TRANSIT ORIENTED DEVELOPMENT AND AFFORDABLE HOUSING:
ANALYZING THE EFFECTS OF ECONOMIC, REGULATORY AND ADVOCACY
FACTORS ON A DEVELOPER’S DECISION TO INCLUDE AFFORDABLE HOUSING IN
TODS IN THE DENVER, COLORADO REGION.

by

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Transit Oriented Development and Affordable Housing: Analyzing the Effects of Economic, Regulatory and Advocacy Factors on a Developer’s Decision to Include Affordable Housing in TODs in the Denver, Colorado Region.

Thesis directed by Associate Professor Allan Wallis

ABSTRACT

The purpose of this research is to analyze the impact of the economic, advocacy, and regulatory factors on the decision of developers to provide or forego affordable housing in a transit-oriented development (TOD). A literature review identifies eleven variables collectively comprising these factors. The study then analyzes the affordable-housing decisions of developers through the theoretical framework of satisficing. The research argues that TOD developers are satisficers who are willing to produce affordable housing in a given TOD only if the risks can be minimized and satisfactory profits achieved.

The general hypothesis for the study is that the more the three factors (economic, regulatory, and advocacy) interact to reduce risks and create conditions for satisfactory profits, the more likely a developer will be to provide affordable housing. The literature additionally suggests that the economic factor provides the dominant influence on a developer’s decision in this regard. In summary, some positive combination of reasonable land costs, stable housing-market conditions, the availability of public subsidies, and a solid expectation of return on investment is required for a developer to consider including affordable housing in a TOD.
The study confirms in the cases reviewed that the economic factor is indeed crucial for each developer’s decisions to provide affordable housing or not in their TOD. In all three cases where affordable housing is provided, a positive economic factor which helps reduce risk and create satisfactory profits is present. The study also shows that in the two cases where affordable housing is not provided, the negative advocacy factor characterized by public opposition to affordable housing creates significant costs and risks and thus non-satisficing conditions for the developers.

This research examines five TODs in the Denver region. The study employs interviews with developers and key players from each TOD as well as analysis of the relevant primary documents. A specially developed scale measures the impact of each factor on the various developers’ decisions for or against affordable housing. The study concludes with policy recommendations to incentivize developers to increase the production of affordable housing in TODs in both Denver and elsewhere.

The form and content of this abstract are approved. I recommend its publication.

Approved: Allan Wallis
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CHAPTER I

INTRODUCTION

Affordable housing continues to be one of the most pressing policy problems in major metropolitan communities in the U.S. (Joint Center for Housing Studies, 2012; NLIHC, 2012). While very-low-income households face the most difficulties finding affordable housing, increasingly working-class and middle-income families are feeling the cost burden. According to research completed by the Joint Centers for Housing Studies at Harvard University (2012), the loss in income associated with the Great Recession that began in 2008 considerably increased affordable-housing problems for low-income, working-class, and modest-income households. JCHS research revealed that between 2007 and 2010, the number of households paying more than half their income for housing rose by 2.3 million, bringing the total to 20.2 million. Additionally, JCHS reported that nearly one-third of all Americans are burdened by housing costs and spend more than 30% of their pre-tax income on housing. Furthermore, workers in low-wage jobs like retail sales, childcare work, and health-care services often pay more than half their income for housing (NLIHC, 2012). Research by the National Low Income Housing Coalition (2012) found that in larger metropolitan communities, a person must earn two to three times the national minimum wage to afford a modest two-bedroom rental apartment.

Housing experts maintain that affordable housing problems are significantly underreported, particularly when one considers transportation costs to and from work (Center for Housing Policy, 2012). The true extent of the affordable-housing problem is realized only when one takes into consideration the distance from the workplace that
households must live to afford either a rental home or homeownership (often referred to as the jobs-housing imbalance problem). In order to spend less than 30% of their pre-tax income on housing, many individuals or families must live far away from their employment centers.

However, much of the money being saved on housing located far from work is lost in transportation costs. The Center for Neighborhood Technology (CNT) has developed a housing-and-transportation index tool that examines housing affordability and transportation costs for households in the U.S. (Center for Neighborhood Technology, 2012). CNT reported that since the year 2000, housing and transportation costs have increased by 44% in the 25 biggest metro areas in the U.S. (2012, 5). CNT’s research revealed that for every dollar a working family saved on housing, they spent 77 cents more on transportation. CNT’s research also showed that working families (households earning less than 100% of the area median income) in 28 metropolitan communities spent more on transportation costs than housing; specifically, 30 percent of their income on transportation versus 28 percent on housing. Thus the combined expenditure of housing and transportation for the average working family is equal to almost 60 percent of their total income. Furthermore, moderate and middle-income households are struggling as well. CNT’s research showed that the typical moderate-income renter spent an average of 55% of their income on combined housing-and-transportation costs while the typical moderate-income homeowner with a mortgage on its property paid a combined 72 percent of their total income on transportation-and-housing costs. Furthermore, with 15 of the 20 fastest-developing counties in the U.S.
located 30 miles or more from the closest central business district, the housing-and-transportation problem is expected to worsen (Center for Housing Policy, 2012).

**Transit-Oriented Development**

While the affordable-housing and transportation-cost problem is worsening in major cities across the country, one significant urban-planning concept that has arisen in the past decade that seeks to mitigate these issues is transit oriented development (TOD) (Bernick & Cervero, 1997; Calthorpe & Fulton, 2001; Center for Transit Oriented Development, 2007; Dittmar & Ohland, 2004). The Center for Transit Oriented Development (2013) defines TOD as a mixed-use development that includes a variety of housing choices with a combination of retail businesses, offices, public spaces, and pedestrian walkways, usually located within a half mile of a public-transit station (Center for Transit Oriented Development, 2013). The lowest-housing-density TOD developments start at 15 to 20 dwelling units per acre while most TODs exceed 60 dwelling units per acre (Dittmar & Ohland, 2004). These housing densities far surpass typical low-density suburban developments which range from one to seven dwelling units per acre (Wheeler & Beatley, 2004).

Higher density TODs can serve to moderate affordable housing shortages by offering a variety of housing options with various price points. Many TODs offer a mixture of residential units such as carriage houses, lofts, apartments, condominiums, townhomes, and single-family homes. These residential options range from small studio apartments up to five bedroom homes. Many TODs also include income qualifying affordable rental and for sale homes for households earning less than 80% of the area median income.
In addition to the affordability related to the variety of residential options in a TOD, the proximity to public transit within TODs lends itself to reducing transportation costs for households as it enables residents to reduce their automobile expenses by accessing public transit to reach jobs and services in other locations. Many TOD residents in fact often choose to live there without a car or to downsize from multiple cars to only one (Cervero, 2009).

**Research Question**

Transit Oriented Developments (TODs) offer an effective strategy to mitigate housing and transportation costs. This dissertation seeks to understand the factors that affect a developer’s decision to provide affordable housing within a TOD. Based on a review of the literature regarding TODs and affordable housing (discussed in Chapter 2.), the following eleven variables appear to have the greatest influence on a developer’s decision to produce affordable housing in a TOD: Land cost, housing-market conditions, public subsidies, return on investment (ROI), zoning requirements, infrastructure requirements, parking requirements, mixed-use retail requirements, neighborhood advocacy, political advocacy, and non-profit advocacy. The research organizes these eleven variables into three factors: Economic (land cost, housing-market conditions, public subsidies, and ROI); regulatory (zoning, infrastructure, parking and mixed-use requirements), and advocacy (neighborhood, political, and non-profit advocacy).

The research question for this study is as follows: How do the economic, regulatory, and advocacy factors, separately and together, impact a developer’s decision to produce or forego affordable housing in a TOD? The general hypothesis for this research is that if these three factors work to reduce risks and allow for satisfactory
profits, then it is likely that a developer will choose to provide affordable housing.

Furthermore, the study holds that the economic factor is the dominant of the three factors with regard to creating favorable conditions for affordable housing. If the economic factor—comprised of a combination of reasonable land costs, solid market conditions, available public subsidies—can achieve an attractive return on investment, then it is more likely that a developer will consider including affordable housing in a development.

The study also argues that the regulatory and advocacy factors work to moderate the effect of the economic factor by either increasing or reducing risks for the developer. If the regulatory factor (comprised of zoning, infrastructure, parking, and mixed-use requirements) results in reduced risks for the developer via lower regulatory costs, then affordable housing is more likely since these conditions will enhance the economic conditions for the developer. Conversely, if the regulatory factor increases risks as a result of increased regulatory costs, then affordable housing is unlikely because this situation will compromise the economic conditions.

Additionally, if the advocacy factor is characterized by support for affordable housing, then this outcome will serve to reduce risk and thereby make it more likely that a TOD developer will choose to provide affordable housing. If however the advocacy factor is characterized by hostility toward affordable housing, then affordable housing is unlikely because the costs and risks for the developer will be increased and negatively impact the economic conditions.

This research maintains that it is the dynamic interaction of the dominant economic factor with the moderating regulatory and advocacy factors that ultimately
influences the developer’s decision-making process regarding affordable housing. The purpose of this study is to analyze the interaction of these factors both individually and as a group to see how they impact a developer’s decision regarding affordable housing.

**Theoretical Framework**

The theory that undergirds this research is that developers are rational decision-makers whose decisions regarding affordable-housing development are formed within a context of limited information. Because of the complicated nature of urban infill developments like TODs, which are rife with obstacles like uncertain market conditions, unclear regulatory costs, and an evolving advocacy climate, developers must make decisions within situations that pose significant risks. Based on these limitations, developers attempt to make decisions that will lead to satisfactory profits and reduced risks. This theory of decision-making is referred to as satisficing (See Chapter 2 for more details.). The theory of satisficing was developed by Herbert Simon (1956) in the context of his concept of bounded rationality. Simon states,

> It appears probable that however adaptive the behavior of organisms in learning and choice situations, this adaptiveness falls far short of the ideal of “maximizing” postulated in economic theory. Evidently, organisms adapt well enough to “satisfice”; they do not, in general, “optimize.” If this is the case, a great deal can be learned about rational decision making by taking into account, at the outset, the limitations upon the capacities and complexity of the organism . . . (Herbert Simon, “Rational Choice and the Structure of the Environment,” *Psychological Review*, 1956, Vol. 63, p. 129).

The theory of satisficing has been used to examine developers’ decision-making with regard to land and housing developments (Kenney, 1972; Lucy & Phillips, 2000; Mohamed, 2006). The literature on satisficing holds that housing and land developers are satisficers who are content to obtain satisfactory profits as opposed to maximum profits.
when choosing to move forward with a land- or housing-development project. Lucy and Phillips (2000) stated the following:

Developers . . . are “satisficers” who limit risk while seeking satisfactory profits. In producing residential, commercial, and industrial buildings, they prefer easy development decisions with satisfactory profits to high-risk projects with the possibility of maximum profits but significant potential for losses (p. 27).

This research employs the theoretical framework of satisficing to examine the developer’s decision-making process regarding the inclusion of affordable housing in a TOD. The research also examines how the economic, regulatory, and advocacy factors impact a developer’s decision to produce affordable housing. Throughout the research it is argued that TOD developers are satisficers who are attempting to make decisions that will lead to satisfactory profits with reduced risks.

**The Denver-Region Case Studies**

The method used to analyze the impact of the economic, regulatory, and advocacy factors on a TOD developer’s decision-making process for or against affordable-housing development is comparative case studies. This method is appropriate for analyzing TODs because of its ability to capture and analyze the variety of actors and key players involved in the complex environment of a TOD development (Belzer, Hickey, Lawson, Poticha, & Wood, 2007; Boarnet & Compin, 1999; Cervero & Duncan, 2002). This research identifies and develops five TOD cases from the Denver region. Each is a mixed-use, retail-and-residential development located within a half mile of a transit stop. The data collected for these five TOD cases were developed using interviews with their developers and other key actors involved in the development of each TOD as well as primary source documents related to each case. Of the five cases included in the research, three are TODs providing affordable rental housing (housing targeted for
households earning at or below 80% of the area median income), while two TOD cases have no affordable housing within the development. The mix of affordable and non-affordable TOD cases was chosen purposely in order to draw distinctions and comparisons between and among the cases.

**Affordable Housing in the Denver Region**

The Denver region provides an excellent context for researching TODs and affordable housing. Denver, one of the fastest growing regions in the U.S., has experienced significant affordable-housing problems and transportation issues. Owing to its attractive location and high ratings for its overall quality of life, the Denver region has grown dramatically in the past 50 years (Goetz, 2013). The Denver/Aurora metropolitan area (MSA) has grown from a population of 564,000 in 1950 to approximately 2.7 million as of 2010. Furthermore, Colorado ranked as the third fastest-growing state in the U.S. during the 1990s and the eighth fastest-growing state since 2000 (Goetz, 2013). As of 2010, Denver was the 21st largest MSA in the United States, with 51% of the state’s population residing in the Denver region (Goetz, 2013). However, one of the byproducts of this explosive growth has been a lack of affordable housing.

The origins of the affordable housing problem can be traced to the economic expansion and population growth of the 1990s (Affordable Housing Solutions for Colorado, 2006). Fueled by the telecommunications and technology boom, the Denver region saw an annual economic growth rate of 3 - 4% per year from the early 1990s to 2002. This expansion produced a surge of high-wage jobs followed by lower-wage ones in the service and retail sectors. This significant economic and population expansion created a substantial growth in housing demand. While the economic recessions of 2002-
2003 and 2008-2010 moderated economic and population growth slightly, housing demand and the concomitant need for affordable housing have continued to be significant problems for the Denver region. The most recent data reveal that the Denver housing market ranks as one of the costliest in the United States (Zillow Realty Research, 2013). Of the 25 largest metropolitan regions cities in the United States, Denver had the seventh highest home price-to-income ratio with only New York City, Los Angeles, Boston, San Francisco, San Diego, and San Jose, California, scoring higher (Zillow Realty Research, 2013). The affordable rental market in the Denver region is even more problematic, since nearly half of all renting households in the area spend more than 30% of their gross income on rent (Williams, 2012). Moreover, nearly one in four renting households spends more than 50% of their total gross income on rental housing.

As a result of the significant population growth in the Denver region and the subsequent affordable-housing problem, many developers have sought to purchase and develop cheaper greenfield acreages on the fringes of the metropolitan area. Many of these outlying developments were former ranch lands that had been converted to large-tract single-family housing which still retain the name *ranch* for its nostalgic appeal (Goetz, 2013). Highlands Ranch is the most populated of these developments in the Denver region, with a population of over 100,000. Other popular fringe developments in the area that were established on former ranch lands are Green Valley Ranch, Grant Ranch, Sterling Ranch, and Crystal Valley Ranch, among others.

The problem with the growth of housing on the fringes of the Denver metropolitan area is that many households live farther from work and are required to make much longer commutes and bear higher transportation costs than they desire.
Transportation Costs and Housing Affordability in the Denver Region

The Center for Neighborhood Technology (CNT) has developed a housing-affordability-and-transportation index that measures housing affordability by calculating the combined costs of housing and transportation to help understand the true costs of housing affordability (Center for Neighborhood Technology, 2012). CNT’s research revealed that Denver ranked fourth in terms of rising housing and transportation costs versus income growth for a typical median-income household. Only Atlanta, Dallas, and Miami had higher housing and transportation costs versus income growth than Denver. Further, CNT’s research showed that moderate-income households (income range of $31,000K to 62,000) in the Denver region paid an average of 58% of their total income on housing and transportation costs. These households are considered to be severely burdened because their housing and transportation costs far exceed the 45% income threshold considered by the U.S Department of Housing and Urban Development to be a healthy standard for combined housing and transportation costs (Center for Neighborhood Technology, 2012). Moreover, CNT’s research found that low-income households bore the brunt of transportation costs in the Denver region inasmuch as more than 30% of all low-income households lived in communities considered to have moderate, high, and very high transportation costs. Finally, 75% of all low-income households in the Denver region had combined housing and transportation costs higher than the regional average. These households are paying a transportation penalty for finding affordable housing farther from their places of employment.
Another transportation cost that affects the quality of life is the amount of time spent commuting to and from work. G. Scott Thomas of Buffalo’s *Business First* Journal analyzed automobile-commuter trends by examining the American Community Surveys prepared by the U.S. Census Bureau (2006-2008). Based on his analysis of the commuting trends in the top 52 metro areas with populations over one million, the Denver region ranked in the top third for the longest automobile commutes with an average round-trip time of approximately 54 minutes (Thomas, 2010).

Furthermore, the cost of owning a vehicle has continued to rise significantly. Research by the Automobile Association of American (AAA) revealed that the typical vehicle owner spent $9,100 per year to own an automobile, including fuel costs, maintenance, insurance, tires, and depreciation for a typical sedan driven 15,000 miles a year (American Automobile Association, 2013). Finally, transportation costs and commuting times are expected to continue to rise in Denver and other American metro regions because of the ongoing popularity of fringe developments located far from work centers as well as the consistent rise in fuel prices and the other costs of owning an automobile.

**Light Rail Development in the Denver Region**

Owing to the escalating transportation costs associated with population growth and sprawling greenfield developments on the urban fringe, many of the policy makers and community leaders in the Denver region began to consider alternative development patterns (Goetz, 2013). The rising infrastructure and environmental costs associated with low-density developments in the form of roads, sewers, utilities, water, energy consumption, and air pollution coupled with rising transportation costs triggered many
city leaders and advocacy groups to reconsider how local governments and municipalities could respond to these problems. The emerging sustainability problems for the Denver region incentivized regional cooperation among local cities and governments as they tried to develop strategies to deal with these issues. Out of this push came the leadership of such non-profit and public organizations as the Metro Mayors Caucus and the Denver Regional Council of Governments (DRCOG). With encouragement from and direction by the members of the Metro Mayors Caucus, DRCOG took the lead in the early 1990s to encourage sustainable development in the Denver region (Goetz, 2013).

DRCOG, a regional membership organization founded in 1955, laid out a blueprint for sustainable transportation and urban-growth patterns for the Denver region in their publication *Metro Vision 2020* (Denver Regional Council of Governments, 1997). Following the momentum of and advocacy efforts related to this publication, DRCOG and the Metro Mayors Caucus among others partnered with the Denver Regional Transportation District (RTD) to promote what was considered one of the most important tools for sustainable growth in the region—the development of light-rail and commuter-rail transit.

After years of advocacy efforts, the first light-rail line opened in Denver in 1994. The Central Corridor line (also known as the MAC line), containing 5.3 miles of track servicing the downtown Denver area, was funded exclusively by an existing use tax as well as RTD’s capital reserves (RTD, 2013). The second light-rail line to be developed in the Denver region was the Southwest Corridor line, which opened in July 2000. This line, funded by a $120 million Full Funding Grant Agreement (FFGA) from the Federal Transit Authority together with $18 million in Federal Highway Administration funds,
extended 8.7 miles from central Denver to Littleton. Following the Southwest Corridor, the 1.8-mile Central Platte Valley Corridor opened in 2002 followed by the 19-mile Southeast Corridor line in 2006. This line was funded as part of a joint-highway-and-light-rail-transportation-expansion project known as TREX. The $1.7 billion TREX budget was funded by a voter-approved bond issue, with approximately $880 million of the funds set aside for the Southeast Corridor line (RTD, 2013).

In spite of much uncertainty and skepticism, the first phases of light-rail development in the Denver region were deemed a success (M. Utter, personal communication, July 26, 2013). This outcome coupled with the advocacy of various regional organizations helped foster a positive political environment that ultimately led to the passing of a landmark light-rail expansion in the Denver region called Fas Tracks. The 2004 voter-approved initiative was a $6.5 billion rail-and-transportation expansion project that was considered by many to be the most extensive light-rail development in the nation (RTD, 2013). The Fas Tracks program called for an additional 122 miles of light rail and commuter rail with 57 additional transit stations besides a $200 million dollar upgrade to Union Station. The new Fas Tracks system, once completed, will originate at Union Station and extend out to Longmont, Denver International Airport, Lone Tree, Littleton, Golden, Arvada, and a future terminus in Boulder. As of May 2013, the current operating light-rail system in Greater Denver consists of six light-rail lines with 46 transit stations and 47 miles of track. As of early 2013, twelve miles of the Western Corridor Fas Tracks system have been built with 110 miles of track still under construction or planned for construction. In addition, 46 additional stations will open over the next three-to-five years as funding becomes available.
Transit-Oriented Developments (TODs) in the Denver Region

One of the most important goals of light-rail expansion in the Denver region was to create opportunities for high-density, mixed-use development near the new transit stations. With 46 existing stations and 46 more likely in the next few years, city planners and community leaders were hopeful that growth within TODs would encourage urban-infill development while reducing automobile usage and related transportation costs. The Denver Regional Transportation District (RTD) stated the following regarding its expectations for TOD:

Fas Tracks offers an unparalleled opportunity. . . . No other U.S. region today is making this scale of commitment to invest in transit. The dividends of this investment will come in the form of an enhanced quality of life. . . . One key to realizing these benefits lies within the region’s ability to implement transit oriented development (TOD) (RTD, 2010).

As the RTD had hoped, the most recent research revealed that Denver’s commitment to rail transit and TODs had an influence on creating higher densities of population in the Denver metropolitan area. Research by DRCOG showed that housing densities in Denver had increased from 1,379 units per acre in 2000 to 1,429 housing units per acre in 2006 (Goetz, 2013). Moreover, research by Ratner and Goetz (2010) revealed that from 2000 to 2010, developments within TODs made up a significant component of the total regional development. Their research claimed that 10% of all residential growth, 11% of all retail growth, and 15% of all office development in the Denver region had occurred in TODs.

Ratner and Goetz (2010) also found that the average population density within a half mile of transit stations was now six times greater than the average density in the rest of the region. They found that household densities within a half mile of transit stations
were nearly nine times greater than the regional average. They argued that Denver’s successful densification around transit was the result of three key strategies: Placing homes, jobs, and retail near transit; creating a mix of transportation, housing, and shopping options near transit stations; and ensuring that transit stations were entry portals to a regional network. According to the RTD, as of April of 2010 the following new development had occurred within a half mile of existing or planned transit stations:

- 17,399 housing units
- 4,907 hotel rooms
- 5.3 million square feet of retail space
- 5.27 million square feet of office space
- 2.3 million square feet of civic space
- 1.58 million square feet of educational space
- 5.96 million square feet of medical space
- 2.62 million square feet of convention space

**TODs and Affordable Housing in the Denver Region**

While significant growth and densification near transit stops have occurred in the past ten years, affordable housing has not been a strong element in the TODs developed thus far (M. Utter, personal communication, July 26, 2013). This lack of affordable-housing provisions near transit stems from a dearth of affordable-housing advocacy during the early years of light-rail activism in the Denver region. In the early 1990s, DRCOG and other light-rail advocates were concerned with the larger issues of sustainable growth and the acquisition of federal funding for light-rail development. While many of the light-rail advocates were hopeful that affordable housing would be located near transit, it was not at the forefront of their push. Marilee Utter, a key player in advocating for light rail for the Denver region in the early 1990s, confirmed this state of affairs:
Unfortunately, affordable housing was not given much consideration at Denver TODs in those [early] days, and I can't say we've made as much progress as we should have, even now (M. Utter, personal communication, July 26, 2013).

Ms. Utter went on to say that during the early years of light-rail/TOD development, many communities, concerned about the untested TOD market, were unwilling to take on the “economic burden of adding affordable housing to a product type (TOD) that was already considered cutting edge and risky at the outset” (M. Utter, personal communication, July 26, 2013). Ms. Utter claimed that the other major reason for the lack of an affordable-housing strategy in the early days of light-rail and TOD advocacy was related to the ad-hoc nature of TOD development and the lack of a region-wide affordable-housing strategy for all TODs and corridors.

While affordable-housing advocacy was absent in the early years of light-rail development in the Denver region, advocacy efforts have increased significantly in the past five years. The major reason for this increase was related to the significant densification within TODs and concern about the lack of affordable housing planned for these developing TODs. Many believed that affordable housing was being threatened by the increased demand for living in TODs. The Center for Transit Oriented Developments (CTOD) claimed that the creation of Fas Tracks would dramatically increase the demand for living near transit in the Denver region. CTOD asserted that this demand would increase 344% by the year 2030. CTOD argued that the growing demand for living near transit would also raise land and housing prices in TODs and stymie the development of affordable housing:

Demographic trends and changing housing preferences are converging to create new demand for housing near transit stops. While only about 45,000 households in metro Denver live within one-half mile of a transit stop today, the creation of Fas Tracks means that, at a conservative estimate, potential demand for such
housing could grow to 155,000 households by 2030—a 344 percent increase. The potential demand for housing in TODs is likely to exceed the number of homes that can be developed in transit districts. Consequently there is considerable risk that virtually all new development near transit in the region will be unaffordable to lower income households (p. 5).

**Significance of this Research to Public Policy**

With the rising demand for living near TODs in the Denver region, available units are quickly becoming unaffordable for moderate-to-low-income families. This study seeks to understand the economic, regulatory, and advocacy conditions that would lead Denver TOD developers to choose to produce affordable housing within a TOD. Based upon the findings of this research, recommendations are offered to help policy makers incentivize developers to provide more affordable housing in TODs. Furthermore, this research is important because it represents the first empirical study to examine the developer’s decision-making process regarding the inclusion of affordable housing within TODs.

**Organization of Dissertation**

This dissertation is organized in the following manner: The second chapter reviews the literature relevant to the study. The third chapter explains the research design and methods for the study. Chapter four provides a context for each of the five Denver TOD cases. The fifth, sixth, and seventh chapters develop cross-cutting analyses of the economic, regulatory, and advocacy factors, respectively, and their impact on the developers’ decisions regarding affordable housing development. Chapter eight presents the conclusions of this study.
CHAPTER II

LITERATURE REVIEW

The purpose of the literature review is threefold. First, it examines the empirical literature documenting the rising transportation costs for households living farther from work. Second, it investigates the literature regarding the economic, regulatory, and advocacy factors and their impact on developers’ decisions to produce affordable housing in TODs or not. Third, it explores the theoretical framework of satisficing and the impact of that theory on a developer’s decision-making process.

Rising Transportation Costs for Households Living Far from Work

Households have continued to move farther away from their workplace to find more affordable housing, a decision which has led to a significant increase in daily transportation costs. Those who study the rise in transportation costs have thus become concerned about the balance of jobs and housing in a given locality (Cervero, 1989; Giuliano, 1991; Kain, 1968) and about the distance between one’s workplace and one’s place of residence (Giuliano, 1991; Horner, 2004; Levine, 1992). Most scholars argue that jobs and housing are balanced on a broader regional scale and that it is the neighborhood, or local, scale where jobs and housing imbalances are most recognized. Researchers concerned with growing transportation costs and their impact on housing affordability focus on the following: (a) the increasing decentralization of jobs from urban to suburban communities and the imbalances that follow (Cervero & Wu, 1997; Immergluck, 1998; Kain, 1968); (b) commuting patterns, distances between home and work, and transportation costs (Cervero, 1989; Giuliano, 1991; Sultana, 2002); and (c) affordable housing deficits and longer commuting times for working families and
individuals (Levine 1998).

Kain (1968) was the first scholar to propose the spatial-mismatch theory regarding the decentralization of jobs from urban to suburban communities. His research focused on suburban housing discrimination against minorities living in urban communities. Kain argued that as a consequence of discrimination, working-class minorities who were the victims of manufacturing job losses in urban centers were unable to find housing in suburban communities where many of these jobs had relocated. Following Kain’s efforts, several more studies emerged regarding the spatial-mismatch concept (Masters, 1974; Offner & Saks, 1971). Recent studies examined the suburbanization of employment and housing, the subsequent lack of affordable housing, and increased commuting times for low-income and working-class households (Immergluck, 1998; Kain, 1992; Levine, 1992; O’Kelly & Mikelbank, 2002). Levine (1992) found that lower-income and modest-wage workers benefitted most from policies that encouraged job-and-housing balances alongside more affordable-housing options.

The issue of commuting patterns and distance between home and work is one of the principal factors underlying the jobs-housing balance problem. The basic argument is that jobs-housing imbalances lead to longer commutes, which in turn result in more congestion and auto pollution and higher automobile-related travel expenses (Cervero, 1989; Frank and Pivo, 1995). Cervero and Wu (1997) found that between 1980 and 1990, those working in the suburbs of San Francisco had an increased commute time of 23% caused mainly by longer distances between home and work. Cervero (1996) discovered that from 1980 to 1990, jobs-and-housing imbalances were exacerbated in eight of the ten major job centers in the San Francisco Bay area, where the average time
for commutes for workers rose 30%. Moreover, Sultana’s (2002) empirical research strongly confirmed a relationship between the imbalance of jobs and housing and mean travel time to work in the Greater Atlanta metro area. Sultana argued that the imbalance between the location of jobs and housing was the most significant determinant for longer commutes and that affordable housing near job-rich communities would greatly benefit workers. Furthermore, Ewing (1996) found that a properly balanced jobs-and-housing ratio within a region would reduce vehicle miles traveled by up to 15%. Frank and Pivo (1995) also uncovered evidence that a jobs-housing balance would reduce commutes. Their research in the Puget Sound area showed that residents of localities with high rates of jobs-housing balance had a 30% shorter commute than residents of non-balanced communities.

**TODs and Jobs-Housing Imbalance**

The rise in transportation costs resulting from longer distances between home and work has prompted a debate about policies and land-use patterns that might reduce this problem. TODs have been hailed as an emerging approach to land use that can help to create a better balance between jobs and housing, particularly for modest-to-low-income households (Center for Housing Policy, 2006; Center for Transit Oriented Development, 2007; Cervero, 2009; Center for Neighborhood Technology, 2012). The Center for Housing Policy (2006) argued that the most significant action that local governments and cities could take to reduce the jobs-housing imbalance would be to encourage high-density, affordable residential development within multiple TODs connected along a transit network. However, providing for affordable housing in TODs has not been an easy process.
TODs are complicated developments, and developers are often constrained by a variety of issues that serve to discourage the development of affordable housing. Escalating land costs, unpredictable housing markets, costly rezoning, parking requirements, and neighborhood opposition to density are just a few of the most common issues that a TOD developer faces when deciding whether to produce or forego affordable housing (Center for Transit Oriented Development, 2007). In order for inclusion of affordable-housing in a TOD to be successful, developers must navigate these obstacles successfully. The following literature discusses the most common eleven variables that developers encounter when deciding to produce or forego affordable TOD housing: Land cost, housing-market conditions, public subsidies, return on investment, zoning requirements, infrastructure requirements, parking requirements, mixed-use retail requirements, neighborhood advocacy, political advocacy, and non-profit advocacy. The variables are organized and grouped into three factors—economic, regulatory, and advocacy. The economic factor is comprised of the following variables: land cost, housing-market conditions, public subsidies, and return on investment. The regulatory factor is comprised of these variables: zoning requirements, infrastructure requirements, parking requirements, and mixed-use retail requirements. Finally, the advocacy factor is comprised of these: neighborhood, political, and non-profit advocacy.

**The Economic Factor**

With regard to the economic factor, one of the most significant constraints that developers of TODs encounter regarding their decision to produce or forego affordable housing is high land prices. The Center for Transit Oriented Development (CTOD), in its report *The Case for Mixed Income Transit Oriented Development in the Denver Region*
claimed that rising land costs near TODs in the Denver region were among the
most important barriers to the development of affordable housing:

Land prices are high at TOD sites. In the Denver region, developers already pay a
premium on land at many planned and existing TOD sites. This presents a
formidable obstacle to providing housing products at affordable prices. Land
prices are being driven up by speculative pressures (p. 25).

Moreover, research by Mile High Connects confirmed the high cost of land near TODs in
Denver. Its research revealed that developers paid an average of 25% more for land
located within one quarter mile of an existing or planned light-rail stop in the Denver
region (Mile High Connects, 2012). More studies of transit-oriented developments in
rapidly growing cities of the American Southwest and West, meanwhile, revealed
escalating land values near transit developments. A 1999 study of the DART system in
Dallas found that land values and rent values near new DART transit stops were 25%
higher than comparable non-transit-oriented properties in the county at large (Weinstein,
Clower & Gross, 1999). Follow-up studies in 2002 and 2005 using different
methodologies showed similar impacts on land values near DART stations in Greater
Dallas (Weinstein & Clower, 2002; 2005). Moreover, a 2001 study found that land
values near planned TOD sites in Washington County, Oregon, the state’s second most
populous county, saw a significant increase in values following the release of plans for
light rail and TOD build-out in the county (Knapp, Ding & Hopkins, 2001).

Furthermore, a 2007 study of 14 major U.S. cities with significant investment in light-rail
development showed significant gentrification trends for properties near walk-and-ride
transit stops (Kahn, 2007). Kahn’s research likewise indicated significant positive
impacts on land values near these stops in Atlanta, Baltimore, Boston, Chicago, Dallas,
Sacramento, and Washington, DC.
Another economic factor that developers must navigate is changing housing-market conditions (Choulet-Nappi, 2006; Winarso, 2002; Yusof & Shafiei, 2011). Developers make choices regarding how to proceed based on their ideas and predictions regarding the market. Urban-infill developments such as TODs can often show unpredictable housing-market dynamics because of uncertain zoning practices, increased infrastructure requirements, and other regulatory costs. Lucy and Phillips’ (2000) research confirmed that developers desire predictable housing markets. They stated,

Uncertain outcomes from housing markets are to be expected. For the majority of developers . . . limiting uncertainty is a goal. A common strategy to limit uncertainty is to make conventional choices [that] will limit risk (p. 31).

While many developers are fearful of uncertain housing markets for TODs, recent research suggests that these housing-markets are gaining strength and stability as demand rises for living in these types of communities. Levine and Frank (2007) uncovered empirical support for the rise in housing-market demand for transit-oriented neighborhoods. Their research analyzed transportation, land-use preferences, and neighborhood choices from a sample of roughly 1,500 residents in the Greater Atlanta area. Their findings revealed a strong preference for more walkable, compact neighborhoods like TODs. They suggested that market demand was not being met and that an undersupply of transit-friendly, compact neighborhoods existed. Moreover, research conducted by the Center for Transit Oriented Development (2004) claimed that more and more people wanted to live in high-density, pedestrian-friendly transit-oriented developments. CTOD (2004) argued that all demographics except for married families with children were beginning to show a stronger preference for transit-oriented, mixed-use living. The CTOD report stated that
. . . household size is shrinking, producing more households of empty nesters, singles and non-family residents. Baby boomers are aging, swelling the ranks of older households as they pass from the child-rearing stage of life to the empty-nest phase. Evidence suggests that they are fueling much of the growth in urban populations as they seek smaller homes in locations with a greater mix of amenities. The traditional nuclear family that made up 40 percent of households in 1970 now comprises less than 24 percent of households. . . . These households are less interested in a single-family home on a quarter acre in a distant suburb than in the 24/7 lifestyle, cultural richness and diversity of walkable neighborhoods (p. 12-13).

While rising land costs and housing-market demand for living in a TOD can act as a constraint for developers who are considering affordable housing, there are economic incentives that federal and local governments can offer to developers to counteract these forces. These include public subsidies like tax credits, tax-increment financing, grants, and low-interest loans. Johnson and Talen (2008), in surveying over 80 developers, found that such subsidies as Low-Income-Housing Tax Credits (LIHTC), community-development block grants, HOPE VI grants, and HOME funds could dramatically reduce costs for developers who were considering the inclusion of affordable housing in their projects. The availability of these types of subsidies, particularly LIHTC funds, provides a developer with equity to be used in affordable-housing development and thus reduces risk (Cervero, 2004; Dittmar & Ohland, 2004; Shoemaker, 2006). Along with LIHTC funding, tax-increment financing (TIF) is another economic subsidy that has emerged in recent years as an effective strategy for incentivizing developers of affordable housing in TODs (Boarnet and Compin, 1999; Cervero, 2004; Shoemaker, 2006). TIF subsidies can provide developers significant resources for affordable-housing redevelopments that require significant infrastructure costs (Johnson & Talen, 2008). These subsidies are offered to developers based on the likelihood of future increases in property sales taxes.

While public subsidies have helped bolster affordable housing in developments
like TODs, many of these funding mechanisms are closely scrutinized. Owing to the Great Recession of 2008-2011 and subsequent austerity measures and budget shortfalls, public subsidies targeted for low-income housing initiatives have been scrutinized and reduced in many states and local communities. The State of Colorado, for example, has seen its public subsidy funding for affordable housing scrutinized and reduced in the past few years because of spending restrictions related to the Tax-Payer Bill of Rights (TABOR) amendment. The Center for Transit Oriented Development (2007) claimed that the reduction in public subsidies was one of the most significant constraints on affordable-housing development in TODs in the Denver region:

State and federal public subsidies have dwindled dramatically in the past five to seven years, especially for affordable rental housing. . . . Meanwhile, Colorado’s General Assembly has slashed affordable housing grants, largely as a result of constitutional revenue and spending restrictions. . . . HUD cuts have eroded city CDBG funding—an important source of flexible, affordable rental projects subsidies (p. 25).

The Regulatory Factor

In addition to the economic barriers encountered by TOD developers, regulatory requirements for TODs can add significant cost constraints for developers considering affordable-housing development. Johnson and Talen’s (2008) research showed that regulatory constraints were one of the most significant barriers to developers considering affordable-housing provisions in New Urbanism/TOD-type developments. They stated, Many of the developers that did not build affordable units blamed local government regulations for creating prohibitive expenses. Moreover, approximately half of these developers noted that local financial incentives or regulatory changes could encourage them to include affordable units in the future (p. 602).

One of the most common regulatory constraints associated with the development of TODs is the time and costs related to rezoning a parcel for a mixed-use, high-density
development. Many sites where TODs are developed or planned for development are still zoned for single use. The major motivation behind single-use “Euclidian” zoning regulations has been single-family homeowners’ desire to preserve the value of their homes and protect against commercial development (Fischel, 2004). Even though recent evidence reveals that mixed-use, higher-density developments like TODs have a positive effect on home values, many homeowners fear that densification will bring negative effects like crime, parking issues, and overpopulation (Cho and Linneman, 1993; Green 1999; Malpezzi, 1996; Pogodzinski and Sass, 1991). The problem for TOD developers regarding the older single-use zoning code is that they must invest the time and cost to rezone the parcel from single- to mixed-use zoning. The higher costs and complications related to the lengthy rezoning process discourage developers from producing affordable housing. The CTOD (2007) report claimed that rezoning expenses were one of the main obstacles to the development of affordable housing in Denver. CTOD stated that

TOD sites frequently require rezoning and land assembly. This can lead to lengthy acquisition and permitting processes, which increase development costs. When developers are saddled with these costs, they have less flexibility to include affordable housing in transit oriented developments (p. 26)

Moreover, Czamanski and Roth (2011) found that “zoning and other urban-planning decisions are considered to be constraints on the developers’ behavior . . .” (p. 107). They further stated that “land use regulations and the consequent long durations of building projects’ approvals have a direct influence on decisions of land developers” (p. 115). Czamanski and Roth’s research showed that rezoning expenses and time delays for urban-infill parcels led developers to prefer the urban periphery where land parcels had fewer rezoning requirements. On a similar note, Baerwald stated that when developers were deciding on investing in a project, they “emphasize[d] that time is money, and if
local governments have reputations for delays in project approval, the site search will focus quickly on jurisdictions felt to be more amenable. . .” (Baerwald, 1981, p. 347).

Another important issue that impacts a TOD developer’s decision to produce or forego affordable housing within a TOD is infrastructure requirements. Many TODs are developed within urban or inner-ring suburban communities that require significant infrastructural improvements (Center for Transit Oriented Development, 2007). Furthermore, high-density TODs often have additional infrastructure requirements related to design standards for roads, trails, bridges, public spaces, parks, and pedestrian-friendly walkways. These requirements add higher-than-normal infrastructure requirements for TODs that act to deter developers from producing affordable housing. The CTOD (2007) report listed infrastructure costs as one of the top-ten barriers to affordable-housing development. The report stated the following:

TOD involves expensive infrastructure. High land prices at TOD sites make significant residential density not only desirable but also financially necessary for projects to ‘pencil out’. This translates into significant infrastructure costs. For example, upgrading the capacity of sewer lines for high density developments can be particularly expensive. . . . Generally affordable housing developers are not capable of taking on these infrastructure costs themselves (p. 26).

Owing to the high infrastructure costs often associated with TODs, Mohamed’s (2006) research revealed that developers often preferred outlying greenfield developments with reduced infrastructure costs. He claimed that developers were trying to minimize risks from required infrastructure development. He gave an example of an urban-infill development that required creating brand-new high-quality roads, something which discouraged developers because of the higher costs involved. Mohamed stated,

Developers create rules about which investments they will make and which they will avoid . . . such as roads of high standards, which do not contribute to meeting
their satisficing profit targets. Thus . . . developers move outward in search of locations with lower regulatory costs. (p. 23).

Costly parking regulations are yet another constraint for developers considering affordable-housing in TODs. TODs are built as high-density, compact developments that discourage large surface lot parking. Many TODs require the development of expensive parking garages, a feature which dramatically raises the price of a development (G. Krause, personal communication, December 5, 2012). Moreover, since TODs are designed with pedestrian-friendly considerations, they often are required to hide parking and reduce its negative appearance. This requirement, which forces developers to tuck parking garages into the rear of their development, adds considerable costs. The CTOD (2007) report on mixed-income development in Denver TODs thus listed parking requirements as one of the main barriers to affordable-housing development:

Parking requirements often are unnecessarily high at TODs. High land prices at TOD sites, coupled with the average cost of providing a structured parking space (over $20,000), means that parking requirements can significantly affect the financial feasibility of TOD projects. Zoning requirements that assume all tenants will have cars add a great deal to the cost of building TOD housing (p. 26).

Along with parking requirements, another regulatory requirement that can act as a constraint to developers of affordable housing is the mixed-use retail requirement for TODs. This requirement is a central component of the TOD concept (Victoria Transport Policy Institute, 2012). TODs contain a mixture that includes residential, retail, office, and entertainment uses. The retail/office component of many TODs is developed on the ground floor of the multi-family residential building (s). Most TOD design guidelines require a minimum of 5,000 square feet of office/retail space to be included as part of the development (Calthorpe Associates and Mintier Associates, 2011; Planning Department
of Plano, Texas, 2008; TransAct, Inc. and Van Meter Williams Pollack, LLP, 2011).

These ground-floor commercial-space requirements add significant risks to TOD developers because of the foot traffic needed to make the retail space successful. Many TODs are built in emerging or transitional communities that don’t have the density to support the retail component, a lack which often leads to unleased or vacant space (S. Johnson, personal communication, March 24, 2011). This risk along with the added costs involved with the retail requirement often discourage developers from wanting to take on the additional risk of providing affordable housing (T. Gladwell, personal communication, April 19, 2012).

**The Advocacy Factor**

In addition to the regulatory issues that TOD developers confront, the advocacy climate near a proposed TOD development can also be a significant constraint to developers considering the inclusion of affordable housing. Neighborhood opposition to high-density, mixed-income development is one of the most common barriers encountered in this regard. Neighborhood groups often claim they are opposed to “high-density” development in their community when in reality they mean they are opposed to the mix of incomes, particularly the low-income households that are often a part of high-density developments. Neighborhood groups that oppose affordable-housing development in a TOD can create significant time and public relations costs for developers. Most developers are not comfortable navigating the unpredictable and volatile nature of neighborhood groups that oppose affordable housing and prefer to steer clear of them. The CTOD (2007) report listed neighborhood opposition as one of the top-ten obstacles to affordable housing:
Density required in TODs can generate “not in my backyard” (NIMBY) opposition. Many interviewees spoke of an ongoing “phobia of density” in the Denver region. Initial resistance and development delays can be expected with higher density projects, particularly without an inclusive community planning process at the outset (p. 26).

The literature showed that neighborhood opposition could be very effective in thwarting development plans for affordable housing and high-density developments like TODs. Lucy and Phillips (2000) argued that neighborhood opposition to high-density developments could often discourage developers from even trying infill developments:

Opposition by neighbors to infill development, and insufficient motivation for developers, lenders, and public officials to overcome opposition and higher acquisition costs compared to green space, leads development actors to avoid most major infill projects. (p. 10).

Moreover, Franzen and Hunsberger (1998) stated that Portland homeowners were successful in thwarting a new mixed-income development of high-density apartments, row homes, and light rail by recalling the mayor and two city councilmembers over concerns about high-density development. A similar mixed-income development in Mount Pleasant, South Carolina, was thwarted by homeowners and a town council which feared high-density development (Farris, 2001). According to Hirt (2007), tolerance for high-density development in Cuyahoga County, Ohio, was low. Hirt’s research showed that two-thirds of the residents and town leaders in the suburbs of nearby Cleveland opposed high-density, mixed-used developments for these reasons: “It brings traffic, noise, and lighting problems”; “it harms people’s privacy in their homes”; “residential does not really mix well with anything else”; “the value of the homes will go down”; “we don’t want to look like a big city”; and “this type of mix is exactly why people moved out of urban areas” (p. 233).

Furthermore, research shows that it is not only suburban residents who fear high-
density developments like TODs. Urban residents are also concerned about higher-density developments. They argue that suburban communities are better able to absorb high-density development and affordable housing. Pendall’s (1999) research of the highly urbanized and dense setting of the San Francisco Bay area found that of the 141 residential-development projects then in the application-approval process, high-density multi-family projects were 42% more likely to draw protest than a single-family development. Similarly, affordable-housing projects were 38% more likely to be opposed than single-family-home development.

In an effort to help mitigate both suburban and urban communities’ fears about affordable housing, many communities have engaged local nonprofit organizations to help communicate the advantages of attractive affordable housing developments in high-density developments like TODs. Johnson and Talen (2008) stated that consensus building aided by nonprofit groups had been one of the most important and successful strategies used by developers to reduce tensions caused by neighborhood groups concerned with high-density developments.

