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16. Abstract

In recent years, there has been much research on Transit Oriented Development (TOD) in the United States and abroad. There has been decades of study of historic preservation, both in the United States and internationally. Yet the intersection of TOD and historic preservation has received scant attention. This project cross-references data on TOD and historic preservation, examines case studies of where TOD and historic preservation intersect and recommends policy and tools for preservation in TODs.

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The Opportunities and Tensions of Historic Preservation and Transit Oriented Development

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Report Number SWUTC/15/600451-00116-1

Study Title: The Tensions and Opportunities of Historic Preservation and Transit Oriented Development: Developing a Policy and Tools for Preservation in TODs

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Executive Summary

The purpose of this study is two-fold. The first goal is to determine if there is a spatial relationship between the location of fixed-route (i.e. rail) transit stops and the location of historic districts and buildings. The second purpose of this project is to identify tools that can serve public and private stakeholders in easing the tensions between preserving the historic stock and character of neighborhoods and creating mixed-used TODs. ***A Guide to Facilitate Historic Preservation through Transit Oriented Development*** **accompanies this report.**

This research was comprised of three main components. The first of these involved cross-referencing TOD locations with various databases listing the locations of historic properties. Second, we examined case studies of where TOD and historic preservation intersect—guided by searching local news archives, interviewing developers, planners, and experts in the field of historic preservation—and finally, identifying tools for preservation through an expert-input process that could be utilized by various stakeholders around the nation for preserving historic structures in TODs.

The national analysis found that half of all station areas intersect with a national historic district and that more than half of all individually listed buildings (3,149 buildings) in station areas were found in stations identified as TODs. Finally, across the United States, 6,293 acres of land in stations identified as TODs were designated as a national historic district.

The state level analysis found a closer spatial cross-linkage between historic resources in higher density and more transit-oriented New Jersey than in Florida. The local level analysis conducted in New Orleans was provided to demonstrate this universal application of this method for any local community at any distance from fixed-route transit stations.

A series of eight case studies was completed in order to better understand the varying circumstances where TOD development intersects with historic preservation, and what impacts the success (or lack thereof) of such projects. The case studies include: Central Station in Memphis, TN, Cityline at Tenley in Washington, D.C., the Saratoga Apartments and the Iberville Project HUD Choice Neighborhood redevelopment in New Orleans, LA, Gateway Transit Village in New Brunswick, NJ, Mockingbird Station and South Side on Lamar in Dallas, TX, and Gates Rubber TOD in Denver, CO. For each of these projects, the authors sought to understand the history and context of the site including its relationship to regional transit networks, the key players involved in the project(s), the processes (e.g. funding sources, tax credits, and tools utilized) involved in redevelopment, and the outcomes and key lessons from each.

The case studies revealed that most historic projects in TODs necessitate one or more subsidies. TODs themselves often need a number of subsidies in the form of infrastructure investment to make them viable. From this perspective, TODs and restoring historic buildings are aligned in the need for the community to realize that public support is needed, but such subsidies often create tensions around the concept that private developers are receiving public assistance. Despite the controversies that such projects can create, TOD and historic preservation can also create tremendous opportunities to revitalize neighborhoods, breathe new life into abandon buildings, and create a vibrant mixed-use, walkable and transit-based environments that defines a successful TOD.

Such projects can align with environmental goals of reducing greenhouse gas emissions through creating walking, bicycling and transit environments and by saving a significant amount of embodied energy in buildings by reducing or eliminating the need for new construction.

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Disclaimer

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I. Introduction

The purpose of this study is two-fold. The first goal is to determine if there is a spatial relationship between the location of fixed-route (i.e. rail) transit stops and the location of historic districts and buildings. Neighborhoods and properties can receive their historic designation at the national, state, or local level. This makes it necessary to collect national, state, and local databases of historic districts and buildings in order to do a full analysis of the spatial relationship between transit and historic districts and properties.

The understanding of the spatial link between transit and historic districts and properties will illuminate the potential for transit-oriented development (TOD) and historic preservation. Sometimes the desire to repurpose historic spaces near transit lines conflicts with the desire to increase density in those locations. To this end, the second purpose of this project is to identify tools that can serve public and private stakeholders in easing the tensions between preserving the historic stock and character of neighborhoods and creating mixed-used TODs. Tools highlight specific financial, land use and design, and project considerations that different private and public stakeholders can utilize to create the environment to foster successful TOD's that preserve historic properties and neighborhoods. Various tools are presented in the guidebook.

2. Literature Review

This section summarizes literature in historic preservation and TOD. While each field is independent, this paper argues that there is significant overlap and interaction. In some cases historic structures are difficult for a developer to preserve without incentives. In other cases, zoning or market forces in TOD areas call for higher densities than historic structures can physically permit while retaining their historic fabric. Finally, historic districts could set forth an architectural framework that could guide new construction and preservation in a strategy that offers financial aid in the form of tax credits and other assistance (e.g., property tax abatement) that would not otherwise be available. In all of these scenarios, there is a need to better understand historic preservation as a planning goal, TOD as a planning goal, and the tensions and opportunities among these concepts.

2.1 Historic Preservation as a Planning Goal

With some exceptions until almost the mid-twentieth century, preservation sentiment was alien to an American society with a reverence for all things new (Hosmer 1965). This changed in time and the last approximate half-century has seen a burgeoning preservation interest in regulation, and investment

(Duerksen 1983; Stipe 2003; Tomlan 2015).[1] Preservation proponents claim significant aesthetic, environmental and economic benefits (Redacted 1998; Rypkema 2005). Many of the most famous restored mixed-use, walkable, and transit-served urban districts in the United States, such as Greenwich Village, the French Quarter, and South Beach are historic districts. With preservation's growing implementation and regulation, however, has also come growing criticism, such as alleged adverse economic impacts (e.g., reduced housing supply and increased housing costs), misapplication as a form of NIMBYISM to stop new development by the well-connected, and stifling architectural creativity (Glaser 2010; Glaser 2011; Koolhaas 2011).

Holding aside its impacts, most observers recognize the many challenges in implementing historic preservation, including financial (gap between preservation cost and market return), and regulatory challenges (e.g., building codes and parking requirements oriented to new construction) (Redacted 2001). Land use controls regarding intensity of use, such as building height and floor area ratio (FAR), as well as allowed density, may also affect the propensity to preserve. Historic properties may be above, at, or below the governing intensity of use; if they are below, then the historic property's owner may understandably be inclined to demolish and build anew to what is referred to as "the highest and best use". Various actions have been taken to address these myriad challenges, such as the offering of historic rehabilitation tax credits, adoption of "smart building codes" and context- sensitive parking requirements, and allowing historic properties to transfer their unused development rights (TDR). TDR has long been espoused to foster historic preservation (Costonis 1974) and has been effected in many cities to that end (Atlanta, Denver, Dallas, Los Angeles, New York, Portland, San Francisco and Seattle (Pruetz and Pruetz 2007, 6). Reflecting the many historic properties that are not at their "highest and best use", TDR transfers for historic preservation purposes have often been considerable in scale. For example, since the adoption of its historic TDR program in the mid 1980s, San Francisco has certified 5.3 million square feet of TDR (Seifel 2013, ES-1).

Throughout its history, historic preservation has had linkages to transportation, both in a positive sense, such as the United States Supreme Court upholding the local land-marking of New York City's Grand Central Terminal (438 U.S. 104, 57 L. Ed 2d 631), and in a negative dimension as well, such as the demolition of Manhattan's Penn Central Station and the destructive impact of America's interstate highway program on many historic resources nationwide. Preservation's variable connection with transportation is also evident concerning TOD.

[1] The following illustrative metrics reflect this burgeoning preservation activity: listings on the National Register of Historic Places grew from 1,200 in 1968 to over 90,000 in 2014; the number of local historic commissions with regulatory oversight increased from about 100 in 1966 to a few thousand today; and the cumulative rehabilitation investment in the federal historic tax credit went from $505 million in 1978 to $109 billion by 2013 in inflation-adjusted (2013) dollars (Listokin, Lahr, and Heydt 2013).

2.2 Transit Oriented Development as a Planning Goal

Many communities encourage TOD as strategy to revitalize neighborhoods near fixed-transit stations, including rail, ferry and bus-rapid transit stations. Proponents tout numerous public benefits, including fostering a more sustainable settlement pattern with lower impacts to the natural environment through less vehicle travel, thus lowering carbon emissions which cause climate change (Calthorpe 2013).

Common elements of the definition of TOD include density, mixed-land uses in a walkable environment within a quarter to a half-mile of a fixed-transit stop (Calthrope 1993; Bernick and Cervero 1996; Dittmar and Ohland 2003). A national TOD study identified about 100 TODs through a self-reported survey but did not adopt a prescriptive definition of TOD (Cervero et al., 2004). While the exact levels of density are not clear in the literature, some authors have framed TOD as part of a spectrum, ranging from TOD to Transit-Adjacent Development (TAD) (Belzer and Autler 2002; Dittmar and Poticha 2004; Redacted 2009). TADs are low-density and auto-oriented station areas.

Goals of TOD as a planning strategy are multi-faceted and depend upon the stakeholder's perspective. For example, transit agencies often want to see higher ridership, developers seek a higher return-on-investment, metropolitan planning organizations are concerned about encouraging land uses that improve air quality and cities are often concerned about local economic development (Dittmar and Ohland 2003; Cervero et al. 2004; Redacted 2009).

Rail stations serve both travel and place characteristics, which can create tensions (Bertolini and Spit 1998). TODs should be designed through the horizontal and vertical built environment to allow for intermodal travel connectivity and creating a place where people want to live, work, and play (Ewing and Bartholomew 2013). Much of the contemporary TOD literature has focused on travel and the built environment (Ewing and Cervero 2010), land values near rail stations (Debrezion, Pels, and Rietveld 2007; Bartholomew and Ewing 2011), and the roles of public and private stakeholders to implement TODs (Curtis, Renne, and Bertolini 2009). Of interest to this study are the real estate development aspects of TOD, which sets the stage for TOD's tensions and opportunities. *Developing Around Transit: Strategies and Solutions that Work* (Dunphy et al. 2005) espouses principles, which focus on successfully developing real estate near transit, such as the need for a vision, establishing partnerships, the need to better understand parking, and the importance of creating a place and not just a project.

2.3 Opportunities and Tensions between TOD and Preservation

A restored or adaptively reused historic building clearly can be a component of and asset to a TOD because of the amenity it affords and through its preservation of the linkage to the past history of a place. Further, with the advent of TOD, empty historic buildings near transit may attract new users and tenants. Historic buildings lacking on-site parking may acquire new market demand and cachet as a result of TODs becoming more popular in the marketplace. Historic sensitivity can additionally guide development in TODs because the area's historic structures can establish an architectural framework that can guide the style and density of the TOD's new construction. For example, the New Jersey Department of Transportation recommends a best practice Transit Village/TOD approach that new

construction respect existing area historic and vernacular design (New Jersey Department of Transportation 2013, 8).

Yet all is not copacetic as there may be tensions between historic preservation and TOD. Designers of new TOD buildings may resent having to conform to existing stylistic motifs. (Recall the Koolhaas [2011] critique.) Further, historic preservation can be difficult to effect because of financial, building code and other challenges, so TOD developers may opt for new construction. Additionally, the development pressure on historic properties not at their "highest and best use" may be accentuated in a TOD where there is understandably a desire to maximize development intensity near transit. To illustrate, when the Washington Metro was built, all five of this system's lines crossed under the East End area of the city and "the 659-acre East End [became] one big transit-oriented development" (Costello 2003, 82). Yet planners and preservationists feared "that the zoning then in place was 'inappropriately dense' for most historic properties. Allowable height and density created an unrealistic expectation of value, and thus pressure for demolition or substantial alteration of the historic resources to capture that envelope" (Costello 2003, 83).

The above-described situation was not unique to Washington, D.C. Neighborhood residents in planned TODs near Denver's multibillion dollar FasTracks light and commuter rail system had "concerns [regarding] gentrification, property values, historic preservation, and other issues" (Chapman 2015). TODs and historic preservation may evoke considerable heated debate between developers and preservationists as was witnessed, for example, by the recently approved One Vanderbilt building in Manhattan, a 1,450 foot multi-use (office, retail, and restaurant) skyscraper to be built across from Grand Central station. While this TOD capitalizes on its superb access to transit, it "will replace several historic buildings...the last of the original [Terminal City] buildings developed to frame the station in a complimentary Beaux-Arts style" (Greenberg 2015).

There is some, albeit limited literature on the subject of the TOD and historic preservation intersection. A 2003 study on *The Returning City: Historic Preservation and Transit in the Age of Civic Renewal* (Costello 2003) examined preservation's influence on classic rail terminals and in the city beyond the station, including TODs. A 2007 Master's thesis by Sarah Michailof at Goucher College examined in detail the relationship of TOD and historic preservation by some Washington, D.C. metro stations. Michailof stated that "the pressure to accommodate density in the vicinity of Metro stations has the potential to positively or negatively affect the preservation of historic resources (Michailof 2007, 1) and her case studies reflected these dual influences. While some other studies and resource materials do mention the TOD and historic preservation connection (Ditmar and Ohland 2003; EPA and SRA 2011; Pousson no date), there is very limited literature on the subject and even less empirical investigation, a gap that prompted our research.

3. Methodology

This research was comprised of three main components. The first of these involved cross-referencing TOD locations with various databases listing the locations of historic properties. Second, we examined case studies of where TOD and historic preservation intersect—guided by searching local news archives, interviewing developers, planners, and experts in the field of historic preservation—and finally, identifying tools for preservation through an expert-input process, which are presented in a companion guide – *A Guide to Facilitate Historic Preservation through Transit Oriented Development* – that could be utilized by various stakeholders around the nation for preserving historic structures in TODs.

3.1 Integration of TOD & HP Databases

To determine the spatial link between transit and historic properties, we cross-referenced the National TOD database with national, state, and local databases of historic properties. The National TOD Database has the location of every rail station in the country. This includes street car/light rail, heavy rail/metro/subway, commuter rail, and intercity passenger rail (i.e. Amtrak). For the analysis, we created a half-mile transit zone around each rail stop. This area became the transit buffer zone used to analyze overlap with historic districts and buildings.

For analysis at the national level, we used the National Register of Historic Places (NRHP) Database. Within the NRHP, we selected Cultural Resource Districts and the Cultural Resource Buildings' layers of data as the primary datasets for analysis. These were converted to a data frame coordinate system with buildings and districts represented by polygons and points, respectively.

For analysis at the state level, a review of the existence and status publicly available datasets was compiled (Appendix A). In order to explore how these divergent datasets could be utilized, we selected New Jersey and Florida as case studies. For New Jersey, we accessed the historic districts and historic properties file from the New Jersey Department of Environmental Protection - Bureau of GIS. To examine the relationship between Florida's rail stations and its historic districts and properties, we used the Florida Master Site File Data provided by Chip Birdsong.

In the course of the project, we realized that not every state designates historic properties. Some states, such as Louisiana, have a department of historic preservation that nominates state properties and districts for the NRHP. Municipalities determine if there is a local designation of historic status. As such, as in the case for Louisiana, historic status is only granted at the national or local level. Please see Appendix A for a database of state historic preservation offices, which includes state level data if available.

New Orleans, LA, was used as an example of applying these techniques at the local level. We used the Historic Properties and Landmarks Database, which is maintained by the Historic Districts and Landmarks Commissions. Due to the nature of built environment characteristics as well as rail transit (e.g., streetcars) in New Orleans, we decided to use a quarter mile transit buffer zone instead of the half mile buffer we used in the national and state level analyses.

3.2 Expert Team Project Meetings

To select case studies for additional analysis, we assembled a team of experts to guide our research. This team included the chairman of a local preservation committee, a national expert on historic preservation, and experts from Historic Renovations, Inc., a New Orleans-based private developer that specializes in the adaptive reuse of historic buildings across the country. We conducted a series of meetings with the team of experts via conference calls, emails and in-person to select case studies of successful TOD developments that incorporated historic preservation. We also held a focus group with the experts in order to identify considerations that might not arise in the case studies and to identify tools for preserving historic structures in rail station areas.

3.3 Case Studies

To select the case studies several criteria were used. The considerations included: geographic diversity of site location, national recognition for success, diversity in the means of incorporating the historic property, diversity in mechanisms used to create the development. The team decided to examine projects in Denver, CO; Dallas, TX; Memphis, TN; Washington, DC; New Orleans, LA; and New Brunswick, NJ. The project in Denver is the only case selected that represents a failed attempt to preserve a historic building. It was analyzed in order to determine what tools could have saved the historic building from demolition. In Dallas and New Orleans, two projects were each selected to illuminate the different approaches within the same city that developers might utilize in order to create successful TODs that repurpose and preserve historic buildings.

4. Quantitative Findings using Geographic Information Systems

This chapter presents the results of the spatial analysis of various historic property databases (national, state, and local) in relationship to fixed-route[2] transit stations. The national data level analysis also includes a TOD typology analysis to better understand the relationship of historic properties by type of station area.

4.1 National Data Analysis

Key questions sought during the initial phase of this research, which consisted of GIS analysis of publicly available datasets in order to evaluate the degree to which transit-oriented development and historic preservation intersect, included the following:

1. How many fixed-route transit stations in the United States are within nationally designated historic districts?
2. How many historic buildings are found within a half-mile of fixed-route transit stations?
3. What percentage of the buffer within a half-mile of fixed-route transit stations is designated as historic?
4. How many station areas intersect with any portion of one or more historic districts?

Please note that Section 4.1.2 below expands upon the analysis in this section through an examination of rail stations by TOD typology at the national and regional levels. The TOD national and regional typology analysis should be viewed as an expansion of the analysis presented here in Section 4.1.

4.1.1 National Historic Districts and Buildings

In order to evaluate the intersection of rail station development and historic preservation at the national level, NRHP datasets were examined in relation to the national TOD database in GIS (Figures 1 and 2). Spatial analysis of fixed-route transit stations within historic districts revealed that 687 out of 4,399 stations nationwide (15.6%) fell within an NRHP Cultural Resource District. Next, we attempted to determine how many NRHP Cultural Resource buildings were located within a half-mile of a station. Selecting by location to identify this portion of the dataset, we found that 5,650 out of 59,492 (9.5%) nationally registered historic buildings are located within half-mile of a fixed-route transit station.

We utilized the two layers created in the first two steps to determine the approximate area of land affiliated with nationally designated historic property within a half-mile of stations, as well as the proportion of all area within a half-mile of stations that is so designated. Projecting the station area buffer layer and the cultural resource districts layer to calculate the geometry of each, we found that

[2] Fixed-route transit stations include all rail stations (including heavy/metro rail, commuter rail, intercity passenger rail and streetcar/light rail stations), which constitutes about 90% of all stations, ferry (5% of all stations) and bus-rapid transit stations (5% of all stations).

approximately 6.8% of all land within the half-mile transit zone is within a NRHP Cultural Resource District. Only 0.9% of all NRHP Cultural Resource District land, however, is within a half-mile of a rail station.

Our final step utilizing this national data set was to determine how many rail station areas intersect with national historic districts. Joining the station area layer to the NRHP Cultural Resource District layer, we found that 2209 out of 4399 rail station areas (50%) intersected with at least one NRHP Cultural Resource District. Together, these findings indicate significant potential intersectionality between historic preservation and development around rail stations at a national scale.

Figure 1: NRHP Cultural Resources and Fixed-Route Transit Station Areas

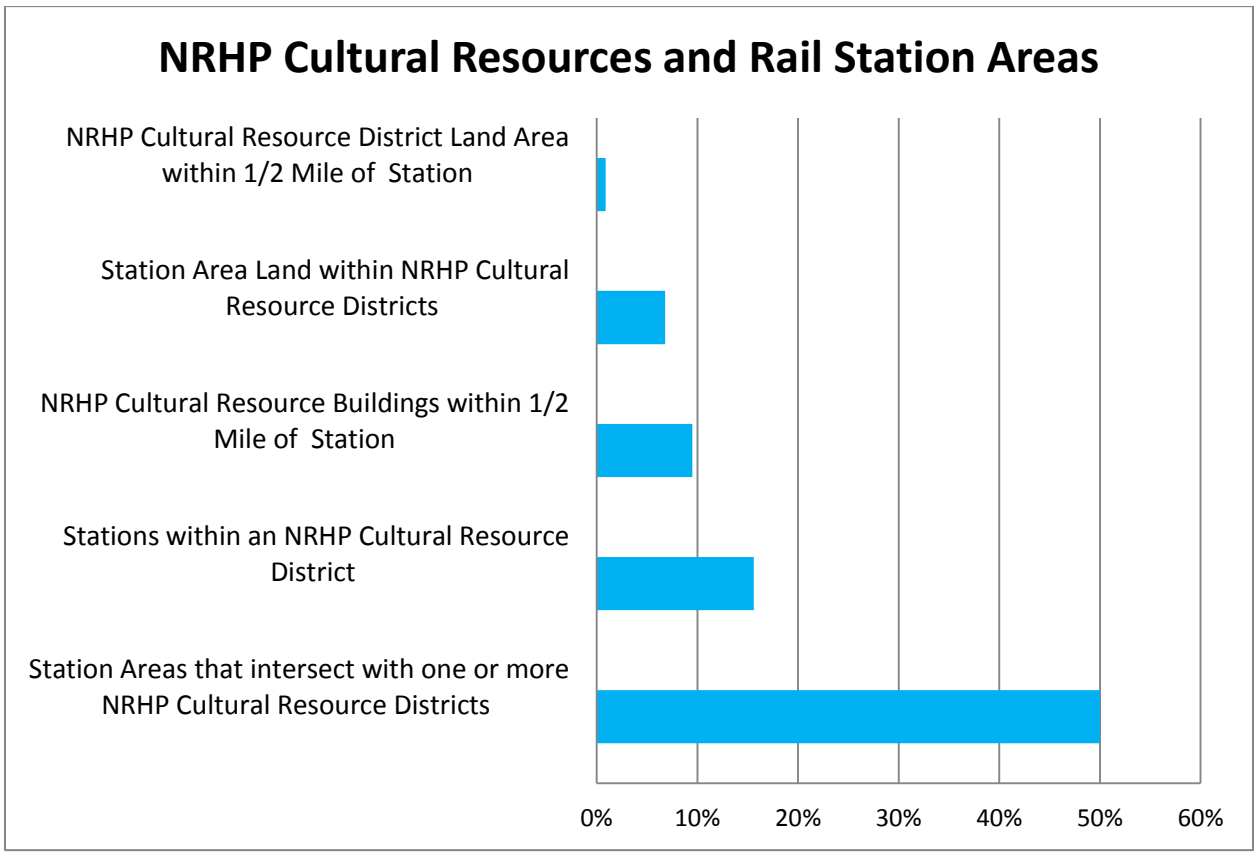
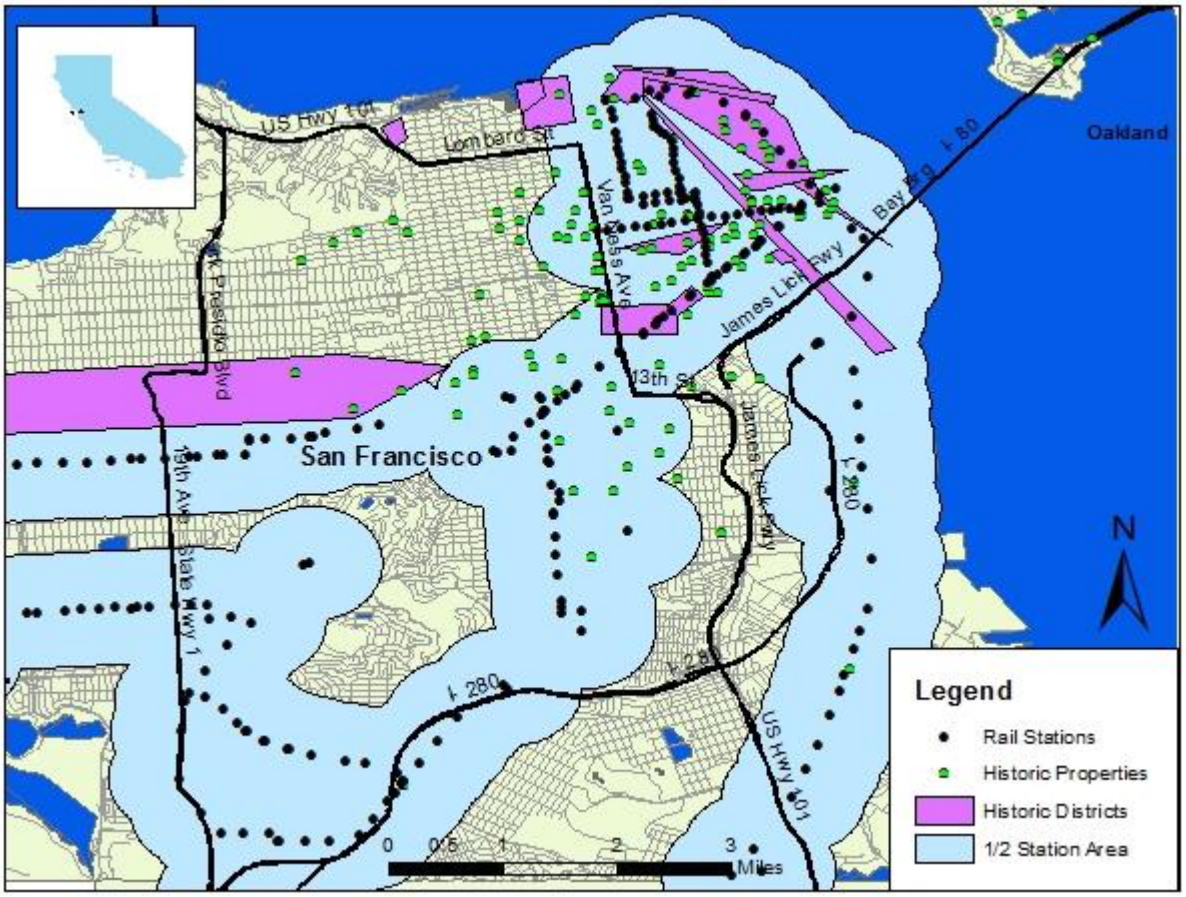


Figure 2: Sample Illustration -- Relationships of NRHP Cultural Resources to Fixed-Route Transit Stations, San Francisco



4.1.2 National TOD Typology Analysis

In addition to the descriptive evaluation of the overall relationship between historic property and fixed-route transit stations, this study sought to evaluate the relationship between the opportunity and need for historic preservation and the characteristics of the built environment that support transit use, i.e., Transit-Oriented Development, as well as variations across metro regions.

This exercise utilized a typology of all fixed-route transit precincts across the United States developed by Renne and Ewing (2013) that categorizes all stations as a Transit Oriented Development (TOD), Transit Adjacent Development (TAD) or a hybrid of the two, based on a minimum benchmark definition of TOD that accounts for density, land use diversity and walkable design (Table 1). All rail stations in the United States were categorized on a TAD – TOD spectrum based on the following point-based system (see Renne and Ewing 2013 for a more detailed justification for the thresholds below):

- Greater than 30 jobs or residents per gross acre = 1 point
- Not having 100% of land uses as either residential or commercial = 1 point
- Average block size less than 6.5 acres 1 = 1 point

A station area with 3 points was categorized as a TOD, a station areas with 2 points was categorized as a Hybrid and a station area with 0 or 1 points was categorized as a TAD.

Table 1: Transit Stations Categorized by TAD – TOD Typology Scale

TAD-TOD Typology Scale	2010	
	Number of Stations	Percentage of Stations
TAD	1,399	31.8
Hybrid	1,360	30.9
TOD	1,640	37.3
All Station Precincts	4,399	100

Using this typology, we sought to explore the following questions in this section, which build on the analysis above in Section 4.1:

1. How many historic properties are within a half-mile of all rail stations in each urbanized region?
2. How many historic properties specifically fall within station areas identified as TODs, TADs, or hybrids for each region, and nationwide?

The NRHP cultural resource buildings file was selected as the dataset by which to perform these analyses. As noted above, additional properties identified as historic resources may be identified on state or local databases, however, the NRHP file is the only dataset that permits spatial evaluation of compatible data across all regions.

Each property in the NRHP Cultural Resource Buildings file was joined to the TOD typology data pertaining to the station area it falls within, if any. In dense urban areas, a property may fall within a half-mile of more than one station. From the resulting dataset, the authors calculated how many historic properties fell within station areas for each urbanized region in which fixed-route transit exists, and then, how many of those properties were found in each station area by typology: TOD, TAD, or hybrid (Table 2).

Table 2 reveals that more than half (55.7%) of nationally listed historic buildings located within a half-mile of a fixed-transit station area are located in station areas identified as TODs, despite TODs only accounting for 37.3% of all station areas. In a number of regions, the share of historic buildings in TOD station areas is greater than 70%, including Atlanta, Baltimore, Charlotte, Denver, Detroit, Houston, Jacksonville, Las Vegas, Little Rock, Memphis, Minneapolis-St. Paul, Nashville, New York, Portland, Sacramento, San Diego, San Francisco, and St. Louis. Given that these locations are TODs (thus have achieved a high density, walkable and mixed use environment) efforts should be placed on preserving historic buildings in such locations against demolition over arguments for the need for higher density in such locations. Given that such buildings are individually listed on the NRHP, preservation would be expected, however, such locations might also experience strong development pressures, especially in

high growth locations such as New York, Atlanta, or Denver. Using a Transfer of Development Rights (TDR) tool, which is expanded on later in this report, might be an ideal method of reassigning growth from TOD stations to Hybrids and TADs, which could use the added density in an effort to transition lower density station areas into TODs.

Nationally, Hybrid stations included a quarter (25.7%) of all individually listed buildings and TADs account for less than one-fifth (18.7%) of all listed buildings. Some of the older and more historic regions, such as Boston, Cleveland, and Philadelphia appear to have historic listed buildings more evenly distributed across all station typologies, which is likely due to the greater prevalence of historic buildings in these regions. Some fast-growing regions, such as Austin, Los Angeles, and Salt Lake City have a relatively high share of historic buildings in Hybrid station areas. Local policy and planning efforts could allow for the repurposing of such buildings into mixed-use anchors, which might spur new construction nearby, thus enabling a transition of Hybrids and TADs into TODs, over time. Again, the report below provides tools to assist in such efforts.

In addition to identifying individually listed (Cultural Resource) buildings within TOD and other station areas, we sought to identify the number and area of cultural resource districts that intersect with station areas, nationwide (Table 3). Many districts intersect multiple station areas, complicating the classification of historic districts by station typology, thus at the regional level we only sought to calculate the total number of such districts per station area as well as the estimated area of that total that falls within a half-mile of stations (Table 4). Separately, we also calculated the number and land area of cultural resource districts that intersect TOD station areas, specifically, for each region (Table 4).

