

# Overcoming Obstacles to Successfully Implementing Transit-Oriented Development

---

*How St. Louis Can Avoid the Roadblocks*

Theodore E. Barklage IV

A Capstone  
Submitted in Fulfillment of the Requirements  
for the Degree of Masters of Arts in Urban Planning and Real Estate Development  
in the Center for Sustainability at Saint Louis University  
Saint Louis, Missouri

May 2013

Advisors:  
Joanna Ganning, Ph.D.  
Saint Louis University

John Langa  
Vice-President Economic Development  
Metro Transit - St. Louis

**Table of Contents**

Introduction and Problem Statement ..... 4

Literature and Case Study Review ..... 6

    What is TOD and what are the advantages of implementing it? ..... 6

    What obstacles stifle the implementation of TOD? ..... 8

        Lack of Financing ..... 8

        Development/Planning Impediments ..... 11

        Lack of Political and Public Support ..... 13

Case Study Evaluation ..... 17

    Atlanta, Georgia – Metropolitan Atlanta Rapid Transit Authority (MARTA)..... 17

    Denver, Colorado – Regional Transportation District (RTD) ..... 22

    Portland, Oregon – Tri-County Metropolitan Transportation District (TriMet) Metropolitan Area Express (MAX) ..... 29

    San Francisco, California – Bay Area Rapid Transit (BART) ..... 35

    Washington, D.C. – Washington Metropolitan Area Transit Authority (WMATA)..... 44

Methodology ..... 52

    Overview of Study Approach ..... 52

    Type of Data and Sources ..... 52

Findings..... 53

    In Review ..... 53

    The St. Louis Region Moves Forward ..... 56

Station Area Market Overview ..... 63

    North Hanley ..... 67

    Rock Road ..... 68

    Union Station/Civic Center ..... 69

    Emerson Park/JJK Center ..... 70

    Fairview Heights ..... 71

Policy and Practice Recommendations ..... 73

    Establish a distinct definition of TOD for St. Louis ..... 73

    Build a market of comparable developments..... 73

    Explore alternative sources of funding ..... 74

    Strive for increased efforts in land acquisition and assembly..... 74

    Continue and expand public input efforts ..... 75

    Educate elected officials and the general public ..... 75

Overcoming Obstacles to Successfully Implementing Transit-Oriented Development

Consider measures that would encourage decreased automobile usage ..... 77  
Encourage jurisdictions to streamline review processes for transit-oriented development ..... 78  
Prudently select station areas to focus development..... 79  
Conclusion ..... 81  
Bibliography and Data Sources ..... 82  
Appendix..... 92

## **Introduction and Problem Statement**

Transit-Oriented Development (TOD) has been gaining popularity across the nation, as a form of development, with significant benefits to a region and the residents and businesses that live in, work in, or utilize its amenities. TOD is defined differently by many entities, but in general it is pedestrian-friendly, compact, mixed-use development established in close proximity to, or around a public transit station, which encourages walkability and increased public transit ridership.

The supply of TODs in the United States is limited by all accounts, but the ever-changing population is increasing demand for this type of development at an impressive rate. A rising number of empty nesters, young adults remaining single or waiting to get married, young couples choosing to not have children, and those with the basic desire to live simpler and with access to a variety of amenities make TOD an attractive option for a growing portion of the population.<sup>1</sup> Others cite the financial and environmental benefits of TOD: fewer cars needed, lower travel expenses, less vehicle miles traveled, and a reduced carbon footprint.<sup>2</sup> Multiple studies show that up to a third of Americans would choose to live in TODs, if they had the option. If this were true, over 6,000 stations with surrounding development would need to be planned and constructed to accommodate demand.<sup>3</sup> Currently the number of specifically designed and built TODs is in the 100s rather than the 1000s.

Agencies in the St. Louis region are currently investigating and planning possible TOD in St. Louis City and County, as well as St. Clair County. Unfortunately, despite the advantages to this type of development and the demand for it nationwide, the many obstacles to TOD often

---

<sup>1</sup> Renne (2007).

<sup>2</sup> Litman (2010).

<sup>3</sup> Levine and Inam (2004).

exist and delay it from moving forward from the planning stages to development and completion. Identifying the most common obstacles TODs have faced around the country and discovering how those obstacles were overcome, by examining various regions, would establish the groundwork for streamlining the planning, development, and implementation of TOD in the bi-state region.

Through an investigation of primary and secondary literature sources, a comprehensive list of relevant obstacles will be established in order to allow stakeholders in TOD within the St. Louis region the ability to meet these impediments head on and to avoid the pitfalls that other regions have fallen victim to, while planning effectively to lessen the impact of unavoidable barriers.

A study of transit-oriented development planning efforts in the Metro Transit – St. Louis service area will then be conducted to evaluate the extent and state of these efforts at present. This evaluation will be combined with literature review and five nationwide case studies to determine the preparedness of transit-oriented development stakeholders within the region to meet the obstacles others have dealt with now and in the future.

Following this effort, recommendations will be made as to how the region may pursue transit-oriented development effectively and efficiently, with the knowledge of likely obstacles that could otherwise deter or delay TOD in St. Louis.

## Literature and Case Study Review

The review of literature and case study areas to follow will examine first what the literature explains regarding the varying definition of TOD and its many benefits, and second, what obstacles have been documented in individual cases of TOD implementation across the country. Exploring existing writing on this topic will help to establish a baseline for developers, planners, and other interested parties in the St. Louis region to potentially implement TOD with the advantage of anticipating hindrances to the process.

### What is TOD and what are the advantages of implementing it?

Defining TOD is much more difficult than some may think. Differing definitions exist due to the number of participants in the TOD process and their varying levels of involvement. Similarly, the assessments of the advantages of implementing TOD also have substantial differences depending on the involvement one may have.

Defining TOD is difficult due to the differing conditions found in cities across the United States. Particular densities, sizes, locations, and other statistics cannot be set to constitute what is or is not TOD, given what could be considered very dense development in St. Louis is relatively less dense in cities like New York, Chicago, or Los Angeles. For example, below are three definitions of TOD from three different stakeholders. Notice the divergence.<sup>4</sup>

In Aspen, Colorado the Roaring Fork Transportation Authority defines TOD simply as:

*Land development pattern that provides a high level of mobility and accessibility by supporting travel by walking, bicycling, and public transit.*<sup>5</sup>

The Maryland Transit Administration in Baltimore, Maryland offers a slightly more detailed definition, including some minor points about the type and density of the development:

---

<sup>4</sup> Cervero (2004), p. 5.

<sup>5</sup> Cervero (2004), p. 6.

*A relatively high-density place with a mixture of residential, employment, shopping, and civic uses located within an easy walk of a bus or rail transit center. The development design gives preference to the pedestrian and bicyclist.*<sup>6</sup>

The Bay Area Rapid Transit Authority (BART) in San Francisco, California adds points regarding the role of the automobile, as well as the possibility of either new construction or redevelopment being part of TOD:

*Moderate- to higher-density development, located within an easy walk of a major transit stop, generally with a mix of residential, employment, and shopping opportunities designed for pedestrians without excluding the automobile. TOD can be new construction or redevelopment of one or more buildings whose design and orientation facilitate transit use.*<sup>7</sup>

Despite varying definitions, a successful TOD is generally considered to be mixed-use, walkable, and location-efficient (meaning consciously placing residences in close proximity to public transit).<sup>8</sup> In addition, it has to balance the need for sufficient density to support transit service that meshes with the scale of the community. Dittmar and Ohland also argue that TOD should be mixed-income as well.<sup>9</sup>

The benefits of TOD can be extensive and touch a wide-range of fields. Supporters of TOD contend that it can aid in curbing sprawl, lessening traffic congestion, reducing vehicle miles traveled, and increase public transit ridership. These benefits also result in environmental advantages and increased revenues for local transit authorities.<sup>10</sup> For eight consecutive years per

---

<sup>6</sup> Cervero (2004), p. 6.

<sup>7</sup> Cervero (2004), p. 6.

<sup>8</sup> Dittmar, et al. (2004), p. 23.

<sup>9</sup> Dittmar, et al. (2004), p. 4.

<sup>10</sup> Cervero (2004), p. S-6.

capita vehicle-miles traveled in the United States has fallen. In 2012, this number was reduced by 0.4 percent, a total of 7.5 percent since 2004. A report by the Federal Highway Administration attributes this reduction, in part, to a move toward compact and mixed-use development, as well as less interest in automobile use by consumers in their 20s and 30s.<sup>11</sup>

Further, TOD has shown promise in increasing property values and tax revenues, while aiding in revitalization. Investment in light rail infrastructure and development around that infrastructure shows commitment by local agencies and developers and, as a result, has shown in some cases to increase property values for commercial and residential projects situated near transit stations.<sup>12</sup>

### **What obstacles stifle the implementation of TOD?**

Unfortunately, despite the many advantages to successfully implementing TOD, “the amount of hype around transit-oriented development far exceeds the progress to date.”<sup>13</sup> The numerous impediments to TOD can be parsed into three categories: 1) Lack of Financing; 2) Development/Planning Issues; and 3) Lack of Political and Public Support.

### **Lack of Financing**

Currently, financing could be listed as an obstacle to most types of development; however, TOD faces a more difficult challenge than most. Although its popularity is growing, a lack of comparable developments causes lenders to question whether the concept of TOD is viable. In Gresham, Oregon, just east of Portland, this issue arose during the planning for The Crossings at Gresham, a TOD project under the charge of Metro, Portland’s regional government.<sup>14</sup>

---

<sup>11</sup> Sundquist (2013).

<sup>12</sup> Atlanta Regional Commission, p. 5-6.

<sup>13</sup> Belzer, et al. (2002), p. 7.

<sup>14</sup> Kazis (2010).



Figure 1: The Crossings at Gresham

Despite the ever-changing world, lenders seem to use some of the same standards set in place in the mid-twentieth century, when it comes to financing development. Banks know what types of projects they have funded in the past and have a solid knowledge of what has been successful. Even though TOD may be dissimilar to unsuccessful projects lenders associate with failure, it is most likely dissimilar to successful ones as well. The fact that many lenders have never funded TOD makes them reluctant to start funding it now.

Financial institutions also take issue with lending to development that doesn't have what they deem to be sufficient parking. They feel the more parking that is available, the less risk they will face and the returns will be higher. Regarding prospective transit-oriented development in Salt Lake City, Utah, Michael Morris, Executive Vice President of Real Estate for Zions Bank, stated "We're not going to make a loan without getting comfortable with the parking element and the parking strategy." Morris also explained that, in addition to parking, the overall economy and the mix of equity and debt would also obviously factor in to a banks willingness to support TOD.<sup>15</sup>

---

<sup>15</sup> Jensen (2009).

The basic philosophy behind TOD makes it illogical that parking requirements would be the same as for more traditional development, yet, if the parking isn't there, lenders fear failure and choose not to lend. In many instances, even very successful transit-oriented developments see profits emerge more slowly than traditional development, pushing developers, planners, and local governments to get creative with financing options that can entice lenders<sup>16</sup>.

Some transit-oriented development projects seek other forms of financing due to the lack of support from lenders. In Salt Lake City, some TOD projects near TRAX (Utah Transit Authority's light rail) stations have stalled in recent years, while others, like the \$1.5 billion, 23-acre City Creek Center development, have been successful. The main difference is financial backing from a significant sponsor, the Church of Jesus Christ of Latter-day Saints. The success of that and other TOD projects in Utah have made banks slightly more interested and willing to consider funding other TOD projects moving forward and progress has been made in the last two to three years.<sup>17</sup>



Figure 2 City Creek Center

Regions are striving to find alternative ways to finance projects or at least provide some financial support to offset total costs. In Denver, Colorado, the FasTracks rail expansion was authorized in 2004, leading to a total of 122 miles of light and commuter rail. Transit-oriented

---

<sup>16</sup> Kazis (2010).

<sup>17</sup> Page (2011).

development was to play a role in the expansion and Denver agencies have discovered creative ways to secure financing.

In February 2012, a historic joint state-federal settlement with the country's five largest mortgage servicers, Ally/GMAC, Bank of America, Citi, JPMorgan Chase, and Wells Fargo, was completed. This settlement was valued at \$25 billion, which was determined to be allocated either as relief to borrowers residing in the states who had signed the settlement or as direct payment to these states, as well as the federal government. The settlement was the largest consumer financial protection settlement in the history of the United States. The mortgage servicers were found to have regularly committed the illegal practices of signing foreclosure documentation without the presence of a notary public and without thorough knowledge of the contents of the documentation.<sup>18</sup>

Denver-based Urban Land Conservancy was able to secure a \$1.3 million loan from the State of Colorado's \$13.1 million portion of the settlement. This low-interest loan supplemented a bank loan to facilitate the purchase of an apartment complex along a soon-to-open new line near downtown Denver. It was only through this financing that the nonprofit group was able to secure the purchase and ensure that affordable housing would be available now and in the future near transit in the area. This model is now being imitated in a number of other cities across the country in an effort to obtain alternative financing to aid in creating affordability within transit-oriented development, where traditional financing would normally shy away.<sup>19</sup>

### **Development/Planning Impediments**

In some cases, transit-oriented development is being created on greenfields along new light rail lines, thereby avoiding many legacy issues associated with in-fill sites. However, challenges to

---

<sup>18</sup> <http://www.nationalmortgagesettlement.com/about> (2013).

<sup>19</sup> Best (2013).

TOD occur when rail lines traverse heavily built environments. The test becomes whether parcels or groups of parcels large enough to make TOD feasible are readily available. In South Los Angeles, California, along the recently built Expo Line light rail, planners estimate up to 6,000 new housing units could result from the new line. Unfortunately, locations to build such units, along with commercial and office space, are sparse.

Developers in these heavily urbanized areas find it difficult to acquire single parcels sizeable enough to develop, leaving them to negotiate with numerous small property owners in order to assemble a collection of parcels. Land acquisition becomes a substantial hurdle, when transit agencies, redevelopment agencies, municipalities, or the like do not own land adjacent to existing or planned stations. In Los Angeles, a stark contrast in development can be seen between the ability to plan and implement TOD along the Expo Line, where available suitable land is scarce, and along the Red Line, where the Los Angeles Metropolitan Transportation Authority has significant landholdings.<sup>20</sup>

Beyond the availability of land, Jonathan Levine of the University of Michigan contends that zoning is often the biggest obstacle to transit-oriented development. In many cities, constructing TODs are actually illegal, according to the cities' zoning codes. The extensive rezoning process that is required to make the development possible severely decreases the viability for developers and investors to commit to a project. As the saying goes, "time is money," and these words are as applicable in the development world as they are in any sphere. Although compliant zoning doesn't necessarily guarantee success or a simple road to

---

<sup>20</sup> Stephens (2012).

development, uncertain planning and zoning processes concern and ultimately can discourage developers and investors.<sup>21</sup>

In one of the preeminent pieces of literature on transit-oriented development, Robert Cervero, Chair of Urban Studies and Professor of City & Regional Planning at the University of California, Berkeley, explains that, when surveyed, planners placed accelerated processing of development approvals at the bottom of the list of planning tools to promote TOD. Developers, on the other hand, ranked expedited development processing as the most important tool. This divergence is a major barrier that must be overcome. As TOD gains popularity and acceptance in the planning world, an increasing number of governments have taken steps to address TOD in zoning ordinances. In order to facilitate extensive acceptance of TOD across the country, accommodating zoning ordinances must become the rule, not the exception.<sup>22</sup>

### **Lack of Political and Public Support**

As is the case with any development, public and political support can make a project a reality, or a lack thereof can stop development with relative ease. Transit-oriented development is no different. In fact, some believe that it relies even more heavily on public and



**Figure 3 AvalonBay Huntington Station**

political support. One is just as critical as the other. In Huntington, New York, a suburb west of New York City, most elected officials supported the AvalonBay Huntington Station project, a low-density, relatively modest TOD being undertaken by a nationally recognized TOD

---

<sup>21</sup> Levine (2006).

<sup>22</sup> Cervero (2004).

developer. New York Newsday provided editorial support for the project as well. Despite this solid backing, a contingent of opponents created a Facebook page to oppose the project, which was defeated in the end. Opponents described TOD as a “threat to Huntington’s quality of life,” a strain on public infrastructure, a cause for plummeting home values, a factor in increasing commute time for residents, and a loss of open space. Regardless of the erroneous allegations made by the group, they were successful in garnering enough support to defeat the project, thus demonstrating how even a small assemblage of outspoken individuals can have a significant impact on the successful implementation of transit-oriented development.<sup>23</sup>

Metropolitan Transportation Authority (MTA) Metro-North Railroad President Howard R. Permut explains that political and public support is vital to the implementation of transit-oriented development. He cites the example of a failed project in Beacon, New York. A transit project had been in the planning stages in Beacon for approximately six years, when an election replaced the incumbent mayor and other elected officials. The newly elected officials raised opposition to the project. Permut broaches a simple but crucial topic in the discussion of obstacles to transit-oriented development, “...a lot of people don’t like change.” He describes projects surrounding rail stations that take anywhere from five to ten years to receive approval, which can be constructed and fully utilized within a matter of twelve months. It’s clear that support can make or break a project.<sup>24</sup>

Few will argue that America is an automobile-oriented society. Although public transit improvements in parts of the United States and around the globe have been rapid in the past century, the appeal of the open road is something many Americans just don’t want to give up.

---

<sup>23</sup> Arrington (2010).

<sup>24</sup> Gallagher (2012).

One Fairfax, Virginia city official put it this way, “Walking is learned behavior that hasn’t been learned here.”<sup>25</sup> Realizing the issue, Brian Taylor, Director of UCLA’s Institute of Transportation Studies, believes the only way to move transit projects like TOD forward is to incentivize the use of other forms of transportation other than the automobile. Taylor points out that, in recent years, funding for transit projects, such as high-speed rail and light-rail expansion, has been available and infrastructure has been expanding, but if anyone is going to actually use the infrastructure, policies must be put in place to make driving costlier and using public transportation more enticing. Although gas prices have risen significantly in the past decade, the increase hasn’t been substantial enough to deter a large portion of the population from using cars. Taylor recommends measures such as higher charges for parking, increased use of toll roads, and markedly higher fuel taxes. Similar methods were successfully used in Japan and many European countries, where public transportation is widely used in varying forms.<sup>26</sup>



Figure 4 Rockville Town Square

In Rockville, Maryland, north of Washington D.C., Rockville Town Square, a mixed-use development, is just two blocks from a Metro transit station.

Regardless, businesses have noticed many customers driving to the development.

Suburbanites adamantly opposed to

abandoning their cars for other forms of transportation demand free or reduced-fee parking at Rockville Town Square, rather than taking advantage of its transit-oriented conveniences. Some

---

<sup>25</sup> Shaver and Spivack (2010).

<sup>26</sup> Lazarus (2009).

experts look to the fact that people are driving to these types of developments as a good sign that consumers want to be there, but old habits die hard and, in order for transit-oriented development to gain traction, decreased automobile dependence is a key factor.<sup>27</sup>

Along with the enthrallment with cars, many Americans are enticed by low-density communities and homes on acreage. David Boyce of Northwestern University says this preference must be addressed by committing resources to expanding rail networks, along with providing higher-density development near transit hubs in the form of condominium and apartment buildings, as well as high-density office buildings and retail space.<sup>28</sup>

Aversion to change may be one of the most significant obstacles transit-oriented development faces in the United States. Examining the measures suggested by Taylor and Boyce demonstrates how difficult the struggle for political and public support can be for TOD. Even when grant money for TOD planning is available to local governments and planning agencies, it's being left unclaimed. In Marin County, California, the Sonoma-Marine Area Rail Transit Project is underway. Cities included in the project were eligible for hundreds of thousands of dollars in grant funding to aid in planning housing near transit stations. The Metropolitan Transit Commission (MTC) was prepared to distribute \$1.8 million in financial support, yet, in Marin County, only one of the three eligible cities applied. The other two municipalities cited lack of support from elected officials, concern over environmental impact, and a desire to maintain lower densities, as some of the reasoning behind not pursuing funds.<sup>29</sup>

---

<sup>27</sup> Shaver and Spivack (2010).

<sup>28</sup> Lazarus (2009).

<sup>29</sup> Prado (2009).

## Case Study Evaluation

One of the most useful practices for the St. Louis region in investigating the prospect of TOD, what to avoid, and what to implement, is a review of current transit-oriented development projects across the nation. TOD hasn't been limited to a certain portion of the country or to select cities. Learning from a variety of TODs from coast to coast can only aid the St. Louis region in efficiently approaching this form of development. Consider the cases of:

- Atlanta, Georgia
- Denver, Colorado
- Portland, Oregon
- San Francisco, California
- Washington, D.C.

