

## DEVELOPERS' PERSPECTIVES ON TRANSIT-ORIENTED DEVELOPMENT

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## **ABSTRACT**

The success of transit corridors in promoting sustainable regional growth hinges on location decisions made by many private-sector developers. This paper centers on a series of interviews with 24 residential and commercial developers in the Twin Cities region. Developers were recruited for interviews using random sampling by residential/commercial and urban/suburban specialty. The authors analyzed interview transcripts using close readings and computerized content analysis focused on word frequency analysis and topic co-occurrence statistics. Recommendations for promoting transit-oriented development including reform of zoning and development regulations, broadening the focus of TOD to include frequent bus routes and providing greater certainty of future transit improvements are discussed, with a specific focus on affordable housing.

## **KEYWORDS**

transit oriented development, sustainable growth, content analysis, transit planning, regional planning, affordable housing

## 1 INTRODUCTION

In the United States, high quality transit is no longer the exclusive domain of large, coastal cities with legacy rail systems. Across the nation, more modestly sized regions that abandoned rail entirely at the end of the streetcar era are turning back to fixed-guideway transit to provide regional mobility and catalyze sustainable regional development. A common characteristic of these “New Start” transit systems is that they serve regions with decades worth of automobile-dominated metropolitan development. This pattern presents planning opportunities and challenges. On the one hand stand hopes of stations serving as the nuclei of transit-oriented regional growth, leading in turn to increasing ridership, further demand for transit-focused housing and commercial space, and so on. (Lund, 2006; Schwanen & Mokhtarian, 2007) On the other, it is increasingly apparent that stations must so serve if the public is to reap the full rewards of the massive capital investments required for fixed-guideway transit. (Tilahun & Fan, 2014) In addition, the very popularity of transit-accessible locations can price low-income residents and entry-level employers out of the market in station areas, raising concerns over whether transit improvements serve those who most need improved transit. (Immergluk, 2009; Kahn, 2007) Finally, transit-friendly built forms do not inevitably follow the implementation of transit improvements: “Build it, and they will come!” seems not to be a viable strategy on its own. (Hurst & West, 2014; Loukaitou-Sideris & Banarjee, 2000) Transit Oriented Development (TOD) may now be a watchword of comprehensive and regional growth plans, but the visions put forward by such plans are in the hands of developers to realize—or not. Despite a large body of research on the demand for and benefits of TOD, little research to date explores how developers themselves relate to the concept. Research indicating developers often attempt to build denser, more compact projects than regulations allow suggests developers’ perceptions of and motivations for pursuing TOD are important to consider (J. Levine & Inam, 2004a).

How do transportation and transit access factor into developers’ decision making? How do private developers perceive their relationships to public plans, policies and processes in pursuing TOD? When developers choose to build transit-oriented projects, what motivates them? How can planners and local governments induce more developers to make such a choice? How can we integrate TOD and affordable housing development, rather than pursuing them separately? These are crucial questions for the success of transit investments and the hopes for regional growth riding on them. They also cannot be answered by common methods in TOD research, such as travel demand modeling and analyses of residential self-selection (R. Cervero, 2006; R. Cervero, 2007). We explore these questions in the Twin Cities region of Minneapolis-Saint Paul, Minnesota. The region is in the process of developing a regional transit system of light rail and bus rapid transit lines, intended to play a transformative role in the region’s future growth. The region has identified 15 major transit corridors for further development by 2030. These corridors, called “transitways” in the region’s 2030 Transportation Policy Plan, are designed to offer fast, reliable, and frequent service all day, as well as an improved passenger experience both in vehicles and at stations.

We focus on a single region, but the Twin Cities offer a case for studying TOD relevant to many regions now building or contemplating fixed-guideway transit. In regions as diverse as Charlotte, North Carolina, Denver, Colorado, Houston, Texas and Seattle, Washington, planners are

wrestling with no less a task than fundamentally changing the foci and form of their regions' future growth. In particular, the Twin Cities region is a major metropolitan area, but not a megacity on the order of New York or Chicago. Its suburbs primarily arose after World War II with an automobile-dominated growth pattern. This pattern is juxtaposed, however, against a revitalizing urban core. Finally, the region is going through a transition from a bus-only transit system designed to serve existing development and travel patterns to a system centered around a network of rail and bus rapid transit corridors intended to create new development and travel patterns.

Forming part of a transit corridor-focused sustainable regional planning initiative, this research aims to explore the attitudes towards, and interest in TOD among private sector developers. To that end, the authors conducted in-depth, open-ended interviews with 24 Twin Cities developers with diverse backgrounds. Interview transcripts were analyzed using content analysis techniques including word frequency analysis and topic co-occurrence analysis. Findings from the analyses were used to propose incentive, regulatory, and public-private partnership programs for attracting market-rate and affordable housing development near transitways.

## **2 LITERATURE REVIEW**

Although the past several decades have been marked by automobile-dominated suburban “sprawl” (Burchell et al., 2002; Ewing, Pendall, & Chen, 2003; Pendall, 2011) the concept of compact, walkable, mixed-use development served by high-quality transit is nothing new. Indeed, it is the hallmark of the numerous, traditional central-city and inner-suburban neighborhoods that grew up around first-generation streetcar lines a century ago (Gin & Sonstelie, 1992; Hess & Lombardi, 2004).

The basic principles of purposeful TOD have been understood for many years (Calthorpe & Mack, 1989; R. Cervero, 1984). In a nationwide survey of developers, Levine and Inam found that developers perceived an unmet market demand for TOD. They also found developers perceive development regulations requiring low-density, single-use development in most areas as a primary obstacle to implementing alternative development forms (J. Levine & Inam, 2004a). Levine and Frank reach a similar conclusion regarding demand for compact, transit- and pedestrian-friendly development (J. Levine & Frank, 2007).

Cervero offers a detailed exploration of how TOD fits into the residential development market in the San Francisco Bay area. Residents of transit-oriented housing tend to be young, childless professionals working downtown or in transit-served areas. Cervero suggests allowing lower parking ratios in transit-oriented housing and location-efficient mortgages as strategies for promoting further TOD projects (R. Cervero, 1996). The Center for Transit Oriented Development (CTOD) estimates more than one in five households will desire housing in a TOD by 2025 (Dittmar et al., 2004).