Table 3 reveals that TODs have the highest prevalence of historic districts, as measured both by the number of districts intersecting station areas and the area of land that is designated as historic, with 39.3% and 40.5%, respectively, of all station areas. Again, TODs account for 37.3% of all stations nationally (Table 1). Hybrids, accounting for 30.9% of all station areas also have a slightly higher prevalence of historic districts and historic designated land area, with 31.1% and 32.0%, respectively. Despite 605,500,384 SF of historically designated land in station areas across the nation, such designation accounts for just 0.63% of all land area across all station areas, demonstrating that such designation is rare.

Table 4 shows the total number and land area of Cultural Resource Districts by region for all station areas and reports the share of all historically designated land in the region that is located in all station areas. Albuquerque, Chicago, Harrisburg, Kansas City, Los Angeles, New Orleans, Norfolk, and Portland have the highest shares of the region's historic land occurring in station areas. Table 5 reports the same information for just TOD stations, by region.

Table 2: Cultural Resource Buildings within a Half-Mile of a Station, by TOD Typology Score

		Cultural Resource Buildings in Station Areas by TOD Typology Score						
Region #	**Region Name**	**TAD**		**Hybrid**		**TOD**		***Total***
		#	**%**	**#**	**%**	**#**	**%**	
1	Albuquerque	9	26.5%	4	11.8%	21	61.8%	**34**
2	Atlanta	2	2.6%	14	18.2%	61	79.2%	**77**
3	Austin	0	0.0%	16	45.7%	19	54.3%	**35**
4	Baltimore	5	4.0%	9	7.2%	111	88.8%	**125**
5	Boston	471	61.5%	269	35.1%	26	3.4%	**766**
6	Buffalo	10	23.8%	4	9.5%	28	66.7%	**42**
7	Charlotte	1	4.0%	4	16.0%	20	80.0%	**25**
8	Chicago	44	11.7%	126	33.4%	207	54.9%	**377**
9	Cleveland	29	23.8%	53	43.4%	40	32.8%	**122**
10	Dallas	0	0.0%	23	39.0%	36	61.0%	**59**
11	Denver	6	5.7%	10	9.5%	89	84.8%	**105**
12	Detroit	0	0.0%	0	0.0%	47	100.0%	**47**
13	Eugene	3	6.1%	20	40.8%	26	53.1%	**49**
14	Harrisburg	0	0.0%	6	33.3%	12	66.7%	**18**
15	Houston	0	0.0%	5	8.1%	57	91.9%	**62**
16	Jacksonville	0	0.0%	6	24.0%	19	76.0%	**25**
17	Kansas City	2	1.5%	35	25.5%	100	73.0%	**137**
18	Las Vegas	2	18.2%	1	9.1%	8	72.7%	**11**
19	Little Rock	0	0.0%	17	21.3%	63	78.8%	**80**
20	Los Angeles	15	8.6%	54	30.9%	106	60.6%	**175**
21	Memphis	0	0.0%	14	24.1%	44	75.9%	**58**
22	Miami	2	2.9%	20	29.0%	47	68.1%	**69**
23	Minneapolis-St. Paul	0	0.0%	1	3.0%	32	97.0%	**33**
24	Nashville	2	15.4%	0	0.0%	11	84.6%	**13**
25	New Orleans	0	0.0%	33	40.7%	48	59.3%	**81**
26	New York	124	17.2%	56	7.8%	539	75.0%	**719**
27	Norfolk	115	33.1%	65	18.7%	167	48.1%	**347**
28	Philadelphia	75	15.8%	101	21.3%	299	62.9%	**475**
29	Phoenix	50	42.0%	9	7.6%	60	50.4%	**119**
30	Pittsburgh	0	0.0%	18	40.9%	26	59.1%	**44**
31	Portland	11	3.7%	33	11.0%	255	85.3%	**299**
32	Sacramento	1	2.6%	8	21.1%	29	76.3%	**38**
33	Salt Lake City	30	17.3%	143	82.7%	0	0.0%	**173**
34	San Diego	2	5.9%	8	23.5%	24	70.6%	**34**
35	San Francisco	3	1.7%	22	12.3%	154	86.0%	**179**
36	Seattle	11	11.1%	25	25.3%	63	63.6%	**99**
37	St Louis	6	3.4%	46	26.4%	122	70.1%	**174**
38	Tampa	0	0.0%	6	31.6%	13	68.4%	**19**
39	Washington	22	7.2%	167	54.6%	117	38.2%	**306**
TOTAL		**1054**	**18.7%**	**1453**	**25.7%**	**3149**	**55.7%**	**5650**

Table 3: Cultural Resource Districts by TOD Typology Score, Nationwide

TOD Typology	Number of Station Areas Intersecting with Historic Districts (% of Historic Districts of All Stations)	Historically Designated Land Area (SF) (Percentage of Historic Land Area Distributed by Typology)	Total Number of Stations Per Typology	Total Land Area (SF) within All Stations	Percentage of All Station Land Area Designated as Historic
TAD	366 (29.6%)	164,417,128 (27.1%)	1,399	30,616,477,056	0.54%
Hybrid	384 (31.1%)	193,961,123 (32.0%)	1,360	29,762,979,840	0.65%
TOD	485 (39.3%)	247,122,132 (40.8%)	1,640	35,890,652,160	0.69%
TOTAL (National)	**1235 (100%)**	**605,500,384 (100%)**	**4,399**	**96,270,109,056**	**0.63%**

Table 4: Cultural Resource Districts Intersecting with Station Areas (Half-Mile Radius)

		Cultural Resource Districts (CRDs) by Region, within ½ mile of All Station Areas		Total CRDs in Region (MSA)		% of CRDs within Station Areas	
Region #	**Region Name**	**Number of CRDs**	**Area (SF)**	**Number of CRDs**	**Area (SF)**	**Number of CRDs**	**Area (SF)**
1	Albuquerque	5	2,918,483	20	96,007,839	25.00%	3.00%
2	Atlanta	45	15,231,508	156	2,382,516,496	28.80%	0.60%
3	Austin	4	674,030	40	219,681,058	10.00%	0.30%
4	Baltimore	48	19,681,242	128	3,635,330,594	37.50%	0.50%
5	Boston	228	62,184,173	393	3,528,771,546	58.00%	1.80%
6	Buffalo	9	2,645,332	19	141,854,334	47.40%	1.90%
7	Charlotte	1	885,210	87	632,225,695	1.10%	0.10%
8	Chicago	113	86,759,881	176	2,858,401,045	64.20%	3.00%
9	Cleveland	26	41,229,836	73	2,596,394,410	35.60%	1.60%
10	Dallas	14	1,973,260	68	366,957,322	20.60%	0.50%
11	Denver	11	2,486,729	78	3,994,873,388	14.10%	0.10%
12	Detroit	6	384,074	84	630,660,369	7.10%	0.10%
13	Eugene	3	724,419	9	40,666,583	33.30%	1.80%
14	Harrisburg	6	2,399,495	19	51,752,035	31.60%	4.60%
15	Houston	7	855,379	23	67,251,853	30.40%	1.30%
16	Jacksonville	1	408,742	21	251,506,521	4.80%	0.20%
17	Kansas City	23	6,316,920	76	307,262,092	30.30%	2.10%
18	Las Vegas	5	3,409,144	10	2,390,093,613	50.00%	0.10%
19	Little Rock	8	1,376,979	32	125,709,529	25.00%	1.10%
20	Los Angeles	21	5,228,042	44	160,986,798	47.70%	3.20%
21	Memphis	19	2,634,717	73	451,403,201	26.00%	0.60%
22	Miami	6	1,076,150	30	162,053,648	20.00%	0.70%
23	Minneapolis-St. Paul	11	5,918,109	48	2,125,958,692	22.90%	0.30%
24	Nashville	6	330,708	75	1,183,727,701	8.00%	0.00%
25	New Orleans	23	34,510,256	44	1,159,184,211	52.30%	3.00%
26	New York	148	52,384,194	427	11,148,232,481	34.70%	0.50%
27	Norfolk	97	29,547,965	64	950,667,460	151.60%	3.10%
28	Philadelphia	96	84,916,793	312	6,425,334,227	30.80%	1.30%
29	Phoenix	24	5,810,632	76	423,653,048	31.60%	1.40%
30	Pittsburgh	7	892,587	74	411,621,724	9.50%	0.20%
31	Portland	19	5,053,707	32	184,693,927	59.40%	2.70%
32	Sacramento	3	375,572	15	55,017,692	20.00%	0.70%
33	Salt Lake City	18	4,832,358	29	40,419,161,986	62.10%	0.00%
34	San Diego	5	410,128	15	76,641,003	33.30%	0.50%
35	San Francisco	22	8,922,650	47	718,299,852	46.80%	1.20%
36	Seattle	13	4,139,864	52	3,176,640,706	25.00%	0.10%
37	St Louis	41	8,573,521	144	1,153,029,358	28.50%	0.70%
38	Tampa	3	2,465,339	24	224,246,108	12.50%	1.10%
39	Washington	90	94,932,255	267	12,421,709,719	33.70%	0.80%
TOTAL		**1235**	**605,500,384**	**3404**	**107,350,179,864**	**36.30%**	**0.60%**

Table 5: Cultural Resource Districts that Intersect TOD Station Areas Only

		Area of Cultural Resource Districts (CRDs) in TODs		% of CRDs within TOD Station Areas	
Region #	**Region Name**	**# of intersecting districts**	**Area (SF)**	**Number of CRDs**	**Area (SF)**
1	Albuquerque	1	318,353	5.0%	0.3%
2	Atlanta	9	2,417,347	5.8%	0.1%
3	Austin	4	674,030	10.0%	0.3%
4	Baltimore	30	12,576,706	23.4%	0.3%
5	Boston	6	1,431,736	1.5%	0.0%
6	Buffalo	4	632,802	21.1%	0.4%
7	Charlotte	1	885,210	1.1%	0.1%
8	Chicago	62	67,806,583	35.2%	2.4%
9	Cleveland	6	2,280,841	8.2%	0.1%
10	Dallas	9	1,128,992	13.2%	0.3%
11	Denver	7	1,976,837	9.0%	0.0%
12	Detroit	6	384,074	7.1%	0.1%
13	Eugene	1	72,059	11.1%	0.2%
14	Harrisburg	5	821,259	26.3%	1.6%
15	Houston	5	794,037	21.7%	1.2%
16	Jacksonville	1	408,742	4.8%	0.2%
17	Kansas City	17	5,333,021	22.4%	1.7%
18	Las Vegas	3	236,984	30.0%	0.0%
19	Little Rock	5	655,255	15.6%	0.5%
20	Los Angeles	16	3,981,066	36.4%	2.5%
21	Memphis	18	2,583,386	24.7%	0.6%
22	Miami	4	598,545	13.3%	0.4%
23	Minneapolis-St. Paul	6	3,284,892	12.5%	0.2%
24	Nashville	5	257,941	6.7%	0.0%
25	New Orleans	18	33,863,529	40.9%	2.9%
26	New York	91	28,426,486	21.3%	0.3%
27	Norfolk	50	15,851,523	78.1%	1.7%
28	Philadelphia	42	67,446,364	13.5%	1.0%
29	Phoenix	10	2,354,510	13.2%	0.6%
30	Pittsburgh	6	424,011	8.1%	0.1%
31	Portland	10	2,320,523	31.3%	1.3%
32	Sacramento	1	354,075	6.7%	0.6%
33	Salt Lake City	0	-	0.0%	0.0%
34	San Diego	1	154,826	6.7%	0.2%
35	San Francisco	16	6,934,994	34.0%	1.0%
36	Seattle	8	2,153,923	15.4%	0.1%
37	St Louis	17	2,553,579	11.8%	0.2%
38	Tampa	2	2,463,266	8.3%	1.1%
39	Washington	45	71,415,136	16.9%	0.6%
TOTAL		**548**	**348,257,441**	**16.1%**	**0.3%**

4.1.3 Summary of National Findings

The national historic property and TOD typology analysis reveals a connection between historic properties with fixed-route transit (i.e. rail) stations and with TOD stations.

The national research questions and findings were as follows:

1. How many fixed-route transit stations in the United States are within nationally designated historic districts?

   Answer: 687 of 4,399 (15.6%) stations were located in a nationally designated historic district.

2. How many historic buildings are found within a half-mile of fixed-route transit stations?

   Answer: 5,650 of 59,492 (9.5%) individually listed buildings are located within a half-mile of a station.

3. What percentage of the buffer within a half-mile of fixed-route transit stations is designated as historic?

   Answer: 6.8% of all land within a half-mile of all 4,399 stations nationally is located in a NRHP Cultural Resource District. When looking at all land designated as NRHP Cultural Resource Districts nationally, 0.9% of the total is located within a half-mile of a fixed-route transit station.

4. How many station areas intersect with any portion of one or more historic districts?

   Answer: 2,209 of 4,399 (50%) station areas intersection with one or more NRHP Cultural Resource District.

The TOD typology analysis examined the additional questions:

1. How many historic properties are within a half-mile of all stations in each urbanized region?

   AND

2. How many historic properties specifically fall within station areas identified as TODs, TADs, or hybrids for each region, and nationwide?

Answer: Table 2 shows the results of the number of historic properties located within a half-mile of all stations in each urban areas, with results stratified by station area typology. 3,149 of 5,650 listed buildings, representing more than 55.7% of all NRHP listed buildings, were located in station areas identified as TODs (despite TODs only accounting for 37.3% of all stations). Hybrid station areas account for 25.7% and TADs account for 18.7% of listed buildings. Next, 39.3% of TOD station areas intersect with a NRHP cultural resource district. This results in 247,122,132 SF (6,293 acres) accounting for 40.8% of all historic land area in station areas. Table 4 shows the total number and amount of land area of historic districts by region. Table 5 shows the total number and amount of land area of historic districts by region in TODs.

In summary, the key findings from the national-level analysis was that half of all station areas intersect with a national historic district and that more than half of all individually listed buildings (3,149 buildings) in station areas were found in TODs. Finally, across the United States, 6,293 acres of land in TOD stations were designated as national historic districts. These districts contain many more buildings that are considered contributing structures. Unfortunately, the NRHP database does not tally the number of buildings listed as contributing structures. Planners, developers, and officials should ensure that efforts to bolster density in TODs with NRHP designated districts and listed buildings should take precautions to ensure that new development is context sensitive.

4.2. State Data Analysis – New Jersey and Florida

This section summarizes a state level analysis of historic properties near fixed-transit stations in New Jersey and Florida.

4.2.1 The Intersection of Rail Stations and Historic Districts and Buildings in New Jersey

To determine the association of state historic districts in station areas with historic buildings, we joined stations in New Jersey to the applicable historic districts, as identified by the Historic Districts and Historic Properties databased made available by the New Jersey Department of Environmental Protection: Bureau of Geographic Information Systems. Utilizing the same spatial analysis techniques employed to evaluate national level data, we found that 147 out of 231 fixed-route transit stations (64%) in New Jersey are located within state historic districts, and that 19,390 of 65,764 historic properties (29%) are located within a station area. We also determined that 11.7% of station area land is part of a historic district and that 6.8% of the land within a half-mile of stations in New Jersey (excluding ROW) is comprised of historic properties (Figures 3 and 4).

Figure 3: New Jersey Historic Property and Station Areas

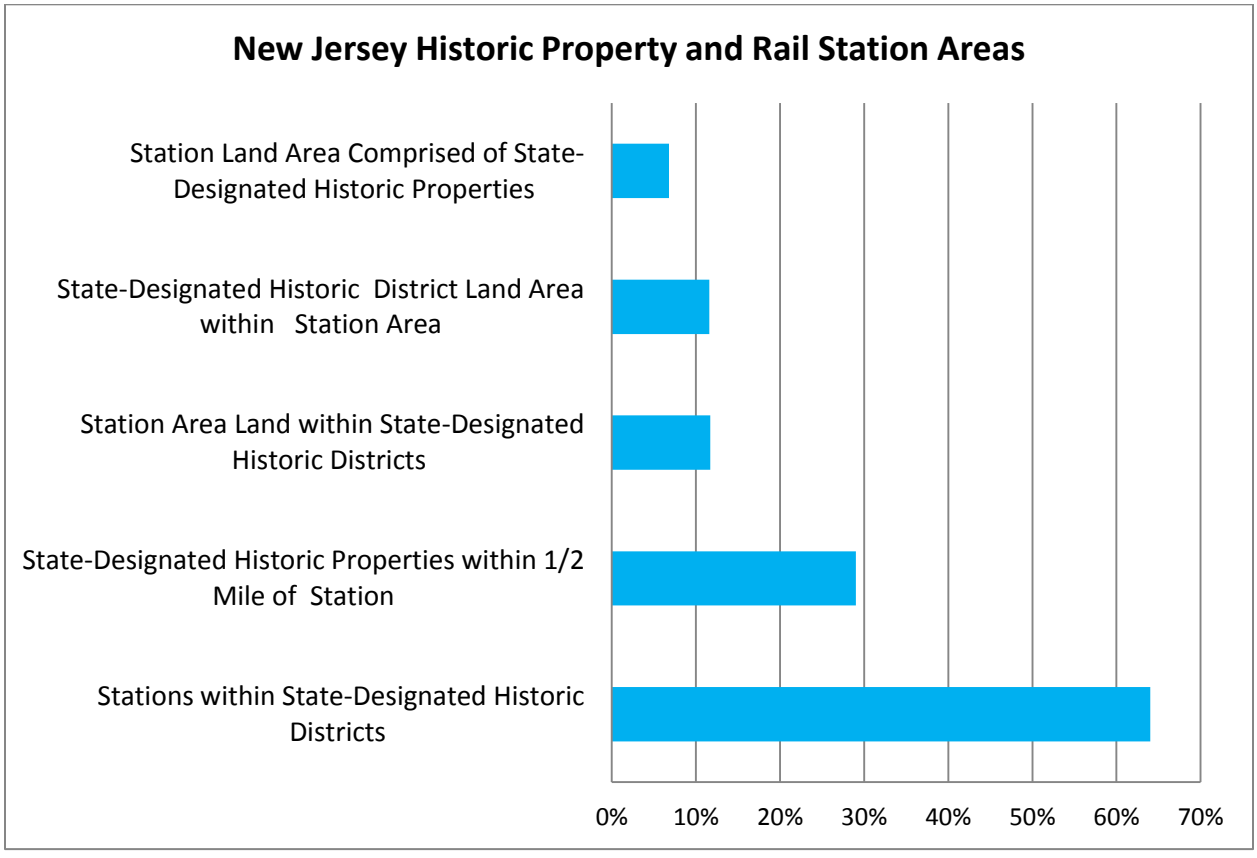
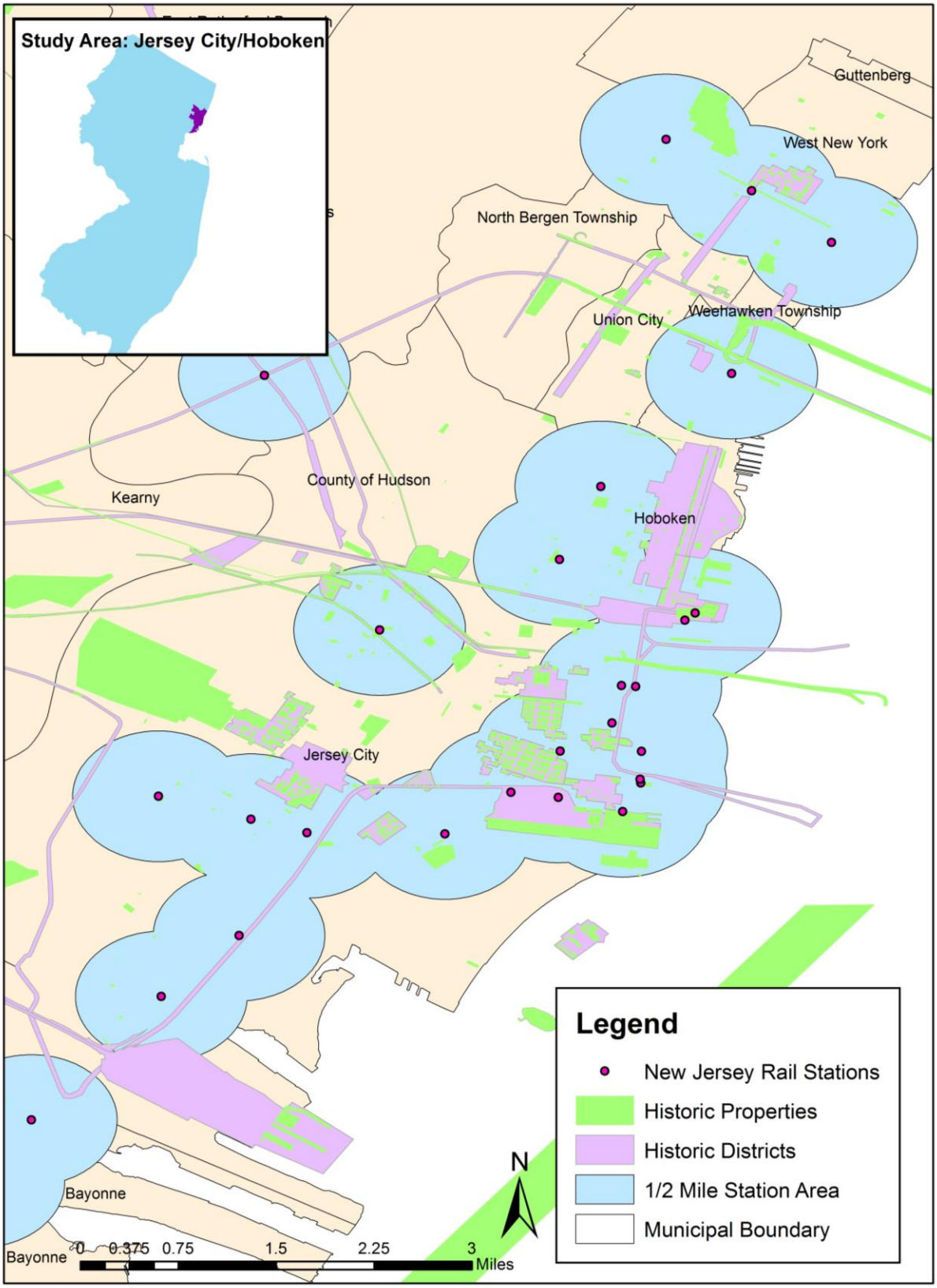


Figure 4: Sample Illustration--New Jersey Historic Property in Station Areas (Jersey City/Hoboken)



4.2.2 Florida

Similar analysis was repeated for Florida using historic resource data provided by the Florida Department of Historical Resources. To examine the relationship between Florida's fixed-route transit stations and its historic districts and properties, we identified historic properties within rail station areas, finding that only 4,506 out of 155,886 state-designated historic properties (2.9%) are located within a half-mile of a station area.

Similarly, only 24 of Florida's 546 historic districts (4.4%) intersect a rail station area. This could be a reflection on the relatively poor coverage of rail transit service in this state as compared to New Jersey. In terms of the area of land where historic preservation and transit-oriented development potentially intersect, we found that approximately 4.5% of designated historic district land area is within a station area, though 11.4% of station land area is within a historic district. However, no stations fall directly within a designated historic district (Figures 5 and 6).

Figure 5: Historic Property and Station Areas

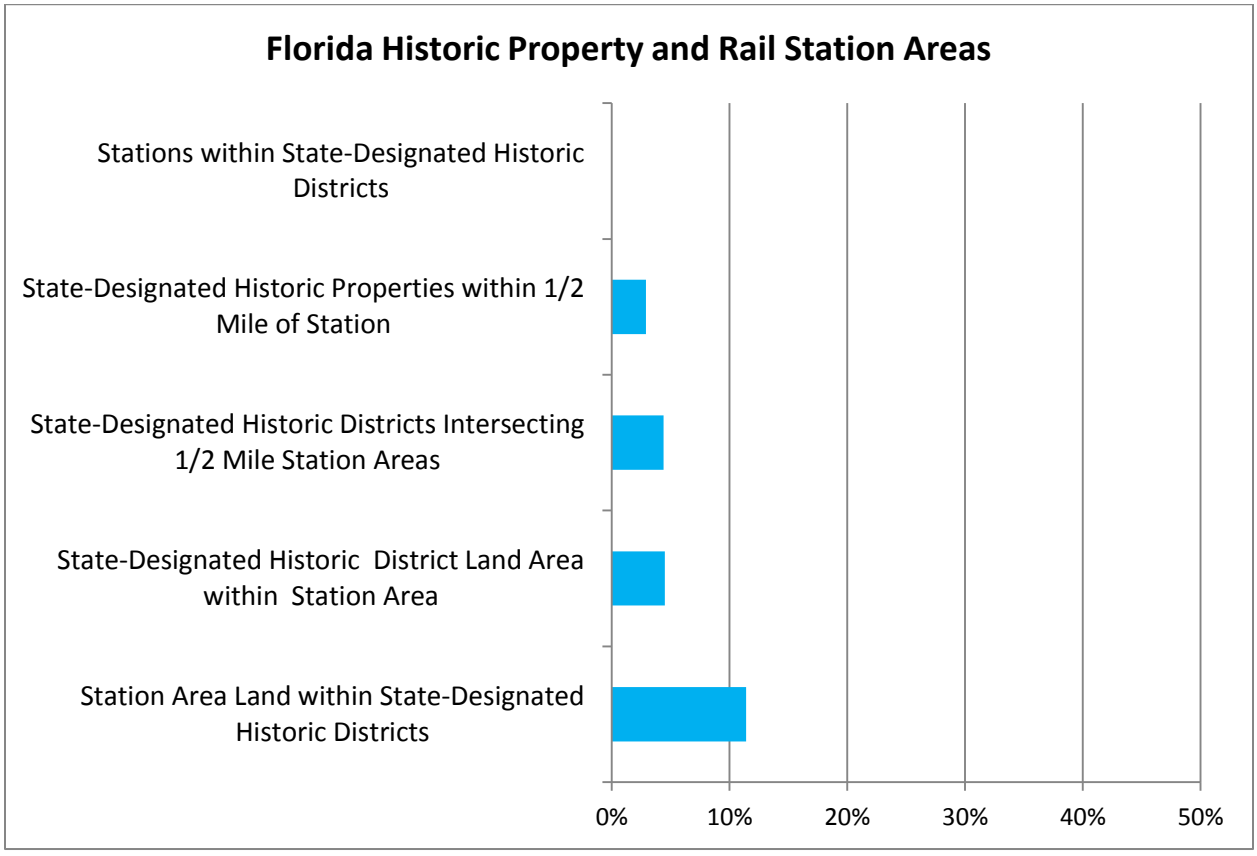
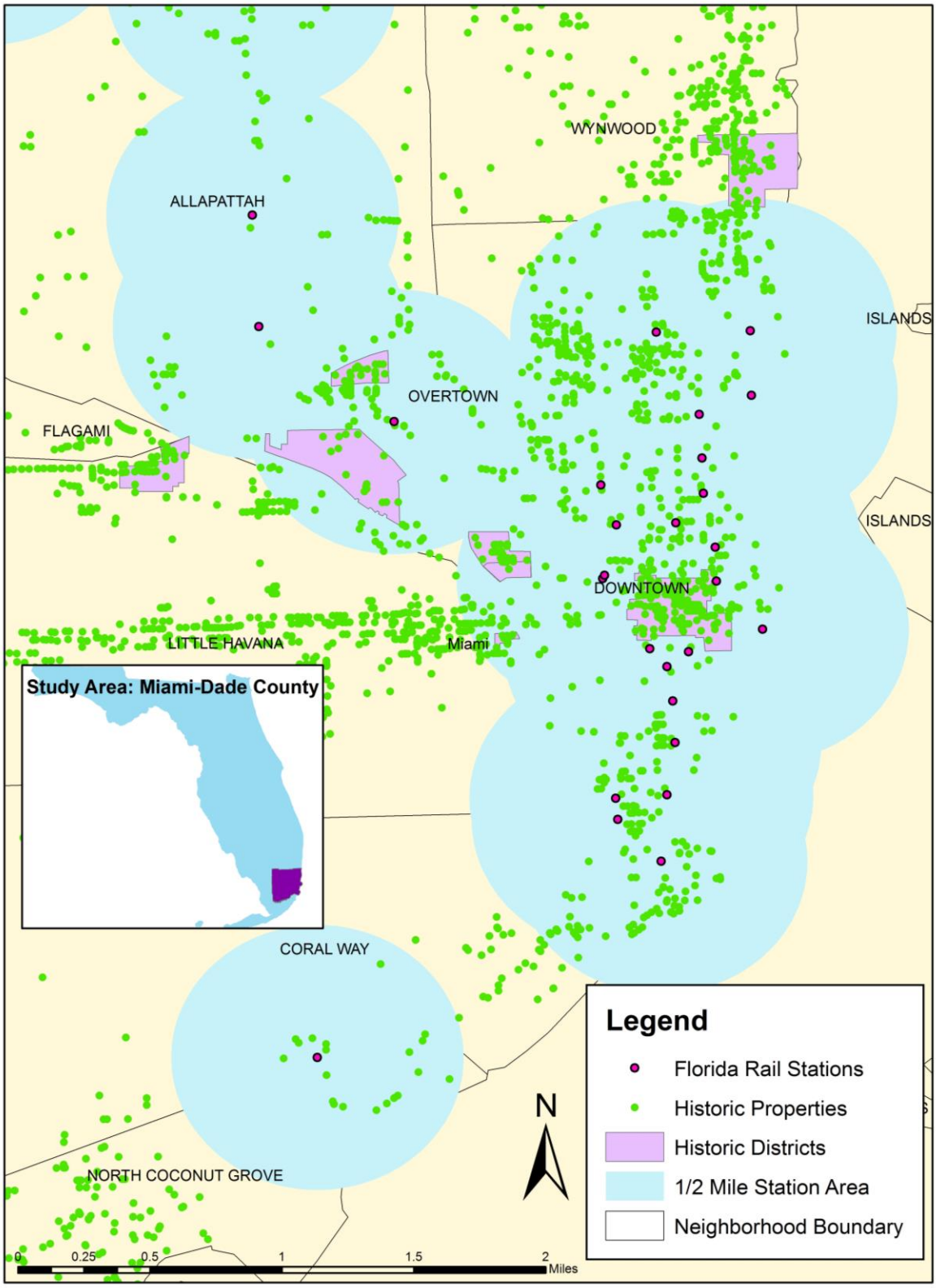


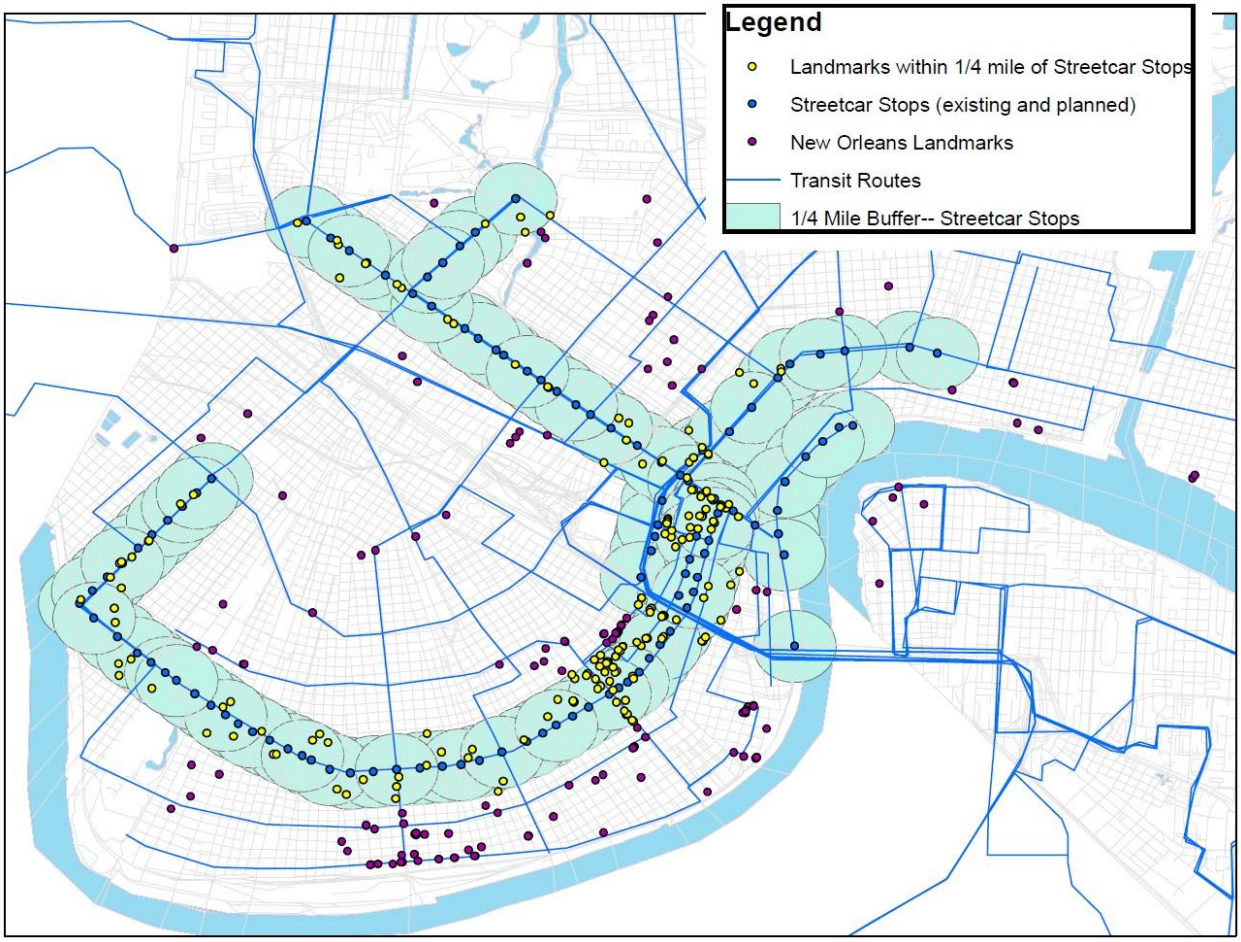
Figure 6: Florida Historic Property in Rail Station Areas (Miami Area)



4.3 Local Data Analysis - New Orleans, LA

In addition to these state-level case studies, we also conducted an additional analysis of local historic landmark data for the City of New Orleans, LA, provided by and designated (or nominated) by the Historic District Landmarks Commission. Because of the close spacing of streetcar stops in this study region, a quarter-mile buffer zone for station areas was selected rather than the half-mile radius used at the state and national level of analysis. The local database of landmarks[3] was provided in a non-spatial format. The records were geocoded for analysis and overlaid with station area buffers, revealing that of the 322 landmarks identified by this database, 177 (55%) were within a quarter-mile of an existing or planned streetcar stop (Figure 7). Due to a lack of precise spatial data, no additional analysis was performed on this dataset.