In addition to the influence that neighborhood and non-profit groups can have on affordable-housing provisions, another important constituency wielding significant impact on affordable housing development consists of political figures and elected officials. A political champion for affordable housing in a TOD can be one of the most important influences on a developer’s decision to provide it. A solid political advocate can create positive public momentum that can help a developer gather additional public subsidies to help cover the costs of affordable housing. In Denver, for example, two TOD developments were the recipients of strong support from the then Denver Mayor
and City Council. The results were two new TODs (C. Nevitt, personal communication, September 21, 2010). Conversely, political negativity or even neutrality can effectively thwart affordable housing within a TOD by leaving space for or fostering community opposition and blocking any public subsidies for such initiatives. Two TOD developments in Arapahoe County near Denver were unsuccessful in achieving affordable housing. Part of the reason for the lack of its inclusion was the absence of support from both the Arapahoe County Commissioners as well as City Council members who both opposed affordable housing in these developments (L. Myers, personal communication, December 3, 2012; R. Simpson, personal communication, 2011).

**The Theory of Satisficing**

While the literature established that the economic, regulatory, and advocacy factors contributed positive momentum or significant constraints regarding a developer’s affordable-housing decision, it is important to understand these factors’ impact on a developer’s decision-making process regarding risks and profit estimation. *Satisficing* is a theory that tries to explain what motivates a person’s decision-making process. The theory originated with Herbert Simon and his work on “bounded rationality” (Simon, 1956; 1991). Satisficing holds that people and firms are not necessarily profit maximizers but are willing to “sacrifice” optimal profit (and the costs exerted to gain it) for a “satisfactory” profit. The term is a combination of “satisfaction” and “sacrifice.”

An examination of the historical context of satisficing follows.

The theory of satisficing emerged from the classical and neo-classical schools of economics and their thinking regarding the motivation of individuals and firms. Classical economic thought was based on ideas regarding free markets (Smith A., 1776), free trade
(Ricardo, 1817), freedom of the individual (Mill, 1869), and utilitarianism (Bentham, 1789). Neo-classical theory, which expanded on the classical traditions, held that individuals have rational preferences, work to maximize utility, and act on complete information (Weintraub, 2002). Closely aligned with these tenets of neo-classical economic theory was rational-choice theory. It held that individuals would make decisions based on a rational process of weighing costs and benefits and then choose the most beneficial course of action (Becker, 1976). The neo-classical theory of the firm was similar. It held that a firm was a single decision-making unit and that the collective actions of a firm could be compared with the acts of individuals. Furthermore, neo-classical theories of the firm claimed that perfect markets existed and that a firm would also act rationally based on perfect information regarding all the possible choices. Decisions by firms would then be made out of a self-interested, utility-maximizing effort to bring the firm maximum profits and benefits (Kantarelis, 2007).

Critics of the neo-classical paradigm and the rational-choice theory claimed that perfect markets, perfect information, and optimal decision-making did not exist. Herbert Simon developed a decision-making concept that rejected the notion of perfect information and profit-maximizing behavior. He referred to his concept of human decision-making as “bounded rationality” (Simon, 1955; 1991). Simon argued that an individual’s rationality is limited by constraints in the decision-making process. He believed that individuals were unable to obtain perfect information for their decision-making process since the complexities involved would lead to an overwhelming number of choices. With boundless choices the human brain would be unable to identify and compute the maximum return on all decisions. Simon further argued that most decision-
making situations allowed for only a limited amount of time, and if a person exceeded the time frame, there would be significant costs and risks. Simon believed that given the various constraints and complexities involved in the decision-making process, individuals would be content to “sacrifice” optimal results and settle for “satisfactory” ones. He called this process “satisficing,” whereby an individual would choose from the first few options to meet a given need as opposed to holding out for the optimal solution (Simon, 1956). To illustrate his point, Simon gave the example of a mouse searching for a piece of cheese in a labyrinth. The mouse’s optimal choice would have been a piece of Gouda cheese, but after searching for a while, the mouse would “sacrifice” the Gouda and be “satisfied” with any piece of cheese, regardless of type. The mouse, in other words, would satisfice.

Cyert and March (1963) developed a theory of the firm based on Simon’s “bounded rationality.” In A Behavioral Theory of the Firm, they argued that firms were not profit maximizers and did not have “full and perfect information” to aid their decision-making process. They asserted that firms were instead satisficers that made decisions within a context of constraints. Furthermore, these theorists held that in the decision-making process, firms settled for choices that were “good enough” or “satisfactory” to yield acceptable profits. They claimed that firms were more concerned with long-term survival and managing risks than with trying to maximize profits.

**Satisficing Developers**

Following from Cyert and March’s theory of the firm, a significant body of research emerged claiming that land and housing developers were “satisficers” (Baerwald, 1981; Drewett, 1973; Hepner, 1983; Kenney, 1972). The first empirical
research regarding satisficing developers was produced by Kenneth Kenney in 1972. Kenney’s research, *The Residential Land Developer and His Land Purchase Decision*, was based on Cyert and March’s work regarding satisficing firms. Kenney conducted 28 interviews with single-family and multi-family housing developers in the Atlanta region. His interviews revealed the following: First, developers were risk averse and chose sites and development concepts they were familiar with and had been successful with in the past. Second, developers shied away from uncertainty and would choose to develop lots that were the most predictable. Third, developers were concerned with time constraints and the costs related to searching for land parcels. Rather than attempt a long-drawn-out search for an optimal piece of land, they would tend to select one of the first feasible options. Kenney stated, “The developer develops a rather implicit standard of what is acceptable to him in terms of price, location, size, and estimated profit potential, and other dimensions. When a tract meets these standards, a positive decision is made” (Kenney, 1972 p. 170). Finally, Kenney found that development firms were motivated by more than just profit maximization. His research determined that these firms were primarily concerned with long-term security, status in the community, and professional excellence rather than, or at least ahead of, profit.

Additional research on satisficing developers was published in the early 1980s. Thomas Baerwald interviewed 17 developers in the Minneapolis-St. Paul region regarding their residential-site-selection process. Baerwald’s 1981 research found that developers satisfice when choosing sites for housing development. He stated that they “seek satisfactory rather than optimal locations and once they have found a parcel that meets their basic standards, they do not search extensively for alternatives that might
produce marginally larger profits” (p. 349). Baerwald also stated that developers “are not profit maximizers. . . . Provided a project would generate an acceptable profit, they were more concerned with reducing risks and assuring prompt and smooth completion of the project” (p. 354). George Hepner’s 1983 study of developers in Arizona corroborated Baerwald’s findings regarding the satisficing behavior of developers. Hepner stated that “developers are not operating solely with a profit maximization strategy. They have a broader decision frame . . .” (p. 361).

More recent literature regarding the satisficing behavior of developers focused on urban sprawl (Czamanski & Roth, 2011; Lucy & Phillips, 2000; Mohamed, 2006 and 2009; Nelson & Duncan, 1995). Much of this literature argued that weak regulations and inexpensive suburban land had influenced developers to satisfice in their preference to develop ex-urban greenfields. Lucy and Phillips (2000) stated that developers . . . are “satisficers” who limit risk while seeking satisfactory profits. In producing residential, commercial, and industrial buildings, they prefer easy development decisions with satisfactory profits to high-risk projects with the possibility of maximum profits but significant potential for losses (p. 27). . . . The tyranny of easy development decisions means that development . . . goes where risk is limited and profits are satisfactory. . . . Settings where lending institutions will finance development readily, and where opposition to development will be low, meet these satisfactory or “satisficing” conditions. Conditions meeting “satisficing” criteria are more prevalent in fringe locations . . . (p. 10).

The literature argued that the satisficing behavior of developers would lead to inefficient development patterns since infill developments would get bypassed for suburban ones (Czamanski & Roth, 2011; Mohamed, 2009; Nelson & Duncan, 1995). Furthermore, Mohamed’s (2006) research concluded that developers dealt with two major constraints that encouraged them to satisfice. One, they were constrained by their lack of ability to analyze more than one project at a time. Mohamed claimed that developers “bracketed”
projects one at a time and made each investment decision one at a time because of “limited cognitive capacity, . . . limited attention spans, [and] short memories” (p. 32). Two, Mohamed argued that developers had liquidity constraints that encouraged them to focus on easier, more predictable greenfield developments. He claimed that developers were fearful of urban infill developments owing to the higher financial capital requirements related to regulatory costs and heavy infrastructural redevelopment. Additionally, in Mohamed’s (2009) research on urban sprawl in Rhode Island, he concluded that satisficing developers avoided smaller, denser parcels in urban locations because of their higher infrastructure costs.

Satisficing Developers and Affordable-Housing Development in TODs

The literature on satisficing developers, as has just been shown, argues that developers are bounded rationally and have limited cognitive capacity. Because of these limitations and the unpredictable nature of urban infill developments, they seek to reduce risk and achieve satisfactory profit levels. Since TODs are usually infill developments with more unpredictable environments, developers who choose these projects take on higher levels of risk than in traditional greenfield developments. Furthermore, when developers consider producing affordable housing within a TOD, they take on even more risk. Thus to incentivize more developers to consider urban infill development like TODs, many governments and local communities have begun to implement policies that would reduce risks. Mohamed’s (2006) research confirmed this strategy of risk reduction for satisficing developers:

Satisficing developers contribute to sprawl in the form of low-density . . . development. In response, government policy makers have designed policies aimed at reducing risks to developers. Reducing risks is intended to help developers overcome the bounds on their rationality so that they will make
decisions that result in more efficient land use. . . . Risk reduction policies include clear rules about zoning and allowable uses, fixed rather than negotiated exactions; transparent capital improvement programs; and predictable, streamlined approval processes (p. 28).

Based on the satisficing literature it is thus clear that developers of TODs would be more likely to consider affordable-housing developments if the risks imposed by the economic, regulatory, and advocacy factors were reduced and satisfactory profit margins were achievable. This study holds that developers would more readily provide affordable housing in a TOD if they were the beneficiary of reduced risks and satisfactory profits in some combination of the following: a.) reasonable land costs, steady housing-market conditions, significant public subsidies, and solid return on investment; b.) lower regulatory costs with regard to zoning, parking, and infrastructure, and mixed-use requirements; and c.) supportive advocacy conditions in the form of neighborhood, non-profit, and political support for affordable housing.

The theoretical model (Fig. 2.1) on the following page provides further understanding of the satisficing concept through a graphic illustration of the decision-making process that a developer would follow when considering whether or not to include affordable housing in a TOD. This model, based on the literature search, serves to demonstrate how the three factors (economic, regulatory, and advocacy) influence a developer’s ability to obtain satisfactory profits while managing risk when considering whether or not to produce affordable housing within a TOD development.
Figure 2.1
Theoretical Model

Economic Factor (dominant)
- Land Costs
- Market Conditions
- Public Subsidies
- ROI

Advocacy Factor (moderating)
- Neighborhood
- Non-Profit
- Political

Regulatory Factor (moderating)
- Zoning
- Infrastructure
- Parking
- Retail

Developer’s Satisficing Decision
Based on the interaction of the three factors, a developer will decide whether risks are manageable and satisfactory profits possible.

If Developer decides that the risks are manageable and satisfactory profits are attainable, Affordable Housing will be developed in a TOD.

If Developer decides that satisfactory profits are unattainable owing to higher risks and costs, Affordable Housing will not be developed in a TOD.

1. Theory - Developers are satisficers who will make the decision to provide affordable housing within a TOD if profits are satisfactory and risks manageable.

2. General Hypothesis - If the economic, regulatory, and advocacy factors meet the standards for satisfactory profits and reduced risks, developers will produce affordable housing in a TOD.
CHAPTER III

RESEARCH DESIGN AND METHODS

This chapter discusses the rationale for selecting the comparative case-study method for this research. It also explains the process for choosing and developing the five Denver TOD cases to be analyzed. The chapter describes how the two primary data sources—interviews and source documents—were used for gathering evidence. Lastly, the chapter defines the three factors and the related eleven variables used in the research model and explain the scoring method for examining their impact on the five developers’ decision-making processes.

Case-Study Research

The comparative case study is the primary method used to organize and analyze the data for this study. Comparative case study, an important approach in qualitative research, has become a prevalent model for studying TODs (Bernick and Cervero, 1997; Boarnet and Compin, 1999; Weinstein and Clower, 2005). Bernick and Cervero’s (1997) research used comparative case studies of TODs in the U.S., Sweden, and Canada to develop guidelines for urban planners on how to design pedestrian-friendly, mixed-use transit villages. Their study focused on site planning, creative land usage, zoning, and real-estate development. Boarnet and Compin (1999) used the comparative case-study method to analyze the planning and implementation of TODs in San Diego County, California. After interviewing regional planning directors and analyzing zoning records, they found that TOD planning and implementation resembled the incremental model of policy-making explained by Lindblom (1959). Furthermore, Weinstein and Clower (2005) created multiple case studies of select TODs developed along the DART light-rail
system in Dallas, Texas. They used the comparative case-study method to help them evaluate the impact that TODs had had on economic investments around select transit stations in the Dallas region.

Researchers use the case-study method for studying TODs because it is a helpful tool for analyzing the complexities of a TOD development. Among the many parties responsible for bringing a TOD into existence are the developers, community advocates, politicians, and city planners. The case study is well suited to examining the complex behavior, decision making, and interaction of these various actors. Yin (2003) claimed that the case-study approach is the appropriate research strategy to understand “... individual, group, organizational, social, and politically related phenomenon” (p. 1). He stated that it is often used in sociology, political science, social work, public administration, and urban planning to examine complex social phenomena. Flyvberg (2001) similarly argued that the case study is the most appropriate method to use when one is trying to understand the richness and depth of a certain phenomenon. George and Bennett (2005), moreover, claimed that case studies provide a strong approach for theory development since they help one find the connections between causes and outcomes.

Moreover, Herriott and Firestone (1983) argued that the multiple-case-study framework is more convincing because it provides increased levels of generalizability owing to its comparative approach. Stake (2006) argued that the multiple case framework helps to reveal differences and distinctions with regard to the research question guiding the study. Furthermore, Flyvbjerg (2001) claimed that multiple case studies are particularly helpful when the cases for analysis are strategically selected to help confirm or disprove hypotheses and research propositions.
Denver TOD Case-Study Design

This research, which uses the multiple-case-study, comparative approach, focuses on five TODs in the Denver region. Of these cases, three represent TODs with affordable housing provisions while two had no affordable housing. Successful affordable housing provision is defined as 10% of all residential units in the development are affordable to households earning less than 80% of the area median income. This is a standard affordable housing criterion used by most national affordable housing advocates (Smart Growth America, 2014). The cases were strategically chosen to enable distinctions to be made between affordable and non-affordable TOD developments. The three TODs that provide affordable housing are the Gates TOD at I-25 and Broadway near downtown Denver, the South Lincoln TOD at 10th and Osage near downtown Denver, and the Evans Station Lofts TOD at 2140 S. Delaware Street in Southwest Denver. The two TOD cases that do not include affordable housing are the Englewood City Center TOD in Englewood, Colorado and the Vallagio at Inverness TOD in Centennial, Colorado, in the South Suburban Denver region.

Case Selection Criteria

Out of the 46 existing transit stations in the Denver light rail network, the five Denver TOD cases were selected for this research and were chosen in accordance with the following criteria: They met the required definition of a TOD (Center for Transit Oriented Development, 2013); they each had ground floor retail-space in excess of 5,000 square feet (Planning Department of Plano, Texas, 2008; TransAct, Inc. and Van Meter Williams Pollack, LLP., 2011; Calthorpe Associates and Mintier Associates, 2011); they each exceeded a total residential budget of at least $10,000,000; the project was under
construction or completed at the time of study and was located within the Denver region; and at least two of the TOD cases had to have affordable housing provisions. The following section describes the case-selection criteria, the first criterion being close adherence to the commonly accepted definition of a TOD. The Center for Transit Oriented Development (2014) defined a TOD as follows:

Transit-oriented development is often defined as [a] higher-density mixed-use development within walking distance–or a half mile–of transit stations. [TOD] …projects should . . . increase “location efficiency” so people can walk and bike and take transit. Boost transit ridership and minimize traffic. Provide a rich mix of housing, shopping and transportation choices. Generate revenue for the public and private sectors and provide value for both new and existing residents. We believe that TOD is really about creating attractive, walkable, sustainable communities that allow residents to have housing and transportation choices and to live convenient, affordable, pleasant lives.

Each of the Denver TOD cases met this description of a TOD since all were pedestrian-friendly, mixed-use developments that include residential and retail space located within ¼ to ½ mile of the nearest light-rail transit stop. Furthermore, the developers in each of these TOD cases planned, designed, and marketed their project with the TOD concept in mind. Many of the residents in these developments, moreover, chose to live there because of the affordability, proximity to light rail, opportunity to reduce automobile travel, and walkability of the community.

The second selection criterion was the minimum-retail-square-footage requirements. One important component of this study is to analyze the risks imposed by ground-floor retail requirements. In order to meet the minimum risk threshold for analyzing the developer’s risk regarding ground-floor retail requirements, a TOD must have more than 5,000 square feet of retail. Moreover, most TOD design guidelines require at least 5,000 square feet of office/retail space as part of a mixed-use requirement
(Planning Department of Plano, Texas, 2008; TransAct, Inc. and Van Meter Williams Pollack, LLP., 2011; Calthorpe Associates and Mintier Associates, 2011). All five of the Denver TODs in this research exceeded 5,000-square-feet of ground-floor retail requirement.

The third criterion for selecting TODs for this research was a required minimum residential-development budget of $10 million. Most developments with less than a $10 million residential budget do not have the size and scale to support mixed-use development. The majority of multi-family developments in the Denver region with a total budget of under $10 million, moreover, are unlikely to include 5,000 square feet of retail/office space. These smaller developments usually lack the residential density to support a ground-floor commercial-space component (Calthorpe Associates and Mintier Associates, 2011; T. Gladwell, personal communication, April 19, 2012). Any development that falls below the $10 million residential-budget threshold, moreover, simply does not have the size, scale, and risk factors of the TOD cases included in this research. All five Denver TOD cases selected have a total residential-development budget in excess of $10 million.

The fourth case-selection criterion for this research related to the construction timeline for the respective TOD. The purpose of this dissertation is to examine the economic, regulatory, and advocacy factors impacting on a developer’s decision about whether or not to include affordable housing within his/her TOD. To decide effectively, the developer and the TOD site had to be at the stage where final decisions could be made, economic commitments were guaranteed, ground had been broken, and the construction process had started or the project had been completed. All the TODs in this
study had either been completed or were close to completion at the time of the study. The final criterion for this research, affordable housing requirement, was met as three of the Denver TOD cases included have affordable housing provisions.

**The Semi-Structured Interview**

The two major sources of data used in the analysis of the Denver TOD cases were semi-structured interview transcripts and primary source documents relevant to each case. The semi-structured interview, also referred to as the general-interview-guide approach, is the preferred interview protocol for case-study research because it has more uniformity than the conversational approach but is less rigid than the fully structured approach (Gall, Gall and Borg 2003; McNamara, 2009). Drever (1995) contended that the semi-structured interview was a good fit for case studies since its predetermined set of questions allowed for consistency and standardization. Moreover, the semi-structured interview was often preferred by researchers because it allowed for more flexibility by encouraging probing and exploratory follow-up questions. Robson (2002) argued that the strength of the semi-structured approach was that it gave the interviewer more freedom in the wording of questions. Patton (1990) argued that by using the semi-structured interview approach, “the interviewer remains free to build a conversation within a particular subject area, to word questions spontaneously, and to establish a conversational style—but with the focus on a particular subject that has been predetermined” (p. 283).

The semi-structured interview uses a standardized set of questions asked of all respondents in the same order and format. Mitchell and Jolley (2007) considered that this pre-constructed set of questions was helpful by providing uniformity that would reduce interviewer bias.
The semi-structured approach was utilized for this particular study. The researcher conducted each semi-structured interview from a predetermined set of questions related to the economic, regulatory, and advocacy factors impacting affordable-housing development in the five TODs considered. All questions were developed with the intention of examining how the economic, regulatory, and advocacy factors influenced the developers’ decisions regarding the possible inclusion of affordable housing in their respective TODs. The researcher, who used the same set of questions for all the interviews, asked them in similar order. The pre-constructed, pre-ordered set of questions and the consistent method of asking the questions assisted the researcher in maintaining uniformity and consistency in the interviews as a means of reducing interviewer bias. The sample set of interview questions employed in this study can be found in Appendix A.

Selecting Interviewees

The interviewees selected for the study were chosen under the sample-selection criteria recommended by Creswell (2003; 2007). The respondents were thus selected according to their title, position, authority, and importance to each TOD case (See Appendix B). The types of people chosen for interviews were developers, planners, city officials, community advocates, local citizen leaders, and other important actors and decision makers involved in the development of each TOD. By using Creswell’s (2007) strategy of purposeful sampling for selecting respondents, the researcher was able to obtain interviews with the most important decision makers in each TOD. The researcher also employed the snowball sample strategy for identifying important players for each case (Goodman, 1961). In other words, during the interview process, the researcher
asked each interviewee for recommendations of other key players involved in the development that the researcher should contact. Based on the feedback from these interviews and contacts, the researcher was able to develop an extensive list and network of possible interviewees and contacts for future interviews.

The researcher followed all the Institutional Review Board (IRB) protocols regarding the informed-consent process and received IRB approval for the all the interview questions used in the interview process. The researcher then contacted each of the potential interviewees via email to explain the nature of the interview and the scope of the research. This introductory email explained that the researcher was a Ph.D. student at the School of Public Affairs of the University of Colorado Denver who was undertaking dissertation research on the topic of TODs and affordable housing in the Denver region. Once the initial email contact was made, the researcher followed up with emails and phone calls to set up a meeting time and to give more details about the interview. The researcher found that most of the respondents, proud to be involved with a TOD, were excited to share lessons learned and to contribute to academic research related to TODs and affordable housing. In total, the researcher conducted 33 interviews and digitally recorded more than 1,427 minutes (approximately 24 total hours) of interviews. The complete interview list with the names and titles of all interviewees and the lengths of the respective interviews is included in Appendix B.

Analyzing the Interview Data

This study used directed content analysis for examining the interview transcripts and primary source documents. The use of content analysis is recommended as a primary tool for examining data since it allows the researcher to review, highlight, and condense a
significant amount of text, documents, interview transcripts, and literature into usable proportions (Hsieh & Shannon, 2005; Miles & Huberman, 1994; Weber, 1990). Moreover, a coding scheme was employed to assist in the analysis of the interview transcripts and primary source documents. Use of such schemes is recommended as part of the content-analysis framework because it helps to facilitate and organize the examination of the research by condensing important data into smaller chunks.

The directed-content-analysis approach is considered the appropriate method for research that has a predetermined set of research questions and hypotheses generated from a literature review (Miles and Huberman, 1994; Potter and Levine-Donnerstein, 1999). Moreover, experts recommend that studies using directed content analysis create a coding scheme based on a theoretical framework developed prior to fieldwork. Hsieh and Shannon (2005) stated, for example, that

the goal of a directed approach to content analysis is to validate or extend conceptually a theoretical framework or theory. Existing theory or research can help focus the research question. It can provide predictions about the variables of interest or about the relationship among variables, thus helping to determine the initial coding scheme or relationships between codes (p. 1281).

Layder (1998), consistent with Hsieh’s position, argued that theories should inform and drive the initial coding process, while Auerbach and Silverstein (2003) claimed that the researchers’ theory and questions should be kept in the forefront to assist the researcher in making coding choices. Saldana (2009) suggested that the coding scheme most appropriate for the direct-content-analysis approach was provisional coding, also referred to as hypothesis coding (Bernard, 2006; Dey, 1993; Weber, 1990). These coding schemes were thought suitable for research that already has a research question,
hypothesis, and theory identified before the fieldwork research and interview process began:

[Provisional coding] establishes a predetermined “start list” set of codes. . . . The provisional list is generated from such preparatory investigative matters as: literature reviews related to the study, the study’s conceptual framework and research questions, previous research findings . . . the researchers’ previous knowledge and experiences, and researcher formulated hypotheses or hunches [p. 120-121]. . . . The codes are developed from a theory/prediction about what will be found in the data . . .” (Saldana, 2009, p. 123).

Miles and Huberman (1994) supported Saldana’s suggestions regarding provisional and hypothesis coding:

One method of creating codes—the one we prefer—is that of creating [a] provisional “start list” of codes prior to fieldwork. That list comes from the conceptual framework, list of research questions, hypotheses, problem areas and/or key variables that the researcher brings to the study [p. 58]. . . . Examples of a well-structured code list [are] keyed to research questions and to “bins” of conceptual variables, and defined precisely enough so that researchers have a common language and can be clear about whether and how a segment of data actually fits into a category (p. 62).

It was also recommended that the coding schemes, definition of codes, and semantics related to the codes be as closely aligned with the variables, research question, hypothesis, and theory as possible so that the researcher might access these concepts quickly during the analysis process. As Miles and Huberman (1994) suggest,

give a code a name that is closest to the concept it is describing. . . . Keep the codes semantically close to the terms they represent. . . . The rationale is that the analyst must be able to get back to the original concept as quickly as possible, without having to translate the code into the concept” (p. 64).

This study used the directed-content-analysis approach because the general framework for the research questions, hypotheses, and theory had already been developed based on a thorough review of the literatures on TODs, affordable housing, and a developer’s decision-making process. Moreover, the research used the provisional and
hypothesis coding schemes outlined by Saldana (2009). To maintain clarity and
efficiency during the analysis of interview transcripts, the code names were closely
aligned with the three factors (economic, regulatory, and advocacy) and the eleven
variables identified in the literature review for this study. For example, the code names
for the variables associated with the economic factor were the following: land costs
(code name “LAND”), public subsidy (code name “SUBSIDY”), housing-market
conditions (code name “HOUSEMARKET”), and return on investment (code name
“ROI”). A full list of code names and code descriptions can be found in Appendix C.

Finally, another significant component of content analysis was the highlighting of
important quotations in the interviews and using those statements to assist in making
important arguments regarding the research questions, hypotheses, and/or theory
involved (Booth, Colomb, and Williams, 2003; Creswell, 2007). Saldana (2009) claimed
that quotations found in interview transcripts
can become key pieces of evidentiary warrant to support your propositions,
assertions, or theory and serve as illustrative examples throughout your report . . .
Quotes may even be so provocative that they become part the title, organizational
framework, or through line of the report (p. 16).

This study used a significant number of direct quotations pulled from the analysis of the
interview transcripts. All the interviews were of high-level developers, urban planners,
elected officials, and key players involved in the important decision-making processes in
the five Denver TODs. Many of these interviews yielded important direct statements and
quotations that related to the research question, hypotheses, and theoretical framework
for this study. These statements were highlighted and used prominently in the three
analysis chapters (Chapters 5, 6, and 7) of this study.
Documentary Evidence

In addition to the semi-structured interviews, the second major source of data in this study was primary source documents. Yin (1994) argued for the importance of primary documents as a valuable source of evidence for case studies. He claimed that information from primary sources was “likely to be relevant to every case study topic” (p. 81). Merriam (1988) confirmed the importance of documentary evidence when she stated that “documents of all types can help the researcher uncover meaning, develop understanding, and discover insights relevant to the research problem” (p. 118). Primary source materials and documentary evidence were an essential component of this study. The researcher estimates that over 2,000 pages of source documents were obtained, reviewed, and used. The strategy applied for collecting primary source documents for this study was based on their relevance and importance to the particular TOD case being considered. The most important source documents used were the following: Low-Income-Housing Tax Credit applications, master and area redevelopment plans, pre-development and final development plans, land and property archival data, minutes and reports from local planning commissions, HUD’s quarterly publication regarding U.S. housing-market conditions for the Denver region, and LoopNet archival records for commercial and residential land sales with comparisons for the Denver region. Other documentary sources used were blueprints and design plans for each TOD site, relevant reports from local and national non-profit organizations, articles from online sources and local print media, memoranda, agendas, written reports, proposals, internal records, and community newsletters, among others.
Of all the primary source documents used in this research, the Low-Income Housing-Tax Credit applications and the master development plans were the most significant sources of evidence. Low-Income Housing-Tax Credit applications were used in three of the five TOD cases selected for this research (Gates, South Lincoln, and Evans Station Lofts). Thanks to the Open Public Records Act, the developers of these TODs were required to release their LIHTC applications for each of the sites in question. The LIHTC applications were significant sources of information since they contained complete financial projections for each TOD project including such line-by-line budget items as the land price paid for the parcel, the amount of public subsidy granted for the site and rental-revenue and regulatory-cost projections for the development, among them zoning, infrastructure, and parking requirements.

The second most important set of source documents related to this study were the master plans, redevelopment plans, and station-area plans related to each of the TOD sites. These documents included the Englewood City Center Final Development Plan, the Vallagio Final Development Plan, the Gates Cherokee Redevelopment Plan, the South Lincoln Master Plan, and the Evans Station Area Redevelopment Plan. Each contained important information regarding the relevant zoning, infrastructure, parking, and mixed-use requirements as well as the local advocacy-group activity at each TOD site.

**Triangulation**

This study used the triangulation technique as recommended by Creswell (2007) to assist in confirming or disqualifying evidence collected in the interview transcripts and primary source documents. The triangulation process is used to judge the quality of
evidence among multiple data sources with regard to research questions and hypotheses. The following scenario is an example of how the triangulation process was used to corroborate evidence in this study. Scott Johnson of Trammell Crow Residential was the lead developer of the affordable and market-rate residential units at the Gates TOD. In an interview with Mr. Johnson, the researcher asked the following set of questions related to the economic variable: “Based on your recollection, what price did you pay for the land parcel where your TOD site was located?” “At the time of the purchase, was this price considered below market value, at fair market, or above market value for comparable land parcels?” And “Did this purchase price have an impact on your decision to produce or forego affordable housing in the development?” Upon recording Mr. Johnson’s answers to this set of questions, the researcher verified the information received by examining the Low-Income Housing-Tax-Credit application for the Gates development, which included a line-item record of the price paid for the land parcel in question. The researcher then confirmed this figure with the Denver municipal archival records.

Furthermore, the researcher accessed the online real-estate database, LoopNet, which provides records of land-price comparisons for similar properties in the Denver region. Finally, the researcher compared Mr. Johnson’s interview responses with interview transcripts from other key players in the Gates development who answered the same set of questions. By using both interviews and source documents to corroborate or disqualify data, the researcher strengthened the likelihood of having the actual verifiable land cost as well as a more detailed account of the impact of the land-cost variables on the developer’s decision-making process.
The next section describes how the use of interviews and source documents were incorporated into a scoring model designed to analyze the impact of the economic, regulatory, and advocacy factors on the developer’s decision to produce affordable housing in his TOD.

**The Economic, Regulatory, and Advocacy Factors**

The three core factors for this research (economic, regulatory, advocacy) and the eleven variables (land cost, housing markets, public subsidies, ROI; zoning, infrastructure, parking, retail; and neighborhood, non-profit, and political advocacy) were chosen because of their prominence in the literature regarding their impact on a developer’s decision whether or not to produce affordable housing in a TOD. The following section will define each variable and explain the scoring system designed to analyze the impact of the variables on each developer’s affordable-housing decision.

**The Economic Factor**

The first economic-factor variable is land cost. This variable was chosen because it represents one of the most significant economic issues involved in a developer’s decision to move forward with a housing-development project (Baerwald, 1981; Kenney, 1972; Winarso, 2002). If a developer can purchase a parcel of land at fair market value or even below market value, it bodes well with regard to the likelihood of earning a satisfactory profit on a particular development. However, if land costs are well above market value, then that fact increases the risk for the developer because the added cost will require a higher return on investment. High land costs are often cited as one of the most significant barriers to affordable-housing development within a TOD (Center for Transit Oriented Development, 2007; Cervero & Duncan, 2002; Weinstein & Clower,
For the purpose of this study, land cost is defined as the purchase price the developer pays for the specific TOD parcel on which the housing development will be built. The three scoring categories for the land-cost variable are “below fair market value,” “fair market value,” and “above fair market value.” If the developer paid below fair market value for the land, the land-cost variable was scored “+1,” reflecting a positive economic impact, since the developer was able to acquire the land at a discount. If the developer paid fair market value for the land, the variable was scored “0,” representing a neutral economic impact. Finally, if the developer paid above fair market price, the land-cost variable was scored a “-1,” representing a negative economic impact for the developer.

The fair market value for each land parcel was determined through comparing the actual purchase price of the parcel with those of similar land parcels in the same region. Land-value comparisons were determined by research at the Denver Municipal Land and Property Archives as well as the online real-estate database, LoopNet (LoopNet.com, 2014). LoopNet, the largest online commercial real-estate database in the world, contains land-price and real-estate records for every major city in the United States for the past 30 years. The land-comparison pricing found in LoopNet and other archival databases was corroborated through interviews with developers, key informants, and primary source documents.

Housing-market conditions represent the second variable included under the economic factor. Interviews with developers as well as a review of the housing development literature revealed that strong, predictable housing-market conditions made
it more likely that a developer would acquire stronger rental and sales revenues from his or her residential products. These positive economic conditions also made it more likely that affordable housing would be considered. Conversely, poor housing-market conditions reduced the probability of profits for the developer and made it less likely that affordable housing would be produced.

The housing-market-conditions variable for this study is defined as the overall state of the housing market within the Denver region during the timeframe of a particular TOD project. The scoring categories for the housing market conditions variable are defined as “negative,” “neutral,” or “positive.” If a developer encountered negative or slumping housing-market conditions in the Denver region, this variable was scored “-1.” If housing-market conditions were neutral/stable for the region, the variable was scored “0,” and if housing-market conditions were strong, the variable was scored a “+1.”

Negative housing-market conditions are characterized by a combination of declines in new-housing starts (both single-family and multi-family), sluggish sales of existing homes, reduced rental revenue, and an uptick in vacancy rates. Neutral housing-market conditions include stable housing-market conditions with no trend either upward or downward. Strong housing-market conditions are characterized by an increase in permits for housing starts, shorter listing times for the sale of existing homes, growth in sales prices for existing and new homes, lower vacancy rates, and rising rent levels. The relevant housing-market conditions for each particular development was determined by analyzing the data contained in the quarterly reports of HUD’s U.S. Housing Market Conditions publication (HUD, 1997; 1998; 1999; 2000; 2003; 2004; 2005; 2006; 2007; 2010; 2011). Each quarterly report contains housing-market conditions for specific
regions, including a summary of housing starts (both single-family and multi-family),
existing home sales, rental-market conditions, and vacancy rates.

The third economic variable chosen for inclusion in this research is public
subsidies. The amount available for a particular TOD project greatly influences a
developer’s decision to produce affordable housing (Center for Transit Oriented
Development, 2007; Johnson & Talen, 2008). The more public subsidies available for a
specific development, the more likely a developer will make a satisfactory profit. The
most prevalent public subsidy for developers of affordable housing was and is the Low-
Income Housing-Tax Credit (LITHC), a federally funded program administered by the
U.S. Department of Housing and Urban Development (Cummings & DiPasquale, 1999;
Korb, 2009). Other significant subsidies offered by city governments are HOME funds,
Tax Increment Financing, and Community Development Block Grants (Johnson & Talen,
2008).

The public-subsidy variable is defined as the total amount of federal, state, and
local subsidies available for a given TOD project. The scoring categories for the public
subsidy variable are defined as “negative,” “neutral,” and “positive.” A negative subsidy,
scored a “-1,” occurs when the developer of a particular project is required to pay a
penalty for the ability to opt out of affordable-housing requirements. A neutral public
subsidy, scored “0,” occurs when a developer receives no public funding for the
respective project. A positive public subsidy, scored “+1,” is given when a developer
receives a subsidy package for the intended TOD development. The amount of subsidy
granted to a particular TOD is based on an analysis of LIHTC applications and
development master plans as well as interviews with developers and other key players.
associated with the TOD development.

The last variable chosen for inclusion under the economic factor is the developer’s projected return on investment (ROI). The projected ROI was included as an economic variable because of its impact on a developer’s decision to produce affordable housing in a TOD. The stronger the predicted ROI for a particular development, the more likely a developer will produce affordable housing there. This study defines ROI as the expected income to be received through retail leases, rental income, profits earned from for-sale units within the project, and equity gained through appreciation of the property. The scoring categories for the ROI variables are “negative,” “neutral,” and “positive.” A negative ROI, scored “-1,” is defined as a situation in which the developer projects a loss on their particular project. A neutral ROI, scored “0,” occurs when a developer projects breaking even. A positive ROI, scored “+1,” is given, then, when a developer projects a profit.

The expected ROI for each development is determined by interviews with the developers as well as analyzing the development budget, tax-credit applications (Colorado Housing and Finance Authority, 2007, 2010, 2011), and housing-market studies (National Valuation Consultants, Inc., 2005; Prior and Associates, 2011). These documents reveal the developer’s projected net profits from rental revenue, expenses, and housing-market conditions. Interviews with other key players involved in each project are also used to corroborate the data in the development documents.
Table 3.1 Economic-Factor Scoring Template

<table>
<thead>
<tr>
<th>Economic variables</th>
<th>Economic Scoring Categories:</th>
<th>0 = Neutral</th>
<th>+1 = Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Land Cost</strong></td>
<td>-1 = Negative</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Above fair market value</td>
<td>Fair market value</td>
<td>Lower than fair market value</td>
<td></td>
</tr>
<tr>
<td>Negative housing-market conditions</td>
<td>Neutral/stable housing-market conditions</td>
<td>Positive housing-market conditions</td>
<td></td>
</tr>
<tr>
<td>Negative subsidies/developer pays penalty for opting out of affordable housing requirement</td>
<td>No subsidies available</td>
<td>Positive subsidy package granted to developer</td>
<td></td>
</tr>
<tr>
<td><strong>Public Subsidy</strong></td>
<td>-1 = Negative</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative ROI/developer projects loss</td>
<td>Neutral ROI/developer expects to break even</td>
<td>Positive ROI/developer projects profits</td>
<td></td>
</tr>
<tr>
<td><strong>Return on Investment</strong></td>
<td>-1 = Negative</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neutral ROI/developer expects to break even</td>
<td>Positive ROI/developer projects profits</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Economic variables</th>
<th>Rationale for inclusion within economic variable</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Land Cost</strong></td>
<td>Land cost is a major factor in affordable-housing development. Most TODs are developed in major urban communities where land costs are high. The more reasonable the land cost, the more likely affordable housing will be developed.</td>
</tr>
<tr>
<td><strong>Public Subsidy</strong></td>
<td>Public subsidies are considered one of the most important incentives required to enable the development of affordable housing within a TOD. Of all the public subsidies used in the development of affordable housing, the Low-Income-Housing Tax Credit (LIHTC) is the most popular. Other popular subsidies include the following: TIF, HOME Funds, CDBG, etc. The more subsidies available for a project, the more likely affordable housing will be developed.</td>
</tr>
<tr>
<td><strong>Housing Market Conditions</strong></td>
<td>Housing-market conditions play a crucial role in a developer’s decision to produce affordable housing within a TOD. The stronger the housing-market conditions, the more likely the developer will see positive benefits related to both market and affordable developments in the form of increased property value, increased rents, lower vacancy rates, more financing options, and future growth within the TOD. Solid housing-market conditions make it more likely a developer will include affordable housing.</td>
</tr>
<tr>
<td><strong>Return On Investment (ROI)</strong></td>
<td>The stronger the ROI is for a development, the more likely the developer will be inclined to produce affordable housing, since higher ROI helps offset the costs of affordable housing.</td>
</tr>
</tbody>
</table>
The Regulatory Factor

The first regulatory variable chosen for inclusion in this research is zoning. The zoning variable was selected because of its significant influence on a developer’s decision to produce affordable housing in a TOD (Johnson & Talen, 2008; Mohamed, 2006). Rezoning costs can be a significant barrier to the provision of affordable housing in a TOD (Cho & Linneman, 1993; Czamanski & Roth, 2011; Green, 1999; Malpezzi, 1996). If a developer is compelled to spend time and money rezoning a particular piece of property, this requirement can reduce profit margins and thereby make it less likely the developer will choose to produce affordable housing.

The zoning variable is defined as the total costs associated with the zoning changes required for the specific parcel/site of the proposed development. The scoring categories for the zoning variable are defined in the following manner: “Above-average costs for the developer”; “average costs for the developer”; and “below-average costs for the developer.” A score is assigned based on the amount of time and money a developer must spend rezoning a parcel. If it is found that a particular development must be rezoned completely, the zoning variable is scored a “-1” for “above average.” If the development requires partial rezoning, the cost is scored “0” for “average,” and if the particular development requires no rezoning work, it is scored “+1” for “below average.” These scoring guidelines were created from a review of the development literature, interviews with developers, and a reading of the master development plans for each TOD.

The second regulatory variable in this research is infrastructure requirements. They comprise another important element that impacts the possible development of affordable housing within a TOD. If these regulations are too burdensome and costly for
the developer, they can negatively affect the development of affordable housing (Johnson & Talen, 2008; Malpezzi, 1996; Mohamed, 2009). However, if infrastructure costs are reduced, this situation creates conditions more supportive of affordable-housing development.

In this study, infrastructure requirements are defined as the total costs associated with such regulations as roads, bridges, pedestrian walkways, right of ways, sewers, utility upgrades, flood-plain management, brownfield remediation, and other types of infrastructure costs associated with developing a TOD. The scoring categories for infrastructure requirements are again defined as “above average costs for the developer”; “average costs for the developer”; and “below average costs for the developer.” The score for infrastructure requirement is based on an analysis of both the development documents and interviews with developers and other key players. If it is determined that the infrastructure requirements for a particular development exceed more than 10% of the total budget, the variable is scored a “-1” for adding “above-average costs for the developer.” If the infrastructure costs come to 5% to 10% of the total budget, the variable is scored “0” for adding “average costs,” and if the infrastructure costs are less than 5% of the total budget, it is scored a “+1,” standing for “below-average costs for the developer.” These cutoff points are based on a review of the development literature regarding infrastructure requirements as well as interviews with developers of all the TOD cases considered. Infrastructure costs were determined via the analysis of budget documents, master development plans, and LIHTC applications related to each TOD.

The third variable included in the regulatory factor consists of parking requirements. Those associated with TODs can impede the development of affordable
housing because of the excessive costs involved (Rick Williams Consulting, 2007). Parking requirements for high-density developments like TODs can force the developer to build parking garages, landscaping wraps, and expensive design features to make the parking area more aesthetically pleasing for potential tenants. These costs, which tend to reduce profit margins, discourage developers from building affordable housing in TODs.

In this study, the parking-requirements variable is defined as the total parking costs per residential unit. The scoring categories for parking requirements are: “Above average,” “average,” and “below average.” The average parking cost per residential unit for multifamily developers in the Denver region is between $8,000 to $12,000 per unit (T. Gladwell, personal communication, April 19, 2012; G. Krause, personal communication, December 5, 2012; Rick Williams Consulting, 2007). This range is based on the regions typical requirement of two surface lot parking spots per unit at an average cost of approximately $5,000 per surface parking spot. A score of “-1” is assigned if the developer is required to spend more than the average $12,000 per unit (i.e. via the development of parking garage spots or detached garage spots which exceed $15,000 per unit). A score of “0” is assigned if the developer spends within the average $8000 to $12,000 range per unit. Finally, a score of “+1” is given if the developer is required to spend less than the $8000 per unit, which would represent a significant financial benefit to the developer. These categories were developed based on interviews with developers and other key players from the five Denver TOD cases as well as a reading of the literature on parking costs and parking-management expenses for the Denver region (Rick Williams Consulting, 2007; Victoria Transport Policy Institute, 2013).
The last regulatory variable for this research concerns ground-floor retail requirements. This variable was included because of its strong influence on the regulatory context of a TOD. TODs are mixed-used developments requiring that commercial space be integrated with residential development (Bernick & Cervero, 1997; Dittmar & Ohland, 2004). In most TODs, some portion of the ground floor of a multi-family residential building must be set aside for retail space. This requirement can be a barrier to the development of affordable housing within a TOD because of the risks involved for the developer. If the location of the specific development does not have the appropriate foot traffic and density, the retail space can be underutilized, a situation which leads to higher retail vacancy rates and less rental income. These conditions, which reduce profit margins for the developer, will naturally discourage the inclusion of affordable housing in a TOD.

The ground-floor retail variable is defined as the required amount of ground floor retail square footage required per residential unit for a specific development. The scoring categories for the retail regulations are: “above average,” “average,” and “below average.” Based on interviews with multi-family developers in the Denver region, the average ground floor retail density requirement in TODs in the Denver region is estimated to be between 40 to 60 square feet of ground floor retail space for every residential unit (T. Gladwell, personal communication, April 19, 2012; C. Parr, personal communication, September 7, 2011). This would translate into a 100 residential unit multifamily development with about 4,000 to 6,000 square feet of ground floor retail. Based on these requirements, if the TOD developer is required to provide more than 60 square feet of ground-floor retail for every residential unit, the variable is scored a “-1”
for above average. If a TOD developer is required to provide between 40-60 square feet of retail per residential unit, the variable is scored “0,” since this is considered an average-sized retail requirement. If a TOD developer must produce less than 40 square feet of retail space per residential unit, the variable is scored a “+1” denoting a minimal retail requirement. These average retail requirements were supported by the literature regarding typical mixed-use retail guidelines for TODs (Calthorpe Associates and Mintier Associates, 2011; TransAct, Inc. and Van Meter Williams Pollack, LLP, 2011).
Table 3.2 Regulatory-Factor Scoring Template

<table>
<thead>
<tr>
<th>Regulatory Sub-variables</th>
<th>Regulatory Scoring Categories:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-1 = Negative</td>
</tr>
<tr>
<td>Zoning Code</td>
<td>Above-average costs to the housing developer; rezoning required</td>
</tr>
<tr>
<td>Infrastructure Regulations</td>
<td>Average costs to the housing developer; costs total 5% to 10% of total budget</td>
</tr>
<tr>
<td>Parking Regulations</td>
<td>Average costs to the housing developer; within the range of $8,000 to $12,000 per residential unit</td>
</tr>
<tr>
<td>Ground-Floor Retail Regulations</td>
<td>Average costs to the developer; between 40 to 60 square feet of ground-floor retail required per residential unit</td>
</tr>
</tbody>
</table>

Regulatory variables | Rationale for inclusion within regulatory variable

Zoning Code
- Zoning issues can have a considerable impact on a developer’s decision to produce affordable housing within a TOD. The more time and cost involved in rezoning a parcel of land to produce a residential development, the less likely it will be for a developer to choose to develop affordable units.

Infrastructure Regulations
- Infrastructure requirements can have a significant impact on whether affordable-housing is developed. Infrastructure costs associated with urban-infill developments like TODs can increase costs significantly for development.

