

The Transit Oriented Basis Boost: Adapting the LIHTC to Finance Affordable Housing Near Transit

by

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ABSTRACT

The Low-Income Housing Tax Credit is arguably the most successful and important program in American history for the creation of affordable housing. The program leverages private investment in affordable housing, through tradable tax credits, to produce quality affordable housing throughout the country. By providing additional money for projects in areas with especially low incomes and high development costs, the program has actively encouraged the creation of affordable housing in certain cities, towns and neighborhoods. At the federal level, the program has not, however, encouraged the development of housing near transit. Since 2008, when states were given the option to provide additional money for certain projects, five states began programs to provide additional money to projects near transit.

This thesis examines the possibility of providing additional money to projects near transit at the federal level, in the form of a transit-oriented basis boost. It starts with a brief introduction to the Low-Income Housing Tax Credit, followed by a discussion of the importance of housing near transit. It then examines what various states are doing to encourage affordable housing near transit, followed by a proposal for a federal basis boost program. The thesis culminates in a case study, showing how providing additional money to projects near transit might affect the economics of developing affordable housing near transit.

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CHAPTER 1: Introduction

According to the Joint Center for Housing Studies at Harvard University, the federal Low-Income Housing Tax Credit is “the most successful federal affordable housing production and preservation program in the nation’s history (Harvard, 2009, p. 13)” Created as a part of the Tax Reform Act of 1986, the program has created nearly two million units of affordable housing (HUD dataset, 2011) by creating a financial incentive for private companies to invest in the creation of housing for low income people. Since 1989, the program has provided additional money to projects in expensive areas and places with especially low incomes. This additional money, or “basis boost,” has helped steer housing production to certain communities, where development costs are high and incomes are low.

In recent years the planning and development communities, along with an increasing segment of the general population, have focused on sustainable land use policies that allow people greater options for living near transit. As metropolitan areas have expanded and people have moved farther from employment centers, the issue of transportation access as a component of overall household expenditures has come into focus, particularly for people on the metropolitan fringes.

Considering that the Low-Income Housing Tax Credit program has been so successful in creating affordable housing, and that it has a long history of providing additional subsidies for building in certain areas, this thesis examines a change to the program that would encourage affordable housing development near transit by providing more financing for projects that meet certain criteria. Specifically, I will look at the benefits of providing a transit-oriented basis boost on the federal level, which would be based on existing programs that currently exist in five states.

Thesis Overview

After this introduction on Chapter 1, Chapter 2 provides a brief explanation of how the Low-Income Housing Tax Credit works, with a particular focus on the basis boost, and a recent rule change giving states more discretion in allocating funds, in order to provide a background for a later discussion of how the program could be adapted. Chapter 3 is a discussion of the importance of affordable housing near transit, and some of the challenges associated with its development. Chapter 4 examines what is currently happening on the state level to encourage affordable housing near transit. This discussion looks at approaches involving the Low-Income Housing Tax Credit, as well as other forms or grants and financing tools, with a discussion of some of the strengths and weaknesses of the various approaches. Chapter 5 synthesizes the preceding information and discussions with a proposal for a federal transit oriented basis boost and a look at implementing such a change in the current political environment. Chapter 6 examines a

theoretical case study to see what the basis boost could do for an urban project close to transit that could not be built under the current system. Chapter 7 concludes the thesis and offers thoughts on next steps in the effort to build more housing near transit.

Methodology

The primary sources for the discussion of the current Low Income Housing Tax Credit program were Novogradac & Company's 2011 Low Income Housing Tax Credit Handbook, and an earlier thesis submitted to the Center for Real Estate, Jason Korb's 2009 *The Low Income Housing Tax Credit: HERA, ARRA and Beyond*. Primary sources, especially individual states' Qualified Action Plans, were used for the sections on current state policies. These were augmented with other information from the states' websites, which generally provide extensive and easy to use information about tools for developing affordable housing. The basis for the case study was provided by the Dot Corner project, which won the 2011 Greater Boston Affordable Housing Development Competition. I was a member of the team that created the proposal, and I adapted it to be more generalizable since the original project had some unique limiting characteristics.

CHAPTER 2: An Introduction to the Low-Income Housing Tax Credit

The Low Income Housing Tax Credit (LIHTC) is a complex financing instrument designed to provide equity to affordable housing developments. A full explanation of how the program functions could fill an entire thesis, so what follows is a general outline, providing enough background to form the basis for a later discussion about how the program might be adapted to encourage the development of more housing near transit. For a more in depth explanation of the intricacies of the LIHTC program, including recent changes that have affected it, Jason Korb (MIT Center for Real Estate, MSRED 2009) has written an excellent thesis titled *The Low Income Housing Tax Credit: HERA, ARRA and Beyond*. An additional resource is the accounting firm Novogradac & Company, which publishes guides about the LIHTC program and maintains extensive resources on their website, novoco.com.

Background

Prior to 1986, liberal accounting rules set into the tax code allowed individuals to claim losses from investments in real estate and use those losses to offset ordinary income. As a result, wealthy individuals invested heavily in real estate, sometimes more as a tax shelter than out of the expectation of any real financial returns. In 1986, Congress passed the Tax Reform Act of 1986 (TRA 86) in order to simplify the tax code and make it more difficult for individuals to shelter their income from taxes by investing in real

estate. Since the ability to claim real estate losses against personal income had been a major motivation for people to invest in the development of affordable housing, Congress realized that without a new affordable housing program to replace the previous system, affordable housing development was likely to grind to a halt. So, as part of TRA 86, the Low Income Housing Tax Credit was established as a way to spur private investment in the creation of affordable housing. Since it was a tax credit written into the tax code, the program would be administered by the Treasury Department, rather than the Department of Housing and Urban Development (Korb, 2009).

When the LIHTC was created in 1986, it was intended to expire at the end of 1988, requiring annual appropriations after that point to keep the program alive. In November of 1989, Congress passed the Omnibus Budget Reconciliation Act, which extended the program through 1990, and also created a basis boost for Qualified Census Tracts (QCTs) and Difficult Development Areas (DDAs). The program was renewed annually until 1992, when Congress passed the Tax Fairness and Economic Growth Act of 1992, which would have made the LIHTC program permanent. The bill was vetoed by President George H.W. Bush, which eliminated the program on June 30, 1992. Congress tried again to make the program permanent later in 1992, but President Bush vetoed that bill as well. It was not until President Bill Clinton signed the Omnibus Reconciliation Act of 1993, on October 10 of that year, that the program returned, this time permanently (Korb, 2009). The bill made the tax credit a permanent part of the tax code, meaning that rather than

needing annual appropriations to keep the program alive, the program would continue indefinitely until Congress voted to end it.

How the LIHTC Works

The LIHTC is a dollar for dollar tax credit, meaning that one dollar of tax credit actually reduces a tax payment by that amount, as opposed to a tax deduction, which only reduces the amount of income that is taxable. In order to create affordable housing, the LIHTC program awards tax credits to developers of affordable housing, either for the developers' own use, or to be sold to a corporation to offset its tax bill. Primarily, these credits are sold to an investor, through a tax credit syndicator, in exchange for an upfront equity investment in the affordable housing development. The tax credits are awarded over a 10 year period, but the investor will typically provide all of the equity upfront, at various intervals over the development of the project. In exchange for the money coming into the project all at once, investors typically buy tax credits at a discount. In other words, even though each dollar of tax credit is worth a full dollar in tax reduction, investors will typically pay between \$.75 and \$.95 per credit. Prices have historically reached and surpassed \$1.00, for reasons that are beyond the scope of this thesis, but tax credit equity is generally worth less than the full amount of the tax credit.

There are two types of tax credits, the 4% Credit and the 9% credit, each referring roughly to the percentage of eligible development costs that are awarded annually to a

project (please refer to Korb's thesis for a complete explanation of the Applicable Percentage and how it is determined). Generally the 4% credit is used for rehabilitation of existing affordable housing projects, while the 9% credit is used for new development. Only the 9% credit is eligible for a basis boost (described below), and since the basis boost is the subject of this thesis, only the 9% credit will be discussed.

The 9% credit is competitive, meaning that there is a finite amount of money available to be allocated throughout the country to affordable housing projects. The money is allocated by the Treasury Department to every state, based on population. The per capita allocation was set at \$1.75 in 2002, and has been pegged to inflation since. For 2011, each state receives \$2.15 per capita, with a minimum for small states of \$2,465,000 (Novogodac, 2011).

The amount of tax credit that each project is eligible for is determined by a formula that is set at the federal level. The first step is to determine the Eligible Basis. This number represents the development costs that are eligible for LIHTC equity. This includes most hard and soft costs, but excludes non-depreciable costs such as land, deposits to reserves, and financing costs, in addition to some other costs such as marketing and lease-up costs. In addition, the cost to build anything that residents will be charged to use when the building is complete, such as parking structures, are excluded from the Eligible Basis (Korb, 2009). Any financing that comes in the form of a grant is also deducted from the Eligible Basis.

The Eligible Basis is then multiplied by the Applicable Fraction, or the percentage of the project that will serve low-income tenants. This number is the lesser of the percentage of units that will be affordable, or the percentage of square feet that will be in affordable units. Multiplying the Eligible Basis by the Applicable Fraction yields the Qualified Basis, or the amount that the tax credit rate is multiplied by to determine the amount of tax credit available to the project.

The Basis Boost

As of 1989's Omnibus Budget Reconciliation Act, there is another calculation, to determine the Adjusted Basis. Projects that are located in areas determined by the Department of Housing and Urban Development to be Difficult Development Areas or Qualified Census Tracts are eligible for a basis boost of 30%. This means that in order to encourage development of affordable housing in areas that have high poverty rates or low incomes (in the case of the Qualified Census Tract), or where costs are abnormally high (for the Difficult Development Area), the Qualified Basis is increased by 30% in order to encourage affordable housing development in those areas (HUD, 2011).

