unobtainable because of cost. Transit supportive home loans¹ are currently available in more than six cities nationwide, including Chicago, San Francisco, Los Angeles, Seattle, and Minneapolis/St. Paul.

Because homes in transit-accessible neighborhoods require less driving, it is easier for households to lower their rate of automobile ownership and use, thereby lowering their transportation costs. This reduction

¹ Transit supportive home loan is a general label used to refer to a variety of programs, such as the Location Efficient Mortgage® (LEM) or Smart Commute Mortgage™. For purposes of clarity and simplification, the term “transit supportive home loan” will be used in this article to refer to programs of this general nature.

in costs is then folded into the mortgage calculation. If the household moves to such a neighborhood, the mortgage allows for a lower down payment from the borrower's own funds and a higher mortgage-to-income qualifying ratio. The result is a mortgage several thousand dollars more than a traditional one, just because the household moves to a transit-rich neighborhood. From a public policy standpoint, it is being touted as a unique initiative to increase homeownership while curbing sprawl and the auto-dependent land use patterns that often result.

Transit supportive home loans have been highlighted in the popular press (Allen 1998; "Loan Will Benefit Buyers" 1999; Rimer 1999) and in trade journals (Chen and Jakowitsch 2001; Glenn 1999; Woellert 1999); they have received attention in the housing, land use, and transportation literature (Benfield, Raimi, and Chen 1999; Danielsen, Lang, and Fulton 1999; Easterbrook 1999); and they have also been the focus of two recent academic studies (Blackman and Krupnick 2001; Holtzclaw et al. 2002). Given the novelty of the concept (the most mature of these loan programs has been in effect for only a few years), to date there have been only a few dozen closings nationwide. The result is a relatively sparse literature evaluating this initiative, much less positioning it within the broader goals of smart growth, describing its application, and commenting on its prospects.

To better understand the nature of these loans, the main parts of this article focus on three issues. The first part draws heavily on the smart growth, antisprawl literature to present the theoretical foundations of transit supportive home loans and how they address goals of growth management programs. The second part describes how loans are administered: major players and administrative issues central to their implementation. The third part comments on the prospects for this tool and briefly reviews fundamental circumstances likely to bedevil its widespread adoption or overall impact. Together, these three parts constitute a primer of the current state of knowledge about these unique loan programs.

Current lending, location decisions, and smart growth

Lending institutions traditionally provide mortgage loans up to a maximum amount that depends almost solely on the borrower's income. An upper limit for the ratio of housing expenses to income is set, usually on the order of 28 percent. Only a small degree of flexibility is available in response to particular household conditions, such as a good credit history. The typical formula does not consider either the lifestyle preferences of the borrower or the location attributes of the house. A given household qualifies for the same mortgage amount regardless of

whether the property is in the city where transit service is plentiful or on the urban fringe where the need for driving is typically greater.

Barring polycentric urban forms, housing prices in many metropolitan areas still generally follow traditional bid-rent curves. Property is more costly near the city center than in outer suburban areas. Many homeowners borrow up to the limits of affordability imposed by lenders; discretionary income available to spend on housing utility is therefore limited. The current rules effectively create an environment where many households that want to own are forced to move closer to outlying urban fringe communities to acquire affordable housing. Such location decisions exacerbate many of the environmental, economic, and social problems that planners are trying to address. One need only turn to the abundance of antisprawl literature to learn about the myriad consequences of the forces pushing housing development to the urban fringe. Higher-cost housing closer to the city is passed up in favor of lower-cost housing farther away from many services, jobs, and other amenities. Development creeps more rapidly into the countryside.

The often-told tale of inner-city decline relative to suburban sprawl gradually plays out; urban flight leads to decreasing investment in inner-city infrastructure and increasing investment to pave over rich agricultural lands and so on. From a transportation perspective, outlying locations tend not to support transit or pedestrian alternatives, contributing to more drive-alone travel and the associated externalities of the automobile (e.g., air and water pollution, consumption of natural resources). Other consequences are increased discrimination against those with no means of auto travel—that is, people with disabilities, the poor, the elderly, or the young. The central premise is that conventional mortgage lending helps fuel the demand for more suburban, auto-dependent locations—locations where households drive more than they would otherwise, given different lending procedures.