Parking Regulations
- Parking regulations have a significant impact on affordable-housing development. Because of the reduced surface parking requirements in TODs, developers are often required to build parking garages and expensive landscaping wraps. These parking requirements raise the cost for developments and thus have a negative impact on a developer’s decision to provide affordable housing.

Ground-Floor Retail Regulations
- Ground-floor regulations can impact a developer’s decision regarding affordable housing. Retail requirements are risky since the projected foot-traffic densities may not being realized leading to vacant or undervalued retail properties. The costs and risks associated with ground-floor retail thus negatively impact the developer’s decision to produce affordable housing.
The Advocacy Factor

The first advocacy variable chosen for inclusion in this study is neighborhood advocacy. Neighborhood support or opposition to affordable housing can have a significant impact on a developer’s decision to provide affordable housing in a TOD. Advocacy from the local or nearby neighborhood(s) can help increase good will for a particular development and thus provide positive support for affordable housing. However, neighborhood opposition, often in the form of the not in my backyard (NIMBY) response, can raise the risks and costs to the developer and thwart affordable-housing development (Danielson, Lang, & Fulton, 1999; Franzen & Hunsberger, 1998; Hirt, 2007; Pendall, 1999).

This study defines neighborhood advocacy as the overall level of support or opposition exerted by the residents, homeowners, business leaders or business owners within the neighborhood or nearby the development area. The scoring categories for this variable are defined as follows: If it is determined that local neighborhood groups oppose the development of affordable housing, a score of “-1” is assigned to signify a negative impact on the development of affordable housing. If the neighborhood is “impartial” or “neutral” to the development of affordable housing, a score of “0” is assigned. Finally, if the neighborhood consensus is “support for the development of affordable housing,” a score of “+1” is assigned to show a positive impact for the inclusion of affordable housing. The neighborhood consensus for support for or opposition to affordable housing was determined by analyzing documents and news articles written about the development as well as interviews with local citizens, developers, and other key players associated with the particular TOD.
The second advocacy variable is non-profit advocacy. Non-profit housing groups often bring strong resources to bear in support of developing affordable housing within TODs. The activism of an organized affordable-housing non-profit can exert significant pressure on developers and dramatically increase the chances of affordable-housing being developed in their TOD (FRESC, 2011; Grady & LeRoy, 2006; Read, 2006). On the one hand, non-profit groups can assist developers in acquiring subsidies and political support for affordable housing which lowers development costs. On the other hand, non-profit organizations can also serve to thwart affordable housing development in a TOD. Some suburban non-profits help monitor design standards and control housing types and land usage in their communities. These organizations can thus block affordable housing in the neighborhoods they serve.

The scoring categories for the non-profit advocacy variable are “opposed to affordable housing development”; “neutral to affordable housing development”; and “supportive of affordable housing development.” If the consensus from the non-profit advocacy groups related to a particular TOD development is opposed to affordable housing, the variable is scored “-1.” If the non-profit community is impartial to affordable housing development, the variable is scored “0.” Finally, if the local non-profits support affordable-housing development in the TOD, the variable is scored “+1.” The non-profit consensus of support for or opposition to affordable housing in this study was determined by analyzing source documents and news articles written about the development as well as through interviews with local citizens, developers, and other key players associated with the respective TOD developments.

The final advocacy variable chosen for this study is political advocacy. Strong
political support for affordable housing can lead to significant benefits for the developer in terms of good will, subsidies, expedited applications, and reduced regulatory fees (DeCristoforo, 2009). Conversely, political opposition can silence support for affordable housing and create a significant barrier to its inclusion in a TOD.

This study defines the political-advocacy variable as strictly the measure of political support or opposition exerted by political leaders and elected officials for or against affordable housing in a TOD. Political support or opposition can come from state or local elected officials as well as civil servants and city administrators. The scoring categories for the political-advocacy variable are “opposed to the development of affordable housing”; “impartial to the development of affordable housing”; and “supportive of the development of affordable housing.” Scores are assigned based on the overall political support or opposition political officials and political leaders exert regarding affordable-housing development in a TOD. If a particular TOD development encounters political opposition from political leaders to affordable housing, the variable is scored “-1.” If the political leadership is neutral regarding affordable housing in a TOD, the assigned score is “0.” Finally, if affordable-housing development in a TOD enjoys support from political leaders and elected officials, this fact is reflected in a score of “+1.” The consensus for political support for or against affordable housing was determined by an analysis of documents and news articles written about the development as well as interviews with local citizens, developers, and other key players.
### Table 3.3 Advocacy-Factor Scoring Template

<table>
<thead>
<tr>
<th>Advocacy variables:</th>
<th>Advocacy Scoring Categories:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Neighborhood Advocacy</strong></td>
<td>-1 = Negative</td>
</tr>
<tr>
<td>Supported by development</td>
<td>Neutral to affordable-housing development</td>
</tr>
<tr>
<td>Opposed to development</td>
<td>Neutral to affordable-housing development</td>
</tr>
<tr>
<td>Neutrally supported</td>
<td>Neutral to affordable-housing development</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Advocacy variables:</th>
<th>Rationale for inclusion within advocacy variable.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Neighborhood Advocacy</strong></td>
<td>Neighborhood groups exert a strong impact on affordable-housing development within their community. If the neighborhood consensus is to oppose affordable housing (NIMBY), this response can drive up costs for the developer. However, if the neighborhood supports the development, it can reduce risks and add strong support for and benefit to the developer.</td>
</tr>
<tr>
<td><strong>Non-Profit Advocacy</strong></td>
<td>Non-profit housing groups can have a powerful impact on the development of affordable housing in a TOD. Many TODs are big developments requiring large public subsidies to offset costs. Because of this public involvement, organized non-profit groups often lobby for political support and additional subsidies. These groups can have a significant positive impact on a developer’s decision to produce affordable housing in a TOD. However, non-profit organizations can also serve to block affordable-housing development.</td>
</tr>
<tr>
<td><strong>Political Advocacy</strong></td>
<td>Political advocacy also has a significant impact on the development of affordable housing in a TOD. Strong political support from elected officials and city administrators can help generate good will for affordable housing in a TOD and lead to stronger subsidies and other support for it.</td>
</tr>
</tbody>
</table>
The Scoring Timeframe

To understand the impact of the economic, regulatory, and advocacy factors on a developer’s decision-making process, one must measure the variables at the proper time during that process. Based on interviews with TOD developers and a review of the development literature, the optimal timeframe to measure the impact of these factors is within the two years leading up to the ground breaking for the project. During this window the developer will have begun to invest significant amounts of time and resources into architectural, engineering, and infrastructure plans as well as other pre-development expenditures. It is within this time period that the developer makes the decision to produce or forego affordable housing within the respective TOD.

This study uses the above-described timeframe as the focal point for its analysis. By looking at the two years preceding the ground breaking for each Denver TOD case, the study scores the economic, regulatory, and advocacy factors in terms of their impact on the respective developers.

The Scoring System

The scoring system used in this research, as mentioned above, is based on the three interval scale of -1, 0, and +1. While the study initially considered using a binary scoring scale, the three-part system was deemed preferable in that it allowed for greater precision. Scores were based on the variables’ impact on a developer’s decision to produce affordable housing in the TOD. For example, “-1” would represent a negative impact on the developer, “0” a neutral one, and “+1” a positive one. If the final average score for the particular factor were positive, it was hypothesized that the factor was creating conditions supportive of affordable housing. If the final score of the factor by
contrast were negative, it was hypothesized that conditions were unfavorable to the development of affordable housing. Table 3.4 below gives an example of how the economic variables would be scored and their respective impacts on a developer’s decision regarding the inclusion of affordable housing in a TOD.

**Table 3.4 Hypothetical Score for the Economic Factor**

<table>
<thead>
<tr>
<th>Economic variables</th>
<th>Score Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land Cost</td>
<td>0 (fair market value)</td>
</tr>
<tr>
<td>Housing Market Conditions</td>
<td>+1 (strong housing market conditions)</td>
</tr>
<tr>
<td>Public Subsidy</td>
<td>+1 (strong subsidies available)</td>
</tr>
<tr>
<td>ROI</td>
<td>+1 (strong return on investment)</td>
</tr>
<tr>
<td><strong>Final Score</strong></td>
<td><strong>+0.75</strong> (sum divided by total number)</td>
</tr>
</tbody>
</table>

Table 3.4 above gives an example of a hypothetical score for the economic factor. In this example, the land-cost variable is neutral, while housing markets, public subsidies, and ROI are all positive. The final score for the economic factor is found by taking the sum of the individual variables and dividing it by the total number of variables. This operation would consequently result in a final score of “+0.75” for the economic factor.

Based on this score, positive economic conditions would make it more likely that a developer would consider the inclusion of affordable housing. The fair-market land costs coupled with solid housing-market conditions, strong subsidies, and a strong ROI would thus provide significant economic benefit to the developer by helping offset the costs and risks of affordable housing.

**Dominant and Moderating Factors**

This literature suggests that the economic factor provides the dominant influence on a developer’s decision whether or not to include affordable housing in their TOD project. The research indicates that some positive combination of reasonable land costs,
stable housing-market conditions, the availability of public subsidies, and a solid expectation of return on investment is required for a developer to consider including affordable housing in a TOD development. Without solid economic conditions, it is unlikely that a developer would consider taking on the added risks of affordable housing.

Moreover, the study holds that both the regulatory and advocacy factors serve as moderators that either enhance or minimize the impact of the economic factor. On the one hand, reduced regulatory requirements can lower the costs for a developer and enhance the economic conditions and thereby make the inclusion of affordable housing more likely. On the other hand, increased regulatory costs can diminish the economic conditions and weaken the prospects for affordable housing. Furthermore, a positive advocacy environment characterized by solid community support for affordable housing can lead to increased good will and a possible increase in public subsidies. All this would enhance the economic context and increase the likelihood of affordable housing. Conversely, community opposition to affordable housing can raise costs and concerns for the developer and diminish the economic context while reducing the likelihood of including affordable housing in a development. It is the interaction of the dominant and moderating factors that creates conditions which ultimately influence a developer’s decision on affordable housing within a TOD. The following section discusses the concept of moderating variables as developed in the psychological research of Baron and Kenny (1986) and Frazier, Tix, and Barron (2004). This section applies the latter research model to the present research on the economic, regulatory, and advocacy factors and their impact on a developer’s decision regarding affordable housing.
Moderating Factors

Frazier, Tix, and Barron (2004) illustrated the impact of moderating factors in their research on psychotherapy and depression. They explained that in a simple causal relationship, the independent predictor variable X causes the dependent outcome variable Y. However, their research also showed that when a moderating variable Z was introduced into that simple equation, it changed the relationship and altered the outcome. For example, Frazier, Tix, and Barron (2004) found that psychotherapy helped alleviate depression where psychotherapy (X—the independent predictor variable) had a positive influence on the person receiving therapy (Y—the dependent, or outcome, variable).

Frazier, Tix, and Barron’s (2004) research thus indicated that psychotherapy had a beneficial effect by improving the lives of individuals who suffered from depression. However, when a moderating variable like gender was added to the equation, the influence on the causal relationship was altered. Frazier, Tix, and Barron (2004) found that the effectiveness of psychotherapy on alleviating depression changed when this moderating variable was added. It turned out that women with depression responded better to psychotherapy than did men.

Frazier, Tix, and Barron’s (2004) simple framework for moderating variables can be used to help explain how regulatory and advocacy factors can likewise influence a
developer’s decision to produce affordable housing in a TOD. In the case of this research, the simple causal relationship is characterized by positive economic factors which create conditions that make it more likely that a developer will produce affordable housing in a TOD. The simple causal statement is that E (positive economic conditions) leads to AH (likelihood that a developer will decide to provide affordable housing), where E is the independent, or predictor, variable and AH is the dependent, or outcome, variable. However, when a moderating factor such as the regulatory or advocacy factor is added, the causal relationship is changed. For example, if a negative regulatory factor (increased costs related to zoning, parking, infrastructure, and/or retail) were added to the equation, it would diminish the positive economic conditions and decrease the likelihood that a developer would choose to provide affordable housing. Similarly, if a positive advocacy factor (solid community support for affordable housing) were added, it would enhance the economic factor and make it more likely that a developer would produce affordable housing.
It is thus the interaction of the dominant (economic) and moderating (regulatory and advocacy) factors that ultimately impacts a developer’s decision regarding the inclusion of affordable housing in a TOD. The following section presents three hypotheses regarding these interactions.

**Hypotheses**

The research question for this dissertation is, *How do economic, regulatory, and advocacy factors influence a developer’s decision to provide affordable housing in a TOD?* The general hypothesis is that if these factors interacted to create satisfactory profits and lower risks, it would be more likely that a developer would choose to provide affordable housing. Furthermore, the literature suggests that the economic factor would be dominant in influencing a developer’s decision making about including affordable housing, while the regulatory and advocacy factors would serve as moderating factors that either enhanced or minimized the impact of the economic factor. Based on the concept of dominant and moderating factors and their impact on a developer’s decision about including affordable housing in a TOD, the following three hypotheses were developed for this study:

**Hypothesis #1.** If the economic factor is negative, then affordable housing is not likely to be produced in a given TOD. The first hypothesis for this study was developed from the argument that economic conditions are the most important determinant for a developer with regard to making a positive decision on affordable-housing development. This study argues that positive economic conditions are required for a developer to consider including affordable housing.
Hypothesis 2. If the advocacy factor is negative, then affordable housing is likely only if the economic and regulatory factors are both positive and strong enough to offset the advocacy costs. The second hypothesis was developed from the argument that a negative score on the moderating advocacy factor would reflect strong opposition to affordable housing within the respective TOD. The increased costs of community opposition at a given TOD site would likely block a developer from choosing to provide it unless the developer was the beneficiary of significantly reduced regulatory requirements as well as substantial economic incentives to help offset the advocacy costs.

Hypothesis 3. If the regulatory factor is negative, then affordable housing is likely only if the economic and advocacy factors are both positive and strong enough to offset the regulatory costs. The third hypothesis for this study was developed from the argument that a negative score for the regulatory factor reflected some combination of high costs related to zoning, infrastructure, parking, and/or ground-floor retail requirements. In order for a developer to choose to include affordable housing in a TOD encumbered with these costs, the economic conditions and advocacy context would need to be supportive enough to offset the costs mentioned and allow the developer to achieve satisfactory profits.

Conclusion

This chapter explained the design and method used in this research. It gave the rationale for employing the comparative case study as the primary methodology and explained how the data were gathered and analyzed. The chapter defined the three factors and eleven variables included in the study and gave the rationale for their inclusion. The chapter also explained the scoring model used and gave examples of how
it worked. Finally, the chapter discussed the role of both dominant and moderating factors and concluded with a discussion of the hypothetical scenarios related to the interaction of the three variables and their impact on a developer’s decision regarding the possible inclusion of affordable housing. The next chapter will provide a brief introduction and contextual background for each of the five Denver-area TODs.
CHAPTER IV

THE FIVE DENVER TOD CASE STUDIES

The following chapter provides an introduction to and overview of the five TOD cases included in this research. For each case, the chapter presents its location within the Denver/RTD light-rail system, a brief project description, and photos of the development taken, unless otherwise indicated, by the researcher. The chapter also includes a background narrative on each case to give the reader an understanding of the economic, regulatory, and advocacy contexts. The conclusion of the chapter consists of a case-study summary table containing the most important comparative details for each case. Finally, the cases are presented in chronological order from the first development, Englewood City Center in 2002, to the most recent, the Evans Station Lofts in 2013. The first two cases, Englewood City Center and Vallagio at Inverness, have no affordable-housing provisions while the Gates, South Lincoln, and Evans Station developments all do.

Selection Criteria

As stated previously in Chapter 3, the five Denver TOD cases studied here were selected according to these criteria: minimum retail-space requirements of 5,000 square feet; a minimum residential budget of $10,000,000; a completion date falling within the time frame of the fieldwork for this research (2008-2012); a project location within the Greater Denver region and at least two cases with affordable housing provisions.
Figure 4.1 – Denver/RTD Light Rail System Map (RTD, 2014)
Case 1 - Englewood City Center TOD

Transit Station

The Englewood City Center TOD is located within a quarter mile of the Englewood Transit Station in Englewood, Colorado. The Englewood Transit Station, at 899 W. Floyd Avenue, opened in July 2000 on what was then designated as the Southwest Corridor Line but is now known as the C and D Lines (See Fig. 4.1.). The C and D Lines, which both depart from Downtown Denver (C at Union Station and D at 16th and Stout), terminate at the Littleton/Mineral Transit Station in Littleton, Colorado. The Englewood Station is located between the Evans Station to the north and the Oxford/Sheridan stop to the south. The Englewood station has 910 park-and-ride parking spaces as well as walkable access to the town center and retail shops via a pedestrian bridge.

Project Description

The Englewood City Center TOD is built on a 55-acre parcel bounded by Santa Fe Drive, Hampden Avenue, Floyd Avenue, and South Elati Street in Englewood. The site was developed by the City of Englewood (master developer), Trammell Crow (residential developer), Miller Weingarten (retail/commercial developer), and the RTD (transit infrastructure/pedestrian-bridge developer). The completed development, approximately 840,000 square feet in size, includes 438 residential rental units, retail shops totaling 350,000 square feet, civic center/city offices of 140,000 square feet, and approximately 2800 parking spaces.

The residential centerpiece of the City Center TOD is the 438 market-rate rental-unit project called Alexan City Center. The Alexan, developed by Trammell Crow
Residential, is situated on ten acres of land at the intersection of South Inca Street and Englewood Parkway in the heart of the City Center TOD. This residential development is located only 100 yards from the light-rail transit platform. The total cost of Alexan development, completed in 2002, was approximately $45 million. The complex consists of two three-story buildings with 29,000 square feet of ground-floor retail space. It also includes one four-story parking garage accommodating 629 parking spaces.

The total site preparation costs paid by the City of Englewood for the City Center project came to approximately $37 million. The city financed the preparations with the sale of a land parcel to Wal-Mart for $3.7 million; the sale of a long-term lease of a land parcel to Miller-Weingarten for $4.2 million; the sale of ten acres to Trammell Crow for $5 million; a sale of bonds to investors in the form of Certificates of Participation (COP) for $19 million; and finally, a grant from the RTD to build a pedestrian bridge and transit platform for $5.7 million. These $37.6 million in funds were used for the site redevelopment including demolition, grade and fill, as well as the development of the public plaza, streets, parks, civic center, pedestrian bridge, and transit platform.

Moreover, upon completion of the city’s initial remediation and development of the site, $110 million dollars in additional private investments followed with Trammell Crow providing $46 million to develop the Alexan City Center apartments while Wal-Mart, Sports Authority, Hobby Lobby, Jamba Juice, GNC, and others added $60 million in investments. In 2003, when the City Center development was completed, public and private investments in this TOD site totaled almost $150 million.
Photos

Pedestrian bridge with Alexan City Center apartments in the background.
Public fountain in the town center with Alexan City Center apartments in the background.
Alexan City Center apartments with ground-floor retail.
**Background**

The City of Englewood, considered a first-ring suburb of Denver, is located approximately ten miles to the southwest of Downtown Denver. Englewood’s housing stock consists of older single-family homes as well as condominiums, townhomes, and apartments which are nearly 55 percent owner occupied and 45 percent rented. Like many first-tier, post-World War II suburbs of major U.S. cities, Englewood saw much of its residential and commercial growth from the 1960s through the 1970s. One significant outcome of Englewood’s commercial growth in the late 1960s was the development of the Cinderella Mall.

When the Cinderella Mall opened in Englewood in 1968, it was the first enclosed shopping mall west of the Mississippi. Cinderella instantly became the pride of the community as well as the city’s strongest financial engine. During the 1970s and 1980s, it was generating an average of $2.5 million in annual tax revenues comprising approximately 50 percent of the city’s entire tax revenue (Stitt, 1997). However, as the mall aged and significant competition emerged, Cinderella began a period of steep decline. By 1994, the mall was only seven percent occupied, with just 35 tenants remaining out of the 275 available retail spaces. Moreover, it was generating almost no tax revenue. In early 1997, after years of negotiations between the City of Englewood and the mall owners, Cinderella filed for bankruptcy, whereupon the owners gave the property to the City of Englewood. By that point, the abandoned 55-acre site was badly in need of redevelopment, containing as it did numerous dilapidated buildings and decaying parking structures.

In the mid-1990s when the City of Englewood realized that the mall was heading
for bankruptcy, the former began to engage community and civic leaders in discussions about what type of development might best replace the mall (Stitt, 1997). Many of the city leaders argued for a TOD development at the site of the defunct mall, since it was close to the newly planned Englewood Transit stop slated to open in late 1999 or early 2000. Based on this interest in a possible TOD, Englewood city leaders and other key players participated in the 1997 Transit Oriented Communities initiative of the Center for Regional and Neighborhood Action and Compass RPI. The participants included Englewood civic leaders, local citizens, officials from the RTD, architects, urban planners, local business owners, developers, and real-estate consultants, among others.

Following this TOD conference, Englewood city leaders and the City Council were convinced that the TOD concept matched their desire for a unique, mixed-use development built on the foreclosed Cinderella mall site (M. Utter, personal communication, September 2, 2010). Following the City Council’s full approval, the City Center TOD was launched, with remediation and redevelopment beginning in 1998.

In July 2000, with the City Center development in full swing, the Southwest Corridor light-rail line and the Englewood Transit Station opened for service. The 8.7-miles-long Southwest Corridor Line started at I-25 and Broadway in Denver and terminated at Mineral Avenue in Littleton. Shortly after the opening of the Englewood Transit Station in August 2000, the first phase of the Englewood City Center TOD was completed, with a grand-opening celebration for the Englewood Civic center. In that same year, Trammell Crow broke ground on their mixed-use, multi-family rental development called the Alexan City Center. By 2002, the 438 market-rate rental-unit project was completed, and with it the City Center TOD. This new development was
considered the crown jewel of the Englewood community as well as a symbolic triumph for the RTD and the Denver light-rail community (M. Utter, personal communication, September 2, 2010).

While the completion of the City Center TOD was a significant source of pride for the City of Englewood, one criticism levied against the development was its lack of affordable housing (R. Simpson, personal communication, July 21, 2011). Peter Calthorpe, a founder of the new urbanism movement and respected TOD advocate, was among the critics. Mr. Calthorpe, an architect based in San Francisco who had coined the term TOD, had consulted with the City of Englewood during the planning of the City Center. He believed that TODs should incorporate affordable housing to help create more diversity and residential price points in locations close to public transit. He was thus disappointed that the City Center development did not contain affordable housing, particularly in a working-class community like Englewood which was in need of newer affordable housing.

Englewood officials responded to this criticism by claiming that affordable housing would have added significant risk to the City Center development (G. Sears, personal communication, July 28, 2011). The city claimed that it would have been difficult to find developers willing to include such housing because of the uncertainty of the TOD concept and their retail markets. Finally, the city had been concerned that affordable housing might negatively affect the upscale design and quality of the overall development (D. Shepherd, personal communication, July 27, 2011; G. Sears, personal communication, July 28, 2011).

In spite of its lack of affordable housing, the City Center TOD was still
considered a significant success by developers and planners in the region since it proved that the TOD concept could work in a suburban context (M. Utter, personal communication, September 2, 2010). Trammell Crow was able to sell their Alexan City Center development for a record $7 million profit, while the retail and commercial leases in and around the City Center TOD outperformed expectations. These outcomes created confidence for developers considering mixed-use TODs. The success of the City Center concept in fact initiated a TOD boom in the region. One development that originated from that boom was the Vallagio TOD, built within the Inverness golf course and corporate community.

Case 2 – The Vallagio at Inverness TOD

Transit Station

The Vallagio at Inverness TOD, located within a half mile of the Dry Creek Transit Station, is connected to the station by a pedestrian bridge that spans I-25 at Dry Creek Road. The Dry Creek Transit Station, located at 9450 E. Dry Creek Road, opened in 2006 and has been operating as part of the E and F Lines (See Fig. 4.1.). The E and F Lines both depart from Downtown Denver (the E from Union Station and the F from 18th and California) and terminate at the Lincoln Station in Lone Tree, Colorado. The Dry Creek Station is located between the Arapahoe Stop to the north and the County Line Station to the south. The Dry Creek Station has 235 park-and-ride spaces as well as walkable access to the Vallagio retail shops via a pedestrian bridge.

Project Description

The Vallagio TOD site is located on a 30-acre parcel at the intersection of Inverness Drive West and Inverness Main Street at Dry Creek Road in Arapahoe County.
The TOD sits directly within the Inverness Business Park and golf-course community. The site, zoned for a mixed-use TOD, received approval from the Board of the Arapahoe County Commissioners on November 23, 2004 (Arapahoe County Board of County Commissioners, 2011). The Vallagio at Inverness development consists of approximately 287 upscale lofts as well as condominiums and townhomes priced from $200,000 up to $900,000. An additional 272 luxury rental apartments were completed in 2014. The Vallagio development has approximately 42,000 square feet of office and retail space. Moreover, 287 of the residential units have secure underground parking. The total development cost for the Vallagio is estimated to be $200 million.

Photos

![RTD Dry Creek Station](image-url)
Pedestrian Bridge linking the Vallagio to the Dry Creek Transit Station. (whitecg.com)
Background

The Vallagio development is located in the Inverness corporate office park and golf-course community. George Beardsley, who passed away in August 2011, began developing Inverness at the beginning of corporate-office growth along the Southeast Denver/I-25 corridor in the early 1970s. He envisioned a world-class, upscale business park that would provide corporate office space to Fortune 500-type companies (Rebchook, 2011). He was able to see the fulfillment of his vision before he passed away, including the full 1000-acre development with its championship golf course, 300-unit luxury hotel and conference center, and over 2 million square feet of office and commercial space (Inverness Properties, 2013). Many prominent corporations have offices at Inverness. They include Comcast, DirecTV, The Wall Street Journal, Dow-Jones, Kraft General Foods, Georgia Pacific, Raytheon, and others (Inverness Properties,
George Beardsley (Inverness), George Wallace (Denver Tech Center), and John Madden (Greenwood Village) were together considered the three most important developers of the Denver Southeast Office-Park corridor (Rebchook, 2011).

Mr. Beardsley, whose vision for Inverness was strictly as a golf community and corporate-office headquarters, never thought of it as including a residential development (P. Mulhern, personal communication, December 14, 2012). Mr. Beardsley was reluctant to allow residential development because he feared it might lower the prestigious nature of Inverness and reduce the amount of the open space which he so valued. Furthermore, he and his development partners benefited from the lack of residential groups within Inverness since there would thus be more space for additional commercial development. Without any residential groups to protest or raise concerns regarding development decisions, the development process within Inverness went smoothly and was mostly uninterrupted. Mr. Beardsley’s opposition to residential development was aided by Inverness’s close proximity to the Centennial Airport. The latter, first opened in 1967, had zoning restrictions against nearby residential development, a fact which served to discourage residential developers from pursuing projects in this area.

In spite of his desire to keep residential development out of Inverness, Mr. Beardsley’s opposition to high-density housing was challenged in the late 1990s and early 2000s with the emergence of a light-rail line along the I-25 Southeast Corridor. The building of transit stops along I-25 created a new demand for mixed-use developments (Cantwell, 2006). New transit stops located at Belleview, Orchard, Dry Creek, County Line, and Lincoln Avenue in fact inspired mixed-use, transit-oriented development. These newly developed transit stops included pedestrian bridges over I-25 into the various office parks located on the east side of I-25, a fact that only increased developers’
interest in TOD and mixed-use development in the area. In his interview, Pat Mulhern of the Inverness Metropolitan Improvement District recalled the importance the pedestrian bridges had played in stimulating interest in the TOD concept at Inverness:

So we lobbied big time for these bridges, and we had to fight them [CDOT and the RTD] for it. You know, they just didn’t get it. We lobbied hard to extend this bridge into Inverness. Once we got these bridge connects, we really had these residential folks (developers) banging on the door saying, “Hey, we want to do TOD there” (P. Mulhern, personal communication, December 14, 2012).

Along with light-rail development, another factor that helped reduce Mr. Beardsley’s opposition to residential development at Inverness was the changing market conditions for commercial development. During the late 1980s through the mid-1990s, commercial development in Southeast Denver was booming. There was thus significant office development at the Denver Tech Center, Greenwood Village, and Inverness, among others. However, in the late 1990s, the overbuilding of office space in both Downtown Denver and the Southeast Corridor led to a major drop in the commercial real-estate market. Mr. Beardsley and his development group were holding more than 100 acres of prime land undeveloped in the Inverness community which they could no longer use for office space. Mr. Beardsley thus began to feel pressure from his partners and investors to sell this remaining valuable land, but the only type of project commanding premium dollars at the time was mixed-use, residential development. Thus in the face of mounting pressure from his partners, Mr. Beardsley reluctantly agreed to sell the last 100 acres of Inverness to residential developers.

Peter Kudla, a prominent multi-family housing developer in Denver, was one of the first persons interested in purchasing property at Inverness. A member of the Inverness Golf and Country Club, he became interested in developing land at Inverness while playing the course in the early 1990s (P. Kudla, personal communication, December 14, 2012).
December 5, 2012). When he approached George Beardsley in 1997 and offered to purchase a 60-acre parcel for greater than the market value at the time, Mr. Beardsley quickly declined and stood firm in his refusal to sell any Inverness land for residential development. In an interview, Mr. Kudla recounted his 1997 meeting with George Beardsley:

Back then he [George Beardsley] was trying to sell the ground for $5.50 per square foot. That was a lot of money back in 1995 to 1997. There was absolutely no office activity going on. So we looked at it and said [we’d pay] $6 per square foot. Well, he threw me out of the office, and it [the deal] was toast. There was no discussion. He hated it. He didn’t want residential. He had one basic product . . . office[s]. He had a district. He didn’t want any human individuals. He didn’t want any residents screwing with the district. He didn’t want anybody messing with the votes. He didn’t want any human interference. So he said no, and it wasn’t until the lender situation got difficult, and the lender said you got to do something about it (P. Kudla, personal communication, December 5, 2012).

In 2003, under mounting pressure from his partners to sell, Mr. Beardsley finally relented and offered to sell the parcel to Mr. Kudla. However, Mr. Kudla was over-leveraged at the time and could not purchase the property. So Mr. Beardsley sold the land to an investment group called Opus Northwest. In 2004, Opus approached Mr. Kudla to see whether he was still interested in purchasing the parcel. Having meantime acquired the financial means to do so, he agreed to purchase 30 acres of the Inverness parcel at $10 per square foot with the intent to develop a mixed-use TOD.

As founder and CEO of Metropolitan Homes, Peter Kudla was familiar with high-density, multi-family developments like TODs. He had created a niche in Denver by developing communities with smaller upscale residential homes like lofts, row-homes, townhomes, and condominiums targeted to urban professionals and retirees. Since 1996, Metropolitan Homes had built more than 10,000 units of luxury residential housing in the Denver region including high-end lofts at the Neustater Building in Downtown Denver and exclusive multi-family developments in the Lowry Neighborhood (Huspeni, 2012).
By 2005, Metropolitan Homes had grown to be one of the prominent high-density, multi-family boutique development companies in the Denver region, with annual revenues and profits of more than $100 million (Huspeni, 2012).

For all of Mr. Kudla’s success in the multi-family development sector, he still longed to develop a mixed-use neighborhood similar to the ones in which he grew up (Huspeni, 2012). As a member of an Italian family in New York, he lived in high-density residential communities with narrow streets, neighborhood markets, and shops all within easy access to public transportation. Having never lost his fondness for this type of neighborhood, he wanted the Vallagio development to be an urban village with residences, restaurants, and shops within walking distance of the light-rail stop at Dry Creek (Grady, 2008; Huspeni, 2012; Walsh, 2008).

Following his dream to create an urban village, Mr. Kudla and Metropolitan Homes broke ground on the Vallagio TOD in 2005 and proceeded to develop a high-density, mixed-use development with residential units, retail stores, and offices within walking distance to the Dry Creek Transit Station. As of 2014, the fully developed Vallagio consists of 287 upscale for-sale residential units and an additional 272 luxury rental units. The development contains more than 42,000 square feet of retail, office, and commercial space with a variety of boutique shops, restaurants, and small offices located on the ground floor of one of the four-story multi-family residential buildings in the community. Vallagio also has a public piazza, dedicated open space, and pedestrian- and biker-friendly trails and paths.

Although Mr. Kudla had originally considered affordable housing at the Vallagio development, he ultimately decided not to pursue it because of opposition at Inverness.
Many TOD advocates who had lobbied for affordable housing in TODs were disappointed to see such a significant residential development forego the inclusion of any affordable housing within its precincts (C. Everett, personal communication, April 23, 2012). In response to this criticism, the business and political leaders of Inverness claimed that affordable housing would not have been an appropriate fit for their upscale development (P. Mulhern, personal communication, December 14, 2012; N. Sharpe, personal communication, December 12, 2012). They feared that substandard quality in the design of affordable housing would have damaged Inverness’s high-end image.

Despite its lack of affordable housing, Vallagio has won numerous awards for its high-density, pedestrian-friendly mixed-use concept. Among these citations were the Denver Regional Council of Governments 2011 Live, Work, Play People's Choice Award; the Rocky Mountain EXPO Residential Project of the Year, Home Builder’s Association of Metro Denver; the Neighbourhood of the Year; the Condo of the Year; the Town Home of the Year; and the prestigious BAR award for the 2008 Premier Residential Development (Metropolitan Homes, 2013).

Case 3 - The Gates TOD

Transit Station

The Gates TOD is situated a half mile from the I-25 and Broadway Transit Station upon the former grounds of the old Gates Tire and Rubber factory. The I-25 and Broadway Transit Station, located at 901 South Broadway, opened in 1994 and at that time was the terminal for the original central corridor. The station, which now serves the C, D, E, F, and H Lines, is the key transfer point for passengers traveling from Littleton/Englewood and redirecting to the Southeast Lines serving the Denver
Technological Center on to Lincoln Station (See Fig. 4.1.). The I-25 and Broadway Transit Station falls between the Alameda Station to the north and the Evans (Southwest Line) and Louisiana/Pearl (Southeast Line) Stations to the south. The I-25 and Broadway Station has 1248 park-and-ride spaces.

**Project Description**

The only significant residential development located at the Gates TOD site are the 419 market-rate rental units that comprise the Alexan Broadway Station complex and the 60 affordable rental units which make up Broadway Junction. Both projects, developed by Trammell Crow Residential, share the same five-acre parcel located near the intersection of South Broadway and West Mississippi Avenue in Denver. The zoning code for the Gates site is TMU-30 (Transit Mixed Use), which allows for a variety of high-density, mixed-use development near transit. The Trammell Crow development includes 12,500 square feet of ground-floor retail space. The total project cost is approximately $84 million—$10,356,332 for the Broadway Junction affordable-housing project and $73,706,459 for the Alexan Broadway market-rate development. The residential development consists of four buildings and a shared six-story parking garage with approximately 590 parking spaces. The project was completed in late 2010.
Broadway Junction affordable units with 11,850 square feet of ground-floor retail space.
The Alexan Broadway Station market-rate apartments.

A light-rail train passing behind the Alexan Broadway/Broadway Junction project.
Background

The initial planning for the redevelopment of the Gates site began in December 2001 when Cherokee Investment Partners purchased a 50-acre parcel from the Gates Industrial Rubber Company (Flynn, 2002). The property was considered a good location because it was located near I-25 and Broadway, only three miles from Downtown Denver. Cherokee was committed to remediating the contaminated parcels at Gates and developing the land into a world-class TOD. Cherokee’s plans called for 1,000 rental apartments, 1,500 condominiums, two million square feet of office space, 250,000 square feet of retail space, two hotels, and a multiplex movie theater (Rebchook, 2002).

Cherokee estimated that the development would take fifteen years and an investment approaching $1 billion to complete (Rebchook, 2002). To assist Cherokee’s remediation and infrastructural redevelopment of the old factory site, the Denver Urban Renewal Authority awarded Cherokee a tax-increment-financing (TIF) subsidy of $126 million (Kilzer, 2006).

As part of their TIF agreement with the Denver Urban Renewal Authority and the City of Denver, Cherokee committed to a generous affordable-housing plan for their TOD. This proposal was negotiated by the non-profit organization FRESC and the Denver Housing and Neighborhood Services along with other city and community leaders (Read, 2006). The plan called for ten percent of all the for-sale residential units to be affordable for households earning between 80% and 110% of the area median income. More importantly, the plan called for more than 10% of all rental units to be affordable for households earning between 30% and 60% of the area median income. The plan also required the Gates site to include over 200 affordable rental units for
households earning less than 50% of the area median income and 150 for-sale units affordable for household earning less than 110% area median income. This affordable-housing agreement was considered a major victory by housing activists in light of Denver’s weak inclusionary-housing ordinances.

Despite the grand vision for Gates, Cherokee’s plans never materialized, and by late 2010 the company had declared bankruptcy, with all the land they had owned given back to the Gates Corporation (Jackson, 2009). The TIF subsidies were never used by Cherokee since the redevelopment never got off the ground. Marilee Utter, a successful urban planner and TOD consultant in the Denver community, claimed that Cherokee’s lack of capacity as a vertical developer together with negative market conditions doomed the development plans for Gates (M. Utter, personal communication, September 2, 2010).

While Cherokee’s plans for the Gates TOD site never materialized, Trammell Crow Residential did follow through on its commitment to develop 479 rental units at the Gates site, of which 60 were set aside for households earning less than 60% of the area median income. Trammell Crow, having purchased 5.1-acre parcel from Cherokee in 2007, had gathered all the financing for the development before the Great Recession hit in 2008. They were thus able to move forward with development plans at Gates in spite of worsening market conditions. Trammell Crow completed its multi-family projects in 2010. Its mix of market-rate and affordable residential units is considered a success story, even if a small one, to have come from the failed redevelopment.
Case 4 - South Lincoln TOD

Transit Station

The South Lincoln TOD is situated one-quarter mile from the 10th and Osage Transit Station in the South Lincoln Park neighborhood near Downtown Denver. The 10th and Osage Transit Station, at 975 Osage Street, opened in 1994 as part of the original Central Corridor Line but now serves the C, D, E, F, and H Lines (See Fig. 4.1.). The 10th and Osage Station is the northernmost transit stop serviced by all trains coming from the I-25 and Broadway Station. It is located between the Auraria West and Auraria Colfax Stations to the north and the Alameda Station to the south. The 10th and Osage Station, which lies within a residential community, has no RTD-designated park-and-ride spots for commuters. The station is noted for its location directly across the street from the old Buckhorn Exchange Restaurant, a Denver landmark.

Project Description

The South Lincoln Park TOD is located on a fifteen-acre parcel just south of the Auraria Campus in Downtown Denver. The site is bounded by 11th Avenue on the north, 9th Avenue on the south, Mariposa Street on the east, and Osage Street on the west. The zoning code for the site, recently updated by the City of Denver, is covered under the new form-based zoning code which has made it possible for the South Lincoln site to be developed for high-density, transit-oriented development. The master developer for the South Lincoln TOD, the Denver Housing Authority (DHA), owns the parcel which is currently home to 270 public-housing units under demolition and redevelopment. The redevelopment of South Lincoln Homes is progressing within a phased approach so as not to displace any of the low-income residents now living in the 270 units.
The first phase of the South Lincoln redevelopment, completed as of this writing, consists of 94 one-bedroom units and six two-bedroom units with an average unit size of around 800 square feet. The 100 units are all designated as affordable housing for senior households earning less than 60% of the area median income. The ground floor of the Osage multi-family building consists of 16,000 square feet of commercial space targeted for community services like a youth center, a library kiosk, computer labs, and a workforce training site. The total cost of the development was approximately $20 million, or nearly $200,000 per unit (Colorado Housing and Finance Authority, 2010). The building was funded with $10 million from Low-Income-Housing-Tax Credits and $10 million from ARRA stimulus funds (DeCristoforo, 2009). The second through fourth phases of the South Lincoln development have been funded and will be developed between 2013 and 2016 (K. Crangle, personal communication, September 7, 2011). The forthcoming 350 units will be a mix of affordable-rental units for households earning less than 60% of the area median income and market-rate rental housing. The total budget for the first four phases is approximately $100 million for the development of approximately 450 residential units and nearly 60,000 square feet of commercial/retail/office space (Denver Housing Authority, 2010). Additional phases will follow after 2016 depending on market conditions and available public and private investment.

Once the entire South Lincoln TOD redevelopment is finished in 2016/2017, the DHA estimates a total of 900 new residential units will exist at the site (Denver Housing Authority, 2010). These will be a mix of approximately 450 market-rate and 450 affordable rental units. The new affordable units will represent an increase of 180 more affordable units than the original 270 units that are being demolished.
Photos

10th and Osage Transit Stop with 1099 Osage Street Senior Center in the background.

1099 Osage Senior Center with 16,000 square feet of ground floor office and retail space.
Background

The South Lincoln TOD redevelopment is located in the Lincoln Park neighborhood southwest of downtown Denver and directly south of the Auraria Higher Education Campus. As home to approximately 7,000 residents, Lincoln Park is one of the first and oldest neighborhoods in Denver, with many houses built in the early 1900s (Denver Community Planning and Development, 2010). Included in the Lincoln Park neighborhood is the Santa Fe Arts District, Denver West High School, the Hispanic Chamber of Commerce, Denver Health and Hospital Medical Center, the Sunken Garden Park, and Lincoln Park. The residents of the neighborhood are 52% Latino, 33% White, 8% African American, 4% Asian, and 2% Native American (The Piton Foundation, 2011). The poverty rate in Lincoln Park is nearly 33%, or close to three times higher than that of the average Denver neighborhood. Blueprint Denver, a comprehensive land-use plan for the city adopted in 2002, classified South Lincoln Park as an urban neighborhood in transitional, or change-oriented, status, which gave it the possibility for
positive redevelopment (Denver Community Planning and Development, 2011).

In 2009, the City of Denver created a neighborhood-redevelopment plan for the 10th and Osage Transit Stop, which was located directly across from the South Lincoln Park neighborhood (Denver Community Planning and Development, 2010). The idea behind this plan was to find ways to leverage the 10th and Osage Transit Stop to revitalize the community with high-density, mixed-use development. In 2010, the completed neighborhood plan recommended a zoning change that would encourage the development of a mixed-use TOD. This plan called for redesigning the street grid and development guidelines to produce a more pedestrian-friendly, walkable neighborhood with easy access to the 10th and Osage Transit Stop.

One of the key partners in Lincoln Park neighborhood plan was the Denver Housing Authority (DHA). The DHA owned the South Lincoln Homes project located directly adjacent to the 10th and Osage Station. South Lincoln Homes was a 270-unit public-housing facility located on fifteen acres of land directly across from the transit stop. The South Lincoln Homes units, built in the 1950s, were dilapidated and in need of significant renovation. The community had become an area of concentrated poverty. Throughout the neighborhood-planning process, the City of Denver and the DHA began to see an opportunity for redeveloping the South Lincoln Homes public-housing complex into a mixed-use, mixed-income TOD (Denver Community Planning and Development, 2010). Once the decision had been made to target South Lincoln Homes for redevelopment, the DHA began looking for funding.

In 2009, the U.S. Congress passed the American Recovery and Reinvestment Act (ARRA) to stimulate the economy through investing federal dollars in local infrastructure
projects (U.S. Government Printing Office, 2011). The DHA’s interest in the redevelopment of South Lincoln Homes provided a perfect match for ARRA stimulus funds. In 2009 the DHA applied for and received a $10-million grant from ARRA for investment in Phase I of the redevelopment of South Lincoln Homes. The $10 million in ARRA funds were then leveraged to raise more than $100 million in public and private financing for the redevelopment of the first four phases of the South Lincoln TOD.

The South Lincoln TOD was seen as a significant boon to the TOD markets in Denver that had been stalled by the Great Recession. The influx of significant federal stimulus funding helped stimulate a development that became one of the city’s most significant TOD redevelopments. The project was also a source of pride for the federal government as it pushed to stimulate the economy through nationwide cutting-edge sustainable development. To highlight the Obama administration’s efforts to encourage investment in transit infrastructure, the White House sent high-level officials to Denver for a walking tour and press conference at the South Lincoln Homes site. These emissaries included the Secretary of Housing and Urban Development, Shaun Donovan; the Secretary of the Department of Transportation, Ray LaHood; and the Secretary of the Environmental Protection Agency, Lisa Jackson.

**Case 5 - Evans Station Lofts TOD**

**Transit Station**

The Evans Station Lofts TOD is situated directly across the street from the Evans Transit Station at 2150 South Delaware Street, Denver. The Evans Station, which opened in July 2000 as part of the Southwest Corridor Line, now serves the C and D Lines, which originate at Union Station (C Line) and 16th and Stout (D Line), respectively, and
terminate at the Littleton/Mineral Station (See Fig. 4.1.). The Evans Station is located between the I-25 and Broadway Station to the north and the Englewood Station to the south. The Evans Station’s small park-and-ride lot can accommodate 99 vehicles.

**Project Description**

The Evans Station Lofts TOD, in the Overland neighborhood community, is zoned C-MX-5 (mixed use) under the new Denver Zoning Code adopted by the Denver City Council in June 2010. The Evans Station Lofts building includes 50 affordable rental units targeted to households earning less than 60% of the area median income. The multi-family apartment building has a loft-style design with brick exterior and approximately 8,000 square feet of ground-floor retail/office space. The property, a five-story elevator building with four stories built on top of a first-floor cement podium, includes 42 on-site parking spaces for the 50 residential units (.75 parking spaces per unit). The total cost of the development was $12.4 million, with $10.2 million of those funds coming from LIHTCs.
Photos (photo by Urban Land Conservancy)

(Photo by insiderealestatenews.com)

(Photo by westword.com)
Background

When the Englewood and the Evans Transit Stations opened for service in July 2000, there were great expectations regarding the TOD concept and the potential economic development that would occur near these stations. While the Englewood Station had significant success with the mixed-use development that occurred at the City Center TOD, the Evans Station did not have the same results. Except for the light-rail platform and the park-and-ride lot developed by RTD, the Evans Station saw very little development during the past decade. This lack was a significant disappointment to the community there who were expecting more economic growth and development near the station (The City of Denver-Office of Community Planning and Development, 2009).