In addition to the positive evidence of a latent market *demand* for TOD, empirical evidence also confirms the development *impacts* of premium (usually rail) transit investments (J. Levine & Inam, 2004a). These studies often seek to quantify the impacts of transit investments on regional

development patterns (R. Cervero, 1984; R. Cervero & Landis, 1997; R. Cervero, 2006a; R. Cervero, 2006b; Dueker & Bianco, 1999; Fan, Guthrie, & Teng, 2010; Fan & Guthrie, 2012b; Fejarang, 1994; Guthrie & Fan, 2013; Landis, Cervero, Guhathukurta, & Huang, 1995; Loukaitou-Sideris & Banarjee, 2000) or the impacts of TOD projects on travel behavior (Brown & Werner, 2009; Cao & Jordan, 2009; Crowley, Shalaby, & Zarei, 2009; Knowles, 1996; Loukaitou-Sideris & Banarjee, 2000; Lund, Cervero, & Willson, 2004; Walters, Ewing, & Schroeder, 2000). Existing studies, including the ones on market demand and development impacts of TOD, offer a wealth of information on why a regional planner might *desire* TOD, but less as to how that regional planner might go about *promoting* it on a regional scale.

The implementation of the Twin Cities' first light rail line, along with surrounding bus service changes significantly increased employment accessibility in the region, with accessibility benefits shared across income groups (Fan, Guthrie & Levinson, 2010). Future-oriented research on the employment accessibility impacts of the proposed 2030 Twin Cities regional transit system under multiple residential and economic development scenarios predicts significant accessibility benefits from the transitway system itself (Tilahun & Fan, 2014). Tilahun and Fan (2014) also found those gains would be much greater if future housing development and/or job growth were concentrated in transit-served areas, with by far the greatest gains occurring from the increased concentration of *both* (Tilahun & Fan, 2014). There is no guarantee, however, that TOD will follow close behind transit investments (Goetz, Hagar, Ton, Ko, & Matson, 2010; Hurst & West, 2014; Loukaitou-Sideris & Banarjee, 2000). Indeed, regional success stories in TOD tend to be carefully nurtured by supportive public policies (Arrington, 2000; Boarnet & Compin, 1999). Our study aims to identify such supportive policies for the Twin Cities region by considering TOD and its surrounding policy environment through the perceptions of local developers.

### *2.1.1 TOD vs. Conventional Development: The Importance of Allowing TOD*

Automobile-dependent growth has traditionally been constructed as a free market response to the technological developments of the automobile and the freeway (Baum-Snow, 2007; Brueckner, 2000). Were this truly the case, TOD promotion efforts would require coercive regulatory action—to achieve TOD we would need to require it (J. Levine & Inam, 2004b). An alternative line of reasoning suggests, however, that it is current development regulations themselves—with their traditional focus on limiting density, separating uses seen as incompatible and facilitating automotive transportation—that present a primary obstacle to TOD. This school of thought suggests there is significant latent market demand for TOD which developers would willingly serve absent automobile-focused regulatory structures. If this is so, successful TOD promotion would not require new coercive regulations so much as the repeal of existing regulations which serve goals planners no longer espouse—to achieve TOD we might need only allow it (J. Levine & Inam, 2004b; Pendall, 2011).

Downs also points out that conventional, automobile-oriented development has hardly occurred in a perfectly free market (Downs, 1999). Similarly, Pendall finds low-density zoning and annual building-permit caps are drivers of sprawling development—in spite of market forces to the contrary (Pendall, 2011).

Levine and Inam argue that targeted deregulation would be sufficient to significantly increase the production of walkable, transit-friendly developments. They cite significant shares of proposed “alternative” developments being rejected or altered. Reductions in density and/or reductions in diversity of uses are the most common alterations. This pattern suggests developers would build more dense projects with greater diversities of uses *if they were allowed to* (J. Levine & Inam, 2004a). Leach points to the Rosslyn-Ballston Metrorail corridor in Arlington County, Virginia, as a successful example of retrofitting an automobile-dominated suburb for a pedestrian- and transit-friendly built form. Arlington County allows station-area developments much higher densities than otherwise. The county also offers a standardized and predictable site-plan review process to encourage the construction of compact, urban development (Leach, 2004).

These alternative concepts of the relationship between development regulations and TOD significantly informed our interview protocol. In recognition of the need to be capable of detecting both market and regulatory obstacles to TOD, we deliberately kept interview questions open-ended, allowing participants to volunteer what they perceived as most critical before asking follow-up questions.

### *2.1.2 TOD and Affordable Housing*

Ensuring the benefits of transit improvements are shared throughout society requires affordable housing in station areas. The construction of affordable housing is often hampered by neighborhood opposition, particularly in suburban areas (Goetz, 2008). Suburbanites often equate affordable housing with poor minorities, recipients of public assistance, and crime (Kirp, 1997). Whatever their reasons, suburban communities often oppose the provision of affordable housing on a large scale (Downs, 1993; Keating, 1994). Providing affordable housing in transit station areas may be complicated by persistent perceptions (particularly in suburban areas) that transit improvements cause increased crime rates, despite evidence to the contrary. Fan and Guthrie find such perceptions alive and well in Twin Cities station areas (Fan & Guthrie, 2012a).

Station area affordable housing development can be further complicated by high market demand for premium transit among affluent households driving up housing costs in station areas. Residents who actually use transit, however, tend to have significantly lower housing-plus-transportation costs than similar residents of non-transit-served neighborhoods (Belzer et al., 2006). Station-area housing attracts price premiums in varied neighborhoods and regions, even along proposed corridors (Goetz et al., 2010; Hess & Almeida, 2007; Immergluk, 2009). Negotiation of variances and approvals common to TOD can present opportunities to include affordable units. (Belzer et al., 2006; Leach, 2004).

The provision of adequate affordable housing in transit accessible areas appears both crucial for the maximum social benefits of transit investments and often difficult to accomplish. Any region includes people with widely varied means, as well as neighborhoods in varied physical locations. We contend that transit-oriented jobs-housing balance cannot genuinely be regional in scope unless access to transit-oriented housing cuts across social strata as well as geographic areas. On account of this importance and difficulty, we specifically asked residential developers about their experiences with and perceptions of affordable housing development in transit accessible areas.

### **3 INTERVIEW PROTOCOL**

Developers were randomly sampled for the interview series. Out of 163 developers identified in the region, we interviewed a total of 24, including 16 working in Minneapolis and/or St. Paul, 21 working in suburbs, 15 developing residential projects, and 17 developing commercial projects. These categories are not mutually exclusive: some developers specialize in only suburban commercial development, for example, while others undertake residential and commercial projects in both central cities and suburbs. We sampled developers to ensure adequate representation of each category, but encouraged participants to discuss any projects they considered applicable, regardless of type or location.