Figure 7: New Orleans HDLC Landmarks Streetcar Station Areas



[3] Some records consist of several adjacent addresses, aggregated in the database as one landmark. This aggregation is retained for the purposes of this analysis.

4.4 Conclusions

The exercise of spatially evaluating the relationships of fixed-route transit station areas to historic resources provides substantial evidence that there is a need to consider the role of historic preservation concurrent with efforts to promote higher-intensity, mixed-use development in support of transit. In some areas, a significant quantity of historic property falls within half-mile of a station area, and/or rail stations themselves fall within designated historic districts.

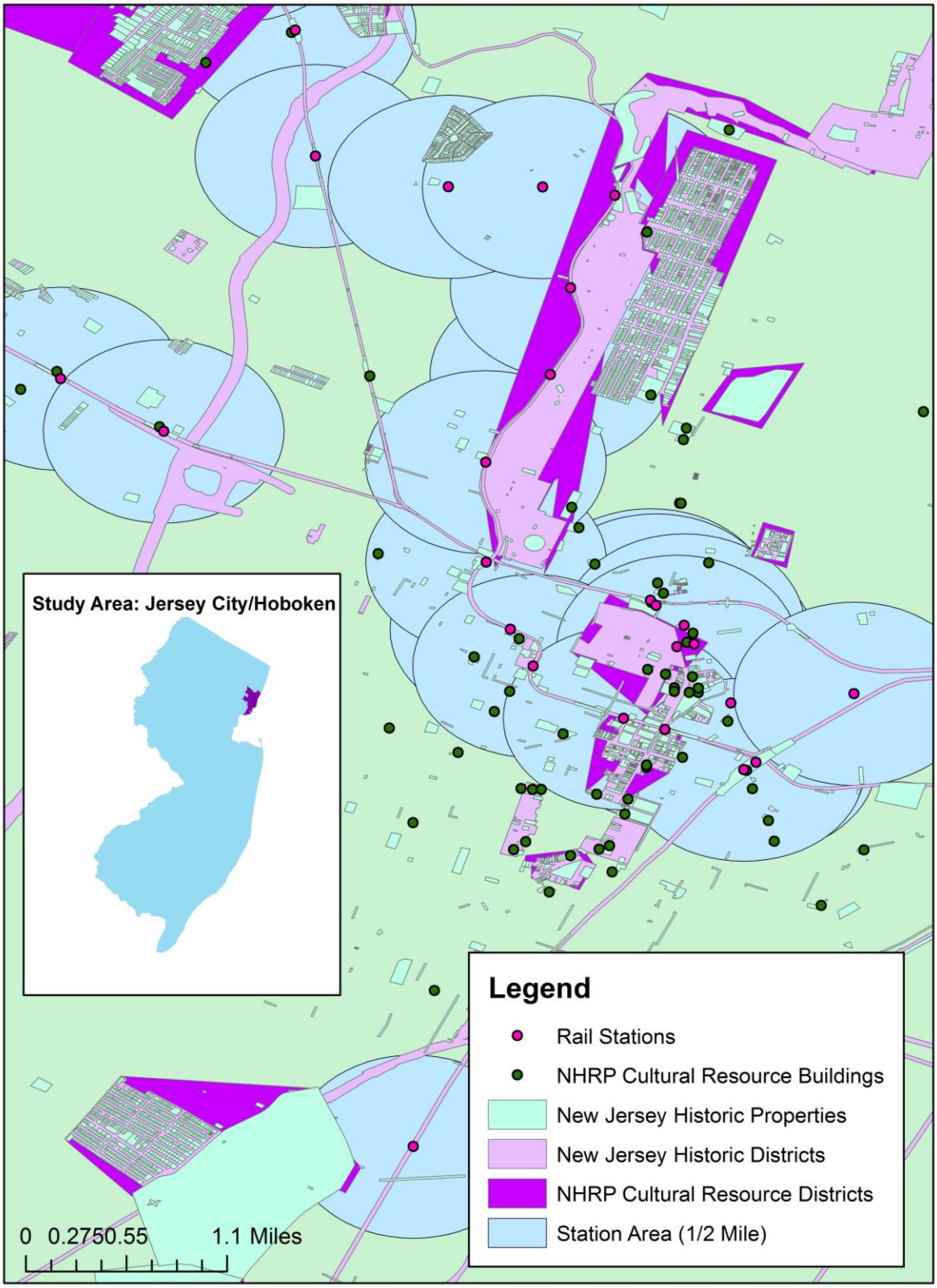
Notably, the quality and availability of historic resource databases varies greatly from state to state. Every local and state dataset we evaluated differed somewhat. We found that state and local historic registries overlapped substantially with NRHP-designated properties, though the specific properties listed and the boundaries of identified districts did not align precisely (e.g., Figure 8). While it would be possible to merge datasets at varying levels of geography in order to attain a more precise estimate of total historic resources within station areas, this would require substantial effort and would likely yield limited new knowledge. A more in-depth analysis of one state or region may warrant more comprehensive analysis of all historic property datasets. In general, however, the process utilized in this research illustrates that it is possible to perform this analysis at both the state and local level to determine the spatial relationship between historic districts and properties and fixed-route transit stations.

As noted above, the national analysis found that half of all station areas intersect with a national historic district and that more than half of all individually listed buildings (3,149 buildings) in station areas were found in TODs. Finally, across the United States, 6,293 acres of land in TOD stations were designated as national historic districts. These districts contain many more buildings that are considered contributing structures. Unfortunately, the NRHP database does not tally the number of buildings listed as contributing structures. Planners, developers, and officials should ensure that efforts to bolster density in TODs with NRHP designated districts and listed buildings should take precautions to ensure that new development is context sensitive.

The state level analysis found a closer spatial cross-linkage between historic resources in higher density and more transit-oriented New Jersey than in Florida. We noted above that there is some spatial relationship between the location of fixed-route transit stations and the location of historic resources, albeit the closeness of this interconnection varies by place. The local level analysis was provided to demonstrate the universal application of this method for any local community at any distance from fixed-route transit stations.

However, we note that normalizing this data for analytic purposes is challenging. Based on our limited data, we cannot say how much more or less prevalent historic buildings are in transit station areas as compared to other areas, namely because we do not have good geocoded data on all building types. Moreover, the NRHP data needs improvement. While it does a good job in locating historic districts and individually listed buildings, it does not include data on contributing buildings within districts.

Figure 8: Comparison of NRHP Cultural Resources to New Jersey Historic Resource Listings



5. Summary of Expert Team Project Meetings

The team conducted a conference call on February 5, 2014. The call consisted of two representatives from HRI, Inc. and the local and national historic preservation experts. This call started with a summary of the results from Task 1. Next, the purpose of the study was clarified for the representatives at HRI. They noted that state and federal policies that support historic preservation around transit stops could significantly improve the success of historic rehabilitations. Then, case study selection was discussed. It was decided that preliminary case studies would focus on successful and non-successful examples. Mockingbird Station in Dallas, TX, and Central Station in Memphis, TN, were selected as successful developments. Gates Factory in Denver, CO, was selected as a non-successful example. In addition, HRI recommended reaching out to another expert in historic preservation for suggestions about successful TODs that utilized historic preservation in Washington, DC. Finally, it was decided the team would meet in person for a half-day workshop in March.

On March 19, 2014, the team held a half-day workshop at HRI's offices in New Orleans. Three representatives from HRI and the local and national historic preservation experts attended the meeting. The meeting began by discussing statistics on TODs and the National TOD database. During the discussion of the findings from Task 1, the national expert indicated that we would need to know how many buildings were located near transit stops to see if the percentage of historic buildings near transit stops was significant in comparison. We also discussed issues with the data supplied by the National Park Service on the National Register of Historic Places Database. While the NPS claims there are over 1.7 million properties, the database only shows 59,000. We decided we needed to seek clarity after the meeting to understand the numbers. We also wanted to understand what the term "cultural resources building" meant because it is not a term used outside of the NPS. We also discussed the lack of data available on the impact of the historic tax credit.

After discussing the data issues with Task 1, we moved on to discuss the case studies. We decided against the Washington, DC, site suggestions by the outside expert and the local expert. One of the suggestions represented a site in progress. It was determined it was too early to know if the historic buildings would be preserved. The second site, Gallery Place, was a facade-exdomy[4], which is controversial in preservation circles and is not viewed as true preservation. We settled on the Sears building that was focused on in a thesis from Goucher College. We also decided to include one or more sites in New Orleans, LA. After discussing the case studies, the experts brainstormed a list of tools from their experiences (Table 5). Following this workshop, the authors conducted extensive research on various financial tools that may be employed in service to historic preservation (Appendix B), as well as the use of Transfer of Development Rights (TDR) in support of transit-oriented development that is respectful of preservation goals (Appendix C). We came up with a possible framework for categorizing tools into financial, regulatory, land use, and design and compatibility. This conceptualization helped direct the research for the next round of case studies.

[4] A façade-exdomy is where the façade is preserved but the rest of the building is new construction.

Table 6: Historic Preservation-TOD Tools Identified by Expert Panel

Financial Incentives	Land Use and Design	Private Developer
Historic Tax Credit (State and Federal)	Transit Orientation	Market Absorption Studies
Low-Income Housing Tax Credit	Walkability	
New Market Tax Credit	Transfer of Development Rights	
Tax Increment Financing (TIF)	Brownfields	
Property Tax Incentives	Parking	
Transportation Grants		
TOD Grants and Incentives		
HUD Incentives		
Private Financing/Loans		
Private-Public Partnership		

6. Case Studies

A series of eight case studies was completed in order to better understand the varying circumstances where TOD development intersects with historic preservation, and what impacts the success (or lack thereof) of such projects. The case studies included: Central Station in Memphis, TN; Cityline at Tenley in Washington, D.C., .; The Saratoga Apartments and the Iberville Project HUD Choice Neighborhood redevelopment in New Orleans, LA; Gateway Transit Village in New Brunswick, NJ; Mockingbird Station and South Side on Lamar in Dallas, TX; and Gates Rubber TOD in Denver, CO. For each of these projects, the authors sought to understand the history and context of the site including its relationship to regional transit networks, the key players involved in the project(s), the processes (e.g. funding sources, tax credits, and tools utilized) involved in redevelopment, and the outcomes and key lessons from each.

6.1 Central Station Memphis, Tennessee

Site History

Central Station in downtown Memphis, TN, is located on the southwest corner of South Main Street and G. E. Patterson. Designed by Daniel Burnham, the current station was constructed in 1914 for the Illinois Central Railroad (Finucan 2001; Memphis Railroad & Trolley Museum 2014). The eight-story structure replaced the company's two-story station, which was built on the same location in 1888 (Figure 9) (Memphis Railroad & Trolley Museum 2014). It served more than 50 passenger and freight trains per day at its height and provided office space for Illinois Central Railroad and three other railroad companies (Finucan 2001; Memphis Railroad & Trolley Museum 2014). Amtrak purchased the station in 1971; however it began to deteriorate since the building was no longer a headquarters for the railroad (Memphis Railroad & Trolley Museum 2014). In the late 70s, even though rail was declining in significance, the Downtown Concept Plan viewed the station as a pillar of the South Main Historic District (Finucan 2001). In addition, Central Station is listed on the National Register of Historic Places (The Commercial Appeal 1995).

Figure 9: 1888 Central Station, Memphis

Image Source: Memphis Railroad & Trolley Museum 2014

Transit Context: Memphis Area Transit Authority

The Memphis Area Transit Authority (MATA) serves roughly 11 million riders annually on its bus, paratransit, and rail trolley systems (Figure 10) (MATA 2014d). The MATA service area includes 311 square miles in Memphis, West Memphis, and Shelby County (2014d). It transports the majority of its passengers via bus but began trolley service in 1993 (2014d; 2014g). MATA has three midtown/downtown trolley lines that serve over a million people each year (2014d). Base fares for bus and trolley one-way rides are $1.75 and $1.00, respectively (2014c; 2014f). Fastpasses may be used for all MATA transit options and allow unlimited rides for 1, 7, or 31 days (2014b). Their price points are $3.50, $16, and $50, respectively (2014b). The Fastpass is activated upon the first use, not upon purchase (2014b). MATA offers reduced fares for seniors, disabled persons, and students (grade 1-12) (2014e).

Figure 10: MATA Downtown Bus and Trolley Routes

Image Source: MATA 2014a

In 1995, the city of Memphis used federal funds to purchase Central Station from Amtrak for $1,117,000 (The Commercial Appeal 1995). The purchase included the station, two additional buildings, and 13.7 acres of land. This exchange placed Central Station under the control of MATA, which began planning for the rehabilitation of the station into a mixed-use, multimodal transportation hub, projected to cost roughly $17.8 million including the purchase price (1995). The project was planned in hopes to stimulate redevelopment of the South Main Historic District. To complete the project, MATA sent out a request for proposals (RFP) for developers and selected the Alexander Company.

Redevelopment Process

The new Central Station was repurposed through a public-private venture between MATA and the Alexander Company. The Alexander Company is a real estate developer based in Madison, WI. Their work includes master development and adaptive reuse projects (Alexander 2014b). They "specializ[e] in urban infill, new construction, Brownfield revitalization, and historic preservation" projects that maintain the original integrity of historic sites while repurposing them to support modern needs (Alexander Company 2014b). The Alexander Company provides in house development, design, construction and facilities management, and sales services for their projects (Alexander Company 2014b). They also provide their clients with extensive knowledge and experience in attaining multiple sources of financing and in completing projects through public-private partnerships (Alexander Company 2014b).

The project was primarily funded through a grant from the Federal Transit Administration (FTA). The $17.8 million grant from the federal government enabled the initial purchase of the site and transportation related improvements (The Commercial Appeal 1995; Finucan 2001). The total project cost $23.3 million dollars and made use of private funding sources to complete the mixed-used goal of the development (Finucan 2001). National Corporate Tax Credit, Inc., IX, based in California, invested $3 million in the project by purchasing the project's historic tax credits (Finucan 2001). The Bank of Bartlett approved a $2.35 million loan to the Alexander Company (Finucan 2001). In addition, Amtrak contributed $100,000 (Finucan 2001).

As a public entity, MATA could not use federal historic tax credits (Finucan 2001). This created the need for a partnership which could make use of the tax credits to close the funding gap (Finucan 2001). FTA funds are limited in the ways in which they can be used. They could only finance the parts of the project that were transit related. To create the mixed-use aspects of the development, different funding sources were necessary. In addition, the site had to maintain its emphasis on encouraging public transit (i.e. limiting the amount of parking for cars) in order to keep the funds (Bailey, Jr. 2012). If the focus of the development shifted, the federal funds would have needed to be repaid (Bailey, Jr. 2012).

Outcomes and Lessons Learned

Today, Central Station includes a total of 35,000 square feet of office and retail space, 63 one and two bedroom apartments with large windows and views of the Mississippi River and downtown Memphis, a rooftop garden, and a banquet hall and conference space, which are available for public use (Figure 11) (Alexander Company 2014a). Several modes of transit are available at the new station. MATA bus and trolley routes stop at the station in addition to Amtrak. The transit improvements included "a new station for the Main Street Trolley, and an eight-bay canopy-covered bus transfer center for MATA. Amtrak received a new canopy-covered platform, refurbished tracks and bridge, new storage building, and new state-of-the-art ticketing and baggage facilities" (Finucan 2001). In addition, MATA and a police precinct now have offices at the new station (Finucan 2001).

Figure 11: Restored Central Station

Image Source: Memphis Railroad & Trolley Museum 2014.

The residential component of the development found tenants before the commercial spaces. The development opened in 1999 with more than 90% of its residential apartments leased (Bailey, Jr. 2012). Today the high occupancy rate continues, and there is generally a waiting list for the apartments which are moderately priced and range from 725 to over 1,350 square feet (Telleria 2006; Bailey, Jr. 2012). As the surrounding neighborhood began to attract real estate development, the seven commercial spaces have stayed occupied as well (Bailey, Jr. 2012). In addition to full occupancy of the residential and commercial spaces, "the banquet hall and conference space generates $100,000 a year in rent revenue," which enables MATA to maintain and operate the property without the use of tax dollars (Bailey, Jr. 2012).

The Central Station redevelopment project spurred the redevelopment of the South Main Historic District (Bailey, Jr. 2012). It became a project where once opposing forces came together to create a vision that benefited transportation and preservation interests instead of positioning one interest group over the other (Finucan 2001).

6.2 Cityline at Tenley, Washington, D.C.

The Cityline at Tenley project is a mixed-use development incorporating the rehabilitation of a historic landmark store—The Sears Roebuck & Company Building, an Art Moderne-style department store at 4500 Wisconsin Avenue in the Tenleytown neighborhood of Washington, D.C. — which is listed on the National Register of Historic Places. The redevelopment was proposed with 88,000 gsf of retail on the ground floor and the construction of four upper stories of residential condominiums.

Site History

The original Sears building, built in 1941, is listed on the National Register of Historic Places "as an example in the District of a new and modern department store building type developed by Sears Roebuck & Company architects" (Figure 12). The building was constructed to attract motorists along Wisconsin Avenue and represents a national trend by both Sears and other retailers to construct stores along suburban routes beyond congested downtown areas (Bushong 1993). Tenleytown was a streetcar suburb in outlying Washington that was primarily rural when Sears built their store. They even sold tractors from this location.

In 1993 the Sears Department Store closed but the building was purchased by another regional retailer (Hechinger's) in 1994 for use as a home improvement center. The Washington Art Deco Society submitted an application for a D.C. Historic Landmark designation in 1993 and the building was listed on the National Register of Historic Places in 1996.

Figure 12: Sears Roebuck & Company Department Store, 4500 Wisconsin Avenue

Image Source: Library of Congress

Redevelopment Process

Roadside Development acquired the building in December 2001 with the intent of creating a Transit-Oriented Development (TOD) atop the Tenleytown Metro Station. When the developers bought the building, the primary reason was its size and its historic use as a retail hub. A property like 4500 Wisconsin Ave. NW was extremely rare in the District, according to developer, Richard Lake, who was searching for a building with a large footprint suitable for big box retailers.

The project also conformed to the guidelines of the 2004 *Upper Wisconsin Avenue Corridor Study,* which focused on reaching a balance of improving the quality, density and mix of uses of development along Wisconsin Avenue in accordance with TOD principles while maintaining the stability and desirability of adjacent low-density residential areas (DC Office of Planning 2004). Roadside LLC bought the vacant building initially to redevelop for big box retail tenants within the existing building's envelope but expanded their development scope based on structural opportunities afforded by previous upgrades.

Once the development team started to investigate the structure they determined that the original columns could support much greater loads if new footings were provided. This was accomplished with 120 37' mini-pilings drilled to bedrock coupled with the construction of a separate slab atop the original parking deck to support the upper floors of the residential condominiums. The large footprint of the building also allowed the designers to investigate numerous alternatives.

During the design process, Shalom Baranes Associates developed three massing alternatives for a residential addition atop the rooftop parking deck of the existing Sears building. These were submitted to the various stakeholders for their review and consideration including the Historic Preservation Office (HPO) and Historic Preservation Resources Board (HPRB). The configuration preferred by the developer incorporated a curvilinear wing along the Wisconsin Avenue façade was selected. "Cityline" was the first mixed-use retail/residential project undertaken by Roadside Development that incorporated the rehabilitation of a historic structure (Figure 13).

Figure 13: Historic Sears Roebuck Store with Condos Built Atop Existing Parking Deck

Image Source: Roadside Development LLC[5]

The conceptual design was reviewed by HPO staff and the community in September, 2001 and by the HPRB on October 25, 2001. The staff found that the restoration would "recapture the clarity and strength of the original design. While clearly visible from many viewpoints," the staff found the addition of four stories of residential units to be a "carefully crafted attempt to balance community, development and planning concerns in a way that is sympathetic to the inherent qualities of a historic landmark" (DC Office of Planning 2001).

Both neighborhood organizations, ANC 3E and ANC 3F, passed resolutions favoring the conceptual design conversion of the building to mixed use. ANC 3E Commissioners noted that the project was consistent with existing zoning and the

Figure 14: Cityline at Tenley

Image Source: Roadside Development LLC

[5] http://www.roadsidedevelopment.com/portfolio/Cityline_at_Tenley

Comprehensive Plan, and that the project would assist in the revitalization of the Wisconsin Avenue commercial corridor (Advisory Neighborhood Commission 2001).

In subsequent submissions, design revisions included a 5-foot increase in height from sixty-five to seventy feet to allow higher unit ceilings in the condos and to accommodate the mechanical system. This height increase required approval by the Board of Zoning Adjustment.

Following design review, HPO staff noted that they felt that Cityline would be an exciting architectural contribution to the community (Maloney 2002). Following HPRB review, the developer received their building permits. Groundbreaking occurred in January 2003. The retail stores in the original Sears Building opened in late 2003 and the residential condominium units were completed in 2005 (Figures 14 and 15).

Figure 15: Residential Condominium Lobby at "CITYLINE AT TENLEY"
Image Source: Roadside Development LLC

Outcomes and Lessons Learned

In concert with the comprehensive plan for Ward 3 and mayoral and planning initiatives, this project was one of the first TODs that incorporated mixed uses, particularly residential, in close proximity to Metro stations. "The $78 million project includes 204 condominium units, ground floor retail (Best Buy, the Container Store, and Ace Hardware) and parking provided at a ratio of 0.8 / 1. The retail stores opened in 2003 and the residential project was completed in 2005. The residential condos were 100% sold (Roadside Development LLC n.d.). It was traditionally financed using debt and equity. No historic tax credits were used, although they were actively pursued by the developers. Their request was denied based on the size of the residential addition they ultimately built atop the former Sears Roebuck & Co. department store.

This project is often cited as an example of how thoughtful design can produce high-density TOD that complements historic architectural style and is respectful to the adjacent lower-density residential development, in this case, the Tenleytown neighborhood (Forgey 2005).

One key to the success of this project was selecting a D.C.-based architect, Shalom Baranes Associates, noted by the American Institute of Architects and local architectural critics for creating new

building designs that complement historic structures and districts (Tardif 2005). The development team also seriously engaged a multitude of stakeholders including the two adjoining neighborhood associations as well as city preservation, planning and zoning staff early and often during the development process to achieve their award-winning project. Roadside Development was also intent on utilizing the historic property in their redevelopment plan and resisted joining proponents of demolition who favored leveling the building in order to facilitate the development of a "big box retailer."[6]

[6] Additional information reported in this project summary was obtained from Richard Lake, co-founder of Roadside LLC, the developer of Cityline at Tenley and from a 2007 Master of Arts in Historic Preservation Thesis prepared by Sarah G. Michailof entitled "Can Transit-Oriented Development Accommodate Preservation Goals? A Study of Historic Structures and Districts in the Vicinity of Washington's Metro Stations" at Goucher College.

6.3 Gateway Transit Village, New Brunswick, New Jersey

Regional and Transit Context

To better understand the Gateway Transit Village case study, some background and context on its host community, New Brunswick, is important. New Brunswick is a city located in the central portion of New Jersey, in Middlesex County. It has a long history. Dutch settlers came to the area in the late 1600s and engaged in farming and trade by boat and ferry on the adjacent Raritan River. Transportation figured prominently throughout its history and the city's growth was encouraged by first the building of the adjacent Raritan and Delaware canal (completed in the 1830s), then, a railroad in the late 1830s, with the current New Brunswick train station built in 1903. Finally a growing network of highways that connected New Brunswick to New York City and Philadelphia was constructed mostly during the 20th century. The city's population grew from about 10,000 in 1850 to about 20,000 in 1900 and was just shy of 40,000 in 1950.

Starting in the 1960s, however, New Brunswick's fortunes waned as its once proud manufacturing and retail industries declined. Whereas in 1954 New Brunswick captured about 26% of Middlesex County's total retail sales, this share dropped to about 15% in 1967 and 4% by 1987.[7] The city's population growth slowed and its racial and ethnic population changed from predominantly white (about 90% in 1950) to increasingly minority (30% black by 1990) and Hispanic (about 20% by 1990). New Brunswick's population, economic and demographic shifts paralleled those experienced by many central cities in the United States in the post-war period.

New Brunswick's fortunes have markedly improved, however, in the past few decades. Its population has grown from about 40,000 in 1960 to about 55,000 in 2010 (40% white, 16% black, and 50 % Hispanic). There has also been a massive amount of new construction proportional to its size; an estimated 7.5 million square feet of office, retail, and residential space comprising a $1.6 billion investment has cumulatively been added from the 1980s until today.[8] This investment is due to a number of factors. New Brunswick is the county seat and county government operations have grown over time. New Brunswick contains the largest campus (40,000 students) of Rutgers, the State University; and has also witnessed the changeover of two local-oriented hospitals to regional medical centers of considerable scale. For instance, Middlesex General Hospital grew to the Robert Wood Johnson Medical Center, a regional complex aided by the Robert Wood Johnson Foundation.

New Brunswick has also benefited from containing the world headquarters of the International Johnson and Johnson (J&J) Company. In the late 1970s, J&J decided to stay in New Brunswick; it had considered leaving its central city location as did many other Fortune 500 companies in this era who, in fact, decamped to the suburbs, but J&J ultimately remained in its home community for numerous reasons (e.g. strategic location and corporate credo responsibility to the communities where it was located). J&J built a new world headquarters in the heart of downtown New Brunswick in the early 1980s and J&J encouraged the formation of two entities, the New Brunswick Development Corporation

[7] 1954, 1967, and 1987 Census of Retail Trade
[8] Data provided by the New Brunswick Development Corporation (DEVCO)

(DEVCO) and New Brunswick Tomorrow (NBT) that in a public-private partnership with the city proved instrumental in New Brunswick's rebirth. DEVCO marshals planning, financial, and other talents to catalyze "bricks and mortar" projects in the city, while NBT works to enhance New Brunswick's social capital through myriad educational, job training, and other services.

New Brunswick's renaissance has also benefitted from its good transportation access. To encourage J&J to stay in the city, the State of New Jersey built new highway connections, namely Route 18 that links to two interstate highways (I-95 and I-287). New Brunswick also benefits from a train station that is on the main line of the Amtrak Northeast Corridor (Boston- New York City- Washington, D.C.) and is also served by New Jersey Transit (NJT) (Figure 20), with about 90 NJT trains stopping daily in New Brunswick. Depending on the time of day, one can hop on an NJT train in the New Brunswick station (located at the intersection of Easton Avenue and French and Albany Streets near the Rutgers College Avenue Campus) and arrive at Pennsylvania Station in central Manhattan in about 45 to 60 minutes.

