



## **Making the Case for Transit-oriented Development in Downtown Holyoke, Massachusetts**

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# Making the Case for Transit-oriented Development in Downtown Holyoke, Massachusetts

A Masters Project  
by  
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## **Executive Summary**

This report serves to inform the City of Holyoke about compelling features in its downtown district as they would pertain to the creation and management of a transit-oriented development district around the recently created Intermodal Transportation Center, a hub for bus service between Holyoke and other communities in the Pioneer Valley. These features were developed through literature and interview surveys and are described in a SWOT analysis, identifying strengths, weaknesses, opportunities and threats as existing and future advantages and disadvantages related to transit-oriented development.

Some of the more compelling strengths include a municipal reputation for attracting planning grants for large-scale projects to improve the district; a competitive location efficiency in the historic business district, the area's accommodation for multimodal service – particularly pedestrian and transit traffic, and national trends correlating the city's demographic profile to transit ridership support. With little expectation for change, all of these features should translate to the near future in Holyoke.

Challenges cited in this report include bus-based transit-oriented development's unproven and unfamiliar reputation with stakeholders in the Pioneer Valley, the rustbelt community's tough-luck image in the development community, lagging leadership for the planning technique from state and regional planning officials, the City's zoning regulations that oblige a suburban development model, and excessive parking that presently challenges a comfortable pedestrian environment.

These challenges have solutions. Opportunities discussed in this report speak to financing options typical to transit-oriented development projects to generate a favorable reputation, ongoing strategies to increase and highlight the City's accomplishments, recommendations for zoning amendments to encourage pedestrian-friendly development, and popular methods to improve transit's viability as a competitive alternative to car use.

Some issues are simply beyond the City's hands and will persist as threats to successful downtown transit-oriented development. These issues include market hesitation to invest in transit-oriented development and Holyoke in general, a challenging reputation established for decades, and persistently lagging support from Beacon Hill for the unique issues confronting communities like Holyoke in the Pioneer Valley.

Transit-oriented development presents a myriad of benefits and challenges for Holyoke and its stakeholders. Overall, the development technique offers compelling reasons for political and business leaders in Holyoke to adopt policies intended to realize its goals to create a vibrant, economically viable downtown district. This report informs these leaders and offers an opening comment to the ongoing dialogue about Holyoke's renaissance.

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## Introduction

In an agreement with the Pioneer Valley Transit Authority (PVTA) and the Picknelly Development Group, the City of Holyoke will develop an old fire station on Maple Street into the new Intermodal Transportation Center (ITC). Located in the heart of the city, the new multimodal center will bring together PVTA and Peter Pan bus lines, taxi pickup and bicycle stalls into one location and will link to the proposed Canalwalk and regional bike trail system. In addition to being the future location of PVTA and Peter Pan offices, the center will host food and retail services on the first floor, a Head Start program on the second floor, a Holyoke Community College satellite campus on the third floor, private businesses on the fourth floor, and a parking deck above ground-level bus bays to accommodate employees and visitors of these businesses. A total of \$6 million has been granted to the city from the U.S. Department of Transportation for this project. These federal funds will be used for all historic preservation components, to refurbish the façade of the building, to upgrade infrastructure, and to develop a common space. (Pioneer Valley Planning Commission (1), 102)

Owing much to recent efforts to rehabilitate the ITC as a new hub for local and regional PVTA service to and from Holyoke, the Paper City could serve as an efficient, vibrant and accommodating host to transit-oriented development (TOD) in the Pioneer Valley. Supported by the Pioneer Valley Planning Commission (PVPC) in the *Regional Transportation Plan: 2003 Update*, “the connection between transportation planning and land use is so tight and compelling as to be almost inseparable” (115). Although not a planning panacea, TOD has the potential to resolve several issues confronting the city while taking advantage of the area’s endearing, transit-friendly qualities. This report serves as a compelling argument to create a TOD district in downtown Holyoke but also as a primer to a burgeoning community discussion about rezoning the downtown district to pursue TOD-related elements.