A Qualified Census Tract is defined as a tract where at least 50% of households have incomes below 60% of Area Median Income. The only places where this definition does not hold is in an area where more than 20% of the population would qualify. In that case only the 20% of tracts with the lowest incomes would be Qualified Census Tracts. A

Difficult Development Area is, according to the tax code, “any area designated by the Secretary of Housing and Urban Development as an area which has high construction, land, and utility costs relative to area median gross income (IRC § 42(d)(5)(C)(iii)(I)).” HUD determines these areas by comparing rents to incomes, determined on the city or county level for metropolitan and non-metropolitan areas throughout the country, with the areas with the highest ratios qualifying as DDAs. Both QCTs and DDAs have detailed rules governing the nuances of how they should be determined, which can be found on HUD’s website (<http://www.huduser.org/portal/datasets/qct/dda2000.html>).

Affordability

In exchange for LIHTC equity, developers agree to maintain a certain portion of their developments as affordable, by limiting rents to a certain percentage of the Area Median Income. Median income in a given metropolitan area is determined by HUD and adjusted for family size. Rents for different sized units are then determined based on the size of a family that is expected to live in each of those units. In order to qualify to live in an affordable unit, a family must not earn more than the income bracket that is approved for their unit. Tax credit projects are required to maintain their affordability levels for a minimum of fifteen years, and agree to an additional fifteen year Extended Low Income Housing Agreement, effectively requiring projects to maintain affordable rents for a total of 30 years. Since rents are limited by the program, LIHTC projects

generally have lower rents than market rate units, severely limiting the achievable net operating income, and therefore the amount of debt that that project can support.

A LIHTC development must satisfy one of two affordability tests: Either 20 percent of the units must be affordable to families making 50 percent of Area Median Income, or 40 percent of the units must be affordable to families making 60 percent of Area Median Income. As described above, the percentage of affordable units determines the Applicable Fraction, which determines the amount of tax credit available to a project. As a result it is common, at least in competitive states, to see projects that are 100 percent affordable, both to maximize tax credit equity, and to increase the chances of being awarded tax credits.

Allocating Credits

Each state is required to publish an annual Qualified Allocation Plan, which outlines that state's priorities for allocating credits that year. While these priorities may vary from state to state, the Treasury Department requires that the following selection criteria must be set forth:

- (i) Project location,
- (ii) Housing needs characteristics,
- (iii) Project characteristics, including whether the project includes the use of

existing housing as part of a community revitalization plan,

(iv) Sponsor characteristics,

(v) Tenant populations with special housing needs,

(vi) Public housing waiting lists,

(vii) Tenant populations of individuals with children,

(viii) Projects intended for eventual tenant ownership,

(ix) The energy efficiency of the project, and

(x) The historic nature of the project.

(IRC § 42(m)(1)(C).)

HERA

States have always been able to make their own determinations of other priorities, such as affordable housing preservation, and how much weight each criterion would be given. As a result, the types of projects that received funding varied from state to state and from year to year, as priorities shifted. But a change to the tax credit program in 2008 gave states far more flexibility in allocating tax credits. In response to the subprime mortgage crisis, Congress passed the Housing and Economic Recovery Act of 2008, which, in addition to a number of programs designed to address the crisis for market rate, for-sale properties, also made a number of changes to the LIHTC program (most of

the changes are not germane to the topic of this thesis, but are covered in detail in Korb's thesis).

Among the provisions in HERA was a change to the program that allowed states to declare any project as being in a Difficult Development Area, making it eligible for a basis boost. States are required to make the DDA designation only if a project would not otherwise be economically feasible (Korb, 2009), but are free to have their QAPs outline which types of projects, more specifically, are eligible for the basis boost, such as those preserving existing affordable housing, or, as will be discussed in later chapters, projects close to transit.

While the LIHTC has always been a tool for creating affordable housing, HERA, by granting states the ability to designate DDAs, was a major step in giving states an opportunity to innovate with new programs to influence where projects will be built. As the next chapter shows, the location of housing has a major impact on its overall affordability, and some states have chosen to use the LIHTC to try to address that issue.

CHAPTER 3: The difficulty of building affordable housing near transit, and why it is important

Developing housing of any kind near transit presents unique challenges. Densities tend to be higher, parking becomes more difficult to provide economically, and site planning becomes more complex. Perhaps most importantly, transit can drastically increase the cost of land, without a commensurate increase in achievable rents once a project is completed. But housing close to transit can provide tremendous affordability benefits, especially for low-income families for whom transportation costs can be a significant burden. This chapter will examine the relationship between transportation and housing affordability and why it can be challenging to provide affordable housing near convenient transportation options.

Barriers to TOD

According to NORR Architects and Planners, a leading designer of mixed-use transit oriented projects, with offices around the world, the main barriers to creating successful TOD projects fall into three broad categories: fiscal, organizational, and political. Political problems encompass neighbors and local officials who stand in the way of higher-density development, while organizational issues have to do with the various

official stakeholders, such as zoning boards and departments of transportation, who are not used to working together but must for TOD projects.

But it is the fiscal side that is the focus of this thesis, and as NORR writes:

“Fiscal barriers can be tied to higher construction costs, development fees and risk associated with higher density nodal development. Often the priciest aspect of high density TOD is the structured or below grade parking that is required to create a walkable neighbourhood and support the additional population living and visiting the area. These added costs can deter TOD and make the construction of affordable housing prohibitive, a key component of successful TOD. In addition, obtaining financing for TOD ’s can be difficult particularly in areas that are economically stagnant or on the verge of urban regeneration. Lastly, financing may be complicated by the mixed use nature of the development (para. 5).”

Across the country, numerous high-profile transit oriented developments have stalled in recent years, for a variety of economic reasons, many of which are outlined above. But a common theme among many of these projects is that land speculation raises rents beyond what developers can pay and still make a profit. Land values rise faster than the value of the finished projects. According to a an article from the urban planning web site

Planetizen, writing about a study conducted by the Center for Transit Oriented Development:

“Our study finds values begin to rise when public discussion of a new line or system begins, and they increase as the project is funded and construction begins. Most of the value is realized by the time transit service begins, though there is potential for increases if a system is expanded, or if there are other existing factors such as rising gas prices, increased traffic congestion, or station area improvements. In some regions with new systems, including Minneapolis-St. Paul, Houston, Denver and Charlotte, speculation over created value has made the price of land so high that it has stifled development (para. 12).”

According to a number of studies, proximity to rail transit has a positive but not monumental impact on residential real estate values. One study in San Francisco shows that home prices there increase by \$2.29 for every meter closer to a transit station a house is located, and a study in Philadelphia shows an average increase in home values of 6.4% for houses close to transit. Studies in other cities, such as Miami and Atlanta, indicate that there is no premium for being close to transit. This is true virtually nationwide when it comes to commercial properties, which multiple studies have shown do not increase in value at all if they are close to transit (Cervero, 2003).

Unique Challenges for LIHTC Projects

The difficulty of capturing increased rents near transit is true for all types of development, but it is especially so for affordable housing, where rents are contractually limited, and even the moderately increased rents that transit can provide to market developments are not available. This makes it extremely difficult to build affordable housing near transit stops using LIHTC, since more expensive transit-oriented developments need to compete for funding with less expensive developments built in less desirable locations.

In addition to basic laws of supply and demand, which would naturally predict that the least expensive housing would be built where land is least desirable and therefore least valuable, there are specific realities of the LIHTC program that exacerbate the difficulty of building affordable housing in job and transit rich areas. These are the fact that land is excluded from the Qualified Basis, the extremely competitive nature of the 9% credit in many states, and the fact that LIHTC projects cannot charge tenants for parking.

Since land is not depreciable, it is not included in the LIHTC basis. In practice this means that affordable housing developers must find money to pay for land either through grants, additional equity, or debt. Since the cash flows from affordable housing tend to be extremely low, finding equity investors or taking on large amounts of debt are frequently impossible. This means that affordable housing developers who attempt to

build a project where land is relatively expensive are more reliant on grants, and are more likely to request the full LIHTC allocation that a project is eligible for. This can create an issue when the competitiveness of the LIHTC program is factored in. Though the program allows for very specific limits on the amount of funding that a project can apply for, and states frequently employ their own limits, in the most competitive states the actual limitations on funding that a developer can expect to receive tend to be much lower in practice than what the rules allow. This is especially true in California, where it is explicitly stated in the state's Qualified Allocation Plan that projects seeking a lower allocation than the maximum allowed will receive preference in securing allocations (CA QAP, 2007).

Because developers trying to build in certain higher-cost areas can find themselves at such a disadvantage in securing LIHTC allocations, they are frequently forced to find less expensive land. Since states are required to include project location location in their scoring criteria, building on an inconvenient parcel not served by transit can negatively affect a project's application. But proximity to transit is generally not worth nearly as many points as other project criteria in LIHTC applications, increasing the likelihood of projects without good transit access being granted funding.

As NORR noted above, providing parking economically is a problem for all types of TODs, but this is especially true for LIHTC projects. Since the LIHTC program does not allow any amenity included in the Eligible Basis to have a charge associated with it for tenants

(Novogradac, 2011), developers have to decide to either provide surface parking only, which can be difficult and inefficient in more densely developed transit oriented areas, or find a way to separately finance an expensive parking structure. Depending on the municipality the developer can choose to not provide any parking, but there are relatively few areas where zero parking would be allowed, and where it would not present a significant marketing challenge.

Transportation as a Household Expense

The LIHTC program was never designed to address the issue of transportation affordability, and to many readers the issue of how the program addresses this issue is irrelevant. In fact, many affordable housing practitioners believe that the focus of the LIHTC program should be to produce the maximum amount of housing possible, rather than spending more money creating less housing in higher-cost locations. However, significant research exists showing that transportation costs rival and sometimes exceed those of housing in certain metropolitan areas. Furthermore, there is frequently a direct correlation between more housing affordability and higher transportation costs.