In response to the lack of development near the station, in 2009 the City of Denver embarked on a community-wide visioning project to develop strategies to
promote a mixed-use TOD near the Evans Station stop. This initiative culminated in the Denver City Council’s adoption of the Evans Station Area Plan in October 2009. The outcome of eighteen months of community meetings with the City of Denver and stakeholders from the Evans Station community, this plan called for the promotion of a pedestrian-friendly mix of retail stores, offices, and residential and entertainment options all within walking distance for the residents in the community. Also included were improvements to the streetscapes to promote walkability and biking. The plan encouraged a full range of housing at various price points, to include both market-rate and affordable-housing options. Finally, the plan called for the updating of the zoning code to encourage high-density, mixed-use development, reduced parking requirements, and subsidies and economic incentives to encourage development.

During the time that the Evans Station area plan was being developed (2007-2009), several affordable-housing advocacy groups were meeting with Denver city officials to discuss how to encourage affordable-housing development near transit. Disappointed with Denver’s lack of an inclusionary housing ordinance for the development of low-income rental housing, the Enterprise Foundation and the Urban Land Conservancy (ULC) began to discuss land banking as a strategy to encourage affordable housing near TODs (C. Everett, personal communication, April 23, 2012). Following years of advocacy efforts by Enterprise and ULC with the City of Denver, the Denver TOD Fund was created in March 2009 (City of Denver-Office of Strategic Partnerships, 2012). The Denver TOD Fund had the purpose of land-banking parcels near light-rail stops to be used for affordable-housing developments. The amount of capital available in the Denver TOD Fund was approximately $15 million (The Urban
Land Conservancy, 2012). The fund was established as the source of revolving loans that could be drawn on for the purchase of land, with the funds repayable once the land was sold to an affordable-housing developer.

In 2010, while the Denver TOD Fund was being set up, an affordable-housing developer in Lakewood named Troy Gladwell was in the process of looking for potential properties for development. Mr. Gladwell, the founder and CEO of a for-profit affordable-housing development-company called Medici Communities, had created multiple affordable-housing developments in the Denver region and was respected for his high-quality projects (Steele, 2012; B. Weinig, personal communication, April 20, 2012). In late 2010, Mr. Gladwell located the one-acre parcel across from the Evans Station that he considered a prime candidate for affordable-housing development. Although Mr. Gladwell did not have the funds to purchase the property straightaway, he was familiar with the recently created Denver TOD Fund. So he approached the Urban Land Conservancy about purchasing the property with a loan from the Denver TOD Fund and holding it for him while he searched for subsidies from which to create an affordable-housing development there. The Urban Land Conservancy agreed with Gladwell’s request. In June 2011, the ULC purchased the one-acre parcel at 2140 South Delaware Street with money from the Denver TOD Fund. One year later, in June 2012, Medici Communities purchased the property from ULC and broke ground on the Evans Station Lofts development (Steele, 2012).

The Evans Station Lofts project represents the first significant development in the Evans Station area and the first mixed-use, multi-family building in the Overland/Evans Station neighborhood. Many leaders in the Denver community view the Evans Station
project as an outstanding example of affordable housing developed near transit. The City of Denver is particularly proud of this project since the Evans Station Lofts represents a successful affordable-housing development made possible by the City’s TOD Fund (B. Weinig, personal communication, April 20, 2012). The City of Denver is optimistic that the Evans Station Lofts project will be a catalyst for future Affordable TOD Fund developments (C. Everett, personal communication, April 23, 2012).

Case-Study Summary Table

Table 4.1 on the following page gives a comparative overview of all the important details regarding the five Denver TOD cases. The table includes the total budget for each development as well as the number of units (affordable and market-rate), retail square-footage requirements, distance from the closest light-rail stop, location, transit station, name of developer, and completion date. The case-study summary table, below, concludes Chapter 4. Chapters 5 through 7, then, analyze the impact of the economic, regulatory, and advocacy factors on the respective developers’ decisions for or against affordable housing
Table 4.1 TOD Case-Study Summary

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Total Budget</th>
<th>Total Units</th>
<th>Affordable Units</th>
<th>Retail</th>
<th>Distance from Light Rail Stop</th>
<th>Transit Station</th>
<th>Developer</th>
<th>Status of Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Englewood, Alexan City Center</td>
<td>$45,000,000</td>
<td>438</td>
<td>0</td>
<td>29,000 sq. ft.</td>
<td>Less than ¼ mile</td>
<td>Englewood</td>
<td>Trammell Crow Residential/City of Englewood</td>
<td>Completed 2002</td>
</tr>
<tr>
<td>Vallagio at Inverness</td>
<td>$200,000,000</td>
<td>559</td>
<td>0</td>
<td>42,000 sq. ft.</td>
<td>Less than ¼ mile</td>
<td>Dry Creek</td>
<td>Peter Kudla/Metropolitan Homes</td>
<td>Completed 2014</td>
</tr>
<tr>
<td>Gates</td>
<td>$84,000,000</td>
<td>479</td>
<td>60</td>
<td>12,500 sq. ft.</td>
<td>½ mile</td>
<td>I-25 and Broadway</td>
<td>Trammell Crow</td>
<td>Completed 2010</td>
</tr>
<tr>
<td>South Lincoln</td>
<td>$99,400,000; First four phases</td>
<td>450</td>
<td>250-300</td>
<td>60,000 sq. ft.</td>
<td>Less than ¼ mile</td>
<td>10th and Osage</td>
<td>Denver Housing Authority</td>
<td>First Phase Completed 2012; 2nd Phase under construction</td>
</tr>
<tr>
<td>Evans Station Lofts</td>
<td>$12,400,000</td>
<td>50</td>
<td>50</td>
<td>8,000 sq. ft.</td>
<td>Less than ¼ mile</td>
<td>Evans Station</td>
<td>Troy Gladwell/Medici Communities</td>
<td>Completed August 2013</td>
</tr>
</tbody>
</table>
CHAPTER V
ANALYSIS OF THE ECONOMIC FACTOR

Introduction

This chapter will analyze the economic factor and its variables—land cost, housing markets, public subsidies, and return on investment—and their impact on residential developers’ decision-making processes regarding the provision of affordable housing within each of the five Denver TOD cases being studied. The analysis will proceed in chronological order from the first TOD development, Englewood City Center in 2000, to the final one, Evans Station Lofts, in 2013. The chronological ordering of the cases is used to convey the changing economic conditions within the region and how they impacted the five TOD cases. The scoring analysis for each TOD case will focus on its pre-development time period when the variables most influenced the residential developer’s decision-making process. The pre-development period consisted of the two years leading up to the groundbreaking for each TOD project. A brief post-development analysis of each case follows. The chapter will conclude by examining the impact of the economic factor on the developers’ affordable-housing decisions in terms of satisficing.

Research Question and the Economic Factor

The research question for this dissertation is the following: *How do the economic, regulatory, and advocacy factors influence a developer’s decision regarding the provision of affordable housing in a TOD?* The general hypothesis is that if these factors interact to create satisfactory profits and lower risks for the developer, the more likely it is that affordable housing will be developed. Furthermore, as discussed in Chapter 3, this study holds that the economic factor is the dominant one and that some positive
combination of reasonable land costs, stable housing-market conditions, availability of public subsidies, and a solid expectation of return on investment is required for a developer to consider the inclusion of affordable housing. This particular chapter is concerned with examining how the economic factor impacted each developer’s decision whether or not to produce affordable housing in their respective TOD. Table 5.1, below, provides the template and scoring categories for the economic factor and its variables that will be analyzed in this chapter. A positive score reflects economic conditions favorable to the development of affordable housing.

**Table 5.1 – Economic Factor Scoring Categories**

<table>
<thead>
<tr>
<th>Economic Variables:</th>
<th>-1 = Negative</th>
<th>0 = Neutral</th>
<th>+1 = Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Land Cost</em></td>
<td>Above fair market value</td>
<td>Fair market value</td>
<td>Below fair market value</td>
</tr>
<tr>
<td><em>Housing-Market Conditions</em></td>
<td>Negative housing-market conditions</td>
<td>Stable housing-market conditions</td>
<td>Positive housing-market conditions</td>
</tr>
<tr>
<td><em>Public Subsidy</em></td>
<td>Negative subsidy; developer pays financial penalty</td>
<td>No public subsidy</td>
<td>Positive public subsidy available</td>
</tr>
<tr>
<td><em>Return on Investment</em></td>
<td>Negative ROI</td>
<td>Neutral/break-even ROI</td>
<td>Positive ROI</td>
</tr>
</tbody>
</table>

**Englewood City Center TOD**

**Economic Context**

The economic context for Trammell Crow at the Englewood City Center TOD from 1998-2000 was characterized by solid economic conditions for the Denver region countered by concern over the untested TOD concept. Englewood’s commitment to redevelop the Cinderella Mall site into a TOD was the first experiment with the TOD concept in the Denver region. Many developers and planners in the area were unsure of
how successful the TOD concept would be in an older inner-ring suburb like Englewood (M. Utter, personal communication, September 2, 2010; G. Sears, personal communication, July 28, 2011). In addition to their concern in this regard, Trammell Crow was worried about its lack of experience with the mixed-use residential/retail development that characterized a TOD. Trammell Crow had very little experience in building the sort of multi-family, ground-floor retail/commercial development required by a TOD. Despite these added risks and concerns, Trammell Crow, intrigued by the chance to gain familiarity with the TOD development, committed to the creation of a 438-market-rate rental-unit project called the Alexan City Center as their way to gain expertise in the cutting-edge TOD concept.

Table 5.2 – Economic Factor Score for Trammell Crow at Englewood City Center

<table>
<thead>
<tr>
<th>Economic Variables:</th>
<th>*Score:</th>
<th>Rationale for Score:</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Land Cost</em></td>
<td>+1</td>
<td>Trammell Crow paid $5 million, approximately $10 per sq. ft., for a 10-acre parcel. Interviews and land comps confirmed this price as below fair market value.</td>
</tr>
<tr>
<td><em>Housing-Market Conditions</em></td>
<td>+1</td>
<td>HUD’s housing-market reports for 1997-2000 showed strong housing markets for the Denver region.</td>
</tr>
<tr>
<td><em>Public Subsidy</em></td>
<td>+1</td>
<td>TC received $19 million in COP bonds from the City of Englewood for infrastructure improvement and site design and preparation.</td>
</tr>
<tr>
<td><em>Return on Investment</em></td>
<td>+1</td>
<td>Trammell Crow projected a 10% ROI for their Alexan development.</td>
</tr>
<tr>
<td><em>Final Factor Score (Average)</em></td>
<td>+1.0</td>
<td>This final score reflected positive economic conditions for Trammell Crow at Englewood.</td>
</tr>
</tbody>
</table>

*Scores are based on the impact of economic variables on Trammell Crow during 1998-2000 as drawn from interviews with developers and reviews of primary source documents related to the Englewood City Center TOD development.
Scoring the Economic Variables

The first economic variable impacting Trammell Crow at the Englewood City Center development, land cost, was scored “+1” (see Table 5.2). The variable received this score based on interviews and land-sales comps for 1998-2000 retrieved from the LoopNet real-estate database. The $10-per-square-foot price paid by Trammell Crow was below the range of fair market value for similar land parcels at the time. Alan White, the current community-development director for the City of Englewood, stated in an interview that Trammell Crow “got a pretty good deal, ten bucks a square foot, for the land we sold them. They probably got a subsidy through the price of the land” (A. White, personal communication, July 21, 2011). Furthermore, Robert Simpson (the former community-development director at Englewood), reinforced White’s statement by arguing in an interview that Trammell Crow purchased the land “cheap” at $10 a square foot. Simpson went on to say that the market value for similar parcels of land at the time was near $13 to $15 per square foot (R. Simpson, personal communication, July 21, 2011).

The second economic variable impacting Trammell Crow at the Englewood development, housing markets, also garnered a “+1.” This score, based on housing-market-conditions research, indicated that Denver’s regional housing markets were indeed strong during 1997-1998 (HUD, 1997; 1998). HUD’s report showed tight labor markets and such positive housing indicators as an increase in building permits for both single- and multi-family construction, a rise in home prices and rents, low vacancy rates, and record-setting levels of home ownership. The following is a highlight of HUD’s research for 1997 and 1998, respectively:
In Colorado, multi-family building-permit activity totaled 5,911 units permitted in the Denver metropolitan area . . . a record high for the 1990s. The sales market in the Denver area was very strong in 1997. A boost in condominium sales in the second half of the year pushed total sales for 1997 to an all-time high. . . . The average price for a single-family home was up to almost $170,000, and the price for condominiums exceeded $100,000 for the first time (HUD, 1997).

Multi-family housing permits in 1998 in [the] Denver area were up 22 percent to 7,226 units, the highest yearly total in 14 years. Denver’s rental-housing market has remained firm throughout the surge in activity. A study by a local real-estate firm indicates that Denver had the largest percentage increase in average rent among 30 major cities during the 1990s (HUD, 1998).

The third economic variable impacting Trammell Crow, public subsidies, also received a positive rating of “+1.” This score was based on the City of Englewood’s commitment to provide $24.7 million in public funding for infrastructure and site improvements for the development (City of Englewood: Community Development Division, 2011). The city expected to receive approximately $19 million in public funding via the issue and sale of certificate of participation bonds. The remaining $5.7 million in public funds were expected to come from the contribution of RTD for the development of a pedestrian bridge to and transit-infrastructure improvements at the Englewood Transit Station. These funds were a significant advantage to Trammell Crow because they provided important investments for the Englewood City Center site from which Trammell Crow’s residential development benefited. One particular benefit was the RTD subsidy which helped develop the pedestrian bridge from the Englewood Transit Stop which ended a mere 50 yards from the entrance to the Alexan City Center apartments. This pedestrian amenity was a significant selling point for the new residences. Moreover, the extensive public subsidies from the City of Englewood enabled site development and design of pedestrian walkways, roads and buildings, street
lamps, and other amenities that significantly benefited the development and Trammell Crow.

The last economic variable impacting Trammell Crow’s Englewood development, return on investment, also received a positive score of “+1.” Interviews with Englewood City leaders as well as a review of primary source documents reveal that Trammell Crow expected to receive approximately $1.16 per square foot in monthly rental revenue for their residential units as well as $16 per square foot in annual rental revenue for their ground-floor retail (Guimond, 2010). Based on these revenue estimations, Trammell Crow’s ROI projection for the property was approximately 10%, which was slightly lower than for its other suburban multi-family residential products in the Denver region owing to uncertainty about the customer attractiveness of the TOD concept (S. Johnson, personal communication, March 24, 2011).

**Impact of the Economic Factor on Affordable Housing**

As stated earlier, a positive economic factor creates conditions favorable for affordable housing but does not guarantee it. In the case of the Englewood City Center TOD, the economic factor did score positively, but Trammell Crow ultimately decided against affordable housing. While political opposition played a significant role, another important reason for this decision was the overall risk related to the then-unproven TOD concept. Trammell Crow was worried by the unpredictability of the TOD housing markets. While housing markets in the Denver region were strong, Trammell Crow was uncertain how well TOD housing markets would perform in an older suburb like Englewood (G. Sears, personal communication, July 28, 2011). Trammell Crow was unsure if it would be able to acquire rental revenue and property appreciation values at a
similar level to those of its other suburban multi-family rental developments in the region. With these housing-market uncertainties, Trammell Crow wanted to reduce its exposure to risk and were unwilling to take on the additional risk of an affordable-housing development.

**Post-Development Economic Context**

While the City of Englewood and Trammell Crow were both concerned about the untested TOD concept, ultimately the City Center TOD development turned out to be a significant success (M. Utter, personal communication, September 2, 2010). Interviews with Englewood City leaders as well as a review of the relevant primary documents reveal that the City Center development exceeded expectations in the majority of its economic projections (R. Simpson, personal communication, July 21, 2011). For example, Trammell Crow expected to lease out its ground-floor retail space for approximately $16 per square foot. When its Alexan development opened in 2002, however, Trammell Crow was able to secure over $24 per square foot for its retail and $1.30 per square foot for its residential units (G. Sears, personal communication, July 28, 2011). Moreover, Trammell Crow proceeded to sell the Alexan City Center apartments in 2003 for $52 million, a sale which netted them a profit of $7 million and a 16% return on investment. The ROI of 16% far exceeded Trammell Crow’s more modest projection of 10%. Jeff Hawks of Apartment Realty Advisor, who helped broker the sale for Trammell Crow, claimed that his client was able to achieve $5,000 to $10,000 more per unit because of the apartment complex’s attractive location within a TOD. Finally, by project stabilization in 2002, the annual sales-tax revenue for the entire City Center development had reached $2 million and by 2005, $2.5 million. In only three years
following its opening, City Center’s level of sales-tax revenue (not inflation adjusted) from its entire commercial, retail, and residential developments nearly equaled that of the Cinderella Mall during its peak years (Simpson, 2007). The surprising success for Trammell Crow from its Alexan City Center development and the overall success of the Englewood City Center TOD reveal that Trammell Crow would have been able to take on the provision of affordable housing and would still have made a significant profit. Interviews with the mayor pro tem of Englewood, Jim Woodward, show that if the leaders of Englewood had known how successful the TOD concept would prove to be, they would have pushed harder for Trammell Crow to provide affordable housing (J. Woodward, personal communication, July 21, 2011).

Vallagio at Inverness TOD

Economic Context

The noteworthy success of the Englewood City Center TOD sent a positive message throughout the development community in the region. While most planners and developers believed that TODs would succeed in Greater Denver, there were uncertainties about whether the market timing and population densities in an older inner-ring suburb like Englewood were strong enough to support one (M. Utter, personal communication, September 2, 2010). With the financial success of the Englewood City Center TOD, however, many other developers in the area were eager to start mixed-use projects near available transit stops. One such developer was Peter Kudla.

Mr. Kudla, the Founder and CEO of Metropolitan Homes, was a Denver-area developer whose company was skilled at building smaller, low-maintenance homes that appealed to empty-nesters, retirees, and urban professionals (Huspeni, 2012). Mr. Kudla
saw the TOD concept as a great fit given his company’s focus on building higher-density luxury residences. With the TOD concept in mind, Mr. Kudla purchased a 30-acre parcel within the exclusive Inverness Business Park located directly across from the new Dry Creek Transit Stop. While many citizens and business leaders along the I-25 corridor were excited about the potential of mixed-use developments, there were also those who were hesitant to support such developments in the corporate office parks of the southeast I-25 corridor. The founders and business owners within Inverness were one group that was uncertain about how the mixed-use residential concept would fit with their reserved, upscale corporate park. The Inverness Group’s reluctance concerning a mixed-use residential development created tension for Peter Kudla and Metropolitan Homes.

Table 5.3 – Economic Factor Score for Vallagio at Inverness TOD

<table>
<thead>
<tr>
<th>Economic Variables:</th>
<th>*Score:</th>
<th>Rationale for Score:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land Cost</td>
<td>0</td>
<td>Metropolitan Homes paid $13 million, $10 per sq. ft., for a 30-acre parcel. Interviews and land comps confirmed this price as the fair market value.</td>
</tr>
<tr>
<td>Housing-Market Conditions</td>
<td>+1</td>
<td>HUD’s housing-market reports for 2003-2005 showed strong housing markets for the Denver region.</td>
</tr>
<tr>
<td>Public Subsidy</td>
<td>0</td>
<td>No public subsidies or TIFs were available for the project.</td>
</tr>
<tr>
<td>Return on Investment</td>
<td>+1</td>
<td>Metropolitan Homes projected a 30% ROI on a $200 million investment for an expected profit of $60 million.</td>
</tr>
<tr>
<td>Final Score (Average)</td>
<td>+.50</td>
<td>This final score reflected positive economic conditions for Vallagio.</td>
</tr>
</tbody>
</table>

*Scores were based on the projected impact of these economic variables on the developer, Metropolitan Homes, during the pre-development period from 2003-2005. Scores were determined from interviews with developers and key players as well as a review of primary source documents related to the Vallagio TOD development.
Scoring the Economic Variables

The land-cost variable for the Vallagio development scored “0” since the developer acquired the Vallagio parcel at fair market value (See Table 5.4.). Metropolitan Homes purchased the 30 acres in September 2005 for approximately $13 million, a price of approximately $10 per square foot. Interviews with key informants as well as land-sale comparisons for the area confirmed the fair market rate since at the time land parcels of similar size and location were selling in the same price range—$9 to $11 per square foot (Arapahoe County Assessor, 2006; S. Beasley, personal communication, December 12, 2012). Scott Beasley of Inverness Properties, one of the brokers involved in the land transaction for the Vallagio development, confirmed the fair market value: “We re-zoned most of the land, and then we sold it for market value . . . which at the time (2004-2005) was between $9 and $11 per square foot” (S. Beasley, personal communication, December 12, 2012). Moreover, the Arapahoe County Assessor’s Office cited a comparable eight-acre land parcel targeted for mixed-use development at Dry Creek and Yosemite, about one mile from the Vallagio development, which sold in September 2004 for approximately $4 million, or around $11 per square foot (Arapahoe County Assessor, 2006).

The second variable impacting the Vallagio development, housing-market conditions, scored “+1.” HUD’s research on housing-market conditions for the Denver region from 2004 and 2005 revealed strong activity in all the major housing indicators including new building permits, single- and multi-family development, rising home prices and rents, strong levels of home ownership, and low vacancy rates (HUD, 2004; 2005). Mr. Kudla in an interview confirmed the market conditions that both led to the
explosive growth of his company and created the positive projections for the Vallagio development. He stated,

We witnessed a spectacular change in the marketplace starting in about 1995. It was a very visible change. We saw a demographic profile change. The housing market, both for sale and for rent, started to rebound in a big way. Population growth was huge, job growth was huge. We took, from 1997 to 2005, a company that did zero to over $100 million in gross sales (P. Kudla, personal communication, December 5, 2012).

The third economic variable impacting the Vallagio development, public subsidy, was scored “0” because no public subsidies were projected as being available during the 2003-2005 pre-development timeframe. Metropolitan Homes considered applying for a TIF subsidy but was unable to acquire these funds since the project could not guarantee enough sales-tax revenue for timely repayment.

The last economic variable, return on investment, scored “+1” (See Table 5.4.). Peter Kudla projected a 30% return on his Vallagio investment (P. Kudla, personal communication, December 5, 2012). Such a return on an overall investment of approximately $200 million would translate into $60 million in profits. These strong projections were based on Metropolitan Homes past successes in developing luxury housing in the region as well as the positive market feedback from Trammell Crow’s successful sale of its Alexan City Center apartments at the Englewood City Center TOD in 2002.

Impact of the Economic Factor on Affordable Housing

Similar to the Englewood City Center development, the scoring of the economic variables for the Vallagio reveals the kind of positive economic context which creates favorable conditions for affordable housing. Still, no affordable housing was provided at Vallagio. The main reason turned out to be staunch opposition from the political actors
within the Inverness community. Interviews with Metropolitan Homes’ Peter Kudla revealed that he would have considered affordable housing at Vallagio to create more residential price diversity had Inverness not provided so much opposition. (More discussion on this point is presented in Chapter 7.)

**Post-Development Economic Context**

Metropolitan Homes broke ground for the Vallagio development in 2005 while the housing markets in Denver were still quite strong. Solid economic conditions for the region continued through 2006 and into early 2007 (HUD, 2007). Then, from late 2007 through 2008 the nation and the Denver region experienced one of the most precipitous housing busts in decades (HUD, 2008; 2009). Metropolitan Homes and the Vallagio development suffered significant negative consequences from the Great Recession. By 2008, the company had constructed and sold only around 280 units, or half their luxury condominiums and lofts at Vallagio (C. Grady, personal communication, November 30, 2012).

When the recession hit in 2008, capital markets dried up, and Metropolitan Homes was unable to acquire the financing needed to complete the final 300 for-sale units. As market conditions deteriorated, development at Vallagio stalled while Metropolitan Homes waited several years for the situation to improve. Ultimately in early 2014 Metropolitan Homes was able to finish its Vallagio development with the addition of 272 rental units. Mr. Kudla and Metropolitan Homes nevertheless had lost a significant amount of money because of the delays caused by the recession. As Mr. Kudla put it in an interview,

I think there is something called seven digits, and then it goes to eight digits. I am just going to let you know that I have lost over eight digits of money on Vallagio.
I will never make back what I lost. Never make that back . . . never. When I tell you I have had a piece of my soul and my body and my wallet carved, I am not kidding (P. Kudla, personal communication, December 5, 2012).

The significant financial losses suffered by Metropolitan Homes provide a dramatic example of why developers are so concerned about housing-market conditions and are fearful of taking on an additional risk like affordable housing in their projects. The housing recession that hit Mr. Kudla and Metropolitan Homes at Vallagio was a situation that could have just as easily happened to Trammell Crow in Englewood. Since developers are always dealing with the uncertainty of the housing market, it is no surprise that they wish to reduce their risks as much as possible.

Gates TOD

Economic Context

In late 2001 Cherokee Investment Partners purchased 50 acres of real estate located near downtown Denver at the old Gates Rubber Factory (Rebchook, 2002). Realizing that the industrial parcel was a brownfield site needing significant remediation, Cherokee immediately began lobbying the City of Denver for significant public subsidies. In 2003, while Cherokee was negotiating with the city for financial help, Trammell Crow sold its Alexan City Center apartments at Englewood for a record $52 million. The Alexan sale along with Cherokee’s significant investment plans for the Gates site spurred a development boon for TODs in the region (M. Utter, personal communication, September 2, 2010). By 2005, Metropolitan Homes had broken ground on the $200 million Vallagio development at Inverness, and Trammell Crow had begun additional TOD developments at Louisiana and Pearl Streets (29 luxury condominiums).
and Lone Tree/Lincoln Station (a 600-unit mix of apartments and condominiums near Park Meadows Mall in South Suburban Denver).

In an effort to leverage the booming TOD markets to help remediate one of the city’s biggest brownfields, the City of Denver awarded Cherokee a $126 million TIF subsidy for the remediation and redevelopment of the Gates site in 2006 (Kilzer, 2006). Soon after winning approval of the TIF subsidy, Cherokee selected Trammell Crow as one of its residential developers for the Gates site. In return for the significant subsidy, Cherokee and Trammell Crow agreed to a generous affordable-housing provision negotiated with the City of Denver and the non-profit organization FRESC. In December 2007 Trammell Crow broke ground on the 479-unit multi-family project which included 419 market-rate rental units (Alexan Broadway) and 60 affordable rental units (Broadway Junction).

Table 5.4 – Economic Factor Score for Trammell Crow/Gates TOD

<table>
<thead>
<tr>
<th>Economic Variables:</th>
<th>*Score:</th>
<th>Rationale for Score:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land Cost</td>
<td>0</td>
<td>The cost of $6 million for 5 acres ($23 per square foot) was the fair market value based on similar locations near downtown Denver.</td>
</tr>
<tr>
<td>Housing-Market Conditions</td>
<td>+1</td>
<td>Market surveys and HUD research for 2005-2007 showed strong housing-market conditions.</td>
</tr>
<tr>
<td>Public Subsidy</td>
<td>+1</td>
<td>Some $8.3 million were available in affordable-housing subsidies (LIHTC, HOME) as well as $125 million in TIF subsidy.</td>
</tr>
<tr>
<td>Return on Investment</td>
<td>+1</td>
<td>Projected ROI of 20%.</td>
</tr>
<tr>
<td>Final Factor Score (Average)</td>
<td>+0.75</td>
<td>Strong economic conditions prevailed.</td>
</tr>
</tbody>
</table>

*Scores were based on the projected economic-variable impact on the developer, Trammell Crow, during the pre-development period of 2005-2007. Scores were determined from interviews with developers and key players as well as a review of primary source documents related to the Gates/Trammell Crow development.
Scoring the Economic Variables

Trammell Crow purchased the five-acre parcel for its 479-unit project from Cherokee in November 2007 for approximately $6 million (Colorado Housing and Finance Authority, 2007). The parcel was one of the few sections of the Gates property that had been fully remediated and was considered a clean parcel with very few land preparations required. At the time of purchase, the parcel was especially attractive because of its location near downtown Denver and its significant potential for appreciation. Based on land-sale comps for 2006 and 2007 retrieved from the LoopNet real-estate database, the $23-per-square-foot price paid by Trammell Crow was within the range of fair market value for nearby land parcels and was thus scored “0” as recorded in Table 5.5 (LoopNet, 2006; 2007).

The second economic variable, housing-market conditions, was scored “+1” since market surveys and housing research revealed strong housing-market conditions for the Denver region during the pre-development time frame of 2005 to 2006 (HUD, 2005; 2006). A market survey from National Valuation Consultants in 2005 reported strengthening market conditions for multi-family housing developments in the Denver region. The report stated that Gates is located in a central metro area location where land is limited for residential development. . . . Vacancy rates are reaching levels on a market-wide basis which will support new multi-family construction. . . . Demand for apartment units is increasing as evidenced by decreasing vacancy rates in the market. This trend should continue as interest rates increase, impacting the affordability of home ownership. As demand for apartment units increases, rental rates should soon follow (National Valuation Consultants, Inc., 2005).

Furthermore, a housing-market survey conducted by RREEF in 2006 confirmed the solid market conditions for multi-family housing in the Denver region:
Indicators across all fronts suggest this is a good time to buy and own quality apartments in metro Denver: solid employment gains and prospects in growth sectors; increased venture capital flows; impressive infrastructure investment; strong net absorption of apartments and office space; limited new supply and pipeline; and effective rent increases achieved while maintaining occupancy (RREEF Research, 2006).

The public-subsidy variable was also scored “+1” since Trammell Crow expected to receive approximately $8.3 million in LIHTC subsidies for the funding of the 60-unit Broadway Junction affordable apartments (Colorado Housing and Finance Authority, 2007). Trammell Crow likewise projected it would receive approximately $1 million in developer fees from the $8.3 million in subsidies to offset its planning-and-development time and cost for the affordable units. In addition to this subsidy, Trammell Crow believed it would benefit from the $126 million TIF subsidy awarded to Cherokee for infrastructural remediation and development at the Gates site.

The final economic variable for the Gates site, return on investment, was also scored “+1” because Trammell Crow projected a 20% ROI from the sale of their 419-unit Alexan Broadway Station development. Trammell Crow had recently sold its Alexan City Center luxury-apartment development in the Englewood TOD for a $7 million profit and a 16% return on investment only one year after completion. The company consequently believed that their market-rate development at Gates would outperform its development in Englewood because of its superior location closer to downtown Denver (S. Johnson, personal communication, March 24, 2010). Trammell Crow thus projected that its market-rate rental units at Gates would achieve rents in excess of $1.50 per square foot (a level comparable to similar developments near downtown Denver) and a 20% return on investment.
Impact of the Economic Factor on Affordable Housing

The positive score for the economic factor recorded in Table 5.4, demonstrating supportive economic conditions for Trammell Crow at Gates, played a significant role in their decision to provide affordable housing at the Gates TOD. TOD housing markets during 2005-2006 were peaking in the Denver region. Trammell Crow had already experienced significant success through the sale of their Alexan City Center property in Englewood and had just finished two other successful TOD projects in the area (Pearl St. Station and Lone Tree). Of all these projects, the Gates TOD development was expected to perform the strongest because of its location and projected public and private investment likely to exceed $750 million (S. Johnson, personal communication, March 24, 2010). These conditions in addition to the significant public subsidies Trammell Crow expected to receive ultimately led to their positive decision on affordable housing.

Post-Development Economic Context

While Trammell Crow began to notice by mid-2007 some worrying signs for the economy in the near term, it had already acquired all the financing needed for its market-rate and affordable residential units, so Trammell Crow moved forward with the project and broke ground in late 2007. In 2008, the housing markets and economic conditions in the Denver region began to slide. When Cherokee declared bankruptcy in late 2009, it gave the remaining 25 acres back to the Gates Corporation (Jackson, 2009). At the grand opening of Trammell Crow’s Broadway Junction and Alexan Broadway apartments in 2010, the dilapidated Gates factory buildings were still standing nearby and no pedestrian-friendly walkways or parks had as yet been developed. Besides Trammell Crow’s development, no other significant redevelopment or remediation had taken place.
at Gates. Moreover, the $126 million in TIF subsidies granted to Cherokee (not Trammell Crow) were never used. Thankfully for Trammell Crow, the small 5-acre parcel where the Alexan and Broadway Junction Apartments were located was a clean parcel and had already been remediated by Cherokee (S. Johnson, personal communication, March 24, 2010).

Cherokee’s bankruptcy, the lack of infrastructure development, and the declining economic conditions in the region created significant losses for Trammell Crow (S. Johnson, personal communication, March 24, 2010). For example, the $23 per square foot that Trammell Crow paid Cherokee for their five-acre land parcel was based on premium-priced land parcels located near downtown Denver. Trammell Crow did not get full value for the price it paid for the parcel owing to the lack of remediation and re-development of the nearby parcels. Furthermore, Trammell Crow had strong expectations for the rental market at Gates and was looking forward to receiving more than $1.50 per square foot in monthly rental revenue. However, upon the grand opening of the Alexan Broadway luxury units, Trammell Crow was able to get only around $1.30 per square foot per month, 20 cents below its expectations. This cost Trammell Crow nearly $854,000 per year (S. Johnson, personal communication, March 24, 2010). Trammell Crow exhausted its entire $1 million developer fee on legal fees and administrative costs related to the delays in completing the affordable-housing component. In addition, the company incurred unexpected legal fees as a result of the complicated nature of the affordable development. Finally, owing to the lack of development at Gates, as of late 2013 Trammell Crow had not been able to sell the property and achieve the projected 20% return on investment.
Like Metropolitan Homes at Vallagio, Trammell Crow was the victim of the housing-market downturn caused by the Great Recession. Trammell Crow’s experience at Gates further exemplifies the risk caused by unpredictable housing markets that can turn at any given moment. This unpredictability is why developers require such significant incentives to take on an additional risk like the development of affordable housing. One such developer that did receive significant subsidies to help offset the risks associated with affordable housing was the Denver Housing Authority at its South Lincoln development.

South Lincoln TOD

Economic Context

The recession of 2008 served to halt the momentum of TOD development in the Denver region. Trammell Crow’s redevelopment at Gates was moving forward only because it had already broken ground while the Metropolitan Homes development at Vallagio was stalled. Most TOD developments in the Denver region that were not currently under construction were put on hold while developers waited for better market conditions. Moreover, as the economic situation deteriorated across the nation, the U.S. government began to stimulate the national economy with the passage of the 2009 American Recovery and Reinvestment Act (ARRA), also known as “the stimulus package.”

One focus of this initiative was so-called smart growth, construction projects like TODs which were aligned with the federal administration’s goal of promoting green, sustainable development. South Lincoln was a prime candidate for ARRA redevelopment funds since it was a badly deteriorated neighborhood located directly
across from the 10th and Osage Transit Stop. Perceiving that ARRA funds would be a great fit for the South Lincoln redevelopment, the Denver Housing Authority applied to the federal program for $10 million. On approval of its application in September 2010, the DHA broke ground on Phase I of the South Lincoln redevelopment, a 100-unit affordable senior housing project near 10th and Osage (Steffen, 2009).

**Table 5.5 – Economic Factor Score for South Lincoln TOD**

<table>
<thead>
<tr>
<th>Economic Variables:</th>
<th><em>Score:</em></th>
<th>Rationale for Score:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land Cost</td>
<td>+1</td>
<td>DHA owned all 17 acres of the redevelopment site. Hence there was no debt on the land and no land cost.</td>
</tr>
<tr>
<td>Housing-Market Conditions</td>
<td>0</td>
<td>HUD research for 2008-2010 reveals that housing sales were soft but stable, while rental markets were balanced to tight in the Denver region.</td>
</tr>
<tr>
<td>Public Subsidy</td>
<td>+1</td>
<td>The phase 1 project received $20,890,000 in subsidies: $12,015,000 in ARRA/HOME, $8,875,000 in LIHTC (CHFA) funds. Phases 2-4 are expected to acquire an additional $60 million in subsidies.</td>
</tr>
<tr>
<td>Return on Investment</td>
<td>+1</td>
<td>ROI is positive based on a projected $102,851 in annual rental income plus a $1,664,945 developer fee for phase I. Additional developer fees and positive rental revenue are projected for phase 2-4.</td>
</tr>
<tr>
<td>Final Score (Average)</td>
<td><strong>+0.75</strong></td>
<td>Strong economic conditions prevailed.</td>
</tr>
</tbody>
</table>

*Scores were based on the projected positive impact of the economic variables on the developer, Denver Housing Authority, for Phase I (100-unit senior housing apartments) of the South Lincoln project during the pre-development period of 2008-2010. Scores were determined from interviews with developers and key players as well as a review of primary source documents related to the South Lincoln TOD development.

**Scoring the Economic Variables**

Phase I of the South Lincoln redevelopment was a 100-unit senior-housing project located on 2.2 acres at 1099 Osage Street, Denver. The land, owned by the Denver Housing Authority, was considered attractive real estate since it was located in a TOD.
redevelopment project directly across from the 10th and Osage Transit Stop near downtown Denver. Since the DHA owned the property free and clear, the land-cost variable was rated “+1” because the land parcel had been acquired at below market value.

The second economic variable, housing markets, was scored “0” since housing-market conditions for the Denver region were balanced and stable for the 2009/2010 period. While existing home sales were still soft in Greater Denver, rental markets continued to stabilize and tighten as more households chose to rent rather than buy. HUD’s U.S. Housing Market Conditions Report testified to this stabilizing effect from late-2009 through 2010:

Housing market conditions continued to show signs of stabilizing during the fourth quarter of 2009. . . . Rental market conditions were balanced to soft throughout the Rocky Mountain region during the fourth quarter of 2009 (HUD, 2009).

The Denver area rental market is currently balanced. . . . In the second quarter of 2010, [the] apartment vacancy rate in the Denver metropolitan area averaged 6.4 percent, down from 8.3 percent a year earlier. . . . Monthly rents in Denver averaged $862, up slightly from $855 (HUD, 2010).

Economic conditions in the Rocky Mountain region have stabilized in recent months. . . . Rental market conditions were balanced to tight in most areas of the Rocky Mountain region in the fourth quarter of 2010. Demand for rental units has increased as more households have shifted from owner to renter occupancy. . . . The apartment market in the Denver-Aurora area was balanced to tight, with [a] 5.4 percent vacancy rate (HUD, 2010).

The public-subsidy variable for the South Lincoln TOD was scored “+1” since the DHA received significant subsidies to fund the development of the 100-unit senior-housing apartments. A total of $20,890,000 in subsidies was acquired for Phase One of the project including approximately $11 million in ARRA federal-stimulus funds in addition to $8,875,000 in LIHTC funding and $1 million in HOME funds (Colorado Housing and Finance Authority, 2010). Furthermore, the DHA projected an additional
$60 million in subsidies for Phases Two through Four of their development (Denver Housing Authority, 2010). The DHA had no capital outlay for the first phase since it was 100% funded by subsidies. While Phase Two through Four is still in the planning stages, source documents reveal that the DHA expects to carry approximately $15 million in permanent debt to go along with the $60 million in additional subsidies.

The final economic variable for the DHA, return on investment, was scored “+1” because the Denver Housing Authority projected a positive return on investment based on its projections for developer fees and rental revenue generated from the first four phases of the South Lincoln development. For the first phase of the development (10th and Osage) the DHA expected to receive approximately $102,851 in annual rental revenue in addition to a developer fee of $1,664,945 (Colorado Housing and Finance Authority, 2010). Moreover, additional developer fees and positive rental revenue is expected as a part of the remaining $60 million in subsidies from LIHTC, HOME, and HOPE VI funds projected for Phases Two through Four of the South Lincoln development (Denver Housing Authority, 2010).

It is important to note that the ROI for the DHA is calculated differently than for previous developments (Trammell Crow and Metropolitan Homes) because of the nature of its investment and its role as an affordable-housing provider. Most for-profit, market-rate multi-family residential developers like Trammell Crow and Metropolitan Homes calculate its projected ROI based on the percentage of profit they expect to receive upon the sale of its market-rate product. These types of developers seek to build its products, hold them for three to seven years (depending on market conditions), and then sell them for an expected profit ranging from 10% to 30% return on investment (S. Johnson,
personal communication, March 24, 2010; P. Kudla, personal communication, December 5, 2012).

For a developer like DHA, however, that mostly develops publicly subsidized affordable housing, there are longer requirements for holding onto the property. For example, most LIHTC developments require the developer to commit to owning and managing these affordable units for 45 years (Colorado Housing and Finance Authority, 2010). In these cases the DHA is not seeking to develop and quickly flip the property for an expected ROI. Rather, they will develop and hold it for the long term. In order to capture and measure the ROI variable in this case, this study thus uses the amount of developer fee and annual positive cash flow this affordable LIHTC development will likely produce for the DHA.

With regard to the DHA’s development of the first four phases of the South Lincoln TOD, DHA’s capital outlay was minimal because the first phase was 100% funded (10th and Osage), and the remaining three phases are estimated to be 80% funded. Consequently the DHA’s investment in the project will be mostly in the form of the administrative, strategic, and logistical efforts they committed to in the application and lobbying process for the LIHTC, ARRA, HOME and HOPE VI subsidies. The return on their “investment” efforts will thus come in the form of developer fees and positive net cash flow from these projects that help to pay their operational expenses and salaries.

**Impact of the Economic Factor on Affordable Housing**

The economic-factor score recorded in Table 5.5 reflects the positive economic conditions that influenced the DHA’s decision to include affordable housing at the South Lincoln TOD. The project had no land cost since the DHA already owned the parcel free
and clear. Furthermore, the housing-market conditions in the Denver region were stabilizing, while the rental market continued to strengthen. These favorable conditions augured well for future rental revenues and low vacancy rates. Moreover, the DHA was the beneficiary of a 100% public subsidy that allowed them to construct the entire Phase One 100-unit project without any debt financing. This strong subsidy additionally enabled the DHA to double its minimum operating reserves for the property from $140,592 to $290,677. Finally, the agency expected to secure a developer fee of $1.6 million on top of a positive cash flow exceeding $100,000 per year. This optimistic economic forecast thus created conditions of limited risk and strong economic incentives that shaped the DHA’s decision to develop its initial 100-unit affordable senior-housing unit. Furthermore, their future projections for additional subsidies for the last three phases created even more positive economic signals and reduced risks for its planned additional development at South Lincoln.

With regard to the economic factor’s impact on the DHA’s decision to produce affordable housing at South Lincoln, moreover, it is important to discuss the distinctions between for-profit developers like Trammell Crow and Metropolitan Homes, both of which are primarily market-rate residential developers, on the one hand, and a quasi-public, nonprofit developer like the DHA whose mission is primarily the development of affordable housing. In this regard, the positive economic factor at South Lincoln did not impact the DHA’s decision regarding affordable housing development in general, for they were always going to provide affordable housing in accordance with their mission. However, the positive impact of the economic factor did lead to their decision to produce affordable housing at the specific South Lincoln TOD site as opposed to another site.
Interviews with the lead developer for the DHA, Chris Parr, confirmed that the DHA was initially hesitant to redevelop the South Lincoln site because of the extraordinary site costs for TOD developments (C. Parr, personal communication, September 7, 2011). He stated that if it had not been for the significant subsidy package, the DHA would have foregone the redevelopment at South Lincoln and focused its affordable housing development elsewhere.

The research question for this study is, “How do the economic, regulatory, and advocacy factors influence a developer’s decision regarding the provision of affordable housing in a TOD?” The important part of the question for the DHA was the phrase “in a TOD.” If the DHA had not received the significant economic package that was expected to subsidize more than 85% of the first four phases of the development, they would have not produced affordable housing in the South Lincoln TOD and would instead have searched for another site. So the positive economic factor, while not impacting its general decision to provide affordable housing, had a significant impact on the DHA’s decision to do so at the South Lincoln TOD site.

**Post-Development Economic Context**

The first phase of the South Lincoln development opened in early 2013. The 100-unit affordable senior-housing development is currently leased to capacity with a waiting list for those seeking units. With the successful development of Phase One of the South Lincoln TOD, the DHA has now broken ground on the second phase. Meanwhile, economic conditions in the Denver region have continued to strengthen while rental markets have tightened, vacancy rates have dropped, and rents continue to rise.
Evans Station Lofts TOD

Economic Context

Following the successful development of Phase One of the South Lincoln TOD development, the economic and housing-market conditions for the Denver region continued to improve (HUD, 2012; 2013). With the Denver Fas Tracks light-rail build-out in full swing, TOD developers in the region were once again seeking opportunities for development near existing and future transit stops. As local economic conditions strengthened, many land parcels near transit stops were escalating in price and thereby causing unease amongst housing advocates troubled by the lack of affordable real estate and housing close to public transportation (Enterprise Community Partners, 2012).

In response to these concerns, Enterprise Community Partners and the Urban Land Conservancy began to work with the City of Denver to create an affordable-housing TOD Fund which would allow for land banking near TODs (The Urban Land Conservancy, 2012). At the same time as the TOD Fund was being developed, Troy Gladwell (founder and CEO of Medici Communities, a for-profit affordable housing development company) located a land parcel near the Evans Transit Station that proved an excellent location for an affordable residential development. Mr. Gladwell approached the ULC about using Denver TOD funds to purchase the property near the Evans Station. The ULC agreed to buy and hold the land for Mr. Gladwell while he applied for Low-Income-Housing Tax Credits. In 2012 Medici Communities, having been approved for the LIHTC funds, purchased the land from ULC and broke ground on a 50-unit affordable-housing project called Evans Station Lofts.
Table 5.6 – Economic Factor Score for Evans Station Lofts TOD

<table>
<thead>
<tr>
<th>Economic Variables</th>
<th><em>Score</em></th>
<th>Rationale for Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land Cost</td>
<td>0</td>
<td>Medici purchased one acre for $1,125,734 at $26 per square foot, which was fair market value.</td>
</tr>
<tr>
<td>Housing-Market Conditions</td>
<td>+1</td>
<td>HUD research reveals that rental-housing markets in the Denver region remained strong in 2011-2012.</td>
</tr>
<tr>
<td>Public Subsidy</td>
<td>+1</td>
<td>The project received $10,244,926 in LIHTC equity.</td>
</tr>
<tr>
<td>Return on Investment</td>
<td>+1</td>
<td>A positive ROI was based on a $1,145,581 developer fee as well as a projected $58,000 annual net positive cash flow from rental revenue.</td>
</tr>
<tr>
<td>Final Factor Score (Average)</td>
<td>+0.75</td>
<td>Strong economic conditions were in place.</td>
</tr>
</tbody>
</table>

*Scores were based on the projected impact of the economic variables on the developer, Troy Gladwell and Medici Communities, during the pre-development period of 2010-2012. Scores were determined from interviews with developers and key players as well as a review of primary source documents related to the Evans Station Lofts TOD development.