### *Report Structure*

The first chapter of this report describes the research methodology employed to develop this project and its report. This chapter illustrates key findings both from a literature survey and from a series of interviews and describes how these findings informed a conventional review of strengths, weaknesses, opportunities and threats – typically referred to as a SWOT analysis.

Following the research methodology, the report then briefly summarizes the range of literature used to develop a general understanding of the issues to be expected from upcoming discussions. The literature noted in this chapter is invaluable to an understanding of the field, and it is suggested that further research and field application utilize these documents for their wealth of case studies and practical experiences as well as for their vision and progressive interests.

Similar to the previous chapter, the third chapter examines stakeholder impressions of transit-oriented development’s benefits and challenges through informal interviews both in person

and over the phone with a range of involved parties, including transit riders, downtown residents and general pedestrians, developers, and professional planners from the local, regional and state agencies. These interviews served to enhance the project and its report with a local impression of the area's unique qualities.

A SWOT analysis conveniently compares the existing and anticipated benefits and challenges of transit-oriented development in general and as it will be pursued in downtown Holyoke. The sections in this chapter attempt to clearly identify and explore the case-sensitive characteristics involved with the development technique and with the proposed district's location. To aid clarity and comparative analysis, each section examines similar themes prevalent in the TOD discussion. The analysis should provide stakeholders with some understanding and direction for future work.

The report closes with summary conclusions addressing potential benefits and critical challenges to implementing and sustaining a successful TOD district in downtown Holyoke. This chapter summarizes the most pressing themes considered in the SWOT analysis and recommends strategies to achieve desired results.

Finally, a list of references provides bibliographical information for the many sources cited throughout the report. These references should be used in ongoing research as the project develops in the community as valuable tools and guides for the district's creation and success.

## *Background*

### Planning Initiatives in Massachusetts

In recent years, Beacon Hill has adopted a new commitment to affect development patterns in a home-rule state comprised of municipalities wary of state intervention and directives. While legislation in Massachusetts does not affect development patterns directly – save environmental buffers and other restrictions reserved by the Massachusetts Environmental Policy Act – state leaders have taken considerable steps to offer incentives to local and regional agencies for comprehensive planning in the pursuit of sustainable growth where development and infrastructure already exist. This development practice aims to conserve open space and renew active, often historic communities, to advocate for increased use of renewable energy and alternative transportation, and to recommend comprehensive planning to locate a variety of jobs near mixed-income housing at local and regional scales. (Commonwealth of Massachusetts (3))

Since 2000, state leaders have created several notable initiatives. In 2004, the Commonwealth of Massachusetts Executive Office of Environmental Affairs produced the Smart Growth Toolkit to provide progressive planning techniques to municipal offices and engaged citizens in order to address consistent and pressing development concerns. The Toolkit speaks to a swelling statewide agenda to pursue planning strategies in Massachusetts, if not from direct governance as is common in other states than from indirect legislative efforts and technical assistance. According to the Toolkit, transit-oriented development stands out as one of twelve techniques as a means to achieve desired planning objectives.

The Toolkit presents considerable background information about TOD, its defining characteristics and benefits, and case studies from across the state – though generally clustered around Greater Boston. (Commonwealth of Massachusetts (2))

Legislators have passed a series of legislation to accommodate this progressive planning agenda. Massachusetts General Laws (M.G.L.) Chapter 40Q supports district improvement financing (DIF) for strategic properties, providing municipalities greater tools to redevelop up to 25% of its land in the interest of gaining tax revenue, enhanced transportation services, increased housing supply, new jobs and an overall improvement in quality of life for the inhabitants of the city or town. Often considered in tandem with 40Q, Chapter 40: Section 59 allows communities to pursue tax-increment financing (TIF), providing property owners with incremental tax relief to reduce initial development costs and encourage redevelopment. Chapter 40: Section 60 supports urban center housing tax increment financing (UCH-TIF), essentially providing municipalities similar TIF tools to target downtown housing. Addressing sprawl and its negative impacts on social efficacy and the environment, in 2004 Governor Romney signed Chapter 40R, a law that provides grants up to \$30,000 per project and technical assistance for communities to adopt overlay zoning districts that aim to satisfy the Principle mentioned above. Passed in 2005 Chapter 40S augments Chapter 40R, providing additional state funding to reimburse communities for additional school costs resulting from smart growth developments. Finally, Chapter 43D facilitates state-regulated expedited permitting to address arguably the most significant challenge to economic development in Massachusetts. (Commonwealth of Massachusetts (1), 3-4)