The Center for Neighborhood Technology (CNT) in Chicago has studied how transportation and housing affordability are linked, by factoring in a family's housing costs and its transportation costs to look at the burden that the two create for average families. While the traditional and widely accepted definition of affordable housing is

having housing costs that are no more than 30% of a family's income, CNT created a new definition of overall affordability, where the combination of housing and transportation do not add to more than 45% of a family's income (Liu, 2010). While the traditional definition of affordability shows that 69% of US families have affordable housing (as of 2009), by CNT's definition only 40% of US families live in a place where housing and transportation combined are affordable (Lipman, 2006).

According to CNT, in some places, the average family actually spends more on transportation costs than on housing. In Boston, the average housing burden is 29% of a family's income, while transportation accounts for 30%. In Portland, housing is 28% while transportation is 31%. Since transportation costs do not have large-scale federal subsidies based on income levels, as housing does, the transportation burden can fall most heavily on low income people, who may spend the same or less on transportation than others, but end up paying a higher percentage of their incomes. A 2006 CNT study showed that people who earned between \$20,000 and \$35,000 per year spent a significantly higher percentage of their incomes on transportation than those making between \$35,000 and \$50,000. For families living in central cities, the lower income group spent 22% of their incomes on transportation, while the higher income group spent 16%. For those living near other employment centers it was 31% versus 23%. And for families who lived farthest from employment centers, the lower income group spent 37% of their incomes on transportation, versus 26% for the higher income group (Lipman, 2006).

During the real estate boom of the early 2000s, the term “drive till you qualify” became shorthand for the tradeoff that families had to make in order to find affordable housing. As housing prices declined with distance from employment centers, more remote housing options seemed more appealing, allowing people to move to far-flung areas where housing was less expensive. In 2009, the Urban Land Institute’s Terwilliger Center for Workforce Housing examined this phenomenon, using the Boston area as a case study. Though the study focused on workforce housing, rather than subsidized affordable housing, it provides valuable lessons about the effects of working families living far from jobs and transportation. The study pointed out that:

“Affordable housing by itself is not sufficient if its location requires families to experience long, frequent, and expensive car trips. A focus on the combined burdens of housing and transportation costs highlights the importance of strategies such as building mixed-income housing near public transit and job centers and zoning for a mix of uses to reduce the need to drive long distances to meet basic needs. Such strategies help keep costs low for working families, strengthen the economy, and lower the carbon emissions of current and future generations (p. 1)”

Not surprisingly, the ULI study found that within the Boston area, residents in the City of Boston and within Route 128 (the close-in circumferential interstate highway) had the lowest transportation costs in the region. The study attributes these low commuting

costs to “good access to public transit and job centers, and ... dense residential development patterns (p. 7).” Not surprisingly, the study also found that regions at the edge of the Boston area, including central Massachusetts, the Merrimack Valley (near the New Hampshire border), Brockton (south of Boston) and Manchester and Dover, New Hampshire, all had higher than average commuting costs, despite also having below average incomes. The study attributes these high commuting costs to “limited access to transit and major job centers (p. 7).”

These studies show that affordable housing is not all that matters in the overall affordability equation, and that finding affordable housing is frequently a factor in other associated costs increasing. Transportation is always a major expenditure, but it seems to become a more significant portion of a family’s income burden as they move to farther-flung parts of a region, where housing prices are lower (Lipman, 2006). Despite increasing evidence that the location of affordable housing can lead to other household costs increasing, the LIHTC program does not provide incentives for building affordable housing closer to transit or job centers. Instead, the economics of land prices within metropolitan regions effectively eliminate any incentive to place LIHTC projects in places where residents’ transportation costs would be minimized. Although there have not been any large-scale, exhaustive studies of where LIHTC projects are built within metropolitan regions, anecdotal evidence suggests that they are built where land costs are lowest, places that also tend to have the worst transportation access.

What is Transit?

Public transportation in America takes many forms, including buses, bus rapid transit, streetcars, light rail, subways, commuter rail, and ferries. While all of these modes move larger numbers of people more efficiently than private automobiles, the level of service varies with each type, and studies show that the type of transit being offered has a tremendous effect on ridership.

While relatively few cities have rapid transit subway systems and diesel commuter rail lines, virtually every city in the country offers some level of bus service, and light rail service has become increasingly popular in recent years, with cities such as Los Angeles, Denver, Charlotte, Phoenix, Minneapolis and Salt Lake City introducing new service. At the same time, proponents of Bus Rapid Transit (BRT), a bus service that has larger vehicles, travels in a dedicated lane and frequently has covered waiting areas that allow people to pay the fare before boarding the bus, for faster boarding, have been making the case that BRT provides equivalent service to light rail, at a fraction of the cost. As a result, the primary transit debate in the country has become one of whether light rail is worth the extra cost, or if BRT is a wiser investment.

As recently as the 1980s, transportation planners assumed that transit services would attract the same number of riders regardless of type, that a new bus line would attract as many users as a new rail line. Starting in the late 1980s, however, planners started to

recalibrate their models to acknowledge that rail service attracts far more riders than buses. In Washington, DC, planners discovered that rail transit attracted 43 percent more riders than seemingly equivalent bus lines. In Boston, the introduction of new light rail service through the suburban communities of Brookline and Newton in 1959 dramatically increased ridership over the bus lines that had previously served the area. While buses served approximately 2,500 riders per day, when they were replaced with rail service ridership increased to 26,000 (Tennyson, 1989).

While those data indicate that light rail is a better way to get more people using transit than buses, more recent ridership studies show mixed results depending on which group is behind them, with some studies (O'Toole, 2004) showing that improved bus service increases transit use as much as light rail service, while others (Henry, 2011), show that rail systems significantly outperform buses in attracting riders. While the data can be interpreted to support either argument, there are more studies saying that light rail attracts more riders than any form of bus service. However, both sides agree that rail is also significantly more expensive to build. The debate then becomes one of whether the light rail is worthwhile (this debate exists in many forums, but is well-represented in Lindblom, 2008).

An interesting corollary to the debate is that both sides tend to agree that light rail attracts more "choice riders," or people who have other transportation options, but choose to use rail for some trips, while bus riders tend to have fewer other options, and

rely exclusively on public transit (Henry, 2011). Though this is often used as an argument in favor of rail, the logic being that it will do more to increase transit ridership and get people out of their cars, it could be argued that for the goal of increasing accessibility to jobs for low income people, policies should focus on increasing transit access to people without another choice.

The ways that various states are approaching the question of how to encourage housing near transit, and what qualifies as transit, show what difficult issues need to be addressed in creating a policy around improved transportation access near affordable housing.

CHAPTER 4: State programs to build affordable housing near transit

With the importance of transportation access as a component of overall household expenditures, many states have tried to encourage the development of affordable housing near transit. Some states have focused on grants that exist outside of the LIHTC program, while others have tried to use LIHTC to steer affordable housing into transit-rich areas. Since 2008, when HERA authorized states to designate Difficult Development Areas, five states – Texas, Missouri, Oregon, Utah, and Mississippi – have created programs that allow projects near transit to take a basis boost (based on reviews of the 50 states' Qualified Action Plans). While HERA was intended to provide temporary relief to the tax credit market by instituting changes that would make certain projects more feasible, Congress has thus far (as of mid-2011) continued to allow states to set standards for which projects are eligible for a basis boost.

This chapter will compare the approaches of states that have instituted a basis boost with those that have used other methods to encourage affordable housing near transit. Three states that do not offer a basis boost, but are considered leaders in programs to encourage transit-oriented housing – Massachusetts, California, and Colorado – will be compared to the five states listed above, in order to compare the types of financial incentives available across the country and provide a basis for later discussions about

national policies and how funding sources would affect a theoretical case study in Massachusetts.

Non-Basis Boost Subsidies

The three states listed that do not offer a basis boost for transit-oriented projects, but try to encourage them with other subsidies, take various approaches, and administer grants through various state and local agencies. Some use the LIHTC program to steer development toward transit, while others rely exclusively on other tools. All are considered leaders in efforts to build housing near transit, and all feature established or emerging transit systems that are more extensive than what is found in most other states. Below is an outline of the programs offered in the three states to encourage transit-oriented housing development.

California:

The largest program in California for the production of affordable housing near transit is the TOD Housing Program, administered by the California Department of Housing and Community Development. The program provides low interest gap financing for the production of affordable rental housing and for mortgage assistance for affordable homeownership opportunities. The program also includes grants for infrastructure (including parking garages) designed to serve

specific affordable housing developments, in an attempt to offset one of the greatest difficulties in financing TOD developments.

The program was created as part of Proposition 1C, the Housing and Emergency Shelter Trust Fund act of 2006. It currently provides up to \$17 million per project for projects located within one quarter mile of a transit station.

Of less importance is the California Department of Transportation's Community-Based Transportation Planning Grant, which provides funding for the planning of connections between transit and communities. There are also a number of small, locally focused planning grants for various parts of the state.

The California Qualified Allocation Plan, which guides the allocation of tax credits, focuses mainly on populations to be served by LIHTC projects, rather than other project characteristics, and does not mention transit proximity as a scoring criterion (CA QAP, 2007).¹

¹ Details on the TOD Housing program can be found at <http://www.hcd.ca.gov/fa/tod/> and more on the Transportation Planning Grant can be found at <http://www.dot.ca.gov/hq/tpp/grants.html>.

Colorado:

Colorado's main funding source for affordable housing near transit is a partnership between the Denver area's Metro Mayors Caucus, and the Colorado Housing and Finance Authority. The cities and towns who are members of the partnership have pooled their Private Activity Bond authority to create a lending source for affordable rental housing within 1500 feet of a transit station in or around Denver.²

For LIHTC allocations, the Colorado Housing and Finance Authority awards points to projects within 1500 feet of transit station or bus stop. These points are counted in the secondary selection criteria. These criteria are applied to projects that meet the minimum standards of the LIHTC program, and are used to determine which projects receive funding (CO QAP, 2011).

Massachusetts:

Massachusetts has a number of programs to encourage affordable housing near transit, but the program that is most commonly used is the Commercial Area Transit Node Housing Program. The program is designed to support smaller (24 units or fewer) affordable rental housing projects within one quarter mile of a

² The program is detailed at <http://www.metromayors.org/Downloads/tod%20brochure.pdf>.

transit station. Up to \$750,000 per project, or \$50,000 per unit is available in the form of soft 30-year, 0% interest loans.