Figure 16: Portion of New Jersey Transit Stations, including New Brunswick

Not coincidentally, many of the major office, retail and housing projects that have been built in New Brunswick over the last few decades are near the New Brunswick train station. Examples located within a 5 to 10 minute walk from the station or closer include the J&J headquarters (completed in the early 1980s at a cost of about $20 million and adjacent to the station), Golden Triangle office complex ($52 million, 260,000 square foot (ft^2) completed in 1989 and also connected to the station), Kilmer Square ($18 million, 145,000 square foot retail office facility, completed 1991), the Highlands (415 housing units completed 2004 at a $59 million cost), and the Heldrich ($120 million, 365,000 ft^2 hotel,

office and residential mixed-use project completed 2007). This case study project personifies yet another transit-oriented development (TOD) in New Brunswick.

TOD Development Process

The opening paragraphs of a February 13, 2011 real estate article in the Sunday *New York Times* read:

> *"In this sluggish real estate market, how is it possible that a major mix-used project… can actually be proceeding? 'Stubborn determination and extreme cooperation,' said Christopher Paladino, the president of the New Brunswick Development Corporation"* (Martin 2011, p.9).

The DEVCO project referred to is Gateway Transit Village (GTV). DEVCO partnered with Pennrose Properties, a company with multi-decade experience in new construction and rehabilitation in the Northeast, including numerous projects in New Brunswick. The Gateway Transit Village is strategically located at Easton Avenue and Somerset Street in the heart of New Brunswick's downtown. GTV is connected to the southbound track at the New Brunswick train station and across the street from the main Rutgers campus. GTV was completed in late 2012-early 2013 and is a very ambitious development that capitalizes on the city's excellent transit access.

As noted elsewhere in this overall study, developers and planners in recent years have stressed the importance of locating development near transit, "transit-oriented development" as a way to reduce dependence on the automobile and to further smart growth. To encourage TODs and smart growth, the state of New Jersey in the mid-2000s, began to designate areas near transit as "Transit Villages" and downtown New Brunswick received this designations in 2005. This designation gave the city's downtown priority access to state revitalization monies. One such program was the New Jersey Urban Transit Hub Tax Credit (UTHTC). Enacted in 2007, UTHTC (administered by the New Jersey Economic Development Authority) issues tax credits (from 35 to 100%) that can be applied against state taxes for projects locating within a half-mile of an urban transit hub. Statewide, the UTHTC had a $1.5 billion authorization and the program was effective until 2013, when New Jersey more broadly changed and consolidated its economic development aid (see detail at end of section). As detailed below, UTHTC was one of the many subsidies that enabled the Gateway Transit Village development.

At 23 stories, 624,000 square feet, and sited on a 1.2 acre parcel, GTV is one of the most significant developments competed in New Brunswick to date (Figure 17 top photographs). It contains mixed uses (retail, residential, office, and on-site parking) including a 45,000 ft^2 Rutgers University Barnes and Noble Bookstore (with an eye-catching "Rutgers" clock-face; see Figure 17, top photo), 12,000 ft^2 additional retail, 58,000 ft^2 office space, 150 rental residences (25% available at below-market rents), 42 condominium residences, and a parking garage with about 670 parking spaces. The parking garage serves the project and other users, including those seeking parking by the New Brunswick train station. The project also provides a direct walking promenade and handsome outdoor café space linking the Rutgers campus directly to the New Brunswick train station (see Figure 17, bottom photo).

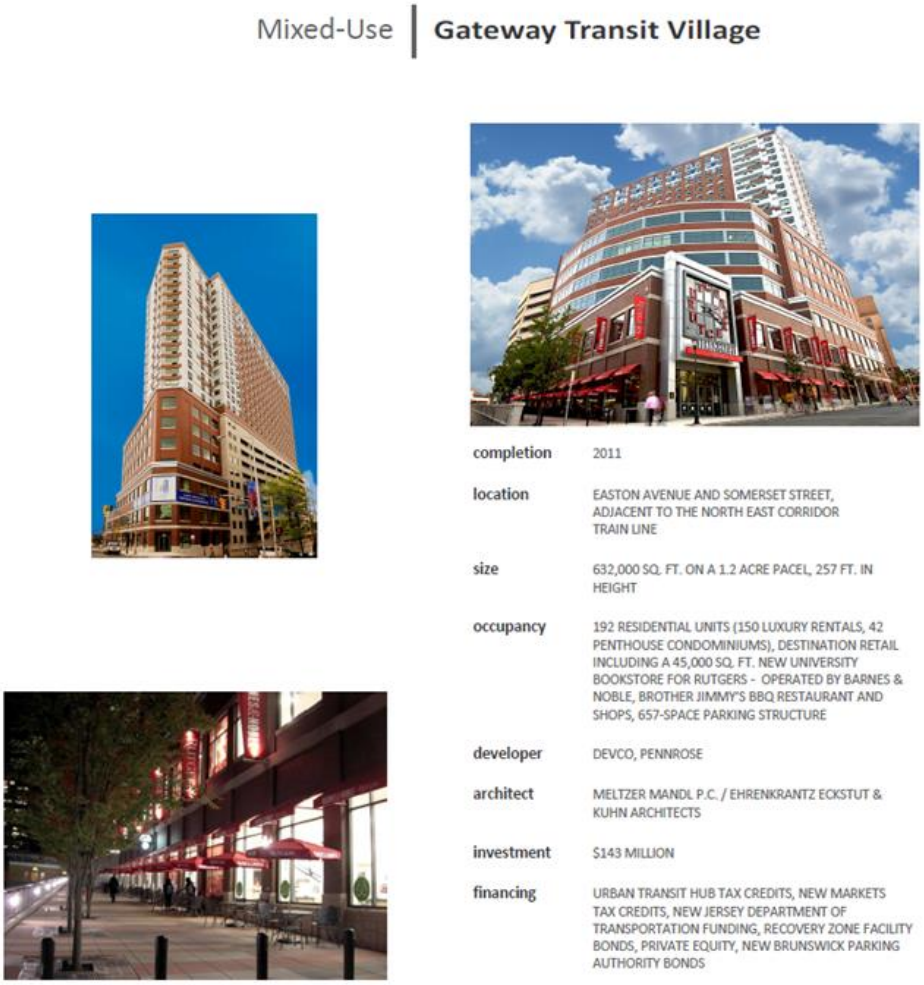


Figure 17: Gateway Transit Village

Image Source: New Brunswick Development Corporation

GTV is a public-private partnership (PPP) involving DEVCO, Pennrose, the New Brunswick Parking Authority (NBPA) and Rutgers University. The approximate $150 million project draws on multiple sources of revenue which emulates many contemporary PPP projects. These monies are detailed in Figure 18 and include as examples the federal New Markets Tax Credit (NMTC), the New Jersey UTHTC, NBPA bond support (in part based on federal stimulus aid), a Rutgers contribution, and private source dollars (e.g., conventional bank financing and condominium sales proceeds).

Evident from Figure 18 is the importance of tax credits to GTV. The NMTC is a 39% federal tax credit offered for investment in community development entities (CDEs) involved in low-income communities and making qualified low-income community investments. The 39% credit is available on a staggered basis over 7 years. This program is explained in detail later in this study's policy menu section. About $15 million of the total $150 million project cost was secured from NMTC equity (sale of tax credits) and the NWMTC provided additional mortgage financing benefits.

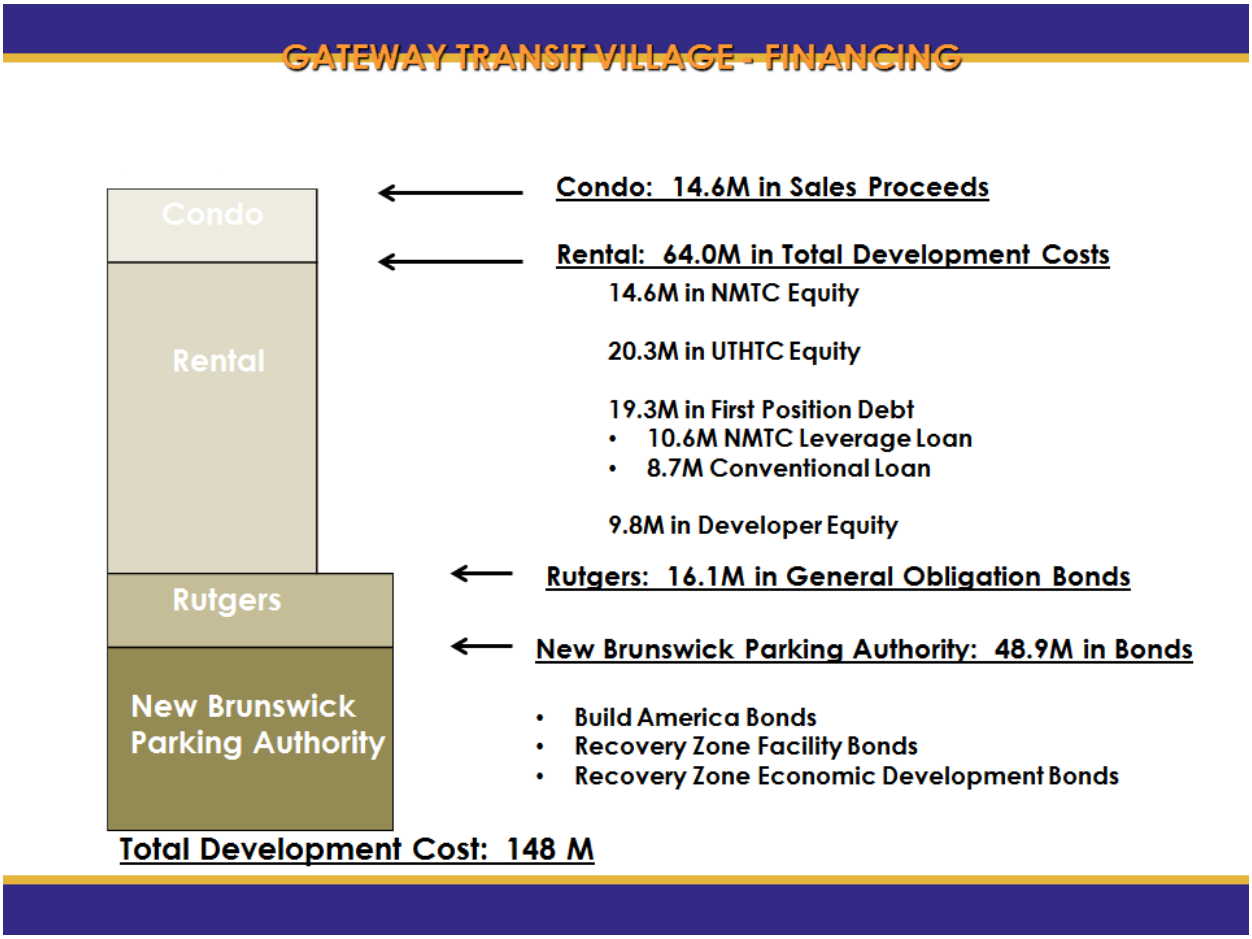


Figure 18: Gateway Transit Village Financing

Image Source: New Brunswick Development Corporation

A second key financial component of GTV was the New Jersey Urban Transit Hub Tax Credit. The UTHTC is described in detail later in this case study. GTV secured about $20 million of the approximate $150 million total project cost from the UTHTC.

Outcomes and Lessons Learned

This case study project as well as others in close proximity to the rail station in New Brunswick involved new construction. The same can be said concerning almost all the redevelopment effected in New Brunswick over the past few decades, namely that it has comprised new construction as opposed to

rehabilitation and adaptive reuse of existing buildings. Rather than just being neutral towards preservation of the existing stock, New Brunswick's redevelopment has often been antithetical to preservation. For example, the construction of the New Brunswick Hyatt Hotel (across from the J&J headquarters) in the early 1980s and the building soon afterwards of new townhouses in Hiram Square (located adjacent to the Hyatt) took place in one of the oldest neighborhoods in the city (Hiram Market). Preservationists fought to preserve the area and in fact the Hiram Market was declared eligible for the National Register of Historic Places in 1979 and was also placed in the same year on the State Register of Historic Places. Yet Hiram Market owner disinvestment and other challenges, including the city's strong desire to redevelop the area with new construction led ultimately to the removal of Hiram Market's designation and only 7 of this district's 81 buildings that were historically designated in 1979 remained intact.

In the planning for GTV, New Brunswick's municipal planner (Glenn Paterson) declared the existing buildings on the development site (Figure 19) as an "area in need of redevelopment" (Tarbous 2005, p.A-1). This included buildings at 104-120 Somerset Street that contained such businesses as Neubies Restaurant, Vagabound Tours, and First Class Notes (Tarbous 2005). Patterson described the block as substantially underdeveloped with stores covering up architectural features with illegal signs, truck trailers being used as parts of buildings, and other undesirable features (e.g. a rutted parking lot) (Tarbous 2005). Some preservationists in New Brunswick, however, had a more positive perspective of the area. Morris Kafka of the New Brunswick Historical Association (NBHA) pointed out that the site contained the city's "last intact 19th century row of commercial structures" (Tarbous 2005, P.A-2). Kafka criticized the rush to declare the area in need of redevelopment, and he favored a scaled-down new building and a more preservation-sensitive approach.

Figure 19: Portion of Gateway Transit Village Site, on Somerset Street: Before Development

Ultimately the site designated as in need of redevelopment was in fact redeveloped with the 624,000 square foot detailed earlier. In a simple "black and white" assessment to the situation, it would appear that preservationists lost the fight to preserve the existing buildings on the site. While that is the case and the historic buildings are gone, GTV did incorporate some preservation sensitivities; so, the outcome is somewhat "grey," rather than a stark "black and white" with respect to preservation and redevelopment themes. The following are some of GTV's preservation sensitivities.

1. GTV was designed to harmonize somewhat with the historic setting of the adjacent St. Peter's Church and some of the oldest buildings on the Rutgers College Avenue campus (e.g. Old Queens and Winant's Hall). As is evident from Figure 24. The GTV's mass is set back and away from its historic neighboring buildings. The "bulky" parking garage (670 spaces) is set further away from St. Peter's and Winant's – Old Queens (e.g. Figure 24), so as to not visually

overwhelm these far more modest-scaled older buildings. For similar reasons, GTV's tower height was reduced from an originally proposed 330 feet to an as-built 250 feet.

Figure 20: Gateway Transit Village and Adjacent St. Peter's Church (Architects Rendering)

Image Source: Martin, Antoinette. "Arts Get Their Cue" New York Times- Real Estate Section. March 23, 2008 (Ehrenkrantz Eckstut & Kuhn Architect)

2. From a pedestrian perspective on Somerset Street, the scale of GTV is sympathetic to that of the adjacent St. Peter's Church and Winant's Hall, across the street from GTV. This is evident from Figure 20 which also conveys some similarity in building materials and color (red-tinged brick) between GTV and its historic neighbors.

3. Finally DEVCO said it would preserve some of the unique facades of some of the older buildings that were on the site before they were demolished to allow the construction of GTV. Retaining portions of older buildings that are demolished is a strategy that preserves at least some relic of the past when entire building preservation is not carried out. While façade salvage has a long history in the preservation field, this policy also has its critics, especially among contemporary preservationists who see this approach as artificial or even misleading (Freeman Gill 2014).

In sum, GTV personifies some of the inherent tensions that may arise when a TOD attempts to increase the density of development near transit in order to maximize access to transit. That is exactly what the GTV realized – to transform an existing block of low-scale buildings abutting an important rail station and replace it with a tower-scale multiuse structure maximizing the benefit of the train connection. Recognizing this, New Jersey Future (NJF), a good planning and smart growth advocacy organization in this state, gave GTV its 2012 Smart Growth Award and also declared that "as ambitious as this project is, care was taken to ensure it did not compromise the [adjacent] historic setting" (New Jersey Future 2012). Yet that surely is not the unanimous perspective with, for example, local preservationists concluding that GTV has been another assault on New Brunswick's historic stock. Their perspective is that GTV represents minimal compromise to preservation sentiments and that goal of having a vibrant city that synthesized both the old and new would have been better served by a GTV of much lower height and scale, much greater setback, and a design that would have retained the facades or more of some of the greater important historic buildings on Somerset Street (e.g. Neubies Restaurant) as an attractive entrance gateway to the new bookstore and restaurant.

Table 7: Detail of the New Jersey Urban Transit Hub Tax Credit (UTHTC)

	Program Overview
A	Authorized in 2007, with later amendments
B	Provides a tax credit to encourage capital investment in eligible municipalities [1] and for an urban transit hub [2]
C	The tax credit (up to a statewide maximum cap of $1.5B) can be applied against the state corporate business and certain insurance premium taxes.
D	The tax credit is normally taken over 10 years.
E	Businesses that don't pay taxes for which Hub credit is applicable will be able to transfer all of part of credits to receive benefit of the UTHTC.
F	The tax credits are available for both non-residential project credits ($1.35B) and residential projects ($0.15B).
	Non- Residential Projects
G	Credits available to businesses (corporations, partnerships, etc.) making a capital investment in a qualified business facility (QBF) [3]
H	Up to a 100% credit is available of the non-residential capital investment that meet defined minimum non-residential thresholds [4]
I	In addition, non-residential projects must satisfy a net positive benefits test.[5]
	Residential Projects
J	Credits available to developer, who invests in a qualified residential project (QRP) [6]
K	Up to a 35% credit is available of the capital investment in residential projects that meet the defined minimum thresholds of $50 million.
L	In addition, residential projects must satisfy a "but for" test. [7]
	Other Provisions
M	There are separate provisions for mixed-use projects (contain both QRP and QBF).
N	The program has limitations and restrictions to avoid overuse of public assistance. [8] The UTHTC is competitive and is not "as of right" (program funding is capped and projects must satisfy "net positive benefit" and "but for" tests).
P	Energy [9] and affordable housing [10] considerations
	Current Program Status
	The UTHTC was discontinued in 2013 after cumulatively approving $1.3 billion in tax credits. The UTHC, along with other New Jersey state subsidy programs (e.g. BEIPP and BRAG) have been consolidated by the Economic Opportunity Act of 2013. New Jersey now awards job subsidies through two broader purpose programs, the Grow New Jersey Program, and the Economic Redevelopment Grant Program.

Table Notes:

[1] Eligible municipalities qualify for state aid and have 30% or more of the real property value exempt. There are nine eligible municipalities in New Jersey: Camden, East Orange, Elizabeth, Hoboken, Jersey City, Newark, New Brunswick, Paterson, and Trenton.

[2] Urban Transit Hub are properties located within a ½ mile radius surrounding the mid-point of designated transit infrastructure (e.g. rail station platform area, including all light rail stations).

[3] QBF is a building, complex of buildings, or structural components of buildings, and all machinery and equipment located within a Transit Hub, used in connection with operation of its business.

[4] For example, an owner must make or acquire capital investment in a QBF equal to at least $50 million, as does a tenant (or a tenant must occupy a leased area of the QBF that represents at least $17.5M of capital investment in the QBF). Non-tenant businesses must employ at least 250 full-time employees in the QBF.

[5] Must demonstrate to the New Jersey Economic Development Authority (EDA) that the State's financial support of the proposed capital investment will yield a new positive benefit to both the State and the eligible municipality.

[6] *QRP means any building, complex of buildings; or structural components of buildings consisting predominantly of residential units that are located in a Transit Hub within an eligible municipality.*

[7] *A developer shall demonstrate through a project pro forma analysis that the QRP is likely to be realized with the provision of tax credits at the level requested but is not likely to be accomplished by private enterprise without the tax credits.*

[8] *For example, a business is not allowed urban transit credits if: the business participates in the New Jersey Business Employment Incentive program ("BEIP") relating to the same capital investment, employees, and site that qualify the business for the urban transit hub credits; and the business receives assistance from the New Jersey Business Retention and Relocation Assistance Grant Program ("BRAG").*

[9] *The capital investment may include environmental components required to attain the level of silver rating or above in the LEED building rating system.*

[10] *Municipality has the option of deciding the percentage of newly-constructed residential units within the project, up to 20% of the total, required to be reserved for occupancy by low or moderate income households.*

6.4 The Saratoga Apartments, New Orleans, LA[9]

Site History

Developed by Wisznia | Architects + Development, a New Orleans CBD based architecture / development firm, in the late 2000s, the Saratoga Apartments was a mid-1950s International Style office building that they purchased in 2006 for $2.1 Million ($14/sq. ft.) with the intent of redeveloping it into market rate apartments. The building was originally a 15-story office tower that opened in 1956 (Figure 21). It was the first commercial building built after the completion of the new City Hall and the reconstruction of Loyola Avenue, thought to be, at the time, the future "Magnificent Mile" for New Orleans.

Figure 21: The Saratoga Building, 1950s

Image Source: Wisznia | Architecture + Development

As Poydras Street was reconstructed in the 1960s, major office building construction shifted to this avenue and Loyola was never realized as a major downtown corridor until recently, in large part due to the introduction of the Loyola Streetcar. The Saratoga sat vacant for over 15 years, according to Marcel Wisznia, but was perfectly situated to provide market-rate housing for employees of the emerging Medical Center, a $2 Billion development currently under construction between I-10, Canal Street, Tulane Avenue and South Rocheblave.

Redevelopment Process

One of the first tasks undertaken by Wisznia and his development team was to seek designation of the building as a historic landmark. Initially his petition was rejected by the State Historic Preservation Office (SHPO), but they noted that if it was included in an enlarged historic district it could be listed as a contributing structure and if the historic period could be extended from 1940 to 1956. To make this happen, Wisznia hired Washington, D.C. based consultant William MacKrostie who was successful in both enlarging the historic district and extending its period of significance to 1956.

By so doing, the building qualified for historic tax credits ($15 million equity) at both the state

Figure 22: The Saratoga Building, 2013

Image Source: Wisznia | Architecture + Development

[9] Information for this case study was obtained through an interview with Marcel Wisznia.

and federal level. This was key to financing the entire development. Hurricane Katrina also helped due to the federal Go Zone program, which allowed for an increase in the state tax credit from 20% to 26%. However, at the time there was a $1 million cap on Qualified Rehab Expenses (QRE) per project.

Consequently, during the 2006 legislative session, Marcel Wisznia and Pres Kabacoff, another prominent developer of historic properties based in New Orleans, attempted to get this cap removed but failed; however they were able to rewrite the law and increase the cap amount to $20 million, using Wizsnia's Western Union project as a case study. Eventually, the Saratoga had $32 million of QRE. In addition, the initial project proforma used a rental rate of $1.30 per square foot. Current rents at over $2.15 per square foot. Wizsnia's recent Maritime Building at Commerce and Carondelet is currently renting at $2.50 per square foot. All of Wizsnia's development projects have utilized a federal government guaranteed loan program.

Specifically, HUD 221 D4, a 40-year amortized non-recourse fixed rate assumable loan. Interestingly, in 2010, HUD determined that New Orleans was overbuilt in the rental market, but they failed to look at the CBD sub-district. The reality of the CBD rental market remains robust. In fact, in Marcel's opinion, new construction is almost possible today without a subsidy, however no developer has yet attempted this in the Central Business District.

Outcomes and lessons Learned

The Saratoga Apartments have a total of 155 units: 1 bedroom units average 620 square feet; 2 bedroom units average 950 square feet. The first floor is commercial. The second floor features a workout room with male and female locker rooms including saunas. The third floor offers a recreational rooftop deck (Figure 23) with a communal outdoor kitchen, a movie screening room and a community space for meetings and other public purposes. There are also 2 penthouse units on the 15th floor with private patios. Occupancy is at 90%.

Figure 23: 3rd Floor Exterior Deck, Saratoga Building

Image Source: Wisznia | Architecture + Development

Marcel believes that throughout the CBD all developers will seek to shrink the size of their rental units. The building also has parking provided by an adjacent garage linked to the Saratoga at the third floor of the building. Ultimately, Marcel intends to remove this pedestrian bridge and get all users to exist on the ground floor on Loyola Avenue. Marcel noted that roughly 60% of his tenants own cars; consequently, public transit is very important to him and his tenants. The Saratoga is located on Tulane Avenue at Loyola so it partially fronts on the Loyola Streetcar line. It is also served by five bus lines in close proximity and Marcel built, in cooperation with the Downtown Development District, a tensile roofed transit stop with seating provided at The Saratoga. Marcel noted that litter at the transit stop is an on-going problem. His company also must pay $900 per year for the space

occupied by the transit stop despite the fact that he has provided shelter to transit patrons. Walkability is a key to this project's success. Roughly 50% of its tenants are medical district employees who can walk to work.

One unique feature of this development is "The Saratoga Collection," a permanent art collection/installation which focuses on the post-Katrina contemporary art scene, particularly by artists residing or working in the St. Claude corridor downriver of Press Street and the Bywater neighborhood (Figure 24). It consists of work created by 41 artists and consists of 64 paintings, photographs and related artworks. Marcel believes that in time, this collection may become more valuable than the actual apartment building. It also includes a memorial in granite inscribed with the names of the 183 individuals who died in New Orleans during Katrina. He feels the building will ultimately be referred to as "The Apartment Museum."

Figure 24: The Saratoga Collection

Image Source: Wisznia | Architecture + Development

Looking to the future, Marcel sees a strong demand for condos in the CBD. At the time of the interview there were only nine condos for sale downtown, excluding those being built by Susan Brennan between Girod / Notre Dame / Magazine / Tchoupitoulas. Marcel's Union Lofts are being converted to condos with a resale price of $450 per square foot. The Steven's Garage project, on Carondelet, will also be condos with parking provided outside each upper floor unit at $650 per square foot.

In closing he wanted to offer "kudos" to Pres Kabacoff and his company HRI who have taken the New Orleans adaptive reuse model to cities around the United States. Marcel is doing the same in cities like Atlanta and Birmingham. In closing, he stated "The best is yet to come. The future starts now."

6.5 The Iberville Project and HUD's Choice Neighborhoods Initiative (CNI) Grant, New Orleans, LA[10]

Site History

The Iberville Housing Project, completed in 1942, was the last intact traditional public housing development built in New Orleans during the late 1930s and early 1940s. On September 1, 2011 the Obama Administration awarded a $30.5 million Choice Neighborhood Initiative (CNI) grant focused on the redevelopment and renewal of the Iberville Public Housing Project and significant surrounding neighborhoods (a 300-block area bounded by St. Bernard Avenue, Tulane Avenue, Broad Street and Rampart Street). The Iberville Project, the last remaining traditional public housing project in New Orleans, will serve as the epicenter of a "broad physical, social, and economic" revitalization of the Iberville-Treme neighborhood, estimated to cost $663M. The CNI will serve as a seed for hundreds of millions of additional public and private sector funds to transform a significant portion of the core of New Orleans. The CNI grant supports local leaders to transform distressed neighborhoods "into sustainable, mixed-income neighborhoods with affordable housing, safe streets and good schools that every family deserves," according to former HUD Secretary Shaun Donovan (Donovan 2011).

Redevelopment Process

According to HRI Properties' material provided to the UNOTI team in late June 2014 the Iberville Onsite redevelopment "entails a phased transformation of the 23-acre Iberville site, located adjacent to New Orleans' famous French Quarter, into a vibrant, mixed-use, mixed-income community. The overall development plan for the site includes 880 of the planned 2,400 mixed-income apartments to be constructed in five phases on site, including the renovation of 16 original Iberville buildings ("the bricks") and the construction of new 2-story townhouses, 3-story townhouses over flats, 3- and 4-story multifamily structures and 3- and 4-story mixed-use buildings." (HRI n.d.). An integral part of the redevelopment plan is the reintroduction of the original street grid to the site while providing new infrastructure throughout the site: new streets, utilities, rights of way including street lights, landscaping and sidewalks. Recently unearthed portions of a historic cemetery on-site caused a 3 block area to be repurposed as open space as part of a greater neighborhood open space improvement plan being undertaken by the City.

Partners include the City of New Orleans, the Housing Authority of New Orleans, the Recovery School District, the Early Childhood & Family Learning Foundation, HRI Properties, based in New Orleans, as well as the St. Louis based team of McCormack Baron Salazar and Urban Strategies. Urban Strategies strengths are in the provision of case management services and job training to public housing residents. They also have strong links to major philanthropic foundations. This multi-disciplinary team will employ a variety of strategies and financing tools to create over 2,400 mixed-income residential units interspersed throughout the adjoining neighborhoods. This project will include new outdoor parks/community spaces, new retail enterprises and economic opportunities for its residents, and

[10] Information for this case study was obtained through interviews with HRI Properties.

enhanced levels of public transportation. A variety of federal, state, and local departments will address healthcare, education, and safety. The overarching intent is to avoid concentrating poverty and improve the overall quality of life for residents throughout the Iberville-Treme neighborhood while remaking the Iberville Housing Project as a model mixed income / mixed use community.

According to Josh Collen, HRI Properties Vice-President of Development, the guiding principles for the Iberville Onsite Redevelopment are both additive and subtractive. The pre-existing street grid is being reintroduced to the site (additive), which necessitated selective buildings to be demolished (subtractive) and replaced with new mixed-use, mixed income structures. Unlike its predecessor program Hope VI, the CNI, as mandated by Congress, has a 1 for 1 replacement requirement which necessitated the project to grow off-site into the greater Iberville / Treme neighborhood.

Roughly one-third of the new apartments will be built on the grounds of the current Iberville complex while the remaining 1,533 will be built in the surrounding neighborhoods. While the existing Iberville units will cost roughly $208,000 to renovate, the off-site units in historic buildings will cost $321,837 each. “One third of the total units will have public housing rents, one third will be market rate and the remaining units will offer a middle-tier for those with more moderate incomes” (Reckdahl 2011). To accommodate elderly and handicapped residents, HRI has renovated the original Texaco office building at 1501 Canal Street, adjacent to the original Iberville project, into 112 Section 8 units that are available to anyone earning less than 60% of the area median income and is over 62 years of age.

The project’s financing reflects its cooperative nature. Funding sources include $276.7 million in tax-credit equity that HANO hopes to get through several federal tax-credit programs; $98.3 million in private debt raised by the developers; $97.4 million in federal block grant funds including piggyback program funding from the state of Louisiana; $65 million in HUD public housing capital money; $10 million from FEMA; $16.9 million from the city in federal block grants HOME funds and donated property. HANO also intends to preserve and completely rehab 16 of Iberville’s 74 brick buildings (Reckdahl 2011). HRI is currently working with the State Historic Preservation Office on a two-part process to designate these 16 structures as eligible for federal historic tax credits, a significant financial incentive for private-sector developers. The first part of this process will document the history of public housing development in State of Louisiana during the late 1930s and early 1940s. The second part will concentrate on the specifics of the Iberville Public Housing project.