### Atlanta, Georgia – Metropolitan Atlanta Rapid Transit Authority (MARTA)

Atlanta's Metropolitan Atlanta Rapid Transit Authority (MARTA) purchased the Atlanta Transit System in February 1972 for \$12.9 million, took over control of the area's bus transportation system, and began to plan for a rail system. Over the next decade, MARTA was awarded grant funding of more than \$800 million from the federal government for planning, design, land acquisition and construction of a rapid rail system. On June 30, 1979, the East Line began operating between Avondale and Georgia State Station, marking the first train in the area and the start of MARTA's combined bus and rail service.<sup>30</sup>

In the early planning stages, MARTA contracted with the Atlanta Regional Commission, who then contracted with the City of Atlanta's Planning Department, to create development plans for transit station areas within the city. As a result, an Urban Framework Plan was developed and assigned stations to various categories based on the current development characteristics in those areas at the time. The established categories included neighborhood,

---

<sup>30</sup> [www.itsmarta.com](http://www.itsmarta.com) (2013).

community center, regional development node, and central business district. The station area category was then used to determine which of a number of development tools would be utilized at that station in the future. Eventually, this categorization resulted in a set of comprehensive plans for the area surrounding each station, which were then incorporated into the land use element of the City of Atlanta's Fifteen Year Comprehensive Plan. Atlanta, like many other large cities in the United States, experienced sprawl and flight of jobs and residents to the suburbs, which was accelerated as I-285, a perimeter ring highway outside of downtown Atlanta, was constructed in the 1980s.<sup>31</sup>

The City of Atlanta produced Special Public Interest (SPI) zones, both in the downtown core of the city and around several rail stations to the north of the downtown. The focus of these SPIs was to aid in altering zoning standards, such as densities around MARTA rail lines. Some SPIs were more successful in dictating change than others, but some significantly changed zoning within the SPI and in the surrounding areas. Some of these changes resulted in projects that would have previously not integrated transportation aspects.<sup>32</sup>

In one case, MARTA persuaded BellSouth to forego other plans and construct office centers on top of or near new or existing rail stations. BellSouth decided that being spread across seventy-five different leased locations throughout Atlanta was not how they wanted to conduct business. Instead, they chose to consolidate several of their Atlanta offices into three main sites. BellSouth's "Atlanta Metro Plan," relocated 10,000 BellSouth employees into three sites near MARTA transit stations. As a result, the company consolidated and closed twenty-five of its Atlanta locations. BellSouth's goal was to have thirty percent of its employees utilizing

---

<sup>31</sup> South San Francisco General Plan (1999).

<sup>32</sup> Fritz (2003).

MARTA buses and rail. In the case of BellSouth’s Midtown Center on Peachtree Street, lower-level retail was integrated in hopes to help revitalize nighttime pedestrian traffic in the Midtown area. Similar projects were facilitated through modifications achieved by the SPIs as well.

By the end of the twentieth century, MARTA began to turn its attention to a connection between transit and community development and a partnership with BellSouth was established to create a TOD at Lindbergh Center on the North Line. At the time, it would be the largest multi-use development of its kind in the United States. This station was targeted as a regional node by the Urban Framework Plan. The Lindbergh Center was an industrial area rezoned for high density, mixed-use development. MARTA worked diligently to be awarded a federal Livable Communities grant for the development and subsequently issued a Request for Proposals (RFP)

to select a developer to construct the project. This 47-acre project would be made up of a MARTA Park-and-Ride lot, as well as surplus land from station construction.<sup>33</sup> It would ultimately include BellSouth office towers, a multi-tenant office building, new parking decks, and a



Figure 5 Lindbergh City Center

Main Street retail promenade, as well as apartments and condominiums. The first phase of the Lindbergh City Center opened in November 2002 and was named by the *Atlanta Business Chronicle* as the “Best Mixed-Use (Real Estate) Deal of the Year.”<sup>34</sup>

---

<sup>33</sup> South San Francisco General Plan (1999).

<sup>34</sup> [www.itsmarta.com](http://www.itsmarta.com) (2013).

MARTA continued its planning by joining the Atlanta Regional Commission and the Georgia Regional Transportation Authority to establish the Transit Planning Board. This Board's charge is to create a regional plan for expanding and funding public transportation for the Atlanta metropolitan region, to improve regional system coordination and performance measurement, and to act as an advocate for increased federal funding for the regional transit system. In 2010, the Regional Transit Committee replaced the TPB in guiding the long-range transit vision for the Atlanta.<sup>35</sup>

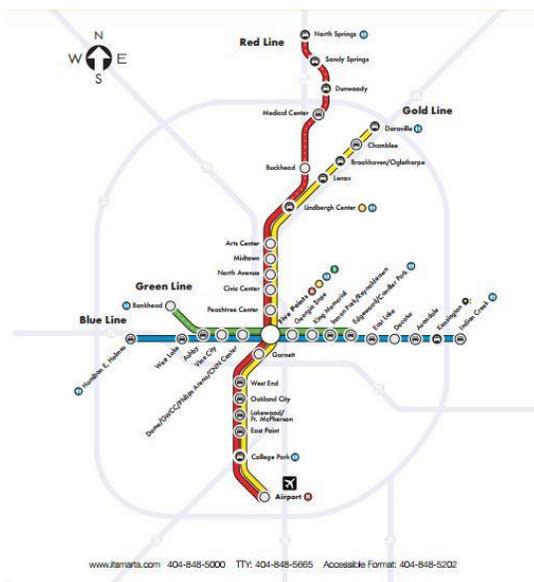


Figure 6 MARTA Rail Map

MARTA faces financial obstacles, as it is the only large metropolitan transit system that doesn't receive any state funding. As a result, MARTA is constantly in need of increased revenues and alternative forms of funding, such as federal grants. MARTA has long looked at TOD as not only a quality form of development, but also something that was in the best interests of the system financially. In initially presenting the Lindbergh

City Center project to the public, many residents voiced concern over traffic congestion the development could create, along with a lack of pedestrian improvements. After BellSouth made the decision to join the project and to increase the size of the development tremendously, community groups were not pleased. Residents felt the project had grown too big and the number of proposed parking spaces was excessive.

<sup>35</sup> [www.atlantaregional.com](http://www.atlantaregional.com) (2013).

MARTA and the surrounding community negotiated at first, but soon were involved in a legal battle. Residents felt that MARTA had no interest in public input. The 13,000 proposed parking spaces were the main point of contention in the dispute. As often happens with TOD projects, parking became the catalyst for disagreement. Community groups had concerns regarding the traffic generation from 13,000 parking spaces, as well as pedestrian access, while BellSouth felt that they must ensure the vast number of employees in the offices would have available parking while, at the same time acknowledging, lenders would never finance a project of this magnitude without adequate parking. It was the hope of stakeholders that, as transit proved to lessen the use of parking in the first phase of development, future phases could require less parking. Six months of mediation eventually resulted in concessions by both sides that would allow the project to proceed.

Public outcry over a lack of affordable housing also impacted development. Community groups believed affordable housing to be a critical aspect to transit-oriented development and it just wasn't included in Lindbergh City Center. An SPI was established just to the east of the project offering a density bonus to developers that would construct affordable housing units.

This project is a perfect example of why community involvement and buy-in is a critical aspect of successful TOD. Community groups and residents felt that the level of transparency provided by MARTA and BellSouth was not acceptable. They felt that their concerns were falling on deaf ears and that lack of communication results in a lack of support and can often delay a project significantly. Lindbergh City Center also demonstrates the severe issues involved with parking in a transit-oriented development. The amount of parking and the cost per space significantly increased project costs and priced out many Atlanta residents who might have otherwise enjoyed the benefits of moving to the development. The lack of affordable housing

also causes issues, both in garnering support from the public and in the long-term success of the project. Finally, the integration of TOD into the built environment is a critical aspect of the development. The TOD must be accessible for pedestrians and bicyclists. Creating an island by establishing extensive amounts of parking around the development is not conducive to a successful TOD.<sup>36</sup>

Despite critical issues in projects, such as Lindbergh City Center, statistics show that MARTA ridership is on the rise. In fiscal year 2012, on weekdays, about 123,400 people traveled via MARTA. Most MARTA customers used a combination of bus and train to get to their destinations; however, about twenty-three percent of MARTA customers only took the train and about 2.4 percent only rode buses. Fifty-six percent of MARTA customers used public transportation for their commute to work, while nine percent used it to get to school. Thirty-one percent of customers used the buses and trains for other purposes, such as going to a sporting or entertainment events. In total, over the course of fiscal year 2012, 134,889,690 unlinked passenger trips were taken using MARTA.<sup>37</sup>

### **Denver, Colorado – Regional Transportation District (RTD)**

The Regional Transportation District (RTD) was established in 1969 by the Colorado General Assembly to develop, operate, and maintain a mass transportation system in and around Denver. The District encompasses 2,340 square miles. The eight counties served in whole or part by RTD are the City and County of Denver, the City and County of Broomfield, the counties of Boulder and Jefferson, the western portions of Adams and Arapahoe Counties, the northern portion of Douglas County, and portions of Weld County.<sup>38</sup>

---

<sup>36</sup> Feigon, Hoyt, and Ohland (2004).

<sup>37</sup> MARTA FY2012 Annual Report (2012).

<sup>38</sup> [www.rtd-denver.com](http://www.rtd-denver.com) (2013).

Over the years, efforts have been made to promote transit-supportive and transit-oriented development in Denver. In 1995, the City began the Light Rail Station Area Development Program with the goal of promoting “growth around the stations that have the potential to maximize transit ridership and enhance neighborhood livability.” At that time, some focus was given to stations in the Five Points District that is north of downtown, as well as four stations along the Central Corridor, south of downtown.

The City of Denver worked to develop a concept plan for station areas in Five Points, considered the historical center of Denver’s African-American community. This area experienced a drastic population decline between 1950 and 1994 and displayed a high crime rate in the 1980s and early 1990s. City officials worked with a range of stakeholders, including developers and landowners, on the project, which experienced a mixed reaction from the public and community leaders, most concerned with the impact the proposed plans may have on their community. Planners wanted to make sure plans were supportive of existing businesses and the history of the area, while making it more connected and bringing better residential uses to the district. They also determined the importance of partnerships between City and non-profit developers to gain support.

Several featured improvements in the area included:

- The African-American Research Library funded by bonds sold through a non-profit organization incorporated by the City.
- Welton Urban Living Lofts
  - Ten residential units
- The Point Project, a mixed-use development
  - Sixty-eight residential units (thirty-three for sale/thirty-five for rent)

- 12,800 square feet of commercial space (6,100 square feet retail/6,700 square feet office).
- Fern Hall
  - Six affordable residential units
  - 4,300 square feet of office/retail.
- The Lofts at Downing Street Station
  - Thirty three for sale residential units (eight affordable/twenty-five market rate)
  - 8,500 square feet of retail
- Curtis Park Homes
  - Replacement of 286 public housing units w/ 550 mixed income units
  - Received a \$26 million HOPE VI grant from HUD

In planning and facilitating the Five Points project, developers and planners came to realize that implementation of a TOD project is not as easy as its planning. They also concluded that political and financial support from the local area is important and that community and local business support is critical.<sup>39</sup>

Currently, RTD serves a total population of 2.8 million residents across forty municipalities. This region is projected to grow to 4.2 million by 2035. The current service area includes 9,841 active bus stops, seventy-four Park-n-Ride facilities, thirty-six light rail stations, and various special services. Over the course of 2012, weekday boardings on RTD transportation averaged 328, 109, with annual boardings for the year totaling 99,142,849 passengers.<sup>40</sup>

---

<sup>39</sup> Rail-Volution (2006).

<sup>40</sup> [www.rtd-denver.com](http://www.rtd-denver.com) (2013).

In 2006, the City of Denver created a TOD Strategic Plan,<sup>41</sup> which outlined the following City-Wide Policy Recommendations:

1. *Fine-Tune Roles and Responsibilities with RTD and (Denver Regional Council of Governments (DRCOG))*
2. *Adopt TOD Typology and Encourage Region to Embrace a Common Definition of TOD*
3. *Engage in Proactive Planning and Zoning*
4. *Adopt a Package of TOD Parking and Parking Management Strategies*
5. *Focus Funding Tools on TOD and Create New Tools*
6. *Prepare an Affordable and Mixed-Income Housing Strategy for TOD*
7. *Develop a Public Housing Renewal Strategy*
8. *Develop Economic Development Strategies for Station Areas*<sup>42</sup>

This strategic document, and other plans and projects throughout the past two decades, have shown clearly that the Denver metropolitan region is focused on transportation and TOD. The City and RTD determined that transportation infrastructure improvements would be essential to accommodate the estimated growth for the region, so a tremendous amount of change is underway, as RTD is in the process of implementing the RTD FasTracks Program,



Figure 7 RTD FasTracks Map

a multi-billion dollar comprehensive transit expansion plan. FasTracks was approved in 2004 by

<sup>41</sup> [www.denvergov.org](http://www.denvergov.org) (2013).

<sup>42</sup> Denver Transit-Oriented Development Strategic Plan (2006).

58% of Denver voters. The plan authorized a 0.4% sales tax increase. RTD previously received a 0.6% sales tax, so the approval of FasTracks brought that to a full 1%. The original 0.6% of that sales tax is earmarked for base expenditures, while the newly approved 0.4% would be applied to the FasTracks expansion project. RTD never wanted to compromise the base system for the improvements, thus the clear separation of funds.<sup>43</sup> FasTracks encompasses 122 miles of new commuter rail and light rail, 18 miles of bus rapid transit, 21,000 new parking spaces at light rail and bus stations, and enhances bus service for easy, convenient bus/rail connections across the eight counties served by RTD. The program's mantra is "Build as much as we can, as fast as we can until it's all done!"<sup>44</sup>

The official program goals make it quite clear that RTD plans on establishing service levels that will meet or exceed the needs of its patrons, both now and into the future.

- 1. Provide improved transportation choices and options to the citizens of the District - additional transportation choices add to the region's quality of life.*
- 2. Increase transit mode share during peak travel times - existing congestion during peak travel times of the day is frustrating for many drivers and is expected to worsen as the region grows.*
- 3. Establish a proactive plan that balances transit needs with future regional growth - the Denver metropolitan region is expected to grow from 2.6 million (2005) people to 3.39 million in 2025.*<sup>45</sup>

With its completion, FasTracks will provide the Denver area with a reliable and safe regional transit system, far more accommodating than what is currently offered. The system will

---

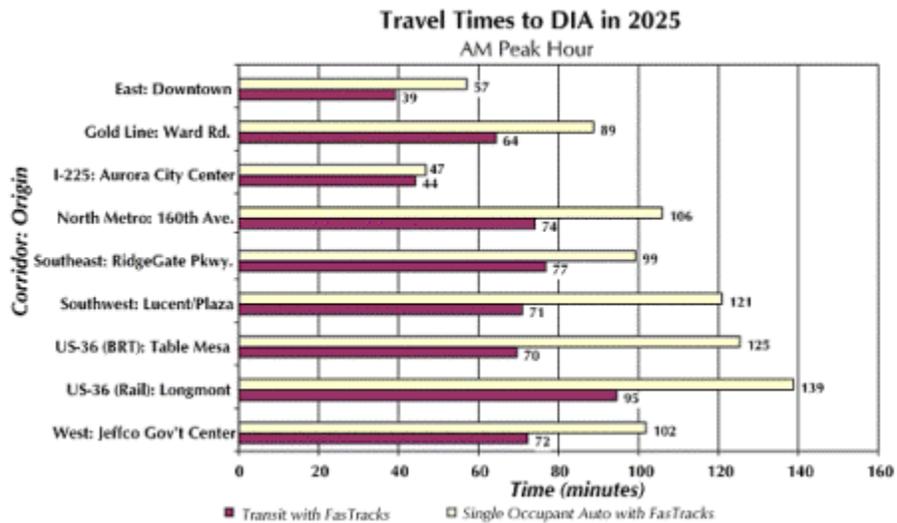
<sup>43</sup> Mulligan (2013).

<sup>44</sup> [www.rtd-fastracks.com](http://www.rtd-fastracks.com) (2013).

<sup>45</sup> [http://www.rtd-fastracks.com/main\\_27](http://www.rtd-fastracks.com/main_27) (2013).

also provide environmental benefits to the area. Economic benefits and job creation will also be produced during its implementation. It is estimated that up to 10,000 construction-related jobs could be generated at some points during its development. RTD projects that for every dollar invested in the program six-dollars are returned to the local economy.

In addition, with the completion of FasTracks, travel time for transit commuters is expected to be considerably lower than that of commuters utilizing automobiles. The graphic provided below illustrates projected estimated travel times for both commuting options (RTD and automobile) to and from various locations around the region.



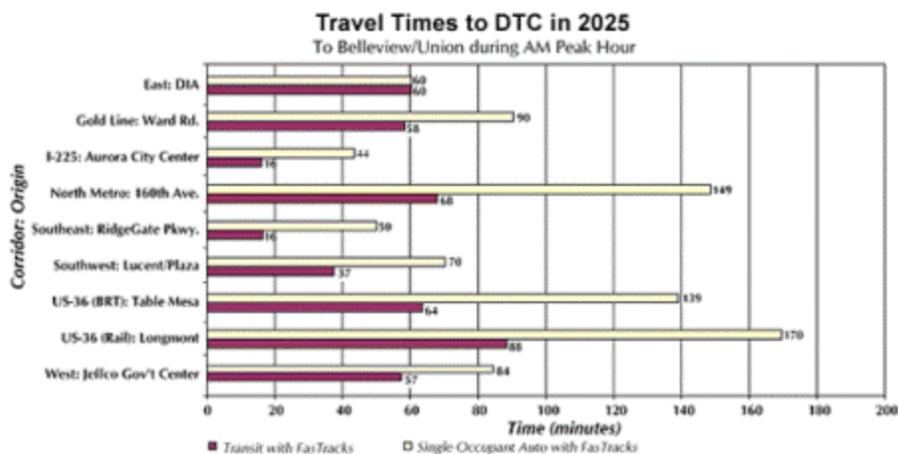


Figure 8 RTD Travel Times

RTDs commitment to improvement is clear, both in its past TOD implementations and in the present growth through the FasTracks initiative. RTD is currently striving to help facilitate TOD opportunities throughout the region, as it considers station design. It also believes close coordination with local jurisdictions and developers to be a key in planning and implementing TOD through the FasTracks program. Expansion continues constantly. The West Rail Line opened to passengers in April 2013 and FasTracks extensions and additions will continue through 2018.

Statistics published by RTD in July 2010 showed development currently in place near planned and existing stations along the FasTracks corridors included: 17,400 housing units, 4,900 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, 160,000 square feet of cultural space, 1.6 million square feet of educational space, 5.96 million square feet of medical-related space, and 2.6 million square feet of convention space.<sup>46</sup>

<sup>46</sup> RTD TOD Fact Sheet (2010).

Denver RTD provides an excellent example for other regions and transit systems as to how to approach expansion efforts and transit-oriented development. Transparency, desire to collaborate, willingness to explore alternative forms of financing, and acceptance of public input has allowed Denver to avoid many of the obstacles others have encountered.

### **Portland, Oregon – Tri-County Metropolitan Transportation District (TriMet) Metropolitan Area Express (MAX)**

Portland has long been considered one of the most public transit centered cities in the United States. The Metropolitan Area Express (MAX) light rail system is extremely well-utilized and ridership is constantly increasing. However, mass transit in Portland wasn't always as successful. It's apropos to examine a brief history of the evolution of Portland's transit planning and development process, as there were many extremely shrewd steps taken along the way that have led to the thriving system that is in place today.

With ridership waning and the primary transit service in Portland prepared to declare bankruptcy in 1969, a Mass Transit Advisory Commission was appointed and the Tri-County Metropolitan Transportation District of Oregon (TriMet) established. TriMet would assume control of the local bus systems and provide regional transit service and attempt to revitalize ridership. Portland began establishing long range transit plans in the early 1970s, one of which recommended fifty-four major new highway projects, as it predicted the declining bus system would remain insignificant.

Fortunately, several years later, TriMet drafted two plans, an "immediate action plan" and a "1990 Master Plan." These plans were created with the intention of counteracting the decline of Portland's transit system. Suggestions, such as consolidating all local bus service, concentrating downtown service on transit malls, building suburban Park & Ride lots,

developing transitways in major corridors, and expanding the number of buses, were all included to aid in expanding transit's reach in the region.

Several large highway projects in the region were rejected and, as provided for in the Federal Aid Highway Act, states were allowed to transfer funds from defunct highway projects to fund transit projects. It was at this time that the Oregon Public Utility Commission proposed a regional light rail system.

By the end of the 1970s Metro, a regional government planning agency was created and established the urban growth boundary (UGB), a tool to accomplish responsible and effective regional land use and development. The UGB protects farms and forests from urban expansion, while promoting the planning and implementation of roads, water and sewer systems, parks, schools, and fire and police protection within the growth boundary. The UGB limits urban sprawl and helps “to promote the efficient use of land, public facilities and services inside the boundary.”<sup>47</sup>

In the early to mid-1980s, the MAX system received federal approval to use freeway funds. At the time, the only other city in the United State using light rail was San Diego, and it had just begun there. Metro decided that light rail was the future of public transportation in Portland and began planning accordingly. In 1986, MAX began service on a 15-mile stretch between Gresham, Oregon and downtown Portland. But that was just the beginning.<sup>48</sup> In 1995, the “Region 2040 Growth Concept” was drafted with a focus on higher density development along transit corridors. Construction of more MAX lines boomed through the 1990s and in to the early 2000s.<sup>49</sup> In 2003, TriMet created a constantly evolving Transit Investment Plan (TIP).

---

<sup>47</sup> [www.oregonmetro.gov](http://www.oregonmetro.gov) (2013).

<sup>48</sup> South San Francisco General Plan (1999)

<sup>49</sup> [www.trimet.org](http://www.trimet.org) (2013).

The TIP considers both short term and long term issues, while integrating ideas from local governments and public input in order to help improve TriMet’s transit offerings. Every fiscal year, the TIP designates a new list of priorities for the coming year.<sup>50</sup>

Light rail expansion in Portland has continued through the economic crisis of the early 2000s. In 2009, the 14.7-mile Westside Express Service (WES) commuter rail line began service. This expansion marks one of the few suburb-to-suburb commuter rail lines in the United States.