**Scoring the Economic Variables**

The Urban Land Conservancy purchased the one-acre parcel for the Evans Station Loft project in June 2011 for approximately $1,125,734 (The Urban Land Conservancy, 2012). The ULC then, after holding the parcel for one year, sold it for the same price to Medici Communities in June 2012. Land comps from the commercial real-estate service LoopNet confirmed that the $26-per-square-foot price was fair market value at the time in light of the values of other properties similar in size and location (Loopnet, 2011; 2012). Based on these conditions, the land-cost variable was scored “0” as indicated in Table 5.7, above.

The second economic variable, housing-market conditions, was rated “+1” since the rental-housing market in the Denver region was strong in late-2010 through 2011. As households moved away from home homeownership in the area, the rental markets continued to strengthen. HUD’s regional report on housing-market conditions in Denver...
for that time period thus revealed significant tightening in the rental market. The same report, moreover, showed that rental-vacancy rates in the Denver/Aurora community had dropped from 7.5 percent in 2007 (HUD, 2007) to less than 5 percent in 2011 (HUD, 2011). Moreover, HUD’s regional-activity report for Denver indicated that the average rents had risen from $770 per unit in 2009 to $900 by the third quarter of 2011 (HUD, 2011).

The third economic variable, public subsidies, was also scored “+1” because Medici Communities was able to acquire $10,244,926 in Low-Income-Housing Tax-Credit equity for the development of the Evans Station Lofts (Colorado Housing and Finance Authority, 2011).

The final economic variable, return on investment, was scored “+1” since Medici Communities projected it would receive $1,145,581 in developer fees as well as a $58,000 annual net positive cash flow from future rental revenue (Colorado Housing and Finance Authority, 2011).

Similar to the DHA, the return on investment variable for Medici was scored based on the amount of developer fee and positive net cash flow that the developer projected. Like the DHA, the primary investment that Medici had made for the Evans station property was the operational and administrative cost of Mr. Gladwell’s staff and their time invested in developing the plans for the project as well as the fees and costs related to the LIHTC application process. The LIHTC application process can take up to three years. The developer’s return on this investment of time and administrative expenses is the developer fee he receives in addition to the positive cash flow from the project.
Impact of the Economic Factor on Affordable Housing

The final score for the economic factor (See Table 5.6.) reflects positive economic conditions which strongly contributed to Medici Communities’ decision to provide affordable housing at the Evans Station site. Moreover, a closer look at each variable shows even stronger economic conditions than the score indicates. For example, although Medici Communities received no discount on the land purchase, the company gained a significant benefit in the land transaction. Namely, the Urban Land Conservancy purchased the parcel for the future site of the Evans Station Lofts with Denver TOD funds and held the parcel at no cost for a year while Medici applied for and received LIHTCs. ULC in fact had been prepared to hold the land long term if Medici had been denied the LIHTC subsidy. Once Medici Communities received its subsidy for the development, they purchased the land from ULC. The company paid no out-of-pocket expense for the land since the funds for the purchase had come entirely from the LIHTC subsidy. Furthermore, Medici anticipated receiving $1 million in developer fees from the LIHTC subsidy as well as a positive cash flow in excess of $50,000 per year plus the ownership of an appreciating asset (Colorado Housing and Finance Authority, 2011). These profit margins along with equity ownership presented significant benefits for a small developer like Medici with only three full-time staff (T. Gladwell, personal communication, April 19, 2012).

Similar to the DHA, Medici Communities is an affordable-housing developer. Thus the positive economic factor did not impact Medici’s choice to provide affordable housing given that that is the only type of housing they provide. However, the positive economic factor did impact Medici’s decision to provide affordable housing at the
specific Evans Station TOD site as opposed to another less attractive location. Without the advantageous buy-and-hold land acquisition process and the significant subsidies targeted for this particular TOD, Medici would have likely sought a different site to produce affordable housing (T. Gladwell, personal communication, April 19, 2012).

Post-Development Economic Context

As of August 2013 the Evans Station Lofts project was completed, with all the units fully leased and a significant waiting list. The affordable loft units are in high demand given the above-average amenities for affordable housing and the attractive loft-style design. In addition, the building is located directly across the street from the local light-rail station.

Satisficing and the Economic Factor

The theoretical framework for this dissertation holds that developers are satisficers, businesspeople who make development decisions based on a strategy of reducing risks and achieving satisfactory profits. The literature on satisficing claims that most developers avoid high-risk developments like urban infill/TODs. Their preference is to seek out more predictable, lower-risk developments on the suburban fringes (Lucy & Phillips, 2000). This section examines the actions that the local municipalities took with regard to reducing risks and incentivizing satisficing developers to produce affordable housing in the respective TODs. This section specifically focuses on how the economic variables impacted the satisficing conditions for each TOD developer.

The City of Englewood understood that Trammell Crow would be concerned about the risks associated with TODs since Englewood was the first community to attempt the untested concept in an inner-ring suburb of Denver. To convince Trammell
Crow to take the risk as the residential/ground-floor retail developer at the City Center project, the City offered them a discount on the purchase price of the land parcel as well as nearly $24 million in public subsidies to invest in infrastructure that would benefit Trammell Crow’s residential/retail development. These economic incentives proved strong enough to convince Trammell Crow to go forward with a market-rate residential development but they still decided against affordable housing. The decision against affordable housing was partly related to political opposition at Englewood but also related to the risks associated with the then-untested TOD residential and retail markets.

One of the keys to reducing risks for developers is their ability to have some certainty regarding housing-market conditions. The more predictable the latter are, the more likely a developer will make profits from rental revenue, vacancy rates, and property appreciation. For Trammell Crow at Englewood, the general housing markets were predictably solid for Denver from 1997 to 2000. However, the specific TOD housing markets were untested, particularly in an older, inner-ring suburb like Englewood. Trammell Crow felt like it was taking somewhat of a risk by agreeing to a market-rate residential development in the untested TOD market at Englewood, an unconventional situation for them.

Unlike the City of Englewood, the Inverness community did not feel the need to offer any economic incentives to Metropolitan Homes for its Vallagio development. One of the major reasons for its decision was the success of the Englewood City Center TOD. When Trammell Crow sold its Alexan development for a record profit, the TOD concept clearly showed that it could be successful and that TOD residential markets were sustainable, even thriving. The master developers at Inverness, having witnessed this
growth in regional TOD markets, determined that it wasn’t necessary to offer any economic incentives to Metropolitan Homes to convince them to invest in the Vallagio TOD. The proven TOD markets and the prime Inverness location were enough to provide significant profit incentives to the developer without additional economic inducements. Further, the Inverness community was not supportive of affordable housing at the Vallagio development (more on this in the discussion of advocacy in Chapter 7) so they especially didn’t feel the need to offer economic incentives to Metropolitan Homes for this sort of development. As a result, Metropolitan Homes received neither a land discount nor a public subsidy for its Vallagio development at Inverness.

Unlike the Inverness community, The City of Denver worked to provide economic benefits to reduce risks for Trammell Crow at Gates. Even though the TOD markets were strengthening in the Denver region, there were still considerable risks involved in the complex undertaking of remediating and redeveloping the Gates factory. Furthermore, the City of Denver wanted to ensure that affordable housing would be developed at the Gates site. To help reduce risks and incentivize Trammell Crow to agree to the latter, the City of Denver saw to it that Trammell Crow benefited from significant public subsidies for its planned development. The city thus helped Trammell Crow acquire nearly $8 million in LIHTC and HOME subsidies for the development of the Broadway Junction affordable apartments. Furthermore, Trammell Crow expected to benefit from the $125 million TIF subsidy which was committed to infrastructure and property improvements at Gates.
Similar to Trammell Crow at Gates, the Denver Housing Authority was also the beneficiary of reduced economic risks at its South Lincoln development thanks to significant public subsidies. The City of Denver supported the DHA’s application requesting $10 million in federal ARRA stimulus funds. In addition, the City of Denver assisted the DHA in receiving $70 million more in subsidies from LIHTC, HOME, and HOPE VI, among other sources.

Finally, Medici Communities too had reduced economic risks thanks to the City of Denver’s help with their land acquisition. The city, in conjunction with Enterprise and the Urban Land Conservancy, used its TOD Fund to make nearly $1 million available to the ULC to buy and hold the Evans Station parcel for Medici while the latter was acquiring LIHTC financing for the Evans Station Lofts development.

In each of the three Denver TOD cases where affordable housing was provided, the local communities worked to reduce the risks to the developers by helping them gain significant public subsidies for affordable-housing development. In the case of Medici, the City of Denver itself offered economic assistance with the land-acquisition process. In all three, the local community worked to provide satisficing conditions to the developers to incentivize them to provide affordable housing. Without these economic incentives and the subsequent satisficing conditions they presented for affordable housing development, Trammell Crow would have likely foregone affordable housing development at Gates and focused only on market-rate development, while the DHA and Medici would have pursued affordable housing development at another site.

In the case of Trammell Crow at Englewood, while the community offered economic incentives in the form of a land-cost discount and public-subsidy benefits,
Trammell Crow still decided against affordable housing. The underlying risks imposed by the still-untested TOD concept and political opposition would not allow for satisficing conditions for Trammell Crow when it came to affordable-housing development.

Finally, in the case of Metropolitan Homes at Inverness, that community did not provide any economic incentives. Their lack in addition to the community’s opposition to affordable housing created non-satisficing conditions for Metropolitan Homes and thus effectively precluded affordable-housing development at Inverness.
CHAPTER VI

ANALYSIS OF THE REGULATORY FACTOR

Introduction

This chapter analyzes the regulatory factor and its variables—zoning, infrastructure, parking, and retail requirements—and their impact on residential developers’ decision-making processes regarding the provision of affordable housing within each of the five Denver TOD cases being studied. As in the previous chapter, the scoring analysis for each TOD case focuses on the pre-development time period consisting of the two years leading up to the groundbreaking for each project. A brief post-development analysis of each case follows. The chapter concludes by examining the impact of the regulatory factor on the developers’ affordable-housing decisions in terms of satisficing.

Research Question and the Regulatory Factor

As discussed in Chapter 3, this study holds that the regulatory factor is a mediating one which serves to enhance or diminish the dominant economic factor. If the regulatory requirements for a particular TOD are costly, this condition will diminish the economic factor and reduce the likelihood that affordable housing will be developed. Conversely, if regulatory requirements are reduced, the economic factor will be enhanced and more favorable conditions for affordable housing will be created. Table 6.1, below, provides the template and scoring categories for the regulatory factor and its variables. A positive score reflects regulatory conditions favorable to the development of affordable housing.
Table 6.1 – Regulatory-Factor Scoring Categories

<table>
<thead>
<tr>
<th>Regulatory Variables:</th>
<th>-1 = Negative</th>
<th>0 = Neutral</th>
<th>+1 = Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zoning Requirements</td>
<td>Above-average zoning requirements (e.g., full rezoning).</td>
<td>Average zoning requirements (partial rezoning).</td>
<td>Below-average zoning requirements (no rezoning).</td>
</tr>
<tr>
<td>Infrastructure Requirements</td>
<td>Above-average infrastructure requirements (more than 10% of total budget).</td>
<td>Average infrastructure requirements (between 5% and 10% of total budget).</td>
<td>Below-average infrastructure requirements (less than 5% of total budget).</td>
</tr>
<tr>
<td>Parking Requirements</td>
<td>Above-average parking costs (more than $12,000 per residential unit).</td>
<td>Average parking costs ($8,000-$12,000 per residential unit).</td>
<td>Below-average parking costs (less than $8,000 per residential unit).</td>
</tr>
<tr>
<td>Ground-Floor Retail Requirements</td>
<td>Above-average retail requirements (more than 60 sq. ft. per residential unit).</td>
<td>Average retail requirements (40-60 sq. ft. per residential unit).</td>
<td>Below-average retail requirements (less than 40 sq. ft. per residential unit).</td>
</tr>
</tbody>
</table>

Englewood City Center TOD

Regulatory Context

When the City of Englewood took on the responsibility for being the master developer of the former Cinderella Mall site, it knew there would need to be significant infrastructure remediation and zoning changes to attract private development. Moreover, since the TOD concept was untested in the Denver region, the City of Englewood felt compelled to reduce risk levels as much as possible to incentivize private developers to
commit to the City Center TOD project (R. Simpson, personal communication, August 6, 2013). One way the city believed it could reduce risks was to remediate and rezone the site to make it market ready for development. Upon realizing the magnitude of infrastructural and site remediation needed for the 55-acre project, the city issued approximately $19 million in certificate of participation bonds. The majority of the funds raised by the COPs were invested in site remediation, including the demolition of the entire mall; removal of thousands of pounds of concrete; construction of roads, sidewalks, civic space, a public plaza, pedestrian walkways, public art, landscaping and lighting as well as the development of water, sewage, and electrical utilities (Stitt, 1997). The city also completely rezoned the site from single-use commercial/business to mixed-use/TOD zoning. This substantial commitment from the City of Englewood was a significant reason for Trammell Crow to agree to undertake residential and retail development at the City Center TOD site.

Table 6.2 – Regulatory-Factor Score for Englewood City Center TOD

<table>
<thead>
<tr>
<th>Regulatory Variables:</th>
<th>*Score:</th>
<th>Rationale for Score:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Zoning Requirements</strong></td>
<td>+1</td>
<td>Below-average zoning costs: The City of Englewood completely rezoned the City Center TOD prior to Trammell Crow’s agreement to a residential/mixed-use development.</td>
</tr>
<tr>
<td><strong>Infrastructure Requirements</strong></td>
<td>+1</td>
<td>Below-average infrastructure costs: The City of Englewood completely remediated the City Center TOD site and built infrastructure.</td>
</tr>
<tr>
<td><strong>Parking Requirements</strong></td>
<td>-1</td>
<td>Above-average parking costs: $20,700 per unit based on a four-story parking garage with 348 spaces, 92 attached garages, and 239 surface parking spots for 438 residential units.</td>
</tr>
<tr>
<td><strong>Ground-Floor Retail Requirements</strong></td>
<td>-1</td>
<td>Above-average ground-floor requirements: 66 sq. ft. of retail requirement per residential unit. (29,000 sq. ft. divided by 438 residential units)</td>
</tr>
<tr>
<td><strong>Final Score (Average)</strong></td>
<td>0</td>
<td>Neutral regulatory conditions: minimal infrastructure and zoning costs offset by above-average parking and retail costs.</td>
</tr>
</tbody>
</table>
Scores are based on the impact of the regulatory requirements on Trammell Crow during 1998-2000 as drawn from interviews with developers and reviews of primary source documents related to the Englewood City Center TOD development.

Scoring the Regulatory Variables

The first regulatory variable for the Englewood City Center TOD development, its zoning requirements, was scored “+1.” The variable received this score because Trammell Crow incurred no zoning costs or requirements since the City of Englewood had already rezoned the site from B-1 (single-use, business) to the new mixed-use/TOD zoning code in 1998 (R. Simpson, personal communication, July 21, 2011). This new zoning code, referred to a PUD-2, was specifically designed to accommodate mixed-use developments comprised of residential, retail, and office space integrated into the Englewood Transit Stop.

The second regulatory variable impacting the Englewood development, its infrastructure requirements, also received a “+1.” This score was based on the reduced site-preparation and infrastructural costs incurred by Trammell Crow. The City of Englewood had invested the majority of its $19 million in COPs to fund the remediation and infrastructure development of the City Center TOD site to make it build ready for private development (Englewood, 2010).

The third regulatory variable, parking requirements, received a “-1” since the total cost per residential unit equaled approximately $20,700. This score resulted from the significant parking costs imposed on Trammell Crow because they were required to build a four-story parking garage that contained 348 parking spots at an approximate cost of $20,000 per spot (Guimond, 2010; G. Krause, personal communication, December 5, 2012). In addition to the garage, Trammell Crow had to provide 92 attached-garage
parking spots at an approximate cost of $10,000 per spot as well as 239 surface spots at an average cost of $5000 per spot.

The last regulatory variable impacting Trammell Crow, ground-floor retail requirements, also received a “-1.” This score resulted from the above-average ground-floor retail requirement of approximately 66 square feet of retail/office space for every residential unit. Because of the mixed-use requirements of the TOD concept, the City of Englewood compelled Trammell Crow to develop approximately 29,000 square feet of ground-floor retail space for small businesses, offices, and boutique shops. As previously stated in Chapter 3, this requirement was considered above average for mixed-use TOD types of developments in the Denver region (R. Simpson, personal communication, July 21, 2011)

**Impact of the Regulatory Factor on Affordable Housing**

While political opposition at Englewood was the most significant driver of Trammell Crow’s decision against affordable housing, the higher risks associated with the parking and ground-floor retail requirements contributed to that decision as well. While Trammell Crow was the beneficiary of reduced zoning and infrastructure requirements, these benefits were more than offset by increased costs for parking and ground-floor retail. The latter were much higher for Trammell Crow than those of its typical multi-family non-TOD development. The company’s typical suburban multi-family apartment developments in the Denver region required only two basic surface parking spots per unit (S. Johnson, personal communication, March 24, 2010). These surface lot parking spots cost, on average, $5,000 per spot (G. Krause, personal communication, December 5, 2012; Rick Williams Consulting, 2007). However,
Englewood’s TOD design standards necessitated that Trammell Crow build a four-story parking garage with 348 garage parking spaces in addition to 92 attached garages and 239 surface spaces for the significant cost of $20,700 per unit.

In addition to the risks imposed by parking specifications, the ground-floor retail requirements created even more risk for Trammell Crow. When the company initially agreed to residential and retail mixed use for the City Center project, they had hoped they could provide the typical free-standing retail stores separate from the residential building (R. Simpson, personal communication, July 21, 2011). However, the TOD design standards for the City Center called for Trammell Crow to build retail space on the ground level of the residential buildings to create a more pedestrian-friendly environment. The company considered backing out of the development because of concerns about adequate density and foot traffic to support retail stores on the ground floor. Through significant negotiations, the developer was ultimately able to convince the City of Englewood to reduce its retail requirements from 45,000 to 29,000 square feet. Nevertheless, 29,000 square feet was still large enough to cause Trammell Crow to worry that they might take losses on its ground-floor retail leases (R. Simpson, personal communication, July 21, 2011).

The risks imposed by the parking and ground-floor retail requirements created significant concerns for Trammell Crow when they were originally considering the development of affordable housing at Englewood. While Trammell Crow was desirous of the developer fees and small rental revenue to be gained from the development of an affordable LIHTC development, the increased risks related to the parking and ground-floor retail requirements at the City Center TOD caused them to balk at taking on another
distraction like affordable housing. These regulatory risks combined with the Englewood City Council’s opposition that later emerged (more in Chapter 7) led to Trammell Crow’s decision against it.

**Post-Development Regulatory Context**

Interviews with Englewood City leaders as well as a review of primary documents reveal that Trammell Crow matched or exceeded its expectations for ground-floor retail revenues (R. Simpson, personal communication, July 21, 2011). The company had estimated its spaces would lease for $13 to $16 per square foot per year upon opening. However, when the Alexan City Center apartments actually opened, the ground-floor retail space was leasing for $19 per square foot (G. Sears, personal communication, July 28, 2011). This better-than-expected result doubtless helped Trammell Crow sell its property in 2003 for a $7-million profit (Rebchook, 2003). As previously stated, the unexpected success of the ground-floor retail leases for Trammell Crow and the subsequent sale of its Alexan product revealed that they likely would have been able to develop affordable housing at the City Center TOD and still have enjoyed a nice profit. However, at the time of decision making, Trammell Crow believed that the parking and retail requirements along with political opposition created too much risk for them to move forward with affordable housing.

**Vallagio at Inverness TOD**

**Regulatory Context**

The context for Metropolitan Homes’ Vallagio TOD development was similar to that for Trammell Crow’s at Englewood. Metropolitan Homes also benefited from reduced zoning costs and infrastructure requirements but encountered significant costs
related to parking and ground-floor retail requirements. Metropolitan Homes nevertheless had the advantage of witnessing Trammell Crow’s success at Englewood, which, as has just been shown, included better-than-expected retail revenues. The positive Englewood TOD experience helped decrease Metropolitan Homes’ concerns about the risks and uncertainties related to the ground-floor retail requirements facing them.

Table 6.3 – Regulatory-Factor Score for Vallagio at Inverness TOD

<table>
<thead>
<tr>
<th>Regulatory Variables:</th>
<th>*Score:</th>
<th>Rationale for Score:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zoning Requirements</td>
<td>+1</td>
<td>Below-average zoning requirements: property completely rezoned for mixed-use TOD in 2004.</td>
</tr>
<tr>
<td>Infrastructure Requirements</td>
<td>+1</td>
<td>Below-average infrastructure requirements.</td>
</tr>
<tr>
<td>Parking Requirements</td>
<td>-1</td>
<td>Above-average parking costs: $34,900 per unit based on 585 underground garage parking spaces, 202 attached garages, and 572 surface parking spots for 559 residential units.</td>
</tr>
<tr>
<td>Ground-Floor Retail Requirements</td>
<td>-1</td>
<td>Above-average ground-floor requirements: 75 sq. ft. of retail requirement per residential unit. (42,000 sq. ft. divided by 559 residential units)</td>
</tr>
<tr>
<td>Final Score (Average)</td>
<td>0</td>
<td>Neutral regulatory conditions.</td>
</tr>
</tbody>
</table>

*Scores were based on the projected impact of the regulatory variables on the developer, Metropolitan Homes, during the pre-development period of 2003-2005. Scores were determined from interviews with developers and other key players as well as a review of primary source documents related to the Vallagio TOD development.

Scoring the Regulatory Variables

The zoning-requirement variable for the Vallagio development was scored “+1” since the Inverness site had been completely rezoned for mixed use by the time Metropolitan Homes purchased the parcel in 2005 (P. Kudla, personal communication, December 5, 2012). Mr. Kudla, the CEO of Metropolitan Homes, had made this
rezoning a requirement before he would agree to purchase the property from the Opus Investment Group. The new zoning classification allowed for densities of 50 units per acre with a maximum building height of 120 feet. The rezoning of the property, which saved Mr. Kudla much time and energy, was a critical incentive for his purchase of the land.

The second regulatory variable at the Vallagio development, the infrastructure requirement, also received a “+1” because the Vallagio parcel at Inverness had already been improved and made ready for development by the Inverness Metropolitan Improvement District (P. Mulhern, personal communication, December 5, 2012). Since the major nearby roads, Inverness West Drive and Dry Creek Road, were already developed, there was no need to build new roads on the parcel. Moreover, there were no excessive fees for developing community parks or schools required from the developer. In an interview with Peter Kudla, he explained how the reduced infrastructural costs were part of the reason he purchased the property:

I think one of the advantages of the site was that all of the open space was already dedicated so we didn’t have extra costs there. We didn’t have any extra storm sewer costs. We didn’t have any extra road costs. The main road, Inverness West, was in, and Dry Creek Road was in. No parks and school. No special district allocations. The site didn’t have that. That’s one of the reasons I paid $10 per square foot for the land (P. Kudla, personal communication, December 5, 2012).

The third regulatory variable impacting the Vallagio development, the parking requirement, received a “-1” since the average parking cost per unit was approximately $34,900 (G. Krause, personal communication, December 5, 2012). The cost per unit was based on 585 underground spots at $25,000 per spot, 202 attached garages at $10,000 per spot, and 572 surface spots at $5,000 per spot for a total cost of $19,505,000 divided by
559 residential units. These significant parking costs for the Vallagio development were related to this high-density development’s being located on a relatively small footprint coupled with Inverness’s stringent demands for parking. The Inverness community and Arapahoe County insisted that Vallagio provide the standard two parking spaces per unit even though the development was a TOD (many TODs are allowed reduced parking requirements because of their proximity to transit and the expected reduced automobile usage on that account). In an interview, Greg Krause, Metropolitan Homes’ president of construction, commented on the impact of these required parking expenses for the Vallagio development:

What we have done to achieve the parking requirements is the most expensive parking spaces you can have. Your parking is driven by municipalities, so . . . in a lot of cases you’re forced to go underground so your cost per space goes exponentially up from surface-parked to detached garages to attached-park to underground. . . . [The] 1st-level and 2nd-levels [were] underground, and each one [represents] an increase in cost. You have to go underground so it drives the cost of construction which in the end drives the cost of the unit. So how did we achieve the parking? We went underground with most of it (G. Krause, personal communication, December 5, 2012).

The final regulatory variable impacting the Vallagio development, the requirement for ground-floor retail, also received a “-1” since the development required 75 square feet of retail space for each residential unit. The Vallagio development plan called for approximately 42,000 square feet of retail space for 559 units, an above average amount in relation to the size of the development. Mr. Kudla was aware of the risks of such a significant portion of commercial/retail but was convinced the upscale restaurants and small boutique shops would succeed (P. Kudla, personal communication, December 5, 2012).
Impact of the Regulatory Factor on Affordable Housing

Similar to Trammell Crow at Englewood, while advocacy opposition was the main driver of Metropolitan Homes decision to forego affordable housing (more in Chapter 7), the significant parking requirements and risks related to the ground-floor retail requirement also contributed significantly to Metropolitan Homes’ decision against it. Arapahoe County had insisted that Metropolitan Homes provide slightly more than two parking spots for every residential unit at the Vallagio development. Owing to the high-density development and small footprint at Vallagio, Metropolitan Homes was thus forced to build parking garages two stories underground, a circumstance which made the parking costs extremely high. Furthermore, Metropolitan Homes’ risks increased because of the Vallagio ground-floor-retail requirement of 42,000 square feet for the 559 units, a significant amount of retail/commercial space in a suburban/office area development with unproven pedestrian foot traffic.

Post-Development Regulatory Context

The most significant negative regulatory outcome for the Vallagio development was the complete failure of the ground-floor retail development. Metropolitan Homes’ 42,000 square feet of ground-floor retail space posed a significant risk for a development located in the suburbs with the lack of foot traffic necessary to support so many stores. Further complicating the ground-floor retail requirement was the Inverness Planning and Architectural Committee’s (IPACC) refusal to allow Metropolitan Homes to develop signage and design standards that would have made the new retail venues visible to vehicles on Interstate 25 (N.Sharpe, personal communication, December 12, 2012). The lack of visibility of the retail development at Vallagio leading to the subsequent failure of
that aspect of the development was a significant setback for Metropolitan Homes, which had to subsidize these stores in their struggle to stay afloat.

Gates TOD

Regulatory Context

The regulatory context for Trammell Crow at the Gates TOD in 2005 to 2007 was characterized by less risk than the developments at Vallagio and Englewood. The Gates site was similar to Englewood and Vallagio in that it had been completely rezoned for mixed-use development and required no remediation. However, the big difference for Trammell Crow at Gates was that its ground-floor retail requirement (12,500 retail square feet/26 square feet per residential unit) was much more manageable than the more significant requirements at Vallagio (75 square feet per unit) and Englewood (66 square feet per unit). Furthermore, Trammell Crow had the advantage of witnessing its own company’s success at Englewood, which included better-than-expected ground-floor retail leases that helped moderate the company’s concerns about the retail requirement at the Gates TOD.

Table 6.4 – Regulatory-Factor Score for Trammell Crow/Gates TOD

<table>
<thead>
<tr>
<th>Regulatory Variables:</th>
<th>Score:</th>
<th>Rationale for Score:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zoning Requirements</td>
<td>+1</td>
<td>Below-average rezoning requirements as property was completely rezoned for mixed use by Cherokee in 2003/2004.</td>
</tr>
<tr>
<td>Infrastructure Requirements</td>
<td>+1</td>
<td>Below-average infrastructure requirements and costs as land parcel was remediated by Cherokee.</td>
</tr>
<tr>
<td>Parking Requirements</td>
<td>-1</td>
<td>Above-average parking costs: $24,630 per residential unit based on six-story parking garage with 590 parking spots for 478 residential units.</td>
</tr>
<tr>
<td>Ground-Floor Retail Requirements</td>
<td>+1</td>
<td>Below-average ground-floor requirements: 26 sq. ft. of retail required per residential unit. (12,500 sq. ft. divided by 478 residential units)</td>
</tr>
<tr>
<td>Final Score (Average)*</td>
<td>+0.50</td>
<td>Positive conditions resulting from reduced zoning, infrastructure, and retail requirements which offset higher parking costs.</td>
</tr>
</tbody>
</table>
*Scores were based on the projected regulatory factor’s impact on the developer, Trammel Crow, during the pre-development period of 2005-2007. Scores were determined from interviews with developers and other key players as well as a review of primary source documents related to the Gates/Trammell Crow development.

**Scoring the Regulatory Variables**

The zoning and infrastructure requirements for the Trammell Crow/Gates TOD development were both scored “+1” inasmuch as these variables represented below-average requirements and served to reduce costs for Trammell Crow at Gates (See Table 6.4, above.). In June 2003 the Denver City Council approved a newly created zoning classification, TMU-30, for the 50-acre western Gates parcel (Vaughan, 2003). Then, in December 2004 the Council voted to rezone the 30-acre east parcel at Gates as TMU-30 (Hudson 2004). The new zoning code (Transit Mixed Use-30) allowed for residential, retail, office, hotel, and light-commercial development at Gates within the context of the adjacent mass-transit stop. This rezoning of the Gates development benefited Trammell Crow since the developer did not have to use its time and money for rezoning. Furthermore, the infrastructural costs were significantly reduced for Trammell Crow because the five-acre parcel was one of the few clean pieces of land at the former Gates factory site that needed only partial remediation and site preparation which Cherokee had provided before selling the parcel to Trammell Crow (S. Johnson, personal communication, March 24, 2010).

The third regulatory variable for the Trammell Crow development, parking, received a “-1,” however, because Trammell Crow’s parking cost were, at a cost of $24,630 per unit, above average (S. Johnson, personal communication, March 24, 2010). Trammell Crow’s significant parking costs were based on the required development of a six-story garage with 590 parking spots at a cost of approximately $20,000 per spot. The
total cost of the parking garage was close to $11,800,000 for the 479 unit project. The parking garage was shared by both the residents of the 60-unit affordable development (Broadway Junction) and those of the 419 market-rate units (Alexan Broadway). The final regulatory variable, the ground-floor retail requirement, was scored “+1” since the 26 square feet of required retail per residential unit was a below-average requirement (See table 6.1.). Trammel Crow self-financed the retail space for $2,221,606.

**Impact of the Regulatory Factor on Affordable Housing**

The final score of “+.50” (See table 6.4, above.) presented favorable regulatory conditions for the development of affordable housing and indeed weighed positively in the company’s decision to take it on at the Gates development. While Trammell Crow projected significant parking costs, these were offset for them by the reduced zoning and infrastructure requirements. Furthermore, Trammell Crow was required to develop only 12,500 square feet of ground-floor retail (26 square feet per unit), an amount that struck them as much more manageable than the 29,000-square-feet (66 square feet per unit) requirement at Englewood. With this reduced square-footage and the higher density-and-foot-traffic projection at Gates, Trammell Crow believed that its ground-floor retail risks would be manageable.

**Post-Development Regulatory Context**

The post-development analysis of the regulatory conditions at Gates revealed a much different set of circumstances for Trammell Crow than they had originally hoped for. Trammell Crow had agreed to develop affordable housing in 2005-2007, a period when market conditions were strong, the regulatory context was positive, and the master developer, Cherokee, was moving forward with grand development plans for Gates. By
the time Trammell Crow had finished its development at Gates in late 2010 to early-
2011, however, Cherokee had filed for bankruptcy, and no redevelopment had taken
place at Gates. This outcome had a strong negative impact on Trammell Crow’s ground-
floor retail revenue. With the economy struggling, Cherokee’s bankruptcy, and the lack
of redevelopment surrounding the Gates site, there was not enough population density
and foot traffic to produce demand for the retail stores. As a consequence, the space
remained vacant for two years. Trammell Crow expected to earn approximately $19 per
square foot from the 12,500 retail square footage, yet this empty space produced no
income in 2011 and 2012 while Trammell Crow had to pay its taxes and utilities. As a
result, Trammell Crow lost approximately $30,000 per month during these 24 months (S.
Johnson, personal communication, March 24, 2010).

South Lincoln TOD

Regulatory Context

During the pre-development period (2008-2010) for the South Lincoln TOD, the
Denver Housing Authority had the advantage of observing the significant problems that
the Vallagio and Trammell Crow’s Gates TOD developments had had with regard to
supporting the ground-floor retail requirement (C. Parr, personal communication,
September 7, 2011). While the South Lincoln development plan called for extensive
ground-floor retail square footage which increased the risks for the DHA, using the
lesson learned from Vallagio and Gates, the DHA was able to slightly reduce these risks
by working to modify its retail space for better market flexibility. The agency
consequently created ground-floor retail/office spaces that were less dependent on
pedestrian foot traffic as they set aside a portion of the space for community-service
providers and the vendors that worked with them. The space could then be converted to retail shops like restaurants and gift shops once the foot traffic proved strong enough to support them.

Table 6.5 – Regulatory-Factor Score for South Lincoln TOD

<table>
<thead>
<tr>
<th>Regulatory Variables:</th>
<th>*Score:</th>
<th>Rationale for Score:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zoning Requirements</td>
<td>+1</td>
<td>Below-average zoning requirements for South Lincoln TOD; the City of Denver helped DHA with the rezone.</td>
</tr>
<tr>
<td>Infrastructure Requirements</td>
<td>-1</td>
<td>Above-average infrastructure and site preparation owing to major demolition, road creation, and flood-plain issues.</td>
</tr>
<tr>
<td>Parking Requirements</td>
<td>-1</td>
<td>Above-average parking costs: $15,309 per unit based on parking garage with 422 spots and 192 surface parking spots for 450 residential units.</td>
</tr>
<tr>
<td>Ground-Floor Retail Requirements</td>
<td>-1</td>
<td>Above-average ground-floor requirements: 133 sq. ft. of retail requirement per residential unit. (60,000 sq. ft. divided by 450 residential units)</td>
</tr>
<tr>
<td><strong>Final Score (Average)</strong></td>
<td>-.50</td>
<td>This score reveals negative regulatory conditions related to infrastructure, parking, and retail/office.</td>
</tr>
</tbody>
</table>

*Scores were based on the projected impact of the regulatory variables on the developer, Denver Housing Authority, during the pre-development period of 2008-2010. Scores were determined from interviews with developers and other key players as well as a review of primary source documents related to the South Lincoln TOD development.

**Scoring the Regulatory Variables**

The zoning-requirement variable for the South Lincoln TOD development received a “+1” since the Denver Housing Authority was the beneficiary of reduced zoning requirements for the South Lincoln redevelopment (See Table 6.5.). During the master planning of the South Lincoln redevelopment in 2009, the DHA invited Kristin Krasnove of the Denver Community Planning and Development Department to be on the master planning team for the development. Ms. Krasnove was the City of Denver’s point
person for creating the new zoning code for the city and county. She worked with the DHA’s planning team to incorporate the new zoning-code revisions to reflect the mixed-use TOD context for the South Lincoln development (K. Krasnove-Fritz, personal communication, September 8, 2011). Having Ms. Krasnove work with the DHA on the zoning code helped the Denver Housing Authority avoid extensive time and expenses in rezoning South Lincoln’s redevelopment. Chris Parr, director of Development for the DHA, speaks to the beneficial timing of the rezoning and the regulatory cost savings to the DHA in these words:

One of the good benefits that South Lincoln had with [the] timing for regulations was that the city was doing their zoning code update while we were in the master planning for this. . . . So because we did the station-area planning together . . . , we are not seeing any macro things that are going to hit us in the head from a rezoning standpoint (C. Parr, personal communication, September 7, 2011).

Kimball Crangle, the program director for the DHA, confirmed this cost saving:

. . . We were finalizing our master plan when the City of Denver was finalizing their form based zoning code, so we worked very closely with the Denver Planning Department. They basically took our master plan and matched it to the zoning code. So we are totally entitled now. . . . That was pretty lucky and reduced our expense regarding time (K. Crangle, personal communication, September 7, 2011).

The second regulatory variable impacting the South Lincoln development, infrastructure requirements, was scored “-1” because the Denver Housing Authority projected significant infrastructure costs and site preparations for the South Lincoln redevelopment. Owing to the fact that the South Lincoln neighborhood was located in a flood plain, it needed significant technical and engineering expertise to prevent flooding and to properly control drainage in the community. Further, the roads and utilities in the neighborhood, which were in bad disrepair, needed to be completely redeveloped. The
DHA’s Kimball Crangle confirmed the significant infrastructure costs when she stated that

our infrastructure plan for this neighborhood is expensive. We are having to rebuild all the sewers, [put in] new water lines, the roads aren’t very good, [and] the storm-water system is costly because we are in a flood plain (K. Crangle, personal communication, September 7, 2011).

The third regulatory variable for the South Lincoln development, parking requirements, received a “-1” because the Denver Housing Authority’s parking costs per units was $15,309. These costs were higher than the average in the Denver region of $8,000-$12,000 per unit (See table 6.1.). During the process of rezoning South Lincoln, the City of Denver found that since the current parking system in the Lincoln Park neighborhood was poorly developed, it created an unfriendly pedestrian environment (Denver Community Planning and Development, 2010). To remedy the troubled parking situation there, The city required the DHA to build a parking garage and ground-level parking structures that needed to be screened by landscaping to minimize the negative visual impact (Denver Community Planning and Development, 2010).

The final regulatory variable, required ground-floor retail space, also received a “-1” because of the stringent commercial and retail requirements at the South Lincoln TOD. As stated earlier, while the DHA was able to modify its retail/office square footage to reduce its dependence on high levels of foot traffic, the 133-square-foot requirement per residential unit was still a large commercial space to manage. This above-average retail requirement was related to the new zoning code for the South Lincoln redevelopment which required all high-density multi-family units within the development to have commercial and retail space on the ground floor of each building (Denver Community Planning and Development, 2010).
Impact of the Regulatory Factor on Affordable Housing

The final score of -.50 (See Table 6.5, above.) for the South Lincoln TOD development indicates regulatory conditions that were not favorable for the development of affordable housing. Significant regulatory requirements related to infrastructure, parking, and ground-floor retail created costs for the DHA that were not conducive to affordable-housing development at South Lincoln. In cases like this one with high regulatory costs, the DHA would usually look for a different site to provide affordable housing (C. Parr, personal communication, September 7, 2011). More than likely, the site would be a non-TOD site with fewer regulatory costs and requirements. Despite these high costs, however, the Denver Housing Authority chose to provide affordable housing there. The most significant reason for this choice was the availability of significant public subsidies to offset these regulatory expenses (K. Crangle, personal communication, September 7, 2011). As discussed in Chapter 5, the amount of subsidies available for the South Lincoln site was extraordinary—well beyond the usual amount the DHA typically received for affordable-housing developments of similar size and scope. Both Federal (ARRA, HOPE VI, and LIHTC funds) and local subsidies (HOME) were targeted for the South Lincoln development because it was considered a strategic TOD site with the potential to be a stellar example of sustainable mixed-use development.

Post-Development Regulatory Context

Phase One of the South Lincoln TOD development, completed in early 2013, is currently fully leased, with a waiting list for the 100-unit senior facility. In addition, the Phase One 16,000-square-foot “retail-space” requirement has been fully leased by community-service and social-service agencies. With market conditions continuing to
strengthen, the DHA is optimistic about successfully leasing space to market-driven retail shops in later phases of the development.

**Evans Station Lofts TOD**

**Regulatory Context**

The regulatory context for the Evans Station Lofts TOD seemed quite positive in 2011/2012. The Evans Station Lofts development had reduced zoning and minimal infrastructure costs as well as reduced parking requirements. Moreover, thanks to the lessons learned from Englewood and Gates regarding commercial/retail space, Medici was able to negotiate with the City of Denver to reduce the ground-floor retail requirement for its TOD. The result was an 8,000-square-foot requirement versus the original 12,000—something that helped moderate the ground-floor-retail regulatory risks associated with the Evans Station Lofts TOD.

**Table 6.6 – Regulatory-Factor Score for Evans Station Lofts TOD**

<table>
<thead>
<tr>
<th>Regulatory Variables:</th>
<th>Score:</th>
<th>Rationale for Score:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zoning Requirements</td>
<td>+1</td>
<td>Below-average zoning costs: The Evans Station area had already been rezoned for mixed-use TOD development.</td>
</tr>
<tr>
<td>Infrastructure Requirements</td>
<td>+1</td>
<td>Below-average infrastructure costs.</td>
</tr>
<tr>
<td>Parking Requirements</td>
<td>+1</td>
<td>Below-average parking costs: $4,300 per unit based on 43 surface parking spots for 50 units.</td>
</tr>
<tr>
<td>Ground-Floor Retail Requirements</td>
<td>-1</td>
<td>Above-average ground-floor requirements: 160 sq. ft. of retail requirement per residential unit. (8,000 sq. ft. divided by 50 residential units)</td>
</tr>
<tr>
<td>Final Score (Average)*</td>
<td>+0.50</td>
<td>Favorable regulatory conditions for affordable-housing development.</td>
</tr>
</tbody>
</table>

*Scores were based on the projected impact of the regulatory variables on the developer, Medici Communities, during the pre-development period of 2010-2012. Scores were determined from interviews with developers and other key players as well as a review of primary source documents related to the Evans Station Lofts TOD development.*
Scoring the Regulatory Variables

The zoning-requirement variable for the Evans Station Lofts TOD development received a score of “+1” since the property had already been rezoned for mixed-use TOD development prior to Medici Communities purchase of the parcel (T. Gladwell, personal communication, April 19, 2012). In June 2010 the Denver City Council adopted a revised zoning code for the city. Under this code, the Evans Station area was designated an urban-center neighborhood with a recommendation for a mixed-use TOD development. In an interview, Cindy Everett of the Urban Land Conservancy underscored the advantages of the new zoning code with regard to the Evans Station Lofts project as follows:

Most of these deals are kind of challenging because you are working along rail lines, and [the property] has been industrial in the past or is in neighborhoods of change where street layouts and everything else needs [to] change. . . . In the case of Evans Station, it wasn’t as convoluted as some of them. . . . What Denver did with their new zoning code. . . is they began the process to improve zoning and define density around those sites which is really helpful. Without that, the entitlement process could take a lot longer (C. Everett, personal communication, April 23, 2012).

The second regulatory variable impacting the Evans Station Lofts TOD, the infrastructure requirement, received a “+1” owing to the fact that Medici Communities encountered below average infrastructural costs for the project. LIHTC budget documents and interviews with the developer confirm the below average infrastructure costs as the Evans station land parcel needed no significant preparations (T. Gladwell, personal communication, April 19, 2012; Colorado Housing and Finance Authority, 2011).
The third regulatory variable for the Evans Station Lofts development, the parking requirement, received a “+1” thanks to fact that the Medici Communities was benefiting from a reduced parking requirement. Because of the land parcel’s close proximity to the Evans Station Transit Stop, the number of spaces was lowered owing to the residents’ reduced dependency on automobile transportation. The new zoning code for the Evans Station Lofts project thus required only 43 surface parking spaces for the 50 residential units. The result was a below-average parking cost of only $4,300 per residential unit (The City of Denver, Office of Community Planning and Development, 2009).

The final regulatory variable, the ground-floor retail requirement, received a “-1” since Medici Communities had to develop 160 square feet of retail requirement per residential unit. However, even though this commercial/ground floor space was an above-average requirement, Medici was able to modify its risks. Given the recent ground-floor retail/commercial struggles of the Vallagio and Gates TODs, Medici built in the following contingency plan for its required 8,000 square feet: One, they developed a budget with no expectation of rental revenue from the retail space. Two, Medici reserved nearly 1,500 square feet of the 8,000-square-foot space for its offices. Three, Medici reserved another 1,500 square feet for its property-management company. By using the required retail/commercial space strategically in this way, Medici lowered its financial risks. In an interview, Medici’s CEO Troy Gladwell explained his approach to working with the city on its ground-floor retail/office requirement. Mr. Gladwell stated,

You have to have retail. You have to have commercial on that ground floor. It is a requirement based on the location, and if you are dumb enough to maximize the amount of commercial space on the ground floor and underwrite it at $24- or $30-per-square-foot rents, you are probably going to be in trouble. I wouldn’t have done the deal if I couldn’t have underwritten it properly. We underwrote it at zero dollars and minimized the square footage. You know you can fight the city and
say, “Oh this is stupid,” or you can figure . . . out how to satisfy it. You just underwrite it properly and are realistic about what it is. You’ve got to be smart about how you underwrite it, you know. . . . Figure out how to solve it without [its] having to cost you a bunch of money ’cause [sic] it doesn’t have to (T. Gladwell, personal communication, April 19, 2012).

**Impact of the Regulatory Factor on Affordable Housing**

The regulatory-factor score of “+0.50” recorded in Table 6.6 reflected positive regulatory conditions for Medici Communities during the pre-development period for the Evans Station Lofts. The reduced zoning, infrastructure and parking requirements along with Medici’s strategy to reduce the risks of the ground-floor retail requirements created favorable regulatory conditions which contributed to Medici’s decision to invest in affordable housing at Evans Station Lofts. Similar to DHA, Medici is an affordable developer, and while these positive conditions did not ultimately create their intention to produce affordable housing—that being their mission— the favorable conditions allowed Medici to move forward with affordable housing at the Evans Station TOD site. Without a favorable regulatory context it is likely Medici would have searched for another site to produce affordable housing.

**Post-Development Regulatory Context**

The Evans Station Lofts TOD development was fully completed and fully leased up by the end of 2013. Furthermore, Medici Communities had moved themselves and its property-management company into the 3,000 square feet of office space set aside for its use. Medici had also secured office and retail leases for the remaining 5,000 square feet.