Outcomes and Lessons Learned

As stated in HRI’s project description,

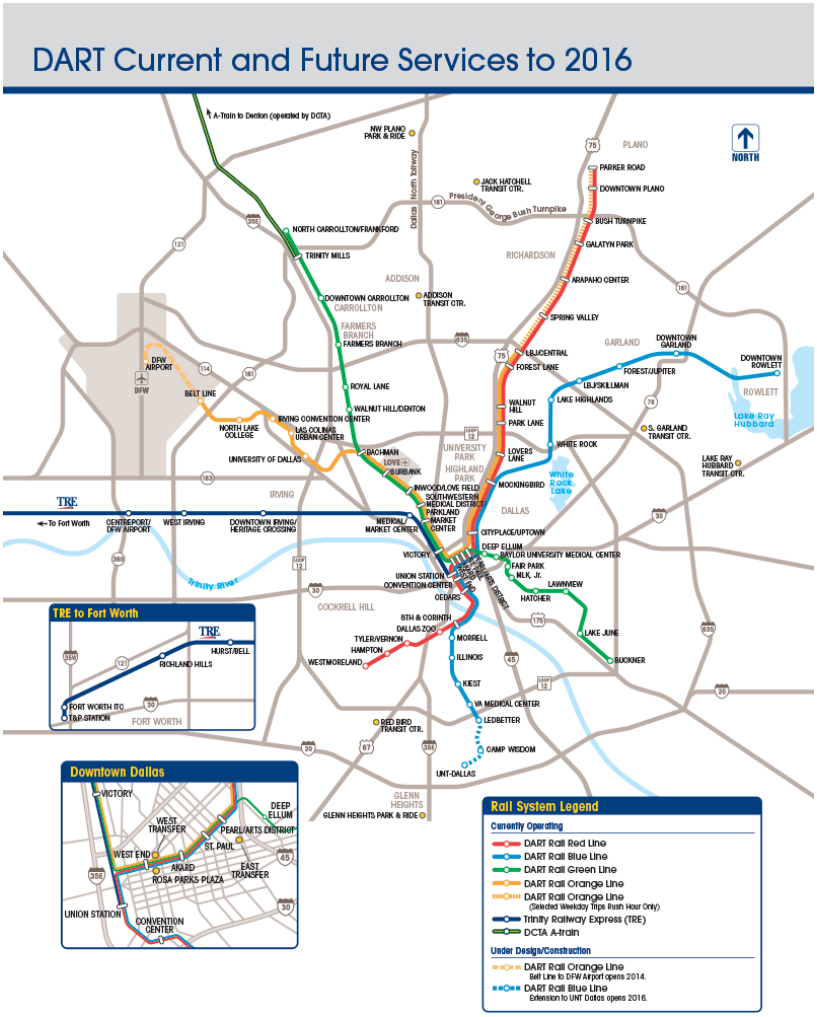
> *“The CNI program and its impetus Iberville Onsite Redevelopment are paving the way to transform one of the most important areas of New Orleans – its downtown historic core … into a connected, vibrant, diverse community. The goal of the transformative plan is not only to revitalize the Iberville site, but to also bring back amenities in surrounding neighborhoods as a way to encourage a healthy urban lifestyle replete with cultural attractions, shopping destinations, and the 24/7 energy that sets urban life abuzz”* (HRI n.d.).

Iberville is located at the intersection of two streetcar corridors, Canal and Loyola. The Loyola line is currently being extended down Rampart Street, which runs adjacent to Iberville. HRI worked with the City of New Orleans to try and secure additional USDOT loans, known as TIFIA, to assist with expanding the project to incorporate more retail along Canal Street, a historic shopping corridor. The TIFIA application has not yet been successful and Iberville is still under construction, but this case study demonstrates the nexus of how TOD, affordable housing and historic preservation can align in the context of a large, complicated, public-private partnership to serve many goals of livability, sustainability, and revitalization.

6.6 Mockingbird Station, Dallas, TX

Transit Context: Dallas Area Rapid Transit

Dallas Area Rapid Transit (DART) connects 13 cities across 7 counties via "rail, bus, paratransit, HOV lanes, and ride share services" (DART 2014d). DART services also include a commuter rail, Trinity Railway Express (TRE), which connects to public transportation in Fort Worth as well as services Dallas/Fort Worth International Airport (2014d). Fares for all modes of transportation are $2.50 for two hours of unlimited rides (2014b). An unlimited day pass can also be purchased for $5 (2014b). Weekly and monthly passes are also available for $25 and $80, respectively (2014b). All fares double for regional transit, which allows travel to Fort Worth on the TRE (2014b). Fares are reduced 50% for select populations, such as elderly, children (5-14 yrs), and students (2014b).



The DART rail system began operation on June 4th, 1996 (DART 2014a). It started with 40 cars on 20 miles of track on two lines (Red and Blue) (DART 1997). The starter system was deemed a success early on, which prompted DART to expand service faster than originally projected (1997). Today the system is the largest light rail network in the United States, which includes 85 miles of track and 61 stations across four lines (Red, Blue, Orange, and Green) (DART 2014a). In December of 2014 the Orange Line was extended to terminate at Dallas-Fort Worth International Airport, which increased total track length to 90 miles (2014a). Plans to expand the Blue Line to the University of North Texas will add 3 more miles of track and 2 more stations by the end of 2016 (Figure 25) (2014a).

Figure 25: DART Light Rail Map: Current and Future Services.

Image Source: DART 2012

TOD Development Process

Mockingbird Station was the original end stop of the Red Line when the rail system began in 1996 (DART 1997). Currently, the station serves 3 light rail lines, Orange, Red, and Blue (DART 2012). It is the last station before the Red and Blue lines split. The station is roughly 4 miles, or ten minutes via light rail, from downtown Dallas (Vision North Texas 2011). It also connects to the Katy Trail (a linear park for pedestrians, inline skaters, and cyclists that begins in downtown Dallas) and seven different bus routes, which include on-call and paratransit services (Friends of Katy Trail 2012; DART 2014e). The DART website states Mockingbird Station offers, "passenger shelters, windscreens, seating, customer information, ticket vending machines, telephones, elevator and escalators, bus "kiss & ride" passenger drop-off/pickup area, free parking (735 spaces, no long term parking), bike racks, [and] public art" (DART 2014e).

Mockingbird Station is located on the northeast corner of East Mockingbird Lane and North Central Expressway, which runs alongside Interstate 75. Southern Methodist University and the George W. Bush Presidential Library and Museum are located on the other side of Interstate 75 (Figure 26). In 1997, Kenneth Hughes of United Commercial Development (UC Urban, now Hughes Development) (Brown 1998; Dillon 2001), the main developer behind the Mockingbird Station TOD, purchased the old Western Electric Company warehouse with plans to create a mixed-use, transportation oriented development (Dillon 2001). Hughes originally partnered with Archon Group (Brown 1998). However in 1998, Simpson Housing Group from Denver joined the team, and the Archon Group withdrew from the project (1998). The partnership with the Denver company was ideal to Hughes due to Simpson Housing Group's experience with multifamily housing developments (1998). The project used architects from RTKL in Los Angeles and Selzer Associates in Dallas (Brown 1998; Dillon 2001). The developers supplied all funding for this project including on-site infrastructure improvements and a pedestrian bridge connection to the DART station (Vision North Texas 2011). Federal funds were used to address off-site infrastructure issues that would increase pedestrian access (2011).

Figure 26: Mockingbird Station Site Map.

Image Source: Nunn 2014

Outcomes and Lessons Learned

Figure 27: Office Building at Mockingbird Station

Image Source: Mockingbird Station 2014c

The first of its kind in Texas, Hughes' development, also known as Mockingbird Station, opened in 2001 with loft apartments, office and retail space, an 8-screen theater, and free parking (Figure 27, 28, and 29). The development made use of the existing properties on the 10-acre site, including the Western Electric Company warehouse built in the 1940s, where the first rotary phone was created, a 10-story office building, and an old parking garage (Dillon 2001; Pitts 2008). The warehouse was converted into 211 upscale loft apartments with 4 penthouse apartments and a rooftop pool (Dillon 2001). Nearly every loft has a unique floor plan (Pitts 2008). Some apartments contain graffiti from when the warehouse was vacant (Dillon 2001). Ceilings heights vary from 9-35 feet, and in 2014 rents range from $1260/month for a 656 square foot studio to over $4000/month for the 2649 square foot, two bedroom, 7th floor corner penthouse (Lofts at Mockingbird Station 2014). The ground floor was converted to retail space (Dillon 2001).

As the first TOD in the state of Texas, Hughes had issues finding investors. The $100 million dollar project was deemed risky because no one knew if the urban atmosphere would be accepted by Dallas residents (Dillon 2001). Original plans included a luxury hotel and a pedestrian bridge over Interstate 75 to connect Mockingbird Station to Southern Methodist University and the President George W. Bush Presidential Library and Museum (Brown 1998; Lindenberger 2009). The pedestrian bridge was never built (Lindenberger 2009). Due to economic constraints on the city, the pedestrian bridge was not prioritized because shuttle services were provided by the university (Lindenberger 2009).

Figure 28: Lofts at Mockingbird Station with Retail Shops Below.

Image Source: Mockingbird Station 2014b

While the warehouse entrance opened to Mockingbird Lane, Hughes and his architects designed the development around the DART Mockingbird Station entrance with the intention that the majority of its clientele would arrive by light rail (Dillon 2001). When exiting the rail station, patrons first come across a public plaza and the Angelika Film Center (Dillon 2001). To encourage commuting

via light rail, DART requires all developments near transit stations to include parking. Mockingbird Station includes above and below ground parking for 1,600 cars (Dillon 2001). There is also a shuttle service that allows SMU students to travel between Mockingbird Station and the university campus. This enables the students to make use of the light rail system and access the new amenities.

Although it was initially deemed risky, over 80% of the commercial and living space had been leased before the development opened in 2001 (Brown 2000; Dillon 2001). By that time, DART had announced the rail system was a success (DART 1997). The success prompted DART to accelerate the timeline for the expansion of the Red and Blue lines as well as purchase more cars to relieve congestion (1997). Since Mockingbird Station opened, it has spurred transit-oriented development along DART's rail system and throughout the state of Texas (Philyaw 2007; Vision North Texas 2011). The development has also been touted as an exemplary model TOD for the rest of the nation.

The decision to convert the warehouse into loft apartments, rather than demolishing the warehouse, was a deliberate choice to save time and money (Dillon 2001). Four floors were added to the warehouse to create the 7-story building the developers envisioned to create increased residential density while maximizing ground floor retail space (Dillon 2001). Mockingbird Station also made use of an existing on-site office building and parking garage (Dillon 2001). The building across from the old warehouse was redesigned to incorporate retail space on the ground floor and office space in the tower (Dillon 2001).

Figure 29: Rooftop Pool at the Lofts, Mockingbird Station

Image Source: Mockingbird Station 2014b

6.7 South Side on Lamar, Dallas, TX

Transit Context

Cedars Station is located on Belleview at Wall Street (Dart 2014) along the Red and Blue lines, close to downtown Dallas (2014). The station offers the following amenities: "passenger shelters, windscreens, seating, customer information, ticket vending machines, telephones, public art" and "a 'kiss & ride' drop-off and pick up area and a bicycle rack" (2014).

Site History

Located at 1409 South Lamar, one block from the DART Cedars Station light rail and bus stop, South Side on Lamar is a mixed used development, which incorporates retail, office, and residential space, in a repurposed nationally registered historic landmark (Figure 30) (Costello, Schamess, Mendelsohn, Canby, and Bender 2003). The building was originally built in 1910 with additions over next five years as the distribution site gained importance (Costello et al. 2003, Dallas Public Library 2006). Sears closed the distribution center in 1993 (Dallas Public Library 2006).

Figure 30: Original Sears, Roebuck, & Co. Catalogue Merchandise Center

Image Source: Source: Matthews Southwest. (2014). History. Retrieved April 4, 2014, from www.southsidedallas.com/history/

Redevelopment Process

In 1997, Matthews Southwest Co. purchased the Sears, Roebuck, & Co. Catalogue Merchandise Center for $2.1 million dollars to build South Side on Lamar (Matthews Southwest 2014). Matthews Southwest Co. was started in 1988 and with offices in Texas and Ontario, the company offers "full-service private real-estate development" throughout North America (Matthews Southwest n.d.). Matthews Southwest handles all aspects of development in-house from garnering the necessary finances to managing the completed developments (Matthews Southwest n.d.).

The 17-acre site included four buildings for a total of 1.4 million square feet (Figure 31) (Matthews Southwest 2014). The development features "455 lofts that occupy 900,000 square feet, 120,000 square feet of office space, and 34,000 square feet for retail and other arts related uses in a ground-floor retail arcade running the length of the building along a former railroad tunnel" (Costello et al. 2003, p. 16).

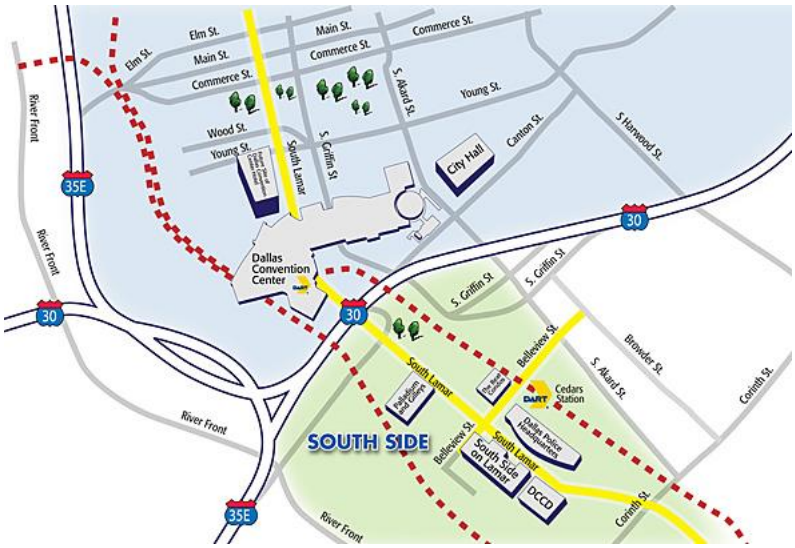


Figure 31: Location of South Side on Lamar

Image Source: South Side on Lamar. (n.d.) Location. Retrieved March 31, 2014, from http://southsideonlamar.com/The-Building/Location.aspx

To finance the $75 million development, Matthews Southwest combined "federal historic tax credits, ...property tax abatements from the city, ...[and] a low interest loan from the Department of Housing and Urban Development in return for setting aside 20% of the 455 lofts for below-market-rate rentals" (Costello et al. 2003, 16).

The area was fairly deserted before the redevelopment project. To combat local perceptions of the area as dangerous, Matthews Southwest donated three acres across the street from South Side on Lamar to the city of Dallas to build a new police station (Matthews Southwest 2014). In addition, rather than open the complex in stages, as originally planned, all of the apartments opened at the same time in order to "create...a critical mass of people in the neighborhood" (Matthews Southwest 2014). The development also features a 24-hour hospitality team to greet people and walk them to and from cars and the DART station (Matthews Southwest 2014). On top of this, Matthews Southwest purchased additional land between the Sears complex and the Dallas Convention Center and solicited a variety of "mom and pop" businesses and entertainment venues, such as Gilley's to move to the neighborhood (Matthews Southwest 2014; Costello et al. 2003). The total area developed is slightly under 40-acres (Costello et al. 2003). The developer also incorporated local artists into the redevelopment plans, which helped maintain the neighborhood atmosphere and character (Matthews Southwest 2014). South Side on Lamar includes gallery space as well as an artist-in-residency program (Figure 32) (Matthews Southwest 2014).

Outcomes and Lessons Learned

South Side on Lamar is the second TOD in Dallas. The project won several awards in 2002. Preservation Texas awarded it a Historic Preservation Award (Dallas Public Library 2006). It also won 2 Pillars awards for Best Loft Development and Best Property Website (Perez 2002). Matthews Southwest's decision to establish and rehabilitate the entire neighborhood in order to make a mixed use apartment complex viable is also significant.

Figure 32: South Side on Lamar Exterior, Lofts, and Rooftop Pool

Image Source: Matthews Southwest. (n.d.). Current Projects: South Side on Lamar. Retrieved March 31, 2014, from http://matthewssouthwest.com/corporate/lamar/lamar.html

6.8 Gates Rubber TOD, Denver, CO[11]

Site History: Gates Rubber Company and its Industrial Legacy

The Gates Rubber Company, a major industry in Denver's formative early years, was founded by Charles Gates, Sr. in 1918 when he began the construction of a large industrial complex ultimately encompassing 45 separate units (Figure 33). The original site was located east of S. Broadway and extended to Santa Fe Drive, three miles south of the Denver Central Business District. The company was one of the earliest industries in Denver and grew to encompass a wide variety of automotive products (tires, belts, hoses, gaskets, etc.). By the 1950s the company employed 5,500 people and occupied 25 square blocks. At their height, Gates Rubber produced over 4,000 separate products with a specialty in automotive parts.

Starting in the 1980s, Gates started shifting their manufacturing operations to other states and countries. In 1996 the Gates family sold the business to London based Tomkins PLC who relocated the company's administrative headquarters to downtown Denver and closed the plant.

Figure 33: Gates Rubber Company circa 1925

Image Source: Denver Public Library Collection

Given the site's long history of heavy industry, it has a number of significant environmental issues. According to Denver's Department of Environmental Health, there is soil and groundwater contamination beneath Units 10, 11 and 13. Contamination beneath Buildings 10 and 13 includes process oil within the soil, process oil that forms a layer in groundwater, and dissolved solvent chemicals in groundwater. Beneath Building 11 there may be groundwater contamination from dissolved solvents

[11] Information from this case study was obtained from news articles in the *Denver Post* and *Westword* as well as interviews conducted by the team with city officials and developers. Note, much of this case study was written prior or during to the demolition of the buildings in late 2013. As of late 2015, virtually all of the buildings have been demolished.

as well. Contaminants include hydrocarbons and trichloroethylene (TCE), a solvent used primarily as a degreaser. These environmental issues have been one the strongest forces for demolishing the buildings. Studies have shown that certain portions of Unit 10 must be demolished so that remediation efforts can be undertaken.

Of the remaining buildings on the site prior to the 2013/2014 demolitions, the first building constructed at the Gates Rubber Company was Unit 10-1 in 1918. This building encompasses 4 floors of 180,000 gross square feet plus a basement of 125,500 gross square feet. Subsequent additions were made to this building through 1961. Other remaining structures include the former Research and Development building which has 3 floors of 16,000 gross square feet. Power Plant East is one 10,000 gross square foot floor. Power Plant West had two floors of 5,000 gross square feet. The Trapezoid Building has four floors of 10,000 gross square feet each. The Bar Building had two floors of 10,000 gross square feet each.

The complex was previously determined eligible for the National Register of Historic Places in 1993 (criteria A, B and C) by the Colorado Historical Society. It was the subject of another detailed study in 2002 entitled "Historic Assessment and Reuse Opportunities for the former Gates Rubber Manufacturing Site" authored by Mandy Wharton and Semple Brown Design. These authors concluded that Buildings 10, 11 and 13 were eligible for the National Register and as Denver Landmarks. However they noted that environmental remediation could affect the overall preservation and adaptive reuse of the remaining buildings, as these costs could be significant and also require partial demolition of portions of the Unit 10. The report concluded "abatement of environmental contamination and building demolition will add to the cost of reusing existing buildings," including the three units that were considered for local landmark designation in 2012, in response to an application filed by Eugene Elliott, a college student from Boulder.

Transit Context: Denver, FasTracks and Transit-Oriented Development (TOD)

In 2004, voters in Denver approved a sales tax increase to fund FasTracks, a $6.5 billion public transport initiative that will result in 122 miles of light rail and commuter rail and 18 miles of bus rapid transit being constructed over the next 20 years (Figure 34). In a May 2013 AIA Magazine article *Mile High in Denver,* the author sums up the envisioned impact of this massive transit initiative: "From the start, FasTracks was envisioned to be more than just a transit system. It's also a land use plan designed to encourage TOD in a region that long considered "density" a dirty word." According to Denver journalist Margaret Jackson, who wrote in a 2006 *Denver Gets on Fast Track,*" FasTracks is creating development opportunities around the system's 57 planned rail stations. Future phases will expand the network to include 93 stations." Completion of the system is scheduled for 2042.

Developers who have jumped on the TOD bandwagon include Denver-based Continuum Partners and East West Partners, Koebel and Co.; Zack Davidson of Tulsa, OK; LNR Corporation; Landon Enterprises; Miller Weingarten. In closing, Ms. Jackson quotes Marilee Utter, President of Citiventure Associates LLC, a Denver mixed-use and TOD consulting firm, "Denver is projected to gain about 250,000 residents within a half-mile of the city's transit stations over the next 50 years. It's a question of supply and demand. It's what consumers want. It gives us an opportunity to reshape the whole region."

Figure 34: Denver Rail Map; Gates Rubber Plant Site at the Convergence of Southwest and Southeast LRT Lines

Ms. Jackson also notes in her article "Over the last five years, Cherokee has been working on a plan to transform 50 acres surrounding the former Gates Rubber Co. plant at I-25 and Broadway into a $1 billion mixed-use neighborhood with 6 million sq. ft. of development. Cherokee is selling off pieces of the property at the convergence of the two lines (Southwest and Southeast LRT) to vertical developers." This strategic site is located adjacent to the Broadway LRT Station just south of I-25 and is the focus of this case study.

Redevelopment Process

Since closing the plant, several development parcels have been sold for construction of an office building, a parking structure, as well as an apartment complex. Various attempts have been made to develop the remainder of the site into a TOD, given its close proximity to the Regional Transit District's Broadway Light Rail Station. To date these have not succeeded.

The first TOD development for the Gates property was proposed by Cherokee Denver, who purchased the 50-acre site from the Gates Corporation in 2001. They envisioned creating a “world class urban village” that would include 3,000 residential units as well as 1.75 million square feet of office and retail space. They also committed to remediate any industrial contamination on the property or in the adjacent groundwater. They worked for several years on this $1 billion mixed-use project and succeeded in getting the property rezoned to T-MU-30 with a Floor Area Ratio of 5.0. This zoning classification allows for residential, commercial, retail, entertainment and hotel uses. However, in 2009, faced with the national recession and a lackluster economy in the Denver region, they were forced to abandon their development plans and the assets reverted to the original seller. Having been essentially abandoned for 15 years, the remaining buildings have been vandalized, the subject of “urban explorers” and midnight thieves stealing anything of value. In late November 2013, demolition was begun on the remaining industrial structures.

The property was re-purchased by the Gates Corporation due to concern of legacy liability resulting from ground contamination. They are seeking another developer to acquire the site and proceed with a new project.

This large site (39.236 acres) is situated adjacent to the Broadway Light Rail Station, I-25, S. Broadway and at the convergence of the existing Southwest Light Rail Line, which bisects the site, and the Southeast Light Rail Line. The property has some of the region's highest traffic counts totaling 336,848 vehicles per day: 188,000 on Interstate 25; 83,000 on U.S. 85/Santa Fe Drive; 65,848 on S. Broadway. It is located three miles south of the Central Business District and 7.5 miles from the Denver Tech Center, the region's second largest employment base. It is also in close proximity to the South Platte River, Vanderbilt Park, and Washington Park.

The reconstruction of I-25 / US 65 interchange is currently underway. This $60M project includes the following: replacement of deficient bridge structures at I-25 over Santa Fe Drive; the addition of one lane of traffic in each direction on I-25 to relieve congestion; construction of a new flyover ramp from northbound Santa Fe to northbound I-25; conversion of current left-hand merge ramps from US 85 and I-25 to more traditional right-hand merge ramps. According to the property owner, these improvements will provide “safer infrastructure, reduced maintenance costs, reduced accident rates and improved access.”

In 2012, the Gates Corporation through CBRE advertised the sale of 39.236 acres of land at their former site as a unique Transit Oriented Development opportunity in an offering managed by CBRE. The site was described as being of two parts: the Eastern Parcel (15.24 acres) and the Western Parcel (23.996 acres). The Eastern Parcel, nearest the Broadway LRT Station, and the Western Parcel were offered together or separately. Separated by a series of heavy and light rail lines, from the Eastern Parcel and the Broadway LRT Station, the Western Parcel lacked good roadway access and had no access to the nearby LRT Station. Estimates for a pedestrian bridge over the rail lines to allow access to the Station from the Western Parcel were reportedly in excess of $5M. The existing structures, formerly part of the Gates Rubber Company complex, are all located within the Eastern Parcel and were offered as is.

Several developers who were interested in the Eastern Parcel as a TOD site were attracted by the presence of the remaining buildings, which comprised over 1,000,000 square feet of historic tax credit eligible construction and were within a short walk of the Broadway LRT. HRI, a New Orleans developer specializing in large historic and inner city projects, responded with an offer in 2012 and engaged in negotiations over several months for the property. HRI pulled together a consortium of other developers who were interested in redeveloping the Eastern Parcel and reusing all or a portion of the remaining buildings, in order to leverage local public financial participation in the project with the 20% federal historic tax credit and to create a unique residential mixed-use historic property redevelopment that would stand out in a market dominated by recently built new construction apartment communities. HRI and its partners submitted offers on both the Eastern Parcel and the entire site but were not successful in coming to terms with Gates.

Outcomes and Lessons Learned

Given that demolition commenced late in 2013, Gates apparently came to the conclusion that the site would be more valuable, net of demolition costs, without the historic buildings than with them. In fact, developers and consultants close to this deal believed that Gates was most concerned about the environmental cleanup of the site, which was more cost effective by demolishing the buildings, despite differing opinion by HRI. Although removal of the buildings allows for the most expedient method of environmental remediation to be conducted, it also facilitates the possibility for big box retail and other commercial development, like Cherokee had planned for the site, which would be nearly impossible to develop in an adaptive reuse of the existing buildings, due to column spacing and other constraints. Notably, such constraints are not much of an impediment to residential, hotel and mixed-use development. In fact, historic features such as impressive facades, high ceilings, large windows and key urban locations seem to give residential, hotel and mixed use developments an edge in the market. There was also concern that the Tax Increment Financing (TIF) district created by the City of Denver to aid in financing infrastructure was based on both property and sales tax generation. This means that developers are incentivized to maximize retail space over other uses to have more bonding capacity for financing infrastructure. While this was likely unintended by the City of Denver, such a decision would likely prioritize big box retail in this location, despite the City's goals of zoning the site for a TOD. The approval of the public financing package to Cherokee was also tied to a Community Benefits Agreement that contained commitments to unionized labor (Wolf-Powers 2010). Interviews held during this study revealed a strong desire amongst the developers to revisit the terms of this agreement, reset the timeframe on the TIF, and rethink the overall public financing approach to this very complicated project.

6.9 Case Study Lessons

The case studies illuminated the variety of ways various stakeholders can come together to preserve historic properties and neighborhoods while creating successful TODs. Many of the developments initiated the revitalization of an entire community, such as Central Station in Memphis, TN, and Southside on Lamar in Dallas, TX. In addition, we found that these projects utilized tools in several different categories in order to achieve success. The categories that emerged were: Financial Considerations, Land Use and Design Considerations, and Project Considerations (Table 8). We developed a guidebook that lists and defines these aspects (Appendix B). In addition, we created specific lists of considerations that different stakeholders can use to enable the creation of TOD projects that preserve historic properties. Through this process the following themes emerged: importance of historic preservation, special consideration of social concerns, layering incentives, improving access to transit, developing new relationships, and changing regulations.

1. The Desirability of Historic Properties

Historic preservation impacted the projects in the case studies in several ways. For some projects, such as Mockingbird Station, repurposing the building reduced production time and cost. In addition, historic design elements, such as large windows, high ceilings, exposed brick walls, and intricate facades, enhanced the value and attraction of the residential spaces these projects created. These elements are highlighted on the Southside on Lamar, Mockingbird Station, and Central Station websites as selling points, which attract potential buyers and renters. In addition, the rehabilitation of historic structures created an additional avenue to fund some of these projects, such as Southside on Lamar, Central Station, and the Saratoga Apartments.

2. Special Considerations of Social Concerns

The success or failure of several of the projects hinged on social concerns within the larger community. Some communities fearing densification have blocked large residential projects from their neighborhoods. The needs of each community impacted the way in which each project developed. In Mockingbird Station fewer lofts were created than originally intended due to prospective interest in larger loft sizes. In Southside on Lamar, the developer had to combat the public perception of crime in the neighborhood. To do this, the developer donated land to the city to build a new police station across the street from the development. In addition, the building was developed in a single phase and is staffed with a courtesy team, which walks residents to and from the transit stop as well as performs other services, in order to populate the area and add a human presence. With the Gates Factory, preservation did not happen because owner's perception and public perception believed the brownfield could only be remediated through the destruction of the buildings.

3. Layering of Financial Incentives

In many of the case studies, developers sought multiple incentives in order to finance their projects. The Saratoga Apartments, Southside on Lamar, and Central Station all used three or more financial incentives to create their developments. These incentives included federal and state historic tax credits,

Department of Housing and Urban Development loans, transportation grants, and various tax incentives. It is important to note that the historic tax credit alone is not enough to ensure success of these projects. The Gates Factory was eligible for the historic tax credit and yet it was demolished. Both Mockingbird Station in Dallas and Cityline at Tenley in D.C. did not use the historic tax credit; however, these projects still incorporated the rehabilitation and repurposing of historic properties and achieved a thriving TOD. Policy makers need to consider how financial incentives work together to direct the style of development. Experts believed the property tax-increment financing created incentive for developers to attract big box retail that could not make use of the existing historic building. Policy needs to incentivize the creation of mixed used developments over the single use developments in order to foster an environment conducive to TODs.

4. Improving Access to Transit

All of these projects understand the importance of transit to the success of their development. Transit provides a way for residents to commute to and from work as well as a way for those who do not live in the developments to access the retail, entertainment, and office amenities. Because of the recognized value of transit within these developments, many of the projects including improving access between the development and the nearby transit stop. At Mockingbird Station, a pedestrian bridge was built to connect the development to the DART light rail stop. At the Saratoga Apartments, new tensile roofed transit stop with seating was created along the streetcar line in front of the building. The developer for Southside on Lamar employs a team of individuals to walk residents to the DART light rail stop that is a block from the development.

5. Developing New Relationships

The success of several of the developments relied upon developing new relationships. For Central Station in Memphis, TN, the city was not eligible for the historic tax credits, which made the project possible. It had to create a public-private partnership with the developer in order to make use of the financial incentive. The developers of Mockingbird Station and Southside on Lamar developed relationships with entertainment venues in order to attract residents to their developments. Southside on Lamar also developed a relationship with local community artists to preserve the unique character of the neighborhood.

6. Changing Regulations

The Saratoga Apartments provided an excellent example of changing regulations in order to create the necessary conditions to make the project viable. The developer hired an independent consultant to petition the extension of the historic district and the period of significance, which enabled the project to be eligible for historic tax credits. The legislation on qualified rehabilitation expenses was also modified to allow for more the cost to be recouped.