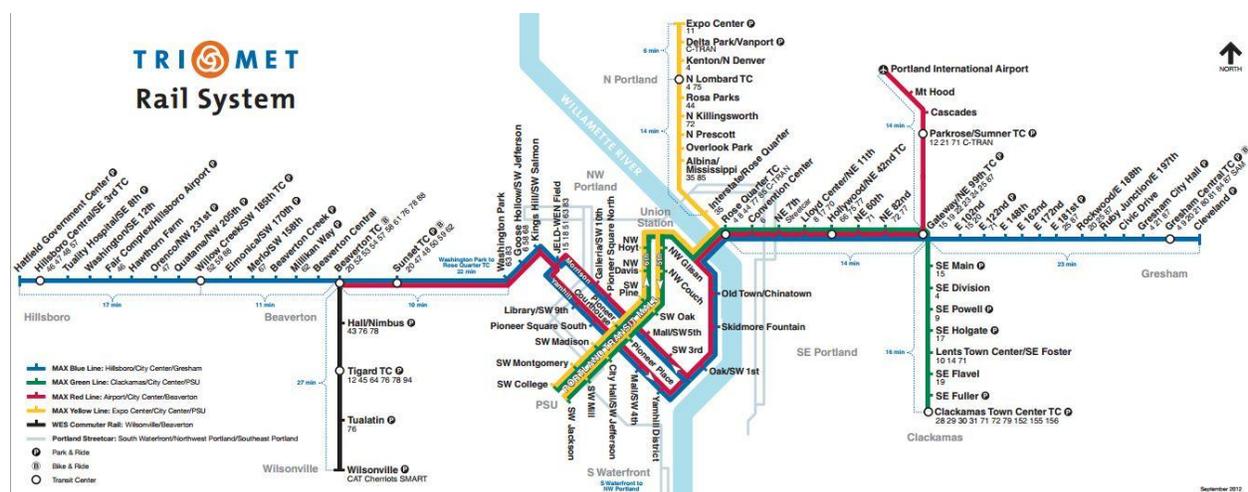


Figure 9 TriMet Rail System Map

TriMet and the MAX system have provided stellar examples for transit services around the country. MAX now includes 52 miles of track and serves 85 stations. All five major MAX projects were completed on or ahead of schedule, and on or under budget. Since the inception of MAX in 1978, over \$6 billion in development has taken place along MAX lines.<sup>51</sup>

Statistically, TriMet provides service to more people than any other U.S. transit system of its size. In an automobile based society in the United States, TriMet ridership has managed to surpass daily vehicle miles traveled for over ten years. During fiscal year 2011, patrons

<sup>50</sup> [www.trimet.org](http://www.trimet.org) (2013).

<sup>51</sup> [www.trimet.org](http://www.trimet.org) (2013).

boarded a bus or light rail train 100 million times. Weekday boardings averaged 318,500 trips, while weekend ridership averaged 343,900 trips. Portland is the twenty-fourth largest metropolitan area in the United States and transit ridership is seventh per capita.<sup>52</sup> TriMet has helped to facilitate \$10 billion in transit-oriented development along MAX lines to date and has one of the most extensive records of TOD implementation in the United States.

Interestingly, TOD in Portland has developed in many forms, ranging from new construction and development to re-use of historic buildings. In 1996, the first phase of the Belmont Dairy TOD was completed. This project reused a portion of a 70-year-old former dairy building, as part of a mixed-use project. In efforts to remain as efficient and sustainable as possible, major elements of the building were recycled and energy-efficient building standards were followed. The Belmont Dairy project was an example in inner-city redevelopment and revitalization. A specialty grocery store and restaurant were also included in phase one, while phase two included thirty row houses that melded well with the first phase and the existing neighborhood. A third phase will renovate a vacant warehouse into live/work spaces.<sup>53</sup>

Many use the Belmont Dairy project as an example of how TOD can increase densities without sacrificing character or composition of the existing community. A local Portland banker was quoted as saying the Belmont Dairy project represents “land uses for the 21st century that promote the preservation of history, urban density, affordability and utilization of existing infrastructure that provides easy access to public transit, bicycle and pedestrian corridors.” Developers opened the lines of communication with the neighborhood association

---

<sup>52</sup> TriMet Fact Sheet (2013).

<sup>53</sup> TriMet Community Building Sourcebook (2007).

and other stakeholders at a very early stage and continued communication throughout the planning and construction of the project. It was this transparency and display of interest in the well-being of the community and its existing character that resulted in the project eventually experiencing strong community support.<sup>54</sup>

As one of the first projects of its kind, the Belmont Dairy TOD had to overcome numerous obstacles, including financing issues. For phase one of the project, lenders were only willing to loan thirty-two percent of the total cost. The developers continued with the project and utilized a combination of



Figure 10 Belmont Dairy

public and private financing, including affordable housing loans, bonds, and low-income housing tax credits. Despite initial skepticism from lenders and the concern from the community over increased density, ultimately the Belmont Dairy project has been recognized regionally and nationally, receiving various awards, including the Oregon Governor's Livability Award in 1997 and an Ahwahnee Award from the American Institute of Architects, American Planning Association, and the Local Government Commission in 1999. The Belmont Dairy phase two row houses also received an Oregon Governor's Livability special mention award in 1999.<sup>55</sup>

The town of Gresham, Oregon, cited in the prior obstacles section, is located just east of Portland. Gresham opposed light rail service in the heart of its downtown district, when

---

<sup>54</sup> EPA Smart Growth Illustrated (2012).

<sup>55</sup> EPA Smart Growth Illustrated (2012).

TriMet originally began expanding rail lines. As time passed, civic leaders began to see that light rail would actually revive the historic downtown portion of Gresham rather than detract from its character. A light rail station had been constructed on the northern edge of downtown by this point, so the City began to implement policies that would allow better integration for the existing light rail station. Streets and sidewalks were improved and select rezonings were completed in order to support transit. In addition, a TOD property tax and fee exemption was employed to encourage mixed-use development in the downtown district.

These modifications resulted in the construction of several successful mixed-use developments, Central Point and The Beranger. Central Point, completed in 2001, was the first high-density, mixed-use project of its kind in downtown Gresham, and was considered innovative in several ways. Its design created a buzz that resulted in the desire to create a new Downtown Gresham Redevelopment Master Plan. Also, Central Point took advantage of City and County tax reductions. As was the case with Belmont Dairy, the development, and several of its stakeholders, received high honors, such as the Governor's Livability Award, as well as praise from the Oregon Department of Environmental Quality. Central Point is appropriately named for its centralized location, providing residents the ability to commute efficiently using Gresham Central MAX Station, while having a variety of amenities in or near the development itself.

The second of these downtown Gresham transit-oriented developments is known as The Beranger. This TOD has close access to MAX and bus lines, the local farmers market, and its own share of commercial and retail space. In addition, both The Beranger and Central Point will be adjacent to the future home of the Gresham Center for the Performing Arts. The Beranger building site had its own set of issues not the least of which concerned stormwater

run-off. Stakeholders applied the use of pervious pavement, flow-through planters, and an eco-roof in order to put the least amount of strain on the City's stormwater system. Both Central Point and The Beranger overcame obstacles to implementation in a community that previously shunned the use of light rail, but later lamented its decision and adapted in order to successfully implement TOD in order to revitalize a diminishing downtown.<sup>56</sup>

There may be no greater example in the United States of the positive effect public transit, particularly light rail, transit-oriented development, and transit supportive zoning measures can have on a region than is seen in Portland, Oregon. To go from a muddled assortment of transit providers, some of which were preparing to go out of business, to one of the most widely used transit systems in the nation, in just a few decades, is a feat most major metropolitan areas would envy.

### **San Francisco, California – Bay Area Rapid Transit (BART)**

The public transit system in the San Francisco Bay Area is also regarded as one of the best in the country. Some point to the iconic cable cars, which started service in 1873, as the roots of San Francisco's extensive interest in quality public transit.<sup>57</sup> Although the cable car system began service nearly eighty years prior, the seed for what is known today as Bay Area Rapid Transit (BART) was planted, as a response to population growth and traffic congestion issues, following the Second World War. A radical concept for the time to add a high-speed electric train connection via an underwater tube between San Francisco and Oakland was discussed. In 1951, the California State Legislature established the San Francisco Bay Area Rapid Transit Commission and tasked it with the assignment to study long range transportation needs and compile recommended solutions. This Commission completed a final report that suggested

---

<sup>56</sup> TriMet Community Building Sourcebook (2007).

<sup>57</sup> San Francisco Cable Car Museum (2013).

future transportation planning be coordinated with an overall master plan, which didn't exist at the time. That Commission actually drafted a master plan itself, which influenced area planning efforts and resulted in a master plan officially being adopted in 1967.<sup>58</sup>

The San Francisco Bay Area Rapid Transit District was established in 1957 by the Commission and included the counties of Alameda, Contra Costa, Marin, San Francisco, and San Mateo. This District was given a level of taxing power in order to support transit projects at that time. The level of importance the Commission gave to a successful transit system is clear in their statement, "If the Bay Area is to be preserved as a fine place to live and work, a regional rapid transit system is essential to prevent total dependence on automobiles and freeways."<sup>59</sup>

After an extensive public participation process, leading to a final plan being created, both San Mateo and Marin Counties withdrew from the District, leading to voters of the remaining three counties approving a \$792 million bond issue to construct a system serving 33 stations and 17 communities. Following litigation questioning the validity of the District and the taxing powers it had been granted, among other things, BART rail construction eventually began on June 19, 1964. Extensive boring was needed to install much of the infrastructure, increasing construction costs and prolonging schedules. The transbay tube, once considered merely a dream, was completed in August 1969. The tube reached depths of 135 feet in the San Francisco Bay. The structure cost a total of \$180 million and took almost nine years to design and build.

An extensive amount of public and governmental opposition brought BART construction to a grinding halt on multiple occasions. Previously approved configurations faced protest from various city and county officials, causing delays that lasted several years. The State Legislature

---

<sup>58</sup> <http://www.bart.gov> (2013).

<sup>59</sup> <http://www.bart.gov> (2013).

eventually approved a half-cent sales tax in the three BART counties, resulting in much needed funding of around \$150 million. September 11, 1972 marked the official first day of service for the BART rail system, as a portion of track between the Fremont and MacArthur Stations became functional.

Over forty years after that first passenger boarded a BART railcar, the system continues to expand and adapt to meet the growing needs of the region. BART clearly states that transit-oriented development is a technique that must be pursued. In July 2005, BART adopted its official Transit-Oriented Development Policy with the following recommendations as the focus:

***Recommendation #1: Pursue Transit-Oriented Development, not Joint Development - BART should work proactively with cities to plan for development over a larger area around its stations that is both supportive of transit service and maximizes the value of the land.***

***Recommendation #2: Shift Access Approach - Developers, cities and funding agencies view BART's application of a 1:1 parking replacement practice as a significant barrier to joint development and TOD. Refining this replacement practice and developing alternative implementation approaches will enhance development opportunities.***<sup>60</sup>

At the end of 2010, BART was part of eighteen TOD projects around its stations, a clear commentary on the importance the system puts on this type of development. In addition, the Transbay Transit Center Project is underway, a collaborative project that will link eleven transit systems: AC Transit, BART, Caltrain, Golden Gate Transit, Greyhound, Muni, SamTrans, WestCAT Lynx, Amtrak, Paratransit, and future high speed rail from San Francisco to Los

---

<sup>60</sup> BART TOD Policy (2005).

Angeles. Some are calling it the “Grand Central Station of the West.” The project, scheduled to be open in 2017, will include homes, offices, parks, and shops, surrounding a five-story transit center.



**Figure 11 Transbay Transit Tower and Center**

Upon completion, the Transbay Transit Center will provide service to over 100,000 passengers each weekday and over 45 million people each year. The goal of the project is to make public transportation convenient and accessible for the largest possible portion of the population. Funding is currently being pursued for various phases of the project, which is a challenge at the \$4.185 billion price tag.<sup>61</sup> The 61-story Transbay Transit Tower broke ground in early

2013 and will soon become the tallest building west of the Mississippi River. The 1.3 million square feet of lease space in the tower will provide a sizeable source of funding for the rest of the project.<sup>62</sup>

---

<sup>61</sup> <http://transbaycenter.org> (2013).

<sup>62</sup> Knowles (2013).



**1 Transbay Transit Center**

The new landmark Transit Center at First and Mission streets in San Francisco features an elevated Bus Deck for AC Transit and other regional carriers (and initially intercity bus operators), ground floor transit amenities and below-grade levels serving Caltrain and future high speed rail. The Transit Center will include retail shops, entertainment, conference, educational and cultural space.

**2 Temporary Terminal**

In order to begin construction on the project, a temporary bus terminal for AC Transit, WestCAT Lynx, Muni, Golden Gate Transit, Greyhound and SamTrans was constructed at Folsom, Howard, Beale and Main streets to ensure uninterrupted service for transit riders. The Temporary Terminal now serves transit riders while the new Transit Center is being constructed. For more information, visit [www.TemporaryTerminal.org](http://www.TemporaryTerminal.org).

**3 New Bus Ramps**

Buses accessed the Bay Bridge to and from the Transbay Terminal on a loop ramp that was designed to accommodate the rail systems that used the Terminal in the '40s and '50s. New elevated bus ramps that enter the Transit Center from the west will both eliminate the east bus loop and maintain direct bus connections to and from the Transbay Transit Center and the Bay Bridge.

**4 Folsom Street**

Folsom Street will be the centerpiece of the new Transbay neighborhood and will feature widened sidewalks for easy pedestrian access, street side cafes and marketplaces with above ground housing and views of the San Francisco Bay.

**5 Redevelopment Area**

The Project Area is approximately 40 acres in size and is bounded by Mission Street in the north, Main Street in the east, Folsom Street in the south and Second Street in the west. The new neighborhood will feature wide sidewalks, front stoops, new parks and small retail shops.

**6 Downtown Rail Extension**

The rail line will be extended 1.3 miles underground from its current terminus at Fourth and King streets into the new Transbay Transit Center, providing a seamless connection between the Peninsula, the South Bay, Southern California and San Francisco's Financial District.

**7 Bus Storage**

Buses are currently stored during the day on the existing bus ramps. With the new, more efficient bus ramps, buses will be stored when not in use in a facility under the I-80 Freeway.

**8 New Fourth & King Caltrain Station**

A new Caltrain station will be built underground at Fourth and King while a smaller platform will be located above ground for Caltrain service terminating at Fourth and King. The new Caltrain and High Speed Rail line will continue underground up Second Street into the new Transit Center.

Figure 12 Transbay Transit Center Plan

As was identified earlier, one of the obstacles TOD encounters is a lack of public and private party support. In the Bay Area, a somewhat unlikely relationship has been forged between developers and a conservation organization called the Greenbelt Alliance. Developers in the region have discovered that an endorsement from this organization can help garner public support and aid in adjusting zoning regulations that may otherwise be a deterrent to this sort of development. What would later become the Greenbelt Alliance was originally formed in 1958 by a collection of environmentally conscious individuals, concerned with protecting the beauty of the region.<sup>63</sup>

By the late 1980s, the organization began to consider the fact that, in order to conserve open space, more compact development would be needed and should include affordable housing as well. It was at this point that the Greenbelt Alliance began its practice of endorsing affordable, compact development, at first supporting only residential projects, but now, endorsing mixed-use, often transit-oriented development as well.

Developers realize the weight such an endorsement carries and they seek out the support of the Greenbelt Alliance. Developers approach the organization with an application, including project details, environmental specifications, and area context information, as well as public hearing schedules and planning staff contact information for the government agency handling the review. The Alliance then proceeds through a review process to determine if the project merits an endorsement. If indeed it does, a letter of support is generated, along with a news release to publicize the project. In addition, under certain circumstances, representatives of the Alliance will appear in support of the project at public hearings and forums.

---

<sup>63</sup> Greenbelt Alliance (2013).

Over a fourteen year period from 1990 to 2004, ninety-five developments and seventeen neighborhood plans received endorsements from the Greenbelt Alliance. In total, these projects would establish over 48,000 residences within existing city limits, countering sprawl and providing affordable housing to people with access to local amenities, including public transit. The relationship between the Greenbelt Alliance and developers focusing on higher-density, mixed-use, and often transit-oriented development, is an example for other regions across the United States.<sup>64</sup>

BART has embraced the concept of transit villages, basically an alternative name for transit-oriented development, a development with direct access to frequent public transit, mixed-use, and higher density buildings, which encourages walking and the use of the accessible transit. A number of successful examples can be cited within BART's system.

The Fruitvale Community in Oakland, California has been the beneficiary of the development of a transit village, but not without some turmoil. In 1991, BART proposed to build a sizeable parking structure that would create a barrier between the existing Fruitvale BART station and the



Figure 13 Fruitvale Transit Village

surrounding community. Community opposition was strong to the plan. The Unity Council, an Oakland-based Development Corporation headed up the opposition. As a result, BART and the Unity Council decided to join forces and work together to explore alternatives.<sup>65</sup> From the initial

---

<sup>64</sup> EPA Smartgrowth Illustrated (2012).

<sup>65</sup> Prevention Institute (2003).

proposal in 1991, to the groundbreaking on the Fruitvale Transit Village in September 1999, much collaboration contributed to a successful project.

This development was by no means completed without hurdles. Concessions had to be made by all of the stakeholders involved. One of the first that came to the fore was the desire of the Unity Council to establish the Fruitvale Development Corporation (FDC) as the developer for the project. BART traditionally had a bidding process that it would put in place for these rights, but BART determined that it was in the best interests of all involved, including the Fruitvale Community, to award development rights to the newly-established FDC.

The next major obstacle was land acquisition and assembly. All of the necessary parcels within the project site had to be acquired and assembled under one owner. BART owned many of the necessary parcels and had long taken the position that it would own parcels surrounding its transit stations, as a critical long-term planning strategy. As the developer, the Unity Council and the FDC needed BART-owned properties to complete the land assembly. BART again loosened its grip on long held policies and entered a ninety-six year lease with FDC and received Unity Council-owned properties behind the Fruitvale station as well as several parcels in the vicinity owned by the City of Oakland.

Parking capacity was the next impediment to a successful development process. Traditionally, BART policy was that every parking space that was removed for a project had to be replaced in another location. The Unity Council believed this policy to be a significant hurdle and worked to negotiate with the Union Pacific Railroad, so as to allow a BART parking structure to be built on railroad property. The Unity Council also assisted BART in receiving a \$7.3 million grant from the Federal Transit Administration to construct the parking structure.

With this parking structure in place, and in keeping with the underlying goals of transit-oriented development and the wishes of the community and project stakeholders, a desire to put a moratorium on additional parking in the project was presented to the City of Oakland. The Unity Council recommended a zoning ordinance be approved that would prohibit additional parking. The City agreed and enacted this ordinance.

As mentioned, the Unity Council assisted BART in acquiring grant funding for the parking structure, but creative financing didn't stop there. BART received a \$780,000 award from the Federal Transit Administration through the Federal Highway Administration to construct the pedestrian plaza portion of the Transit Village. The Federal Transit Administration's Livable Communities Initiative also awarded BART \$2.3 million in grant funding. Throughout the course of the project, \$82 million in private and public financing were secured by BART and FDC.

The Fruitvale project serves as a microcosm of sorts; an example of many of the obstacles most transit-oriented developments can face. Community support, concerns over a lack of parking, financing, land acquisition, and zoning issues were all met and overcome. A number of lessons can be taken from the project. First, government agencies and developers do well to communicate openly with community organizations in areas where projects are being proposed.

In addition, forging partnerships between stakeholders, including various government agencies, developers, and community groups/development agencies, is an extremely effective way of overcoming obstacles to successful development. BART worked diligently with the Unity Council, as well as other stakeholders to create a project that not only increased BART ridership, but revitalized a community. The Fruitvale project faced a number of challenges,

legally, financially, and regulatory, but because of the partnerships that were created, these were overcome. Finally, BART realized that creating a transit village in the Fruitvale Community would aid the area greatly. Successful projects of this nature can serve to prove that TOD shouldn't be limited to affluent urban areas, but can assist greatly in revitalizing low-income minority communities

The Fruitvale Transit Village was born out of an exhaustive effort to unite various stakeholders and collaborate to create the best plan for the community and all involved. In the end, new businesses were attracted to the development, creating new jobs, an increase in BART ridership was seen, affordable housing was added to the community, and the community bought into the project because they were engaged and involved throughout. BART listened and adapted, based on community concerns and involvement and, as a result, an awarding winning TOD was designed and constructed.<sup>66</sup>

### **Washington, D.C. – Washington Metropolitan Area Transit Authority (WMATA)**

In the nation's Capital, establishing a successful public transit system has a set of obstacles all its own. In 1967, the Washington Metropolitan Area Transit Authority, known simply as Metro, was created with the task to plan, construct, and operate a transportation system in the Washington D.C. region. The construction of Metrorail began in 1969 and service began in 1976. Construction of the original network of rail continued through, and was completed in, 2001. Metrorail currently consists of eighty-six stations and runs on 106.3 miles of rail. The Metro bus and rail system serves five million people in a 1,500 square mile district that crosses boundaries of the District of Columbia and the States of Maryland and Virginia. In Maryland, the Counties of Montgomery and Prince George's are serviced, while in Virginia, Arlington,

---

<sup>66</sup> Federal Highway Administration (2011).