**Satisficing and the Regulatory Factor**

As previously stated, the theoretical framework for this dissertation holds that developers are satisficers who make development decisions based on a strategy of
reducing risks and achieving satisfactory profits. The literature on satisficing claims that most developers avoid high-risk developments like urban infill/TODs. Their preference is to seek out more predictable, lower-risk developments on the suburban fringes (Lucy & Phillips, 2000). One contributing factor to a satisficing developer’s decision to avoid urban infill developments like TODs is the higher regulatory costs of the latter. Most developers are concerned about the time and costs associated with rezoning and the infrastructural improvements like roads, bridges, pedestrian walkways, and utilities that are often required. Research by Mohamed (2009) concluded that satisficing developers preferred a suburban development over urban ones because of the latters’ predictably lower infrastructure costs. He gave the example of developers trying to avoid providing “high-standard roads,” since they drive up development costs. Mohamed went on to say,

Developers create rules about which investments they will make and which they will avoid. The rules result in self-imposed artificial liquidity constraints that protect developers from the temptation of making marginally important investments, such as roads of high standards, which do not contribute to meeting their satisficing profit targets. Thus . . . developers move outward in search of locations with lower regulatory costs (p. 23).

Mohamed’s research (2006) argued that to encourage developers to take on riskier projects like urban infills/TODs, government policies had shifted toward reducing regulatory risks. He stated that

*satisficing* developers contribute to sprawl in the form of low-density . . . development. In response, government policymakers have designed policies aimed at reducing risks to developers. Reducing risks is intended to help developers overcome the *bounds on their rationality* so that they will make decisions that result in more efficient land use. . . . Risk reduction policies include clear rules about zoning and allowable uses; fixed rather than negotiated exactions; transparent capital improvement programs; and predictable, streamlined approval processes (Mohamed, 2006, p. 28).
The following section provides examples of how the master developer and/or the local municipality within each of the Denver-region TOD cases discussed above worked to attract satisficing residential developers by reducing the regulatory risks.

The City of Englewood understood that developers would be concerned about the risks associated with a TOD since Englewood was the first community to attempt the then-untested concept in an inner-ring suburb. To attract developers, the city took on the role of rezoning-and-infrastructure remediation of the site. In an interview Robert Simpson, the community developer for Englewood at the time of the City Center development, related how Trammell Crow had benefited from the city’s effort to reduce regulatory risks via rezoning and infrastructural remediation. Mr. Simpson stated,

From their [Trammell Crow’s] standpoint . . . there is absolutely the value and benefit of having that zoning in place and ready to go. . . . They don’t have to go through the uncertainty and the time process. . . . A lot of developers have to go through that rezoning process . . . , and there is risk associated with that time and costs . . . and you don’t know at the end of that whether it will be approved. . . . So it is a big, significant risk . . . and . . . in the end, we [the City of Englewood] took on the risk . . . and began the remediation process and the rezoning process . . . and that was hard. . . . That is not a normal process for a city (R. Simpson, personal communication, July 21, 2011).

In addition to reducing the infrastructure and zoning costs for Trammell Crow, the City of Englewood also worked to decrease the risks imposed on Trammell Crow by the retail requirements. The original contract from the City of Englewood bound Trammell Crow to developing 45,000 square feet of retail space on the ground floors of its 438 unit multi-family apartment buildings. Trammell Crow was worried, however, that the density and foot traffic would not support so much retail space. The city agreed to reduce the requirement to 29,000 square feet and even gave Trammell Crow some of the better
locations with better foot traffic for its retail space (R. Simpson, personal communication, July 21, 2011).

Inverness also worked with Metropolitan Homes to reduce its regulatory risks for the Vallagio development. Inverness Properties and the Inverness Metropolitan Improvement District were local organizations that worked to get the 30-acre Vallagio parcel rezoned and to have the needed infrastructure improvements done ahead of time so that turn-key development could take place (P. Mulhern, personal communication, December 14, 2012). Vallagio developer Peter Kudla claimed that his purchase of the Inverness parcel was contingent on successful rezoning. Moreover, Mr. Kudla asserted that a clean infrastructure and reduced site preparations were also key incentives for him to agree to purchase the Inverness property for TOD development.

The City of Denver and Cherokee Development, the co-master developers at Gates, both worked to reduce the regulatory risks for Trammell Crow there. In exchange for a significant amount of TIF funds offered by Denver, Cherokee rezoned the entire Gates parcel as well as committed to the remediation of the property’s infrastructure. Cherokee subsequently sold Trammell Crow a choice parcel at Gates that they had remediated and required no additional site preparation. The reduced zoning and infrastructure risks were thus clearly a significant factor in Trammell Crow’s decision to develop both its market-rate and affordable-housing units.

The Denver Housing Authority was also the beneficiary of reduced regulatory risk thanks to the investment of the City of Denver and the contribution of subsidies. The city helped streamline the rezoning for the South Lincoln TOD, an action which proved significant in reducing regulatory costs. Moreover, while the DHA was not able to avoid
the considerable infrastructure costs, they benefited from significant public subsidies that helped offset these costs. (See Chapter 5.).

Finally, Medici Communities also benefited from reduced regulatory risk thanks to help from the City of Denver. Medici was able to avoid zoning costs for Evans Station Lofts because the city had rezoned the site during its work on the Evans Station area TOD plan. Furthermore, the city reduced the parking requirements for Medici Communities which lowered its costs to $4,300 per unit, well under the average for the Denver region.

In each of the Denver TOD cases, the master developer and/or the local community worked to reduce the regulatory risks to encourage residential developers to invest in a TOD. In three of the TOD cases, the community’s efforts to reduce regulatory requirements created strong enough satisficing conditions that it enabled the developers to build affordable housing (Gates, South Lincoln, and Evans Station). In the two developments where affordable housing was not constructed (Englewood and Vallagio), the incentives were not strong enough to overcome high parking and retail requirements in addition to political opposition for affordable housing (more on political opposition in next chapter). As a result, Trammell Crow and Metropolitan Homes did not have the satisficing conditions necessary for affordable housing, and as a result it was not developed within those TODs.
CHAPTER VII

ANALYSIS OF THE ADVOCACY FACTOR

Introduction

This chapter analyzes the advocacy factor and its variables—neighborhood, non-profit, and political—and their impact on residential developers’ decision-making processes regarding the provision of affordable housing within each of the five Denver TOD cases studied. As previously stated, the analysis proceeds in chronological order, with the scoring analysis for each TOD case focusing on the two-year pre-development period when the variables most influenced the residential developer’s decision making. A brief post-development analysis for each case follows. The chapter concludes, then, with a section examining the advocacy variable’s impact on the developer’s affordable-housing decision in terms of satisficing.

The Research Question and the Advocacy Factor

The research question for this dissertation is the following: How do the economic, regulatory, and advocacy factors influence a developer’s decision regarding the provision of affordable housing in a TOD? The general idea related to the impact of the advocacy factor is that if its variables promote satisfactory profits and lower risks for the developer, then it is more likely that affordable housing will be developed. Furthermore, as discussed previously, this study holds that the advocacy factor (along with the regulatory factor) serves to moderate the influence of the dominant economic factor. The advocacy factor can serve to enhance positive economic conditions and thus increase the likelihood for affordable-housing development, or it can weaken the impact of economic conditions and thereby reduce the likelihood of affordable housing. For instance, a
negative advocacy environment characterized by community opposition to affordable housing can work to negate positive economic conditions by raising the costs and decreasing the predictability for a specific TOD development, with the result that the developer decides against affordable housing. Conversely, an advocacy factor characterized by community support for affordable housing can enhance the economic context and make it more likely that a developer will choose to provide affordable housing. Table 7.1, below, presents the template and scoring categories for the advocacy factor analyzed in this chapter.

**Table 7.1 – Advocacy-Factor Scoring Categories**

<table>
<thead>
<tr>
<th>Advocacy Variables:</th>
<th>-1 = Negative</th>
<th>0 = Neutral</th>
<th>+1 = Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Neighborhood Advocacy</strong></td>
<td>Oppose affordable-housing development.</td>
<td>Impartial/neutral on affordable housing development/not active</td>
<td>Support affordable-housing development.</td>
</tr>
<tr>
<td><strong>Non-profit Advocacy</strong></td>
<td>Oppose affordable-housing development.</td>
<td>Impartial/neutral on affordable-housing development/not active</td>
<td>Support affordable-housing development.</td>
</tr>
<tr>
<td><strong>Political Advocacy</strong></td>
<td>Oppose affordable-housing development.</td>
<td>Impartial/neutral on affordable-housing development/not active</td>
<td>Support affordable-housing development.</td>
</tr>
</tbody>
</table>

**Englewood City Center TOD**

**Advocacy Climate**

The advocacy climate for the Englewood City Center TOD was unsupportive of the development of affordable housing. This lack of support was related to the uncertainty hanging over the City of Englewood regarding the then-untested TOD concept. The city, hesitant to take on additional risk for the development, saw affordable
housing as one such risk that was not essential to the project. Furthermore, during the planning of the City Center concept in 1997-1999, there was a stigma associated with affordable-housing design, which was perceived as low quality. Englewood city leaders, who wanted the City Center project to be its crown jewel, were concerned about the lackluster design affordable housing might bring to the development (D. Shepherd, personal communication, July 27, 2011). In addition, they believed the city already had too much older housing stock and wanted to provide new, market-oriented rental units. Together, these factors contributed to a non-supportive political-advocacy climate for Trammell Crow developing affordable housing there. Table 7.2, below, records the advocacy-factor score that led to the company’s negative decision on affordable housing at the Englewood City Center TOD.

### Table 7.2 – Advocacy-Factor Score for Englewood City Center TOD

<table>
<thead>
<tr>
<th>Advocacy Variables</th>
<th><em>Score</em></th>
<th>Rationale for Score:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Neighborhood Advocacy</strong></td>
<td>0</td>
<td>Neutral to affordable housing.</td>
</tr>
<tr>
<td><strong>Non-profit Advocacy</strong></td>
<td>0</td>
<td>Neutral to affordable housing.</td>
</tr>
<tr>
<td><strong>Political Advocacy</strong></td>
<td>-1</td>
<td>Opposed to affordable housing.</td>
</tr>
<tr>
<td><strong>Final Score (Average)</strong></td>
<td>-0.33</td>
<td>Non-supportive conditions for affordable housing.</td>
</tr>
</tbody>
</table>

*Scores are based on the impact of the demands of advocacy groups on the residential developer, Trammell Crow, during 1998-2000 as drawn from interviews with developers and reviews of primary source documents related to the Englewood City Center TOD development.

**Scoring the Advocacy Variables**

The first advocacy variable impacting Trammell Crow at the Englewood City Center TOD development, neighborhood advocacy, was scored “0” for neutrality regarding affordable-housing development at the City Center TOD. The variable received this neutral score because interviews with local officials and a review of primary documents revealed that the citizens of Englewood were ambivalent about having an
affordable-housing development there (Clarion Associates, 1996; R. Simpson, personal communication, July 21, 2011). Clarion Associates, a research group, sent out a community survey asking for residents’ input on the City Center TOD development. While it did not directly ask about affordable housing, the survey did request citizens to respond with their ideas about what type of residential housing they wanted at the City Center development. Only 20% said they preferred any type of residential housing while nearly 85% preferred the inclusion of shopping, retail, and entertainment (Clarion Associates, 1996). Former Englewood director of Community Planning Robert Simpson interpreted these results as the community’s ambivalence toward any type of housing, affordable or market rate. Mr. Simpson claimed that many of the local citizen groups were less concerned about developing residential housing and more interested in retail and entertainment options for the City Center. These individuals apparently desired a retail/entertainment type development that would fulfill their needs in those regards (similar to the offerings of the former Cinderella Mall) and create solid tax revenue for the city. An interview with the current Englewood Director of Community Planning, Alan White, reinforced this assessment. He stated that “the local citizens wanted shopping and retail. I don’t think there was organized [neighborhood] opposition for or against affordable housing. It was more a priority for retail” (A. White, personal communication, July 21, 2011).

The second advocacy variable with the potential to impact Trammell Crow, non-profit advocacy, also received a neutral “0” for the development of affordable housing. This score was based on the fact that there were no non-profit organizations lobbying Trammell Crow or the City of Englewood for or against the provision of affordable
housing. The absence of any organized pro-affordable-housing group during the planning process was confirmed in interviews with various Englewood city leaders. Robert Simpson, for example, expressed relief at the lack of a strong non-profit-housing organization like FRESC, a powerful non-profit organization that had achieved inclusion of significant affordable-housing provisions at the Gates TOD. Mr. Simpson believed that an organization like FRESC could have derailed the City Center development with demands for affordable housing (R. Simpson, personal communication, July 21, 2011).

The final advocacy variable with potential to impact Trammell Crow, political advocacy, received a “-1” because of the significant opposition to affordable housing expressed by the Englewood mayor and city council members. During the planning phase of the City Center TOD, the then Englewood mayor (Tom Burns) and the city council were opposed to affordable housing. Interviews with various Englewood city officials also indicated the council’s opposition. Robert Simpson, Community Development director for Englewood during the City Center development, stated that the council gave an “emphatic no” to affordable housing (R. Simpson, personal communication, July 21, 2011). Alan White, the current Community Development director at Englewood, confirmed that “it was a pretty conscious decision not to do affordable housing [at the Englewood TOD]” (A. White, personal communication, July 21, 2011).

Impact of the Advocacy Factor on Affordable Housing

The negative advocacy factor score of “-0.33” for affordable housing at Englewood contributed significantly to Trammell Crow’s decision against providing it. While neighborhood and non-profit groups were neutral, the significant political
opposition to affordable housing at the City Center development played a noteworthy role in Trammell Crow’s decision to forego it. A closer examination of the political context during the pre-planning deliberations reveals how the decision against affordable housing was made. Interviews with Robert Simpson showed that in the early planning stages of the City Center, affordable housing had been considered (Simpson, 2011). Mr. Simpson explained that one of the reasons the city and Trammell Crow did so was the LIHTC subsidies and developer fees available for its inclusion. Furthermore, Trammell Crow, which had had previous experience and success with LIHTC developments in the Denver region, was willing to consider it for the Englewood City Center TOD. After discussing the affordable-housing option for the City Center development, however, the city council’s growing concern regarding the risks of affordable housing at Englewood proved to be critical, so they asked Trammell Crow to forego its development (Simpson, 2011).

**Post-Development Advocacy Climate**

In retrospect, one of the main concerns for the City of Englewood and Trammell Crow was their shared uncertainty about the TOD concept. There were significant questions regarding how successful multi-family residential housing would be in the context of the untested TOD concept in an older inner-ring suburb like Englewood. Furthermore, as mentioned earlier, surveys and feedback from the residents of Englewood revealed that most citizens preferred that retail, restaurant, and entertainment replace the Cinderella Mall. Many of the residents were uncertain about the mixed-use concept implicit in TODs and were particularly concerned that a multi-family project with 438 housing units might be too residential for the City Center.
Upon seeing the significant success of the residential component of the Englewood City Center development after the grand opening and stabilization of the project in 2002, however, many of the city leaders now wished they had included higher levels of residential density there (R. Simpson, personal communication, July 21, 2011). Furthermore, interviews with these leaders revealed that they would have considered affordable-housing provisions more strongly had they known how successful the residential element would prove to be. In an interview with current Englewood Mayor pro-tem Jim Woodward, he conceded that affordable housing could have worked well within the development and should have been more positively considered (J. Woodward, personal communication, July 28, 2011).

The Vallagio at Inverness TOD

Advocacy Climate

Similar to the Englewood City Center TOD, the advocacy factor for the Vallagio at Inverness project did not support affordable-housing development. The main driver of the opposition to affordable housing was resistance from political and business leaders in the area. The Inverness complex was known for its posh corporate image with its upscale golf course. Thanks to the high-end nature of the office park, its business owners and professional executives were hesitant to see multi-family residential mixed-use housing at Inverness. They were skeptical of the quality and aesthetics of a smaller, higher-density residential development. If any residential units were to be developed, these business leaders wanted them to be luxury housing with high-end amenities to ensure that Inverness’s upscale nature be retained. Table 7.3, below, records the advocacy-factor
scores that impacted Metropolitan Homes’ decision about excluding affordable housing at the Vallagio TOD.

**Table 7.3 – Advocacy-Factor Score for Vallagio at Inverness TOD**

<table>
<thead>
<tr>
<th>Advocacy Variables:</th>
<th>*Score:</th>
<th>Rationale for Score:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neighborhood Advocacy</td>
<td>-1</td>
<td>Business leaders and business owners in neighborhood opposed affordable housing.</td>
</tr>
<tr>
<td>Non-profit Advocacy</td>
<td>0</td>
<td>Neutral to affordable housing.</td>
</tr>
<tr>
<td>Political Advocacy</td>
<td>-1</td>
<td>Opposed to affordable housing.</td>
</tr>
<tr>
<td><strong>Final Score (Average)</strong></td>
<td><strong>-0.66</strong></td>
<td>Negative advocacy conditions regarding affordable-housing development.</td>
</tr>
</tbody>
</table>

*Scores were based on the projected impact of the advocacy variables on the developer, Metropolitan Homes, during the pre-development period from 2003-2005. Scores were determined from interviews with developers and other key players as well as a review of primary source documents related to the Vallagio TOD development.

**Scoring the Advocacy Variables**

The neighborhood-advocacy variable for the Vallagio development was scored “-1” due to the significant hostility expressed toward affordable housing by the professionals and business owners within the Inverness corporate park. This opposition was part of the culture the master developer, George Beardsley, had cultivated during his tenure at Inverness. In an interview, Vallagio developer Peter Kudla described the hostility toward affordable housing fomented by Mr. Beardsley. As Mr. Kudla put it,

> If you want to see a neighborhood go ballistic, just mention the word [sic!] **affordable housing**. Inverness didn’t want any; . . . everything you build has got to be $1 million dollars [per unit] or more. They wanted nothing but the best (P. Kudla, personal communication, December 5, 2012).

The opposition to affordable housing that Mr. Kudla referred to was related to the upscale corporate image of the Inverness office park that Mr. Beardsley had encouraged. Pat Mulhern, CEO of Metropolitan Inverness Improvement District and owner of a civil-engineering company located in Inverness, has worked there for the past 20 years. He
provided engineering consulting to both Mr. Beardsley during the master development of Inverness and to Mr. Kudla for the development of Vallagio. With his extensive network in the Inverness business community, Mr. Mulhern had a thorough understanding of its corporate culture. He explained in an interview that the opposition to affordable housing within the Inverness corporate park was related to the fear that it would bring down the high-end corporate image of the area. Mr. Mulhern stated,

We the businesses down here were supporting affordable housing but you know, not within our boundaries. . . . We don’t want it to be internal to these office parks because of the concern with the Class A corporate image deal. . . . We always viewed ourselves as producing very high-quality, class-A office stuff down this corridor. . . . We are trying to continue to attract Fortune 500 company headquarters . . . and what not. . . . You want everything to be high quality and look good internally, so while the corridor supported affordable housing, it wasn’t internal to the corridor that it was really supported (P. Mulhern, personal communication, December 14, 2012).

Scott Beasley, a professional in the Inverness neighborhood who had also worked with Mr. Beardsley’s master development group as a property broker at Inverness Properties, LLC, for over 20 years, expressed his disdain for affordable housing at Vallagio. As he put it,

One of the issues I have with all this affordable housing going into light-rail stations is . . . is that the best place to live? . . . If you have kids, where is the open space? Where is the swing set? Where is the neighborhood? Where is the school? Where do they shop? Is that where you would want to raise a family? . . . People get very excited about the notions of it [affordable housing], all [of] which is great, but when it comes to the practical pieces of it, . . . in residential people want to be by a park and by a school in a safe environment, . . . protect their kids, . . . stuff like that (S. Beasley, personal communication, December 12, 2012).

The second advocacy variable with the potential to impact Metropolitan Homes, non-profit advocacy, was also scored a “0” for neutrality on the development of
affordable housing. This score was based on the fact that there were no active non-profit organizations lobbying Metropolitan Homes for or against the provision of affordable housing at Inverness. The absence of any organized anti-affordable- or pro-affordable-housing groups during the planning process was confirmed through interviews and a careful review of source documents related to the Vallagio development. In an interview with Arapahoe County Commissioner Nancy Sharpe, she stated that she was very involved in the Vallagio development and was certain there were no non-profit groups lobbying either for or against affordable housing (N. Sharpe, personal communication, December 12, 2012). Furthermore, she stated that the lack of pro-affordable housing non-profits at the Vallagio was probably related to the fact that the Inverness office park was located in a far-south suburb of Denver and that most affordable-housing advocacy groups were focused more on developments nearer downtown Denver.

The final advocacy variable impacting the Vallagio development, politics, was scored a “-1” since the political leadership representing Inverness was unsupportive of affordable housing there. The most significant political actors in the Vallagio development were the Arapahoe County Commissioners, a group of elected officials representing the constituents of Arapahoe County (N. Sharpe, personal communication, December 12, 2012; L. Myers, personal communication, December 3, 2012). These officials were highly involved in the Vallagio development because it was a premier project in Arapahoe County. While the Commissioners were supportive of the luxury residential units at Vallagio, they opposed affordable housing. Interviews with two of the former Arapahoe County Commissioners, Nancy Sharpe and Lynn Myers, revealed that they were hesitant to support affordable housing since they both believed it would
diminish the quality of the development. The commissioners felt that affordable housing would not fit with the prestigious design of the Vallagio. Scott Beasley, a real-estate broker in Inverness, recalled the Arapahoe County Commissioners’ reluctance even to allow Metropolitan Homes to build a luxury rental community at the Vallagio TOD, much less affordable housing. As he stated, “Metropolitan Homes had a huge battle with the Arapahoe County Commissioners over the development of luxury rental apartments . . . and since that time the message is “don’t even try” [for any type of affordable units]. Their reasoning is we have got enough rental units, and it [having more such units] doesn’t help [the project financially]” (S. Beasley, personal communication, December 12, 2012).

**Impact of the Advocacy Factor on Affordable Housing**

The negative advocacy factor score of “-0.66” for Metropolitan Homes at the Vallagio consisted of a neutral non-profit impact on affordable housing together with strong political opposition and neighborhood opposition to it. Furthermore, the corporate culture of the Inverness office park was significantly hostile to affordable housing at Vallagio. These conditions had a strong collective impact on Metropolitan Homes’ decision not to pursue affordable housing at its TOD. In an interview, Vallagio developer Peter Kudla expressed openness to including for-sale affordable housing at 80% of the area’s median income level. Affordable units of this kind would have consisted of one- and two-bedroom condominiums or lofts priced at around $150K. Mr. Kudla considered developing such units because of his desire to have “price diversity” in accordance with the TOD concept (P. Kudla, personal communication, December 5, 2012). He explained, however, that any further consideration of affordable housing was quickly quashed by the scale of the opposition.
Post-Development Advocacy Climate

In 2004/2005, Metropolitan Homes had originally planned the 30-acre Vallagio development to include only a mixture of luxury for-sale condominiums and lofts. However, in the middle of the Vallagio build-out (2008/2009), the subprime mortgage crisis struck and sent the local and national economy into recession. The result was that the planned additional 250 for-sale condominiums were never built. Subsequently, the Vallagio development remained unfinished. By 2010, however, the recovering housing markets in the region were again strongly supportive of rental-apartment development while the for-sale market was still struggling. Based on the new market realities, Metropolitan Homes proposed a luxury-market-rate rental development to replace the original plan calling for for-sale condominiums and townhomes. This proposal was not supported by the existing Vallagio residents, however, who had purchased for-sale condominiums ranging from $200K to $1 million. These homeowners were concerned that the rental units would bring down their property values, increase traffic, and exacerbate parking issues (P. Mulhern, personal communication, December 14, 2012). Furthermore, they were convinced that the design of the new rental-unit buildings would not be as attractive or have the same upscale quality as their current homes. As a result, they created strong opposition to Metropolitan Homes’ rental proposal and organized significant protests at the local planning meetings at the Arapahoe County municipal offices. Pat Mulhern explained the NIMBY sentiments of the Vallagio homeowners regarding Peter Kudla’s proposed rental development as follows:

They bought into Peter’s plan down here, and [they thought] it was going to be owners . . . people that own the places that are gonna take care of them and they’re gonna be kept up and nice, . . .[but] if you bring apartment people in here, they are not gonna take care of them, and it’s
gonna run down our neighborhood, [and], . . . our land values are going to be brought down by these people who rent apartments. . . . They don’t have money, and they’re fly-by-night folks (P. Mulhern, personal communication, December 14, 2012).

The emergence of NIMBY opposition to luxury rental housing at the Vallagio from its new unit owners revealed the increased community opposition to not just affordable housing at Vallagio but even luxury market-rate rental units. This increased opposition to lower-priced housing contributed to significant time costs and delays for Metropolitan Homes at Vallagio. These delays revealed both the level of unpredictability and risk that neighborhood advocates can cause housing developers and the reason the latter are so eager to avoid community opposition of any sort when it comes to residential development.

**Gates TOD**

**Advocacy Climate**

The advocacy climate for Trammell Crow at the Gates TOD was much more favorable for affordable housing than at the Vallagio and Englewood developments. The positive conditions at Gates were related to Denver Mayor John Hickenlooper’s campaign to reduce homelessness in the city by increasing affordable housing. Upon winning the mayoral election in 2003, Hickenlooper saw the Gates development as an excellent opportunity to create affordable housing for lower-income households. The Hickenlooper administration consequently encouraged many of the city agencies to begin promoting affordable housing at Gates and to work with Trammell Crow and Cherokee to locate subsidies to help fund it.

In addition to positive advocacy from the Hickenlooper administration, the Gates development also benefited from strong support by the non-profit organization FRESC.
FRESC was founded in 2002 at nearly the same time Cherokee was lobbying the City of Denver for $250 million in TIF subsidies for the redevelopment of the Gates property. FRESC saw the Gates development as an opportunity to establish its organization as a strong advocate for responsible development (Read, 2006). FRESC argued that in exchange for public TIF money for the Gates redevelopment, Cherokee and other developers at Gates ought to be required to commit to a sensible amount of affordable housing. FRESC thus put the full force of its organization into lobbying Cherokee and Trammell Crow to commit to affordable-housing provisions at Gates.

Table 7.4 – Advocacy-Factor Score for Trammell Crow/Gates TOD

<table>
<thead>
<tr>
<th>Advocacy Variables</th>
<th>Score</th>
<th>Rationale for Score:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neighborhood Advocacy</td>
<td>+1</td>
<td>Supported affordable housing.</td>
</tr>
<tr>
<td>Non-profit Advocacy</td>
<td>+1</td>
<td>Supported affordable housing.</td>
</tr>
<tr>
<td>Political Advocacy</td>
<td>+1</td>
<td>Supported affordable housing.</td>
</tr>
<tr>
<td>Final Score (Average)*</td>
<td>+1</td>
<td>Strong advocacy support for affordable housing.</td>
</tr>
</tbody>
</table>

*Scores were based on the projected advocacy variables impact on the developer, Trammel Crow, during the pre-development period of 2005-2007. Scores were determined from interviews with developers and other key players as well as a review of primary source documents related to the Gates/Trammell Crow development.

Scoring the Advocacy Variables

The first advocacy variable, neighborhood advocacy, was scored a “+1” since the surrounding Gates neighborhoods were supportive of the development of affordable housing at the Gates TOD. Interviews with neighborhood leaders near the Gates site revealed solid support for affordable housing at the Gates TOD (R. Kniech, personal communication, October 4, 2010; C. Nevitt, personal communication, September 21, 2010). Many of the nearby communities were lower-income and working-class areas whose residents were encouraged that the old industrial/factory site was going to be
redeveloped into a mixed-use residential and entertainment district (Read, 2006). While some neighbors were concerned about the size of the development and the subsequent traffic and noise that would likely be associated with it, the majority were grateful that the new mixed-use, market-oriented development promised to bring economic growth and stability to their neighborhood (Read, 2006). Furthermore, since many of the nearby communities housed lower-income renters, there was significant support for newer affordable rental units at the Gates TOD (Read, 2006).

The second advocacy variable for the Trammell Crow/Gates TOD development, non-profit advocacy, also received a “+1” because of the significant affordable-housing advocacy provided by non-profit organizations for the Gates development. The most active non-profit advocacy came from FRESC. FRESC is a registered 501(c) 3 non-profit organization which can be found in the non-profit database guidestar.org (GuideStar.org, 2014). FRESC’s mission is to support working families and low-income people in Denver by lobbying for affordable housing and responsible development (FRESC, 2011). FRESC’s used its political and community clout at Gates to win affordable housing and healthcare provisions for working families (Read, 2006). FRESC’s biggest achievement at Gates was securing a community-benefits agreement from the master developer, Cherokee, and the residential developer, Trammell Crow which included a generous commitment to affordable housing. Although Cherokee eventually went bankrupt during the Great Recession, Trammell Crow followed through on the community benefits agreement to provide affordable housing by developing the 60-unit Broadway Junction Apartments.
The final advocacy variable impacting Trammell Crow at Gates, politics, was scored “+1” since the political environment for the Gates TOD was strongly supportive of affordable housing. One particularly important political advocate for affordable housing at Gates was the then Denver mayor and later Colorado governor, John Hickenlooper. When Hickenlooper was elected mayor, as mentioned earlier, he promised to address the growing issue of homelessness in the community. The Hickenlooper administration believed that the significant size of the Gates development (up to 2,500 residential units projected) offered an excellent opportunity to provide affordable housing for very-low-income individuals. Consequently, the mayor exerted pressure and made City funding available to create affordable rental units for households transitioning from homelessness to permanent housing (S. Johnson, personal communication, March 24, 2011). These efforts enabled Trammell Crow to secure significant public subsidies for its development of affordable housing at Gates.

Another noteworthy political-advocacy group that provided consistent support for affordable housing at Gates was the Denver City Council (Read, 2006). The council wanted to create social and community benefits for the residents of Denver in exchange for the generous amount of TIF subsidies pledged to the Gates redevelopment. The council used its political leverage to craft a strong affordable-housing plan that Cherokee and Trammel Crow agreed to in exchange for TIF subsidies (C. Nevitt, personal communication, September 21, 2010).

**Impact of the Advocacy Factor on Affordable Housing**

The final advocacy factor score of “+1” (See table 7.4, above.) presented favorable conditions for the development of affordable housing and indeed weighed
positively in Trammell Crow’s decision to provide such housing at the Gates development. Trammell Crow benefited from positive neighborhood support for affordable housing, yet it was the non-profit and political advocacy that was most responsible for its decision to include affordable housing in the Gates TOD. The strong lobbying efforts by FRESC helped convince the City of Denver to offer a significant TIF package to Cherokee for the entire redevelopment of the Gates brownfield. Trammell Crow projected that its market-rate development would benefit tremendously from the TIF subsidies which served to incentivize them to agree to affordable-housing provisions. Further, the support of the Denver mayor’s office and the various Denver city agencies helped Trammell Crow secure nearly $1 million in HOME funds and $8 million in LIHTC federal funds administered by the Colorado Housing and Finance Authority.

**Post-Development Advocacy Climate**

The post-development analysis of the advocacy conditions at Gates revealed a very different set of circumstances for Trammell Crow than they had originally expected. When Trammell Crow first agreed to generous affordable-housing provisions at Gates in 2005-2007, it was based on the large amount of TIF funds that had become available for the redevelopment. Trammell Crow was counting on that support to spur the redevelopment at Gates and thereby help them gain increased rental revenue from its 419 market-rate-unit development as well as the equity appreciation from its building. However, the bankruptcy of Cherokee in 2010 and the subsequent collapse of the TIF funding package contributed to unmet profit expectations for Trammel Crow. In addition, while the nonprofit and political support assisted Trammell Crow by helping them secure full subsidy funding for the Broadway Junction affordable development, the
significant number of meetings with these groups regarding the details of the affordable-housing development proved time consuming and delayed Trammell Crow’s work on other projects (S. Johnson, personal communication, March 24, 2010).

South Lincoln TOD

Advocacy Climate

The advocacy climate for the Denver Housing Authority at the South Lincoln TOD was marked by significant support for affordable housing. While South Lincoln was the beneficiary of strong neighborhood and non-profit advocacy favorable to affordable housing, it was the significant political support that proved the most helpful to the DHA. Strong local political advocacy for the South Lincoln TOD helped the DHA secure substantial federal funding from the American Reinvestment and Recovery Act of 2010 (ARRA). The redevelopment of the blighted, impoverished public-housing project was a perfect match for the federal funds that were intended to help foster sustainable, transit-oriented developments. Through the advocacy efforts of the Denver Mayor’s office as well as from Senator Michael Bennet and Congresswoman Diana DeGette among other political advocates from the Denver region, the DHA was able to secure nearly $80 million in subsidies including ARRA stimulus funds, HOPE VI funds, and LIHTC funding for the first four phases of redevelopment of the South Lincoln TOD.

Table 7.5 – Advocacy-Factor Score for the South Lincoln TOD

<table>
<thead>
<tr>
<th>Advocacy Variables:</th>
<th><em>Score:</em></th>
<th>Rationale for Score:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neighborhood Advocacy</td>
<td>+1</td>
<td>Supported affordable housing.</td>
</tr>
<tr>
<td>Nonprofit Advocacy</td>
<td>+1</td>
<td>Supported affordable housing.</td>
</tr>
<tr>
<td>Political Advocacy</td>
<td>+1</td>
<td>Supported affordable housing.</td>
</tr>
<tr>
<td>Final Score (Average)*</td>
<td>+1</td>
<td>Strong advocacy support for affordable housing.</td>
</tr>
</tbody>
</table>
Scores were based on the projected impact of the advocacy variables on the developer, Denver Housing Authority, during the pre-development period of 2008-2010. Scores were determined from interviews with developers and other key players as well as a review of primary source documents related to the South Lincoln TOD development.

**Scoring the Advocacy Variables**

The neighborhood-advocacy variable for the South Lincoln TOD received a “+1” because the Denver Housing Authority was the beneficiary of solid neighborhood and community support for affordable housing from the La Alma/Lincoln Park neighborhood (the South Lincoln public-housing redevelopment resides within the larger La Alma/Lincoln Park neighborhood). The DHA made a strong effort to reach out to local citizens and neighborhood groups within the La Alma/Lincoln Park neighborhood to gather their input regarding affordable-housing provisions in the South Lincoln redevelopment (K. Crangle, personal communication, September 7, 2011). The Lincoln Residents Council (LRC) was the main neighborhood advocacy group representing the La Alma/Lincoln Park community. The LRC, formed in 2009 at the start of master planning for South Lincoln, served as the official liaison group between the neighborhood and the City of Denver. Chris Parr, director of Development for the DHA, stated that the creation of the La Alma/Lincoln Park stakeholder group was one of the most important community initiatives in the creation of a successful affordable-housing master plan for the South Lincoln redevelopment:

> We have had a very, very vibrant stakeholder group... where we give everyone a seat at the table from all of the different representative bodies, non-profits, residents, [and] neighborhood association. So we had this consistent stakeholder group that people have to commit to for a long time (a five-to-seven-year commitment), and this is going to be a clearinghouse for our decision-making process (C. Parr, personal communication, September 7, 2011).
As it turned out, the top concern of the La Alma/Lincoln Park neighborhood group was its desire to retain affordability within the new residential development and its fear of gentrification and the loss of diversity within the community (Denver Housing Authority, 2010).

The second advocacy variable for the South Lincoln TOD development, non-profit advocacy, also received a “+1” as a result of significant affordable-housing advocacy by local nonprofit organizations. The two primary non-profit groups involved in the master planning of the redevelopment were FRESC (Front Range Economic Strategy Center) and the DICP (Denver Inner City Parish). FRESC had the strongest impact of all the non-profits at South Lincoln since it helped persuade the DHA to proceed with a phased-redevelopment approach so that no low-income residents would be displaced during the South Lincoln redevelopment (A. Apodaca, personal communication, September 8, 2011). Kimble Crangle, DHA manager for the project, stated that it would have been faster, easier, and more efficient to have demolished the entire South Lincoln neighborhood at one time and then to have proceeded with the redevelopment, since the phased approach was more costly and complicated (K. Crangle, personal communication, September 7, 2011). Because of FRESC’s advocacy efforts which helped to convince the DHA to take the phased-redevelopment approach, however, the South Lincoln residents were able to avoid displacement.

Furthermore, FRESC and the DICP (Denver Inner City Parish) also lobbied for a one-to-one replacement of the affordable-housing units so that no net loss of these units would take place at South Lincoln. As a result of these efforts, the DHA agreed not only to replace the affordable units on a one-to-one basis but also to increase the overall
number of affordable units in the development. The original South Lincoln affordable-housing project totaled 270 affordable rental homes. The first four phases of the South Lincoln redevelopment however called for approximately 450 total units of which 320 were to be affordable for households earning less than 60% of the area median income. The remaining 130 units were targeted to be market rate (Denver Housing Authority, 2010). The planned 320 units of affordable rental housing thus represented a net gain of 50 versus the original 270 affordable units. Furthermore, with the completion of the first phase of the 10th and Osage affordable senior apartments, 100 of these units had already been completed.

The final advocacy variable impacting the DHA at South Lincoln, political advocacy, received a “+1” thanks to the significant political support for affordable housing expressed by local political leaders in the Denver region. The DHA benefited from the support of elected city officials and city administrators who were strong advocates of the South Lincoln redevelopment. The following is a list of the local and state elected officials who actively lobbied for federal grant assistance in the form of ARRA stimulus funding for the South Lincoln TOD redevelopment: then Denver Mayor John Hickenlooper, then Colorado Governor Bill Ritter, U.S. Senator Michael Bennet, U.S. Congresswoman Dianna DeGette, and Denver City Councilwoman Judy Montero (Steffen, 2009).

Impact of the Advocacy Factor on Affordable Housing

The final advocacy factor score of “+1” (See table 7.5, above.) indicated strong advocacy conditions for affordable housing at the South Lincoln TOD. The DHA was impressed by the considerable neighborhood and non-profit support for affordable
housing there, yet it was the political advocacy that was the most responsible in the end for the authority’s decision to go forward with affordable housing there. The strong political-advocacy efforts, both nationally and locally, helped secure nearly $80 million in grants and tax-credit equity funding that created a significant incentive for the DHA’s low-income-redevelopment focus at the South Lincoln TOD (Denver Housing Authority, 2010).

Post-Development Advocacy Climate

Advocacy conditions remained strong for the South Lincoln TOD development following the completion of Phase One, the 100-unit senior facility which recently opened in early 2013. Although full funding has been acquired for the first four phases of the redevelopment, applications to underwrite the final four phases are in progress, and the DHA expects to acquire the needed funds for the rest of the South Lincoln project. The advocacy environment, in short, remains strong for completing the South Lincoln development, with this TOD promising to be a significant positive development for affordable housing in Denver.

Evans Station Lofts TOD

Advocacy Climate

Similar to the Denver Housing Authority at South Lincoln, Medici Communities was the beneficiary of robust support for the development of affordable housing at the Evans Station Lofts TOD. The Evans Station Transit Stop had opened in July 2000 with strongly positive community anticipation for the proposed mixed-use growth around the station. This hope was not realized, however, and the area remained vacant with no significant development. When Medici Communities probed neighborhood members...
about the possibility of developing a mixed-use, loft-type affordable-housing
development the, area residents were quite supportive, since such an initiative
represented the first possibility for significant development in the area for some time
(The City of Denver- Office of Community Planning and Development, 2009).

**Table 7.6 – Advocacy-Factor Score for Evans Station Lofts TOD**

<table>
<thead>
<tr>
<th>Advocacy Variables:</th>
<th>Score:</th>
<th>Rationale for Score:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neighborhood Advocacy</td>
<td>+1</td>
<td>Supported affordable housing.</td>
</tr>
<tr>
<td>Nonprofit Advocacy</td>
<td>+1</td>
<td>Supported affordable housing.</td>
</tr>
<tr>
<td>Political Advocacy</td>
<td>+1</td>
<td>Supported affordable housing.</td>
</tr>
<tr>
<td><strong>Final Score (Average)</strong></td>
<td>+1</td>
<td>Strong advocacy support for affordable housing.</td>
</tr>
</tbody>
</table>

*Scores were based on the projected impact of the advocacy variables on the developer, Medici Communities, during the pre-development period of 2010-2012. Scores were determined from interviews with developers and other key players as well as a review of primary source documents related to the Evans Station Lofts TOD development.

**Scoring the Advocacy Variables**

The neighborhood-advocacy variable for the Evans Station Lofts TOD
development was scored a “+1” owing to the fact that Medici Communities received
solid neighborhood and community support for affordable housing. The local
neighborhood groups saw the Evans Station Lofts project as a possible catalyst for future
mixed-use development in the area—something that would significantly benefit local
business owners and residents (T. Gladwell, personal communication, April 19, 2012).
The point person facilitating outreach to the Evans Station community was Denver City
Councilman Chris Nevitt. Mr. Nevitt and his two legislative aides—Jennifer Redies and
Valerie Kerns—were instrumental in organizing neighborhood support for the Evans
Station Lofts project (C. Nevitt, personal communication, September 21, 2010). Mr.
Nevitt and his staff in this regard were able to engage the following groups to back the
Evans Station area plan and subsequent Evans Station Lofts project as well: the Evans Station Area Steering Committee, the Overland Neighborhood Association, the Platt Park People’s Association, the Platt Park Residents’ Coalition, the Ruby Hill Neighborhood Association, and the Godsman Neighborhood Association (The City of Denver, Office of Community Planning and Development, 2009).

The second advocacy variable impacting the Evans Station Lofts TOD, non-profit advocacy, also received a “+1” because Medici Communities gained strong support for affordable housing from local non-profits. The two most significant of these were the Enterprise Community Partners and the Urban Land Conservancy, both of which worked together to help Medici acquire the Evans Station land parcel through the use of the Denver TOD Fund.

The Enterprise Denver office had worked consistently with the City of Denver and the Urban Land Conservancy over the past five years to develop the Denver TOD Fund, which was set up to provide loans for purchasing land parcels near TODs for the development of affordable housing. The TOD Fund was then used to acquire eight TOD properties in the Denver region, including the Evans Station property.

Along with Enterprise, the Urban Land Conservancy (ULC) played a vital role in the Evans Station Lofts project. The ULC was founded as a land-banking organization with the mission of acquiring and preserving land parcels in the Denver region, specifically for the development of affordable housing (The Urban Land Conservancy, 2012). The ULC secured the land parcel that was to be the future site of the Evans Station Lofts. The organization then made the initial $120K down payment on the $1.2 million parcel and used a loan from the Denver TOD Fund to finance the balance. The
ULC moreover held the land for the developer, Medici Communities, for a little over a year while the latter raised funds for the project. Medici, which purchased the land from ULC in June 2012, completed the Evans Station project in August 2013.

The final advocacy variable for the Evans Station Lofts development, political advocacy, also received a “+1” as a result of the project’s having gained political support from various Denver city officials. The City of Denver viewed the Evans Station Lofts project as a continuation of its goal of developing affordable housing near light-rail stations (The City of Denver, Office of Community Planning and Development, 2009). The Evans Station Loft project consequently received significant support from Denver City Councilmember Chris Nevitt, president of the Denver City Council and representative for District 7. Councilmember Nevitt, former executive director of FRESC, applied strong political pressure to promote the Evans Station Lofts project. Along with Councilman Nevitt, the following city officials were directly or indirectly involved in advocating for the Evans Station area plan and the related Affordable Lofts project: Kristen Krasnove, senior planner for Denver Community and Planning Department; Gordon Robertson, planning director for Denver Parks and Recreation; Cec Ortiz, deputy director for the Denver Office of Economic Development; Dace West, Denver Office of Strategic Partnerships and the Denver TOD Fund; and Bill Sirois, TOD program manager for RTD (The City of Denver, Office of Community Planning and Development, 2009).

Impact of the Advocacy Factor on Affordable Housing

The positive advocacy-factor score of “+1.0” in Table 7.6 played a significant role in Medici Communities’ decision to build affordable housing at the Evans Station site.
While Medici benefited from solid neighborhood and political advocacy for this development, it was the support of the two non-profits mentioned above, Enterprise and the Urban Land Conservancy, together with the loan from the Denver TOD Fund that proved crucial. As a small affordable-housing developer, Medici Communities did not have the funds or the risk capacity to buy and hold the chosen land parcel while waiting for public-subsidy funding which might never have come. This waiting process tended to result in affordable-housing developers losing out on choice land parcels since many attractive TOD sites would get purchased and held by better-healed private developers in the meantime. In the case of the Evans Station Lofts development, however, Enterprise and ULC were able to use the Denver TOD funds to purchase and hold the Evans Station land parcel for one year while Medici got approval for subsidy funding. This land-banking process was of enormous benefit to Medici and really made the Evans TOD development possible.

**Post-Development Advocacy Climate**

The post-development advocacy conditions for the Evans Station Lofts TOD remained strong following its grand opening in August 2013. All 50 of the affordable rental units were quickly leased, with a significant number of households on the waiting lists for future vacancies. Furthermore, the 8,000 square feet of retail/commercial space were soon fully leased. The City of Denver as well as Enterprise and the Urban Land Conservancy continued to champion the Evans Station Lofts, which they viewed as a successful model of affordable-housing land banking and development near a TOD. Evans Station Lofts moreover represents the first affordable-housing TOD development to make use of the Denver TOD Fund. The City of Denver and the non-profit housing
community are proud of this high-quality, loft-oriented mixed-use development, which they are eager to promote locally and nationally as a model TOD with affordable housing (C. Everett, personal communication, April 23, 2012).

**Satisficing and the Advocacy Factor**

As previously stated, the theory of satisficing argues that developers are not looking to maximize profits but instead want to reduce risks when they make their development decisions. They are willing to accept “satisfactory” profits while “sacrificing” maximum profits; thus they satisfice. In an effort to reduce risks, developers are constantly seeking to avoid the costs imposed by hostile advocacy groups. Many of these neighborhood groups dislike high-density developments like TODs since they believe these projects will bring increased traffic and noise while diminishing the quality of their communities (as expressed previously in this chapter by the new Vallagio residents). Additionally, they fear these negative outcomes will bring down the value of their homes (See more on NIMBY in the literature review in Chapter 2.). Even more than their disapproval of high-density developments, these neighborhood groups are critical of low-income affordable housing for bringing in not only noise and crime but also poor-quality design that would further diminish their neighborhoods and home values.