Table 8: Tools Utilized at Case Study Transit-Oriented Developments

	Central Station Memphis, TN	Cityline at Tenley, DC	Gateway Transit Village, NJ	Saratoga, New Orleans, LA	Iberville, New Orleans, LA	Mockingbird Station, Dallas, TX	South Side on Lamar, Dallas, TX	Gates Factory, Denver, CO
Financial Incentives								
Historic Tax Credit	✓	Denied		✓	✓		✓	✓
Low-Income Housing Tax Credit					✓			
Transportation Grants	✓							
HUD Incentives				✓	✓		✓	
Tax Incentives (e.g. GO-Zone)				✓				
TIF (Tax Increment Financing)								✓
Private Financing/Loans	✓	✓	✓		✓	✓		
Private-Public Partnership	✓		✓		✓			
Property Tax Abatement			✓				✓	
New Market Tax Credit			✓					
TOD Grants and Incentives			✓					
Land Use and Design								
Incorporation of Local Artwork				✓		✓	✓	
Changing Zoning								✓
Historic Preservation	✓	✓		✓	✓	✓	✓	
Transit Orientation			✓					
Walkability					✓	✓		
Transfer of Development Rights								
Brownfields								✓
Parking	✓	✓	✓			✓		
New Construction Designed with Sensitivity to Historic Construction		✓	✓		✓	✓		

Table 8 continued on the next page

	Central Station Memphis, TN	Cityline at Tenley, DC	Gateway Transit Village, NJ	Saratoga, New Orleans, LA	Iberville, New Orleans, LA	Mockingbird Station, Dallas, TX	South Side on Lamar, Dallas, TX	Gates Factory, Denver, CO
Project Considerations								
Development in Phases					✓	✓		
Wider Neighborhood Redevelopment		✓			✓		✓	
Improved Transit Stop (Access)	✓		✓	✓	✓	✓		
Critical Mass (Single Phase Development)							✓	
Entertainment Venues	✓		✓			✓	✓	
Courtesy Team							✓	
Market absorption studies			✓					
Engaging Stakeholders	✓	✓					✓	
Other								
Changing Legislation/Laws				✓				
Land Uses in Each Development								
Residental	✓	✓	✓	✓	✓	✓	✓	✓
retail/commercial	✓	✓	✓	✓	✓	✓	✓	✓
Office	✓		✓			✓	✓	
Hotel						✓ (Future phases)	✓ (not on site)	

Note: This table is based on the authors' best assessment from the case studies and interview. We did not conduct a specific survey to obtain this information, thus any errors in this table are the responsibility of the authors.

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7. Conclusions and Recommendations

This study asked two key questions that sought to determine if there is a spatial relationship between the location of fixed-route (i.e. rail) transit stations and the location of historic districts and buildings and to understand what tools are useful in historic preservation in TOD locations. Our reconnaissance investigation shows there is a linkage.

The national analysis found that half of all station areas intersect with a national historic district and that more than half of all individually listed buildings (3,149 buildings) in station areas were found in TODs. Finally, across the United States, 6,293 acres of land in TOD stations was designated as national historic districts. These districts contain many more buildings that are considered contributing structures. Unfortunately, the NRHP database does not tally the number of buildings listed as contributing structures. Planners, developers, and officials should ensure that efforts to bolster density in TODs with NRHP designated districts and listed buildings should take precautions to ensure that new development is context sensitive.

The state level analysis found a closer spatial cross-linkage between historic resources in higher density and more transit-oriented New Jersey than in Florida. There is some spatial relationship between the location of fixed-route transit stations and the location of historic resources, albeit the closeness of this interconnection varies by place. The local level analysis conducted in New Orleans was provided to demonstrate this universal application of this method for any local community at any distance from fixed-route transit stations.

However, we note that normalizing the data for analytic purposes is challenging. Based on our limited data, we cannot say how much more or less prevalent historic buildings are in transit station areas as compared to other areas, namely because we do not have good geocoded data on all building types. Moreover, the NRHP data needs improvement. While it does a good job in locating historic districts and individually listed buildings, as noted above, it does not include data on contributing buildings within districts.

This paper's second purpose was to examine case studies of historic preservation in TODs to better understand how tools can be useful. Our findings above demonstrate the usefulness of this approach to highlight development, financial, planning, and other tools that are useful to realize preservation. While such tools might not eliminate the tensions between increasing densities and preserving historic structures, and these questions are ultimately always a matter of local discourse, the case studies point to a wide array of options for planners, preservationists and developers to consider to find common ground between historic preservation and TOD.

Some key findings and recommendations regarding stakeholder roles and responsibilities include the following:

Federal and State Government:

- How accessible and detailed is the data available on historic properties?

  Finding: Better data is needed. Historic information is available at the district level, but we could not identify the number of historic buildings within a federally recognized historic district.

- What financial incentives exist to facilitate the preservation of historic properties?

  Finding: Tax credits aid greatly in the redevelopment of historic buildings. However, not all projects qualify for the historic tax credit due to rules and regulations that limit the uses and physical changes to the buildings due to the rehabilitation process. Incentives often need to be layered to create successful projects.

  Recommendation: While it is necessary to preserve the historic character of buildings, exceptions may be necessary in projects aimed to increase density by adopting additional stories to buildings. In some cases, new construction that is sensitive to the character of the historic district and adds on to a historic building should not automatically disqualify a project from eligibility. Tax credit programs are beneficial and should be continued to aid in the construction of TODs that preserve historic structures.

Municipal Government:

- Has the community been involved in the planning process?

  Finding: Community support and perceptions can be pivotal in the success of development projects. However, sometimes NIMBY opposition to TOD goals can hide behind the guise of preservation.

  Recommendation: Incorporate community participation in the planning process but also have clear regulations and rules at the outset in station areas that developers can follow, which should be informed by an expert driven process.

- What financial incentives can be created to promote TOD? How will these initiatives impact historic buildings?

  Finding: Some incentives have unintended negative consequences on historic preservation. Often times, historic buildings cannot support big box retail, nor should

big-box retail be a use located in a station precinct. Sales tax based incentives can create a tension between generating financial resources to support a project versus preserving historic buildings and maintaining smaller stores for shopping, which should be a priority in TODs.

Recommendation: Examine how incentives impact preservation. Create programs that increase the attractiveness of preserving historic buildings over new construction. Create eligibility requirements that ensure the creation of mixed-use developments.

- Do public-private partnerships increase the viability of preservation and TOD?

  Finding: Properties owned by municipal entities are not eligible for tax credits. This limits the financial resources for preservation and TOD.

  Recommendation: Through the creation of public-private partnerships, more funds can be leveraged to aid in preservation-focused development of properties owned by government entities.

- How can infrastructure be built or financed to aid in preservation and TOD projects?

  Finding: The creation of rail systems (i.e. light rail in Dallas, TX) enabled the environment for TOD. The creation and upgrading of public transportation systems stimulates the ability for success TOD projects and can aid in preservation but pressure for density can also have a negative effect on preservation.

  Recommendation: Consider preservation goals during the visioning and planning phase of new rail, BRT and ferry systems.

In addition to the questions above, we have also developed a list of additional question that government agencies and developers should consider that may relate to historic preservation and TOD. We do not attempt to provide answers to these questions but feel that they could be useful questions to address early in the planning and development process.

<u>Public sector considerations:</u>

- Is data on historic preservation consistent and available to the public?
- How can transportation investments be planned and coordinated to aid in the redevelopment and preservation of historic properties?
- Has a vision been established for the station area that includes historic preservation and TOD?
- Is there an objective of the comprehensive and/or master plan to preserve historic building and promote TOD?

- What zoning ordinances need to change or be developed to facilitate historic preservation and TOD?
- Does the local community have a list of all local, state, and federal resources to promote historic preservation and TOD?
- Does the transit agency or local government own historic assets near stations?
- What opportunities exist to enhance transit systems within and to historic districts?
- What funds do transit agencies and local government have to return historic buildings into use? Can municipal services be relocated to provide an anchor tenant for the building?
- Which developers might be interested in and/or have a track record of preserving buildings and/or engaging in public private partnerships?
- What is the impact of parking policy and parking requirements on the preservation of historic buildings in station areas?
- What other project specific considerations are important in promoting preservation in station areas?

Private sector considerations:

- What are the demographics of the project neighborhood and the targeted population?
- What equity, debt, and gap financing sources exist to finance historic preservation and TOD?
- What is the ability of the market to absorb this project? Will the restoration of unique architecture create a market that might not otherwise exist?
- What infrastructure is necessary for the success of this project? What sources of funding exist to create necessary changes or upgrades?
- What zoning regulations apply to the project areas? Will the project require changes or special exemptions to the existing zoning?
- What approval process is necessary from various stakeholders, including transit authorities; local, state, and federal government; historic planning commissions; and neighborhood associations?
- What is the community response to the project? Is there support, resistance, or both? How can support be gained or increased? How can resistance be overcome?

In summary, this report sought to address the tensions and opportunities between historic preservation and TOD. The quantitative analysis and case studies have revealed key challenges that illustrate these tensions. First, a lack of quality data at the national level makes the findings murky with respect to how many historic buildings are in TODs. The finding that half of all stations in the U.S. intersect with at least one historic district might sound like TOD and historic preservation is the perfect nexus to some, but the finding that only 10% of individually listed historic buildings are in TODs sounds as if the linkage is weak. Future studies research is needed to account for contributing buildings within historic districts and data on all buildings within station-areas across the country.

The second tension regarding TOD and preservation resolves around the difficult to answer question about ideal density in TODs and if historic buildings hinder density. Despite so much that has been written about TOD in past years, minimum density has been an under-studied topic. Renne (2013) argued that 64% of stations areas across the United States failed to achieve a minimum density of 8 units per acre, which is equal to 4,000 dwelling units within a half-mile of the station. However, ideal density varies by station area based on local market demand. The case studies revealed that in many instances, historic buildings were preserved because they allowed for the developer to achieve a viable project that aided in the TOD aims of the community. However some preservationists might argue that adding so much density above the old Sears building in Washington, D.C. bastardized the historic nature of the building. In New Brunswick, the density of the historic 19th Century buildings was not enough for the development team, thus they were demolished to make way for a much denser project. Was this a success or a failure? Perhaps TOD goals will never fully align with those of preservationists.

The case studies revealed that most historic projects in TODs necessitate one or more subsidies. TODs themselves often need a number of subsidies in the form of infrastructure investment to make them viable. From this perspective, TODs and restoring historic buildings are aligned in the need for the community to realize that public support needed, but such subsidies often create tensions around the concept that private developers are receiving public assistance. Despite the controversies that such projects can create, TOD and historic preservation can also create tremendous opportunities to revitalize neighborhoods, breathe new life into abandon buildings, and create a vibrant mixed-use, walkable and transit-based environments that defines a successful TOD.

Such projects can align with environmental goals of reducing greenhouse gas emissions through creating walking, bicycling and transit environments and by saving a significant amount of embodied energy in buildings by reducing or eliminating the need for new construction.

It is appropriate to conclude with a reference to history as it relates to TOD and preservation. While TOD is a new term, the concept and implementation of development around transportation is of course as old as cities and rural settlements. It is good to remember that, for we often forget that what we think is new is not. To cite just one example, most planners and preservationists are aware of Grand Central Terminal, the famous train station in Manhattan and the literal ground zero of the 1978 Penn Central case where the U.S. Supreme Court upheld the constitutionality of local historic landmark designation. But how many are aware that the corporation spearheading Grand Central's construction, the New York Central Railroad, then coordinated (with the help of Warren & Wetmore and some other architectural firms) terminal-adjacent and nearby construction of a constellation of hotels, offices and apartment buildings, and clubs with "an overall urban form and uniform architectural style" that were appropriately called Terminal City (Robins 2013, 104). To name just a few of its inclusive buildings, Terminal City included the Commodore, Biltmore, Roosevelt, and Waldorf-Astoria Hotels; the 32-story Graybar office building; the Grand Central Palace exhibition complex (its 240,000 square feet was the largest in the country after the Chicago Fair Grounds and it was three times the size of Madison Square Garden); and the prestigious Yale Club (Robins 2013, 108). Such an assemblage of important buildings led the *New York Times* (August 29, 1926, cited in Robbins 2013, 106) to gush, "Right in the centre of New York stands a group of connected buildings that are unique in the world's history. A man born in one of these buildings could live, carry on a large business and enjoy life's comforts without ever emerging from beneath a roof..."

While the term “TOD” might be new to a generation of planners and developers, Terminal City, built almost a century ago, illustrates the timeless nature of the issues highlighted in this study. Further, what happened to Terminal City underscores the subject of this report, for in the post-war construction boom, many of the iconic historic Terminal City buildings (e.g., the Biltmore, Commodore and Grand Central Palace) were demolished and replaced by denser, modern-design hotels and skyscrapers. This tension continues as the 1,450 foot One Vanderbilt skyscraper, approved in 2015, will replace a Terminal City building that some view as the death knell to the remaining Terminal City structures as this area of Midtown Manhattan is being up- zoned for higher density. Thus, we offer this story and this study as one resource to heighten our historic context and understanding of preservation and TOD – the tensions of historic preservation and TOD will continue but perhaps the resources identified in this study may help to better navigate the tensions.

8. References

Advisory Neighborhood Commission 3E. (2001, Oct. 11). “Hechinger’s Building Resolution.”

Alexander Company. (2014a). “Central Station.” Retrieved March 13, 2014 from http://www.alexandercompany.com/.

Alexander Company. (2014b). “Services.” Retrieved March 13, 2014 from http://www.alexandercompany.com/.

Bailey, Jr., T. (2012, November 17). “MATA look for developer to add new apartments at Central Station.” *The Commercial Appeal* (Memphis, TN).

Brown, S. (1998, October 22). “Development back on track - Mockingbird Station to get under way as Colorado apartment builder gets on board.” *The Dallas Morning News*, p. 1D.

Brown, S. (2000, July 25). “Dallas developers begin work on new mixed-use shopping, office center.” *The Dallas Morning News*.

Bushong, W. (1993). “District of Columbia Historic Preservation Board. Landmark application for the Sears Roebuck & Company department store.” Art Deco Society of Washington.

Commercial Appeal. (1995, January 28). “Memphis gives $1.1 million for dilapidated Central Station.” *The Commercial Appeal* (Memphis, TN).

Costello, D., Schamess, L., Mendelsohn, R., Canby, A., and J. Bender. (2003). “The returning city: Historic preservation and transit in the age of civic revival (Report No. FTA DC-26-1004).” Washington, DC: Federal Transit Administration and National Trust for Historic Preservation. Retrieved from http://www.planning.dot.gov/documents/casestudy/cities/returning_city.htm#top.

Dallas Area Rapid Transit. (1997). “DART board accelerates and expands rail, bus lines.” [Press release]. Retrieved March 4, 2014, from http://dart.org/news/news.asp?ID=123.

Dallas Area Rapid Transit. (2012). “DART maps.” Retrieved March 4, 2014, from http://dart.org/maps/printrailmap.asp.

Dallas Area Rapid Transit. (2014a). “DART expansion plans.” Retrieved March 4, 2014, from http://dart.org/about/expansion/otherprojects.asp.

Dallas Area Rapid Transit. (2014b). “DART fares.” Retrieved March 4, 2014, from http://www.dart.org/fares/fares.asp.

Dallas Area Rapid Transit. (2014c). “DART rail expansion maps.” Retrieved March 4, 2014, from http://dart.org/about/expansion/expansionmaps.asp.

Dallas Area Rapid Transit. (2014d). “DART service area.” Retrieved March 4, 2014, from http://www.dart.org/about/servicearea.asp.

Dallas Area Rapid Transit. (2014e). “Mockingbird Station.” Retrieved March 4, 2014, from http://www.dart.org/riding/stations/mockingbirdstation.asp.

Dallas Area Rapid Transit. (2014). “Cedars Station.” Retrieved March 31, 2014, from http://www.dart.org/riding/stations/mockingbirdstation.asp.

Dallas Public Library. (2006). “Sears warehouse.” Retrieved April 4, 2014, from http://dallaslibrary2.org/texas/photogallery/downtownliving/sears.htm.

Dillon, D. (2001, July 1). “An urban space that sings - Mockingbird Station creates harmony from old and new, odds and ends.” *The Dallas Morning News*, p. 1C.

District of Columbia, Office of Planning. (2004, July). *Upper Wisconsin Avenue Corridor Study* Washington, D.C.

District of Columbia Office of Planning, Historic Preservation Division. (2001, Oct. 25). Staff Report to the Historic Preservation Review Board, “Sears Department Store, 4500 Wisconsin Avenue.”

Donovan, S. (2011, September 1). “The future starts at home in Iberville: Shaun Donovan, Contributing Op-Ed Columnist.” *The Times-Picayune.*

Downtown Memphis Commission. (2013). “Central Station site plan.” Retrieved March 13, 2014 from http://www.downtownmemphiscommission.com/uploads/1/9/8/2/19820239/central_station_site_plan.pdf.

Finucan, K. (2001). “Outstanding planning: Project.” *Planning*, 67(3), 8.

Forgey, B. (2005, September 3). “Top Floor, Home Goods: Condo Building above the Old Sears Throws Landmark a Beautiful Curve,” *Washington Post.*

Freeman Gill, J. (2014, April 23). “The Fully of Saving What You Kill.” *The New York Times* Op-Ed.

New Jersey Future (2012). “Vanguard of New Brunswick’s Transit- Oriented Revitalization.” http://www.njfuture.org/smart-growth-101/stories/2012-smartgrowth. Accessed June 11, 201Friends of Katy Trail. (2012). Map. Retrieved March 4, 2014, from http://www.katytraildallas.org/site/PageServer?pagename=fkt_masterplan2011.

Friends of Katy Trail. (2012). “Master plan.” Retrieved March 4, 2014, from http://www.katytraildallas.org/site/PageServer?pagename=fkt_masterplan2011.

HRI Properties. n.d.. “Press Release: *Iberville/Treme Transformation – Choice Neighborhood Implementation / Iberville Onsite Redevelopment”* (provided by Josh Collen, HRI Vice President – Development on June 30, 2014).

Lindenberger, M. A. (2009, August 31). “SMU gives up on pedestrian bridge to link university, Bush library to DART station.” *Dallas Morning News*.

Lofts at Mockingbird Station. (2014). “The lofts at Mockingbird Station floor plans.” Retrieved March 6, 2014, from http://www.mockingbirdloftsdallas.com/plans-and-pricing-studio.asp.

Maloney, David. (2002, November 21). email to Communi-E Newsletter.

Martin, A. (2011, February 16). “A Construction Site That’s Busting.” *The New York Times,* p. 9.

Matthews Southwest. (n.d.). “Corporate overview.” Retrieved March 31, 2014, from http://matthewssouthwest.com/corp_overview.html.

Matthews Southwest. (2014). “History.” Retrieved April 4, 2014, from www.southsidedallas.com/history/.

Memphis Area Transit Authority. (2014a). “Downtown Memphis map.” Retrieved March 13, 2014 from http://www.matatransit.com/mapsandschedules/Downtown-Memphis-map/.

Memphis Area Transit Authority. (2014b). “Fastpasses. Retrieved March 13, 2014 from http://www.matatransit.com/FaresandPasses/Fastpasses/.

Memphis Area Transit Authority. (2014c). “Fixed rate bus - cash fares.” Retrieved March 13, 2014 from http://www.matatransit.com/faresandpasses/cash-fares/.

Memphis Area Transit Authority. (2014d). “Inside MATA.” Retrieved March 13, 2014 from http://www.matatransit.com/aboutus/InsideMATA/.

Memphis Area Transit Authority. (2014e). “Reduced fare program.” Retrieved March 13, 2014 from http://www.matatransit.com/FaresandPasses/Reduced-Fare-Program/.

Memphis Area Transit Authority. (2014f). “Trolley fares and passes.” Retrieved March 13, 2014 from http://www.matatransit.com/services/trolleys/trolley-fares/.

Memphis Area Transit Authority. (2014g). “Trolley history.” Retrieved March 13, 2014 from http://www.matatransit.com/trolleys/trolley-history/.

Memphis Railroad & Trolley Museum. (2014). “The southwest corner of South Main and G.E. Patterson (formerly Calhoun Ave.) has been continuously occupied by railroad stations for almost 150 years.” Retrieved March 13, 2014 from http://mrtm.org/centralstation.

Mockingbird Station. (2014a). “Map.” Retrieved March 3, 2014, from http://www.mockingbirdstation.com/info/map.

Mockingbird Station. (2014b). “Loft Photo gallery.” Retrieved March 3, 2014, from http://www.mockingbirdstation.com/mimages/gallery.

Mockingbird Station. (2014c). “Office photo gallery.” Retrieved March 3, 2014, from http://www.mockingbirdstation.com/info/officegallery.

Nunn, B. (2014, February 25). “Trammell Crow talks about plans for a development near Glencoe Park.” *Lakewood/East Dallas Advocate*. Retrieved March 6, 2014, from http://lakewood.advocatemag.com/2014/02/25/trammell-crow-talks-about-plans-for-a-development-near-glencoe-park/.

Perez, Christine (2002, March 31). “Two local developers win national awards.” *Dallas Business Journal*.

Philyaw, J. (2007, February 14). “Transit systems serve as engines for development, officials say.”*Bond Buyer*, p. 27.

Pitts, G. (2008). “Landmarks: Mockingbird Station in Dallas. *Multifamily Executive*, April 2008.” Retrieved March 6, 2014, from http://www.multifamilyexecutive.com/multifamily-executive/landmarks-mockingbird-station-in-dallas.aspx

Pousson, E. (no date). “Historic Preservation and Transit-Oriented Development in the Rosemont Station area”. Baltimore heritage/National Ttrust for Historic Preservation

Reckdahl, K. (2011, July 4). “The Iberville housing complex is set to get $589 million renovation.” *The Times-Picayune*.

John Renne. (2013.) “The Pent-Up Demand for Transit-Oriented Development and Its Role in Reducing Oil Dependence.” In Renne and Fields, Eds. *Transport Beyond Oil: Policy Choices for a Multimodal Future.* Washington, D.C.: Island Press, pp. 226-243.

Renne, J. and Ewing, R. (2013). "Transit-Oriented Development: An Examination of America’s Transit Precincts in 2000 & 2010."UNOTI Publications. Paper 17. http://scholarworks.uno.edu/unoti_pubs/17

Roadside Development LLC. (n.d.). http:www.roadsidedevelopment.com/portfolio/Cityline_at_Tenley. Accessed August 11 2015.

Tarbous, K. (2005, July). “New Brunswick Oks Gateway-Area Step.” *Home News Tribune*.

Tardif, M. (2005/2006, Winter). “Award-Winning Architecture: Thirty-three Projects Earn Kudos in Six Categories.” *American Institute of Architects*.

Telleria, A. (2006, October). “Central Station.” *Multifamily Executive*. Retrieved March 13, 2014 from http://www.multifamilyexecutive.com/architects/central-station.aspx.

United States Environmental Protection Administration (EPA) and SRA,International Inc. (2011). “TOD Development Opportunities Case Studies for Reference and Historic Preservation Opportunities.” PowerPoint October 28.

Vision North Texas. (2011). “Mockingbird TOD Dallas, Texas.” Retrieved March 6, 2014, from http://www.visionnorthtexas.org/2011CaseStudies/docs/MockingbirdStation.pdf.

Wolf-Powers, L. (2010). “Community Benefits Agreement and Local Government: A Review of Recent Evidence.” *Journal of the American Planning Association*. Vol. 72, No. 2, pp. 141-159.

Appendix A: State-Level Historic Property Database Availability

State	Office	Contact Person	Email	Office Ph. #	Have Property Info?	Info in GIS format?	Permission Request?	COST	Website
Alabama	Alabama Historical Commission			(334) 242-3184	NO	NO			
Alaska	Office of History and Archaeology			(907) 269-8721					http://dnr.alaska.gov/parks/oha/shpo/shpo.htm
Arizona	Arizona Cultural Resource Inventory	Rick Karl	karlr@email.arizona.edu	(520) 621-1271	YES	YES	YES	YES	http://azsite3.asurite.ad.asu.edu/azsite/contact.html
Arkansas	Arkansas Historic Preservation Program	Tony Feaster	michael@arkansasheritage.org	(501) 324-9880					http://www.arkansaspreservation.com/staff-directory/
California	Office of Historic Preservation	Eric Allison	eric.allison@parks.ca.gov	(916) 445-7044	PARTIAL	PARTIAL	YES	YES	http://www.ohp.parks.ca.gov/?page_id=1068
Colorado	Office of Archaeology & Historic Preservation	Mary Sullivan	mary.sullivan@state.co.us	303-866-4673					http://www.historycolorado.org/connect/office-archaeology-historic-preservation
Connecticut	State Historic Preservation Office	Stacey Vairo	Stacey.Vairo@ct.gov	(860) 256-2766	NO	NO	N/A	N/A	http://www.ct.gov/cct/cwp/view.asp?a=3948&q=293806
Delaware	Division of Historical and Cultural Affairs	Alice Guerrant	alice.guerrante@state.de.us		YES	YES	YES		http://history.delaware.gov/preservation/research/gis.shtml
Florida	Florida Division of Historical Resources	Vicent Birdsong	Vincent.Birdsong@DOS.MyFlorida.com	(850) 245-6440	YES	YES	YES		http://www.flheritage.com/
Georgia	Georgia Dept. of Natural Resources Historic Preservation Division	Amanda Schraner	Amanda.Schraner@dnr.state.ga.us	(404) 656-2840	YES	YES			http://www.gnahrgis.org/
Hawaii	Historic Preservation Division	Nick Beulluzzo	Nicholas.R.Belluzzo@hawaii.gov	808-692-8027					http://hawaii.gov/dlnr/2013-shpd

Idaho	State Historic Preservation Office	Shannon Vihlene	Shannon.Vihlene@ishs.idaho.gov	(208) 334-3861					http://history.idaho.gov/state-historic-preservation-office
Illinois	Illinois Historic Preservation Agency								http://gis.hpa.state.il.us/hargis/
Indiana	Division of Historic Preservation and Archeology	Mitch Zoll	mzoll@dnr.in.gov	(317) 232-3492					http://www.in.gov/dnr/historic/
Iowa	State Historical Society	Don Hirt	Don.Hirt@iowa.gov	(515) 281.7803	YES	YES	NO	NO	http://www.iowahistory.org/historic-preservation/
Kansas	Kansas State Historical Society	Matt Veatch	mveatch@kshs.org	(785) 272-8681, Ext. 271					http://www.kshs.org/
Kentucky	Kentucky Heritage Council	Craig Potts	craig.potts@ky.gov	(502) 564-7005, Ext. 123					http://heritage.ky.gov/staff.htm
Louisiana	Office of Historic Preservation	Mike Varnado	mvarnado@crt.la.gov	(225) 219-4596	NO	NO	N/A	N/A	http://www.crt.state.la.us/hp/
Maine	Maine Historic Preservation Commission	Elizabeth Trautman		(207) 287-5983					http://www.maine.gov/mhpc/certified_local_government/program_guidelines.html
Maryland	Maryland Historic Trust	Julia Fischer	julia.fischer@maryland.gov						http://www.mht.maryland.gov/research_gis.html
Massachusetts	Massachusetts Historical Commission	Miles Shugar	gismgr@sec.state.ma.us	(617) 727-8470	YES	YES	NO		http://maps.mhc-macris.net/
Michigan	State Historic Preservation Office	Ted Grevstad-Nordbrock	GrevstadT@michigan.gov	(517) 335-2722					http://www.michigan.gov/mshda/0,1607,7-141-54317---,00.html
Minnesota	State Historic Preservation Office	Barbara Howard	barbara.howard@mnhs.org	(651) 259-3466					http://www.mnhs.org/shpo/
Mississippi	Mississippi Department of Archives and History			(601) 576-6850					http://mdah.state.ms.us/new/about/contact-us/
Missouri	State Historic Preservation Office								http://www.dnr.mo.gov/shpo/aboutus.htm http://www.msdis.missouri.edu/index.html
Montana	GIS	Mindy Cochran	gis_online@flathead.mt.gov	(406) 758-5540					http://flathead.mt.gov/gis/index.php
Nebraska	State Historic Preservation Office	Patrick Haynes	patrick.haynes@nebraska.go	(402) 471-4770	YES	80-90% entered.	YES		http://www.nebraskahistory.org/histpres/about.htm

			v			Many errors.			
Nevada	State Historic Preservation Office	Karen de Dufour	kdedufour@shpo.nv.gov	(775) 684-3447					http://nvshpo.org/
New Hampshire	Division of Historical Resources			603-271-3483					http://www.nh.gov/nhdhr/contact.html
New Jersey	NJ Historic Preservation Office				YES	YES, Can be downloaded from website	NO		http://www.nj.gov/dep/gis/stateshp.html
New Mexico	New Mexico Historic Preservation Division	Derek Pierce	derek.pierce@state.nm.us	(505) 476-1287					http://www.nmhistoricpreservation.org/
New York	Division of Historic Preservation	Michael Schifferli		(518) 237-8643 ext. 3281					http://www.nysparks.com/shpo/online-tools/
North Carolina	State Historic Preservation Office	Andrew Edmonds	andrew.edmonds@ncdcr.gov	919-807-6592					http://www.hpo.ncdcr.gov/
North Dakota	State Historic Preservation Office	Tim Reed		(701) 328-3567					http://www.history.nd.gov/hp/
Ohio	Ohio Historical Society	Christopher Coleman							http://www.ohiohistory.org/ohio-historic-preservation-office/online-mapping-system
Oklahoma	Oklahoma Historical Society			(405) 521-2491					http://www.okhistory.org/shpo/shpom.htm
Oregon	State Historic Preservation Office	Matthew Diederich	Matthew.Diederich@state.or.us	503-986-0577					http://www.oregon.gov/OPRD/HCD/SHPO/Pages/index.aspx
Pennsylvania	PA Historical & Museum Commission	Katie Hess-Reichard	khess-reic@pa.gov	(717) 346-9568	YES	YES	No but not accessible		http://www.portal.state.pa.us/portal/server.pt/community/historic_preservation/3741
Rhode Island	Historic Preservation and Heritage Commission			(405) 521-2491					http://www.preservation.ri.gov/
South Carolina	State Historic Preservation Office	Jon Leader	leader@sc.edu	803-777-8170	YES	YES	YES	YES	http://shpo.sc.gov/Pages/default.aspx http://archsite.cas.sc.edu/ArchSite/(oocuz4450fv2wr45tucb1wet)/Login.aspx?ReturnUrl=%2fArchSite%2fDefaul