Fairfax, and Loudon Counties, along with the Cities of Alexandria, Fairfax, and Falls Church, all receive service from Metro. Estimates show that forty-five percent of workers in the urban core of the region utilize mass transit to commute.<sup>67</sup>

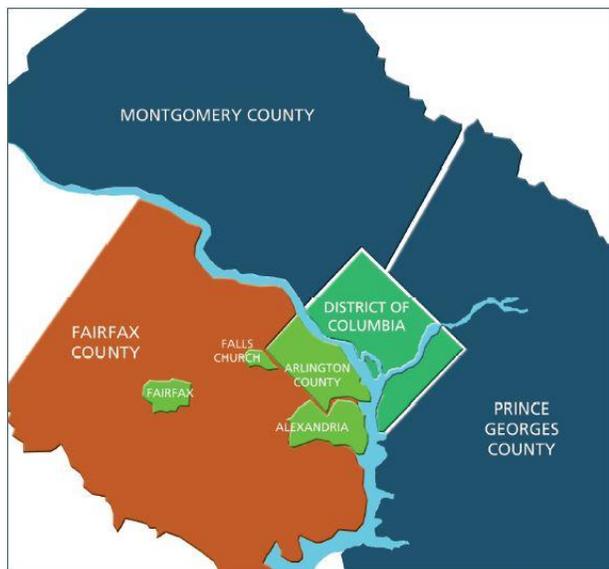


Figure 14 WMATA Metro Service Area

Because of its service area in the nation's capital, Metro has partnered with the federal government in various fashions. Thirty-five of the eighty-six metro stations serve federal facilities and almost half of Metro's peak period ridership is made up of federal employees. As a result, the federal government provides approximately fifty-six percent of the capital costs for Metro.<sup>68</sup>

In 2012, Metro Forward was established. This six-year, \$5 billion program will focus on renovating and rebuilding infrastructure and track, purchasing new railcars and buses, and upgrading technology. The goal of Metro Forward is to modernize the system to enhance the rider's experience moving into the future. In addition to Metro Forward, Momentum, a strategic plan to guide Metro in decision-making and planning processes was created to establish a set of common themes and goals Metro can achieve by 2025. Some of these include increased pedestrian access and new and improved infrastructure and stations to provide enhanced service. In creating Momentum, Metro has striven to be transparent and engage a comprehensive list of stakeholders in order to produce a well-rounded plan for the region.

<sup>67</sup> Metro Facts 2013 (2013).

<sup>68</sup> Metro Facts 2013 (2013).

This agency considers Metro Forward to be an attempt to “catch up” with improvements, while Momentum will build upon those improvements and project the system into the future. Metro is building on its original focus in its early stages of transporting suburban workers to jobs in the core. Over the years, the importance of that service has grown dramatically and reliance on Metro has become significant in the region. Metro is now the second-largest rail and sixth-largest bus service in the United States. The importance of Metro to employers in the region is emphasized by the fact that fifty-four percent of all jobs in the Washington D.C. area are within a half-mile of Metro stations and bus stops. It is estimated that, without Metro, roadway congestion would skyrocket by twenty-five percent, costing the region over \$1.5 billion annually.<sup>69</sup>

As the population in and around the Capital is expected to rise in the coming years, Metro is faced with challenges to keep pace with, or get ahead of, demand for transit service. One of the biggest focuses will be on suburban stations bringing commuters into the core each day. Because of its wide reach across the region, Metro must work with over fifteen different agencies and enumerable stakeholders, as planning and implementation proceeds with Metro Forward and Metro Momentum. Metro has vowed to work closely with individual jurisdictions in order to increase accessibility to Metro stations and improve local planning and development efforts in relation to their stations.

As part of these efforts, Metro is seeking partnerships in developing around existing and future stations. In fact, Metro characterizes its desire for joint development by stating, “Metro aggressively seeks partners to develop Metro-owned or controlled property.”<sup>70</sup> Metro seeks out

---

<sup>69</sup> [www.wmata.com](http://www.wmata.com) (2013).

<sup>70</sup> [www.wmata.com](http://www.wmata.com) (2013).

private developers in order to develop transit-oriented projects on its owned or controlled properties. Currently, efforts in this regard are being made to improve the Rhode Island Avenue Metro station, a station known for its poor accessibility. Metro is seeking partners to transform the adjacent parking lot into 274 units of rental housing and retail. In addition, various developers and stakeholders are considering projects in the vicinity of the station.

H Street Community Development Corporation has plans for a parcel of land one block from the Rhode Island Avenue station. This entity is in the process of planning a six-story project, with 155 affordable residential units. The development would have forty parking spaces and would feature some ground level retail and office space. Community leaders like the idea of development around the station, but have raised concerns over an excess of affordable housing units in the area.<sup>71</sup>

An amazing example of transit-oriented development, as a conduit for revitalization, is located just outside of Washington D.C. in Arlington County, along the Rosslyn-Ballston Corridor. One of the most interesting aspects of this development project is its timing. As more and more people fled to lower density development in the suburbs, Arlington County, much like many other regions across the country at that time, saw a significant loss of population. Between 1972 and 1980, Arlington County saw a loss of 21,500 residents, 12.4 percent of its total population. Eleven-thousand of those residents were from the Rosslyn-Ballston Corridor, which lost 36.4 percent of its population in that same time period.

Area leaders saw the flight starting in the 1960s, with it continuing through the 1970s. In a time when transit-oriented development wasn't a phrase thrown around by civic leaders, planners, or developers, Arlington County started looking at how transit and development

---

<sup>71</sup> Paul (2012).

centered around it could revitalize the County, and the Rosslyn-Ballston Corridor in particular. Civic leaders began discussing standards and techniques that planning professionals today use regularly, but at the time were untested, unproven concepts.

Area leaders created a series of white papers used to investigate various methods of development and presented them to boards and interested members of the public. Some of these documents looked at the “bull’s-eye” concept centering intense mixed-use development directly around transit stations, which would then narrow down as it transitioned to lower density development. They also considered the possibility of focusing the development within a quarter-mile of transit stations and including mixed-use elements within that radius, a concept now that is considered standard, when it comes to transit-oriented development.

As was mentioned, Metrorail construction began in 1969, so Arlington County’s planning and investigating was coinciding with the planning and construction of the region’s transit infrastructure. Access via the Blue Line was opened to Rosslyn in 1977 and via the Orange Line to Ballston in 1979.

A focus on pedestrian access around Metro stations has been a key to the success of the Rosslyn-Ballston Corridor project. Each of the five effected stations is surrounded by pedestrian-friendly development. In the past, commuter parking was a part of the station areas, but, by the end of 2002, all of the commuter parking lots were redeveloped into residential and commercial uses, leaving no long-term surface parking in the corridor. Lack of parking has been noted as a significant impediment to TOD, but, in the case of the Rosslyn-Ballston Corridor, while parking was being removed and redeveloped, the average number of weekday passenger trips from these Metro stations rose over sixteen percent. Rail passengers get to the stations on foot, by bicycle, and via bus, and this pattern has shaped the redevelopment. As stakeholders

took into consideration that these modes of transportation to stations were going to be surpassing automobile travel, station area development grew to accommodate them.

Over the course of the redevelopment, between 1972 and 2002, an overall increase of over 11,000 housing units, sixteen million square feet of office space, 950,000 square feet of retail space, and 1,900 hotel rooms has been seen along the corridor. In that same time period, an eighty-one percent increase in the assessed value of land and improvements has been noted as well. Vacancy rates are lower and rents are higher than any other community in the region, outside of the District of Columbia.<sup>72</sup>

In reviewing the Rosslyn-Ballston Corridor transit-oriented redevelopment, it seems like few obstacles were encountered, and that is true. But that doesn't mean lessons cannot be drawn from the project. Examining a long-term project of this nature that has encountered few obstacles and has seen a high rate of success is paramount to the success of other TOD projects in the Washington D.C. region, and across the nation. The planning and development methods used in this project were clearly successful and can, and should, be imitated in other projects.

One challenge that was faced in this project was the number of stakeholders involved. Players in the process included the Arlington County Board, County government staff, citizen commissions, community representatives, developers, business owners, and property owners. Although there were many with vested interests, the approach to planning and development encouraged all to work together and created trust amongst County government, developers, and the community. After a redevelopment plan was completed with input from all involved, the County created a policy framework for transit-oriented development that would span the next thirty years. Establishing a document that would foster stability in the project over an extended

---

<sup>72</sup> Leach (2004).

period of time allowed stakeholders to feel confident in the direction the project would take and that following the enacted framework would always keep development on track and in line with the stakeholders' wishes.

Arlington County leaders worked diligently with WMATA to ensure that the alignment of the Metrorail tracks be directed through Arlington's commercial center. Previous plans took the rail line north of the Rosslyn-Ballston Corridor and would have completely precluded all redevelopment efforts centered around transit.

One of the main aspects of the planning process employed by Arlington County was public outreach. After the basis for the project was set, in order to establish the policy framework mentioned previously, County officials enlisted the assistance of the public and a number of other stakeholders within the community. Over the course of the thirty year development efforts, although minor refinements have been made, the overall framework has been maintained and respected. When minor improvements to the plan have been proposed, again, all stakeholders are consulted. A revised land-use plan and adjusted transportation policies were implemented, but more than sixty public meetings were held prior to these changes. This involvement continued repeatedly throughout the project in order to confirm that the input of all involved was being taken into consideration. Although the corridor continues to evolve over time, much of the change is now aesthetic. Stakeholders wish to keep the corridor attractive and successful.

The Rosslyn-Ballston Corridor proves that investment in transit can spark redevelopment. It confirms that predictability and consistency in development and planning review processes can

foster trust; that public involvement is of utmost importance; and that focusing a mix of uses and density around transit stations is a recipe for success.<sup>73</sup>

---

<sup>73</sup> Leach (2004).

## **Methodology**

### **Overview of Study Approach**

Metro Transit - St. Louis is actively investigating and pursuing potential transit-oriented development in the three currently served counties. The objective of this study is to examine current and completed steps taken by Metro in this regard, as well as to evaluate efforts to avoid or address obstacles defined in the literature review and case studies. Geographic Information Systems (GIS) resources have been utilized to provide illustrative and quantitative analysis prospective market areas. This review will result in recommendations as to possible future action that may be necessary in order to effectively challenge these obstacles moving forward, or to avoid them completely.

### **Type of Data and Sources**

Data for this study was collected from a number of sources, including current and past newspaper and online articles, Metro planning documents, local municipal documents, and regional planning organization documents and bulletins.

Metro Transit - St. Louis, East-West Gateway Council of Governments, and Citizens for Modern Transit – St. Louis have combined to provide a comprehensive set of materials enabling the creation of a timeline of events (past, present, and future) pertaining to planning TOD in St. Louis. The study takes advantage of the vast online resources of these agencies, as well as secondary sources in the form of local print and online articles evaluating this undertaking. Some local municipalities have also begun to take steps to plan for TOD and their ordinances and planning documents have been included in the evaluation as well.

GIS data and shapefiles were obtained from St. Louis County Government, Metro Transit – St. Louis, United States Census TIGER/Line data, United States Census American Fact Finder, and Esri.

## Findings

### In Review

The review of literature and cases included above provide invaluable information for the St. Louis region. In a way, St. Louis’s deficiency in transit-oriented development and its under-developed public transit system, comparatively speaking, may provide it an advantage as transit-oriented development gains support in the region and moves toward advanced stages of planning and implementation. The literature review focused on obstacles faced across the nation in the planning and implementation of transit-oriented development. These obstacles were addressed under three subheadings:

1. Lack of Financing
2. Development/Planning Impediments
3. Lack of Political and Public Support

Through an evaluation of these wider topics, a number of individual obstacles were identified and are summarized in the table below:

<b>Summary of Obstacles to TOD</b>	
<b>Lack of Available Financing</b>	<ul style="list-style-type: none"> <li>▪ Lenders are suspicious of a new, unproven form of development</li> <li>▪ Lenders continue to associate successful development with “adequate” parking facilities</li> <li>▪ Poor economy remains a deterrent to lending</li> </ul>
<b>Parking Debate</b>	<ul style="list-style-type: none"> <li>▪ TOD inherently requires less parking spaces</li> <li>▪ Lenders base loans on parking</li> <li>▪ Elected officials and constituents fear lack of parking will inhibit access and usability of the development</li> </ul>
<b>Thorough Public Engagement</b>	<ul style="list-style-type: none"> <li>▪ Uninformed public often propagates false information that could prove detrimental to projects</li> <li>▪ An engaged constituency takes ownership in a project</li> <li>▪ Informed individuals are more likely to lobby for project support</li> </ul>

<p><b>Unfavorable Zoning Standards</b></p>	<ul style="list-style-type: none"> <li>▪ Some jurisdictions are unaware they have zoning standards in place that make TOD unlawful</li> <li>▪ Lengthy review processes disincentivize development</li> </ul>
<p><b>Land Acquisition and Assembly</b></p>	<ul style="list-style-type: none"> <li>▪ Sufficient contiguous land is necessary to facilitate development</li> <li>▪ Transit agencies and/or developers often lack this ownership</li> <li>▪ Various land owners must work together to generate required acreage</li> </ul>
<p><b>Lack of Comparable Development</b></p>	<ul style="list-style-type: none"> <li>▪ Lenders have few to zero examples of successful TOD within a given region</li> <li>▪ When considering support, elected officials and public have no basis for judgments</li> </ul>
<p><b>Support of Elected Officials</b></p>	<ul style="list-style-type: none"> <li>▪ Development approval is often premised on support of elected officials</li> <li>▪ Elected officials are often undereducated on the philosophy behind TOD</li> <li>▪ Lack of support from elected officials can result in opposition from constituency</li> </ul>
<p><b>Tradition and Habit</b></p>	<ul style="list-style-type: none"> <li>▪ America has an automobile-based culture</li> <li>▪ TOD counters the general thinking of the average American when it comes to development</li> <li>▪ Automobile use is easy and can be relatively inexpensive</li> <li>▪ Human beings often have an aversion to change</li> </ul>

The case studies of five well-developed public transit systems across various regions of the United States provided firsthand examples of how cities can best address transit-oriented development in the context of their existing transit infrastructure and ridership base. Reviewing not only their experiences with transit-oriented development, but also the history of the growth of each system frames this consideration appropriately and allows for complete exploration of how each region can provide both positive and negative practices the St. Louis region can learn from. The table below provides a summary of these five transit systems and the takeaways of

their transit endeavors. Interestingly, common themes present themselves, demonstrating what makes a successful transit system.

<b>Case Study Summary</b>	
<b>Atlanta (MARTA)</b>	<ul style="list-style-type: none"> <li>▪ Collaboratively planned with various agencies to establish long-term plans</li> <li>▪ Established Special Public Interest zones to aid in altering zoning regulations, such as density requirements</li> <li>▪ Partnered with a major corporation to establish TOD in conjunction with corporate offices</li> <li>▪ Lack of transparency resulted in a lack of community support for TOD projects</li> <li>▪ Affordable housing not planned into TOD projects</li> <li>▪ Failed to integrate some TOD projects into the built environment</li> </ul>
<b>Denver (RTD)</b>	<ul style="list-style-type: none"> <li>▪ Effectively serves eight counties</li> <li>▪ Focuses on prospective TOD, as infrastructure expands</li> <li>▪ Keeps general public thoroughly informed</li> <li>▪ Mindful of built environment, neighborhood history, and culture</li> <li>▪ Effective strategic planning</li> <li>▪ Massive expansion efforts currently underway through the FasTracks program</li> </ul>
<b>Portland (TriMet)</b>	<ul style="list-style-type: none"> <li>▪ Thorough planning efforts, both short and long-term</li> <li>▪ Explores creative financing techniques</li> <li>▪ Established an Urban Growth Boundary (UGB) to limit urban sprawl and help promote efficient use of land, facilities, and services</li> <li>▪ Successfully connects suburbs via public transit</li> <li>▪ Promotes expansion of TOD</li> <li>▪ Acts with transparency and continually communicates with stakeholders</li> </ul>
<b>San Francisco (BART)</b>	<ul style="list-style-type: none"> <li>▪ Innovative early adoption of public transit technologies</li> <li>▪ Encourages extensive public participation</li> <li>▪ Overcame early opposition</li> <li>▪ Adopted an official TOD Policy</li> <li>▪ Consistently plans for the future</li> <li>▪ Works to unite transit agencies, increasing access for patrons</li> <li>▪ Willing to make concessions to longheld standards in order to make TOD work</li> <li>▪ Works collaboratively with communities, planning agencies, and other transit systems</li> </ul>
<b>Washington, D.C. (WMATA)</b>	<ul style="list-style-type: none"> <li>▪ Maintains a large ridership</li> <li>▪ Fosters a partnership with the federal government</li> <li>▪ Implemented Metro Forward plan to renovate and rebuild infrastructure and Metro Momentum to propel the WMATA system into the future</li> <li>▪ Cognizant of the need of suburban residents to use public</li> </ul>

	<p>transit to access the urban core</p> <ul style="list-style-type: none"><li>▪ Actively seeks partnerships</li><li>▪ Effectively uses TOD as a tool for revitalization</li><li>▪ Pioneers in TOD</li><li>▪ Collaboratively plans for the future of the system and the region</li></ul>
--	---

This examination of the five case study transit systems reveals several common traits that stimulate success:

1. An effort to collaboratively plan.
2. Foresight to plan for the future and abide by the plan.
3. Make a consistent effort to encourage public participation.
4. Maintain a high level of transparency.

### The St. Louis Region Moves Forward

In October 2012, the United States

Department of Housing and Urban Development (HUD) awarded nearly \$100 million in grants in an effort to create more livable and sustainable communities. The St. Louis region was awarded \$4.6 million in funding through the Regional Communities Planning Grant with the goal to “devise regional and sub-regional plans to coordinate housing, transportation, the environment and economic development to give the region a better chance to sustain its current

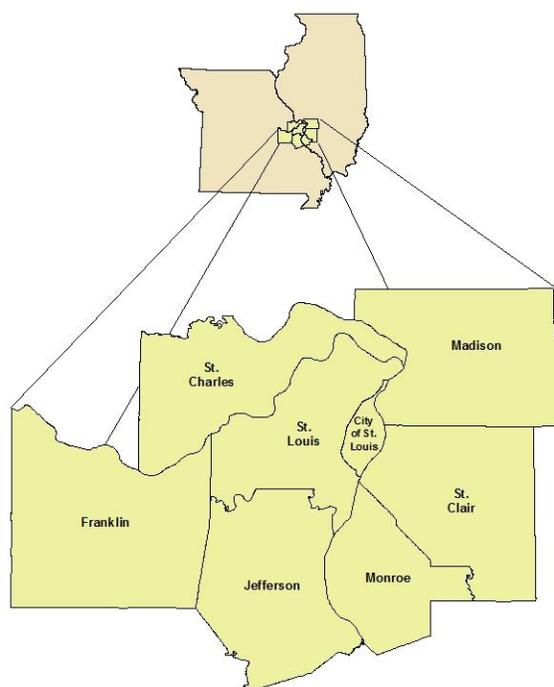


Figure 15 RPSD Subject Area

affordability and further its economic progress.”<sup>74</sup> The focus of this project and others being supported by the federal government is integrated planning; focusing on the need to link transportation, housing, and environmental elements for the betterment of the community as a whole. The three-year planning grant was officially initiated on February 15, 2011, with the intention to develop a St. Louis Regional Plan for Sustainable Development (RPSD).

As part of the grant and RPSD development, East-West Gateway Council of Governments, a regional organization of local governments in the St. Louis area, began the St. Louis Regional Transit-Oriented Development Study. East-West Gateway Council of Governments took the lead in this planning effort to explore the potential for transit-oriented development in the vicinity of all thirty-seven MetroLink light rail stations. This collaborative study includes Metro Transit – St. Louis, local municipalities that are home to the various stations and developable parcels, and other public and private agencies. The goal of this study, as an element of the RPSD, is to create a plan that will foster interest in transit-oriented development in the region and encourage the implementation of TOD moving forward.

Together, these organizations drafted a TOD framework that will help to drive development around existing light rail stations. The framework examines key elements that could affect development at each existing MetroLink station and then gives recommendations and suggestions for local jurisdictions to foster TOD in their area. The framework tasks these jurisdictions, Metro, and other various stakeholders with certain undertakings to complete in the short and long-term, to help facilitate successful transit-oriented development. One of the most

---

<sup>74</sup> HUD Grant Press Release (2010).

helpful features of the framework is its defining of universal tools to aid TOD implementation, both for the MetroLink system as a whole and for individual stations.<sup>75</sup>



Figure 16 Current MetroLink Station Map

Metro Transit – St. Louis has taken a lead role in the TOD aspect of the RPSD, by performing background research and fieldwork in order to produce a TOD Best Practices Guide. This guide offers the reader a well-rounded view of TOD and provides a generous amount of information to aid the reader in developing a fairly comprehensive understanding of TOD, its benefits, and tools for planning and implementing TOD. Metro Transit – St. Louis has also developed exhaustive Station Area Profiles for all thirty-seven MetroLink light rail stations.

<sup>75</sup> St. Louis TOD Framework Plan (2012).

These profiles provide a single source of information on every station including usage data, detail on surrounding neighborhoods, demographic data, employment data, existing land uses and property ownership, barriers to development, and external planning efforts with the communities surrounding the stations. The basic purpose for the Station Area Profiles was to establish a baseline for research and planning, a foundation to be built upon as the RPSD was developed. A thorough market demand study is also being conducted, as part of the RPSD, in order to evaluate the prospects of development around individual stations.

One of the most tangible elements of the RPSD TOD study efforts to-date are the detailed station area plans for five current MetroLink stations. The Emerson Park/JJK Center, Fairview Heights, North Hanley, Rock Road, and Union Station/Civic Center stations were selected to receive more focused, detailed attention, and have detailed station area plans generated that would actually provide thorough documentation placing them in position to begin development negotiations among the identified stakeholders.