Theoretical foundation

At the simplest level, the rationale for transit supportive home loans is derived from the basic principles of classic land economics, bid-rent theory, and traditional land use/transportation interactions first introduced by Von Thunen in 1826 (1966 translation). Almost two centuries ago, a farmer's profit at a given location depended on two factors: how much people in the city were willing to pay for different crops and how much it would cost to produce and transport them to market. The two key variables were the market price of the good and the cost of transport. The core rationale for transit supportive loans relates to similar matters, except that the cost of the crop is replaced by the price of land.

Operating within a set budget and maximizing total utility and minimizing total costs, households are assumed to make trade-offs between less expensive homes that are farther from the city center and higher travel costs. A home with lower travel costs means that more funds could be appropriated for location costs and vice versa.²

Residential location decisions, however, are considerably more complex than this. More than 30 years ago, for example, neighborhood considerations and the type of dwelling unit were shown to be more important than accessibility (Stegman 1969). One need only refer to the rich literature on residential location to learn that myriad factors and individual preferences trigger household decisions (for example, access to specific amenities, school quality, racial composition, and so on). Such preferences need to be weighed against constraints (for example, income, availability of housing stock). In response, the degree to which households rely strictly on trade-offs between transportation and land cost has come under scrutiny (Weisbord, Lerman, and Ben-Akiva 1980; Williams 1979).

The important element is that individual households reconcile competing trade-offs—trade-offs that usually internalize transport costs; transit supportive home loans provide an institutional means of recognizing these trade-offs while furthering public policy goals. The recaptured costs (from driving less) would be available to divert to other utilities, such as a bundle of attributes that includes higher-priced housing or owning a house at all. In this respect, these loans take into account the elasticity of transport costs. They allow a dollar a month saved on transportation costs to be applied to higher loan payments.

The basic concept behind these loans originates from work spearheaded by John Holtzclaw of the Sierra Club. Since 1996, the effort has blossomed into a strong partnership between the Center for Neighborhood Technology (CNT), the National Resources Defense Council (NRDC), and the Surface Transportation Policy Project (STPP). Holtzclaw's original work (1994) examined travel and residential location patterns for 28 California communities in four metropolitan areas. He concluded that household transportation costs—travel distance and auto ownership—are highly correlated with such urban form characteristics as levels of residential density and transit accessibility. Such findings are consistent with a battery of recent studies concluding that, on average, households that live in neighborhoods with relatively higher density, good transit and pedestrian access, and a mix of uses tend to drive less and use transit more (see, for example, Crane [2000] or Ewing and Cervero [2001]).

² Lower transportation costs can be attained through a variety of strategies. One option is living closer to the city center; another is living close to public transportation.

Relation to smart growth

The urban form characteristics of such communities are the cornerstone of planning initiatives developed under the rubric of smart growth, New Urbanism, or sustainable development. These initiatives encourage compact development with a variety of housing types, a fine-grained mix of land uses, and attractive urban design. A primary intent of these land use planning initiatives is that resulting neighborhoods will contain a variety of housing types and be occupied by residents likely to ride public transit, cycle, or walk to common destinations.

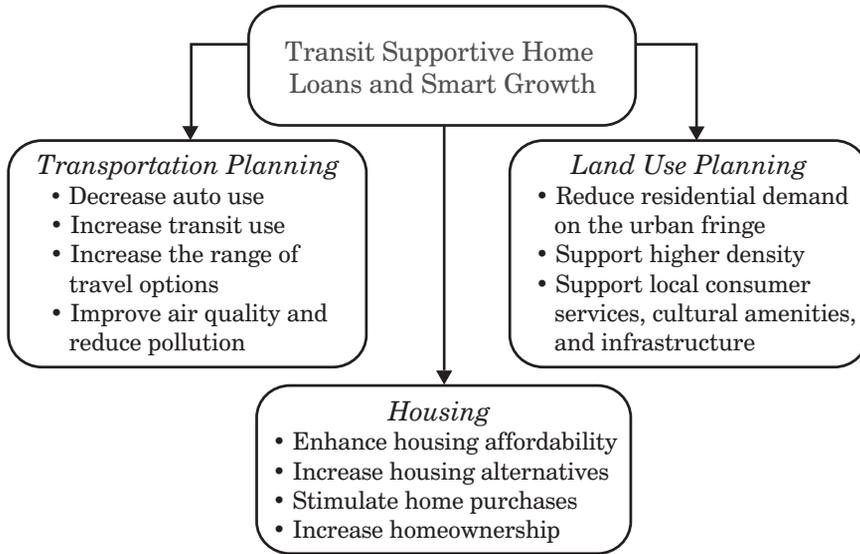
But providing more transit-accessible neighborhoods is only one piece of the puzzle. The more complex component relates to the manner in which households respond to the supply of such development types. Is there a demand? Housing market analysts quickly point to the elderly, baby boomers, and “urbanites” as populations demanding higher-density housing where transit and walking are viable options. But this population represents a much smaller segment of the housing market than the segment demanding homes in outlying parts of urban areas.