The MassWorks Infrastructure Program provides grants to communities to support the infrastructure component of TOD projects. While it is designed primarily as an economic development tool, it can also be used to support residential projects with a density of at least 4 units per acre.

The Smart Growth Overlay Zoning District Map, known as Chapter 40R is another Massachusetts program designed to encourage housing near transit. The program provides financial incentives of up to \$600,000 to communities who create high-density zoning overlay districts near transit, with a requirement that at least 20% of the housing be designated affordable.

Massachusetts also provides LIHTC points for projects located near transit. The Massachusetts Qualified Allocation Plan separates the scoring criteria into Fundamental Project Characteristics and Special Project Characteristics. A project must receive a minimum score on all Fundamental Project Characteristics in order to be considered for funding, and Special Project Characteristics are used to encourage the types of projects that the Massachusetts Department of Housing and Community Development would prefer. For Special Project Characteristics, a total of 82 points are available, with up to six points being

awarded to projects that are within one half mile of a rail station, bus stop, or ferry terminal (MA QAP,2011).

While the state subsidies listed above are helpful in providing incentives for affordable housing near transit, they do not completely harness the power of the nation's largest affordable housing program, the LIHTC. The LIHTC has already been adapted to encourage the development of affordable housing in certain areas, in the form of the basis boost for Qualified Census Tracts and Difficult to Develop Areas. As discussed in Chapter 2, the basis boost was created in 1989 with the express purpose of steering the development of affordable housing to areas with lower income levels (in the case of the Qualified Census Tract) or higher development costs (for the Difficult to Develop Area). Since HERA granted the option, some states have already determined that transit proximity justifies a basis boost, and how the change to the LIHTC program was implemented in each state shows the diversity of opinions across the country about what constitutes effective transit oriented development.³

³ More information about the CATNHP program can be found at:
http://www.mass.gov/?pageID=eheadterminal&L=3&L0=Home&L1=Housing+Development&L2=Affordable+Rental+Development&sid=Ehed&b=terminalcontent&f=dhcd_hd_catnhp_catnhpr&csid=Ehed.

Details on the MassWorks program are available at:
http://www.mass.gov/?pageID=eheadterminal&L=4&L0=Home&L1=Economic+Analysis&L2=Executive+Office+of+Housing+and+Economic+Development&L3=Massachusetts+Permit+Regulatory+Office&sid=Ehed&b=terminalcontent&f=permitting_massworks_program_mainpage&csid=Ehed.

A toolkit for Chapter 40R is at:
http://www.mass.gov/envir/smart_growth_toolkit/pages/mod-40R.html.

State Basis Boost Policies

An examination of how those states structured their programs can provide the foundation for a look at expanding the program to the federal level. While some states are very clear about the requirements that projects must meet in order to receive the basis boost, others leave them somewhat vague and open to interpretation, but all make it possible to receive a basis boost for some definition of proximity to transit.

Oregon

In Oregon, the Qualified Action Plan states that the basis boost has been extended to certain projects “Based on research of the types of projects and the areas in need of the 130% basis boost.” One of the criteria for establishing that a project met this definition was:

“Projects that are located in Transit Oriented Districts (TODs) or Economic Development Regions (EDRs) as designated by local governments, or projects in a designated state or federal empowerment/enterprise zone or Public Improvement District (PIDs), or other area or zone where a city or county has, through a local government initiative, encouraged or channeled growth, neighborhood preservation, redevelopment, or encouraged the development and use of public transportation (p. 46).”

By tying the definition to specific official designations of certain areas, Oregon is putting power into the hands of local governments, who would make those designations, while removing some of the discretion from the state level. The language of Oregon's basis boost policy strongly indicates that projects that meet the state's basis boost criteria will be guaranteed the basis boost, as areas in QCTs and DDAs are on the federal level, rather than being subject to approval on a case by case basis.

Texas

This is in contrast with the basis boost program in Texas, which does not guarantee a basis boost, but indicates that being part of a transit-oriented district could add 30% to the basis. To be eligible for the basis boost in Texas, a project must be located in a High Opportunity Area, which is defined as an area with less than 10% poverty, that has a higher median income than the rest of the county in which it is located, or is close to transit, per the state's Qualified Allocation Plan. Projects seeking the basis boost for transit must be:

“A four story or greater Development with structural parking that is proposed to be located within one-quarter mile of existing major bus transfer centers, regional or local commuter rail transportation stations, and/or Transit Oriented

Districts that are accessible to all residents including Persons with Disabilities...(p. 13)”

Although the basis boost is not guaranteed in Texas, it is noteworthy for being very specific in detailing what criteria a project must meet in order to be eligible, rather than leaving the determination to local jurisdictions. By requiring a minimum number of stories for projects to qualify, the program encourages density near transit. Perhaps the most noteworthy requirement, however, is the inclusion of a requirement for structured parking. While it may be counterintuitive to require parking in a TOD, the requirement is most likely designed to offset one of the greatest challenges of high density LIHTC projects, which is the inability to charge tenants for parking, which can be extremely costly in projects where expensive parking structures are required. By limiting the basis boost to projects that include structured parking, the program seems to be designed to level the playing field for TOD.

Missouri

In Missouri, eligibility for a basis boost is far more subjective, with an emphasis on projects receiving the basis boost being part of a larger transit oriented development, mixed use development, or both. The state’s QAP says that for a project to be eligible for the basis boost, it must:

“Be part of a mixed-use economic development area that includes different housing types for different household income levels, new retail/office/light industrial space that creates new permanent jobs, and new public space or activity centers designed for users of the area; or

Be part of a Transit Oriented Development (“TOD”) plan as defined in the Developer’s Guide. The TOD plan must be centered around and integrated with a transit stop. The plan must be mixed-use, mixed-income, pedestrian friendly and of appropriate density for a TOD (p. 5).”

The state’s Developer’s Guide, released as part of the Notice of Funding Availability (NOFA) for all state housing programs, provides more detail on what qualifies as a transit oriented development for the purposes of the basis boost:

- “1. The development must be located within five blocks of a light rail transit stop.
2. The master development plan must include a balanced mix of uses, providing residents the ability to live, work and shop in the same neighborhood.
3. Transit service at the stop must be frequent (every 15-30 minutes).
4. The transit service must offer increased mobility choices and good transit connections.
5. The master development must include significant retail development.

6. The master development must include a mix of housing choices (rental and for-sale, affordable and market-rate).
7. The development must include a mix of transportation choices including biking and walking (p. 67).”

Missouri’s list is noteworthy for a number of reasons. The first is that it is more specific than other states about what qualifies as transit. While some states have broad definitions of what transit is, including everything from commuter rail to bus stops, Missouri only counts light rail. It is also extremely specific about the distance and frequency of service. It is, however, equally noteworthy for the subjectivity in determining which projects will get funding. The Missouri Housing Development Corporation makes clear that it will determine, in its sole discretion, what projects are eligible, rather than providing a guarantee like Oregon. Also, by including subjective requirements for “a balanced mix of uses,” “significant retail development,” and “a mix of transportation choices including biking and walking,” it is clear that the intent is for a basis boost to be given on a case by case basis, based on overall quality of the plan, rather than easily measured metrics. Recognizing that one LIHTC project is unlikely to be of the scale and type to singlehandedly create that type of project, the Developer’s Guide goes on to say that one key element in determining whether or not a project is eligible for a basis boost is that it be part of a larger project, rather than being the only project.

Utah

In Utah, proximity to transit is the only state-level basis boost available. In order to qualify, a project must be within 1/3 mile of an existing or under construction light rail or commuter rail stop in the Salt Lake City area. Although the basis boost is not guaranteed, there are no subjective criteria that must be met in order to qualify for the basis boost. According to the state's QAP proximity to the stations is all that is required.

Mississippi

The Mississippi Home Corporation, which is the LIHTC allocating authority in that state, does not specifically provide a basis boost for transit oriented projects, but it does offer the possibility of a basis boost to address high land costs for projects where the location meets a specific need, including transportation access. The QAP states that:

“Acquisition of land at abnormally high cost, that provides additional specific benefits to the tenants residing in the developments (i.e. transportation, hospital, access for seniors) may justify the developments for the 30% (thirty) percent discretionary basis boost (p. 43).”

The basis boost is clearly far from guaranteed, as the Corporation has the right to determine if a high land cost provides a worthwhile benefit on a case by case basis, and does not guarantee a basis boost for any specific type of project.

Comparing the Programs

Though the five states listed above all provide a basis boost to projects that are close to transit, the different approaches they take and the different definitions of what projects are truly transit oriented show that there is not necessarily one right way to provide a basis boost for transit oriented projects. All of the programs feature varying levels of subjectivity in the criteria for granting a basis boost and varying levels of effectiveness in reaching the goal of encouraging affordable housing development near transit.

Perhaps the most important aspect of creating a federal basis boost program would be the need for scalability, or the ability to implement the program on a large scale. In the current basis boost system, Qualified Census Tracts are clearly defined, and easily searchable in order to determine if a particular address falls within the particular tract. Difficult to Develop Areas are equally clearly defined, on either the city/town or county level. In both cases, there is no subjectivity in awarding the extra 30% to a project.

In many of the state basis boost programs, however, there is a great deal of uncertainty for developers who apply for the program because the definitions of which projects are

eligible can be so unclear. Mississippi's program, which allows for the possibility of a basis boost if a high land cost is justified by some other factor, is probably the least clear, and would be the hardest to implement on a federal level. Missouri's program is specific in terms of type of transit, the maximum distance that a project may be from transit, and how often the transit service should run, but very imprecise on the standards for the larger project that the housing should be a part of. By requiring "significant retail development" and "increased mobility choices" it is clear what type of development Missouri is hoping to attract, but also clear that it would be difficult to create a nationwide standard for those items. Texas and Utah, however, provide very clear guidance on what is required to qualify for the basis boost. In Utah the only standard is distance from a rail station, while Texas outlines other characteristics that the project must possess, such as type of transit, heights of buildings, and the inclusion of structured parking. For Oregon, where the only standard for a project is that a municipality considers part of a greater economic development or transit oriented zone, the standard is clear on the state level, but does nothing to set standards that municipalities should follow in making such a determination.