Aside from the Regional TOD Study, the RPSD held public input sessions and informational meetings in the eleven previously defined Community Planning Areas (CPA) of the region. As the TOD Study took shape, public input sessions were held specifically to address the transit-oriented development element of the RPSD. In mid-2012, the Regional TOD Study held public input sessions to discuss with the public goals for transit-oriented development in the region, and specifically how individuals are impacted by the MetroLink system and how they could prospectively be impacted with TOD implementation. Public open houses, online polling, and stakeholder discussions were among some of the efforts taken to receive input from impacted individuals and groups. The public sessions were held at several different locations around the region to allow for convenient access to the public.

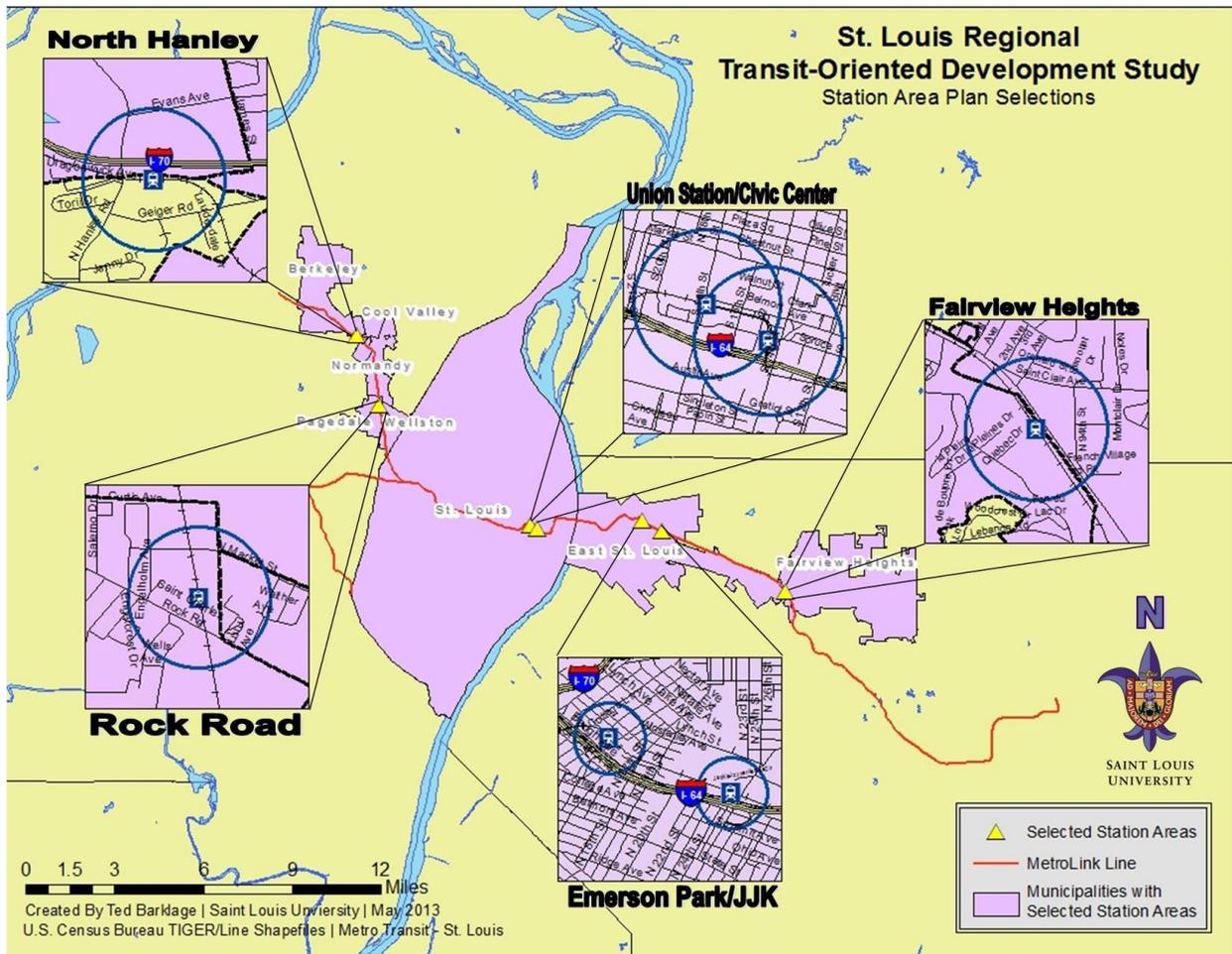


Figure 17 Station Area Plan Selections

As the five station areas were selected for detailed plans, public meetings have been held and continue to be scheduled in these locations to solicit public involvement as these full station area plans are developed. In addition, the St. Louis Regional Transit-Oriented Development Study website has been regularly updated and provides access to materials presented at these meetings and allows interested constituents to complete online surveys regarding the station areas in question, thus allowing those unable to attend an avenue to have their thoughts included in the planning effort.

Unlike regions discussed in the previous case studies, St. Louis has not continuously planned and grown its public transit system for an extended period of time or at the rate that

other regions have. St. Louis is a fragmented metropolitan area. The “Great Divorce” of St. Louis City and County in 1876 was only the beginning of the fragmentation. The metropolitan statistical area is made up of sixteen counties in two states, and nearly 170 individual incorporated municipalities. This division has often caused discord, when it comes to regional planning efforts. At one time, St. Louis was a leader in urban planning. In 1907, *A City Plan for St. Louis* was officially presented and was a factor in positively transforming city planning in the United States in ways that are still seen today. No longer did there have to be individual plans for parks, civic centers, streets, etc. but rather, a single document that comprehensively planned all aspects could be applied. Ironically, just over thirty years after the “Great Divorce,” St. Louis was leading the way in comprehensive urban planning.<sup>76</sup> The Peirce Report of 1997 provided a study of the St. Louis region's assets and liabilities. The conclusion of the report included the authors’ fear that the St. Louis region “lacks a common vision; a shared focus.”<sup>77</sup> Ninety years after changing city planning for the better, St. Louis was struggling to do what it had excelled in. Now, over one-hundred years after *A City Plan for St. Louis*, and nearly sixteen years after *The Peirce Report*, the HUD Regional Communities Planning Grant has given St. Louis an opportunity to once again foster cohesive development across the region and transit-oriented development and, in turn, the region as a whole could benefit from this unified planning effort.

The City of St. Louis has consistently lost population over the course of the last six decades. Although the population decreased again in the 2010 Census, a total of approximately 7.3%, some positives can be taken away from the total number of households in the City. The

---

<sup>76</sup> Abbot (2007).

<sup>77</sup> Peirce and Johnson (1997).

2010 Census showed only a 3.5% loss of total households, most likely a reflection of a trend of smaller family units or single person households remaining or returning to the City.<sup>78</sup>

The successful implementation of transit-oriented development would only help to curb the sprawling, fragmented pattern St. Louis has experienced over the past century and realizing the obstacles other regions have faced over the years will aid greatly in streamlining that process. Learning from the successes and missteps of other regions like San Francisco, Atlanta, Denver, Portland, and Washington D.C., can provide St. Louis an advantage that others didn't have. Although the St. Louis metropolitan area perhaps trails behind these other regions in transportation planning and implementation, the gap can be closed, if strong comprehensive planning and development practices are implemented now and into the future.

Metro Transit – St. Louis has taken advantage of the work being done on the Regional Plan for Sustainable Development. It has invested time and effort, along with East-West Gateway Council of Governments and numerous other stakeholders, in studying TOD in the region and getting the community involved; that alone is a step other communities, such as Atlanta, neglected and were later delayed by. Over the past ten to fifteen years, various municipalities and planning agencies in St. Louis have taken measures to investigate and prepare for future transit-oriented development. Some municipalities, such as Clayton, Missouri, have even implemented Transit-Oriented Development Overlay Districts, as part of their Comprehensive Plan, but without more widespread planning efforts and favorable zoning modifications, TOD will remain an idea rather than a reality. The extent to which area planning agencies, local municipalities, developers, area residents, and other stakeholders work collectively and make every effort to take advantage of the RPSD, as it is completed, will largely

---

<sup>78</sup> United States Census Bureau (2010).

dictate the ability of the region to successfully implement sustainable development techniques, including transit-oriented development around current and future MetroLink stations.

### **Station Area Market Overview**

Undoubtedly transit-oriented development can change the area it is placed in, but “if you build it, they will come” doesn’t always apply. In order to provide transit-oriented development the opportunity to flourish, the existing market area must be accepting to allow this type of development to take root and have a positive effect on the community and region. Utilizing Esri Arc Geographic Information Systems (GIS) mapping and the Esri Business Analyst, a breakdown of several applicable demographic measures in the municipalities surrounding the five selected station areas in the St. Louis Regional TOD Study was completed. Examining underlying market characteristics can assist in effectively selecting appropriate station areas for transit-oriented development.

Selected demographic topics include median age, percentage of residents sixteen years of age and older that drive alone to work or who take public transit, what their average travel time to work is, and how many vehicles on average are a part of each household unit. In addition, Esri tapestry segments have been listed for each municipality. This measure divides U.S. residential areas into sixty-five distinct segments based on socioeconomic and demographic characteristics to provide an accurate, detailed description of neighborhoods across the country. Segmentation is often used in marketing to divide and cluster consumer markets in order to accurately target customer bases. This system helps to describe customer diversity, aids in marketing to a particular demographic, and uses a wide range of data types. Segmentation goes beyond simply describing statistical demographic information. It incorporates lifestyle choices of market segments including subjects like entertainment and shopping preferences. Esri’s

tapestry segments theorize that groups with similar lifestyles attract one another.<sup>79</sup> With this concept in mind, and Esri’s extensive background in GIS, the Business Analyst tool allows for market segmentation statistics to be appended to selected geographic locations, such as these five station areas.

Location maps of each station area, along with the Business Analyst data, provide an overview of these markets. A table summarizing the twelve applicable tapestry segments has been included below, while the full description of each tapestry segment has been included for reference purposes in the appendix.

Tapestry Segment	Summary
<b>In Style</b>	<ul style="list-style-type: none"> <li>• Live in the suburbs but prefer the city lifestyle</li> <li>• Financially prosperous</li> <li>• Live in affluent neighborhoods</li> <li>• Computer savvy</li> <li>• Stay fit and active</li> </ul>
<b>Cozy and Comfortable</b>	<ul style="list-style-type: none"> <li>• Middle-aged married couples</li> <li>• Comfortably settled in single-family homes in older neighborhoods</li> <li>• Older labor force</li> <li>• No hurry to retire</li> <li>• Suburban areas</li> <li>• Plan for financial security</li> </ul>
<b>Rustbelt Retirees</b>	<ul style="list-style-type: none"> <li>• Married couples with no children or singles who live alone</li> <li>• Many residents still work, although the labor force is dwindling</li> <li>• Often located in older, industrial cities</li> <li>• Settled in the same house for years</li> <li>• Loyal to country and community</li> </ul>
<b>Rustbelt Traditions</b>	<ul style="list-style-type: none"> <li>• Mix of married-couple families, single parents, and singles</li> <li>• Median household income slightly below the national average</li> <li>• Stick close to home</li> <li>• Lived, worked, shopped, and played in the same area for years</li> </ul>

---

<sup>79</sup> Esri Tapestry Segmentation Reference Guide 2011

	<ul style="list-style-type: none"> <li>• Not swayed by fads</li> <li>• Financially conservative</li> </ul>
<b>Family Foundations</b>	<ul style="list-style-type: none"> <li>• Family is the cornerstone of life</li> <li>• Mix of married couples, single parents, grandparents, and young and adult children</li> <li>• Many workers are beginning to retire</li> <li>• Small urban communities located in large metropolitan areas with little household growth</li> <li>• Active in the community</li> <li>• Big TV fans</li> </ul>
<b>Young and Restless</b>	<ul style="list-style-type: none"> <li>• Constantly changing</li> <li>• Young, on-the-go population</li> <li>• Willing to move for better employment</li> <li>• Single professionals pursuing careers and living a busy lifestyle</li> <li>• Read magazines and get news and sports online</li> <li>• Enjoy seeing movies in theaters and on DVD</li> </ul>
<b>Great Expectations</b>	<ul style="list-style-type: none"> <li>• Young singles who live alone and married-couple families</li> <li>• Employed in manufacturing, retail, and service industry sectors</li> <li>• Not afraid to tackle home improvement projects</li> <li>• Occasionally eat out and shop at major discount and department stores</li> </ul>
<b>Metro City Edge</b>	<ul style="list-style-type: none"> <li>• Married couples, single parents, and multigenerational families</li> <li>• Older suburban neighborhoods of large metropolitan cities</li> <li>• Spend their money wisely</li> <li>• Concerned with the welfare of their children</li> <li>• Watch TV regularly</li> </ul>
<b>College Towns</b>	<ul style="list-style-type: none"> <li>• Third youngest of all the tapestry segments</li> <li>• Focused on their education</li> <li>• One in seven residents live in a dorm on campus</li> <li>• Others live in low-income apartment rentals</li> <li>• Purchase convenience foods</li> <li>• Purchase new household products</li> <li>• Attend concerts regularly</li> </ul>
<b>City Dimensions</b>	<ul style="list-style-type: none"> <li>• Diversity in household type and ethnicity</li> <li>• Mix of housing types</li> <li>• More than half of the residents rent apartments in multiunit buildings</li> <li>• Watch cable TV often</li> <li>• Rely on room air conditioners rather than central air conditioning</li> </ul>

	<ul style="list-style-type: none"> <li>• Prefer domestic cars and buy used vehicles</li> </ul>
<b>Modest Income Homes</b>	<ul style="list-style-type: none"> <li>• Majority black population</li> <li>• Many residents are caregivers for grandchildren</li> <li>• Strong family ties</li> <li>• High level of retirement</li> <li>• Rely on Social Security benefits</li> <li>• Demand for housing is low</li> <li>• Big fans of daytime and primetime TV</li> <li>• Shop at discount stores</li> </ul>
<b>City Commons</b>	<ul style="list-style-type: none"> <li>• Single-parent families or singles who live alone</li> <li>• Half of households have children</li> <li>• Neighborhoods not ethnically diverse</li> <li>• Shop primarily at discounts starts</li> <li>• Enjoy eating at fast-food restaurants several times a month</li> <li>• Big fans of daytime and primetime TV</li> </ul>

North Hanley



Figure 18 North Hanley Station



Figure 19 North Hanley Station Area

North Hanley			
	Berkeley	Cool Valley	Bellerive
Median Age	32.3	35	34.8
Drive Alone to Work	77%	81.1%	78.4%
Public Transit to Work	5.5%	4.7%	5.2%
Average Travel Time to Work	22.6 Minutes	22.3 Minutes	23.4 Minutes
Average Available Vehicles per Household	1.5	1.5	1.6
Esri Tapestry Segments	<ol style="list-style-type: none"> <li>Metro City Edge</li> <li>Family Foundations</li> <li>Rustbelt Traditions</li> </ol>	<ol style="list-style-type: none"> <li>Metro City Edge</li> <li>Family Foundations</li> <li>Rustbelt Traditions</li> </ol>	<ol style="list-style-type: none"> <li>Rustbelt Traditions</li> </ol>

## Rock Road



Figure 20 Rock Road Station

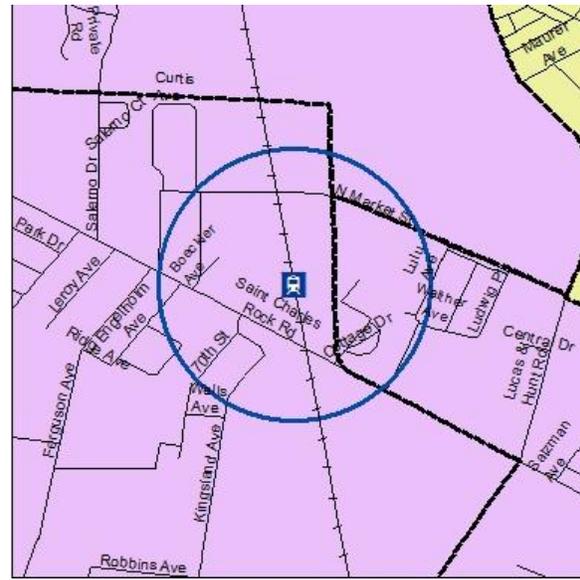


Figure 21 Rock Road Station Area

<b>Rock Road</b>			
	<b>Normandy</b>	<b>Pagedale</b>	<b>Wellston</b>
<b>Median Age</b>	34.2	34.8	30.3
<b>Drive Alone to Work</b>	76.5%	69.9%	57.5%
<b>Public Transit to Work</b>	7.9%	12.1%	19.9%
<b>Average Travel Time to Work</b>	21.8 Minutes	25.2 Minutes	27.9 Minutes
<b>Average Available Vehicles per Household</b>	1.4	1.3	1.1
<b>Esri Tapestry Segments</b>	<ol style="list-style-type: none"> <li>1. Family Foundations</li> <li>2. College Towns</li> <li>3. Young and Restless</li> </ol>	<ol style="list-style-type: none"> <li>1. Modest Income Homes</li> <li>2. Family Foundations</li> <li>3. Metro City Edge</li> </ol>	<ol style="list-style-type: none"> <li>1. Modest Income Homes</li> <li>2. City Commons</li> <li>3. Family Foundations</li> </ol>

**Union Station/Civic Center**

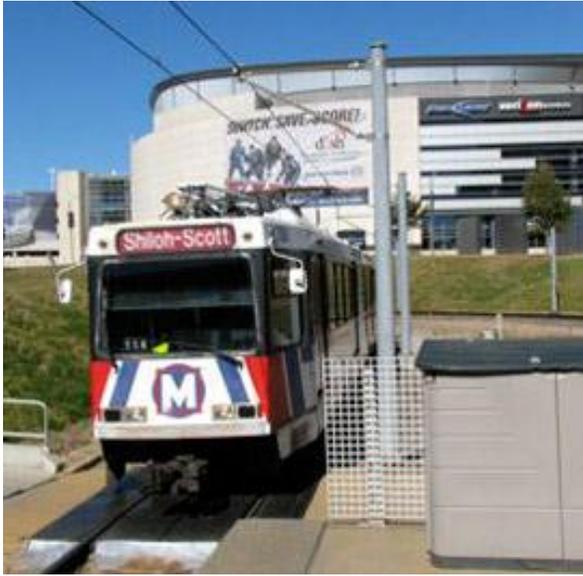


Figure 22 Civic Center Station

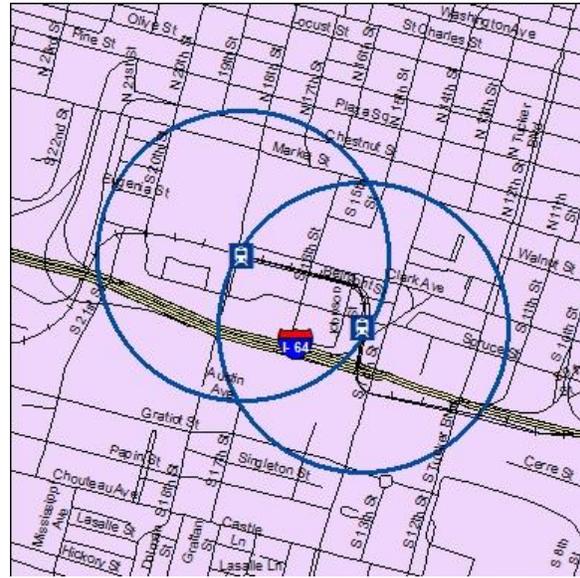


Figure 23 Union Station/Civic Center Station Area

<b>Union Station/Civic Center</b>	
	<b>City of St. Louis</b>
<b>Median Age</b>	35.4
<b>Drive Alone to Work</b>	68.9%
<b>Public Transit to Work</b>	10.7%
<b>Average Travel Time to Work</b>	25.1 Minutes
<b>Average Available Vehicles per Household</b>	1.1
<b>Esri Tapestry Segments</b>	1. Modest Income Homes 2. Great Expectations 3. City Dimensions

**Emerson Park/JJK Center**



Figure 24 JJK Center Station

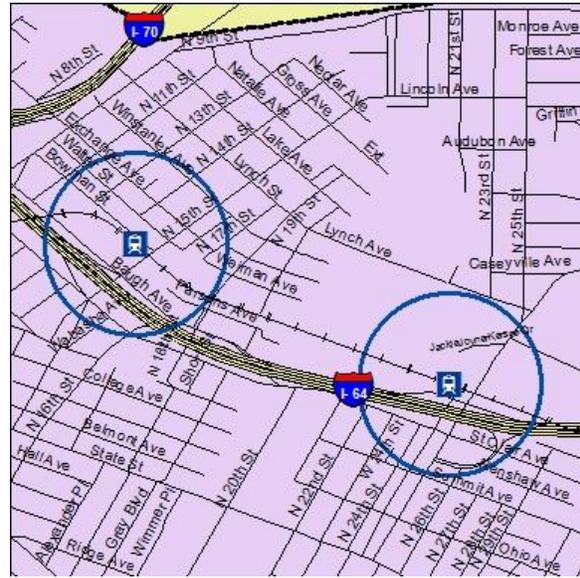


Figure 25 Emerson Park/JJK Center Station Area

<b>Emerson Park/JJK Center</b>	
	<b>East St. Louis</b>
<b>Median Age</b>	32.7
<b>Drive Alone to Work</b>	67.7%
<b>Public Transit to Work</b>	14.6%
<b>Average Travel Time to Work</b>	27.4 Minutes
<b>Average Available Vehicles per Household</b>	1.1
<b>Esri Tapestry Segments</b>	1. Modest Income Homes 2. Family Foundations 3. City Commons

## Fairview Heights



Figure 26 Fairview Heights Station

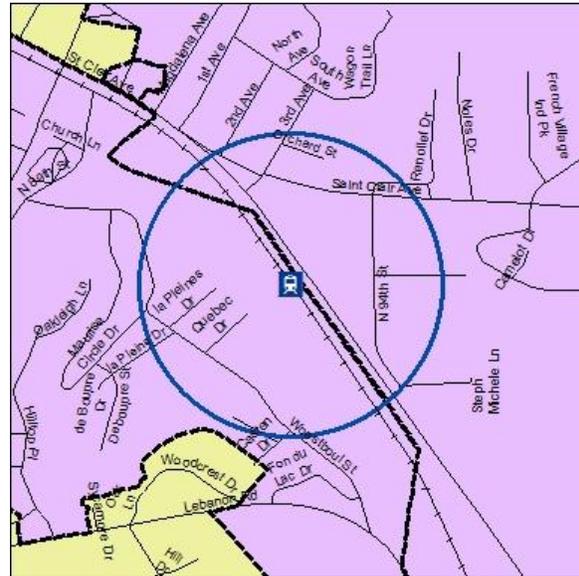


Figure 27 Fairview Heights Station Area

Fairview Heights		
	East St. Louis	Fairview Heights
<b>Median Age</b>	32.7	42.8
<b>Drive Alone to Work</b>	67.7%	84.3%
<b>Public Transit to Work</b>	14.6%	1.1%
<b>Average Travel Time to Work</b>	27.4 Minutes	24.4 Minutes
<b>Average Available Vehicles per Household</b>	1.1	1.8
<b>Esri Tapestry Segments</b>	<ol style="list-style-type: none"> <li>1. Modest Income Homes</li> <li>2. Family Foundations</li> <li>3. City Commons</li> </ol>	<ol style="list-style-type: none"> <li>1. Rustbelt Retirees</li> <li>2. In Style</li> <li>3. Cozy and Comfortable</li> </ol>

Within the five selected station areas, several stand out as more or less suitable markets for transit-oriented development than others. Combining the five statistical categories, included in the tables above, along with the tapestry segment descriptions, reveals that a station area such as North Hanley may not be well-suited as an accepting market for transit-oriented development. The tapestry segments for the municipalities surrounding the North Hanley station area paint a picture of a market where residents stick close to home, don't like or experience much change in their community, and enjoy community and family tradition. Pair that with fairly low existing

ridership of public transit to work, the highest average of residents driving alone to work, and one of the higher average automobile per household figures of the group and it makes for an unwelcoming market for TOD. The Rock Road station area, on the other hand, includes three municipalities with a higher level of public transit ridership to work and tapestry segments that portray a somewhat younger demographic that is willing to rent housing, focus on their education, accept and even invite change, and that is pursuing careers and living a busy lifestyle; a much more appropriate market for TOD.