Questions for all interviews revolved around four themes:

- What the participant sees as crucial factors involved in selecting locations for their development projects
- Where transportation and transit access fit into that set of factors,
- What makes transportation and transit access important (to whatever degree they are), and:
- What actions the public sector could take to make transit-accessible sites more attractive for private-sector development.

Residential developers were also asked about affordable housing: on their past experience (if any) had been and what the public sector might do to make developing affordable housing more attractive.

The questions served as conversation starters. To let participants provide the insights they saw as most important, interviewers stayed “out of the way” as much as possible. Interviewers only stepped in to redirect the conversation to make certain all key topics were addressed, or to expand on interesting but not fully explored themes. Interviews were recorded and transcribed in full.

### **4 ANALYSIS TECHNIQUES**

We employed two computerized content analysis techniques: word frequency analysis and topic co-occurrence, in connection with repeated close readings of the interview transcripts. Word frequency analysis offers a simple but comprehensive first look at recurring themes in the interview transcripts. The NVivo 10 software package for qualitative analysis processes word frequency counts with the aid of an electronic thesaurus and aggregates words together with their synonyms. As a result, each word appearing in the final count represents a meaning, not merely a string of letters.

Commonly recurring meanings suggest important topics and concepts to the researcher. The software employed also allows the user to assign passages of text to “nodes,” tagging them as pertaining to a particular topic. This process allows the use of a computer to analyze the

frequencies of and correlations between a large number of topics throughout all the documents in the completed set of interviews. Since topics are manually assigned, this analysis analyses can be performed even on complex themes requiring human intelligence to parse (QSR, 2012). Co-occurrences of important topics can shed light on the important issues to address in efforts to promote TOD, since interviewees likely mention conceptually related topics together.

As beneficial as computerized content analysis can be, there is no substitute for reading and rereading interview transcripts by a researcher intimately familiar with the subject. This process identifies recurring overall themes which may not appear in more formal analysis techniques—for example, a systemic perspective present throughout an interview may be plain to a reader, yet difficult to assign to specific topics. In addition, the human touch, so to speak, identifies novel perspectives from participants which are interesting more for offering a different point of view than for prevalence. Computerized analysis can help direct close readings of interview transcripts by allowing the reader to search transcripts by topic and identifying intersections between important topics. The reverse can be true as well. For example, a passage in which two or more topics appear together in an unexpected way could suggest a new coding query, leading to an iterative process blending human and computerized analysis.

## **5 RESULTS**

### **5.1 Word Frequency Analysis**

Figure 1 shows the 100 words used most frequently in interviews; transportation-related words are circled. More frequent words are shown in larger, darker type. The importance of “city” and “works” illustrates two recurring themes: First, working relationships with local governments are crucial. “City” is mentioned largely in terms of permitting processes, local regulatory structures and the vagaries of local political processes—participants say “city” when they mean municipal government. These relationships play a major role in site selection when choosing between a site in a city seen as easy to work with and one in a city seen as difficult to work with. Second, “works” is also commonly used to refer to the perceived viability of a project, or of a community’s vision for it. In other words, TOD and/or affordable housing might be desirable but are only possible if a project “works” overall. The following quote illustrates this sense:

*We have to be a believer that it’s realistic. That if you’ve got a city that wants to do[...] let’s say they want to do a typical kind of new urbanism, mixed-use project with some retail on the first level and housing up above it, put the parking in the rear. That isn’t going to work everywhere.*



**Figure 1: Frequently Used Words (Transportation-Related Words Circled)**

The most prominent transportation-related word—“parking”—is also illustrative. All but three participants mentioned parking at least once, even though parking is not mentioned in the interview questions. Twelve participants cited parking as a major cost, particularly for multi-family and mixed-use developments and/or urban redevelopments. Six also specifically mentioned excessive minimum parking requirements as significant hindrances to TOD. These developers claim parking standards artificially inflate the cost of TOD’s; they also consume buildable station-area land.

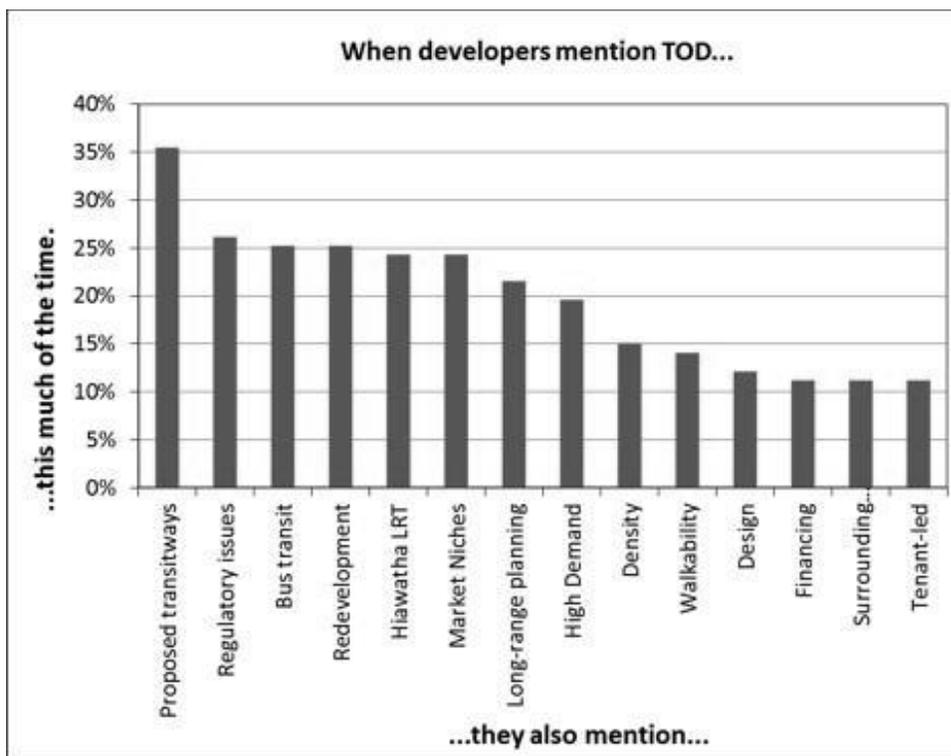
“Rail” is the next most common transportation-related word after “parking,” followed closely by “transit.” Rail generally has a very positive image for developers. Twelve participants identified rail transit as highly attractive. Twelve developers had built projects they identified as transit-

oriented on bus routes. Interviewees are much more likely to discuss “transit service” than “bus service.”