However, clarity and scalability are far from the only goals that a federal program would have; it would also need to demonstrably address the issue of transit access for low-income people. While proximity to transit is an obvious standard for projects to meet, there are great questions involved with other aspects of transit oriented development, such as the type of transit being offered, and what other amenities are included in a

development that includes affordable housing, which would be difficult for the federal government to determine.

How transit is defined in the various states depends to some extent on what form of transit is available. All of the states examined in this chapter and the previous chapter, with the exception of Mississippi, have some form of rail transit in at least one city. California has large transit systems in its largest cities, Los Angeles, San Diego, and the San Francisco Bay Area, with smaller systems in San Jose and Sacramento. Colorado, Utah and Oregon have small but rapidly expanding light rail and commuter rail systems in Denver, Salt Lake City, and Portland. Missouri has a small trolley system in Saint Louis, with proposals for a new system in Kansas City. Texas has a variety of rail services in Dallas, Houston and Austin. Massachusetts has one of the country's largest and most extensive rail systems, combining light rail, heavy rail, subways, streetcars and commuter rail.⁴

With these varied offerings it is no surprise that each state has a different definition of what qualifies as transit for the purposes of receiving funding for transit oriented developments. However, the varying definitions of transit do not correspond with the type of transit being offered. Massachusetts, for its TOD subsidies, includes a bus stop as transit (MA QAP, 2011), while Missouri, with just one light rail line, only provides its

⁴ All transit information is from the Federal Transit Administration's website, fta.dot.gov. Since there are no comprehensive lists of types of transit available in every state, information about each state's systems was found by visiting pages within the site, organized by region.

basis boost to projects located within five blocks of one of its stops (MO QAP, 2011). For a federal policy a decision would most likely have to be made to set one standard, such as access to rail service, which would apply to the whole country, or create coherent guidelines that would allow for different levels of transit service in different states, and different parts of states, and adjust the requirements accordingly.

Any proposal would also need to be politically feasible, which might be difficult, considering how heavily concentrated the largest transit systems are in Democratic states. The seven largest rapid transit systems in the country serve states that voted for Barack Obama in the 2008 presidential election, and only one of the top 15 systems – MARTA, in Atlanta – is in a state that voted for John McCain.⁵ Of the largest light rail systems, only seven of the states with the largest 30 systems voted for McCain and only two of the 20 largest commuter rail systems are in McCain states. Any effort to link a transit basis boost to rail service would likely be politically difficult due to the political lopsidedness of where the rail systems are located. The current system of Qualified Census Tracts and Difficult to Develop Areas is designed to provide relatively even opportunities for basis boosts throughout the country, and it would be extremely important to assure that any transit oriented basis boost did the same.

⁵ These data were compiled by comparing the data on fta.dot.gov, mentioned above to election results provided by CNN, at <http://www.cnn.com/ELECTION/2008/results/state/>

CHAPTER 5: A proposal for a transit oriented basis boost, and the realities of implementation

The states that have implemented basis boost policies for transit-adjacent affordable housing can combine to form a basic framework for what a federal basis boost might look like and how it would function. Taking into account the concerns outlined in the previous chapter, the following is a proposal for a federal basis boost program for projects located in proximity to transit, followed by an examination of the political feasibility of incorporating the basis boost into federal policy.

The Proposal

Type of Transit

The primary issue facing a federal program would have to be an assurance that it would have a significant positive impact on the problems outlined in Chapter 3, of American families, particularly low-income families, facing increasing hardship as a result of transportation costs. Therefore, a program that sets the bar too low and provides a basis boost to projects that will not be effective should not be considered.

For that reason, a minimum level of transit service should be mandated in order to receive the basis boost. That would involve setting standards for the type and frequency

of service that would qualify. While transportation planners and users generally consider rail transit to be superior to bus service, in terms of speed, reliability, and availability of one seat rides from home to work, the relative paucity of rail systems in the United States would only make a relatively small number of projects, in an even smaller number of states, eligible to take part in the program. For that reason, Utah and Missouri's rail-only basis boost should be eliminated.

To strike a balance between rail only programs and subsidizing projects that will only provide insufficient service, I propose using Texas' system as a basis, and borrowing one aspect of Missouri's program. Because Texas is a state with fast-growing cities but relatively little in the way of rail service, its program is flexible in allowing for a basis boost near rail and bus services. But rather than allowing the basis boost for being close to any bus stop, which may have spotty service, it requires projects to be near rail or a "major bus transfer center." Since bus transfer stations may not exist everywhere with decent bus service, the definition could be amended to something that indicates an area with better-than-average bus service, or an area served by some minimum number of bus lines. In addition, taking a page from Missouri's program, a minimum frequency of service could be specified. The advantage of a program like Texas' is that it involves an infrastructure component (rail or a bus station), making it less likely that the level of service will change drastically after the project is built (a bus line that runs every ten minutes could easily be changed to run every hour during a budget crisis).

Type of Development

Many of the state programs offering a basis boost for TOD try to encourage the development to be part of a greater transit oriented project or development. Texas requires projects that receive the basis boost to be at least four stories, and for structured parking to be part of the development. These requirements are consistent with a higher-density transit district, and show that Texas is trying not only to build housing near transit, but to create a particular kind of development with its basis boost. Missouri has very clear guidelines for its basis boost that seem to place as much importance on urban design as transit access. While the state requires developments to be within five blocks of transit, it also requires that “the plan must be mixed-use, mixed-income, pedestrian friendly and of appropriate density for a TOD.”

Oregon arguably puts the most emphasis on the non-transit aspects of TODs by requiring projects to be within a district that a municipality creates. While the details of what such a district would be comprised of are not outlined by the state, the implication is of a more holistically planned project than would be required if transit proximity were the only criterion. Utah, however, takes a different approach. For projects in that state to receive a basis boost, they must simply be within 1/3 of a mile of a transit station. There is no effort made to assure that other design or experiential elements are part of a plan.

While the programs that try to create broader walkable districts are likely to appeal to certain groups of urban planners and advocates of compact, traditional neighborhoods as a smarter way to develop cities, walkability does not necessarily address the issue of providing transportation options for low income people by combatting the “drive till you qualify” paradigm and addressing the issues outlined in Chapter 3. While having a pleasant walk to transit may make people more likely to use it the effect is not as great as proximity to transit.

The other issue with trying to legislate a certain type of neighborhood is the issue of implementation. While the goal of providing transportation options to low income people is relatively straightforward, questions of urban design are far more subjective. What is the proper height for buildings? How much retail should be included? Should parking be required? Should it be discouraged? There is no answer to these questions that would be applicable across the country, for every project. Agreeing on an overall vision on the federal level for what a transit oriented development should be would be an extraordinarily difficult and time-consuming undertaking, and would very likely stall an effort to make a transit oriented basis boost a reality.

For that reason, I would propose a simple distance-based system, where projects would only be eligible for the basis boost if they were located within a certain distance of transit (somewhere between $\frac{1}{4}$ and $\frac{1}{2}$ mile, which is generally regarded to be a comfortable walking distance for transit), with direct access. That would mean that

projects that are technically near transit but separated by a highway or some other barrier, without an easy walking path, would be excluded. A distance would be far easier to agree on than a whole system of development guidelines, and would be far simpler to administer when projects apply for the basis boost. Just as the current system uses census tracts and cities, towns and counties to make it abundantly clear which projects are eligible, a distance-based system would do the same.

Difficult Development Area

While the legislation authorizing the creation of state level basis boosts placed them under the umbrella of Difficult Development Areas, any national basis boost system should create a new category, separate from DDAs and QCTs, under which projects would apply for the basis boost. While it is clear that HERA placed these new areas under the DDA umbrella in order to implement the change quickly, there would be issues with such a plan if the program were handled nationally and made permanent.

The list of DDAs is created using very specific criteria that includes not only costs but incomes as well, and is catalogued on a citywide or countywide basis. Transit oriented projects share hardly anything fundamentally with those areas, and would need to be determined on a much smaller, more local level, and trying to force a transit basis boost under that umbrella would simply create confusion.

Instead, I would advocate for a specific transit basis boost, separate from the DDA designation, with each state responsible for maintaining a catalogue of eligible transit stations or stops, and the onus on the developers to prove that their sites are within the required distance of one of those stops. This would simplify the administration of the new basis boost on the federal level, but still make the program consistent enough that it could be centrally administered and easy to understand.

How to Implement Changes to the LIHTC Program

Since the LIHTC is a part of the federal tax code, any change to it would require an act of Congress. This is what happened in 1989 with the Omnibus Budget Reconciliation Act of 1989, which added the QCT and DDA basis boost, and in 2000 with the Community Renewal Tax Relief Act, which made slight changes to the determination of QCTs (Korb, 2009). While the process for implementing changes to the tax code is straightforward, the reality of implementing a change that may be seen as making the LIHTC program more generous is less so.

By most accounts, the LIHTC has long garnered broad bipartisan support. The original Tax Reform Act of 1986 passed the Senate by a vote of 97 to 3 and the act that added the basis boost passed 87 to 7, with six abstentions. Since that time, according to a 2009 report by Harvard University's Joint Center for Housing Studies, "The LIHTC program gained broad bipartisan support because every state has successfully used the tax

credits to produce and preserve affordable rental housing. As a federal program with funding awarded on a per capita basis, it enjoys Congressional support among those representing both the nation's most and least expensive housing markets.”(13) The public-private nature of the program has also been one of its strongest appeals for both sides of the political aisle. This, according to Chickie Grayson, president of Enterprise Homes, “reduces federal costs, private investors bear the risk, and the federal government awards credits only after properties are built to appropriate quality standards and occupied by income eligible residents at affordable rents (Grayson, 2011).”