The literature on satisficing developers claims that it is exactly these types of neighborhood advocacy groups that developers try to avoid. The costs imposed by the formers’ opposition to urban-infill projects like TODs with affordable housing often included with them encourage satisficing developers to prefer more traditional residential developments in suburban greenfields (Lucy & Phillips, 2000). Based on the notion that
satisficing developers seek to avoid the risks and costs imposed by advocacy groups, this section of the study seeks to understand whether the advocacy groups worked in some cases to create satisficing condition for the developers’ decisions on affordable housing by reducing risks and creating the opportunity for satisfactory profits. Or did these groups contribute to non-satisficing conditions which discouraged the production of affordable housing by raising some developers’ costs and risks?

In the case of the Englewood City Center TOD, the advocacy climate by being unsupportive of affordable housing created non-satisficing conditions for Trammell Crow in its consideration of affordable housing. The Englewood City Council’s opposition to affordable housing at the development would have created significant costs and risks for Trammell Crow had they more strongly pursued affordable housing at its City Center development. Thus they chose to forego affordable housing.

Similar to the Englewood City Council, the advocacy groups within the Inverness community opposed affordable housing and thus helped create non-satisficing conditions for Metropolitan Homes in its consideration of affordable housing. Peter Kudla, the CEO of Metropolitan Homes, at the outset of planning for Vallagio briefly thought about including affordable housing, but the strong opposition from political groups in addition to a corporate culture hostile to low-income housing stymied any further consideration of affordable housing. The opposition to any type of lower-end housing was further exacerbated after the initial residential owners moved into the Vallagio. These groups strongly protested the possible inclusion of even luxury rental apartments. This opposition cost Mr. Kudla and Metropolitan Homes significant losses as a result of the delays in the approval of the luxury apartment complex.
Unlike the cases of the Englewood and Vallagio TODs, advocacy groups at the Gates TOD acted diligently to create satisficing conditions for Trammell Crow’s decision on affordable housing. The City of Denver as well as non-profit advocacy groups like FRESC worked hard to secure public subsidies for Trammell Crow at Gates to help reduce the risks inherent in their affordable-housing development. Similar to Gates, advocacy groups involved at the South Lincoln development were instrumental in creating satisficing conditions for the Denver Housing Authority. Local political advocacy for the South Lincoln redevelopment helped the DHA acquire nearly $10 million in federal ARRA stimulus funds as well as approximately $70 million in LIHTC, HOPE VI, and HOME moneys. These advocacy initiatives were critical in helping the DHA reduce its risk and achieve satisfactory profits.

Finally, advocacy groups involved in the Evans Station Lofts project provided significant support to reduce risks for Medici Communities and create satisficing conditions for the latter’s development of affordable housing there. Advocacy efforts from the non-profit organizations Enterprise and the Urban Land Conservancy, moreover, leveraged over $1.2 million from the Denver TOD Fund to purchase and hold the land for the Evans Station Lofts until the developer could find the subsidies needed to buy it themselves.
CHAPTER VIII

CONCLUSIONS

This chapter examines the research question and assesses the hypotheses proposed for the research. The chapter also analyzes the selected developers’ decision-making processes with regard to the theory of satisficing and evaluates how it has impacted their decisions on whether or not to include affordable housing within each of the TOD cases. Moreover, the chapter discusses the findings of the research, suggests policy recommendations, proposes ideas for future research, and considers the research’s contributions to the relevant literature. The chapter concludes with a discussion of the limitations of the research.

Research Question, Theory, and Hypotheses

The research question for this dissertation is the following: How do the economic, regulatory, and advocacy factors influence a developer’s decision to provide affordable housing in a TOD? The general hypothesis is that if these factors interact to create satisfactory profits and lower risks, then it is more likely a developer will choose to provide affordable housing in a TOD. The literature suggests that the economic factor is dominant in influencing a developer’s decision-making process about the inclusion of affordable housing, while regulations and advocacy are moderating factors that either enhance or minimize the impact of the economic factor.

The theoretical framework that informs this research is satisficing, a theoretical construct first developed by Herbert Simon (1956). The construct of satisficing is related to Simon’s idea of bounded rationality. He argued that the rationality of human decision makers is bounded by the limits of their cognitive capacity. Simon concluded that this
limitation resulted in an inability to “maximize” or “optimize” outcomes. Therefore when faced with a choice, they satisfice.

It appears probable that however adaptive the behavior of organisms in learning and choice situations, this adaptiveness falls far short of the ideal of “maximizing” postulated in economic theory. Evidently, organisms adapt well enough to “satisfice”; they do not, in general, “optimize.” If this is the case, a great deal can be learned about rational decision making by taking into account, at the outset, the limitations upon the capacities and complexity of the organism . . . (Simon, 1956, p. 129).

Simon expounded upon the idea of satisficing in his article “Theories of Bounded Rationality” (1972). There he argued that because satisficing decision makers were bounded by uncertainty and complexity in “real world situations,” they would attempt to reduce these complexities into a more simplified, less complicated decision scenario where they would settle for a satisfactory outcome.

The terms satisficing and optimizing . . . are labels for two broad approaches to rational behavior in situations where complexity and uncertainty make global rationality impossible. In these situations, optimization becomes approximate optimization—the description of the real-world situation is radically simplified until reduced to a degree of complication that the decision maker can handle. Satisficing approaches seek this simplification, retaining more of the detail of the real-world situation, but settling for a satisfactory, rather than an approximate best, decision (1972, p. 170).

Following from Simon’s theories of bounded rationality and satisficing, this study holds that residential developers are bounded rationally and they make simplifying, satisficing decisions regarding affordable-housing development in TODs. The study concludes that TODs are complicated developments characterized by uncertain markets, unpredictable regulatory requirements, and volatile advocacy conditions. The unpredictability regarding the interaction of these factors pushes developers to the limits of their rationality. In response, developers try to reduce and simplify the situation so they can make an informed satisficing decision. This study argues that they will only
decide to develop affordable housing in a TOD if their risks are sufficiently reduced and they can make satisfactory profits. For developers to get to the place where they can confidently decide to develop affordable housing, they must be incentivized by strong, predictable economic conditions as well as manageable regulatory requirements and low advocacy opposition to affordable housing.

Following from the idea that developers are satisficers whose decision making is bounded rationally, this research has developed the following three hypotheses to help examine the impact of the three factors (economic, regulatory, and advocacy) on a developer’s decision-making process about including affordable housing in the five Denver TOD cases studied. Each hypothesis is scored and analyzed based on the impact of the three factors during the two-year period leading up to the ground breaking for the respective TOD. The hypotheses are followed by a graphic depiction of the theoretical model (Figure 8.1) in addition to a composite table containing all the final scores for the factors and variables for each case (Table 8.1).

*Hypothesis 1.* If the economic factor is negative, then affordable housing is not likely to be produced in a given TOD.

*Hypothesis 2.* If the advocacy factor is negative, then affordable housing is likely only if the economic and regulatory factors are both positive and strong enough to offset the advocacy costs.

*Hypothesis 3.* If the regulatory factor is negative, then affordable housing is likely only if the economic and advocacy factors are both positive and strong enough to offset the regulatory costs.
If Developer decides that the risks are manageable and satisfactory profits are attainable, Affordable Housing will be developed in a TOD.

If Developer decides that satisfactory profits are unattainable owing to higher risks and costs, Affordable Housing will not be developed in a TOD.

Developer’s Satisficing Decision
Based on the interaction of the three factors, a developer will decide whether risks are manageable and satisfactory profits possible.

1. Theory - Developers are satisficers who will make the decision to provide affordable housing within a TOD if profits are satisfactory and risks manageable.

2. General Hypothesis - If the economic, regulatory, and advocacy factors meet the standards for satisfactory profits and reduced risks, developers will produce affordable housing in a TOD.
Table 8.1. Composite Scoring Table for Five Denver TOD Cases

<table>
<thead>
<tr>
<th>Economic Factor</th>
<th>Regulatory Factor</th>
<th>Advocacy Factor</th>
<th>Final Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Land Cost</td>
<td>Housing Markets</td>
<td>Subsidy</td>
</tr>
<tr>
<td>Trammell Crow at Englewood (1998-2000)</td>
<td>+1</td>
<td>+1</td>
<td>+1</td>
</tr>
<tr>
<td>Metropolitan Homes at Vallagio (2003-2005)</td>
<td>0</td>
<td>+1</td>
<td>0</td>
</tr>
<tr>
<td>Trammell Crow at Gates (2005-2007)</td>
<td>0</td>
<td>+1</td>
<td>+1</td>
</tr>
<tr>
<td>The DHA at South Lincoln (2009-2011)</td>
<td>+1</td>
<td>0</td>
<td>+1</td>
</tr>
<tr>
<td>Medici at Evans Station Lofts (2010-2012)</td>
<td>0</td>
<td>+1</td>
<td>+1</td>
</tr>
</tbody>
</table>
Findings

Hypothesis 1. If the economic factor is negative, then affordable housing is not likely to be produced in a given TOD.

The first hypothesis for this study was based on the assumption that the economic factor is dominant and strong economic conditions are the most important determinant for a TOD developer considering affordable housing. This study argues that some positive combination of reasonable land costs, stable housing-market conditions, availability of public subsidies, and a solid expectation of return on investment is required for a developer to include affordable housing.

Table 8.2. Economic Factor Scores for the Five Denver TODs

<table>
<thead>
<tr>
<th>Economic Factors</th>
<th>Final Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Land Cost</td>
</tr>
<tr>
<td>Englewood</td>
<td>+1</td>
</tr>
<tr>
<td>Vallagio</td>
<td>0</td>
</tr>
<tr>
<td>Gates</td>
<td>0</td>
</tr>
<tr>
<td>South Lincoln</td>
<td>+1</td>
</tr>
<tr>
<td>Evans Station</td>
<td>0</td>
</tr>
</tbody>
</table>

As expected, Table 8.2 above reveals that in all three of the Denver TOD cases where affordable housing was produced (Gates, South Lincoln, and Evans Station), the economic variable received a positive score. Each of these TODs had a healthy “+0.75” for their economic-factor score (See Table 8.1.). Paradoxically, in the two Denver TOD cases where the developer decided against having affordable housing (Englewood City Center and Vallagio at Inverness), the economic factor also had positive scores, with Englewood receiving a “+1.0” while Inverness got a “+.50” (See Table 8.2.).
positive economic factor for these two cases was to be expected since it would be unlikely for a developer to take on a complex urban-infill development like a TOD without positive economic expectations. However, while Trammell Crow received a perfect “+1.0” at Englewood, the underlying risks related to the then-untested TOD housing market together with the political opposition encountered there contributed to the company’s decision against affordable housing. For Metropolitan Homes, while they had strong housing markets and solid ROI projections, the lack of discounted land costs and public subsidies along with political opposition reduced their incentives to provide affordable housing.

While it was expected that the economic conditions in all five TOD cases would be strong, one unexpected finding was the importance of the housing-market variable and its overall impact on the economic factor. The housing-market-conditions variable thus turned out to be the most significant driver of the economic context for developing affordable housing. Interviews with the individual TOD developers as well as an analysis of the primary data sources provide the following reasons for the significance of the housing-market variable.

The first is related to the impact of the housing market on revenue projections. A multi-family residential developer’s prediction of return on investment is strongly influenced by the likely levels of rents, sales prices, and appreciation of their properties. Housing-market conditions are among the most critical factors in determining these benchmarks. The stronger and more stable the housing market in a particular region, the lower the vacancy rates, the higher the rents, and the stronger the sale prices and equity appreciation of the residential product are likely to be. TOD developers want to break
ground on a development in the midst of a stable-to-strong housing market so that they can be reasonably assured of recovering their investment with predictable sales-and-rental revenue and product appreciation. Affordable-housing developers of low-income rental units are also significantly impacted by housing-market conditions since their subsidized rent levels are tied to the housing market, and stronger housing markets lead to higher rent levels for low-income-housing-tax-credit units.

Moreover, housing-market conditions also have a significant impact on the LIHTC market. The equity value of LIHTCs is often influenced by the strength of the national economy and housing markets (Korb, 2009). For example, strong housing-market conditions usually indicate general economic growth in the country which in turn tends to produce escalating profits for corporations, banks, and private equity groups, among others. The significant profits reaped by these groups during times of growth lead to higher demand for tax write-offs and thus a stronger market for tax credits. During times of economic growth, corporations, banks, and private equity groups in need of tax write-offs will pay close to 90-to-95 cents on the dollar for LIHTCs (T. Gladwell, personal communication, April 19, 2012). For example, a bank might purchase $10 million in LIHTCs for 90 cents on the dollar, or $9 million. This transaction gives the affordable-housing developer $9 million in cash equity for affordable-housing development while the bank receives a $1 million tax discount off its tax liability.

However, in times of economic and housing recession, the LIHTC can decrease significantly in value as the demand for tax write-offs drops precipitously. During the economic recession of 2008-2010, for example, there was much less demand for tax credits since corporations and banks were suffering losses and did not need tax breaks
(Korb, 2009). During the recession, LIHTCs were selling for only 60-to-70 cents on the dollar (C. Smith, personal communication, October 7, 2010). Such a significant drop in their value can have a huge impact on affordable-housing projects with potential developers losing up to 30% of the equity value of the tax credits—a result which makes many affordable-housing projects unviable since developers cannot achieve satisfactory profits.

The Evans Station TOD case is a good example of how housing-market conditions and the strength of the economy can impact the value of LIHTCs. Medici Communities, the developer of Evans Station Lofts TOD in Denver, first applied for tax credits in 2009 and was awarded approximately $12 million worth through a competitive application process administered by the Colorado Housing and Finance Authority (Colorado Housing and Finance Authority, 2011). When the tax credits were granted to Medici in 2010, however, the housing market was still coming out of recession, and the $12 million tax credits could be sold to investors for only approximately 80 cents on the dollar, a rate which yielded approximately $9.6 million in equity for Medici Communities to develop the Evans Station Lofts (Colorado Housing and Finance Authority, 2011). This result left a nearly $2.5 million gap in financing for Medici’s Evans Station Lofts. The lower value of the tax credits put the development on hold while Medici scrambled to find additional subsidies to fill their budget gap. By late 2011, when housing-market conditions had begun to stabilize and the economy to improve, the demand for tax credits started to rise. At that time Medici was able to find an investor willing to pay 95 cents on the dollar for the $12 million in tax credits (Colorado Housing and Finance Authority, 2011). This improved rate increased the value of the tax-credit equity from $9.6 million
to $11.4 million, an outcome which filled the budget gap and enabled Medici to move forward with the development. (See Appendix D for further explanation of the LIHTC program.)

While a strong housing market promotes TOD developments in general and also serves to increase the chances for including affordable housing within a TOD, a weak housing market can significantly stymie affordable-housing development in TODs. During the Great Recession, beginning in late-2007 or early-2008, housing markets softened dramatically, and affordable-housing development in TODs in the Denver region weakened significantly. As explained in the previous section, one of the primary reasons for the lack of affordable-housing starts during the recession was related to the dramatic softening of the LIHTC market. As the bottom fell out of the tax-credit market during the recession, developers found it less and less possible to generate enough equity to fund an affordable housing project. The only affordable-housing developments in progress at that time were ones like Trammell Crow’s at Gates for which the developers had already sold their tax credits at a higher rate in 2007 before the housing crisis hit. The first affordable-housing development in a TOD in the Denver region post-recession was the South Lincoln development, which broke ground in early 2011, when the housing and tax-credit markets had already begun to stabilize and strengthen.

_Hypothesis 2. If the advocacy factor is negative, then affordable housing is likely only if the economic and regulatory factors are both positive and strong enough to offset the advocacy costs._

The second hypothesis for this study was developed from the argument that a negative score on the moderating advocacy factor reflects strong opposition to affordable
housing within the TOD in question. Without significant economic incentives in addition to reduced regulatory requirements, it is unlikely that a developer will be willing or able to overcome the costs associated with advocacy opposition to affordable housing. Moreover, since typical LIHTC affordable-housing developments have limits on the amount of developer fees and rental revenues that can be generated from these developments, some form of extra economic incentive or benefit tied to these developments is likely necessary for the developer to overcome the stiff costs and barriers imposed by advocates who oppose affordable housing.

The literature reveals how costly advocacy groups can be to a developer. Studies show that it is difficult enough to get communities to approve high-density developments like TODs, but adding affordable housing to a TOD creates an additional risk which can stir up further opposition. As the Center of Transit Oriented Development (2007) put it, Density required in TODs can generate “not in my backyard” (NIMBY) opposition. Many interviewees spoke of an ongoing “phobia of density” in the Denver region. Initial resistance and development delays can be expected with higher-density projects, particularly without an inclusive community planning process at the outset (p. 26).

Most developers try to avoid any type of public confrontation, since the latter can slow a project down. Lucy and Phillips (2000) argued that neighborhood opposition to high-density infill developments can often discourage companies from such initiatives. Opposition by neighbors to infill development, and insufficient motivation for developers, lenders, and public officials to overcome opposition and higher acquisition costs compared to green space, leads development actors to avoid most major infill projects (p. 10).
Table 8.3. Factor Scores for Englewood and Vallagio

<table>
<thead>
<tr>
<th>Economic Factor</th>
<th>Regulatory Factor</th>
<th>Advocacy Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land H M Su b</td>
<td>ROI Final Zone</td>
<td>Neig hbor PA Final</td>
</tr>
<tr>
<td>Englewood</td>
<td>+1 +1 +1 +1 +1</td>
<td>0 0 -1 -0.33</td>
</tr>
<tr>
<td>Vallagio</td>
<td>0 +1 0 +1 +0.50</td>
<td>-1 0 -1 -0.66</td>
</tr>
</tbody>
</table>

As expected, in both the Denver TOD cases—Englewood and Vallagio—where community opposition to affordable housing resulted in a negative advocacy factor (See Table 8.3, above.), there were no extraordinary economic benefits tied to affordable housing that would have compelled the developers to be willing to try to overcome the opposition to affordable housing. Moreover, the regulatory costs related to parking and ground-floor retail developments further diminished the economic context (See Table 8.3.). Because of these issues, the developers in the two cases decided against affordable housing. In both cases they expressed that it was enough of a challenge just getting the community on board for the high-density TOD development (R. Simpson, personal communication, August 6, 2013; P. Kudla, personal communication, December 5, 2012).

In the case of Englewood City Center, Trammell Crow was experienced in affordable-housing development and was willing to consider it. The City Council members of Englewood, however, were opposed to adding any risks to what they considered the still-unproven TOD concept. After discussions with the City of Englewood, Trammell Crow decided against affordable housing because of the political
opposition. For Trammell Crow to push back against the City’s opposition to affordable housing, they would have more than likely needed reduced parking and ground-floor retail requirements as well as a strong economic package tied to affordable-housing development to reduce their risks. Ultimately, the negative moderating advocacy factor in addition to the high parking and retail requirements under the regulatory factor diminished the positive economic factor and resulted in Trammell Crow’s decision to forego affordable housing there.

Similar to the situation with the Englewood City Center development, Metropolitan Homes decided against affordable housing at Inverness mostly because of the negative advocacy factor, which ultimately trumped a positive economic environment. In an interview Metropolitan Homes’ developer Peter Kudla made it clear that he had been open to providing affordable for-sale units in the Inverness development to create price diversity. However, the Arapahoe County Commissioners and the business owners in the community were already concerned about the lower-priced starter condos for what was intended as an upscale high-density development and were thus opposed to any affordable housing there. Similar to Trammell Crow at Englewood, for Metropolitan Homes to push back against Inverness’s opposition to affordable housing, they would have more than likely needed reduced parking and ground-floor retail requirements as well as a much stronger economic package tied to affordable-housing development to lower their risks. Ultimately, the negative moderating advocacy factor in addition to the high parking and retail requirements under the regulatory factor overcame the positive economic factor and resulted in Metropolitan Homes’ decision to forego the construction of affordable housing at Vallagio.
Hypothesis 3. If the regulatory factor is negative, then affordable housing is likely if the economic and advocacy factors are both positive and strong enough to offset the regulatory costs.

The third hypothesis for this study was developed from the theory that a net negative score for the regulatory factor reflects some combination of high costs for zoning, infrastructure, parking, and required ground-floor retail space. In order for a developer to choose to include affordable housing in a TOD encumbered with such costs, the economic factor and advocacy factor would need to be positive and strong enough to offset them and allow the developer to achieve satisfactory profits.

Table 8.4. Factor Scores for South Lincoln

<table>
<thead>
<tr>
<th>Economic Factor</th>
<th>Regulatory Factor</th>
<th>Advocacy Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land</td>
<td>HM</td>
<td>Sub</td>
</tr>
<tr>
<td>+1</td>
<td>0</td>
<td>+1</td>
</tr>
</tbody>
</table>

With regard to the Denver TOD cases, the South Lincoln TOD was the only development in which the moderating regulatory factor received a negative score (See Table 8.4). The developer of the South Lincoln TOD, the Denver Housing Authority, was subject to significant costs associated with infrastructure since the project required major flood-plain mitigation, road construction, and utility provisions (See Table 8.4). Yet despite the negative regulatory factor at South Lincoln, the DHA moved forward with affordable housing there. Part of the reason for this decision was the strength of the economic factor highlighted by strong subsidies and low land costs. The Center for Transit Oriented Development in their report *The Case for Mixed Income Transit Oriented Development in the Denver Region* (2007) claimed that rising land costs near

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TODs in the Denver region created an important barrier to the development of affordable housing. The CTOD stated,

Land prices are high at TOD sites. In the Denver region, developers already pay a premium on land at many planned and existing TOD sites. This presents a formidable obstacle to providing housing products at affordable prices. Land prices are being driven up by speculative pressures.

The Denver Housing Authority was able to avoid high land costs at the South Lincoln site because they were the owners of 17 of the 20 acres on which the project was to be located. The DHA’s ownership of the parcel allowed them to save $10 to $15 million in land costs alone based on the market rate at the time for land of similar location and quality (LoopNet.com, 2012).

In addition to low land costs, the DHA benefited from significant political advocacy, something which helped the Agency secure substantial federal and local subsidies that came to nearly $80 million of the total $99 million project budget for the first four phases of development (K. Crangle, personal communication, September 7, 2011). Ultimately, the positive economic factor led by low land costs and enormous subsidies along with the positive advocacy factor helped offset the higher regulatory costs and led the Denver Housing Authority to make a positive decision for including affordable housing at South Lincoln. Without these strong subsidies and political-advocacy support, the DHA would likely have avoided the costly redevelopment at South Lincoln and chosen a non-TOD site with less infrastructural costs (K. Crangle, personal communication, September 7, 2011).

The previous sections of this study were intended to examine these research hypotheses to show how the dominant and moderating factors interacted to shape the
respective developer’s decision on affordable housing in each of the Denver-area TODs. The next section on satisficing examines the overall risk context for each developer in the various TODs to highlight how the economic, regulatory, and advocacy factors ultimately influenced their respective decisions on affordable housing.

**Findings Related to Satisficing**

As previously stated, the theory of satisficing holds that developers are satisficers who seek to reduce risk while obtaining a satisfactory profit before deciding to move forward on a residential development (Lucy & Phillips, 2000). According to this theory, developers are bounded rationally as a result of limited information and a constricted time frame for making decisions (Simon, 1956; 1991). Owing to these limitations, the theory further stipulates that developers are not driven by maximizing profit but would rather settle for lower yet still satisfactory profits while minimizing their risks. This research holds that TOD developers are satisficers who will choose to develop affordable housing within a TOD only when the risks are minimized and satisfactory profits likely. This study further concludes that it is the interaction of the economic, regulatory, and advocacy factors that helps determine whether satisfactory profits are attainable and risks manageable for developing affordable housing. The following section assesses each Denver TOD Case Study to determine how the three factors influenced the developers’ satisficing behavior which in turn governed their decisions to develop affordable housing in their TOD or not.

**Trammell Crow at Englewood City Center**

One of the significant satisficing constraints that Trammell Crow encountered at the Englewood City Center consisted of the risks related to the still-untested TOD
markets. The City of Englewood, which was attempting the first suburban TOD development in the Denver region, offered Trammell Crow the opportunity to be the residential and retail developer at the new TOD site. Since the TOD concept was new in the region at the time, Trammell Crow had limited information regarding the land, ground-floor retail, and housing markets, and how they would behave compared with similar non-TOD markets in the region. Not only was the City of Englewood considered an older inner-ring suburb, but many developers believed redeveloping the vacant Cinderella Mall site to be a risky venture (M. Utter, personal communication, September 2, 2010). Moreover, while the new Englewood Station light-rail stop created hopeful expectations regarding TOD development, there remained uncertainties about whether ridership and densities would support the new project (R. Simpson, personal communication, August 6, 2013).

Amidst these uncertainties, Trammell Crow was unsure if they would be able to rent out market-rate units in the new TOD at price levels similar to their market-rate units in other suburban communities. The company was also uncertain about how much appreciation they would be able to accrue for a new market-rate development and whether they would be able to sell the property for a reasonable profit in the near future. These uncertainties added significant risks for the development and almost caused Trammell Crow to walk away from the project altogether. Lucy and Phillips (2000) claimed that such circumstances would usually drive developers away from risky developments like TODs:

Uncertain outcomes from housing markets are to be expected. For the majority of developers . . . limiting uncertainty is a goal. A common strategy to limit uncertainty is to make conventional choices [that] will limit risk (p. 31).
The lack of information regarding the as-yet-untested TOD markets in a new development like Englewood would normally have discouraged developers like Trammell Crow from taking on this type of project. They would have typically preferred a development with more predictability like a strip mall or tract housing developments in a suburban greenfield. Lucy and Phillips (2000) confirmed this sentiment:

> Developers . . . are “satisficers” who limit risk while seeking satisfactory profits. In producing residential, commercial, and industrial buildings, they prefer easy development decisions with satisfactory profits to high-risk projects with the possibility of maximum profits but significant potential for losses (p. 27). The tyranny of easy development decisions means that development . . . goes where risk is limited and profits are satisfactory. . . . Conditions meeting “satisficing” criteria are more prevalent in fringe locations . . . (p. 10).

Ultimately, the City of Englewood was able to convince Trammell Crow to commit to a market-rate residential development at the City Center TOD by offering them a benefit package that included economic incentives (reduced land costs together with a public subsidy) and fewer regulatory requirements (reduced zoning and infrastructure costs). However, even with the benefit package offered by the City, Trammell Crow still decided against affordable housing. Interviews with Englewood leaders and key players in the City Center development revealed that Trammell Crow had considered affordable housing at Englewood. Having had positive experiences with LIHTC development in the Denver region in the past, they were interested in the significant developer fees that come with LIHTC projects. In addition, interviews with the City of Englewood officials made it clear that LIHTC funds were available for Trammell Crow to use at the City Center development if they had been inclined toward including affordable housing there (R. Simpson, personal communication, July 21, 2011). However, Trammell Crow ultimately decided against doing so.
A final analysis of the Englewood City Center TOD development reveals that Trammell Crow had been unable to achieve satisficing conditions for the development of affordable housing at the City Center development. Although the company had received a strong benefit package from the City to help incentivize them to commit to a market-rate residential development, they would have needed a stronger benefit package tied to affordable-housing development as well as reduced costs related to their parking and ground-floor retail requirements in addition to reduced advocacy opposition to achieve satisficing conditions for affordable housing. Without these considerations, the risks imposed by uncertain housing markets were too high and satisficing conditions for affordable housing were not attainable.

**Metropolitan Homes at Inverness**

The development context for Metropolitan Homes at Inverness was characterized by less risk than that of Trammell Crow at Englewood. This reduction in risk stemmed from Trammell Crow’s prior success with their TOD housing. Metropolitan Homes observed how Trammell Crow had exceeded their ground-floor retail and housing revenue projections at Englewood (P. Kudla, personal communication, December 5, 2012). Metropolitan Homes also watched as Trammell Crow sold their 438-unit market-rate residential development for a record profit in 2003. The positive market signals from Trammell Crow’s success at the City Center development in Englewood in fact set off a TOD development boom in the Greater Denver region.

Despite the increased confidence in TOD markets, Metropolitan Homes chose not to provide affordable housing at the Vallagio. The major reason for this decision was related to the non-satisficing conditions for affordable housing imposed by significant
parking costs and ground-floor retail requirements in addition to high levels of political and neighborhood opposition to affordable housing at Inverness. These conditions drove up the risks and costs for Metropolitan Homes and stymied further consideration of affordable housing at the Vallagio.

**Trammell Crow at Gates**

Unlike Trammell Crow at Englewood and Metropolitan Homes at Inverness, Trammell Crow’s satisficing conditions at Gates in 2006 were much more supportive of affordable housing. Trammell Crow had more information and certainty regarding TOD markets than was the case with their original TOD development at Englewood in 2000. They were now armed with six years of experience regarding TOD housing markets and involved at the time in two other TOD developments in the Denver region including a large 600-unit project in Lone Tree near the Park Meadows Mall and another small TOD condo project at Pearl Street near I-25. Trammell Crow’s increased confidence and certainty regarding the TOD housing markets at the time thus created expectations for a strong return on investment for their 419 market-rate units at Gates.

In addition to more predictability regarding TOD markets, Trammell Crow was the recipient of a benefits package that helped reduce their regulatory costs at Gates. This reduction had become a key strategy that many municipalities were already using to attract developers like Trammell Crow to higher-risk developments like TODs. Mohamed’s (2006) research argued that reducing the regulatory requirement for satisficing developers would help them overcome the “bounds on their rationality.” He stated,

> Satisficing developers contribute to sprawl in the form of low-density... development. In response, government policy makers have designed policies
aimed at reducing risks to developers. Reducing risks is intended to help developers *overcome the bounds on their rationality* so that they will make decisions that result in more efficient land use. . . . Risk-reduction policies include clear rules about zoning and allowable uses; fixed rather than negotiated exactions; transparent capital improvement programs; and predictable, streamlined approval processes (p. 28).

The City of Denver and Cherokee contributed to helping Trammell Crow “overcome the bounds on their rationality” about affordable housing at Gates by reducing their regulatory risks. Cherokee had rezoned the entire property before Trammell Crow purchased their land parcel. Cherokee then sold Trammell Crow a clean piece of land they had already remediated. Cherokee also committed to use their TIF subsidy to make further infrastructure improvements to the entire site, a decision that would work to the benefit of Trammell Crow’s residential developments. Moreover, the City of Denver nearly halved Trammell Crow’s ground-floor retail requirements from the original 20,000-plus square feet to a more manageable 12,500 square feet.

The positive regulatory situation for Trammell Crow at the Gates site was further enhanced by the positive advocacy factor there. The advocacy efforts of local nonprofit organizations as well as political advocates from the City of Denver helped the company raise nearly $8 million in LIHTC and HOME funds to cover the total cost of the company’s 60 Broadway Junction affordable units. Trammell Crow invested none of their own money into the affordable-housing project. Their only investment was the cost associated with the administrative time spent developing these units.

Increased confidence in TOD markets, reduced regulatory requirements, and strong advocacy support for affordable housing all worked together to create positive satisficing conditions for Trammell Crow’s decision to provide affordable housing at
Gates. Each of these factors served to reduce risks and ensure satisfactory profits for Trammell Crow at Gates.

**The Denver Housing Authority at South Lincoln**

Like Trammell Crow at Gates, the Denver Housing Authority was the beneficiary of a positive satisficing context at the South Lincoln TOD development. This situation was again related to greater certainty regarding TOD housing markets, a circumstance that created more predictable outcomes for the DHA. In 2010/2011, as the DHA was making its final decisions regarding their South Lincoln development, the TOD markets in the Denver region had been in existence for more than ten years. The DHA was able to witness the remarkable boom during those ten years as well as the slowdown in the TOD market during the Great Recession of late 2008 to late 2010 (C. Parr, personal communication, September 7, 2011). The agency had learned valuable lessons from the recession about the TOD housing and retail markets. They were able to witness Metropolitan Homes struggle and stall-out with their for-sale condo products at Inverness in 2008. The Housing Authority was also able to observe the ground-floor-retail issues that had plagued both Metropolitan Homes and Trammell Crow at Gates. Moreover, the DHA saw the strength of rental housing for Trammell Crow’s development at Gates, which performed admirably even during the recession years. These lessons coupled with other information gained by the DHA allowed them to modify the first four phases of the South Lincoln development to focus on rental-only units and to modify their ground-floor-retail risks during the beginning phases of their development.

In addition to their increased knowledge about TOD housing markets and the lessons learned regarding ground-floor retail, the DHA was the beneficiary of reduced
land costs and significant public subsidies. These benefits were critical because the DHA needed help in offsetting the significant regulatory costs including those for infrastructure and parking.

Finally, the Denver Housing Authority benefited from significant support from Denver’s political leadership, something which helped them acquire the enormous subsidy package required to offset the high regulatory costs of the development. The positive economic and advocacy factors, which were thus strong enough to offset the high infrastructural costs at South Lincoln, created positive satisficing conditions for the DHA at South Lincoln. The result was reduced risks and satisfactory profits for the DHA. Without these conditions, it is unlikely that the Agency would have taken on the complicated development at 10th and Osage, for they would probably have searched for a site with fewer costs.

**Medici at Evans Station**

Like the Denver Housing Authority, Medici was able to benefit from information about the regional TOD markets leading up to and following the Great Recession of 2008. By the time Medici was making its final development decisions in 2011, they were able to learn from the mistakes of Metropolitan Homes and Trammell Crow and modify their own retail requirements, which further reduced their risk exposure. As with the DHA, Medici’s gain in knowledge about the TOD housing and retail markets helped contribute to a positive satisficing context for their initiative.

Further enhancing Medici’s satisficing conditions at Evans Station was the positive regulatory factor. As previously stated, reduced regulatory requirements are one of the most important aspects for creating positive satisficing conditions for an
affordable-housing developer at a TOD. Talen and Johnson’s research (2008) showed that regulatory constraints were one of the most significant barriers facing developers considering affordable-housing provisions in high-density, mixed-used developments:

Many of the developers that did not build affordable units blamed local government regulations for creating prohibitive expenses. Moreover, approximately half of these developers noted that local financial incentives or regulatory changes could encourage them to include affordable units in the future (p. 602).

Medici benefited from dramatically reduced regulatory requirements with regard to zoning, parking, and infrastructure. The Evans Station site had already been rezoned by the City of Denver approximately one year before the developer broke ground. In addition to lowered rezoning costs, the Evans Station parcel was granted significant parking reductions. The latter are especially important because creating parking units is another source of high costs. As the Center for Transit Oriented Development (2007) made clear,

Parking requirements often are unnecessarily high at TODs. High land prices at TOD sites, coupled with the average cost of providing a structured parking space (over $20,000), means that parking requirements can significantly affect the financial feasibility of TOD projects. Zoning requirements that assume all tenants will have cars add a great deal to the cost of building TOD housing (p. 26).

The City of Denver worked with Medici to help them avoid high parking costs at Evans Station by reducing their parking requirements from two spaces per unit to less than one. This parking reduction enabled Medici to avoid building a parking garage, a turn of events which led to significant cost savings (T. Gladwell, personal communication, April 19, 2012).

Finally, the positive advocacy factor was a strong source for contributing to the satisficing conditions for Medici because they were the beneficiary of non-profit
advocates who purchased and held the Evans Station land parcel for more than a year while Medici acquired low-income tax credits. The holding period was particularly beneficial since it allowed Medici to wait until the tax-credit market improved enough for them to get the maximum equity value from the tax credits they received.

It was the combination of the positive economic, regulatory, and advocacy factors that contributed to satisficing conditions for Medici’s decision to produce affordable housing at the Evans Station site. Without these positive conditions, Medici would have likely pursued affordable housing at a less attractive, non-TOD location.

**Additional Findings**

One of the most significant findings of this research is the importance of timing and the time-sensitive nature of a developer’s decision-making process. As previously stated, this research has evaluated the impact of the three factors on the pre-development period (the two years leading up to ground breaking) of a development. It is nonetheless important to examine both the pre- and post-development time frame for each project to understand fully how the satisficing conditions for a developer’s decision making on affordable housing can change dramatically and unexpectedly.

One important example of how timing influenced the satisficing conditions regarding a developer’s affordable-housing decision involves changing housing-market conditions. Figure 8.2 on the following page provides a graph of multi-family housing-market conditions from 1999 to 2013. The graph is part of the National Multifamily Housing Council’s quarterly market survey of the strength of the multi-family housing markets in the United States. The graph provides an excellent depiction of housing-market conditions both nationally and locally in the Denver region. Furthermore, the
focus on multi-family housing conditions is helpful since each TOD project in this study was anchored by a multi-family rental-housing development except the Vallagio, and even it ultimately included some market-rate rental units toward the end of its development period. The graph covers the entire time frame of this research, from Englewood in 2000 to Evans Station Lofts in 2012. Each Denver TOD case considered here is depicted on the graph from the ground breaking time period through the completion of the project.

Figure 8.2. Multifamily Housing Market Conditions in the U.S. from 1999-2013* (McBride, 2014)

*Dates for each development show time of ground breaking to finish of project

Analysis of the graph shows that each of the Denver TOD developers decided to break ground on their development during strong market conditions for rental housing. While Trammell Crow at Englewood had a small dip in market conditions during their
building period, by the time they were opening their market-rate residential units (Alexan City Center) at Englewood in late 2002, the housing market was on the upswing and their rental revenues exceeded expectations.

In the case of Metropolitan Homes at Vallagio and Trammell Crow at Gates, however, even though they started their developments when the housing market was strong (2005-2006), soon after their developments were underway, conditions changed dramatically because of the Great Recession. This change created significant losses for both Metropolitan Homes and Trammell Crow. The Denver Housing Authority and Medici Communities avoided these losses because they began their developments after housing conditions had stabilized.

A review of the timing and circumstances surrounding the developers’ decision-making processes reveals the different satisficing conditions that existed for each regarding affordable housing and the fact that some of these conditions changed unexpectedly. For instance, although Trammell Crow entered their development at Englewood in 2000 with some trepidation regarding the risk of the then-new TOD concept, their concerns soon disappeared when their expectations were surpassed with the unexpected success of their grand opening in 2002. Interviews with the Englewood City leaders showed that had Trammell Crow known how strong their residential products were going to fare, they would have more strongly considered including affordable housing at their City Center development (J. Woodward, personal communication, July 28, 2011).

Conversely, thanks to the Englewood success and the strong market conditions in the region, Metropolitan Homes was highly confident about their development at
Vallagio. They expected their luxury condos and townhomes to perform in a similarly exceptional way to their other recent successes in the region. Consequently, they planned over 600 units of luxury for-sale condos. Moreover, it was their confidence about the market conditions at that time that led Peter Kudla to consider affordable for-sale housing (high-quality workforce housing for 80% to 100% AMI). When the recession hit Metropolitan Homes in the middle of their build-out in late 2007, however, it caused them both serious delays and significant losses. Had Metropolitan Homes known that a significant recession was around the corner, they would no doubt have drastically scaled back their for-sale condos and would not have entertained even the thought of affordable housing. Similar to Metropolitan Homes, had Trammell Crow at Gates known the recession was coming and that it would bankrupt Cherokee, that none of their TIF money would be used, and that no major remediation would take place at Gates, they would not have agreed to affordable housing there.

The timing for the decision making for each development also impacted how the regulatory factor would play out, especially with regard to ground-floor retail requirements. Trammell Crow at Englewood was deeply concerned in 2000 about the retail requirements because of the uncertainty regarding the amount of pedestrian foot traffic. They thus negotiated their retail requirement down from 42,000 to 29,000 square feet. However, beginning at the grand opening of their Alexan project, the ground-floor retail performed much better than expected (R. Simpson, personal communication, August 6, 2013).

The stellar performance of the ground-floor retail at Englewood led Metropolitan Homes at Vallagio and Trammell Crow at Gates to under-estimate the risks related to
their respective retail requirements (S. Johnson, personal communication, March 24, 2010; P. Kudla, personal communication, December 5, 2012). Metropolitan Homes agreed to over 42,000 square feet of ground-floor retail at the Vallagio, a challengingly large amount for a development located in a non-residential corporate office park with very low population density. In addition, Trammell Crow thought that their 12,000 square feet at Gates was perfectly manageable considering how well they had done with 29,000 square feet of retail at their Alexan City Center development at Englewood.

When the recession hit, however, Metropolitan Homes’ ground-floor retail suffered significantly and ended up costing the company significant losses. Furthermore, when the recession hit the Gates project and resulted in Cherokee’s bankruptcy, Trammell Crow was left with an undeveloped abandoned factory sitting right next to their new residential development. The impact of the recession thus led to a lack of foot traffic near their ground-floor retail area, which sat unleased for two years. If Trammell Crow and Metropolitan Homes had been aware of the problems they would encounter as a result of the recession and how it would impact their retail, they would almost certainly have negotiated to cut their required space back dramatically.

The timing related to the decision making of each developer also impacted the advocacy factor for the developments. For instance, the advocacy factor for Trammell Crow at Englewood was negative at the time of the development because of the risk of the untested TOD concept. The political leadership in Englewood (City Council driven) was not supportive of affordable housing. However, after the City Center project was finished and performed so well, these city leaders now say that if they had known how
successful the project was going to be, they would have considered affordable housing more strongly.

In fact, this positive outcome for Trammell Crow’s residential project at Englewood led the company to agree to the strong demands for significant affordable housing they received from the community for their Gates development. To be sure, had FRESC and the City of Denver been able to predict the bankruptcy of Cherokee, the lack of TIF money usage, and the stalled redevelopment at Gates, these advocates would not have pushed so strongly for affordable housing and probably would not have expected Trammell Crow to follow through on their commitment in that regard.

The Denver Housing Authority and Medici were fortunate in starting their developments after the Great Recession had ended. Moreover, they had the advantage of learning from the mistakes of Metropolitan Homes and Trammell Crow at Gates. Both the DHA and Medici increased their subsidy requirements and worked to reduce their ground-floor retail requirements (C. Parr, personal communication, September 7, 2011; T. Gladwell, personal communication, April 19, 2012). They also both had advocacy groups working diligently to help them offset their risks. In this regard, concerned advocacy groups helped the DHA secure significant subsidies that insulated them from risk at the South Lincoln redevelopment while Enterprise and ULC reduced Medici’s risk at the Evans Station project by acquiring and holding their land parcel while Medici finalized their LIHTC package.

The main lesson about the timing of each developer’s decision to move forward on their project was that market conditions can change dramatically and that these changing conditions reveal how much unpredictability and risk are involved in real-estate
housing developments. The recession that hit Metropolitan Homes and Trammell Crow at Gates could easily have hit Trammell Crow at Englewood or the DHA and Medici if they had not been so fortunate in their timing. The unpredictability of economic conditions and regulatory risks, for example in ground-floor retail in TODs, is why developers need such strong satisficing conditions before they consider including affordable housing. TODs are complicated enough developments to begin with, but when the unpredictable nature of changing market conditions, regulatory requirements, and advocacy impact are added in, the inclusion of affordable housing often becomes too much of an additional risk for developers to bear.

**Satisficing, Learning, and Future Decision Making**

As discussed in the previous section, the timing of a developer’s decision-making process regarding the economic, regulatory, and advocacy factors and the related risk conditions exert an enormous impact on a developer’s decision to produce affordable housing in a TOD. This research has primarily focused on the impact of these factors during the two years leading up to the ground breaking of a particular TOD. However, it is also important to examine the satisficing model within the context of the developer’s learning cycle to understand how developers learn from their decision-making process and how that feedback loop impacts their decision making in the future. Figure 8.3 on the following page examines the satisficing model within the context of the learning cycle for developers. The model depicts the impact of the three factors on the developer’s affordable-housing decision during the following three time periods: pre-development (the two years leading up to ground breaking), post-development (the two years following the completion of the project), and the future development.
As discussed previously in Chapter 3, the pre-development time frame represents the first period of learning and feedback for the developer regarding the satisficing conditions for affordable housing. This time frame, as mentioned above, represents the two years leading up to the ground breaking of the particular TOD project. During this period the developer evaluates the impact of the three factors (economic, regulatory, and advocacy) and makes a decision to produce or forego affordable housing in his TOD based on the satisficing conditions present.

The second learning cycle for the developer is the post-development period which, as mentioned, represents the two years following the completed development. During this time, the developer reflects on the impact of the three factors and compares the pre-development projections with the post-development realities to see how the three factors have ultimately influenced the satisficing conditions for affordable housing. The third cycle represents the developer’s future decision making regarding affordable housing as based on the totality of the feedback and information gathered from the pre- and post-development results. The satisficing learning cycle model (Figure 8.3) on the following page gives a graphic depiction of the three learning phases for a developer’s affordable-housing decision.
Figure 8.3
The Satisficing Learning Cycle

Pre-development
(two years leading up to groundbreaking)

Developers Decision:
Affordable-housing decision is based on the impact of these three factors during the pre-development time frame.

Post-development
(two years following completion)

Learning:
Developer reflects on the impact of the three factors on the decision for or against affordable housing.

Decision Cycle Repeats

Future Development

Future Decision:
Developer’s future affordable-housing decisions result from satisficing projections based on feedback and lessons learned during the pre- and post-development time frame.
Trammell Crow and the Satisficing Learning Cycle

The experience of Trammell Crow at the Englewood TOD and the Gates TOD provides a good example of the learning cycle and the changing satisficing conditions for their affordable-housing decisions. During the pre-development period of the Englewood development, Trammell Crow believed that satisficing conditions were not supportive of affordable housing because of the risk of the unknown housing markets for TOD in addition to the risk related to parking and ground-floor retail requirements. These conditions, along with political opposition, ultimately led to Trammell Crow’s decision against affordable housing. However, the post-development time frame for Trammell Crow at Englewood revealed positive satisficing conditions for the development of affordable housing. These conditions were reflected in the unexpected positive performance of the housing and ground-floor retail markets in the Englewood TOD which enabled Trammell Crow to sell their Alexan City Center project at the Englewood TOD for a better-than-expected ROI. These satisficing conditions at Englewood proved that Trammell Crow could have provided affordable housing at the Englewood development and still had positive satisficing conditions marked by reduced risks and satisfactory profits.

The post-development time frame at the Englewood development provided feedback and learning experience that gave Trammell Crow confidence for their future decision making on affordable housing at the Gates TOD. Emboldened by their success at Englewood, Trammell Crow came to believe that the strong economic conditions together with a more propitious location at Gates would lead to a projected ROI that
would surpass their profits at Englewood. These positive satisficing conditions thus enabled them to agree to generous affordable rental housing at their Gates development.