## 5.2 Topic Co-Occurrence Analysis

### 5.2.1 Coding Intersections—TOD

Figure 2 shows the topics mentioned with TOD at least 10% of the time. The most striking finding is at left: developers discussed TOD together with discussions of future, proposed transitways more often than any other topic. Over a third of all mentions of TOD also included mention of future transitways.



**Figure 2: TOD Co-occurrences**

The areas to be served by yet-to-be-built transitways include one of the most favored sectors for development in the region. According to one developer:

*Before you even talk to these CEOs, they said, are you going to go on the Central Corridor? They said, no. You going to go on Hiawatha? No. Are you going to go on Southwest? Yes. Would you go here more than any of those? Yes, because that’s where we’re planning to go, that’s where we are now.*

Developers show interest in proposed transitways but will not make location decisions based on them unless construction is certain. One participant put it so: “[T]he proposals for the

transportation changes and stuff are so many years out, and very speculative, [...] it's still so far into the future, and the funds aren't even there to do it."

The second most common node to co-occur with TOD is also instructive: regulatory issues. Increased costs, complexity, and/or time caused by regulatory regimes ill-suited to TOD are mentioned in one in four mentions of TOD. Four participants saw current development regulations as restricting developments that might have negative impacts rather than encouraging developments with positive impacts. The following example comes from a suburban developer with residential and commercial experience:

*They're not pro-development. They're actually anti-development, and they look at their jobs as to try to control it. [...] So anyway, what we see is cities, even with this downturn, they see themselves still as regulators. They aren't—there are very, very few cities that take a proactive response that say, "Okay, what is it we can do to make something happen? What is it that we can come alongside with and help to make this project move forward?"*

Mentions of bus transit co-occur slightly more often than mentions of Metro Blue Line LRT with mentions of TOD—both appear in roughly 25 percent of passages dealing with TOD. Many popular urban neighborhoods, such as Uptown Minneapolis, are desirable areas for development independent of transit access. Often, these neighborhoods are only served by conventional bus transit. Here, an already somewhat transit-oriented *neighborhood* attracts development, which may have little choice but to adopt transit-oriented design features to fit in.

Interview participants also mention redevelopment together with 25% of mentions of TOD. This highlights the importance of urban/inner-suburban locations for TOD in the views of developers, as with this small, urban redevelopment specialist:

*If it's housing, obviously, transit, and desirability of location and what affects that. If it's housing, what are the supporting services that surround there, or could surround there? And transportation. And transportation. And we are urban infill developers. So, when I look at transportation, I don't look at as much the possibility of future transit, it's what's existing. Now that's all changed over the last you know, eight years, because of our newly constructed and evolving light-rail system.*

Frequent mentions of market niches together with TOD indicate developers see it as a niche market. However, TOD is not alone in this—interview participants discuss development more as a myriad of niche markets than as one mass market. One small, urban developer put it this way:

*So, my buyers are people that decidedly want urban—I mean, I'm an urban developer. I'm in the niche. And people just, statistically, go, well, don't people still want to buy a single-family house in the suburbs? Yeah! The majority of them still do. But instead of 98 percent, we're down to 80 percent. And that 20 percent is my market.*

Issues of long-range planning occur frequently, either in terms of identifying a need to support future TOD or recommending how to plan more effectively for TOD. Roughly one in five mentions of TOD also include specific mention of high market demand. Demand for transit

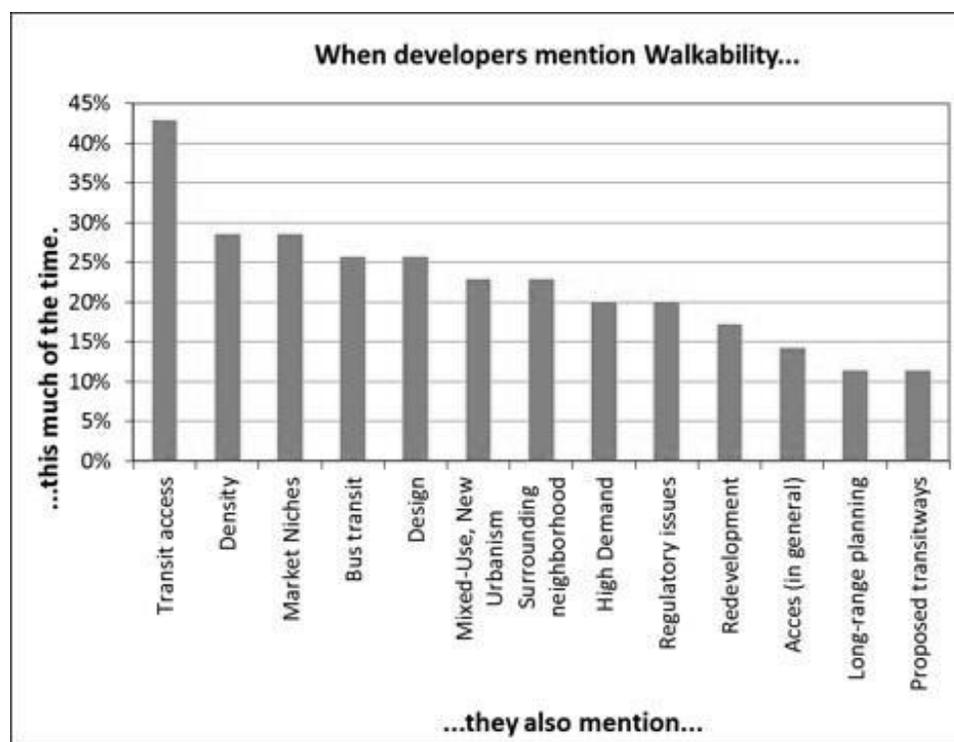
access is cited as highest among younger demographics. One primarily suburban residential developer described his perception of demand for TOD thus:

*That's where the customer is gonna be. And the younger customer that we're gonna do, is just gonna be, you know, transit motivation and orientation is generational. [...] And so they try to do senior housing around transit orient is stupid. And so, but you get someone your guys' age, you go, why wouldn't I live there? Leave the damn car, and/or if I team up with someone, have one car and use the transit.*

Other topics mentioned together with TOD at least 10 percent of the time include density, walkability, design issues, financing, issues related to the surrounding neighborhood (crime rates, surrounding uses, etc.), and tenant-led (commercial) development.