Conventional wisdom has long held that the program's support from both parties made it safe even in times of budget reductions. However, the political climate in mid-2011 is calling the conventional wisdom into question and causing many observers to believe that all spending and tax credit programs could conceivably be targeted for cuts. The bipartisan deficit reduction commission appointed by President Obama in 2010 called for a reduction in expensive tax credit programs, though the report did not specifically mention the LIHTC. Since much of the budget reduction pressure is coming from the Republican party, which has a stronger presence in states with less transit, as outlined above, the current political climate would likely make the basis boost difficult to enact now.

In order for the LIHTC program to expand, its appeal as more than a program to provide housing to low-income people would need to be emphasized. While the program is extremely successful at creating housing, it is also an excellent investment vehicle for large banks and corporations, who can realize high yields by investing in LIHTC projects. That creates a strong additional group of advocates, and an argument that may be more palatable to politicians who are not moved by arguments that focus on the benefits of the program to low-income people.

Another approach that could give the change to the LIHTC program broader appeal is a focus on the benefits to aging Americans, whose mobility options become very limited as they age beyond the point where they are safely able to drive. Shaun Donovan, the Secretary of HUD, points out the importance of the LIHTC program for the elderly, by saying “...for all the great work HUD’s sec. 202 program [a program designed specifically to fund elderly housing] does to build affordable housing for seniors, seven times as many units for the elderly and disabled are produced under the tax credit (AHF, 2011, para. 1)” By focusing on the project as a tool to provide housing choice for individuals, including large numbers of seniors, who want to be near transit, the political landscape could be kinder to a proposal to change the LIHTC program.

Another challenge to the change proposed above is the problem of scarce resources in the most expensive and most competitive states. Places like California and Massachusetts already place limits on the amount of LIHTC funding that an individual

project can receive, in order to make sure that the scarce funds are distributed among the maximum number of projects. Basis caps, which limit the Eligible Basis that a project can count, and pre-project limits, which cap the total LIHTC allocation available to a project, are already a major hurdle in some states, before an additional option for a basis boost comes into play. This is a complex issue, and the possible solutions, of funding fewer units in order to make sure those units are closer to transit, or trying to raise total LIHTC funds available to states with transit, add to the political difficulty in changing the program.

To offset the challenges in changing the LIHTC, the next chapter will illustrate the benefits of a possible change. By showing how an urban project, close to transit and amenities, could be transformed from infeasible to feasible, the potentially transformative nature of the transit oriented basis boost will become evident.

CHAPTER 6: DC2, a case study

A case study may best illustrate the advantages of a transit oriented basis boost, as well as illustrating how it would work. The case to be examined is a modified version of the Dot Corner project, which won the 2011 Greater Boston Affordable Housing Development Competition, an annual competition of Boston area graduate schools to produce a plan for an affordable housing development at a real site. The modified case for this thesis will be called Dot Corner 2, or DC2 for short.

Dot Corner 2 is a 32-unit project proposed for a city-owned parcel in Fields Corner, a densely developed retail and residential area in Boston's Dorchester neighborhood. Dorchester is a traditionally lower income neighborhood with large immigrant and minority populations. Fields Corner is one of the neighborhood's more active retail areas, and home to Fields Corner Station, a rapid transit stop on the Massachusetts Bay Transportation Authority's Red Line. The Red Line connects directly to two of the Boston area's largest employment centers: the downtown financial district, and Kendall Square in Cambridge, making Fields Corner an ideal location for providing affordable housing with good access to jobs.

Because Fields Corner is a dense urban area, DC2's parcel totals only 11,600 square feet. It is at the corner of Dorchester Avenue, the area's main commercial thoroughfare, and

Park Street, with a city-owned alley at the rear and a small private parking lot on the lot's fourth side. The site is extremely constrained, with no room for construction staging, and would face expensive pedestrian circulation issues during construction. This site, with its benefits and challenges, reflects the issues addressed to this point in this thesis: while it provides advantages from a transportation perspective, it is a much more expensive site on which to build housing than a larger greenfield site in a less developed part of the region.

In an effort to make the case as universal as possible, I will present the project's finances with and without Massachusetts' basis cap. A basis cap is a rule that exists in a number of competitive states, which disallows an Eligible Basis above a certain amount, on a project and/or per unit basis. If a project's Eligible Basis is too high, the cap comes into play, and the Eligible Basis is calculated off of the cap number, rather than the actual calculated Eligible Basis. In Massachusetts, the basis cap is \$250,000 per unit (MA QAP, 2011). This project would surpass that cap, but to make the case generalizable it will be presented first as if it were in a state without a cap, and then re-presented with the cap, to show how a basis cap can affect certain projects in states like Massachusetts.

The development uses below outlines the project's development costs:

Uses of Funds	\$	\$/Unit	\$/SF	% of TDC	LIHTC Eligible Amount
Acquisition Costs					
Land	\$ 90,000	2,813		0.90%	0
Acq Financing Fee	\$ 700	22		0.01%	0
Acq. Legal	\$ 250	8		0.00%	0
Acq. Maintenance and Mgmt	\$ 1,000	31		0.01%	0
Acq. Title and Recording	\$ 300	9		0.00%	0
Acq. Interest	\$ 7,500	234		0.07%	0
Subtotal: Acquisition Costs	\$ 99,750	3,117		0.99%	0
Hard Costs					
Construction	\$ 6,626,250	207,070	190.00	1	6,626,250
Parking	\$ 166,667	5,208	4.78	1.66%	166,667
Contingency (6%)	\$ 407,575	12,737	11.69	4.06%	407,575
Subtotal: Hard Costs	\$ 7,200,492	225,015	206.47	71.81%	7,200,492
Soft Costs					
A/E Design and Inspection	\$ 509,472	15,921	14.61	5.08%	509,472
Bonding	\$ 47,763	1,493	1.37	0.48%	47,763
Permits	\$ 63,684	1,990	1.83	0.64%	63,684
Survey	\$ 5,000	156	0.14	0.05%	5,000
Geo and Env. Assessment	\$ 10,000	313	0.29	0.10%	10,000
Clerk	\$ 45,000	1,406	1.29	0.45%	45,000
Insurance	\$ 50,947	1,592	1.46	0.51%	50,947
RE Taxes	\$ 2,667	83	0.08	0.03%	2,667
Marketing/Lease-Up	\$ 53,333	1,667	1.53	0.53%	0
DND Env. Contingency	\$ 100,000	3,125	2.87	1.00%	100,000
Appraisal	\$ 5,000	156	0.14	0.05%	5,000
Title and Recording	\$ 2,150	67	0.06	0.02%	2,150
Traffic Study and Trans. Analysis	\$ 7,500	234	0.22	0.07%	7,500
Lender and LP Review and Insp.	\$ 12,000	375	0.34	0.12%	12,000
Cost Cert. Accounting	\$ 15,000	469	0.43	0.15%	15,000
Legal					
Developer	\$ 75,000	2,344	2.15	0.75%	63,750
City Counsel	\$ 15,000	469	0.43	0.15%	7500
Financing Costs					
Permanent Lender					
MHP Application Fee	\$ 497	16	0.01	0.00%	0
Loan Fee	\$ 4,967	155	0.14	0.05%	0
Legal	\$ 15,000	469	0.43	0.15%	0
Construction Lender					
Loan Fee	\$ 453	14	0.01	0.00%	453
Legal	\$ 15,000	469	0.43	0.15%	15,000
Const. Loan Int. Reserve (incl. Lease-Up)	\$ 60,356	1,886	1.73	0.60%	0
DHCD Tax Credit Fees	\$ 60,356	1,886	1.73	0.60%	0
Developer Overhead	\$ 720,803	22,525	20.67	7.19%	720,803
Developer Fee	\$ 720,803	22,525	20.67	7.19%	720,803
Soft Cost Contingency (2.5%)	\$ 70,095	2,190	2.01	0.70%	70,095
Operating Reserves	\$ 39,723	1,241	1.14	0.40%	0
Subtotal: Soft Costs	\$ 2,727,569	85,237	78.21	27.20%	2,474,587
Total Uses of Funds	\$ 10,027,811	313,369	287.54	100.00%	9,675,079

This project's Eligible Basis, before removing non-eligible sources of funding, is \$9,675,079. If LIHTC were the only public source of funding available, the project would be eligible for \$870,757 in annual tax credits, which, assuming a price of \$.85 per credit would be worth \$7,400,695 in equity to the project.

LIHTC Calculation	
LIHTC Eligible Costs	9,675,079
Less: Non-Eligible Financing	0
Eligible Basis	9,675,079
Basis Boost Multiplier	100%
Adjusted Basis	9,675,079
Tax Credit Rate	9%
Annual Credits	870,757
Total Credits (10 Years)	8,707,571
LP Ownership %	99.99%
Credits to LP	8,706,700
Price per Credit	\$.85
Total Net Syndication Proceeds	7,400,695

Assuming the project could not attract any other equity sources (other equity would be extremely unlikely since LIHTC projects tend to have extremely low cash flows), the project would need \$2,627,116 in debt. If we assume DC2 would have \$13,000 of gross potential revenue per unit (based on tax credit rents), a 5% vacancy rate, and operating expenses of \$10,000 per unit, the project would have a net operating income of \$2,350 per unit, or \$75,200 for the project as a whole. Assuming a required 1.15 debt service coverage ratio, and a 5% loan with a 30 year amortization, the maximum achievable loan amount would be \$1,015,100, less than half the amount required to build the project. While changes to certain aspects of this scenario, such as the rents and expenses that make up the NOI, or the interest rate, could have a small effect on the

feasibility of the project, it is unlikely that any of these factors would change significantly enough to make a loan of over \$2.6 million possible.