Examining this demographic information and tapestry segments allows stakeholders to determine markets that would give transit-oriented development projects the greatest chance for success. It is critical, as can be seen in the difference even amongst the existing five selected station areas, for stakeholders to determine whether these markets would support TOD or whether perhaps development should be considered at other existing or future MetroLink stations. Further examination of the five selected areas should be completed using market analysis tools, such as market segmentation, in order to determine which should be pursued, while a similar analysis should focus on other existing or future stations that could provide more suitable environments for transit-oriented development. Undoubtedly, TOD could improve even the least appropriate of these station areas. However, in order to begin transit-oriented development in St. Louis successfully, prudently selecting the initial station areas is essential.

## **Policy and Practice Recommendations**

The literature review, case study examination, and analysis of the current state of transit-oriented development in the St. Louis region has brought to light a number of recommendations that have proved successful in other regions and could produce positive results, if implemented in the St. Louis area.

### **Establish a distinct definition of TOD for St. Louis**

There is no doubt the St. Louis region can, and should, learn from the positive and negative actions of other areas around the country. But St. Louis is unique and, as such, demands its own distinct definition of transit-oriented development. As discussed at the onset, no two definitions of TOD are the same. They may share characteristics, but inevitably differ. With the diverse set of existing stations and the prospect for future expansion, transit stakeholders in the St. Louis region should establish a definition of TOD that would include flexibility; a definition that would address and respect the varying markets and development patterns surrounding stations. With a definition in place that was a product of a collaborative effort amongst stakeholders, TOD would have the groundwork from which to base development efforts.

### **Build a market of comparable developments**

This task is much easier said than done; however, cities, like Portland, Oregon, have proven that successful implementation of transit-oriented development precipitates acceptance and support of further development. The implementation of one successful TOD in the region could provide a sizeable push for further TODs. Once a positive example is established and can be used to support proposals of future developments, several of the previously defined obstacles, such as financing or acceptance of lessened parking availability, can be addressed much more easily. Having proven examples in the region to use can help to alleviate some of the concerns that encircle prospective transit-oriented development.

### **Explore alternative sources of funding**

In the current economic climate in the United States, funding for large projects is difficult, whether they are traditional or non-traditional, but proposing transit-oriented development in a region, where it has never been undertaken before, has proven to be a challenging sell to lenders, as demonstrated by the case studies. Exploring alternative forms of funding and financial support is key, so as to lessen the extent of traditional funding. Following the example explained earlier in Denver, Colorado, where federal funds were dispersed to individual states, following a landmark settlement with the nation's largest mortgage companies, could provide an idea of the lengths local agencies and jurisdictions may need to go to explore funding. Federal and state grant funding, as well as special taxing districts, could possibly provide some relief from parsimonious lenders. Gresham, Oregon successfully implemented a TOD property tax and fee exemption to encourage mixed-use development in its' downtown district.

### **Strive for increased efforts in land acquisition and assembly**

When discussing a topic as complex as land development, often times the most basic elements can be overlooked. Regardless of how beneficial transit-oriented development can be for a region, it is impossible for all intents and purposes, if the land is not available to be developed. The St. Louis region would do well to follow the lead of the Bay Area. The Fruitvale Transit Village faced land acquisition and assembly obstacles, but area municipalities, BART, and planning agencies worked collectively to acquire and assemble land to use for the project. In addition, some of these stakeholders had to adjust established regulations in order to reach acceptable terms for land use, including long-term leases on parcels rather than ownership. The various stakeholders also agreed upon land exchanges in order to fully assemble the contiguous acreage necessary for the development.

### **Continue and expand public input efforts**

In its current efforts to establish the Regional Plan for Sustainable Development, the St. Louis region has done an excellent job of keeping the public informed and soliciting public input in a variety of ways. As part of the RPSD, the St. Louis Regional Transit-Oriented Development Study has also strived to maintain open lines of communication among stakeholders. Public input sessions have been held throughout the community and online polls and surveys have been utilized as well. Look no further than Atlanta's Lindbergh City Center project to see that a lack of public involvement or even worse, an air of intentional avoidance can bring a transit-oriented development project to a halt and, as seen in this case, could even necessitate legal proceedings or mediation.

On the other hand, Denver's Five Points development, and later its massive undertaking of the FasTracks program currently being implemented, demonstrates the advantage to full transparency. Going above and beyond to involve the public throughout the process shows care and concern for both them and their communities, and garners support for the project during the planning process, throughout construction, and after completion. Extensive public involvement is crucial to successful transit-oriented development.

### **Educate elected officials and the general public**

America is an automobile oriented society. Transit-oriented development challenges that tradition and as a result is often opposed without being given proper consideration. It is the responsibility of TOD supporters including local planning agencies, Metro Transit – St. Louis, and local municipalities to market TOD and public transit in general to both the general population and to elected officials, both state and local. As a sprawling metropolitan area, many residents that live in and around St. Louis are aware of MetroLink but don't seek out its services

on a regular basis. The region must be made aware that MetroLink can be a convenient, practical, and safe transportation option.

Marketing the system, as such, would aid in increased ridership, not only from those with easy access to stations, but also prospective users in outlying counties and municipalities that don't live or work in the immediate vicinity of an existing station. Not only would this form of marketing increase the likelihood of occasional ridership from those who would otherwise commute via automobile, but it would also attract attention and interest to the desirability of relocating to an area that has convenient access to MetroLink, both now and in possible future transit-oriented development. The general public may not take the time to attend public input sessions or follow the planning process of MetroLink expansion if it doesn't currently impact them directly, however, a more formal marketing campaign could bring the system to their attention and could aid in lessening the stronghold tradition and habit has on non-users. In addition, support of public transit and transit-oriented development can influence the actions of elected officials to positively act on TOD projects.

It is imperative to also directly market the usability of MetroLink and the advantages of transit-oriented development to elected officials. These individuals, at various levels of state and local government, can play a crucial role in funding endeavors and in streamlining review and approval processes. Examples of stalled or failed developments in both Huntington and Beacon, New York, mentioned in the literature review, prove support of the general public and elected officials can make or break a project. Marketing the positive effects of public transit and transit-oriented development to a wide audience across the region would help in garnering support.

Identifying or working to establish an organization that could serve the role that Greenbelt Alliance does in the Bay Area could prove effective in lobbying political and

community support for transit-oriented development projects. Having an ally to provide an objective review of prospective transit-oriented development and issue support of worthy projects would likely give government staff and elected officials, as well as community groups, a level of confidence in the viability of a proposed development.

### **Consider measures that would encourage decreased automobile usage**

As long as automobile travel is relatively convenient and somewhat affordable, a move to dependency on public transit, although still possible, will be slowed. Incentivizing the use of other forms of transportation could increase support expeditiously. Policies should be considered that make driving costlier and using public transit more appealing. As Brian Taylor, Director of UCLA's Institute of Transportation Studies, suggested, measures, such as higher charges for parking, increased use of toll roads, and higher fuel taxes, such as were levied in Japan and many European nations, could hasten support of public transit.

Lobbying for reduced parking in and around future transit-oriented development or other major developments could encourage increased public transit use as well. As has been stated throughout this document, reduced parking has often been a stumbling block of transit-oriented development, but as these projects progress and prove viable, parking reductions may increase ridership of MetroLink and patronage of surrounding development. Returning to the example of BART's Fruitvale Transit Village, after a lengthy debate over parking needs, a zoning ordinance was approved for the neighborhood surrounding Fruitvale Community that would prohibit additional parking. Although not a common practice, there are successful examples of parking limitations to learn from.

In 2011, Washington, D.C.'s Office of Planning explored incentivizing relocation of residents. The "Live Near Your Work" program offered to match employer contributions of up

to \$6,000 to encourage employees to move within two miles of their workplace, within a half-mile of a Metro station, or within a quarter-mile of a "high-quality" bus corridor. The City's view was, people who live closer to their place of employment, would spend less on their commute, employers would have less concern over parking availability, employees would be more likely to arrive at work on time, and the City of Washington, D.C. would receive a boost in neighborhood revitalization and the overall tax base, while experiencing less traffic congestion and auto emissions.<sup>80</sup> The St. Louis region must take a cue from such examples to investigate the possibility of encouraging area residents to drive less and ride public transportation more.

### **Encourage jurisdictions to streamline review processes for transit-oriented development**

The importance of efficient and expedited review processes cannot be understated. To a prospective developer the zoning review and permitting processes of local jurisdictions can, at times, determine whether a project will proceed or not. To a developer, every day that is used to review a project is a day that project is not under construction and a day that project is not making a profit. If jurisdictions in the St. Louis metropolitan area streamlined their review processes for transit-oriented development, it would provide a significant incentive for developers and other stakeholders to pursue a project they may otherwise leave on the table. To reemphasize the point, transit-oriented development, specifically in a market that has not seen similar projects, is a risk in the minds of developers and lenders. Providing these parties the assurance of expedited reviews would increase the likelihood of them getting off the table sooner, than later, and may be the incentive needed to make a project a reality.

---

<sup>80</sup> Schwartz (2011).

Preemptively modifying zoning ordinances and comprehensive plans to anticipate transit-oriented development could also aid in attracting this type of project. As was mentioned previously, the City of Clayton, Missouri has foreseen the possibility of transit-oriented development by establishing overlay districts around two current MetroLink stations (Clayton and Forsyth). Other local jurisdictions should seriously consider taking Clayton's lead by reviewing certain zoning requirements that would apply to MetroLink stations in their area.

### **Prudently select station areas to focus development**

For transit-oriented development to see a level of success in the St. Louis area, it is of utmost importance to focus development efforts on station areas that provide a fertile market for investment. With thirty-seven MetroLink stations currently operating, discussion of various infill stations on existing lines, and the prospect of new lines in the future, some station areas lend themselves to transit-oriented development more than others. In a region where TOD is just beginning to draw attention, an early failure could be disastrous for the future of TOD in St. Louis. Critically examining current and future station areas to select the proper candidates for transit-oriented development could be one of the most crucial actions stakeholders will take in promoting TOD. Considering areas like the Cortex development, or the current Convention Center MetroLink station, near the newly developed Mercantile Exchange (The MX), would provide a strong base to implement TOD in the future. Selecting places people want to go already, such as The MX, or locations a large number of individuals must travel to each day like the Washington University/BJC Medical Campus, would provide TOD a solid foundation for development that wouldn't be available in locations like the Wellston, Belleville, or Swansea stations. Utilizing market segmentation techniques such as Esri's Business Analyst tool and

tapestry segment designations could provide stakeholders the market profile needed to make educated decisions on these selections.

## **Conclusion**

To many, transit-oriented development is a shiny new toy, something everyone is interested in playing with for a while. One city sees another city with it and wants to take a look at it themselves. But after tossing it around for a time, it gets put away, left only to be found later and brought out again. What keeps it from being the preeminent “toy” in every region’s plans? Obstacles to implementation. Without a doubt, some are unavoidable; yet others can be sidestepped, with a minor detour here and there. Establishing a thorough knowledge of the obstacles well-developed public transit systems have experienced in implementing TOD will allow the St. Louis region to continue its current efforts and improve moving forward by confronting the inevitable head-on and veering around those obstacles that can be eluded. The benefits of transit-oriented development for the St. Louis region are vast and implementing this form of development is a key element to nurturing a sustainable community.

## Bibliography and Data Sources

### Literature

10 Strategies for Attracting Development Near Transit in a Slow Growth Market. (n.d.). *Citizens For Modern Transit: Working To Expand Metrolink*. Retrieved March 18, 2013, from [cmt-stl.org/wp-content/uploads/2012/11/10-Strategies-Updated.pdf](http://cmt-stl.org/wp-content/uploads/2012/11/10-Strategies-Updated.pdf)

2012 Transportation Talking Points. (n.d.). *Citizens For Modern Transit: Working To Expand Metrolink*. Retrieved March 18, 2013, from [cmt-stl.org/wp-content/uploads/2011/10/2012-talkingpoints.pdf](http://cmt-stl.org/wp-content/uploads/2011/10/2012-talkingpoints.pdf)

Abbott, M. (2007). *St. Louis plans: the ideal and the real St. Louis*. St. Louis: Missouri Historical Society Press.

About the Settlement | NationalMortgageSettlement. (n.d.). Payments to borrowers who lost their homes to foreclosure | NationalMortgageSettlement. Retrieved April 18, 2013, from <http://www.nationalmortgagesettlement.com/about>

America, R. (2007). WHY TRANSIT-ORIENTED DEVELOPMENT AND WHY NOW?. *Reconnecting America and the Centre for Transit-Oriented Development, Oakland, CA*.

Arrington, G. (2010, October 14). What does TOD Stand for: transit-oriented development — or just the same Tired Old Development? | Planetizen. *Planetizen*. Retrieved March 18, 2013, from <http://www.planetizen.com/node/46425>

Atlanta Regional Transit. (n.d.). Welcome to the Atlanta Regional Commission. Retrieved May 1, 2013, from <http://www.atlantaregional.com/transportation/transit>

BART - A History of BART: The Concept is Born. (n.d.). BART - Bay Area Rapid Transit. Retrieved April 18, 2013, from <http://www.bart.gov/about/history/index.aspx>

BART TOD Policy. (n.d.). BART - Bay Area Rapid Transit. Retrieved April 18, 2013, from [www.bart.gov/docs/tod/TOD\\_Policy\\_Adopted\\_07-14-05.pdf](http://www.bart.gov/docs/tod/TOD_Policy_Adopted_07-14-05.pdf)

Belzer, D., Autler, G., & Economics, S. (2002). *Transit oriented development: moving from rhetoric to reality* (pp. 06-15). Washington, DC: Brookings Institution Center on Urban and Metropolitan Policy.

Belzer, D., Hickey, R., Lawson, W., Poticha, S., & Wood, J. (2007). The Case for Mixed-Income Transit-Oriented Development in the Denver Region. *Oakland, CA: Center for Transit-Oriented Development, February*.

Best, A. (2013, March). Federal Mortgage Deal Funds Denver TOD. *Planning*, 79, 7. What is TOD? - Reconnecting America. (n.d.). *Home - Reconnecting America*. Retrieved March 18, 2013, from <http://www.reconnectingamerica.org/what-we-do/what-is-tod/>

Box, S. (2010, June 10). What Was Missing from Last Week's T.O.D. Conference | Streetsblog Los Angeles. *Streetsblog Los Angeles*. Retrieved March 18, 2013, from <http://la.streetsblog.org/2010/06/10/what-was-missing-from-last-weeks-t-o-d-conference/>

Buntin, S. B. (n.d.). Rockville Town Square in Rockville, Maryland: UnSprawl Case Study : Terrain.org. *Terrain.org: A Journal of the Built + Natural Environments*. Retrieved March 18, 2013, from <http://www.terrain.org/unsprawl/27/>

City of Denver Transit-Oriented Development Strategic Plan (2006). (n.d.). [www.denvergov.org](http://www.denvergov.org). Retrieved April 18, 2013, from [www.denvergov.org/Portals/193/documents/full%20tod%20st%20plan%20.pdf](http://www.denvergov.org/Portals/193/documents/full%20tod%20st%20plan%20.pdf)

Cervero, R. (2004). *TCRP Report 102: Transit-oriented Development in the United States-- Experiences, Challenges, and Prospects*. Transportation Research Board.

City of Clayton, Missouri TOD Overlay Code - Forsyth Station

City of Clayton, Missouri TOD Overlay Code - Clayton Station

Cohen, R., & Salomon, E. (2011, February 7). Building in Affordability - Shelterforce - National Housing Institute. *Shelterforce - National Housing Institute*. Retrieved March 18, 2013, from [http://www.shelterforce.org/article/2109/building\\_in\\_affordability/](http://www.shelterforce.org/article/2109/building_in_affordability/)

Community Building Sourcebook: Land Use and Transportation Initiatives in Portland, Oregon. (n.d.). TriMet: Public Transit in the Portland Area. Retrieved April 18, 2013, from [http://www.trimet.org/pdfs/publications/community\\_sourcebook.pdf](http://www.trimet.org/pdfs/publications/community_sourcebook.pdf)

Cortright, J. (n.d.). Portland's Green Dividend. CEOs for Cities. Retrieved April 18, 2013, from <http://www.ceosforcities.org/files/PGD%20FINAL.pdf>

Cox, W. (2009, June 24). Exurban Growth Greater than Central Growth: Census Bureau | Newgeography.com . *Newgeography.com*. Retrieved March 18, 2013, from <http://www.newgeography.com/content/00868-exurban-growth-greater-central-growth-census-bureau>

Dittmar, H., & Ohland, G. (2004). *The new transit town: best practices in transit-oriented development*. Washington, DC: Island Press.

Esri Tapestry Segmentation Reference Guide 2011.

FasTracks Home. (n.d.). FasTracks Home. Retrieved May 1, 2013, from <http://www.rtd-fastracks.com>

Fritz, J. (n.d.). Southeast Real Estate Business. Southeast Real Estate Business redirect. Retrieved May 1, 2013, from <http://www.southeastrebusiness.com/articles/MAR03/cover2.html>

Fruitvale Transit Village Project - Case Studies - Environmental Justice - Environment - FHWA. Home | Federal Highway Administration. Retrieved April 30, 2013, from [http://www.fhwa.dot.gov/environment/environmental\\_justice/case\\_studies/case6.cfm](http://www.fhwa.dot.gov/environment/environmental_justice/case_studies/case6.cfm)

Fulton, W. (2009, August 18). Precision Required To Make California's Good Places Great. *California Planning & Development Report*. Retrieved March 18, 2013, from [www.cp-dr.com/node/2393](http://www.cp-dr.com/node/2393)

Gallagher, P. (2012). Public support vital for TODs, rail exec says. *Westchester County Business Journal*, 48(22), 2. Retrieved March 18, 2013, from the EBSCO HOST database.

General TOD Resources & Links - Citizens For Modern Transit. (n.d.). *Citizens For Modern Transit: Working To Expand Metrolink*. Retrieved March 18, 2013, from <http://cmt-stl.org/transit-oriented-development-clearinghouse/general-tod-resources/>

Guiding Principles. (n.d.). FasTracks Home. Retrieved May 1, 2013, from [http://www.rtd-fastracks.com/main\\_27](http://www.rtd-fastracks.com/main_27)

Halbur, T. (2010, April 6). Want Your TOD To Work? Add Parking | Planetizen. *Planetizen*. Retrieved March 18, 2013, from <http://www.planetizen.com/node/43665>

Harrell, R., Brooks, A., & Nedwick, T. (2009). *Preserving Affordability and Access in Liveable Communities: Subsidized Housing Opportunities Near Transit and the 50+ Population* (No. 2009-15). AARP Public Policy Institute.