### 5.2.2 Coding Intersections—Walkability

Walkable neighborhood design is widely considered a crucial component of TOD (Calthorpe & Mack, 1989). Developers shape the pedestrian environments of new and redeveloped communities. Figure 3 shows topic nodes that frequently appear in connection with walkability.



**Figure 3: Walkability Co-occurrences**

TOD stands out—mentioned together with nearly 45% of mentions of walkability. Developers marketing to growing desires for urban living cite walkability as an important neighborhood amenity. Walkability is seen both as complementary to transit access and desirable in its own right:

*The first way I want to move is walking. Then I want good bike connections. Then I want to take my transit to work. So, multimodal. And then just, sort of, urban amenities. Shops and restaurants and activities and clubs. And then nature. Access to nature.*

Density appears in generally similar context. Density often comes up in conversation in terms of a neighborhood having destinations within walking distance of a site.

The market niches node appears in more than 25% of passages dealing with walkability. This pattern fits with developers seeing walkable environments as high-demand segments of the housing market—especially with young members of the “creative class”—with strong desires for vibrant, urban neighborhoods. Walkability in surrounding, existing neighborhoods also appears as a point in favor of urban or older suburban sites.

Bus transit appears together with roughly 25% of passages regarding walkability. This pattern reflects the central-city and inner-suburbs focus of most developers interested in walkable neighborhoods as amenities.

Walkability co-occurs with discussion of mixed-use and/or New-Urbanist development roughly 22% of the time. Interestingly, this rate of co-occurrence is lower than that for general discussions of project/neighborhood design (25%). This pattern may reflect a common view among participants that New Urbanist design can be too much of a “one-size-fits-all” solution. These developers contend other, more viable design options exist for incorporating walkability into projects where stereotypical New Urbanism is inappropriate. The fact that issues of surrounding neighborhoods appear with walkability as often as mixed-use/New Urbanist development supports this finding, illustrated by the following statement from a large, commercial developer:

*The New Urbanist elements, you can incorporate many of those things: conductivity, walkability, attention to other modes of transportation, even bicycle as opposed to vehicular. All of New Urbanism isn't four-story mixed use, retail, with residential above. You can incorporate many soft-scaping things and better design into different communities.*

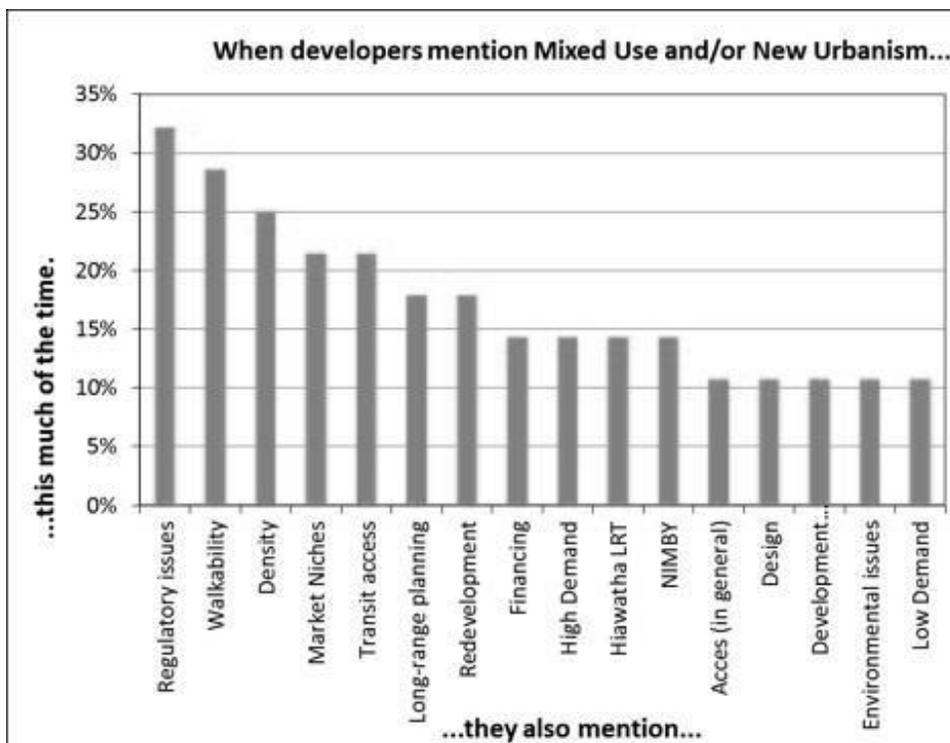
Discussion of high demand in interviews appears in 20% of discussions of walkability. All but one developer who mentioned walkability acknowledged that a walkable neighborhood would increase the desirability of an otherwise suitable site, at least for residential development.

Regulatory issues appear largely regarding parking standards, setback requirements, and similar development regulations. Off-street parking requirements that increase walking distances between pedestrian destinations and create an unwelcoming pedestrian environment are prominent. One participant spoke at length about preferring to build as few as 0.83 stalls/residential unit with good transit access, even with two-bedroom units. In the words of a smaller, urban residential and commercial developer:

*You know, parking is always the conundrum in any development because the clients, the users, want what they call line-of-sight parking. Park here, walk 30 feet, and get in the front door, that way I'll have more customers. It isn't go to any metropolitan area, and that is no longer possible, just because of density. So, the city requires certain parking minimums. Portland has parking maximums. If one develops in the traditional way, you end up with a checkerboard: building, parking lot, building, parking lot, building, parking lot. And you lose the opportunity for increased density, and architectural presence along the entire boulevard face.*

### 5.2.3 Coding Intersections—Mixed-Use/New Urbanism

Figure 4 shows nodes occurring together with mixed-use and/or New Urbanist development at least 10% of the time. “Regulatory issues” is the most common, appearing together with one in three mentions. Developers cite long, complicated regulatory approval processes required for such projects. Three urban-focused developers with extensive mixed-use experience specifically cited conventional, single-use, automobile-oriented zoning ordinances that have not been updated to reflect the principles articulated in current, progressive comprehensive plans.



**Figure 4: Mixed Use/New Urbanism Co-occurrences**

Walkability and density both commonly co-occur with mixed-use and New Urbanism, mostly in terms of developers identifying necessary design features and neighborhood attributes for such projects to be successful. The next most common co-occurring node is market niches, again

showing interview participants' consciousness of what areas and markets developments fit their definitions of mixed-use/New Urbanism.

Transit access occurs with mixed-use/New Urbanism almost as often as market niches. High demand co-occurs 14% of the time, while, on the other hand, low demand does 11% of the time. This pattern betrays significant difference of opinion among developers about the desirability and feasibility of mixed-use/New Urbanist development.