Transit supportive home loans are a means to stoke the demand for housing in inner-city neighborhoods by providing a program consistent with growth management and smart growth. One approach is to develop market segmentation models that will help indicate the potential demand of certain demographic groups (Volk and Zimmerman 2000) and to specifically target such groups with public policies (Krizek and Waddell 2002). Another tactic is to specify guidelines consistent with what has been referred to as the third generation of growth management initiatives (Navarro and Carson 1991).³

The public sector’s limited capacity to shape growth has prompted many planners to urge market-based strategies that provide “carrots” to foster more sustainable decisions by private sector actors. Transit supportive home loans are valuable because they allow—perhaps facilitate—an economic transaction for desired land use behavior but leave the ultimate decision in the hands of the private sector (Blackman and Krupnick 2001). If successful, they will help nudge the market in ways consistent with city planning initiatives relating to housing, land use

³ The first generation of growth controls, as described by Navarro and Carson (1991), aimed to place restrictions on residential housing construction to rein in growth in a given community. The second generation, an approach steeped in comprehensive planning, aimed to mitigate many of the negative externalities of growth by more thoroughly considering the effects of residential, commercial, and other development jointly. This second generation was still operated largely under the command and control power of the state.

Figure 1. **How Transit Supportive Home Loans Satisfy Growth Management Goals**



planning, and transportation planning (see figure 1). The following discussion borrows heavily from the arguments of advocates of such loans.

Housing and community development. From a housing standpoint, transit supportive home loans advance at least two distinguishable planning goals. First, they provide a means by which a greater variety of income groups can afford homes in residential markets that would otherwise be unattainable. In this respect, they open up a range of housing options to a broader market. Specifically, these loans further income diversity in desirable, transit-accessible neighborhoods. Potential home buyers have greater freedom to choose housing where they *want* to live as enlightened lending policies expand the set of neighborhoods where they can *afford* to live.

Second, by stimulating home purchases, transit supportive home loans help increase homeownership. With higher homeownership rates, they enhance the self-esteem and life satisfaction of lower-income households and a neighborhood’s stability and livability. For some households, transit supportive loans may provide the means that help lower-income households move into previously unavailable neighborhoods. By helping to integrate these populations into such neighborhoods, the loans represent one strategy that enables the housing finance system to better serve low- and moderate-income borrowers.

Over the long term, this may serve to connect these populations to the resources available in a metropolitan area.

Land use planning. From the perspective of land use policy, the current rules for residential mortgage lending effectively create an environment where households move farther away from urban centers in search of housing stock where they can receive more home for their dollar. Development encroaches on the countryside, leading to increased investment to pave over agricultural lands and decreased investment in inner-city infrastructure. Transit supportive home loans indirectly help shape residential location patterns by making urban, infill, and preexisting properties available (and in some cases attractive or accessible) to potential home buyers and/or developers. Stimulating investment in infill neighborhoods with existing infrastructure and transit service helps deter development pressures on the urban fringe. Triggering home purchases in higher-density neighborhoods also reduces developed land per capita.

Such neighborhoods are within walking distance of basic services like neighborhood retail establishments and require a density threshold on the order of at least eight dwelling units per acre. This helps create urban environments with a higher density than typical suburban environments. By attracting more households to mixed-use neighborhoods, transit supportive home loans help support a market for neighborhood retailers, which have had difficulty competing with big-box retailers.

Transportation planning. Finally, transit supportive home loans allow households to purchase homes in higher-density neighborhoods with access to public transit. These neighborhoods also frequently have a diversity of land use, which promotes pedestrian traffic. They therefore may reduce auto-dependent travel and its associated negative externalities (e.g., air and water pollution, consumption of natural resources). The goal of reducing drive-alone travel has been echoed in federal legislation, including the Clean Air Act Amendments of 1990; the Intermodal Surface Transportation Efficiency Act; and its successor, the Transportation Equity Act for the 21st Century. Specific initiatives from the U.S. Department of Transportation (DOT) and the U.S. Environmental Protection Agency (EPA) aim to enhance multimodal accessibility, reduce mobile source emissions, and improve air quality. In fact, both the Federal Transit Administration and the EPA provided grant funds to develop, support, and implement the concept of these loans.