Operating Projections	Per Unit	Total
Gross Potential Income	13,000	416,000
Vacancy (5%)	650	20,800
Operating Expenses	10,000	320,000
Net Operating Income	2,350	75,200

Loan Sizing	
Stabilized NOI	75,200
Minimum Debt Service Coverage Ratio	1.15
Maximum Debt Service	65,391
Interest Rate	5%
Amortization (Years)	30
Implied Loan Amount	\$1,015,100

But the Commonwealth of Massachusetts and the City of Boston have other funds available to support the development of affordable housing, and many of these programs would be available for DC2, though none of the incentives for building housing near transit, outlined in Chapter 3, would be. The largest program in Massachusetts for affordable housing development near transit, the CATNHP program outlined in Chapter 3, would not be available to DC2, as it is only for projects of 24 units or fewer, according to the program’s website. The MassWorks infrastructure program would also be an unlikely funding source, since the infrastructure in Fields Corner is already developed. Finally, the Smart Growth Overlay Zoning District, Chapter 40R, would be of no use for this project since relatively high-density development is already allowed in Dorchester.

The programs available for DC2 would be grant and soft debt programs designed to support affordable housing more generally, rather than housing near transit. During the development of the original Dot Corner proposal, employees of the Boston Department of Neighborhood Development and the Massachusetts Department of Housing and Community Development, which administer these grants, indicated that the following amounts would be reasonable to expect, though somewhat optimistic, for one project. Also included is an energy efficiency grant from NSTAR, the local electric utility:

Grants and Soft Debt	
DHCD HOME	750,000
DHCD MF Housing Fund	500,000
DHCD Affordable Housing Trust	600,000
DND Neighborhood Housing Trust	550,000
DND Rental and Coop Housing	600,000
NSTAR	18,000
TOTAL	3,018,000

Of these, the Multifamily Rental Housing Fund, Affordable Housing Trust, Neighborhood Housing Trust, Rental and Cooperative Housing fund, and the NSTAR grant would be considered non-eligible sources of financing, and be removed from the Eligible Basis.

Non-Eligible Sources	
DHCD MF Housing Fund	500,000
DHCD Affordable Housing Trust	600,000
DND Neighborhood Housing Trust	550,000
DND Rental and Coop Housing	600,000
NSTAR	18,000
TOTAL	2,268,000

With \$2,268,000 removed from the Eligible Basis, the amount of LIHTC equity available to the project, assuming a constant price of \$.85, would be \$5,665,849:

LIHTC Calculation	
LIHTC Eligible Costs	9,675,079
Less: Non-Eligible Financing	2,268,000
Eligible Basis	7,407,079
Basis Boost Multiplier	100%
Adjusted Basis	7,407,079
Tax Credit Rate	9%
Annual Credits	666,637
Total Credits (10 Years)	6,666,371
LP Ownership %	99.99%
Credits to LP	6,665,704
Price per Credit	\$0.85
Total Net Syndication Proceeds	5,665,849

With the other sources of state financing outlined above, plus this amount of LIHTC equity, the project would require \$1,343,962 of debt. As outlined above, the maximum amount that a project with DC2's net operating income could support would be \$1,015,100.

Sources of Funds	
Permanent Loan	1,343,962
LIHTC Equity	5,665,849
DHCD HOME	750,000
DHCD MF Housing Fund	500,000
DHCD Affordable Housing Trust	600,000
DND Neighborhood Housing Trust	550,000
DND Rental and Coop Housing	600,000
NSTAR	18,000
TOTAL	10,027,811

In short, this transit oriented affordable housing development would not be feasible, even with significant city and state subsidies, and a low land cost. A smaller project, eligible for CATNHP funds, may work, but the DC2 case shows that significant, high-density transit oriented affordable housing near transit frequently cannot be built using the LIHTC program in a place with high construction costs, like Boston. Despite Boston's excellent public transit system, many LIHTC tenants would still be located in places that are inconvenient to transportation options to get to work. Had Fields Corner been in a QCT or DDA and able to receive a basis boost under existing guidelines the project may be feasible, but then there would be no financial incentive to put those projects close to transit within those census tracts or difficult development areas.

But with a transit oriented basis boost the project could be built and give a developer a strong incentive to invest in affordable housing near a transit station. Assuming the same LIHTC-eligible costs and non-eligible sources of financing, the project still has an Eligible Basis of \$7,407,079. But with the basis boost the total credits available rise to \$8,666,282, and the total equity raise is \$7,365,603.

LIHTC Calculation	
LIHTC Eligible Costs	9,675,079
Less: Non-Eligible Financing	2,268,000
Eligible Basis	7,407,079
Basis Boost Multiplier	130%
Adjusted Basis	9,629,203
Tax Credit Rate	9%
Annual Credits	866,628
Total Credits (10 Years)	8,666,282
LP Ownership %	99.99%
Credits to LP	8,665,416
Price per Credit	\$0.85
Total Net Syndication Proceeds	7,365,603

With this increased equity, and without a basis cap, the project would actually have equity and grant sources in excess of the costs to build, and would be able to take less than the allocation for which it was qualified without taking on any debt.

Sources of Funds	
Permanent Loan	0
LIHTC Equity	7,365,603
DHCD HOME	750,000
DHCD MF Housing Fund	500,000
DHCD Affordable Housing Trust	600,000
DND Neighborhood Housing Trust	550,000
DND Rental and Coop Housing	600,000
NSTAR	18,000
TOTAL	10,383,603

The situation is slightly different when the Massachusetts basis cap is factored in. While the project's Adjusted Basis is \$9,629,203, the state would adjust it back down to \$8,000,000 (32 units X \$250,000), changing the LIHTC calculation above as follows:

LIHTC Calculation	
LIHTC Eligible Costs	9,675,079
Less: Non-Eligible Financing	2,268,000
Eligible Basis	7,407,079
Basis Boost Multiplier	130%
Adjusted Basis	9,629,203
Basis Cap	8,000,000
Tax Credit Rate	9%
Annual Credits	720,000
Total Credits (10 Years)	7,200,000
LP Ownership %	99.99%
Credits to LP	7,199,280
Price per Credit	\$0.85
Total Net Syndication Proceeds	6,119,388

With the basis cap, only \$7,200,000 of credits are available to the project, for a net equity raise of \$6,119,388. Even with this new limit, the project would only need \$890,423 of debt, comfortably under the \$1,015,100 that it could support.

Sources of Funds	
Permanent Loan	890,423
LIHTC Equity	6,119,388
DHCD HOME	750,000
DHCD MF Housing Fund	500,000
DHCD Affordable Housing Trust	600,000
DND Neighborhood Housing Trust	550,000
DND Rental and Coop Housing	600,000
NSTAR	18,000
TOTAL	10,027,811

In this case, the basis cap seems to make sense, as the project was receiving a LIHTC allocation that more than covered its needs, and even with the basis cap the project could be built by taking on a reasonable amount of debt. But it would be easy to see a situation where the basis cap would create a problem for worthwhile projects facing different economics. Another possible issue is that in addition to a basis cap of \$250,000

per unit, the Massachusetts QAP limits a project's total LIHTC allocation to \$1,000,000. These limits are not absolute, and in the words of the QAP, "these limits are **recommended** limits: they are not intended to be absolute limits for projects seeking tax credits. Applications for projects with costs higher than the recommended limits will undergo greater scrutiny, so that DHCD [the Department of Housing and Community Development] may attempt to understand the added costs."(22) In order to make full use of a transit oriented basis boost it would make sense to revisit the wisdom of caps on LIHTC allocations.

The above case illustrates the challenge of building projects near transit, and how a basis boost could address that challenge. While there are less expensive places to build housing than Fields Corner, Chapter 3 showed that there is a great cost associated with foregoing places with access to transit and jobs, in favor of areas where it is less expensive to build. The costs of building on a constrained site in a busy urban area can push developers to easier sites, where residents are more isolated and getting to work is more difficult and more expensive. The transit oriented basis boost addresses these additional costs and encourages the development of affordable housing in the kinds of places that are more challenging.

Another benefit is the fact that a program allowing for more of the necessary funding to come from one source simplifies the notoriously difficult affordable housing financing process. Minimizing the number of sources that a developer must secure eliminates a

great deal of the uncertainty that makes affordable housing development difficult. This program makes it easier and more predictable for developers to build near transit, providing strong motivation to focus efforts on transit-oriented projects.

Chapter 7: Conclusion and Next Steps

This thesis has examined the need for affordable housing near transit, and what certain states are doing to address this need, with a proposal for a federal policy to encourage the development of more affordable housing near transit, and a case study detailing the effect that such a policy could have. While the benefits of a basis boost on the federal level have hopefully been made clear, there is a great deal more research to do.

The greatest frustration of writing this thesis was the lack of information available about the projects that have been built or proposed in the states that have instituted a transit oriented basis boost. While the case study shows the benefits of the basis boost on paper, a full understanding of how a basis boost for transit would work would be helped tremendously by examples from the real world in states where the basis boost already exists. Unfortunately, efforts to get this data from the states and HUD were not fruitful.

This may be due more to the length of the development process than anything else. Since HERA was not enacted until 2008, the amount of time that it would take developers to get comfortable with the new financing options, and to actually develop the projects may mean that there are simply not very many projects that have been built so far using the basis boost. Assuming this is the case, an examination down the

road that focuses on projects that have been built would be an extremely helpful next step in the study of a transit oriented basis boost for affordable housing.