Hess, D. B., & Lombardi, P. A. (2004). Policy support for and barriers to transit-oriented development in the inner city: Literature review. *Transportation Research Record: Journal of the Transportation Research Board*, 1887(-1), 26-33.

History - Greenbelt Alliance. (n.d.). Greenbelt Alliance. Retrieved April 30, 2013, from <http://www.greenbelt.org/about/history/>

Hoban, S. (n.d.). What Drives TOD? | CCIM Institute. *CCIM Institute | The Global Standard for Professional Achievement in Commercial Real Estate*. Retrieved March 18, 2013, from <http://www.ccim.com/cire-magazine/articles/what-drives-tod>

HUD Press Release. (2010, October 15). *East-West Gateway*. Retrieved May 1, 2013, from [www.ewgateway.org/pdffiles/prs/PRS-101510-SustainabilityGrant.pdf](http://www.ewgateway.org/pdffiles/prs/PRS-101510-SustainabilityGrant.pdf)

Ivey, M. (2009, August 1). Advocates make last-minute pitch to site Amtrak depot on isthmus : Ct. *Madison.com Madison WI news sports entertainment*. Retrieved March 18, 2013, from [http://host.madison.com/ct/business/advocates-make-last-minute-pitch-to-site-amtrak-depot-on/article\\_6f50d51d-8308-5a44-8671-d9162b28730f.html](http://host.madison.com/ct/business/advocates-make-last-minute-pitch-to-site-amtrak-depot-on/article_6f50d51d-8308-5a44-8671-d9162b28730f.html)

Jackson, M. (2010, June 14). Apartment seekers willing to pay more to be near light rail - The Denver Post. *The Denver Post*. Retrieved March 18, 2013, from [http://www.denverpost.com/business/ci\\_15290467](http://www.denverpost.com/business/ci_15290467)

Jensen, D. (2009, October 12). Are banks a roadblock to walkable development?. *The Salt Lake Tribune*. Retrieved March 18, 2013, from [http://www.sltrib.com/news/ci\\_13529914](http://www.sltrib.com/news/ci_13529914)

Kazis, N. (2010, May 25). How Portland Sold Its Banks on Walkable Development | Streetsblog New York City. *Streetsblog New York City*. Retrieved March 18, 2013, from <http://www.streetsblog.org/2010/05/25/how-portland-sold-its-banks-on-walkable-development/>

Knowles, D. (n.d.). Cesar Pelli's Transbay Transit Tower, soon to be the tallest building west of the Mississippi, will reshape San Francisco's skyline - NY Daily News. Daily News America - Breaking national news, video, and photos - Homepage - NY Daily News. Retrieved April 18, 2013, from <http://www.nydailynews.com/news/national/cesar-pelli-transbay-transit-tower-soar-61-stories-san-francisco-article-1.1308926>

Langdon, P. (2011, January 21). 42 ways to fund transit-oriented development | Better! Cities & Towns Online. *Better! Cities & Towns Online*. Retrieved March 18, 2013, from <http://bettercities.net/article/42-ways-fund-transit-oriented-development-13934>

Lazarus, D. (2009, August 5). U.S. public transit improvements will be a tough sell - Los Angeles Times. *Los Angeles Times*. Retrieved March 18, 2013, from <http://articles.latimes.com/2009/aug/05/business/fi-lazarus5>

Lazo, L. (2012, October 17). In Capitol Heights, little change in spite of a whole lot of planning™ around the Metro - Washington Post. *The Washington Post*. Retrieved March 18, 2013, from [http://articles.washingtonpost.com/2012-10-17/local/35498657\\_1\\_metro-stations-wal-mart-plans-economic-development](http://articles.washingtonpost.com/2012-10-17/local/35498657_1_metro-stations-wal-mart-plans-economic-development)

Levine, J. (2005). *Zoned out: regulation, markets, and choices in transportation and metropolitan land-use*. Washington, DC: Resources for the Future.

Levine, J., & Inam, A. (2004). The market for transportation-land use integration: Do developers want smarter growth than regulations allow?. *Transportation*, 31(4), 409-427.

Litman, T. (2010, February 22). Raise My Taxes, Please! Financing High Quality Public Transit Service Saves Me Money Overall | Planetizen. *Planetizen*. Retrieved March 18, 2013, from <http://www.planetizen.com/node/43035>

MARTA - FY 2012 Annual Report July 1, 2011 - June 30, 2012. (n.d.). MARTA. Retrieved April 18, 2013, from [www.itsmarta.com/uploadedfiles/About\\_MARTA/Reports/AR-FY12-Full12-31FINAL.pdf](http://www.itsmarta.com/uploadedfiles/About_MARTA/Reports/AR-FY12-Full12-31FINAL.pdf)

MARTA > About MARTA. (n.d.). MARTA. Retrieved May 1, 2013, from <http://www.itsmarta.com/marta-past-and-future.aspx>

Maximizing the Region's Investment in Transit. (n.d.). *Metro Transit St. Louis*. Retrieved March 18, 2013, from [www.metrostlouis.org/BusinessCommunity/EconomicDevelopment/TransitOrientedDevelopment.aspx](http://www.metrostlouis.org/BusinessCommunity/EconomicDevelopment/TransitOrientedDevelopment.aspx)

Metro - About Metro - Strategic Plan. (n.d.). Metro - Home page. Retrieved April 29, 2013, from <http://www.wmata.com/momentum/prologue.cfm>

Metro - Home page. (n.d.). Metro - Home page. Retrieved April 30, 2013, from <http://www.wmata.com>

Metro TOD Station Area Profiles. (n.d.). *Metro Transit - St. Louis*. Retrieved May 5, 2013, from [www.metrostlouis.org/BusinessCommunity/EconomicDevelopment/TransitOrientedDevelopment/StationAreaProfiles.aspx](http://www.metrostlouis.org/BusinessCommunity/EconomicDevelopment/TransitOrientedDevelopment/StationAreaProfiles.aspx)

Mulligan, R. (2013, May 1). FasTracks – What's Next?. *DenverUrbanism Blog*. Retrieved May 2, 2013, from <http://denverurbanism.com/2013/05/fastracks-whats-next.html>

Nelson, D., & Niles, J. (1999). Market Dynamics And Nonwork Travel Patterns; Obstacles To Transit-Oriented Development. *Transportation Research Record*, 1669(1), 13-21.

Novak, S. (2009, July 9). Developer plans new community south of Avery Ranch. *Austin Statesman*. Retrieved March 18, 2013, from <http://sunnydayaustin.com/news/2009/july/local/developer.php>

Nusca, A. (2010, October 22). New public transit encourages gentrification, lowers ridership, study says | SmartPlanet. *SmartPlanet - Innovative Ideas That Impact Your World*. Retrieved March 18, 2013, from <http://www.smartplanet.com/blog/smart-takes/new-public-transit-encourages-gentrification-lowers-ridership-study-says/11832>

Page, J. (2011, April 10). Can transit-oriented development work along Wasatch Front? | Deseret News. *Deseret News*. Retrieved March 18, 2013, from <http://www.deseretnews.com/article/700126176/Can-transit-oriented-development-work-along-Wasatch-Front.html?pg=all>

Paul, B. (2010, April 21). How 'Transit-Oriented Development' Will Put More New Yorkers in Cars | Development. *Gotham Gazette: The Place for New York Policy and Politics*. Retrieved March 18, 2013, from <http://www.gothamgazette.com/index.php/development/501-how-transit-oriented-development-will-put-more-new-yorkers-in-cars>

Paul, S. (2012, April 18). 155-Unit Affordable Development Planned for Rhode Island Avenue. UrbanTurf DC: For buying a home or condo in the Washington, DC area. Retrieved April 29, 2013, from [http://dc.urbanturf.com/articles/blog/development\\_planned\\_for\\_rhode\\_island\\_avenue/5433](http://dc.urbanturf.com/articles/blog/development_planned_for_rhode_island_avenue/5433)

Peirce, N., & Johnson, C. (1997, March 16). THE PEIRCE REPORT A CALL TO ACTION Eighth of Eight in a Series. *St. Louis Post-Dispatch*.

Policy and Action Recommendations. (n.d.). City and County of Denver Official Site. Retrieved April 18, 2013, from <http://www.denvergov.org/tod/TransitOrientedDevelopment/TODinDenver/PolicyandActionRecommendations/tabid/442490/Default.aspx>

Porter, D. (1997). TCRP Synthesis of Transit Practice 20: Transit Focused Development.

Portland's Urban Growth Boundary. (n.d.). [www.oregonmetro.gov](http://www.oregonmetro.gov). Retrieved April 18, 2013, from [www.oregonmetro.gov/index.cfm/go/by.web/id=277](http://www.oregonmetro.gov/index.cfm/go/by.web/id=277)

Prado, M. (2009, December 19). Not all on board for high-density housing near rail stations - Marin Independent Journal. *Marin Independent Journal*. Retrieved March 18, 2013, from [http://www.marinij.com/marinnews/ci\\_14035623](http://www.marinij.com/marinnews/ci_14035623)

Program Overview « Transbay Center. (n.d.). Transbay Center. Retrieved April 18, 2013, from <http://transbaycenter.org/project/program-overview>

Renne, J. (2007, April 23). The Market for Transit Oriented Development: Niche or Mainstream? | Planetizen. *Planetizen*. Retrieved March 18, 2013, from <http://www.planetizen.com/node/23980>

RPSD Community Planning Area Summary Sheets. (n.d.). *onestl.org*. Retrieved May 5, 2013, from [www.onestl.org/CPAInfo/CPASheets-Maps2.pdf](http://www.onestl.org/CPAInfo/CPASheets-Maps2.pdf)

RTD. (n.d.). RTD. Retrieved May 1, 2013, from <http://www.rtd-denver.com/factsAndFigures.shtml>

RTD FasTracks TOD Fact Sheet. (n.d.). FasTracks Home. Retrieved April 18, 2013, from [www.rtd-fastracks.com/media/uploads/main/TOD\\_Fact\\_Sheet\\_July\\_2010.pdf](http://www.rtd-fastracks.com/media/uploads/main/TOD_Fact_Sheet_July_2010.pdf)

San Francisco Cable Car Museum. (n.d.). San Francisco Cable Car Museum. Retrieved April 18, 2013, from <http://www.cablecarmuseum.org>

Schwartz, A. (2011, May 4). Would \$12,000 Convince You To Move Closer To Work? | Fast Company. *Fast Company*. Retrieved March 18, 2013, from <http://www.fastcompany.com/1751629/would-12000-convince-you-move-closer-work>

Shaver, K., & Spivack, M. S. (2010, February 28). It takes more than stores to build a winning town center. *Washington Post*. Retrieved March 18, 2013, from <http://www.washingtonpost.com/wp-dyn/content/article/2010/02/27/AR2010022703434.html>

Simril, R. (2010, June 23). Transit Oriented Development Doesn't Just Happen! | The Planning Report. *The Planning Report*. Retrieved March 18, 2013, from <http://www.planningreport.com/2010/06/23/transit-oriented-development-doesnt-just-happen>

Smart Growth Illustrated: Compact Development Endorsement Program, San Francisco Bay Area Communities, California | Smart Growth | US EPA. (n.d.). US Environmental Protection Agency. Retrieved April 18, 2013, from <http://www.epa.gov/dced/case/compact.htm>

Smart Growth in Oakland, California: Fruitvale Transit Village. (n.d.). Prevention Institute. Retrieved April 29, 2013, from <http://www.preventioninstitute.org/component/sbxmapper/article/343.html>

South San Francisco General Plan. (n.d.). *Reconnecting America*. 1999. Retrieved March 18, 2013, from [www.reconnectingamerica.org/assets/Uploads/bestpractice087.pdf](http://www.reconnectingamerica.org/assets/Uploads/bestpractice087.pdf)

St. Louis Regional Transit-Oriented Development Best Practices Guide. (n.d.). *Metro Transit St. Louis*. Retrieved March 18, 2013, from [www.metrostlouis.org/Libraries/TOD\\_Documents/TOD\\_Best\\_Practices\\_Guide.pdf](http://www.metrostlouis.org/Libraries/TOD_Documents/TOD_Best_Practices_Guide.pdf)

St. Louis Regional TOD Study. (n.d.). *St. Louis Regional TOD Study*. Retrieved May 5, 2013, from <http://stlouistod.com>

St. Louis TOD Framework Plan

Stephens, J. (2012, July 24). New Light Rail Line Opens Up World of TOD Possibilities | California Planning & Development Report. *California Planning & Development Report*. Retrieved March 18, 2013, from <http://www.cp-dr.com/node/3235>

Steuteville, R. (2011, March 23). Five keys to successful retail in a transit-oriented development | Better! Cities & Towns Online. *Better! Cities & Towns Online*. Retrieved March 18, 2013, from <http://bettercities.net/article/five-keys-successful-retail-transit-oriented-development-14358>

Sundquist, E. (n.d.). » Per capita VMT ticks down for eighth straight year SSTI. *SSTI*. Retrieved March 18, 2013, from <http://www.ssti.us/2013/02/per-capita-vmt-ticks-down-for-eighth-straight-year/>

The Five Points Neighborhood - A TOD Evolution. (n.d.). Railvolution. Retrieved April 18, 2013, from [www.railvolution.org/rv2006\\_pdfs/rv2006\\_313b.pdf](http://www.railvolution.org/rv2006_pdfs/rv2006_313b.pdf)

Transit-Oriented Development. (n.d.). *Metro-Transit St. Louis*. Retrieved May 5, 2013, from [www.metrostlouis.org/BusinessCommunity](http://www.metrostlouis.org/BusinessCommunity)

Transit Oriented Development (As an Overlay District) Template for the St. Louis Area. (n.d.). *Citizens For Modern Transit: Working To Expand Metrolink*. Retrieved March 18, 2013, from [http://www.cmt-stl.org/wp-content/uploads/2011/10/CMT-Overlay\\_District\\_Code\\_Template.pdf](http://www.cmt-stl.org/wp-content/uploads/2011/10/CMT-Overlay_District_Code_Template.pdf)

Transit Oriented Development Implementation. (n.d.). *Atlanta Regional Commission*. Retrieved March 18, 2013, from [www.lebcounty.org/Planning/Documents/Comp%20Plan%20-%20Appendix%20III/LCCP\\_AppIII\\_04\\_TODImplementationBookle](http://www.lebcounty.org/Planning/Documents/Comp%20Plan%20-%20Appendix%20III/LCCP_AppIII_04_TODImplementationBookle)

TriMet Fact Sheet 2013. (n.d.). TriMet: Public Transit in the Portland Area.. Retrieved April 18, 2013, from <http://www.trimet.org/pdfs/publications/factsheet.pdf>

TriMet: History - The TriMet Story. (n.d.). TriMet: Public Transit in the Portland Area. Retrieved April 18, 2013, from [http://trimet.org/about/history/trimet\\_story.htm](http://trimet.org/about/history/trimet_story.htm)

TriMet: Transit Investment Priorities (TIP). (n.d.). TriMet: Public Transit in the Portland Area. Retrieved April 18, 2013, from <http://trimet.org/tip/index.htm>

United States Census Bureau

Wolfe, C., & Symington, P. (2009). From Barriers to Solutions and Best Practices: Urban Centers and TOD in Washington. *The Quality Growth Alliance, 1*. Retrieved March 18, 2013, from [http://www.reuw.washington.edu/research/download/biblio\\_revised\\_v6\\_merged.pdf](http://www.reuw.washington.edu/research/download/biblio_revised_v6_merged.pdf)

Wood, J., & Zimmerman, M. (2009). *Destinations matter building transit success*. Washington, DC: Federal Transit Administration.

## GIS Data Sources

Esri.

Metro Transit – St. Louis

St. Louis County Government

United States Census TIGER/Line data

United States Census American Fact Finder

## Table of Figures

Figure 1: The Crossings at Gresham.....	9
<a href="http://thecrossingsatgreshamstation.com">http://thecrossingsatgreshamstation.com</a>	
Figure 2 City Creek Center .....	10
<a href="http://www.visitsaltlake.com/listings/City-Creek-Center/58660/">http://www.visitsaltlake.com/listings/City-Creek-Center/58660/</a>	
Figure 3 AvalonBay Huntington Station .....	13
<a href="http://www.newsday.com/long-island/towns/avalonbay-officials-appear-before-planning-board-1.4277286">http://www.newsday.com/long-island/towns/avalonbay-officials-appear-before-planning-board-1.4277286</a>	
Figure 4 Rockville Town Square .....	15
<a href="http://bettercities.net/sites/default/files/Rockville_2_copy.jpg">http://bettercities.net/sites/default/files/Rockville_2_copy.jpg</a>	
Figure 5 Lindbergh City Center.....	19
<a href="http://www.smithdalia.com/works_detail.php?ID=21">http://www.smithdalia.com/works_detail.php?ID=21</a>	
Figure 6 MARTA Rail Map.....	20
<a href="http://www.itsmarta.com/uploadedFiles/Schedules_And_Maps/Rail_Schedules_or_Routes/MARTA-Rail-Map-2010.pdf">http://www.itsmarta.com/uploadedFiles/Schedules_And_Maps/Rail_Schedules_or_Routes/MARTA-Rail-Map-2010.pdf</a>	
Figure 7 RTD FasTracks Map .....	25
<a href="http://www.rtd-fastracks.com/main_26">http://www.rtd-fastracks.com/main_26</a>	
Figure 8 RTD Travel Times.....	28
<a href="http://www.rtd-fastracks.com/main_28">http://www.rtd-fastracks.com/main_28</a>	
Figure 9 TriMet Rail System Map.....	31
<a href="http://trimet.org/pdfs/maps/railsystem.pdf">http://trimet.org/pdfs/maps/railsystem.pdf</a>	
Figure 10 Belmont Dairy .....	33
<a href="http://www.epa.gov/dced/case/img/belmont01.jpg">http://www.epa.gov/dced/case/img/belmont01.jpg</a>	
Figure 11 Transbay Transit Tower and Center .....	38
<a href="https://www.facebook.com/pages/Transbay-Transit-Center-Project/211301050057">https://www.facebook.com/pages/Transbay-Transit-Center-Project/211301050057</a>	
Figure 12 Transbay Transit Center Plan .....	39
<a href="http://transbaycenter.org/project/program-overview/project-map">http://transbaycenter.org/project/program-overview/project-map</a>	
Figure 13 Fruitvale Transit Village.....	41
<a href="http://www.mtc.ca.gov/images/Fruitvale_Village.jpg">http://www.mtc.ca.gov/images/Fruitvale_Village.jpg</a>	
Figure 14 WMATA Metro Service Area .....	45
<a href="http://www.wmata.com/about_metro/docs/metrofacts.pdf?">http://www.wmata.com/about_metro/docs/metrofacts.pdf?</a>	
Figure 15 RPSD Subject Area .....	56
Created by Ted Barklage - May 2013	
Figure 16 Current MetroLink Station Map.....	58
Created by Ted Barklage - May 2013	
Figure 17 Station Area Plan Selections .....	60
Created by Ted Barklage - May 2013	
Figure 18 North Hanley Station.....	67
<a href="http://www.metrostlouis.org">http://www.metrostlouis.org</a>	
Figure 19 North Hanley Station Area .....	67
Created by Ted Barklage - May 2013	
Figure 20 Rock Road Station.....	68
<a href="http://www.metrostlouis.org">http://www.metrostlouis.org</a>	
Figure 21 Rock Road Station Area .....	68
Created by Ted Barklage - May 2013	
Figure 22 Civic Center Station .....	69
	90

<http://www.metrostlouis.org>  
Figure 23 Union Station/Civic Center Station Area ..... 69  
Created by Ted Barklage - May 2013

Figure 24 JJK Center Station ..... 70  
<http://www.metrostlouis.org>

Figure 25 Emerson Park/JJK Center Station Area..... 70  
Created by Ted Barklage - May 2013

Figure 26 Fairview Heights Station ..... 71  
<http://www.metrostlouis.org>

Figure 27 Fairview Heights Station Area ..... 71  
Created by Ted Barklage - May 2013

## Appendix

### Esri Business Analyst Market Profile Information

Information	Census Year
Median Age	2010
Drive Alone to Work	2000
Public Transit to Work	2000
Average Travel Time to Work	2000
Average Available Vehicles per Household	2000
Esri Tapestry Segments	2000
Source Information: U.S. Bureau of the Census, 2000 Census of Population and Housing. Esri forecasts for 2010 and 2015. Consumer Spending data are derived from the 2006 and 2007 Consumer Expenditure Surveys, Bureau of Labor Statistics.	

### Tapestry Segments

#### In Style

##### Demographic

In Style residents live in the suburbs but prefer the city lifestyle. Professional couples predominate. Household distributions by type are similar to those of the United States. Married-couple families represent 54 percent of households. Households without children (married couples without children, single-person, shared, and other family types), comprise more than two-thirds of all households. This count is increasing. The population is slightly older, with a median age of 40 years. There is little diversity in these neighborhoods.

##### Socioeconomic

In Style residents are prosperous, with a median household income of \$70,745 and a median net worth of \$182,665. Wages and salaries provide income for 84 percent of the households; 47 percent also receive some form of investment income. In Style residents are more educated compared to the US level: 42 percent of the population aged 25 years and older hold a bachelor's or graduate degree. Labor force participation is 68.5 percent; unemployment is 8.4 percent. Forty-six percent of employed residents have professional or management positions, with above average concentrations in the finance, insurance, health care, technical services, and education industry sectors.