The degree to which these mortgages attract current transit users and/or former auto-using households to such neighborhoods remains an open question, however. Increasing evidence suggests that households

choose particular neighborhoods because location efficiency allows them to drive less and use transit more (Boarnet and Sarmiento 1998; Kitamura, Mokhtarian, and Laidet 1997). On the basis of research in the San Francisco area (Cervero 1996), Portland, OR (Dueker and Bianco 1999), and Seattle (Krizek 2003), some suggest that many residents consciously select residences near rail stops to increase their accessibility to job sites, suggesting residential sorting based on travel preferences.

As previously mentioned, transit supportive home loans help correct for the current discrimination built into conventional mortgage products against households with low transportation costs. Last, they help create a stronger market (i.e., demand) for transit ridership, which in turn serves to better support a community's transit system and encourage better and more reliable service.

Application of transit supportive home loans

Qualifying properties

On average, an estimated 28 percent of a household's income is devoted to transportation-related expenses (STPP and CNT 2000). Considered in concert with fixed and variable cost estimates for automobiles, Holtzclaw (1994) claims that it is possible to compute average annual automobile costs from such results. Average costs for public transportation in a given community are much smaller but can be determined from the recorded revenue of transit agencies. Advocates of transit supportive loans posit that these costs, termed transportation savings, be made available to households that decide to live in transit-accessible neighborhoods. The manner in which this theory would play out is as follows.

Mortgage qualification is guided by calculating two ratios. A front-end (housing debt) ratio divides monthly payments of principal, interest, taxes, and insurance by income. A back-end (total debt) ratio includes other debts, such as automobile and other loans. As a first cut, lower ratios indicate a greater ability to repay. Higher ratios (beyond thresholds of approximately 30 percent and 38 percent, respectively) suggest more risky borrowers. If the costs from transportation savings were subtracted from each of the debts and payments, both ratios would be lower. Folding the transportation costs into the mortgage calculation would allow a household to purchase a home in a transit neighborhood that would otherwise be unobtainable (CNT 2000; NRDC 2000).

In the original applications of the concept (Chicago, San Francisco, Los Angeles, and Seattle), individual neighborhoods were assigned a value

based on such factors as neighborhood density, pedestrian friendliness, and access to public transportation. A thumbnail sketch of the way in which this value is calculated is presented next.

Determining the degree of transit supportiveness

First, vehicle miles traveled (VMT) and auto ownership are modeled by independent variables including household income, household size, neighborhood density, transit access, and pedestrian access. The choice of these independent variables closely mirrors the variables used in recent studies examining the relationship between urban form and travel. Data for the first three variables were gleaned from U.S. census data. Transit access was determined for each census tract by a factor for the number of transit seats and was measured by combining the proximity of transit stops, the number of routes, and their frequency. Pedestrian access was operationalized by measuring the nature of the street layout (e.g., gridded versus cul-de-sac) and the pedestrian infrastructure available.

In terms of dependent variables, auto ownership rates were obtained from U.S. census data. A particularly notable contribution of this research lies in the data collected to measure VMT. Most recent work examining the relationship between urban form and travel uses sample data to measure mode split, number of trips, or self-reported travel distance. Using biennial odometer readings from vehicle emission inspections, researchers were able to identify the actual auto travel distance per household for millions of records by ZIP code in Illinois and California. The second step in the analysis uses fixed and variable driving cost information (from DOT Federal Highway Administration estimates) to predict the average amount spent on transportation costs (adjusted for inflation).

On the basis of the three locational variables (density, transit access, and pedestrian access), transportation analysis zones (TAZs) are assigned a value by subtracting the transportation costs for transit supportive neighborhoods from the transportation costs averaged for the bottom quartile of TAZs (those neighborhoods considered least transit supportive). The difference between the two—the transportation savings—is then folded into mortgage lending qualifications. This detailed analysis took years to come to fruition; the models and analysis are described in depth elsewhere (Holtzclaw et al. 2002).

The above modeling effort yields important and reasonably accurate information about how transportation costs vary across a continuum of

neighborhood types. Such information helps analysts better understand the marginal savings of one household over another. The calculation process requires major efforts and substantial expertise for data collection and modeling. In Seattle, the ambitious data and modeling demands were the principal reasons for limiting the program to properties inside the city limits and not including others in the metropolitan area.