Bibliography

- ABT Associates. (2011). *What LIHTC could do*. Retrieved June 21, 2011, from <http://www.abtassociates.com/page.cfm?PageID=40925&FamilyID=1800&T2=40888&T3=40903>
- ABT Associates. (2011). *What LIHTC does*. Retrieved June 21, 2011, from <http://www.abtassociates.com/page.cfm?PageID=40915&FamilyID=1800&T2=40888&T3=40903>
- ABT Associates. (2011). *Proposals for the Low-Income Housing Tax Credit*. Retrieved June 21, 2011, from <http://www.abtassociates.com/Page.cfm?PageID=40903&FamilyID=1800&T2=40888>
- The Affordable Housing Tax Credit Coalition. (2011). *President Obama releases 2010 budget proposal including LIHTC proposals*. Retrieved from <http://taxcreditcoalition.org/news/president-obama-releases-2012-budget-proposal-including-lihtc-proposals-2/>
- The Affordable Housing Tax Credit Coalition. (2011). *Senator Coburn's proposal to end the Low-Income Housing Tax Credit would deprive thousands of low-income families from finding decent and affordable housing and would kill thousands of small business jobs*. Retrieved July 7, 2011, from http://housingthink.com/wp-content/uploads/2011/07/coburn-rebuttal_ahtcc-signed_072111.pdf
- Bealing, T. (2010, Fall). Transit oriented development: Benefits and barriers. *Fieldnotes: NORR Architects and Planners Planning Services E-Newsletter*, 2(2). http://fieldnotes.norr.com/urban_solutions.html
- Bodaken, M. (2011). *Low Income Housing Tax Credit: Preservation trending*. National Housing Trust. Retrieved July 28, 2011, from www.ncsha.org/system/files/resources/Bodaken,+Michael.pdf
- California Department of Housing and Community Development. *Transit Oriented Development (TOD) Housing Program*. Retrieved June 21, 2011, from <http://www.hcd.ca.gov/fa/tod/>
- California Department of Transportation. *Transportation Planning Grant Program*. Retrieved July 6, 2011, from <http://www.dot.ca.gov/hq/tpg/grants.html>

- California Tax Credit Allocation Committee. (2007). *Qualified Allocation Plan*. Retrieved June 21, 2011, from <http://www.treasurer.ca.gov/ctcac/qap.pdf>
- Cervero, R. (2003). *Effects of light and commuter rail transit on land prices: Experiences in San Diego County*. Berkeley, CA: Department of City and Regional Planning, University of California, Berkeley. Retrieved July 2, 2011, from <http://www.uctc.net/papers/769.pdf>
- Colorado Housing and Finance Authority. (2011). *Qualified Allocation Plan*. Retrieved June 21, 2011, from http://www.chfainfo.com/documents/CHFA_LIHTC_Allocation.pdf
- Colorado Housing and Finance Authority. (2011). Summary of proposed changes to 2011 *Qualified Allocation Plan*. Retrieved June 21, 2011, from http://www.chfainfo.com/documents/SummaryChanges2011QAP_5.pdf
- Commonwealth of Massachusetts. *Smart Growth/Smart Energy Toolkit*. Retrieved July 6, 2011, from http://www.mass.gov/envir/smart_growth_toolkit/pages/mod-40R.html
- CNN 2008 election results page. <http://www.cnn.com/ELECTION/2008/results/state/>
- Department of Housing and Urban Development. (2011). Low-Income Housing Tax Credit datasets. Retrieved July 25, 2011 at <http://www.huduser.org/portal/datasets/lihtc.html>
- Department of Housing and Urban Development. (2010). Statutorily mandated designation of Difficult Development Areas and Qualified Census Tracts for 2011. Retrieved June 8, 2011, from http://www.huduser.org/portal/Datasets/QCT/DDA2011_Notice.pdf
- Federal Transit Administration. <http://fta.dot.gov>
- Grayson, C. (2011, February 10). Congress must preserve Low Income Housing Tax Credit. *The Baltimore Sun*, http://articles.baltimoresun.com/2011-02-10/news/bs-ed-apartment-tax-credit-20110210_1_affordable-rental-homes-affordable-apartments-enterprise-homes
- Haughey, R., & Sherriff, R. (2008). *Challenges and policy options for creating and preserving affordable housing near transit and in other location-efficient areas*. What Works Collaborative. Retrieved June 21, 2011, from <http://www.reconnectingamerica.org/assets/PDFs/2010chpaffordablehousingTODchallengesandoptions1.pdf>

Henry, L., & Litma, T. (2011). *Evaluating new start transit program performance: comparing rail and bus*. Victoria, BC: Victoria Transport Policy Institute. Retrieved June 21, 2011, from http://www.vtpi.org/bus_rail.pdf

Housing Advisory Group. (2011). *Outreach on behalf of the Low Income Housing Tax Credit*. Retrieved July 28, 2011, from <http://www.bostoncapital.com/about/pdf/2011-02-08-HAG.pdf>

Industry roundtable. (2011, June). *Affordable Housing Finance*, <http://www.housingfinance.com/ahf/articles/2011/june/0611-specialfocus-Industry-Roundtable.htm>

Internal Revenue Code, § 42

Jacobs, B. (2011, January-February). Deficit-reduction efforts may target housing tax incentives. *Affordable Housing Finance Magazine*. Accessed at <http://www.housingfinance.com/ahf/articles/2011/january-february/0111-housingpolicy-Deficit-Reduction-Efforts-May-Target-Housing-Tax-Incentives.htm>

Joint Center for Housing Studies of Harvard University. (2009). *The disruption of the Low-Income Housing Tax Credit program: Causes, consequences, responses, and proposed correctives*. Cambridge, MA: Harvard University. Retrieved from http://www.jchs.harvard.edu/publications/governmentprograms/disruption_of_the_lihtc_program_2009.pdf

Korb, J. (2009). *The Low-Income Housing Tax Credit: HERA, ARRA and beyond* (MIT Center for Real Estate Masters Thesis). Available from MIT DSpace. <http://dspace.mit.edu>

Lindblom, M. (2008, October 29). Bus vs. light rail: Which is your ticket to ride? Article posted to http://seattletimes.nwsourc.com/html/lightrailinitiative/2008324129_busrail29m.html

Lipman, B. (2006). *A heavy load: The combined housing and transportation burdens of working families*. Washington, DC: Center for Housing Policy. Retrieved July 9, 2011, from http://www.cnt.org/repository/heavy_load_10_06.pdf

Liu, Y. (2010, March 25). Adding transportation to the affordable housing equation. Message posted to <http://blog.tstc.org>

Massachusetts Department of Housing and Community Development. (2011). *Qualified Allocation Plan*. Retrieved June 21, 2011, from <http://www.mass.gov/Ehed/docs/dhcd/hd/lihtc/final2011qap.pdf>

Massachusetts Executive Office of Housing and Economic Development. *Commercial Area Transit Node Housing Program*. Retrieved July 6, 2011, from http://www.mass.gov/?pageID=ehedterminal&L=3&L0=Home&L1=Housing+Development&L2=Affordable+Rental+Development&sid=Ehed&b=terminalcontent&f=dhcd_hd_catnhp_catnhpr&csid=Ehed

Massachusetts Executive Office of Housing and Economic Development. *The MassWorks Infrastructure Program*. Retrieved July 6, 2011, from http://www.mass.gov/?pageID=ehedterminal&L=4&L0=Home&L1=Economic+Analysis&L2=Executive+Office+of+Housing+and+Economic+Development&L3=Massachusetts+Permit+Regulatory+Office&sid=Ehed&b=terminalcontent&f=permitted_g_massworks_program_mainpage&csid=Ehed

Metro Mayors Conference (Denver) and Colorado Housing and Finance Authority. *Transit oriented development*. Brochure. Retrieved June 21, 2011, from <http://www.metromayors.org/Downloads/tod%20brochure.pdf>

Mississippi Home Corporation. (2011). *Qualified Allocation Plan*. Retrieved June 21, 2011, from <http://www.mshomecorp.com/htc/pdf/2011/qap/2011%20QAP.pdf>

Missouri Housing Development Commission. (2011). *Qualified Allocation Plan*. Retrieved June 21, 2011, from http://www.mhdc.com/rental_production/2011_FY_items/documents/2011_Qualified_Allocation_Plan.pdf

Missouri Housing Development Commission. (2011). *2011 developer's guide to MHDC multifamily programs*. Retrieved June 21, 2011, from http://www.mhdc.com/rental_production/2011_FY_items/documents/2011_Developer's_Guide_NOFA_Application.pdf

Novogradac, M. J. (2011). *Novogradac & Company LLP Low-Income Housing Tax Credit Handbook, 2011 Edition*. New York: Thompson Reuters/West.

Ohland, G., and Fogarty, N. (2009, May). Capturing the value of transit. *Planetizen.com*. <http://www.planetizen.com/node/38695>

Oregon Housing and Community Services Department. (2009). *Qualified Allocation Plan*. Retrieved June 21, 2011, from http://www.oregon.gov/OHCS/HD/HRS/LIHTC/FINAL_Amended_2009_QAP.pdf

O'Toole, R. (2004). *Great rail disasters: The impact of rail transit on urban livability*.

- American Dream Coalition. Retrieved July 28, 2011, from http://www.grassrootinstitute.org/system/old/Publications/GRIH_Study_1004.pdf
- Reconnecting America. (2005). *2010 inventory of TOD programs: A national review of state, regional, and local programs that fund transit-oriented development plans and projects*. Retrieved from http://www.reconnectingamerica.org/assets/Uploads/2010_inventory_of_tod_programs.pdf
- Shelburne, M. (2011, February). States' use of basis boost reflects their priorities. *Novogradac Journal of Tax Credits*, 2(2), http://www.novoco.com/journal/2011/02/news_lihtc_201102.php
- Tennyson, E. (1989). *Impact on transit patronage of cessation or inauguration of rail service*. Washington, DC: Transportation Research Board, National Research Council. Retrieved July 9, 2011, from <http://www.publictransit.us/ptlibrary/TRB1221.pdf>
- Texas Department of Housing and Community Affairs. (2011). *Qualified Allocation Plan*. Retrieved June 21, 2011, from <http://www.tdhca.state.tx.us/multifamily/htc/docs/11-FinalQAP.pdf>
- Texas Department of Housing and Community Affairs. (2010). *What the Research Shows: What Other States are doing to Link Housing and Transportation*. Retrieved from <http://www.tdhca.state.tx.us/housing-center/docs/10-WhitePaper-WhatResearchShows.pdf>
- Urban Land Institute, Terwilliger Center for Workforce Housing. (2010). *The Boston regional challenge: Comparing the costs and impacts of housing and transportation on area residents, their neighborhoods, and the environment*. Washington, Urban Land Institute: Author. Retrieved from <http://bostonregionalchallenge.org/wp-content/uploads/BostonChallenge04092010.pdf>
- Utah Housing Corporation. (2011). *Qualified Allocation Plan*. Retrieved June 21, 2011, from <http://www.utahhousingcorp.org/PDF/2011FinalQAP.pdf>