The satisficing learning cycle continued for Trammell Crow at Gates as they considered the feedback and lessons learned during the post-development period at Gates in 2010. From the Great Recession and Cherokees bankruptcy, Trammell Crow came to understand that economic conditions are unpredictable and can change quickly. The recession and lack of development at Gates contributed to significant economic losses for the company in terms of both time and money. Notably, their 12,000 square feet of ground-floor retail sat empty from lack of foot traffic. Interviews with Trammell Crow’s developers showed they had learned from the failures at Gates and decided that in future they would avoid complicated urban developments like Gates that involved multiple developers and significant infrastructure and remediation requirements.

**Learning in the Region**

Other developers in the Denver region were also able to learn from Trammell Crow’s experiences at Englewood and Gates. The early success of Trammell Crow’s development at Englewood changed the beliefs of developers regarding the risk factors related to TOD development in the region. Many planners and developers were doubtful that TODs would work in older suburban communities like Englewood. Once Trammell Crow proved that TOD housing markets could be trusted and the TOD model did in fact work, this evidence changed the views of these developers who could then begin TODs of their own in the Denver region. Moreover, many developers now believed that affordable housing could also work in TODs.
Metropolitan Homes, one such developer who learned from Trammell Crow’s TOD success at Englewood, moved forward with an ambitious TOD development at Vallagio. While Metropolitan Homes decided against affordable because of political opposition, without that opposition they most likely would have been amenable to providing it owing to the positive economic conditions and their anticipated strong ROI.

While the Great Recession of 2007-2010 did interrupt some of the development momentum in the region, most developers still believed in the likely success of TODs even with affordable housing, though in more economically favorable times. Two such developers in the Denver region were The Denver Housing Authority and Medici Communities. The DHA and Medici were both affordable-housing developers who had no experience in TOD developments, yet both had seen the success of TODs in the region. Both these developers were able to watch and learn from Trammel Crow’s and Metropolitan Homes’ experience, particularly in managing the fallout from the Great Recession. The DHA and Medici were able to use the lessons learned during the recession to increase their subsidy targets while modifying their ground-floor retail requirements to achieve satisficing conditions for affordable housing at South Lincoln and Evans Station, respectively.

Policy Recommendations

Based on the satisficing decision model that TOD developers follow when deciding on whether or not to provide affordable housing, this research suggests the following policy recommendations for developers considering the inclusion of affordable housing in their TODs.
First, federal programs should be encouraged that contribute to stable and healthy housing markets. This research reveals that solid housing-market conditions are one of the most important factors in creating satisficing conditions for developers wishing to include affordable housing in their TODs. A key factor for stable housing-market conditions is the continuation of low home-mortgage interest rates. One program that the federal government can use to assure this beneficial situation is the continuation of the Federal Reserve’s purchase of mortgage-backed securities to keep mortgage interest rates low. Research by Northwestern University economists Arvind Krishnamurthy and Annette Vissing-Jorgensen (2011) argued for strategic tapering of quantitative-easing programs implemented by the Federal Reserve. They claimed that the Fed should focus its tapering efforts on the purchase of Treasury securities and not mortgage-backed securities. Their research showed that the buying back of Treasury securities had little effect on home-mortgage rates versus the buyback of mortgage-based security bonds, which had a significant positive impact. (See Appendix E for a further explanation of their research.)

Second, federal and local governments should be encouraged to sustain and bolster public-subsidy programs that target affordable-housing development in TODs. The LIHTC program funded through the U.S. Department of Housing and Urban Development has been the single most successful affordable-rental-housing program in the history of the United States (Korb, 2009). This program incentivizes developers to produce affordable rental units in TODs. The future of affordable housing in TODs is strongly related to the ongoing availability of LIHTC funds. Unfortunately, the program has come under heavy scrutiny in the past few years during the U.S. Congressional
budget debates. Any reduction in LIHTC funding would likely hurt the production of affordable housing in TODs. Other federal programs that have been successful in promoting affordable housing in TODs have been HOPE VI grants and ARRA stimulus funding (The Brookings Institute, 2005; Korb, 2009). Continued policy support for local-government subsidy packages in the form of TIF, HOME funds, and CDBG funds, finally, is highly recommended because these programs have been significantly effective in encouraging affordable-housing development in TODs (Lubell, 2006).

Third, local communities should be encouraged to create TOD funds to help with the acquisition of land near TODs. Land banking is an important program that helps create satisficing conditions to incentivize developers to provide affordable housing near or as part of TODs. The Denver TOD Fund, a national model for TOD land banking, was created with support from the City of Denver, local non-profit organizations, and local banks. Such private/public partnerships help provide capital for the acquisition of land near transit stops—funds that can be held for affordable development. The Denver Fund is not a subsidy but instead is a revolving low-interest loan fund which can easily be replicated with support from local non-profits, banks, and municipal organizations.

Fourth, local communities should be urged to streamline and reduce regulatory requirements. TODs often need fewer parking spaces because of their proximity to light-rail transportation, yet many communities still require the standard parking requirements of two spaces per residential unit. Reducing these requirements to one-half-to-one space per housing unit would help bring down the regulatory costs for TOD developers. In conjunction with reducing parking requirements near TODs, local communities could encourage the proliferation of location-efficient mortgages which enable households to
qualify for larger home mortgages at better interest rates if they agree to reduce their automobile expenditures based on their proximity to public transportation. Communities can also work to reduce zoning costs for developers by rezoning existing and future TOD sites to mixed use. Finally, local municipalities can work to expedite construction-permit applications and approvals to help reduce the time costs for TOD developers.

Fifth, local municipalities should foster greater communication between affordable-housing advocacy groups and the local neighborhoods that need more affordable housing. Research shows that non-profit advocacy groups are often able to communicate the benefits of affordable housing better than developers and are more successful in alleviating community concerns about affordable housing (Johnson & Talen, 2008). Local residents, moreover, tend to place greater trust in faith-based organizations and local non-profits which can communicate the benefits of mixed-income affordable housing in a more credible, less threatening manner than bottom-line-oriented developers. Local communities that encourage non-profit organizations to help facilitate communication between a private developer and community members are thus often successful in increasing their supply of affordable housing (Johnson & Talen, 2008).

Sixth and finally, city and county governments should develop stronger affordable-housing laws. Many communities which have burgeoning TOD developments to address housing and transportation needs also have minimal affordable-housing mandates, particularly rental housing. Denver is one such city. Denver has no requirements for the inclusion of affordable rental housing; it stipulates only that developers of a residential property of over 30 units provide 10% of the for-sale housing to households earning less than 80% of the area median income (Lado, 2007). These
minimal affordable-housing laws in Denver County along with non-existent affordable-housing laws elsewhere in the region place an enormous responsibility on affordable-housing advocacy groups. In most cases in the Denver region, it is the sole responsibility of the advocacy community to persuade developers to produce affordable housing because no public mandates exist (Lado, 2007). To reduce reliance on pro-affordable-housing advocacy groups and to ensure that communities acquire sufficient affordable housing in their TODs, it is incumbent upon communities to create stronger affordable-housing requirements.

**Policy Recommendations and the Satisficing Model**

This section examines how each of the policy recommendations listed above would impact their projects. A modified version of the satisficing model is included for each policy recommendation to depict how the policy recommendation would affect the factors and variables as well as the developer’s decision regarding affordable housing.

**Strong Housing Markets**

The first policy recommendation argues that stable-to-strong housing markets would help create satisficing conditions for developers considering affordable-housing development in a TOD. Strong housing markets lead to economic conditions with more predictable outcomes for positive rental income, low vacancy rates, and higher appreciation values for the proposed development. These conditions would help create stronger ROI projections for developers. Furthermore, strong housing markets are also associated with strong economic conditions nationally which in turn stimulate higher demand for low-income tax credits. The more competitive the tax-credit market is
because of higher demand, the higher the levels of LIHTC equity for developers planning to use these funds to build affordable housing. (See Figure 8.4.)

**Figure 8.4. Housing Markets and the Satisficing Model**

Figure 8.4, above, depicts how strong housing markets influence the satisficing conditions for a developer’s affordable-housing decision. The model reveals that strong housing markets positively influence the value of low-income tax credits. A stronger LIHTC package positively impacts the developer’s ROI thanks to higher developer fees, more equity invested in affordable development, and higher levels of rental revenue from the affordable units. Furthermore, strong housing markets also impact a developer’s ROI from market-rate units since such markets predict stronger rental revenue, lower vacancy rates, and higher appreciation of market-rate units. The dynamic interaction of these variables within the economic factor contributes to positive satisficing conditions for a developer considering the inclusion of affordable housing in a TOD. In all three of the Denver TOD cases where the developer included affordable housing (Gates, South Lincoln, and Evans Station), the presence of stable-to-strong housing markets contributed to larger LIHTC equity packages which in turn positively impacted better ROI projections for the developers in question.
Public Subsidies

The second policy recommendation is for federal and local communities to bolster public-subsidy programs that incentivize developers to produce affordable housing in TODs. Federal subsidies like the LIHTC program along with local subsidies in the form of TIF packages and HOME funds among others are crucial for creating satisficing conditions for TOD developers considering affordable-housing development.

Figure 8.5. Public Subsidies and the Satisficing Model

Figure 8.5, above, reveals the impact of public subsidies on the developer’s satisficing decision regarding affordable housing. Strong subsidies create more equity for the developer to invest in affordable housing. The higher the amounts of subsidy/equity the developer is able to acquire and apply to the affordable development, the higher the level of developer fees and the lower the conventional debt tied to the project. These conditions lead to higher rental revenue and higher ROI projections which contribute to positive satisficing conditions for the developer. In each of the three Denver TODs that included affordable housing, the developers of those projects were awarded significant subsidy packages that created strong levels of ROI which contributed to satisficing conditions.
conditions for them (i.e., satisfactory profits and lowered risks) which ultimately impacted their decision to produce affordable housing.

**TOD and Affordable-Housing Land Banks**

The third policy recommendation was that local communities develop affordable-housing land banks to help acquire and hold parcels near transit stops before they are bought by private developers for higher-end market-rate housing. Buying and holding land for affordable-housing development contribute to satisficing conditions for affordable-housing developers in that these activities enable them to acquire LIHTC subsidies (which can be a lengthy process of two to three years) while attractive land parcels near transit are being held for them. The process also lowers the risks and transaction costs associated with land acquisition.

![Diagram of Land Banking and the Satisficing Model](image)

**Figure 8.6. Land Banking and the Satisficing Model**
Figure 8.6, above, shows that the advocacy efforts from non-profit and political actors creating the land-banking fund positively impact the land and LIHTC-acquisition process which ultimately benefits the developer’s ROI and creates satisficing conditions for his affordable-housing decision. The Denver TOD Fund is an example of this process. This fund was created by the advocacy efforts of non-profit groups in the Denver region through their work with politicians and civil servants in the Denver community. These efforts led to the development of a $15 million private equity fund to be used to buy and hold attractive parcels near transit for affordable housing. The Denver TOD Fund was used, for example, to access $1.2 million in funds to buy and hold land near the Evans Station transit stop. This buy-and-hold process gave Medici the time to acquire LIHTC funding for their development. It also reduced Medici’s risks related to land acquisition while contributing to their success in acquiring strong levels of LIHTC equity. The latter in turn help create both a positive ROI and strong satisficing conditions for Medici and formed the basis for their decision to provide affordable housing at the Evans Station site.

**Reduced Parking Requirements**

The fourth policy recommendation, above, was the suggestion that cities and counties work to lower regulatory costs within TOD developments, particularly parking regulations. The standard parking requirement for most multi-family suburban developments is two parking spots per residential unit. However, families living in a TOD are usually less auto dependent and need fewer parking spaces. Reducing the parking requirements in TODs from the standard two spots to one spot or less would
reduce costs and create satisficing conditions for developers considering affordable housing in a TOD. (See Figure 8.7, below.)

Figure 8.7. Reduced Parking Requirements and the Satisficing Model

Figure 8.7, above, depicts the positive effect of lowered parking requirements on a developer’s affordable-housing decision. Lowered parking costs mean lower outlays for the developer which thus contribute to better ROI projections. The combination of these positive impacts leads to satisficing conditions for the developer’s affordable-housing decision. The Evans Station Lofts development in Denver is a great example of how lowered parking costs contributed to positive satisficing conditions for the developer, Medici Communities, and played a strong role in their decision to produce affordable housing. The City of Denver reduced the parking requirements for Medici from two spots per residential unit to less than one. This change allowed Medici to avoid building a costly parking garage and contributed to fewer outlays for Medici which increased ROI projections. Conversely, Arapahoe County's refusal to lower parking requirements for Metropolitan Homes at the Vallagio development contributed to steep
parking costs which made for non-satisficing conditions and influenced Metropolitan’s
decision to forego affordable housing there.

**Communication Among Advocacy Groups**

The fifth policy recommendation was the fostering of communication between
and among advocacy groups. The NIMBY literature reveals that many neighborhood
groups are concerned about having high-density TOD developments and the affordable
housing developments that often come with them. These groups are concerned about the
quality of a development and the possible deleterious effects on their neighborhood and
home values. However, this research shows that a high demand for pedestrian-friendly
communities like TODs that include well-designed affordable housing actually increase
the value of homes in the neighborhood. However, it is often more effective when local
churches and non-profit groups help to communicate these positive effects to members of
the neighborhood as opposed to the developer, who is often mistrusted as being merely
interested in making money. The literature suggests that communities that foster better
communication with non-profit advocacy groups are more likely to have affordable
housing in their local TOD(s).

![Figure 8.8. Communications with Advocacy Groups and the Satisficing Model](image-url)
Figure 8.8, above, depicts how better communication between pro-affordable non-profit groups and neighborhood members concerned that affordable housing can lower the costs associated with a negative advocacy conditions. The lowered advocacy costs lead to fewer outlays and expenses for the developer which in turn create better ROI and contribute to positive satisficing conditions for the developer’s affordable-housing decision. The Gates TOD in Denver provides a good example of how effective communication between advocacy groups led to lower costs for Trammell Crow. Several neighborhood groups surrounding the Gates factory area were concerned about the high-density development and affordable housing development that would be taking place at Gates. The non-profit group, FRESC, along with a local church, the Denver Inner City Parish, were able to communicate the positive value of the Gates development to the various neighborhood groups and thus help alleviate their concerns. The good will that FRESC and DICP generated helped reduce advocacy costs and paved the way for Cherokee and Trammell Crow’s development plans at the Gates site. Trammell Crow’s ability to avoid any costs related to disgruntled neighborhood groups therefore contributed to positive satisficing conditions at the Gates site and their decision to provide affordable housing there.

**Stronger Affordable-Housing Mandates**

The sixth and final policy recommendation applied to the satisficing model is that of affordable-housing mandates. The presence of stronger affordable-housing mandates places a significant amount of responsibility on strong economic conditions to help create positive satisficing conditions for the developer’s affordable-housing decision. If low-income housing is required by mandate, both affordable rental and for-sale units, then
positive economic conditions marked by strong housing markets, public-subsidy availability, and strong ROI projections are required to help incentivize developers to agree to affordable-housing development. Moreover, stronger inclusionary mandates for low-income rental housing would give more significance to LIHTC subsidy, since that program is the subsidy program most developers rely on for the development of low-income affordable rental housing.

Figure 8.9. Affordable Housing Mandates and the Satisficing Model

Figure 8.9, above, depicts the necessary satisficing conditions for each factor regarding a developer’s affordable-housing decision. Stronger affordable mandates will have an impact on all three factors of the satisficing model, but strong economic conditions are still vital for affordable-housing development. If affordable housing is required in TOD developments (either rental or for sale), developers will need strong housing markets and positive ROI projections in addition to the availability of subsidies as well as manageable advocacy and regulatory costs to decide on including affordable housing. In the case of the Englewood and Vallagio developments, affordable housing was not provided, with political opposition the main driver of the opposition. However,
if stronger affordable-housing mandates had existed in these communities, the political opposition would not have been able to kill affordable housing since it would have been required. In the case of Trammell Crow at Englewood, had affordable housing been required, they would have likely moved forward with the development of low-income rental units because they were experienced LIHTC developers, and LIHTC funds were available for this development.

Moreover, if affordable housing had been required at Vallagio, Metropolitan Homes would have more than likely agreed to sell affordable workforce housing on account of their healthy ROI projection in excess of $60 million which would have helped offset their costs for providing affordable housing. In both cases, some healthy combination of public subsidy or strong ROI projections in addition to manageable advocacy and regulatory costs would have enabled satisficing conditions for Trammell Crow or Metropolitan Homes had affordable housing been required.

**Contributions of this Research**

This research makes a strong contribution to the literature on satisficing. Before this study, the literature on satisficing developers focused exclusively on the decision-making process of land developers and their satisficing decisions regarding the risks associated with a land-purchase decision (Kenney, 1972; Drewett, 1973; Baerwald, 1981; Hepner, 1983) or the behavior of satisficing developers with regard to urban sprawl (Nelson & Duncan, 1995; Lucy & Phillips, 2000; Mohamed, 2006 and 2009; Czamanski & Roth, 2011). As the first study to examine the satisficing behavior of developers with regard to their affordable-housing decision making in the context of TODs, the present research adds to the literature on satisficing developers. The research represents an
original contribution in describing TOD developers’ decision-making process. The research provides original models that help one understand the impact of learning and feedback on developers. Moreover, based on the satisficing models and the evidence from the Case Studies, this research has been able to provide the basis for constructive policy recommendations at both the federal and local levels to help incentivize developers to produce more affordable housing in their TODs.

Moreover, when this dissertation research was initiated more than four years ago, the empirical literature on TODs was sparse, particularly that which related to affordable housing in TODs. The little empirical research that did exist in this subject area was mostly concerned with the impact of TODs on nearby land and home values (Cervero & Duncan, 2002; Weinstein & Clower, 2002); the impact on public ridership and reduced automobile usage (Cervero R., TOD and Carsharing: A Natural Marriage, 2009); and the related impact on commuting patterns to and from work (Cervero & Day, 2008). While the last few years have seen significant growth in the empirical literature regarding TODs, this research has tended to focus on the impact of TODs on local housing prices (Mandapaka, 2012), regional economic impacts (Jacobson, 2010; Ratner & Goetz, 2010), and the environmental impact of TODs (Kimball, Chester, Gino & al., 2013; Seo, Kim, & Kim, 2013). Despite the growth of literature on TODs, there was still little if any empirical research on affordable-housing development within TODs, since most of the research on TODs and affordable housing remained about best practices and lessons learned. The model developed by this research therefore contributes one of the first empirical studies on affordable housing in TODs.
Another important contribution this study makes to the affordable-housing-and-TOD literature is the identification of the three influential factors and the eleven variables that impact development decision making: economic (land cost, housing-market conditions, public subsidies, and ROI), regulatory (zoning, infrastructure, parking and mixed-use requirements), and advocacy (neighborhood, political, and non-profit advocacy). The selection of the eleven variables and the grouping of them under the three factors comprised an original model developed by the researcher after close scrutiny and examination of the literature on affordable housing and TODs. This model is thus a good launching point for further examination of these factors and variables in future research on affordable housing, TODs, and developers’ decision-making processes regarding these factors.

Future Research

One suggestion for future research is to apply this research’s model and research question to examine affordable-housing development in conventional projects as opposed to TODs. The research question could focus on how the three factors (economic, regulatory, and advocacy) impact a developer’s decision making with regard to affordable housing in such developments. It would be interesting to see the differences between TOD and conventional/non-mixed-use developments and how those differences impact the three factors in the present model. It would seem that the regulatory costs would be more manageable in a non-TOD development on account of the fewer infrastructure, retail, and parking requirements. It would also be interesting to analyze the satisficing context and the difference in risk and satisfactory profits when comparing traditional affordable-housing developments with the non-conventional TOD type of
development. Again, it would seem that the risk environment would be reduced in a more conventional development owing to the more predictable nature of such projects. However, there might be less subsidy funding and community-driven incentives for these initiatives because of the lower risk threshold. These factors would all need to be compared and contrasted.

Finally, it would also be intriguing to use the model developed in this research to examine other TODs in a different region, particularly one with stronger affordable-housing mandates. It would be interesting to see how the impacts of the factors are changed if at all based on affordable-housing mandates. One could also observe how the advocacy factor would be impacted in a region with strong affordable-housing mandates. Regions like these would be less driven by winning affordable housing since it would already be mandated. Thus pro-affordable-housing advocacy groups could focus on other important issues like winning community support and assisting the developer in finding subsidies to underwrite the project. Conversely, it would seem that anti-affordable-housing advocacy groups would have diminished power with affordable housing already required in these regions and would have to focus more on shaping its design, quality, and number of units versus simply lobbying against it.

**Limitations of the Research**

The most significant limitation of this research is related to the issue of generalizability. The small sample size, limited regional focus, and narrow range of developer types are some of the issues that might weaken the use of the research findings across a broader spectrum of affordable-housing developments within TODs. This research consists of only five TODs, a small sample that conceivably could reduce the
strength of the findings. Each case could be considered a unique TOD with an exclusive set of circumstances where the findings might be applicable only in the distinct context of that particular development. Since the TODs studied are all located in the Denver region, moreover, it might be difficult to generalize the findings to other regions. Denver has its own set of political, social, and demographic contexts unique to the region. The contextual forces that shape the Denver region might not be comparable to those of other regions. Finally, two of the organizations included in the research are dedicated to affordable-housing development. The fact that they are committed to affordable housing might have compromised the impact of the three factors on their decision to develop affordable housing at their respective TODs and specifically on how they computed satisficing.

On the other hand, while the sample size of five TODs is indeed small, this number is nonetheless sufficient for case-study research. Many case studies focus on only one case or two or three at most (Merriam, 1988; Gillham, 2000; Yin, 2003; Stake R. E., 2006). The five cases in this study therefore present a significant body of evidence for case-study research. Further, the purpose of the case study is to address specific issues to understand the nuances and details of the specific research question. This study thus represents a thorough, robust analysis of five different TOD developers’ decision-making processes regarding the possible inclusion of affordable housing in their projects. One of the particular strengths of this study was the researcher’s ability to gain access to high-level developers who rarely grant interviews because of the demands on their time. Some of the information included confidential financial details relating to their decision-making processes and outcomes with regard to their respective TOD development. These
details, which provide valuable insights, would be difficult if not impossible to gather in a non-case-study, non-interview format.

Moreover, the researcher specifically chose the Denver region for his TOD case-study analysis because of the rapidly growing cities of the West and Southwest with common transportation and housing issues. Many of these cities are, like Denver, dealing with sustainability and growth issues. As a result, they too are implementing light rail and TODs. Furthermore, most of these cities resemble Denver in having minimal affordable-housing regulations for the suburban communities being developed. Among the cities in question are Phoenix, Salt Lake City, Dallas, and Houston. Consequently, many of the findings in this research can likely be used as a basis of comparison for these communities.

Finally, even though two of the developers in this study are committed to affordable housing—the Denver Housing Authority and Medici Communities—they still make satisficing decisions like market-rate developers. Both the DHA and Medici required satisficing conditions in their respective developments before deciding to move forward with project plans at their particular TOD site. Like for-profit developers, they cannot afford to lose money on their projects. Even though their mission is to provide affordable housing, both these developers decided to move forward at their particular TOD site because of the satisficing conditions that existed which reduced risks and promised satisfactory profits. If these conditions had not been present within their respective developments, the developers would have chosen another location to develop affordable housing—most likely a non-TOD location with lower costs and more predictable outcomes.
REFERENCES


Center for Neighborhood Technology. (2012). *Losing ground: The struggle of moderate income households to afford the rising costs of housing and transportation*. Chicago, IL: Center for Neighborhood Technology.


Colorado Housing and Finance Authority. (2010). *Low income housing tax credit application for 1099 Osage*. Denver, CO: Colorado Housing and Finance Authority.


*Invernews*, p. 2.


Jackson, M. (2005, August 10). 30 acre project lured by light rail Inverness Business Park at Dry Creek will see homes, offices and retail added by the Vallagio development. *Denver Post*,


Mandapaka, N. (2012). *Impacts of transit oriented developments (TOD) and mixed use centers in Dallas Fort Worth metroplex on housing values and demographic composition*. Arlington, TX: University of Texas Arlington.


Steffen, J. (2009, September 19). Homes project get $10 million-South Lincoln Park - HUD funds are going to cities incorporating green ideas in improving public housing. The Denver Post.


APPENDIX A

LIST OF SAMPLE QUESTIONS USED FOR INTERVIEWS

The semi-structured interview protocol was used for all interviews (See more in the methods chapter, Chapter Three.). The following is a sample set of standardized questions used in the interview process. The follow-up questions employed were based on interviewee feedback.

Economic Factor

1. What was the price of the land for the TOD parcel? How did this price compare with other parcels of similar size and location? How did the price of the land impact the market-rate or the affordable-housing development at the project?

2. What were the national and regional housing-market conditions like during the two-to-three-year window leading up to ground breaking for the project? How did these conditions influence the development of market-rate or affordable units at the project?

3. What types of public subsidies were available to the developer for the particular project? How did these subsidies influence the development of market-rate and/or affordable units at the project?

4. What was the developer’s expected return on investment for the project (ROI)? What other profit or revenue expectations did the developer have for this project?

Regulatory Factor

1. What type of rezoning was required for the particular development? How much time and what costs was associated with the zoning requirements? How did the zoning requirements influence the development of the market-rate and/or affordable units at the project?
2. What were the infrastructure costs for the particular development? Were these costs considered above average, below average, or average for developments of similar size and scope? How did the infrastructure requirements influence the development of market-rate and/or affordable units?

3. What were the parking costs and requirements for the particular development? Were these costs considered above average, below average, or average for a project of similar size and scope? What are the typical parking requirements for this community, region, and county? What were the average costs per spot for developing a surface parking spot, a detached garage spot, or a parking-garage spot?

4. What were the ground-floor retail space requirements for the particular project? Were these requirements considered above average, below average, or average for a project of similar size and scope? How did these requirements impact the development of market-rate and/or affordable units?

**Advocacy Factor**

1. Were any residential neighborhood or homeowners’ advocacy groups involved during the particular development? How important was this group’s influence on the development? How did these groups influence the development of a market-rate and/or affordable-housing development at the particular project?

2. Were any non-profit advocacy groups involved during the planning or execution of the particular development? How important were these groups’ influence on the development? How did these groups influence the development of market-rate and/or affordable-housing units at the particular development?
3. Were any political actors or local elected officials involved during the planning of the development? What type of role did these actors play with regard to the development? How did these individuals impact the development in terms of market-rate and/or affordable-housing units at the development?
## APPENDIX B
### LIST OF INTERVIEWEES USED IN RESEARCH

<table>
<thead>
<tr>
<th>Name</th>
<th>TOD Case</th>
<th>Date of Interview</th>
<th>Type</th>
<th>Length (Hour: Minutes)</th>
<th>Title and Job Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marilee Utter</td>
<td>Englewood CityCenter</td>
<td>Sept. 2nd, 2010</td>
<td>in-person</td>
<td>1:13 minutes</td>
<td>President Citiventures LLC, TOD Consultant; First TOD manager for RTD</td>
</tr>
<tr>
<td>Sue Smith</td>
<td>Englewood CityCenter</td>
<td>July, 18th, 2011</td>
<td>phone</td>
<td>11 minutes</td>
<td>Admin. Assistant to Gary Sears, City of Englewood</td>
</tr>
<tr>
<td>Alan White</td>
<td>Englewood CityCenter</td>
<td>July, 21st, 2011</td>
<td>in-person</td>
<td>54 minutes</td>
<td>Director of Community Development, City of Englewood</td>
</tr>
<tr>
<td>Dawn Shepherd</td>
<td>Englewood CityCenter</td>
<td>July 27th, 2011</td>
<td>in-person</td>
<td>33 minutes</td>
<td>Executive Director, Englewood Housing Authority</td>
</tr>
<tr>
<td>Gary Sears</td>
<td>Englewood CityCenter</td>
<td>July 28th, 2011</td>
<td>in-person</td>
<td>1:18 minutes</td>
<td>City Manager, City of Englewood</td>
</tr>
<tr>
<td>Jim Woodward</td>
<td>Englewood CityCenter</td>
<td>July 28th, 2011</td>
<td>in-person</td>
<td>1:18 minutes</td>
<td>Mayor Pro Tem, City of Englewood</td>
</tr>
<tr>
<td>Harold Stitt</td>
<td>Englewood CityCenter</td>
<td>Aug. 5th, 2011</td>
<td>email</td>
<td></td>
<td>Planning Community Coordinator, City of Englewood</td>
</tr>
<tr>
<td>Chris Grady</td>
<td>Vallagio at Inverness</td>
<td>Nov. 30th, 2012</td>
<td>in-person</td>
<td>1:01 minutes</td>
<td>Land Planner, Kephart Architects, architectural firm that designed Vallagio</td>
</tr>
<tr>
<td>Peter Kudla</td>
<td>Vallagio at Inverness</td>
<td>Dec. 5th, 2012</td>
<td>in-person</td>
<td>1:28 minutes</td>
<td>Founder/CEO of Metropolitan Homes, Lead Developer of Vallagio</td>
</tr>
<tr>
<td>Greg Krause</td>
<td>Vallagio at Inverness</td>
<td>Dec. 5th, 2012</td>
<td>in-person</td>
<td>1:28 minutes</td>
<td>President of Construction, Metropolitan Homes</td>
</tr>
<tr>
<td>Scott Beasley</td>
<td>Vallagio at Inverness</td>
<td>Dec. 12th, 2012</td>
<td>in-person</td>
<td>22 minutes</td>
<td>Principal and Partner, Inverness Properties LLC.</td>
</tr>
<tr>
<td>Nancy Sharpe</td>
<td>Vallagio at Inverness</td>
<td>Dec. 12th, 2012</td>
<td>phone</td>
<td>27 minutes</td>
<td>Arapahoe County Commissioner, Former Mayor of Greenwood Village</td>
</tr>
<tr>
<td>Pat Mulhern</td>
<td>Vallagio at Inverness</td>
<td>Dec. 14th, 2012</td>
<td>in-person</td>
<td>59 minutes</td>
<td>General Manager, Inverness Metropolitan Improvement District</td>
</tr>
<tr>
<td>Marilee Utter</td>
<td>Gates</td>
<td>Sept. 2nd, 2010</td>
<td>in-person</td>
<td>1:13 minutes</td>
<td>President Citiventures LLC, TOD Consultant; First TOD manager for RTD</td>
</tr>
<tr>
<td>Tony Robinson</td>
<td>Gates</td>
<td>Sept. 8th, 2010</td>
<td>in-person</td>
<td>57 minutes</td>
<td>Associate Professor and Dept. Chair, Political Science-UCDenver</td>
</tr>
<tr>
<td>Chris Nevitt</td>
<td>Gates</td>
<td>Sept. 21st, 2010</td>
<td>in-person</td>
<td>20 minutes</td>
<td>Denver City Council (District 7), President of FRES (2002-2007)</td>
</tr>
<tr>
<td>Scott Johnson</td>
<td>Gates</td>
<td>Sept. 29th, 2010</td>
<td>in-person</td>
<td>1:33 minutes</td>
<td>Director of Mountain West Region, Trammell Crow Residential</td>
</tr>
<tr>
<td>Robin Kneich</td>
<td>Gates</td>
<td>Oct. 4th, 2010</td>
<td>email</td>
<td></td>
<td>Denver City Council; Program Director for FRES (2005-2011)</td>
</tr>
<tr>
<td>Josh Russell</td>
<td>Gates</td>
<td>Oct. 5th, 2010</td>
<td>in-person</td>
<td>1:43 minutes</td>
<td>Executive Director, Archdiocesan Housing; owner of affordable at Gates</td>
</tr>
<tr>
<td>Chris Smith</td>
<td>Gates</td>
<td>Oct. 7th, 2010</td>
<td>in-person</td>
<td>41 minutes</td>
<td>Housing Program Manager, City of Denver</td>
</tr>
<tr>
<td>Scott Johnson</td>
<td>Gates</td>
<td>Oct. 12th, 2010</td>
<td>in-person</td>
<td>37 minutes</td>
<td>Director of Mountain West Region, Trammell Crow Residential</td>
</tr>
<tr>
<td>Scott Johnson</td>
<td>Gates</td>
<td>March 24th, 2010</td>
<td>in-person</td>
<td>27 minutes</td>
<td>Director of Mountain West Region, Trammell Crow Residential</td>
</tr>
<tr>
<td>Ishmael Guerrero</td>
<td>South Lincoln</td>
<td>Sept. 6th, 2011</td>
<td>phone</td>
<td>10 minutes</td>
<td>Executive Director, Denver Housing Authority</td>
</tr>
<tr>
<td>Chris Parr</td>
<td>South Lincoln</td>
<td>Sept. 7th, 2011</td>
<td>in-person</td>
<td>1:23 minutes</td>
<td>Director of Development, Denver Housing Authority; Lead Developer</td>
</tr>
<tr>
<td>Kimball Crangle</td>
<td>South Lincoln</td>
<td>Sept. 7th, 2011</td>
<td>in-person</td>
<td>46 minutes</td>
<td>Senior Developer, Denver Housing Authority</td>
</tr>
</tbody>
</table>
# LIST OF INTERVIEWEES USED IN RESEARCH

<table>
<thead>
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<th>Name</th>
<th>Location</th>
<th>Date</th>
<th>Method</th>
<th>Duration</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aurita Apodaca</td>
<td>South Lincoln</td>
<td>Sept. 8th, 2011</td>
<td>in-person</td>
<td>20 minutes</td>
<td>Community Organizer, FRESC</td>
</tr>
<tr>
<td>Kristin Krasnove</td>
<td>South Lincoln</td>
<td>Sept. 8th, 2011</td>
<td>phone</td>
<td>16 minutes</td>
<td>Senior City Planner, City and County of Denver</td>
</tr>
<tr>
<td>Aaron Miripol</td>
<td>Evans Station Lofts</td>
<td>April 19th, 2012</td>
<td>email</td>
<td>16 minutes</td>
<td>CEO and President, Urban Land Conservancy Denver</td>
</tr>
<tr>
<td>Troy Gladwell</td>
<td>Evans Station Lofts</td>
<td>April 19th, 2012</td>
<td>in-person</td>
<td>51 minutes</td>
<td>CEO/Founder of Medici Communities, Developer of Evans Station</td>
</tr>
<tr>
<td>Melinda Pollack</td>
<td>Evans Station Lofts</td>
<td>April 20th, 2012</td>
<td>email</td>
<td>51 minutes</td>
<td>Vice President of TOD Program, Enterprise Community Partners</td>
</tr>
<tr>
<td>Bradley Weinig</td>
<td>Evans Station Lofts</td>
<td>April 20th, 2012</td>
<td>in-person</td>
<td>37 minutes</td>
<td>TOD Program Director, Enterprise Community Partners</td>
</tr>
<tr>
<td>Cindy Everett</td>
<td>Evans Station Lofts</td>
<td>April 23rd, 2012</td>
<td>in-person</td>
<td>37 minutes</td>
<td>Senior Associate, Urban Land Conservancy Denver</td>
</tr>
</tbody>
</table>
APPENDIX C

SUMMARY TABLE OF CODES USED IN THE MANUAL QUALITATIVE DATA ANALYSIS

The following codes were used in the direct content analysis of source documents and interview transcripts for this research (See further discussion in the methods chapter, Chapter Three.). The codes were developed to help manage and organize the researcher’s data analysis. The development of codes was based on Miles and Huberman’s (1994) recommendations to make them as simple as possible and as closely related to the research question, hypotheses, and theoretical framework as possible so that the codes could be easily used and understood. Also, Miles and Huberman recommended keeping the code list short so as not to inundate the researcher with too many codes. Miles and Huberman further suggested restricting the number of codes to fewer than 40 for the manual data analysis so that they would remain manageable for and accessible to the researcher.

<table>
<thead>
<tr>
<th>Code</th>
<th>Description of Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFFORDABLE</td>
<td>Refers to affordable housing. The code was used to designate any discussion in the text or interviews referring to affordable housing.</td>
</tr>
<tr>
<td>ADVOCACY</td>
<td>Refers to the main advocacy-factor category. The code was used to designate any discussion in the text or interviews referring to the advocacy factor, including the neighborhood, non-profit, or politics variable.</td>
</tr>
<tr>
<td>DECISION</td>
<td>Refers to any discussion related to a developer’s decision-making process regarding affordable housing.</td>
</tr>
<tr>
<td>DEVELOPER</td>
<td>Refers to the key developers involved in particular TOD projects.</td>
</tr>
<tr>
<td>ECONOMIC</td>
<td>Refers to the main economic factor and the related economic variables of land cost, housing-market conditions, public subsidy, and ROI.</td>
</tr>
<tr>
<td>HOUSEMARKET</td>
<td>Refers to the housing-market-conditions variable included within the economic factor.</td>
</tr>
<tr>
<td>INFRASTRUCTURE</td>
<td>Refers to the infrastructure variable included within the regulatory factor. This code is used to designate any discussion of infrastructure or site preparations related to roads, sidewalks, utilities, remediation, etc.</td>
</tr>
<tr>
<td>LAND</td>
<td>Refers to the land-cost variable included within the economic factor. This code is used to designate anything related to land cost, location of land, or land description of a particular TOD parcel.</td>
</tr>
<tr>
<td>NEIGHBORHOOD</td>
<td>Refers to the neighborhood variable included within the advocacy factor. This code is used to designate anything related to neighborhood advocacy groups and their involvement in the TOD development.</td>
</tr>
<tr>
<td>NONPROFIT</td>
<td>Refers to the non-profit variable included within the advocacy factor. This code is used to designate any type of discussion regarding a non-profit group’s involvement in a TOD development.</td>
</tr>
<tr>
<td>PARKING</td>
<td>Refers to the parking-requirement variable included within the regulatory factor. This code is used to designate any discussion related to parking requirements for a particular TOD.</td>
</tr>
<tr>
<td>CODE</td>
<td>Description</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>POLITICS</strong></td>
<td>Refers to the political variable included within the advocacy factor. This code is used to designate any discussion related to political actors and their involvement in a particular TOD.</td>
</tr>
<tr>
<td><strong>PREDICTABILITY</strong></td>
<td>Refers to the concept of predictability. This code is used to designate any discussion related to the three factors’ impact on a developer’s predictability or unpredictability regarding the risk conditions surrounding a particular TOD development.</td>
</tr>
<tr>
<td><strong>REGULATORY</strong></td>
<td>Refers to the regulatory factor. This code is used to designate any discussion related to the regulatory requirements within a particular TOD, including the zoning, infrastructure, parking, and retail requirements.</td>
</tr>
<tr>
<td><strong>RETAIL</strong></td>
<td>Refers to the ground-floor retail variable included within the regulatory factor. This code is used to designate any discussion related to the ground-floor retail requirements for a particular TOD.</td>
</tr>
<tr>
<td><strong>ROI</strong></td>
<td>Refers to the return-on-investment variable included within the economic factor. This code is used to designate any discussion related to profit expectation and ROI for a developer of a particular TOD.</td>
</tr>
<tr>
<td><strong>SATISFACTORY</strong></td>
<td>Refers to satisfactory profits in relation to the concept of satisficing. This code is used to designate any discussion related to the concept of satisfactory profits as opposed to maximum profits with regards to the developer’s decision making.</td>
</tr>
<tr>
<td><strong>SUBSIDY</strong></td>
<td>Refers to the public-subsidy variable included within the economic factor. This code is used to designate any discussion related to public subsidies targeted for a particular TOD project.</td>
</tr>
<tr>
<td><strong>RISK</strong></td>
<td>Refers to the over-all concept of risk for the developer in making decisions for a particular TOD. This code is used to designate any discussion or text related to the risk environment and risk conditions that a developer encounters during a TOD project.</td>
</tr>
<tr>
<td><strong>SATISFICE</strong></td>
<td>Refers to the theoretical concept of satisficing used in this research. This code is used to designate any text or discussion related to the concept of satisficing, which refers to a developer’s making decisions based on reducing risks and obtaining satisfactory profits.</td>
</tr>
<tr>
<td><strong>TIMING</strong></td>
<td>Refers to the concept of timing and the time-sensitive nature of a developer’s decision-making process. This code is used to designate any text or discussion of a developer’s decision-making process with regard to market timing and economic conditions.</td>
</tr>
<tr>
<td><strong>TOD</strong></td>
<td>This code is used to designate any discussion or text related to the concept of a TOD, which is often described as mixed-use, residential retail-and-office development located within a half mile of a transit stop.</td>
</tr>
<tr>
<td><strong>ZONING</strong></td>
<td>Refers to the zoning variable included within the regulatory factor. This code is used to designate any discussion or text referring to zoning regulations related to a particular TOD project.</td>
</tr>
</tbody>
</table>
APPENDIX D

THE LOW-INCOME-HOUSING TAX-CREDIT PROGRAM

The following is a basic description of the LIHTC program. The section seeks to give a brief explanation of how low-income tax credits are acquired by developers and sold to finance affordable rental-housing developments. For a more detailed explanation of the LIHTC program, refer to Korb’s (2009) research, “The Low-Income Housing Tax Credit: HERA, ARRA and Beyond.”

Introduction

The LIHTC is a federally subsidized (HUD) program created to stimulate the development of affordable multi-family rental-housing developments in the United States (Korb, 2009). The program, first enacted with the Tax Reform Act of 1986 (TRA86), offers a dollar-for-dollar tax reduction to corporations and other private equity groups to help stimulate the development of affordable housing. The LIHTC program is responsible for almost 90 percent of all affordable-rental housing created in the U.S. The program stimulates the development of affordable housing to serve low-income households that earn between 30% and 80% of an area’s median income.

A Description of How the LIHTC Program Works

1. The developer applies for low-income-housing tax credits through the local housing authority. The application process is competitive with the best developer being awarded the tax credits. (Example: Medici Communities submitted its successful application to the Colorado Housing and Finance Authority for LIHTCs to fund the development of 50 affordable units at the Evans Station site in Denver, Colorado.)
2. The highest-scoring LIHTC application is awarded these tax credits by the local housing authority. (Example: Medici Communities was awarded approximately $12 million in LIHTCs by the Colorado Housing and Finance Authority.)

3. Once awarded LIHTCs, a developer must seek a buyer for the tax credits. (The tax credits awarded to the developer are not cash. The credits must be sold to an investor like a corporation or private equity group. Once the tax credits are sold to the investor, the developer receives cash which can then be applied to their development project.)

(Example: Medici Communities found a buyer for their $12 million in tax credits. The corporate investor purchased the $12 million in tax credits for approximately .95 cents on the dollar. The sale gave Medici $11.4 million in cash equity for their affordable development while the investor received $12 million in tax credits. When the corporate investor paid their tax bill, they used their $12 million in tax credits which were purchased for $11.4 million for a savings of $600,000 in corporate taxes.)

4. The developer uses the cash equity from the sale of the tax credits to fund the affordable housing development.

(Example: Medici used the $11.4 million received via the sale of their tax credits to fund the development of the affordable Evans Station Loft apartments.)
APPENDIX E

QUANTITATIVE EASING AND MORTGAGE-BACKED SECURITIES

Introduction

This section gives a basic explanation of the quantitative-easing program and the U.S. Federal Reserve’s role in purchasing such long-term assets as treasury bonds and mortgage-backed securities. The purpose of the QE program was to help stabilize and strengthen housing markets and the national economy following their collapse during the subprime-mortgage crisis in the U.S. which began in 2007-2008. For a more detailed understanding of the QE program and the U.S. Federal Reserve’s role in purchasing mortgage-backed securities, refer Klyuev, Imus, and Srinivasan’s (2009) research in their report “Unconventional Choices for Unconventional Times: Credit and Quantitative Easing in Advanced Economies.”

The Quantitative Easing Program implemented by the Federal Reserve is related to this research because it seeks to stabilize and strengthen housing markets and the national economy. Strong, stable housing markets lead to more predictable and increased profits for TOD developers. Therefore they become more likely to consider affordable housing in their TOD. Furthermore, stronger housing-market conditions lead to stronger tax-credit markets which in turn produce more LIHTC equity for developers considering using it to fund affordable-housing development in a TOD. Higher LIHTC equity margins thus increase the likelihood that a developer will produce affordable housing in a TOD.
Quantitative Easing

Quantitative easing (QE) is a monetary policy used by central and government banks to lower interest rates to stimulate the national economy. QE refers to the federal government’s adding to the money circulating in the economy via the purchase of long-term assets like long-term treasury bonds or mortgage-backed securities. QE is often used when standard monetary policy (lowering the federal interest rates) is exhausted. The U.S. Federal Reserve under the chairmanship of Ben Bernanke first introduced Quantitative Easing in 2008 to help stimulate the economy during the start of the subprime mortgage scandal. QE1 was introduced when the Fed had exhausted standard monetary policy by lowering the federal fund interest rate to 0. Since the Fed could not reduce the federal interest rate below 0, additional monetary policy was deemed necessary. The Fed thus instituted QE1 as an additional measure to help hold down interest rates in the hope of stimulating the economy.

QE1, QE2, QE3, and QE4

The Fed introduced QE1 in November of 2008 to help address the economic fallout caused by the subprime mortgage scandal. QE1 resulted in the Federal Reserve’s using $600 billion to purchase long-term treasury bonds and mortgage-backed securities. QE2, QE3, and QE4 followed from 2010 through 2013 with similar amounts of funds. In early 2014, with the economy showing several years of stability and modest growth, the Fed announced that it would begin to taper its quantitative-easing purchases by approximately $10 billion per month from the standard $40 billion it had been authorizing. The Fed will continue to taper the quantitative-easing program as long as
the U.S. housing markets and the national economic remain stable and show signs of modest growth.

**Mortgage-Backed Securities**

Some economists argue that of the two long-term assets purchased by the Federal Reserve in the QE programs (treasury bonds and mortgage-backed securities), the purchase of the latter is more influential in holding down interest rates (Krishnamurthy & Vissing-Jorgensen, 2011). These economists argue that as the Fed embarks on its tapering program, it should taper its buyback of long-term Treasury bonds more than mortgage-backed securities to keep interest rates as low as possible and to continue to stimulate the development of affordable housing.