Housing and mortgage officials have responded to the constraints presented by data and modeling complexities by exploring less data-intensive strategies that would more simply promote similar objectives. For example, other programs launched in Pittsburgh, Minneapolis, Salt Lake City, and Philadelphia allow any household purchasing a home within one-quarter mile of a bus route to qualify for such mortgages. The frequency or intensity of transit service is not taken into consideration, and transportation savings are not assessed on a continuum. A qualifying household is simply allowed a lower down payment, increased qualifying income for reduced auto ownership, and higher qualifying ratios in general. These substantially modified criteria may accomplish the same end as the more stringent application used in Los Angeles, Seattle, Chicago, and San Francisco, while at the same time simplifying program administration.

Multiple agencies and combined efforts

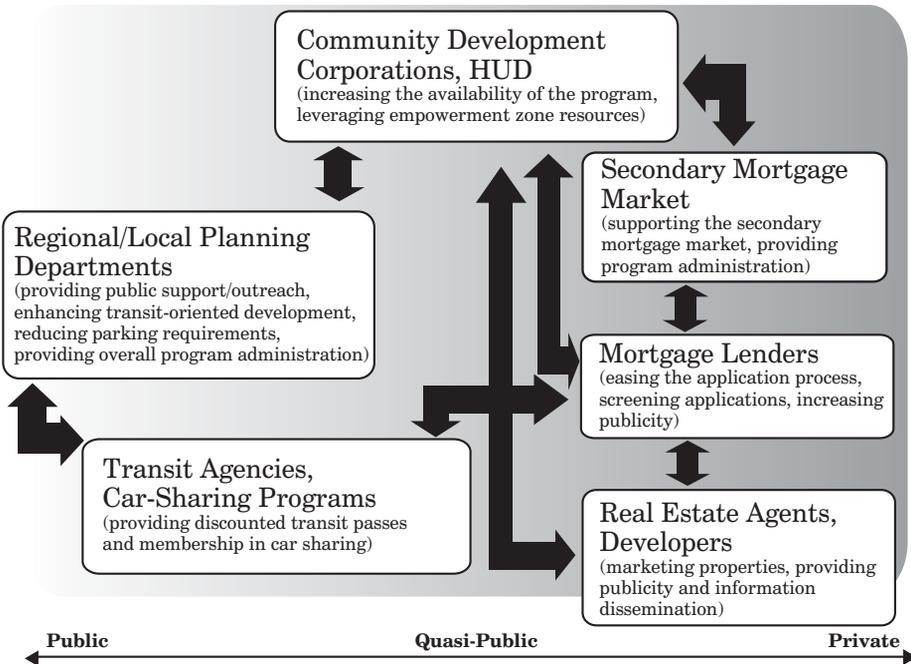
As with any public/private partnership, successful implementation of transit supportive home loans requires coordination and support from a variety of organizations. The combined efforts of the CNT, NRDC, and STPP produced the seed that sprouted the idea. In concert with efforts from financial institutions and local public/private organizations, these mortgages have become a reality in a handful of cities. Agencies assume different roles in different settings, depending on the manner in which the program is applied. One need only look at the supporting agencies listed on the interior bus advertisement shown in figure 2 (King County Metro, Fannie Mae, Seattle Office of Housing, HomeStreet Bank) to understand the multiple entities that take part.

Figure 3 provides an overview of the different private and public agencies involved, their primary roles, and primary partnerships. While coordination and communication among agencies are needed, the bold arrows are used to represent primary partnerships. The following discussion describes the roles of different organizations in more detail.

Figure 2. Interior Bus Advertisement for the Transit Supportive Home Loan Program in Seattle



Figure 3. The Multiple Parties and Agencies Responsible for Successful Implementation of Transit Supportive Home Loans



Note: Primary relationships and partnerships are highlighted by arrows. The continuum at the bottom roughly represents the nature of the organization, ranging from public to private.

Mortgage lenders and the secondary mortgage market. Important stakeholders for transit supportive loans are mortgage lending institutions and supporting agencies. Fannie Mae's commitment to purchase many of these loans through an experimental program has made them available through large mortgage lending institutions (e.g., Countrywide Home Loans) and more conventional banks (e.g., HomeStreet Bank). More mortgage lenders have expressed their willingness to underwrite transit supportive loans to qualified borrowers, contingent on such mortgages being accepted on the secondary mortgage market.

Aligned with the lenders are real estate agents and developers. In many respects, real estate agents are on the front line to bring properties in transit-friendly neighborhoods to the attention of potentially interested households. Similarly, real estate developers could potentially tap into additional buyers who might not be able to qualify for given properties without using such loans. For instance, program officials in Seattle are aiming to engage a variety of developers to advertise the loan program as part of their presales marketing efforts.