The Hiawatha light-rail line also appears in 14% of mentions of mixed-use/New Urbanist development, though not entirely in a positive light. Participants cite a poor pedestrian environment along the corridor and a parallel industrial corridor acting as a pedestrian barrier in explaining why they perceive little mixed-use/New Urbanist development (or any development) along the Twin Cities' first LRT line.

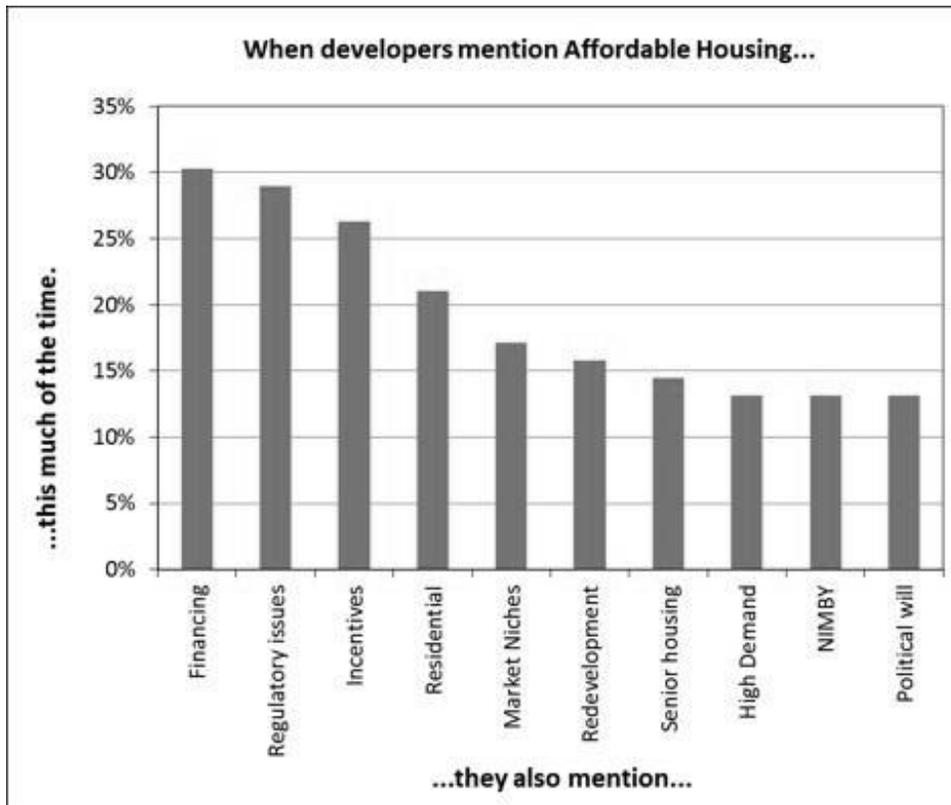
#### 5.2.4 Coding Intersections—Affordable Housing

Figure 5 shows topics participants frequently mentioned with affordable housing. In stark contrast with TOD, the two most commonly co-occurring nodes with affordable housing—financing and regulatory issues—both largely describe impediments to its development. Financing is a negative in the obvious context of renting or selling housing significantly below market price. Regulatory issues arise as negatives in terms of zoning, height/bulk limits, and/or parking standards that make it difficult to design profitable projects that include affordable housing. Four developers with affordable housing experience specifically cited relaxed parking requirements and higher permitted densities as important for making affordable developments financially viable. Allowing an affordable development in a transit corridor to have, for example, four stories instead of three and parking at 0.85 stalls per unit instead of 1 or 1.5 could potentially make the difference between needing grant funding and simply fitting costs to a lower-income market.

These nodes are not wholly negative, however. Affordable housing tax credits can be important strategies for financing larger projects. Stringent regulatory compliance requirements accompanying affordable housing can reduce competition, especially for developers with in-house compliance capabilities. As one urban, affordable housing specialist put it:

*We've done a lot of that and it's one of those things that you don't want to do ONE, you need to kind of set up everybody for it. You're talking about fair housing, you're talking about a lot of people looking over your shoulder for various reasons that you wouldn't have in a normal real estate.*

Public-sector incentives appear in over 25% of passages mentioning affordable housing, underscoring the importance of governmental actions and funding. The incentives topic node refers to financial incentives, density bonuses and other affordable-housing specific variances from underlying zoning and development regulations.



**Figure 5: Affordable Housing Co-occurrences**

“Affordable by design,”—maximizing affordable housing in a constrained public funding environment by controlling construction costs (hence reducing break-even rents) and/or reducing residents’ other expenditures through services such as on-site childcare (financed through other programs) or good transit access—is a compelling concept raised in the interviews. Here is one of the most striking statements heard on affordable housing in the series of developer interviews:

*[I]n my group we say, what’s the best way to build affordable housing? Put it on transit. You don’t even have to touch the unit. You don’t have to subsidize the unit or do anything—just put it on transit. Change the equation about the money going into personal transportation, which is 20 percent now. Housing is 30 percent. So, transportation is taking up two-thirds of the budget that your house is. Your car is costing you two-thirds as much as your house! That’s crazy—if you’re on the lower end, especially. So, that’s—you can change the two-by-fours or get government programs all day long, but none of them have the impact of transportation connections.*

The developer quoted above argues that transit-oriented housing *is* affordable housing—at least significantly more affordable than it would otherwise be. Of course, this only works up to a point. Still, transportation costs play right into a strategy of making housing “affordable by design,” in the words of one participant.

The market niches node occurs with affordable housing roughly 17% of the time. Developers experienced in affordable housing have nuanced perceptions of different affordable housing needs and how well they are met. For example, one urban, mixed-use developer identified affordable family housing as a major, underserved need in transit corridors:

*How much money have we got for affordable housing? [...] Okay, what's the best way to spend this money [...]? Buy up as much existing inventory along the line, a block or two away, as you can. First of all, it's going to be more family-oriented inventory, which is where the problem is. It's not going to be the one-bedroom studio apartment I build over the store on the line. That's not where the affordable disconnect is. That unit will cost more than that house that I could buy today.*

Developers with significant experience in affordable housing tend to specialize in it, achieving economies of scale through in-house regulatory compliance and management capabilities. To maximize financial incentives in an environment of constrained funding, four affordable-housing specialists noted they mix in other tax credits and/or incentive programs, such as historic preservation credits. The frequent co-occurrence of affordable housing and senior housing also underscores the many different facets of affordable-housing demand.