##### Residential

In Style residents live in affluent neighborhoods of metropolitan areas across the country. More suburban than urban, they embrace an urbane lifestyle; 14 percent prefer townhouses to traditional single-family homes chosen by 56 percent of the households. The median home value is \$218,289. The 68 percent rate of home ownership is just slightly above average. More than three-quarters of the housing was built in the last 30 years.

##### Preferences

Computer savvy In Style residents go online daily to research real estate information; do their banking; track investments; trade stocks; book travel; and buy computer hardware or software, concert tickets, or tickets to sporting events. They use a financial planner and invest in stocks,

bonds, money market funds, money market bank accounts, and securities. Looking toward the future, residents hold life insurance policies and contribute to IRA and 401(k) retirement accounts. To maintain their homes, they hire professional household cleaning services and contractors to remodel their kitchens.

Residents stay fit by exercising, eating a healthy diet to control their weight, buying low-fat foods, and taking vitamins. They attend live musical performances and gamble at casinos. They take domestic vacations to hike, golf, and go backpacking. They read magazines, listen to news-talk radio, and watch professional sports events and golf on TV.

## **Cozy and Comfortable**

### Demographic

Cozy and Comfortable residents are middle-aged married couples who are comfortably settled in their single-family homes in older neighborhoods. The median age of 42.3 years is five years older than the US median of 37 years. Most residents are married without children or married couples with school-aged or adult children. With 8.7 million people, this is a relatively large segment that is growing moderately by 0.48 percent annually since 2000. Most of these residents are white.

### Socioeconomic

Although the labor force is older, they are in no hurry to retire. The labor force participation rate is 65.7 percent; the unemployment figure is 9.3 percent. Employed residents work in professional, managerial, and service occupations in a variety of industry sectors. Occupation distributions are similar to US values. The median household income is \$65,665. Income for 80 percent of the households is earned from wages and salaries. Forty-six percent of households receive investment income. Their median net worth is \$181,850.

### Residential

Cozy and Comfortable neighborhoods are located in suburban areas, primarily in the Midwest, Northeast, and South. Many residents are still living in the homes in which they raised their children. Single-family structures make up 88 percent of the household inventory. The median home value is \$154,868. Sixty-two percent of the housing units were built before 1970. Home ownership is at 85 percent.

### Preferences

Cozy and Comfortable residents prefer to own certificates of deposit and consult a financial planner. They typically hold a second mortgage, a new car loan, a home equity line of credit, and a universal life insurance policy. Home improvement and remodeling projects are important to them. Although they will contract for some work, they attempt many projects, especially painting and lawn care. Depending on the season, they play golf or ice skate for exercise. They attend ice hockey games, watch science fiction movies on DVD, and take domestic vacations. They eat at family restaurants such as Friendly's, Bob Evans Farms, and Big Boy.

Going online isn't a priority, so they own older home computers. Television is very important; many households own four or more sets so they won't miss any of their favorite shows. They

watch sports, particularly football, and news programs. Reading the Sunday newspaper is part of the routine for many.

## **Rustbelt Retirees**

### Demographic

Most of the households in these neighborhoods are married couples with no children or singles who live alone. Twenty percent are married couples with children. The median age is 45.6 years; more than one-third of the householders are aged 65 years or older. Seventeen percent are veterans. These neighborhoods are not ethnically diverse.

### Socioeconomic

Although many residents still work, the labor force participation rate is 58 percent. Most households derive income from wages. However, 45 percent of households earn income from interest, dividends, and rental properties; 40 percent draw Social Security benefits; and 28 percent receive retirement income. The median household income is \$52,216, just below that of the US median. The median net worth is \$130,866, slightly above the US value. Overall, 86 percent of residents aged 25 years and older have graduated from high school, approximately 50 percent have attended college, and 20 percent hold a bachelor's or graduate degree.

### Residential

Most Rustbelt Retirees neighborhoods can be found in older, industrial northeastern cities, especially in Pennsylvania, and other states surrounding the Great Lakes; 67 percent of the households are located in the Northeast and Midwest. Twenty-eight percent are in the South. Eighty-four percent of the housing is single-family homes with a median home value of \$119,104; three-fourths were built before 1970. Unlike many retirees, these residents are content to stay put and live in the same house for years.

### Preferences

These hardworking folks are settled; many have lived in the same house for years. Loyal to country and community, they tend to be politically conservative. They participate in public activities and fund-raising, visit elected officials, and work for political parties or candidates. They belong to fraternal organizations, unions, and veterans' clubs. Practical people who take pride in their homes and gardens, Rustbelt Retirees buy home furnishings and work on remodeling projects to update their houses. They watch their pennies, use coupons, and look for bargains at discount stores and warehouse clubs. They own savings bonds and certificates of deposit and hold life insurance policies.

They eat out at family restaurants such as Perkins and Friendly's and watch rented movies on DVD instead of going to the theater. They also go bowling, play cards and bingo, gamble in Atlantic City, and go to horse races. They watch home improvement shows, sports events, news programs, game shows, and old reruns on TV. Favorite channels include Home & Garden Television, the Hallmark Channel, and the Weather Channel. They listen to country, oldies, and sports radio and peruse the daily newspaper.

## **Rustbelt Traditions**

### Demographic

These neighborhoods are primarily a mix of married-couple families, single parents, and singles who live alone. With a population of 8.4 million, this segment is one of Tapestry Segmentation's largest. The median age is 36.7 years, just below the US median. There is little diversity in these communities.

### Socioeconomic

The median household income is \$51,378, slightly below that of the US median. Half of the employed residents work in white-collar jobs. For years, these residents sustained the manufacturing industry that drove local economies. Now, the service industry predominates, followed by manufacturing and retail trade. The median net worth is \$82,469. Their education attainment is improving; more than 84 percent of residents aged 25 years and older have graduated from high school, 15 percent hold a bachelor's or graduate degree, and 44 percent have attended college.

### Residential

The backbone of older industrial cities in the Great Lakes border states, residents of these neighborhoods live in modest, single-family homes. Home ownership is 72 percent. The relatively low median home value of \$94,696 is because nearly two-thirds of the housing was built before 1960.

### Preferences

These residents stick close to home; for years, they've lived, worked, shopped, and played in the same area. Not tempted by fads, they stick to familiar products and services. They drive domestic cars. They will spend money on their families, yard maintenance, and home improvements. They will hire contractors for special projects such as the installation of roofing, carpet, and flooring. These financially conservative residents prefer to bank at a credit union and have personal savings. They might carry a personal loan and hold low-value life and homeowner's insurance policies. They're frugal and shop for bargains at Sam's Club, JCPenney, and Kmart. They go online weekly to play games and shop.

They go bowling, fishing, and hunting and attend car races, country music shows, and ice hockey games. They're big TV fans; they watch sitcoms and sports events. They also subscribe to cable and watch it regularly. Favorite channels are truTV, the Game Show Network, and the Disney Channel.

## **Family Foundations**

### Demographic

Family is the cornerstone of life in these neighborhoods that are a mix of married couples, single parents, grandparents, and young and adult children. The average family size is 3.3. The median age is 39.4 years, slightly older than the US median; 7 in 10 are aged 45 or older. Diversity is low; 84 percent of the population is black.

### Socioeconomic

The median household income is \$46,990. Because workers are beginning to retire, the 58.1 percent labor force participation is below average. More than 20 percent of the employed residents work for the government. Approximately one-third of the households are on Social

Security or public assistance. Their median net worth is \$81,495. Although education attainment levels are below the US level, a slightly higher proportion of residents aged 25 or older have graduated from high school.

### Residential

These small urban communities are located in large metropolitan areas, primarily in the South and Midwest. Because these residents tend to stay put, very little household growth has occurred since 2000. More than 75 percent own their homes; the median home value is \$91,154. Most of their houses are single-family, built before 1970.

### Preferences

Active in their communities, Family Foundations residents attend church, serve on church boards, help with fund-raising projects, and participate in civic activities. They spend money on their families and home maintenance projects. Careful consumers, they watch their budgets. They eat at home, shop at discount stores such as Marshalls and T.J. Maxx, and take advantage of savings at Sam's Club.

They're big TV fans; they watch courtroom shows, sports, and news programs. Viewership rates are very high; cable subscriptions are near the US level. Many households own multiple sets so they won't miss anything. They listen to gospel, urban, and jazz radio and read newspapers, Entertainment Weekly, and general editorial and newsmagazines. Basketball is a favorite sport; they play, attend professional games, watch games on TV, and listen to games on the radio.

## **Young and Restless**

### Demographic

Change is the constant for Young and Restless households. This young, on-the-go population has a median age of 28.6 years. Approximately two-thirds of them are younger than 35. Fifty-eight percent of these households are either single person or shared. Neighborhoods are diverse. Fifty-six percent of the residents are white; however, an above-average representation of blacks, Hispanics, and Asians also live in these neighborhoods.

### Socioeconomic

The median household income is \$46,185, and the median net worth is \$12,857. Although the median household income is below the US median; only 23 percent of these residents have children, giving them more disposable income than segments with similar income levels. They are educated; 36 percent aged 25 years or older hold a bachelor's or graduate degree; 69 percent have attended college. These ethnically diverse folks are very career-oriented. Seventy-two percent are in the labor force; 10.2 percent are unemployed. Seventy-four percent of the females are working. Most employed residents have professional, sales, service, or office/administration support jobs.

### Residential

These neighborhoods are in metropolitan areas in the South, West, and Midwest; the highest concentration is in Texas. Ranked fifth of the Tapestry segments for renters, 85 percent rent apartments in multiunit buildings. Most of the housing was built in the 1970s and 1980s. They don't mind moving for better jobs; 85 percent have moved in the last five years.

### Preferences

These young, single professionals are pursuing their careers and living a busy lifestyle. They are technologically savvy and take advantage of the convenience provided by many products and services. They go online to communicate with friends and family, shop, bank, and look for jobs. They read magazines to stay current on the latest lifestyle and entertainment trends and are just as likely to read a music magazine as a business publication. They go online for the latest news and sports. Television viewing is average. Radio is a good way to reach them; they listen to urban and contemporary hit music.

Seeing movies at theaters and on DVD is a major source of entertainment. They also enjoy going to bars or nightclubs. Their busy schedule also includes working out at the gym and playing various sports. Domestic vehicles have a slight edge in this market.

### **Great Expectations**

#### Demographic

Young singles who live alone and married-couple families dominate the Great Expectations market, although all household types are represented. The median age is 33.3 years. Some residents are just beginning their careers or family lives. Compared to the US figures, this segment has a higher proportion of residents who are in their 20s and a higher proportion of householders younger than 35 years. The ethnic diversity and racial composition of this segment are similar to US levels.

#### Socioeconomic

The median household income of \$40,243 and the median net worth of \$21,548 are lower than the US values. Nearly half of the population aged 25 years and older has some postsecondary education; 18 percent hold a bachelor's or graduate degree. Labor force participation rate is 66 percent; most of the jobs come from the manufacturing, retail, and service industry sectors.

#### Residential

Great Expectations neighborhoods are located throughout the country, with higher proportions in the Midwest and South. Half own their homes; half rent. More than half of the households are single-family dwellings; approximately 40 percent are apartments in low- or mid-rise buildings. The median home value is \$100,315. Most of the housing units in these older suburban neighborhoods were built before 1960.

#### Preferences

Great Expectations homeowners are not afraid to tackle smaller maintenance and remodeling projects, but they also enjoy a young and active lifestyle. They go out to dinner and to the movies. They do most of their grocery shopping at Wal-Mart Supercenters, Aldi, and Shop 'n Save. They throw Frisbees; play softball and pool; go canoeing; watch horror, science fiction, and drama films on DVD; and listen to country music, classic rock, and sports on the radio. They watch dramas, auto racing, and the evening news on TV. They occasionally eat at Arby's and Dairy Queen. They shop at major discount and department stores. They rarely travel. Focused on starting their careers, they're not investing for their retirement years.

### **Metro City Edge**

### Demographic

Married couples, single parents, and multigenerational families are the household types found in Metro City Edge neighborhoods. Grandparents are caregivers in 4 percent of these households, twice the US rate. The median age of this segment is 29.4 years because of the children, including adult children who still live at home. The average family size of 3.5 is slightly higher than the US average. Seventy-two percent of the residents are black; 17.3 percent are white; and 4 percent are American Indian—four times the US level.

### Socioeconomic

The median household income for this segment is \$33,018; the median net worth is \$14,773. Although 78 percent of households derive income from wages and salaries, 9 percent receive public assistance and 9 percent receive Supplemental Security Income. Nearly half of employed residents work in service industries. Unemployment is more than double the US level. One in ten residents aged 25 years or older have a bachelor's or graduate degree; four in ten have attended college.

### Residential

Metro City Edge residents live in older suburban neighborhoods of large metropolitan cities, primarily in the Midwest and South. Sixty-eight percent live in single-family homes; 14 percent live in buildings with two to four units. The home ownership rate is 53 percent; the median home value is \$70,892. Although home prices are relatively inexpensive, many families are young, unsettled, and still renting. Seventy percent of the housing units were built before 1970.

### Preferences

Metro City Edge residents must spend their money wisely to ensure the welfare of their children. They tend to shop for groceries at Piggly Wiggly, Kroger, and Aldi but will go to superstores and wholesalers for bulk purchases of household and children's items. Some will have their vehicles serviced at auto parts chains. They eat at fast-food or family-style restaurants such as Old Country Buffet or Ryan's.

They watch sitcoms, movies, news programs, courtroom shows, and sports such as pro wrestling on TV. Accessing the Internet at home isn't important. They go to the movies and professional football games and play basketball. They read music and baby magazines and listen to urban and contemporary hit radio.

## **College Towns**

### Demographic

With a median age of 24.4 years, College Towns is the third youngest of all the Tapestry segments. Most residents are aged between 18 and 34 years and live in single-person or shared households. One-fourth of households are occupied by married-couple families. The race profile of this market is somewhat similar to the US profile. Approximately three-fourths of the residents are white.

### Socioeconomic

College Towns residents are focused on their education; 59 percent are enrolled in college or graduate school. After graduation, other residents stayed on to teach or do research. Because

many students only work part-time, the median household income of \$31,271 ranks near the low end. The median net worth is \$12,027. Fifty-two percent of the employed residents work part-time. This segment ranks second to the Dorms to Diplomas segment for the highest proportion of part-time employment. Most of the employed residents work in the service industry, holding on- and off-campus jobs in educational services, health care, and food preparation.

### Residential

One in seven College Towns residents lives in a dorm on campus. Students in off-campus housing live in low-income apartment rentals. Thirty percent of housing is owner-occupied, typically by town residents, who live with their families in single-family dwellings. The median home value is \$137,707. One-third of the housing is single-family structures.

### Preferences

Convenience dictates food choices; they usually buy ready-made, easy-to-prepare, or frozen meals, frozen pasta, pizza crusts, and peanut butter and jelly at the closest grocery store. With their busy lifestyles, they frequently eat out or order in from fast-food restaurants, particularly McDonald's, Wendy's, and pizza outlets during the week; however, many cook at home over the weekend. They buy books online and in stores. They have student loans and bank online or by ATM. These computer-savvy students own laptop computers or expensive desktop personal computers and the peripherals to match. Connecting to the Internet is essential; they go online to research assignments, look for jobs, check e-mail, and download music. Keeping in touch is also important; they buy and use cell phones and accessories.

New to living on their own, many College Towns residents purchase bedding, bath, and cooking products. They own few appliances but, at a minimum, have a microwave oven, a toaster, and an upright vacuum cleaner. Their lifestyle is very casual. They rank high for participating in nearly every outdoor sport and athletic activity.

College Towns residents attend country music and rock concerts and college basketball and football games, play pool, and go to movies and bars. They also participate in public activities including fund-raising and volunteer work. They usually listen to alternative music on their MP3 players, tune in to public radio, and watch MTV and Comedy Central on cable TV. They shop at discount stores but prefer to buy branded clothes from Old Navy, Gap, and Target.

## **City Dimensions**

### Demographic

Diversity in household type and ethnicity characterizes City Dimensions neighborhoods. Most of these residents are young, with a median age of 29.2 years. Households are a mix of types; most are singles who live alone (31 percent), married-couple families (30 percent), and single-parent families (23 percent). Ethnic diversity is high. Nearly half of the residents are white and one-fourth are black; however, higher-than-average proportions of other race populations are also represented. Three in ten residents are of Hispanic origin.

### Socioeconomic

The median household income is \$28,963; the median net worth is \$12,275. Ten percent of the households receive Supplemental Security Income; 11 percent receive public assistance.

Employed residents work full-time or part-time, primarily in the service, manufacturing, and retail trade industry sectors. At 20 percent, unemployment is high. Overall, 65 percent of residents aged 25 years and older have graduated from high school; 9 percent hold a bachelor's or graduate degree.

### Residential

Although City Dimensions neighborhoods have a mix of housing types, more than half of the residents rent apartments in multiunit buildings. Most of the real estate is older; approximately 70 percent of the housing units were built before 1960; 42 percent are pre-1940 structures. Average gross rent in these older buildings is 17 percent below the US average. Housing types are split between single-family homes and apartments in two- to four-unit buildings. The median home value for owner-occupied dwellings is \$76,641. Although most households have a vehicle, residents seek jobs near their homes, commuting an average of 22 minutes to work.

### Preferences

City Dimensions residents watch cable TV often, preferring movies and news programs to documentaries. Most households own more than one television set. They also like gaming systems. Residents are big-time sports fans and loyal team supporters; this is a top market for buying and wearing sports team clothes.

Because few homes are equipped with central air conditioning, they rely on room air conditioners if necessary. Many have recently moved, so they bought household furnishings such as area rugs and sofas. Families with children spend wisely for children's and baby products, preferring to shop at discount stores. They use store brands, particularly for expensive items such as disposable diapers.

Households that own vehicles prefer domestic cars and buy used vehicles. If they have automotive repair expertise, they service their own cars; others rely on the car dealership or a nearby garage. They eat out and go to the movies.

## **Modest Income Homes**

### Demographic

Eighty-three percent of the residents in Modest Income Homes neighborhoods are black. Single-person and single-parent household types are predominant; however, a higher-than-average proportion of other family households is also present. The median age of 36 years is a year younger than the national median of 37. Many adult children still live at home. More than one-fourth are aged 65 years or older and have retired. Many are caregivers for their grandchildren, demonstrating strong family ties in these neighborhoods.

### Socioeconomic

Most of the retirees in Modest Income Homes rely on Social Security benefits for support. Slightly more employed residents work part-time than full-time, mainly in service and blue-collar occupations. The median household income is \$21,444; the median net worth is \$12,922. The unemployment rate is 23.2 percent. Thirteen percent of households receive Supplemental Security Income, and 10 percent receive public assistance. With little savings, home equity contributes the lion's share to a household's net worth in these neighborhoods. More than 60

percent of residents aged 25 years and older have graduated from high school. Eight percent hold a bachelor's or graduate degree, and 28 percent have attended college.

### Residential

Most Modest Income Homes neighborhoods are in older suburbs of Southern metropolitan areas, with a smaller concentration in the Midwest. More than two-thirds of the housing is single-family dwellings; 15 percent are duplexes. Homeowners and renters are almost evenly divided. Seventy-one percent of the households own at least one vehicle. Because demand for housing is low, home prices are very moderate; the median home value is \$53,529.

### Preferences

Residents are big fans of daytime and primetime TV. They go to the movies occasionally and also like to watch movies on TV channels such as the Lifetime Movie Network and The Movie Channel. They also watch football and basketball games on TV. They listen to urban radio. The Internet is the least effective way to reach these folks.

To save money, they shop at discount stores, limit their long-distance telephone calls, and restrict nonessential services such as Internet access and fitness center memberships. When they participate in physical activities, they might play basketball. Most drive used domestic sedans.

## **City Commons**

### Demographic

Single-parent families or singles who live alone comprise most of these very young households. With a median age of 24.6 years, City Commons is one of Tapestry Segmentation's youngest segments. Approximately half of the households have children; some households are multigenerational, with adults still living at home or grandparents who provide child care. The average household size of 2.8 is higher than the national average. Since 2000, population in these areas has declined at 0.4 percent per year. These neighborhoods are not ethnically diverse; 81 percent of the population is black.

### Socioeconomic

Thirty-one percent of the residents who work are employed in service occupations (twice the national level). Nineteen percent of the households are on public assistance; 13 percent receive Supplemental Social Security income. Overall, more than 60 percent of the residents aged 25 years and older have graduated from high school. Six percent hold a bachelor's or graduate degree; 27 percent have attended college. Because they have limited employment options, more residents work part-time than full-time. Unemployment is at 30 percent, the highest rate among the Tapestry segments, and almost three times that of the national level. The median household income is \$16,830, and the median net worth is \$9,958.

### Residential

City Commons neighborhoods are found in large metropolitan areas, mainly in the South and Midwest. More than three-fourths of the households rent. Sixty-three percent rent apartments in multiunit buildings, primarily with fewer than 20 units. One-fourth of the housing is single-family dwellings. The median home value is \$67,943. Typical of a young renters' market, these residents are movers; nearly 50 percent have relocated within the last five years.

Preferences

City Commons residents buy baby and children's products, food, and clothing most frequently. They shop primarily at discount stores and occasionally at department stores. Most families enjoy eating at fast-food restaurants several times a month. For exercise, they take their children to nearby city parks and playgrounds. Occasionally, they go to basketball games. An annual travel destination is probably to a theme park. They watch daytime courtroom and talk show programs and primetime TV shows. They would rather go to the movies than rent films to watch at home. They buy game systems for their children and listen to urban radio.

\*\* Esri Tapestry Segmentation Reference Guide 2011\*\*