Transit agencies, car-sharing programs, and the municipal land development process. A core motive of transit supportive home loans—providing incentives to drive less and own fewer automobiles—assumes that several transportation choices are available. While such choices include walking or cycling, transit is seen as the primary way to drive less and own fewer automobiles. Transit agencies and car-sharing programs are therefore instrumental in successfully implementing these programs. Each is briefly discussed next.

The transit agency could support such loan programs by enhancing routes and facilitating transit passes. Transit agencies are continually looking for strategies to strengthen existing or new routes (e.g., increase ridership): More targeted marketing may lead to stronger demand for services. The second tenet involves providing reduced-cost transit passes for loan recipients. In the Twin Cities (Minnesota) application, the transit provider is an active partner and has agreed to provide a free pass to loan recipients for the first two years and discounted passes thereafter. In the Seattle case, transit passes for any travel on the regional transit system are bundled with other cost items into a single escrow fund, payable at the time of closing and subtracted from the amount of the loan or escrowed from monthly mortgage payments. These funds are then transferred to the public transit provider. In Seattle, it was found that many households already had discounted transit passes from their employer. In these cases, plans are currently under way to use money from the escrow fund to provide vouchers to such households for new bicycles.

Car sharing, an additional transportation service available in the test market in Seattle, has found its way into the program. Car sharing allows a group of individuals to share access to vehicles that are parked close to their homes. Households therefore have the benefits of auto use without the high fixed costs of ownership. Users typically pay an initiation fee plus additional costs based on their use of the system. Under recent modifications to program guidelines, Seattle households closing on homes with transit supportive loans would also receive greatly discounted initiation rates for these programs.

Transportation services, however, do not operate in isolation. They require community development to ensure greater viability of both walking and transit. Local land use and zoning departments assume at least an implicit role; they are instrumental in facilitating development types in plans or zoning documents so that developers can more easily respond to the demand for services required in transit-rich neighborhoods. For example, typical guidelines for transit-oriented development specify residential densities between 12 and 25 dwelling units per acre supplemented by a core area to provide convenience retail and local-serving offices (Tri-Met 1993). Types of commercial centers include convenience shopping; neighborhood centers with a supermarket, drug-store, and supporting uses; specialty retail centers; and community centers with convenience shopping and department stores (Calthorpe 1993). In Seattle, a city-created office devoted to Station Area Planning coordinates development issues (e.g., zoning, circulation, parking, connections to bus service) in neighborhoods around each of the region's soon-to-be opened light rail stations.

The city of Seattle and the city council have been active supporters of the loan program since its inception. In fact, \$50,000 in municipal funds was appropriated to help initiate the program. The city council has recently discussed using the program as a means of reducing parking requirements in the zoning code. Under a current proposal, new condominiums available for purchase through the loan process would be exempt from complying with standard parking-to-dwelling-unit ratios. While land use and zoning departments and other municipal actions are not involved in negotiating closings, their impact is realized by the nature of zoning and other development factors in transit-friendly neighborhoods.

Resources available for lower-income neighborhoods. In Minneapolis/St. Paul, the program has an explicit component catering to lower-income households. Local Minnesota officials seized a unique opportunity to leverage their version of the program with funds available because the area was designated as 1 of the 15 empowerment zones

by the U.S. Department of Housing and Urban Development. By leveraging enterprise zone funds, local officials can provide recipient households purchasing within the 6.7 square miles of the enterprise zone (which includes 19 of the 81 Minneapolis neighborhoods) with \$2,500 toward a down payment. In return, these households would be responsible for completing 100 hours of community service.

Understanding the prospects of transit supportive home loans

Having reviewed the theoretical foundations of the transit supportive home loans and their application, I now turn to the potential impact of such programs, highlighting major hurdles that need to be overcome and describing factors likely to hamper widespread adoption.