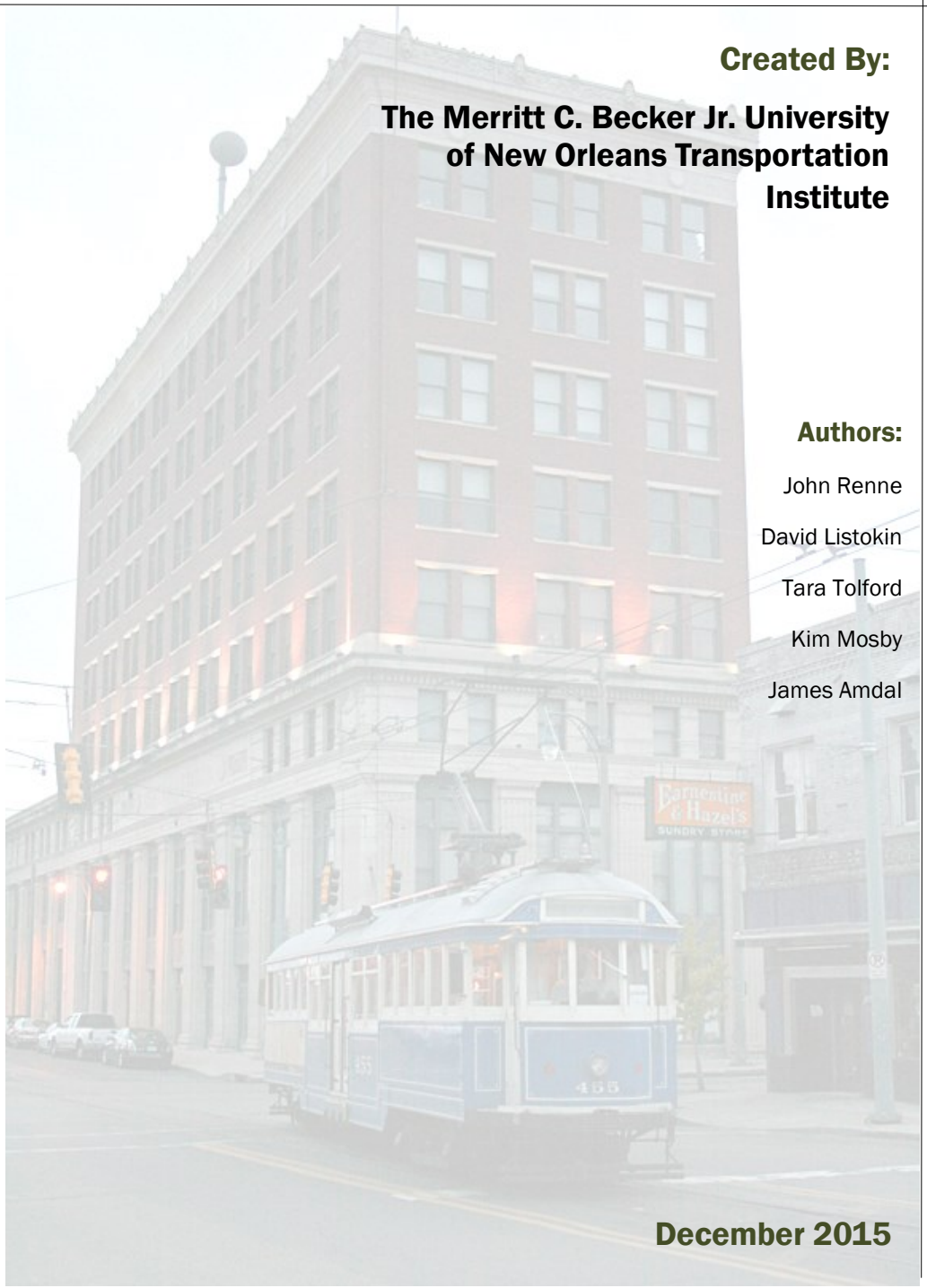
									t.aspx
South Dakota	State Historical Society			(605) 773-3458					http://history.sd.gov/preservation/
Tennessee	Tennessee Historical Commission	Casey Mahoney	casey.mahoney@tn.gov	(615) 532-8964	NO	NO	N/A	N/A	http://www.tn.gov/environment/history/
Texas	Texas Historical Commission			(512) 463-6100					http://www.thc.state.tx.us/
Utah	State Historic Preservation Office			801-245-7239					http://heritage.utah.gov/history/shpo-compliance
Vermont	Vermont Division for Historic Preservation			802-828-3045					http://accd.vermont.gov/strong_communities/preservation/
Virginia	Virginia Department of Historic Resources	Dominic Bascone	dominic.bascone@dhr.virginia.gov	(804) 482-6101	YES, incomplete	YES	YES	YES	http://www.dhr.virginia.gov/
Washington	Department of Archeology and Historic Preservation	Rick Anderson	Rick.Anderson@dahp.wa.gov	(360) 586-3070					http://www.dahp.wa.gov/
West Virginia	West Virginia Division of Culture and History	Tami Koontz	Tami.S.Koontz@wv.gov						http://www.wvculture.org/shpo/shpoindex.aspx
Wisconsin	Wisconsin Historic Preservation Database		gis@wisconsinhistory.org		YES	YES	YES	YES, $239.00	http://www.wisconsinhistory.org/hp/whpd/custom.asp

Note: This data was collected in December 2013 and may have changed since then.

Appendix B: Guide to Facilitate Historic Preservation through Transit Oriented Development

(See Separate PDF)

Guide to Facilitate Historic Preservation through Transit Oriented Development



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December 2015

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Introduction

Purpose

The purpose of this guide is to identify and define tools that can serve public and private stakeholders in coordinating redevelopment and new construction in transit-oriented developments (TODs). The goal is to provide better information for developers, transit agencies and local governements seeking to preserve historic buildings and the historic character of neighborhoods near fixed-route transit stations, including passenger rail (all types such as high speed rail, intercity rail, commuter rail, metro/subway, light rail and streetcar), ferry terminals and bus-rapid transit stations. This guide is part of a larger study called the "Opportunities and Tensions of Historic Preservation and Transit Oriented Development," as described below.

About the Study: Opportunities and Tensions of Historic Preservation and Transit Oriented Development

In recent years, there has been a growing body of research and development examples of TOD in the United States and abroad. The field of historic preservation has also been a field with growing interest, yet the intersection of TOD and historic preservation has received scant attention. This study, the "Opportunities and Tensions of Historic Preservation and Transit Oriented Development," sought to bring these two fields together given their natural nexus since many rail, ferry and BRT stations that are ripe for redevelopment are located in historic places.

This research was comprised of three main components. The first of these involved cross-referencing TOD locations with various databases listing the locations of historic properties. A database of existing state-level historic asset databases is included in the final research report. Second, we examined case studies of where TOD and historic preservation intersect— guided by searching local news archives, interviewing developers, planners, and experts in the field of historic preservation— and finally, identifying tools for preservation through an expert-input process that could be utilized by various stakeholders around the nation for preserving historic structures in TODs.

A series of eight case studies was completed in order to better understand the varying circumstances where TOD development intersects with historic preservation, and what impacts the success (or lack thereof) of such projects. The case studies included: Central Station in Memphis, TN, Cityline at Tenley in Washington, D.C., the Saratoga Apartments and the Iberville Project HUD Choice Neighborhood redevelopment in New Orleans, LA, Gateway Transit Village in New Brunswick, NJ, Mockingbird Station and South Side on Lamar in Dallas, TX, and Gates Rubber TOD in Denver, CO. For each of these projects, the authors sought to understand the history and context of the site including its relationship to regional transit networks, the key players involved in the project(s), the processes (e.g. funding sources, tax credits, and tools utilized) involved in the redevelopment, and the outcomes and key lessons from each.

Structure of this Guide

This guide includes an overview of tools that can assist with TOD and historic preservation followed by a section on financials tools that can aid in historic preservation. The last section discusses the possibility of using a Transfer of Development Rights (TDR) approach to preserving buildings in TOD locations.

A. TOD and Historic Preservation Tools — Overview

This section provides an overview of commonly used tools (including financial incentives, land use and design regulations, and additional project-level development strategies) to promote transit-oriented development that effectively preserves historic assets. A brief description and, if available, link to additional information is provided, as well as examples of where such tools have been employed from the case studies described in *The Tensions and Opportunities of Historic Preservation and Transit Oriented Development: Developing a Policy and Tools for Preservation in TODs.* Several of these tools, including Transfer of Development Rights, Historic Tax Credits, and property tax incentives, are discussed in greater detail in sections B and C of this guide.

Land Use and Design Strategies	Description + Resources	Selected Case Study Example(s)
Incorporation of Local Artwork	Many states and cities maintain a "1% for art" requirement for large-scale projects to fund and install public art. **See Also:** http://www.nasaa-arts.org/Research/Key-Topics/Public-Art/State-Percent-for-Art-Programs.php	Saratoga Building, New Orleans, LA; South Side on Lamar, Dallas, TX
Changing Zoning	Supporting transit often requires increasing the level of development intensity permitted, and/or developing mixed-use zoning districts. These may or may not include special features or procedures to promote placemaking and/or historic preservation. **See Also:** http://www.reconnectingamerica.org/assets/Uploads/bestpractice230.pdf	Gates Factory, Denver, CO
Transit Orientation	Orienting development around transit means providing a variety of housing types, businesses, and/or civic investments within 1/4 to 1/2 mile of fixed transit, and ensuring that transit use is actively supported through the design and function of the development; e.g., by providing wayfinding to and from destinations. **See Also**: http://www.ctod.org/	Gateway Transit Village, New Brunswick, NJ
Walkability	Creating well-connected, pedestrian-friendly streets and spaces is integral to promoting transit use, promoting economic vitality, and supporting the character of historic structures and neighborhoods. **See Also:** http://www.walkable.org/	Iberville, New Orleans, LA; Mockingbird Station, Dallas, TX
Transfer of Development Rights (TDR)	TDR is a zoning technique used to natural or cultural resources by redirecting development to areas which can better accomodate growth and development. **See Also:** Section C of this Guide	Not utilized within these case studies
Brownfields	Though not without additional challenges, coordination of TOD with redevelopment of contaminated sites can maximize the impact of available financial incentives as well as the investment benefits to communities. **See Also:** http://mnbrownfields.org/wp-content/uploads/2013/07/TODandBrownfields051613.2-FINAL.pdf	Gates Factory, Denver, CO
Parking	TOD parking supply and pricing policy must be structured to support transit ridership goals, e.g., by implementing parking maximums rather than minimums. **See Also:** http://www.reconnectingamerica.org/assets/Uploads/dallasbrief3.pdf	Central Station, Memphis, TN; Cityline at Tenley, DC
New Construction Designed with Sensitivity to Historic Construction	Context-sensitive design of new structures is essential to preserving the character of historic districts and creating a comfortable and attractive tout ensemble. **See Also:** http://www.preservationalliance.com/publications/	Iberville, New Orleans, LA; Gateway Transit Village, New Brunswick, NJ

Financial Incentives	Description + Resources	Selected Case Study Examples
Historic Tax Credit	A federal income tax credit of up to 20% is available for the rehabilitation of historic, income-producing buildings designated as certified historic structures. **See Also:** http://www.nps.gov/tps/tax-incentives.htm	Central Station, Memphis, TN; Saratoga, New Orleans, LA
Low-Income Housing Tax Credit (LIHTC)	The LIHTC provides state entities the authority to issue federal tax credits for development of rental housing for low-income housing. **See Also:** http://portal.hud.gov/hudportal/HUD?src=/program_offices/fair_housing_equal_opp/lihtcmou	Iberville, New Orleans, LA
Transportation Grants	Various federal grant programs exist to support the development of transit, livable communities, and economic development. **See Also:** http://www.transportation.gov/grants	Central Station, Memphis, TN
HUD Incentives	Many developers utilize HUD Section 108 loans as well as Low-Income Housing Tax Credit (LIHTC). **See Also:** http://www.enterprisecommunity.com/financing-and-development/low-income-housing-tax-credits/about-lihtc and https://www.hudexchange.info/programs/section-108/	South Side on Lamar, Dallas, TX; Iberville, New Orleans, LA
Tax Incentives and other TOD Programs	Various local state and federal programs have been employed to promote targeted development or redevelopment in support of TOD. **See Also:** http://reconnectingamerica.org/inventory/index.php	Saratoga Building, New Orleans, LA
Tax Increment Financing (TIF)	TIF is a public financing method that is used as a value-capture strategy for redevelopment, infrastructure, and other community-improvement projects. **See Also:** http://www.lincolninst.edu/pubs/1078_Tax-Increment-Financing	Gates Factory, Denver, CO
Private Financing/ Loans	Most developers utilize private market access debt and equity.	Cityline at Tenley, DC, Mockingbird Station, Dallas, TX
Private-Public Partnership (P3)	Public-private partnerships (P3s) are contractual agreements formed between a public agency and a private sector entity that allow for greater private sector participation in the delivery and financing of transportation projects. **See Also:** http://www.fhwa.dot.gov/ipd/p3/defined/	Iberville, New Orleans, LA; Central Station, Memphis, TN
Property Tax Abatement	Property tax abatements exempt owners from paying taxes on the value of property improvements for a specified period of time. See **Also:** http://www.investopedia.com/articles/mortgages-real-estate/12/property-tax-abatement.asp?adtest=article_page_v12_v1	Gateway transit Village, New Brunswick, NJ; South Side on Lamar, Dallas, TX
New Market Tax Credit (NMTC)	The NMTC program is intended o spur revitalization efforts of low-income and impoverished communities by providing tax credit incentives to investors for equity investments in certified Community Development Entities, which invest in low-income communities. **See Also:** http://www.irs.gov/pub/irs-utl/atgnmtc.pdf	Gateway Transit Village, New Brunswick, NJ
TOD Grants and Incentives	Various TOD funding programs exist in different states and regions. For an overview of state, regional, and local programs, **See Also:** http://reconnectingamerica.org/inventory/index.php	Gateway Transit Village, New Brunswick, NJ

B. Historic Preservation Financial Aids

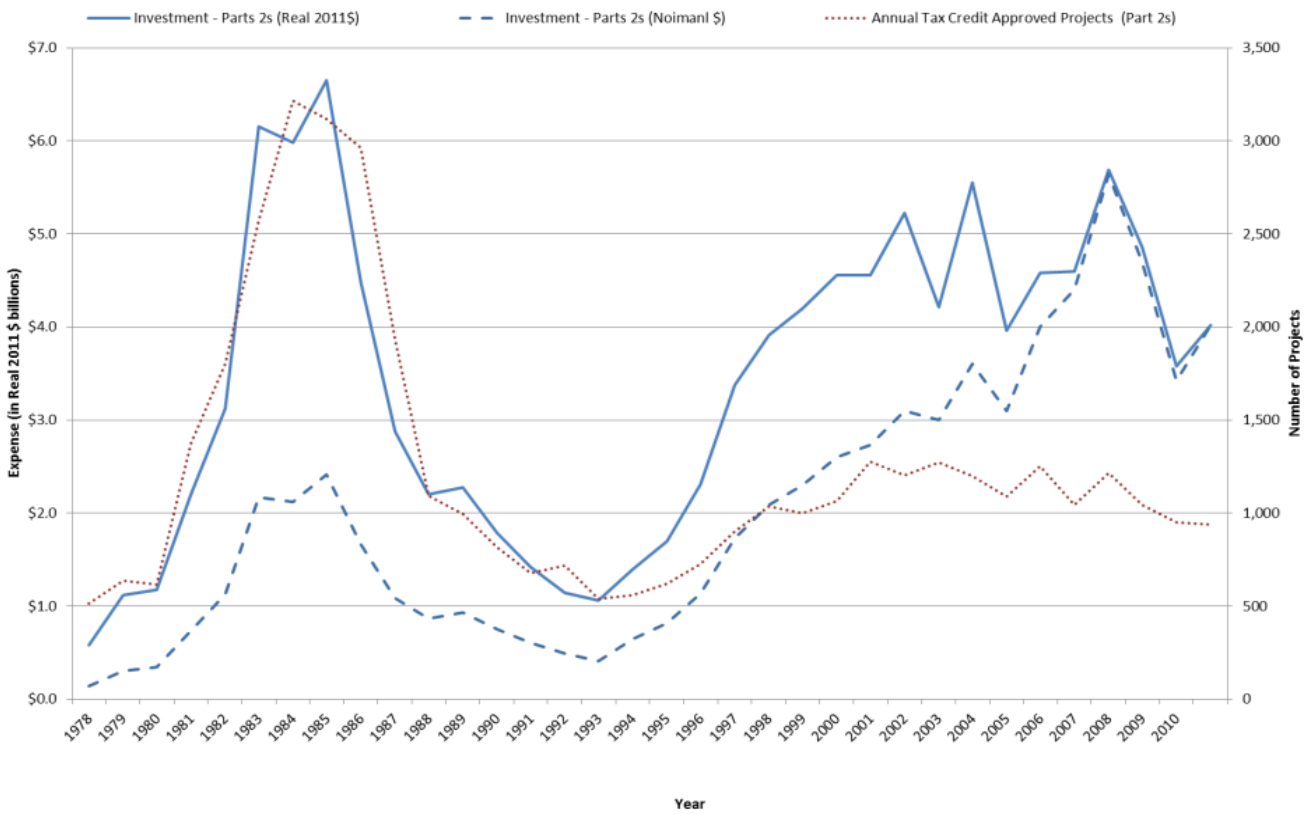
INTRODUCTION

This section summarizes numerous financial sources to rehabilitate and restore historic properties. These include the Federal Historic Tax Credit (FHTC), State HTCs, New Markets Tax Credits (NMTC), property tax incentives, transportation-related federal assistance that can be used for preservation, and some other federal aids.

FEDERAL HISTORIC REHABILITATION TAX CREDIT (FHTC)

The FHTC was first introduced in the late 1970s, the credit was increased to 25 percent in 1981 (Economic Recovery Tax Act or ERTA), and the credit was revised in 1986 (by that year's Tax Reform Act or TRA) and was set at a lower 20 percent, where it remains today. In other words, a $1 million rehabilitation of an historic building would qualify for a $200,000 credit (i.e., federal income taxes would be reduced by $200,000). The FHTC is applied to income-producing buildings, both residential and non-residential. FHTC program activity over fiscal years 1978-2011 is summarized in Figure 1 and Table 1. Proposals have been floated to extend the federal 20 percent HTC to historic, owner-occupied (not income-producing) properties, but to date this change has not been made. Numerous states, however, that grant state HTCs do extend the credit to owner-occupied historic properties (Figure 1).

Figure 1: Federal Historic Tax Credits For Rehabilitating Historic Buildings, FY 1978-2011



Source: David Listokin, Michael Lahr, and Charles Heydt, Third Annual Report on the Economic Impacts of the Historic Tax Credit, 2012, p.13

Table 1: Federal Historic Tax Credits, Fiscal Years 1978-2011				
Fiscal Year	Estimated Investment (Part 2s in $[a] millions)	Cumulative Estimated Investment (Parts 2s in $ millions)	Number of Part 2s approved	Cumulative Part 2s approved
1978	$580	$580	512	512
1979	$1,114	$1,694	635	1,147
1980	$1,175	$2,869	614	1,761
1981	$2,205	$5,074	1,375	3,136
1982	$3,123	$8,197	1,802	4,938
1983	$6,152	$14,349	2,572	7,510
1984	$5,980	$20,329	3,214	10,724
1985	$6,648	$26,977	3,117	13,841
1986	$4,484	$31,461	2,964	16,805
1987	$2,877	$36,542	1,931	18,736
1988	$2,204	$36,542	1,092	19,828
1989	$2,273	$38,815	994	20,822
1990	$1,782	$40,597	814	21,636
1991	$1,419	$42,016	678	22,314
1992	$1,145	$43,161	719	23,033
1993	$1,056	$44,217	538	23,571
1994	$1,398	$45,615	560	24,131
1995	$1,697	$47,312	621	24,752
1996	$2,304	$49,616	687	25,439
1997	$3,378	$52,994	902	26,341
1998	$3,914	$56,908	1,036	27,377
1999	$4,195	$61,103	973	28,350
2000	$4,560	$65,663	1,065	29,415
2001	$4,557	$70,220	1,276	30,691
2002	$5,228	$74,448	1,202	31,893
2003	$4,214	$79,662	1,270	33,163
2004	$5,554	$85,216	1,200	34,363
2005	$3,962	$89,178	1,101	35,464
2006	$4,580	$93,758	1,253	36,717
2007	$4,597	$98,355	1,045	37,762
2008	$5,685	$104,040	1,213	38,993
2009	$4,858	$108,898	1,044	40,037
2010	$3,578	$112,476	951	40,988
2011	$4,020	$116,496	937	41,925

**These figures are in inflation-adjusted terms (FY 2011 dollars).*

Source: Listokin, Lahr and Heydt. Third Annual Report on the Economic Impact of the Historic Tax Credit, 2012, 18

The FHTC has a multi-step application process encompassing "Part 1" (evaluation of the historic significance of the property), "Part 2" (description of the rehabilitation work), and "Part 3" (request of certification of completed work). Both "Part 2" and "Part 3" rehabilitations statistics include only what are termed "eligible" or "qualified" items (or Qualified Rehabilitation Expenditures – QRE) for the tax credit as opposed to what are called "ineligible" or "non-qualified" costs.
To qualify for the 20 percent FHTC, the rehabilitated property must be a "certified historic structure", that is, a building individually listed on the National Register of Historic Places, or located in, and contributing to, the historic significance of a registered historic district;[1] the rehab has to be "substantial";[2] and the rehabilitation has to be certified. To be certified, the rehab must be approved by the National Park Service (NPS) as being consistent with the historic character of the property and, where applicable, the district in which it is located, using the Secretary of the Interior's Standards for Rehabilitation as a guide.

To date, from FY 1978 through FY 2011, there has been a cumulative total in inflation-adjusted 2011 dollars of $116.5 billion "Part 2" FHTC activity (in 41,925 total projects) (Table A-1) and $89.2 billion in "Part 3" FHTC activity. An estimated $99.2 billion of rehabilitation has occurred over the full span of the FHTC program at a federal cost of an estimated $19.2 billion – proving it one of the most effective tools for historic rehabilitation.

The FHTC is a powerful subsidy. To illustrate just how effective it can be, consider the case of a proposed adaptive reuse of a 1929 neoclassical landmarked office building in Newark, New Jersey. This building had served as a corporate headquarters of a major publisher and it was later used as a school, but as the building aged it no longer was deemed fit for educational purposes. A developer proposed reusing the building as a hotel containing about 275 rooms. The estimated cost of the project was about $47 million or almost $170,000 per room. The Newark hospitality market at the time (around 2000) was so weak that it could not support that level of investment solely from conventional sources. Hence the developer proposed a package that would draw on a first mortgage of about $32 million (about two-thirds of the project costs), $7 million raised from the FHTC (about one-seventh of the project cost), and the remaining $8 million from various sources. This project would not be feasible without the FHTC.

The FHTC has served a similar invaluable role in other historic projects. A $20 million renovation of the famous Apollo Theater in Harlem, New York City was made possible by the FHTC. The adaptive reuse of a former American Can Company complex in New Orleans into apartments and retail space, and the reuse of a 1929 Procter & Gamble soup factory into a 400,000 square foot corporate office campus along Baltimore's inner harbor were similarly realized by the federal tax credits.

[1]A registered historic district includes both those districts listed on the National Register and any state or local historic districts in which the district and enabling statue are certified by the Secretary of the Interior.

[2]This is $5,000 or the adjusted basis of the renovated property, whichever was greater.

Evident from the above cases is the valuable and varied application of the FHTC. Since its inception, it has been available for both housing and nonresidential projects. In practice, the FHTC has often involved housing or mixed-use investment. Although data are not readily available on the dollar distribution of FHTC investment by type, the type of projects are recorded. The distribution indicates that about half of the FHTC projects were exclusively housing and another 20 to 30 percent were in the mixed-use/other category. The remainder was commercial/office renovations.

One way developers use the FHTC to create affordable units for low and moderate-income households is by "piggybacking" the FHTC's benefits with other subsidies. Piggybacked financing packages can include many sources discussed later in this chapter, including reduced property taxes. One important additional aid particularly important to produce affordable historic housing units is the low-income housing tax credit (LIHTC).

COMBINING LIHTC AND HISTORIC REHABILITATION TAX CREDITS

Created by the Tax Reform Act of 1986, the LIHTC gives states the authority to issue tax credits to owners or developers who construct, rehabilitate, and acquire rental housing for lower-income households. Since its adoption, the LIHTC has been one of the most significant programs for the production of affordable housing in the United States, in recent years far exceeding that of direct housing subsidies administered by the U.S. Department of Housing and Urban Development. From the beginning of the program in 1987 through 2008, the LIHTC has allocated $10 billion for federal tax credits granted for the production of 1,761,245 units of affordable housing. For 2008, the LIHTC allocation amounted to $932 million aiding 91,911 housing units.[3]

The tax credit is equal to a maximum of 9 percent annually over a 10 year period. To receive the 9 percent credit, equal to about 90 percent total over the decade, the low-income units must either be new or "substantially rehabilitated" and the property could not otherwise be subsidized by the federal government. The dollar amount of the tax credits available in any given project is equal to the tax-credit rate (up to 9 percent annually) multiplied by the dollar amount of the project's "qualified basis" (the amount eligible for subsidy).

The gain in financial leverage from combining the FHTC and LIHTC is seen from the following example in Seattle, Washington. Built in 1916, the Pacific Hotel closed in the 1980's. An affordable housing group acquired the hotel and renovated it. The Pacific Hotel's total project cost was $8,534,694 ($2,113,092 acquisition and $6,421,602 rehab). The $8,534,694 project expense was met through $3,656,085 in equity—raised from combining the LIHTC ($2,708,079 in tax credit equity) and FHTC ($948,006 in tax credit equity)—and $4,878,609 in debt financing. The debt's cost and project operating expenses were reduced from subsidies received from the Federal Home Loan Bank, the Washington State Housing Trust Fund, the City of Seattle, and other sources.

[3]*The Danter Company, 2012. "Statistical Overview of the LIHTC Program, 1987 to 2008." Accessed online at http://www.danter.com/taxcredit/stats.htm*

INCOME TAX BRIDGE MECHANISMS:

STATE HISTORIC PRESERVATION TAX CREDIT

As of 2012 about 35 states in America had enacted state tax credits for historic rehabilitation. States with such programs are indicated in Figure 2 and some of their major provisions are overviewed below.

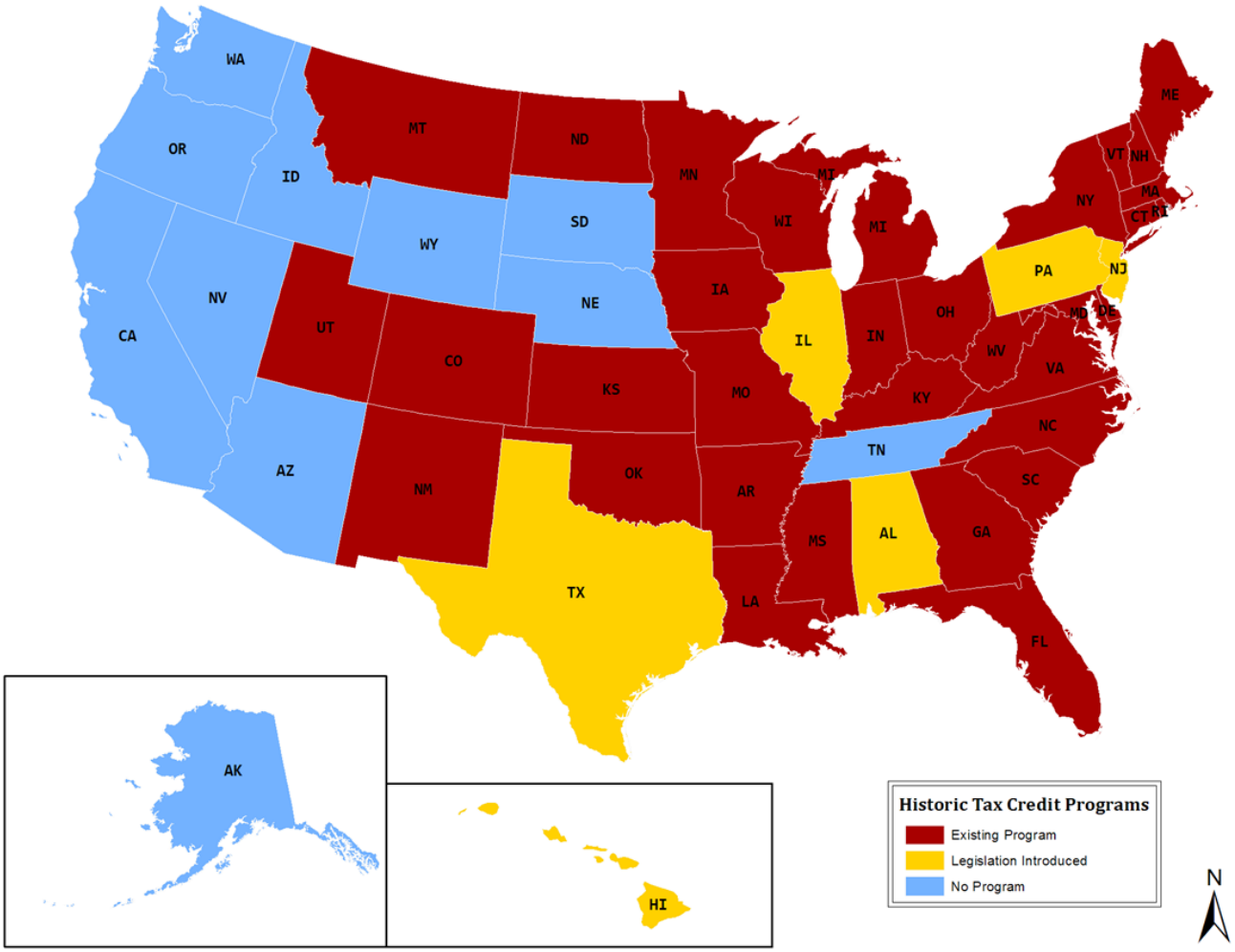
The percentage of the rehabilitation investment against which a credit is given for state tax purposes (e.g., individual income or corporate) ranges from 5 percent (Montana) to 50 percent (New Mexico). Many states mirror the current federal provisions and allow a 20 percent credit for income-producing properties, while other states allow a 25 percent credit – the pre-Economic Recovery Tax Act federal incentive. Some states provide different credits depending on the type or location of historic property.

The applicability of the state historic tax credit (SHTC) varies tremendously. The SHTC is often available to income-producing properties (as the FHTCs), may be available to homeowner occupants (going beyond the current FHTCs), and may have further targeting, such as to farm building, downtown development districts, and archaeological sites

Reflecting dynamic federalism, investment requirements for SHTCs are quite disparate. States may require a minimum dollar investment may have no minimum dollar investment or may adhere to the FHTC minimum investment (i.e., the greater of $5,000 or the adjusted basis), or may revise the federal blue print. While the FHTC has no cap or maximum once its requirements are met, the less "deep pocketed" states often cap their SHTC by individual project or total cumulative project outlay.