The frequent occurrence of the redevelopment node with affordable housing underscores perceived demand for affordable housing in urban areas. Six developers also mention a growing need for affordable housing in historically affluent suburbs, especially along proposed transitways.

Roughly one in eight passages mentioning affordable housing also mentions high demand for affordable housing. In an illustration of the complexity of affordable housing development, however, NIMBY-ism and problems of local political will to allow needed projects occur together with affordable housing as often as high demand. Developers with significant experience in affordable housing identify NIMBY-based neighborhood opposition as a frequent problem. In the words of one:

*When people talk about affordable housing, they think you're building a 10-story high-rise project building, and if you can breathe, you can move in, It's had a negative connotation that requires a lot of education and unfortunately it seems like the people that are involved in the municipal process, [...] I think you've got just a generational gap in attitude between people that sit on these boards and people that are trying to get work done and that are in need of the housing. You kind of have the people making the decisions that don't understand and don't care.*

### **5.3 Recurring Themes on Overall Location Factors**

#### *5.3.1 Convenient Transportation and Transit Access Desirable*

Participants were asked: “What are the crucial factors you often consider in determining the location of your development projects?” In response, participants frequently identified convenient access to transportation as key to their site-selection decisions. In fact, all but three

interview participants volunteered convenient transportation access as important before they were asked any transportation-specific questions. In addition, nine of the 24 developers interviewed directly reported transit access as a crucial factor in determining development locations. For example:

*I look for the amenity package. I want a restaurant near me, a coffee shop near me, a bus stop near me, so multimodal transit options. Can I move around to this site?*

Other characteristics are frequently mentioned as well, including the density, walkability, and other characteristics of the surrounding neighborhood, financing and incentives such as TIF or tax credits, tenant-led site-selection processes, and visibility. Still, these developers demonstrate real demand for transit-oriented sites.

### 5.3.2 Many Participants Focus on Redevelopment

Another interesting finding is the number of participants who focus on redevelopment. Fourteen of the 24 developers generally develop on sites in built-out communities with improvements already present. Reasons include an existing oversupply of conventional, greenfield development, and transportation access problems at remote sites. Developers of affordable housings also often focus on redevelopment and/or reuse of existing sites/buildings. This focus results in part from high demand in the central cities and inner suburbs. It can also protect affordable housing developments from “NIMBY” opposition by promising reuse of a vacant site or rehabilitation of a dilapidated property. This common focus on redevelopment demonstrates significant interest in development in already fully built-out communities.

### 5.3.3 Tenants Drive Commercial Development

Current market conditions have led prospective tenants to determine many aspects of commercial development projects before developers even become involved. Participants cite financing and leasing difficulties as reasons for avoiding speculative commercial development. In the words of one predominantly suburban commercial developer:

*We did [develop on speculation] in the past, and that's history. Where I built centers, where I started building without any tenants, I'd fill them up, and that was prior to the so-called recession, [...] since the recession, the banks are not excited about that, and it just doesn't work.*

This situation often means that a particular city or neighborhood may be specified by an anchor tenant. A retail chain, for instance, might select general areas in which to locate. In such cases, developers can play an important role in selecting a specific site within a key tenant's desired market.

## 5.4 Recurring Themes on TOD-Related Experience and Attitudes

### 5.4.1 Transit Access Desired but Often Overridden

The following statement came early in an interview with a project manager at a major Twin Cities-based development company:

*[I]t's always on the list. We want to be close to buses, we want to be close to light rail. [...] [I]t ends up being not quite as important as you'd think. At least in the Twin Cities, here. But everything that we've responded to in the last two years, that's been on the list—for a corporate user or a government user.*

Another developer put it this way regarding residential projects:

*If we looked at an opportunity and we thought it was a good opportunity, if it wasn't near transit, that wouldn't stop us from moving forward, if the thing underwrote and the metrics were good on it. Now, would we do more apartments in downtown Hopkins knowing that as the light rail eventually gets there, whether it will be something that will add some incremental value? If people had a choice to be a block or two away from the train station, it's probably better than a short drive. And so we might get 5 more cents a foot, and maybe we don't get 5 more cents a foot, but maybe our [occupancy] runs at 94% versus 91% or 89%.*

Nineteen of the 24 interview participants saw transit as desirable, all else equal. Participants, however, cited increased land costs, limited buildable land around existing transitways, and difficult permitting processes in the central cities as factors keeping all else from being equal. A common theme is that transit can easily “break the tie” between otherwise similar sites, but that few developers will compromise other site-selection factors for a transit-oriented site.

### 5.4.2 Already Interested

Developing near transit in such a way as to be truly transit -oriented, rather than merely transit adjacent, can be difficult. Still, several groups of developers in the Twin Cities place a premium on transit access in selecting sites:

- **Multifamily developers:** Developers of market-rate multifamily housing depend on a young demographic. Participants identify young people as demanding rather than desiring transit access. Generally, this takes the form of conventional bus service. Most favored sectors of the Twin Cities region for development currently have no other form of transit service. Twelve participants, however, stated that the arrival of LRT in areas they favor would/did significantly increase premiums placed on transit access.
- **Redevelopers:** Developers specializing in redevelopment tend to work in the central cities and inner suburbs. Basic transit access is widespread, and demand for new construction is predominantly in multifamily housing. As a result, redevelopers frequently build projects with the effect of retrofitting a more transit-friendly built form

onto neighborhoods. This finding—and the previous one—demonstrate a need to include existing bus service in TOD promotion programs.

- Large office developers: The more employees commuting to an employer’s place of business, the more important commutes become to that employer’s business. Large office firms generally drive the development of the buildings they will occupy. Consequently, they have power to shape commercial development patterns. Both large development corporations interviewed indicated that corporate clients are increasingly including transit access in their “wish lists” of desired site characteristics.

## **6 CONCLUSIONS AND POLICY RECOMMENDATIONS**

These findings point to strategies for encouraging TOD, both through public policy changes and partnerships with the private sector. In particular, instances where current development policies are perceived to inhibit TOD and where the interests of TOD-promoting planners and profit-seeking developers align offer fruitful ways forward. Word frequency analysis, topic co-occurrence analysis and close readings all show strong interest in transit-served locations among developers, high perceived demand for transit-friendly development types and a difficult, expensive process for permitting TOD. The latter point is troubling given that developers perceive transit-oriented built forms (with high densities and low parking ratios, for example) as crucial to making a profit on transit-served sites. Developers are motivated to build complex TOD projects on expensive, transit-served land by hopes of profit; the result of difficult permitting processes for genuinely transit-oriented development may not be Renne’s pejorative “transit-adjacent development” (Renne, 2009), but no development at all in some cases. Interest in TOD is by no means unanimous, but together with difficult regulatory perceptions suggests an artificially constrained supply of TOD projects, much as found by Levine and Inam (2004).