The potential population of borrowers

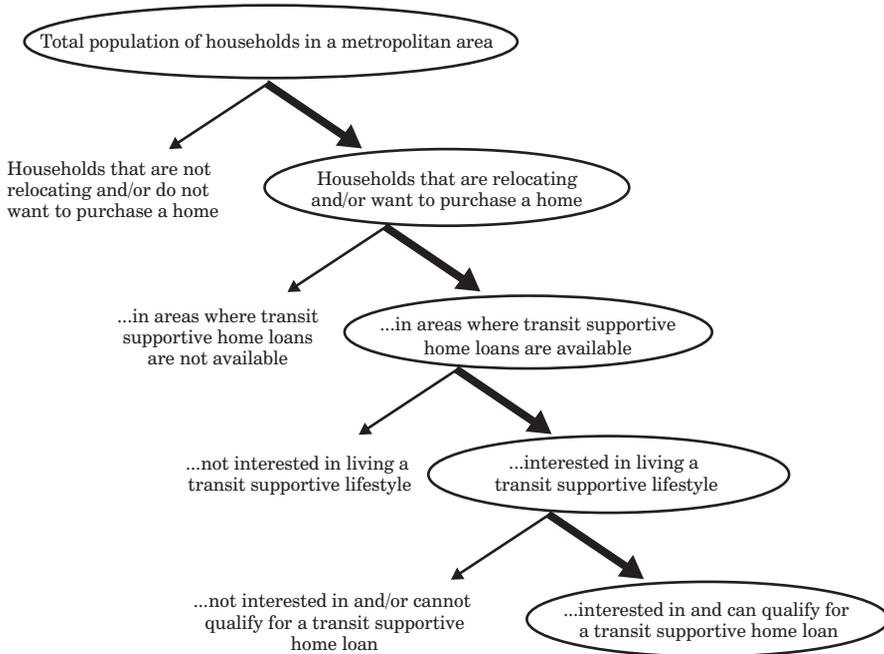
The most important issue when considering the impact of such loans is the population of households that would likely take advantage of them. To better understand this population, I rely on the schematic presented in figure 4. Of the total population of households in a metropolitan area, these loans would apply only to those relocating *within* the metropolitan area⁴ or migrating *to* the area. Additionally, they would also serve only those households interested in purchasing a home. In the fast-growing, four-county Puget Sound metropolitan region, for example, a coarse estimate of less than 5 percent of households purchased homes in 1999.⁵ Because transit supportive loans explicitly increase the home-buying power of participating households, however, it is likely that they will enable some households that would otherwise have remained renters to become homeowners.

Of the buying households, such loans would apply only to those households interested in purchasing homes where the program is available. In Chicago, Los Angeles, San Francisco, and Minneapolis/St. Paul, this represents most of the metropolitan area. In the Puget Sound area, however, they are currently available only in incorporated Seattle, thereby excluding property in most of the four-county metropolitan

⁴ This would apply only to metropolitan areas where transit supportive home loans are currently available.

⁵ According to the Puget Sound Regional Council, there were 52,000 housing transactions in 1999, divided by a household population of 1,269,070.

Figure 4. Criteria Used to Describe the Potential Transit Supportive Home Loan Market



area. The third criterion filters for households that are interested in living transit supportive lifestyles—that is, households that (a) would rather live in compact urban neighborhoods, (b) have work commutes accessible by foot, bicycle, or transit, (c) prefer to shop locally in the neighborhood, and (d) mostly prefer to travel to other destinations by foot, bicycle, or transit. Finally, they apply only to households that are interested in them and that can qualify for them. This requires households to be interested in purchasing a particular home in a transit-rich neighborhood, for that particular home to be available, and for households to qualify for the required mortgage to purchase it.

A typical mortgage loan applicant weighs several matters when deciding on the type of mortgage to get, including, but not limited to, variations in the term of the mortgage, the down payment amount, lender fees, and interest rates (and points). Such issues typically supersede decisions about different types of unique or “green” mortgages, should they even be available. After filtering for households that are (1) relocating, (2) interested in buying a home, (3) attracted to the transit supportive lifestyle, (4) qualified, and (5) wanting to pursue a transit supportive home loan, one can see how the potential population narrows to a small segment of the residential housing market.

Having explained the potential population of users, I now turn to the backdrop of other issues against which this program is positioned.

Risks of the mortgage industry

Transit supportive home loans are based on the premise that mortgage underwriting guidelines can and should accommodate the distinct consumption patterns of residents in transit supportive neighborhoods. Such a premise makes a number of assumptions that place a greater risk of possible mortgage default on the housing finance industry. The range of these assumptions includes, but is not limited to, the household (1) forsaking a second car, (2) reducing its transportation expenses by using transit more, (3) shopping locally, and (4) having limited assets for a down payment.