Missouri has one of the most extensive SHTCs in the nation (25 percent state credit for both income-reducing and owner-occupied historic buildings) and we illustrate its implementation in the following case example. The Gateway (built in 1917) and Statler (built in 1922) were iconic hotels in the St. Louis Centre business district, but as this city's central business district declined, so did the Gateway and Statler – both were closed in the 1980's. About 2 decades later both were rehabilitated and historically restored at a total (two-hotel) project of $200 million. The $200 million outlay was subsidized by both the federal historic tax credit ($34 million) and a Missouri state historic tax credit ($12 million). Other aids were used as well, such as property tax increment financing (TIF) described below.

Figure 2: Historic Tax Credits: State Programs



Source: Novogradac, LLC 2012.

NEW MARKETS TAX CREDITS

The New Markets Tax Credit (NMTC) is offered from the Community Development Financial Institution (CDFI) Fund within the United States Department of the Treasury. The NMTC grants a 39 percent tax credit for investment in Community Development Entities (CDEs).

A CDE provides loans, investments or financial counseling in "low income communities," (LICs) -- census tracts with a minimum 20 percent poverty level or where median income is at or below 80 percent of the area median family income. The CDEs in turn make "qualified low- income community investments" (QLICIs). The QLICIs can take various forms, including investing or lending to a "qualified active low-income community business" or QALICB (a business located in a LIC with a "substantial connection to that location"), financially aiding other CDEs, (through investing, lending or purchasing loans), or providing financial counseling to LICs.

The NMTC 39 percent tax credit is taken over 7 years (equal to about 30 percent in present value terms). The 39 percent is scheduled as follows: a 5 percent credit is allowed in each of the first 3 years and a 6 percent credit is extended in each of the final four years. The program is quite significant. From 2003 through 2011, about $32 billion cumulatively has been allocated to the NMTC.

While the NMTC is not directed to historic preservation per se, it has been applied in this context provided the standard guidelines are met. The National Trust Community Investment Corporation (NTCIC), a CDE formed by the National Trust for Historic Preservation, said that about 38 percent of National Register Historic Districts, 58 percent of the buildings within these districts and 33 percent of all staffed Main Street programs from the National Trust are all in NMTC-eligible census tracts. When NMTC investors were asked what other government incentives they used besides the 39 percent credit, almost 30 percent cited utilization of the FHTC.

To illustrate, the historic rehabilitation of the iconic King Edward and Standard Life buildings in Jackson Missouri, a combined $123 million project tapped $26 million in equity raised from the FHTC, $18 million in equity occurred from the SHTC (and other state sources), and $29 million in equity raised from the federal NMTC.

PROPERTY TAX INCENTIVES

The property tax is a levy on wealth held in the form of property. As of 2008, the total property tax levy by local governments in the United States amounted to about $400 billion. Many states have enabled local governments to offer property tax incentives to encourage historic preservation. For example, a historic building undergoing rehabilitation may have its existing (pre-rehabilitation) taxes reduced or at minimum the property's valuation is frozen for some time despite the enhancement to its value because of the rehabilitation investment.

Also popular is the Tax Increment Financing (TIF). The objective of this strategy is to turn the "lemon" of property taxes, especially high taxes that can discourage investment, into the "lemonade" of a resource that can support investment, whether preservation or for other purposes. A TIF is a popular tool to finance new development or redevelopment (rehabilitation and new construction) by capturing the property appreciation and associated nominal higher property tax payments ensuing from the development or redevelopment. The mechanism works as follows:

1. The area within where the development/redevelopment is to occur is designated as a TIF district
2. Property values for standard property taxation purposes are then frozen in the TIF district for a given period of time (e.g., 10 to 20 years). As property values from the frozen levels increase over time, the appreciation (or "increment") is applied for development or redevelopment purposes. The amount captured is equal to the increment in property value multiplied by the property tax rate (the full rate or a portion, such as the municipal but not the school property tax rate). To illustrate, say a community with an effective property tax rate of 2 percent created a TIF to help preservation. If the TIF district appreciated $10 million in value from the frozen base, then $200,000 ($10 million × 2 percent) in preservation assistance would be made available annually.

There are many TIF variations, such as "bond TIF" (city issues bonds to raise money for up-front project purposes with the bonds to be repaid from projected TIF revenues) versus a "pay-as-you-go TIF" (annual TIF revenue is made available as per the district's valuation increment). Since developers often need assistance up front to launch a project, a bond TIF is more desirable, albeit riskier (if the value increment is not secured). Because all TIFs involve some risk, this mechanism typically requires state enabling authority for the effecting local entity. Further, the type of area eligible for a TIF may be limited to "blighted," "redevelopment" or other financially challenged locations. Relatedly, a TIF may require a report showing that "but for" this finance mechanism the proposed project could not proceed. In practice, however, "blight" and "redevelopment" are themselves broadly applied as is the satisfaction of a "but for" requirement.

Today, almost all states authorize TIFs and this mechanism can be applied to use in historic preservation. For example, the successful renovation of the historic Gateway/Statler hotel in St. Louis, a $200 million project, described earlier, used $34 million secured by TIF. This TIF resource matched the combined equity obtained from the FHTC ($26 million) and state HTC ($12 million).

FEDERAL TRANSPORTATION ASSISTANCE APPLICABLE TO HISTORIC PRESERVATION

This section briefly discusses the following transportation programs: The 1991 Intermodal Service Transportation Act (ISTEA), familiarly known as "ICE TEA"; the 1998 Transportation Equity Act for the 21st Century (TEA-21); the 2005 Safe, Accountable, Flexible and Efficient Transportation Equity Act--A Legacy for Users (SAFETEA-LU); and most recently, the 2013 Moving Ahead for Progress in the 21st Century (Map-21). All of the above were transportation funding behemoths: ISTEA funded at about $155 billion; TEA-21, about $220 billion; and SAFETEA-LU, about $280 billion; and Map-21 about $105 billion (just for 2013-2014).

The largest and most flexible component of the above group of transportation legislation was the Surface Transportation Program (STP)-- federal block grants to states for non-national highway purposes. In turn, 10 percent of the STP was dedicated to what are referred to as Transportation Enhancement Activities (TEAs), which we will see in a moment are both directly and indirectly supportive of preservation (termed "transportation alternatives" in MAP-21). The TEA resources are very significant (ISTEA, $2.6 billion; TEA-21, $3.8 billion; and SAFTEA-LU, *$4.2* billion), so monies going from this pool to preservation are large sums.

To receive TEA funding, a project must (1) be related to surface transportation *and* (2) must include an eligible enhancement activity. Under ISTEA, TEA-21 and SAFTEA-LU, there were twelve eligible activities (Table 2). Under MAP-21, there were a smaller number but similar transportation alternatives (Table 3).

In brief, of the $9.87 billion distributed in TEA support over the 1992 through 2010 year span, the activities which have received the most funds are pedestrian and bicycle facilities, ($4,891 million or 50 percent), landscaping and other scenic beautification ($1,863 million or 19 percent), and rehabilitation and operation of older historic transportation infrastructure ($926 million or 9 percent).

Of the eligible activities, numerous investments are directly supportive of historic preservation. This includes historic preservation, rehabilitation and operation of historic transportation infrastructure, and archaeological planning. The other activities are indirectly helpful to preservation or historic or older areas. For instance, an historic downtown would surely benefit from such activities as enhanced pedestrian and bicycle facilities. Under Map-21, the Transportation Alternatives (TA) most applicable to historic preservation are TA 6 (historic preservation and rehabilitation of historic transportation facilities, but other TAs are at least indirectly beneficial to historic preservation projects (e.g., pedestrian and bicycle facilities).

Numerous historic preservation (connected to transportation) projects have benefitted from the programs just described. For example, the $17.5 million renovation of the San Francisco Ferry Terminal tapped $2 million in TEAs; the $6 million rehabilitation of the St. James Hotel in Alabama secured $1.2 million in TEAs; and the $980,000 renovation of the Paducah (Ki) Main Street benefitted from a $490,000 TEA.

Table 2: Transportation Enhancement Activities: Eligible Activities and Funding (FY 1992-2010)

	List and Examples :The term Transportation Enhancement Activity means any of the following as they relate to surface transportation.	FY 1992-2010 Funding ($millions)		
		Total	Annual	%
1	**Pedestrian and bicycle facilities:** New or reconstructed sidewalks, walkways, curb ramps, bike lane striping, paved shoulders, bike parking, bus racks, off-road trails, bike and pedestrian bridges and underpasses.	4,891	257.4	49.6
2	**Safety and educational activities for pedestrians and bicyclists:** Programs designed to encourage walking and bicycling by providing potential users with education and safety instruction through classes, pamphlets, and signs.	33	1.7	0.3
3	**Acquisition of scenic easements and scenic or historic sites, including historic battlefields:** Acquisition of scenic land easements, vistas and landscapes, including historic battlefields; purchase of building in historic districts or historic properties.	218	11.5	2.2
4	**Scenic or historic highway program including tourist and welcome center facilities:** Construction of turnouts, overlooks, visitor centers, and viewing areas, designation signs, and markers.	548	28.8	5.6
5	**Landscaping and other scenic beautification, including pedestrian streetscapes:** Street furniture, lighting, public art, and landscaping along street, highways, trails, waterfronts, and gateways.	1,863	98.1	18.9
6	**Historic preservation:** Preservation of buildings and facades in historic districts; restoration and reuse of historic buildings for transportation-related purposes; access improvements to historic sites and buildings.	343	18.1	3.5
7	**Rehabilitation and operation of historic transportation buildings, structures, or facilities:** Restoration of historic railroad depots, bus stations, canals, canal towpaths, historic canal bridges, and lighthouses; rehabilitation of rail trestles, tunnels and bridges.	926	48.7	9.4
8	**Preservation of abandoned railway corridors and the conversion and use of the corridors for pedestrian or bicycle trails:** Acquiring railroad rights-of-way; planning, designing and constructing multi-use trails; developing rail-with-rail projects; purchasing unused railroad property for reuse as trails.	713	37.5	7.2
9	**Inventory, control, and removal of outdoor advertising:** Billboard inventories or removal of nonconforming billboards.	40	2.1	0.4
10	**Archaeological planning and research:** Research, preservation planning and interpretation; developing interpretive signs, exhibits, guides, inventories, and surveys.	47	2.5	0.5
11	**Environmental mitigation to address water pollution due to highway runoff or to reduce vehicle-caused wildlife mortality while maintaining habitat connectivity:** Runoff pollution mitigation, soil erosion controls, detention and sediment basins, river cleanups, and wildlife crossings.	100	5.3	1
12	**Establishment of transportation museums:** Construction of transportation museums, including the conversion of railroad stations or historic properties to museums with transportation themes and exhibits, or the purchase of transportation related artifacts.	148	7.8	1.5
	Total	**$9.87**	**$519.40**	**100%**

Table 3: Historic Tax Credits: State Programs

MAP-21's Changes to Historic Rehabilitation-Related Transportation Alternatives		
	SAFETEA-LU Transportation Enhancement Activity	Historic preservation-related changes in MAP-21 Transportation Alternative
3	Acquisition of scenic easements and scenic or historic sites, including historic battlefields	Not included in MAP-21
4	Scenic or historic highway program including tourist and welcome center facilities	Construction of turnouts, overlooks, and viewing areas
6	Historic preservation	Historic preservation and rehabilitation of historic transportation facilities [Combined with TEA 7] Note: Historic preservation is combined with historic transportation facility rehabilitation. Operation of historic transportation facilities is no longer covered
7	Rehabilitation and operation of historic transportation buildings, structures, or facilities	[See above]
8	Preservation of abandoned railway corridors and the conversion and use of the corridors for pedestrian or bicycle trails.	Conversion and use of abandoned railroad corridors for trails for pedestrians, bicyclists, or other nonmotorized transportation users Note: Instead of "preservation," there is now emphasis on "conversion and use"
10	Archaeological planning and research	Archaeological activities relating to impacts from implementation of a transportation project eligible under this title
12	Establishment of transportation museums:	Not included in MAP-21

OTHER PRESERVATION AIDS

Besides the transportation related aid just described, other federal programs can either directly or indirectly assist historic preservation. Illustrative are the many housing and community and economic development programs offered from the United States Department of Housing and Urban Development (HUD). Prominent examples are Community Development Block Grants (CDBG)--funds that can be flexibly applied for housing, community and economic development--and HOME monies--housing block grants that can be used for both new construction and rehabilitation. Both programs have numerous components. For instance, CDBG encompasses section 108 loan guarantee assistance, the Neighborhood Stabilization Program, and economic Empowerment Zones/Enterprise Communities. Both CDBG and HOME have been tapped for historic preservation and rehabilitation purposes. A portion of the city funds committed to help revitalize the historic St. Louis Post Office came from its CDBG allocation. The $200 million rehabilitation of the Gateway/Statler hotel in St. Louis benefited from $25 million in HUD section 108 assistance, a program linked to the CDBG program. Besides $0.8 million in TEA grants, the $7.6 million rehab in historic downtown Journal Square was enabled by a $500,000 CDBG grant to Jersey City, $1.2 million in Urban Enterprise Zone assistance (aid is given for economic development in distressed areas) and other HUD and state aids. The $1.9 million adaptive reuse of the Shely School in West York Pennsylvania utilized $340,000 in HUD HOME funds.

Further, HUD is far from the only federal agency of potential benefit to preservation for agencies/programs dealing with rural housing and economic development and many other programmatic areas offer aid of direct or indirect benefit to the preservation community. The same is true of some federal financial regulators and sister agencies. The Federal Home Loan Banks offer subsidized funds in an Affordable Housing Program (AHP) that has been used to deliver below market rate historic housing units.

While preservationists should be aware of HUD and other federal agency housing and community and economic development aids of use to them, they must recognize that this is a declining asset as such federal domestic spending is in eclipse. The good news-bad news is that in a system of creative federalism, state governments have become invigorated funders of housing and community development as well as offering direct assistance for preservation. The state historic tax credits earlier described is a prominent example of state assistance to preservation.

C. Transfer of Development Rights (TDR)

INTRODUCTION

Originally developed in 1995 and then updated in 2011, the state of California has preserved an "Energy Aware Planning Guide" as a comprehensive resource energy use. One section in this guide considers TOD [4] as a strategy to realize energy savings since TOD would encourage more transit and less automobile utilization by community resident workers and shoppers. Amongst a long list of "implementation ideas" to foster TODs, the California Energy Aware Planning Guide recommends that local government "provide for…TDR where development rights could be transferred from areas without transit access to areas within one-quarter to one-half mile of major stops and stations."5 TDR is already in the arsenal of TOD in order to increase TOD's development density so as to maximize the development connection to transit.

TDR can be useful to TOD implementation in another application as well. As pointed to and illustrated elsewhere in this study, TOD can pressure the demolition and more intense redevelopment of historic properties located near transit since these historic buildings are often "underutilized" relative to their underlying zoning. One solution to alleviate such pressure is allowing for the TDR from the historic property to a non-historic site near transit, with the TOD then built on the latter site. This way the multiple interests can be served: the historic site, with its development rights transferred, can be equitably and practically preserved while allowing for a TOD to be built at maximum density since it secured enhanced development rights from the TDR mechanism.

TDR is a complex strategy and is the subject of lengthy articles and monographs. One recent book-length publication is *The TDR Handbook: Designing and Implementing Transfer of Development Rights Programs*6 and we refer the reader to this cited handbook for details on TDR. In our discussion here we synopsize concepts and applications and focus on TDR and historic preservation. To that end, we extract the findings of a recent (June 2013) excellent study7 on TDR and historic preservation done by Seifel Consulting Inc. and C.H. Ellist and Associates for the city of San Francisco. But let us start at the beginning by considering basic TDR concepts.

[4] *State of California, "Transit Oriented Development" Energy Aware Planning Guide http://puff.lbl.gov/transportation/transportation/energy-aware/energyaware-l-1-3.html*

[5] *Ibid*

[6] *Arthur Neleson, Rick Gruetz, and Doug Woodruff. Island Press 2012*

[7] *Seifel Consulting Inc. and C.H. Elliot and Associates. TDR Study – San Francisco's Transfer of Development Rights Program June 2013. Prepared for San Francisco Planning Department*

TDR: BASIC CONCEPTS AND TERMS

As is evident from Figure 3, all properties have a bundle of multiple rights (e.g. to use, demolish, sell, mortgage and subdivide) and an owner can sever some of these rights by establishing an easement on the property that restricts, typically in perpurty, the severed right. That severed right[8] can be transferred typically for a fee, to another property owner who now will have an enhanced bundle of rights (e.g. can intensify development density; see Figure 4).

From a public policy perspective as described by Rick and Erica Pruetz:[9]

> *"Allows increased development in places where a community wants more growth in return for reduced development in places where it wants less… The areas where communities want less (or no) development are called sending areas…The areas appropriate for growth are called receiving areas."*

The sending and receiving areas and the development consequences from TDR are illustrated in Figure A-4. A sending area would be those locations where the community wants to reduce or restrict development, such as farmland, environmentally fragile areas and historic landmarks. A receiving area is deemed by the community as suitable for more intense development for various reasons (e.g. development capacity; proximity to jobs, utility infrastructure, transit, and extant public services; and/or non-historic character so preservation is not called for).

The exact mechanisms of TDR are complicated and we offer the following synopsis from Rick and Erica Pruetz:[10]

> *"TDR operates within a community's zoning code or similar land use regulation. It offers options to the owners of sending and receiving sites. Sending area landowners do not have to use the TDR option, but when they choose to participate, they record easements that restrict future development. When the easement is recorded, the property owners are allowed to sell transferable development rights, or TDRs. The compensation provided by the sale of these TDRs motivates sending area landowners to participate. In receiving areas, the zoning code establishes a baseline density. No TDRs are needed to build at or below baseline density. However, developers who buy TDRs can exceed baseline density and build up to the maximum densities established in the zoning code. The extra profit made possible by increased density motivates these developers."*

[8] *Jersey City (NJ) "Transfer of Development Rights – An Overview" http://www.cityofjerseycity.com/hedc.aspx?id=6876*

[9] *"Transfer of Development Rights Turns 40" American Planning Association Planning and Environmental Law 2007, Vol. 59, No. 6 p.3*

[10] *Ibid*

Figure 3: Property Rights and Preservation

Image Source: Jersey City (NJ) "Transfer of Development Rights – An Overview" http://www.cityofjerseycity.com/hedc.aspx?id=6876

Figure 4: Transfer of Development Rights

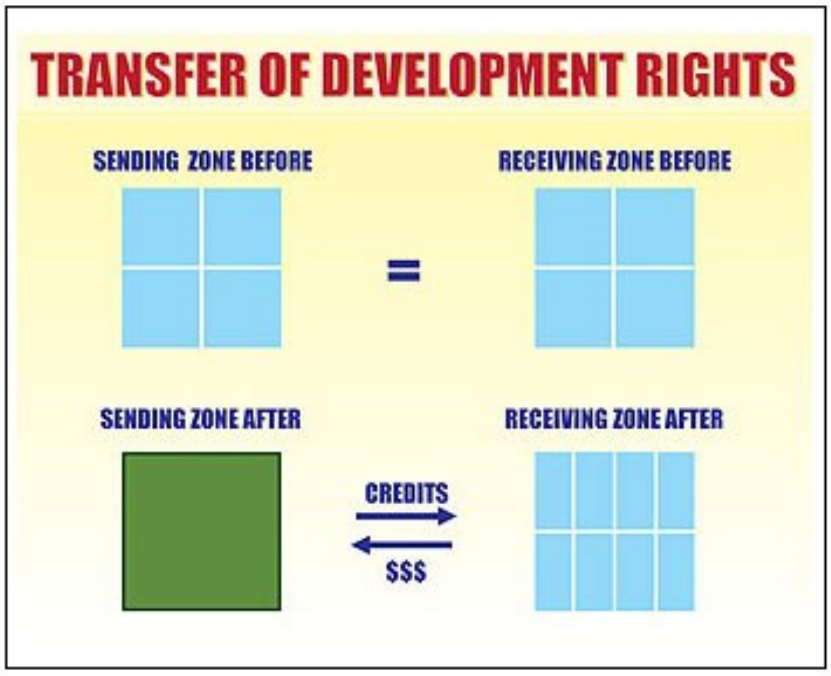


Image Source: Jersey City (NJ) "Transfer of Development Rights – An Overview" http://www.cityofjerseycity.com/hedc.aspx?id=6876

HISTORY OF TDR

One of the earlier applications of TDR dates to 1968 in New York City. By way of background New York passed a municipal landmark designation ordinance in 1965, prompted in part by the demolition of the iconic Pennsylvania station in the early 1960s. The New York City landmark ordinance has broad designation criteria. For instance, to be designated as an individual landmark a building must be at least 40 years old and have "special character, historic or aesthetic interest, or value as part of the development, heritage or cultural characteristic of the city." New York City designates both individual landmarks and area-wide historic districts. Once designated, a landmark cannot be demolished (except under exceptional circumstances) and changes to the property's exterior are strictly reviewed by the New York City Landmarks Commission as to appropriateness with respect to the landmarks architectural style and other features. In short, historic designation in New York City essentially restricts the landmarked building to its existing intensity of use. That existing use could be far below a higher intensity of use momently allowed by zoning.

To compensate landmark owners that were so constrained, New York City adopted a TDR program in 1968 that permitted landmark owners to transfer unused development rights to other locations that would be more intensely developed. The latter included: other lots on the same block, lots directly across the street or at the same interaction (if the landmark were located on a corner), and to any site connected to the landmark through a chain of lots under common ownership.

TDR in New York City was specifically cited by the United States Supreme Court in its important 1978 decision *Penn Central Transportation v. New York City*.[11] The decision upheld the constitutionality of the designation of Grand Central terminal (GCT), one of the earlier individual landmarks designated by New York City. (Recall the trauma of losing Pennsylvania Station and hence the urgency to protect the city remaining train terminal.) GCT had a floor area ratio (FAR) of 2 in a central business district zone that allowed a much higher FAR of 12. GCT's owner (the Pennsylvania Railroad) claimed that the landmark designation with its attendant development restriction constituted an illegal talking of its property. The United States Supreme Court disagreed; the majority in the *Penn Central* case decided that the landmark law did not constitute a talking for various reasons, including the provision in New York City that allowed the owners of land-marker properties the TDR option. So TDR is "embedded" in one of the most important legal decisions regarding landmark designation. In practice, the Penn Central Railroad did sell some of Grand Central's unused development rights, such as 70,000 square feet (ft^2) of TDR sold to the Philip Morris headquarters skyscraper built nearby.

[11] *438 U.S. 104 (1978)*

TDR received another boost in 1974 when Professor John Costonis published his influential *Space Adrift*[12] monograph. This study advocated TDR as an equitable strategy to compensate the owners of designated historic landmarks, whose properties had reduced development potential as a result of landmark designation (Figure 5). The majority of these TDR programs (about 220) involve the preservation of farmland or open space, as opposed to historic building application (about 25 programs). Two very significant examples of farmland and open-space oriented TDR efforts are found in Montgomery County Maryland and the New Jersey Penelands where TDR has preserved well over 100,000 acres.

Figure 5: Transfer of Development Rights In a Historic Preservation Context

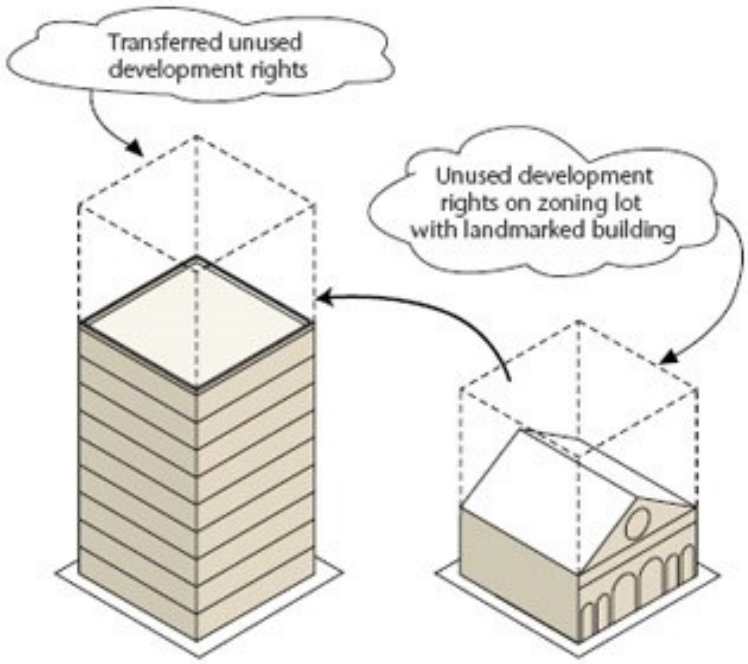


Image Source: John J. Costonis Space Adrift Urbinana, IC: University of Illinois Press, 1974

Until recently there was minimal empirical investigation of TDR programs applied to historic preservation the subject of our study. One exception is the 2013 exemplary report by Seifel Consulting Inc. and C.H. Elliot Associates,[13] which examined the application of historic preservation-themed TDR in San Francisco (started in the mid 1980s) and other major cities. We extract this report's major findings below.

[12] *John J. Costonis Space Adrift Urbinana, IC: University of Illinois Press, 1974*

[13] *Seifel Consulting Inc. and C.H. Elliot and Associates. TDR Study – San Francisco's Transfer of Development Rights Program June 2013. Prepared for San Francisco Planning Department*

TDR FINDINGS FROM 2013 SEIFEL-ELLIOT REPORT

(Seifel Consulting Inc. and C.H. Elliot and Associates. *TDR Study – San Francisco's Planning Department)*

San Francisco TDR Program In Practice

TDR Supply (Certification)

Since the TDR program's inception, the City has certified 5.3 million (*refers to square feet*) TDR originating from 112 parcels. The amount of certified TDR on an individual originating parcel ranges from 1,800 to 489,452 TDR. The average amount of TDR generated on each originating parcel is approximately 47,500 TDR, with half of the parcels originating less than 22,000 TDR.

TDR Demand (Usage)

Of the 5.3 million certified TDR, over half have been used in the development of 32 buildings on receiving sites, including 26 newly constructed buildings. The amounts of TDR used on individual developments range from 1,000 to 453,900 TDR. The average amount of TDR needed for development on the receiving site is approximately 80,000, with half of the parcels requiring less than 40,000 TDR. On average, developers using TDR have needed 2.5 TDR transactions to acquire sufficient TDR for their developments.

Since 2000, on average, approximately 237,000 TDR have been certified per year while on average, 164,000 TDR have been used per year. Figure ES-1 shows the actual amounts of TDR certified and used each year since 2000.

Historical TDR Pricing

Since 2000, TDR pricing has varied from a low of $5.51 to a high of $37.50, with most transactions in the range of $18 to $25. (See Figure ES-2, which shows the total amount of certified TDR in existence each year, the number of TDR used per year, and market pricing.)

Overall Findings on Current San Francisco Program

- Since 2001, the annual amount of unused certified TDR in existence has been 2 million square feet or more. (Of the total 5.3 million certified).
- TDR usage fluctuates with market cycles, with recent TDR usage peaks in 2001, 2005 and 2008.
- Property owners/developers typically have had to acquire TDR through multiple transactions.
- TDR pricing has not correlated with supply, demand or use, but rather with the overall real estate market for development, as well as the characteristics of unique individual transactions.

Recommendations for Future San Francisco TDR Program

- Consider including additional areas in the TDR Program of the City.
- Report on annual TDR certification and use, as well as market pricing, in order to inform and facilitate market activity.
- Provide Information to the public on TDR that is available for purchase.
- Devise a mechanism for potential buyers to contact TDR owners without displaying the names of the owners. This information could bring TDR sellers and buyers together and facilitate TDR transactions.
- Expand the amount of public TDR that is available for purchase. Consider certifying approximately 1.2 million in public TDR in the near future in order to test the market demand for larger segments of TDR.
- Every five years, undertake a third party review of the TDR program, in order to evaluate program effectiveness including success in achieving City goals, and as necessary, recommend program refinements.
- Evaluate the cost of TDR program administration and review fee charges to ensure fee amounts cover the cost of providing service.
- Integrate the TDR program certification, transfers and use into the City's permit and project tracking system (PPTS) to make the data more accessible internally for the Planning Department. In addition, the PPTS could generate automated reports identifying TDR market activity.
- Consider implementing the payment of property tax and transfer tax on TDR transactions by assessing the TDR value based on the transaction price upon transfer.

Historic Preservation TDR Programs in Other Cities

Los Angeles

As part of its plan for the Central Business District (CBD) in 1975, Los Angeles and its Community Redevelopment Agency (CRA) initiated its TFAR program for the transfer of floor area rights (TFAR) to encourage a high-density, mixed use downtown, preserve historic landmarks, promote affordable housing, create public open space, and meet other policy objectives to create a vital downtown.

Oakland

Another Bay Area TDR program focused on historic preservation, Oakland's program allows transfers of residential density between abutting properties in order to encourage the preservation of turn-of-the-century historic homes.

New York

In 1968, New York adopted its program to mitigate possible financial losses by owners whose properties were designated as historic landmarks and to allow greater flexibility through zoning lot merger or density zoning.

Portland

From 1988 through 2003, Portland instituted a number of density bonus and transfer programs to meet a range of public policy objectives, such as preserving historic landmarks, residential housing and SRO units in the Central City, and open space in the South Waterfront.

Seattle

As part of the comprehensive Downtown Restoration effort in 1985, Seattle initiated its program to help retain low-income housing, preserve historic landmarks, encourage infill development, and create incentives for varying building scale in the downtown. In order to facilitate TDR use, the city created a TDR bank that buys and sells housing TDR.

Key Findings from Historic Preservation TDR Programs in Other Cities

- While San Francisco's TDR program focuses on historic resources, Los Angeles, New York, Portland, and Seattle have expanded their programs to focus on additional areas of public interest, such as the preservation and creation of affordable housing and open space.
- Unlike most other cities TDR programs, San Francisco's TDR program allows any third party— developers with entitled or proposed projects, brokers, investors, speculators, and financial institutions, among others—to own TDR.
- The TDR programs in all the cities follow similar processes in which an originating parcel applies for TDR, and TDR are certified based on a formula that accounts for zoning, existing FAR and potential FAR. Most jurisdictions track TDR through recorded documents that note at minimum the originating owner, the receiving owner and the number of TDR.
- TDR pricing is influenced by the presence or lack of alternative options to TDR to increase FAR. Due to the constrained supply and no other alternatives to increase FAR in New York City, TDR pricing can become extremely expensive in this community and trades for 50 to 60 percent of land value, and recently prices have approached $450 in prime neighborhoods. In other cities where multiple options and programs compete with TDR such as in-lieu fees, developers tend to opt for the lowest cost option, and pricing ranges from $20 to $30.
- Some cities generate revenues from their TDR program through fees and taxation. Los Angeles charges a TDR transfer fee with revenues deposited into a fund to be used for public services and facilities, while New York applies city and state real property transfer taxes on the TDR sales price.

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