Participating developers who built transit oriented projects also did so to serve perceived demand for walkable developments in vibrant, urban communities. In such instances, transit access is not a primary goal, but a characteristic which makes other goals easier to achieve. Participants cite factors such as the ability to bargain for lower parking ratios (despite the uncertainty and difficulty of success) and access to a larger pool of residents (due to reduced competition between housing and transportation expenditures) as potentially making TOD more profitable than broadly similar development could be without transit access.

Regarding affordable housing, a common thread is the inadequacy of available public funding to meet perceived demand. Developers with affordable housing experience cite a need to either combine other funding sources, minimize building costs and/or build housing which minimizes residents’ other expenses, allowing them to afford more expensive housing. The latter two strategies suggest a possible symbiotic relationship between affordable housing and TOD: higher densities and lower parking ratios can help reduce per-unit costs, while transit access can dramatically reduce household transportation expenditures.

These conclusions show important motivations developers have for pursuing TOD, as well as perceived issues that can override those motivations. Below, we make specific policy recommendations to address these issues and perceptions.

## **6.1 Policy Recommendations for Promoting TOD among Developers**

### *6.1.1 Reduce Costs, Emphasize Benefits*

High costs of transit-accessible sites can stop interested developers from selecting them. Subsidy programs, including TOD promotion grants or station-area tax abatement, could offset this obstacle to TOD and station-area economic development. Costs specific to automobile-dominated locations (for which TOD can actually offer costs savings) may be less well known by developers. A site-plus-transportation cost index (like housing-plus-transportation indices) could help developers factor in costs such as parking.

Twin Cities developers see current development regulations (such as single-use zoning, low density limits, and high parking minimums) as limiting them from building profitably near transit. A TOD zone, in which a developer can build a true TOD project (desired development) *by right* (a strong encouragement to regulation-averse developers), would help level the playing field between transit-oriented and automobile-dominated areas. Such a zone would permit higher densities, increasing potential returns on investments. Reducing minimum parking ratios where transit options exist would reduce the costs of TOD projects and increase densities of residents and destinations in station areas.

### *6.1.2 Take Advantage of Natural Alliances*

Developers that build transit-friendly projects in the Twin Cities metropolitan area tend to be small, innovative firms focusing on multifamily residential development and/or redevelopment of sites in the central cities and inner suburbs. In addition, large development corporations interviewed indicated that corporate clients are increasingly including transit access in their “wish lists” of desired site characteristics. It is important for TOD promotion efforts to actively reach out to these developers. Developers who have built projects with TOD characteristics near transitway corridors should be included in TOD promotion efforts surrounding these corridors. TOD-friendly zoning reforms should consider the needs of small projects as well as large ones.

Developers also specialize in specific areas of the region, and most developers with experience in transit-friendly development work primarily in the central cities. Connecting developers with expertise in suburban transit corridor areas and developers with TOD experience could speed the broader adoption of sustainable development patterns.

### *6.1.3 Accelerate and Diversify Transit Improvements Throughout the Region*

The prominence of planned transit improvements in developers’ consideration of TOD is noteworthy: this primacy demonstrates the importance of continuing, and if possible, accelerating the build-out of the regional transit system to take advantage of the interest

developers show in TOD around yet-to-be-built transitways. A strengthened, dedicated funding source for transit improvements could offer developers the feeling of certainty they need to make transit-oriented location decisions.

Bus transit was the third most common topic node to co-occur with TOD—more common even than the Metro Blue Line (the region’s one operating light rail line at the time of data collection). (See Figure 2.) Interviews suggest significant amounts of urban TOD activity oriented to Twin Cities bus routes. High-frequency bus routes, especially with transitway connections, offer significant TOD opportunities and should be considered for TOD-specific zoning and parking standards.

In addition, this relevance to development of central city locations and bus service indicates transit could be enhanced if premium local services, such as streetcars and/or arterial bus rapid transit (BRT), were implemented in popular urban neighborhoods. Such services could offer attractive links with the regional transitway system, extending its reach and development impacts. This finding also underscores the importance of taking a transit system level approach to TOD-friendly regulatory reform, and including bus-served neighborhoods beyond immediate station areas.

## **6.2 Policy Recommendations for Attracting Affordable Housing Near Transit**

### *6.2.1 Pursue Affordable-by-Design Solutions*

The high demand for affordable housing, coupled with limited available public funds, points to affordable-by-design housing as a potentially important part of a system-wide, transit-oriented affordable-housing strategy. Affordable-by-design housing will require reform of the same automobile-oriented density and use restrictions as well as off-street parking standards that hinder TOD. For example—the developer who stated a clear preference for parking ratios low enough to create conflict with staff and neighborhoods in the permitting process has no personal hatred of parking; he merely recognizes that parking is expensive to build. Implementing affordable-housing policies that recognize transit’s housing-plus-transportation cost benefits in determining what constitutes “affordable” for funding eligibility could ease the development of transit-oriented affordable housing.

### *6.2.2 Engage with Affordable Housing Specialists*

Participants with extensive experience in developing affordable housing relate regulatory compliance and management capacities well beyond those required for market-rate residential development, as well as economies of scale realized by building those capacities in-house for all-affordable projects. Affordable-housing promotion efforts might have more success if focused on providing affordable-housing units at the level of station-area neighborhoods rather than percentages of individual new developments. Several participants also contend that transit-oriented housing—affordable or otherwise—largely means high-density multifamily development ill-suited to the needs of poor families with children. Given low values and high vacancy rates for single-family homes along several key Twin Cities transit corridors, broadly

including preservation and reuse in affordable-housing strategies could offer significant cost savings along urban transitways and avoid NIMBY opposition.

### **6.3 Final Comments**

The most positive finding of this research is that pent-up demand for transit access exists among Twin Cities developers—even among some of those with little prior experience pursuing it. Though significant obstacles also remain to increased TOD, the specific policy recommendations derived from this study are neither new nor unknown. Indeed, many are widely accepted by the planning profession as tactics for encouraging TOD. The key is implementing these policies on a broad enough, regional scale to achieve the desired broad, regional impacts. Implementation will require a great deal of regional cooperation and political will—things this study does not make any easier to realize. It does, however, argue strongly for the need to try.

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