Given the lack of mortgage loan performance data to test default rates of such loans, a recent study used an indirect test to better understand the possible risks that the housing finance industry might incur (Blackman and Krupnick 2001). The authors tested the rationale that because homeowners in transit-rich areas have below-average transportation expenses and more funds available for a mortgage payment, they should have lower default rates than similar borrowers with similar mortgages in other areas. Finding that no relationship exists (i.e., there is no correlation between transit availability and probability of default), the authors concluded that making low down payment loans available to borrowers in such areas is tantamount to making such loans available to a random sample of borrowers and will have the same impact: It will raise default rates (Blackman and Krupnick 2001). The bottom line is that there are risks involved, as there are with all programs and policies, and in this case, the risk of higher default losses would need to be weighed against the benefits of the program. These costs would be absorbed by lenders, insurers, and the secondary mortgage market—while they also enjoy the benefit of an increased volume of mortgage lending. Loan borrowers benefit from access to affordable homeownership in attractive, transit-accessible communities. Societal benefits include higher homeownership rates and support for income diversity in such communities.

The potential market of non-auto users

An important consideration is the extent to which the mortgage product promotes a change in household travel. Two scenarios help shed light on this point. The first argues that those interested in transit

supportive home loans are likely already living the transit supportive lifestyle (for example, living in urban environments and using transit). This refers to the type of residential sorting alluded to earlier. In this case, a household's travel behavior and residential location decisions are triggered by personal preferences and are not likely to be dramatically affected by moving to a new home.

The second scenario calls for transit supportive home loans to attract low-auto-using residents. That is, former high-auto-using residents would become low-auto-using residents, presumably because of the increased travel opportunities provided by the relationship with urban form. The mortgages would reward this decision by incorporating household transportation savings into home-buying power. The degree to which this second scenario plays out depends on one's perspective on the following considerations.

One argument suggests that this scenario is unlikely because, generally speaking, travel and residential location preferences reflect particular lifestyles (Kitamura, Mokhtarian, and Laidet 1997)—lifestyles that may *not* be consistent with program goals. In this respect, it is unlikely that such residents would move to these neighborhoods and change their travel behavior. Those in this camp contend that transit supportive loans are not likely to generate significant new demand for houses in transit-rich areas (Easterbrook 1999). A second argument, however, suggests that there may be latent demand consisting of households that wish to live in transit supportive neighborhoods and that may be interested in changing their lifestyle (such as baby boomers and the elderly) (Levine, Inam, and Torng 2000); indeed, these households may be waiting for an impetus to change their lifestyle.

Tackling sprawl and affordable housing

Finally, sprawling development patterns and affordable housing are more complex issues than any prescription related to mortgage finance can remedy. It is important for advocates and users to understand the relatively marginal role that such mortgages could possibly play in the context of urban dynamics. Directing new development away from suburban fringe areas and increasing affordable housing depend on issues larger than the mortgage industry itself. Borrowing from the logic of Anthony Downs (1994), relevant factors include, but are not limited to, (1) deficiencies of the trickle-down housing theory, (2) the continued proliferation of dispersed land use powers, (3) subsequent exclusionary zoning and other planning-related practices that increase the separation between the "haves" and the "have-nots," and (4) the requirement that all new housing meet high quality standards that are difficult for

many without subsidies. These larger-scale—and significantly weightier—issues have been identified in the past and are beyond the scope of the present discussion.

Summary and conclusions

This article fills a void in the literature on mortgage innovations that the housing finance industry has developed over the past decade to advance homeownership. It provides a primer on transit supportive home loans by describing the motivations for the tool, the ways in which it is applied, and likely prospects for widespread adoption. The intent is to position such loans to nudge the market in ways compatible with public policy goals related to housing, transportation, and land use planning. These mortgages are unique because they combine both public and private interests in doing so. However, I close by positing that the future of transit supportive home loans may not be quite as bright as many advocates contend. For example, they are likely to offer only marginal respite for problems related to regional growth management. This is consistent with the growing recognition that there is no magic bullet—no single growth management strategy—to remedy the woes of many metropolitan areas (e.g., congestion, development on the urban fringe). This point echoes previous arguments contending that land use planning measures are too indirect a tool to leverage changes in individual travel behavior (Giuliano 1995) or residential location decisions.

While I suggest that transit supportive home loans may not significantly contribute to reversing (or mitigating) suburban sprawl, it is important to understand that the impact the program would have on *regional* growth management goals is just one way of measuring it. A separate way is the impact the loans would have on more localized matters and individual households. For example, they may open up a wider array of neighborhoods for lower-income households to choose from. Complicated problems such as sprawl deserve complicated solutions, and transit supportive loans should be relied on as only one weapon in the arsenal for planners and decision makers. They represent a growth management tool that pursues public policy objectives while satisfying the profit motives of participating private sector actors.

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