Recognizing that local government plays a significant role in providing leadership and creating a regulatory environment conducive to housing growth, economic development, and environmental sustainability, the now-defunct Office for Commonwealth Development created the Commonwealth Capital program to coordinate and direct discretionary funds to municipalities that promote projects consistent with sustainable development goals and that advance the Commonwealth's development interests. Although the Patrick Administration has not renewed the program or defined a successor, Commonwealth Capital served as an important, though imperfect, first step to coordinate statewide planning endeavors. (Commonwealth of Massachusetts (1), 3-4)

The State's Priority Development Fund provides up to \$50,000 to increase the supply of mixed-income (primarily rental) housing by encouraging community-based planning without the use of new taxpayer dollars. MassHousing, the state's quasi-public affordable housing bank, provides \$100 million for developers' mortgage loans while making \$3 million available for technical assistance to communities seeking to increase housing production. (Commonwealth of Massachusetts (1), 3-4)

Authorized by Chapter 291 of the Acts of 2004, the State's TOD program provides \$30 million for key components of transit-oriented development, like parking facilities, pedestrian and bicycle facilities, and housing. TOD is compact, walkable development centered around transit stations, designed to improve the quality of life while reducing dependence on automobiles. TOD serves as a critical technique in the State's ambition to promote smart growth. (Commonwealth of Massachusetts (1), 3-4)

With this recent pattern of interest and action, local and regional planners in the Commonwealth are hopeful that more support for considerate, comprehensive planning will be the standard more than the exception in a state infamous for locally implemented, regionally inconsiderate planning initiatives. Pointing to an effective and positive future, these statewide efforts have begun to turn the tide of planning dialogue in the Pioneer Valley.

#### Holyoke: A City with the Power to Grow

Holyoke's Office of Planning and Development has applied for and received funding for downtown improvements. Interest in the TOD district and its requisite rezoning stems from municipal officials' commitment to provide a framework for a vibrant and profitable central business district extending to the Arts and Industry overlay district to the southeast including the Canalwalk project. The notion of the TOD district itself grew from a \$7.2 million funding campaign from federal, state and local coffers to rehabilitate a vacant downtown fire station to operate as a hub for PVRTA transit activity but also retail, child care and education. Local officials hope to receive additional funding for construction of these designs and for the construction of housing and parking. (Mendrala)

The Office of Planning and Development has consistently included the importance of the ITC as a precursor to a TOD district in other downtown plans to integrate the hub as a citywide nexus. The Canalwalk project received nearly \$5 million from federal and state governments to rehabilitate the underutilized historic industrial corridor in support of an active district with recreational and work space while connecting neighborhoods and restoring the community fabric. The City also received \$50,000 from the Executive Office of Transportation to complete preliminary design for pedestrian improvements to provide safe pedestrian and bike connections between the Canalwalk and ITC projects. (Mendrala)

Further investments in the TOD district include \$240,000 from the EPA in 2002 to assess brownfields properties throughout the TOD district, \$200,000 from the EPA in 2007 for citywide brownfields assessments, and \$96,000 to clean the former Adams Pakkawood industrial site (Mendrala). As an historic city founded as the first planned industrial community in the nation, Holyoke's downtown core showcases a collection of underutilized, derelict and contaminated but monumental factories and mills, lending the community to significant historic preservation and adaptive reuse, live/work space, affordable artist lofts, and continued industrial production. Assessing these brownfields removes one hurdle for prospective investors, facilitating future investment in the district.

This summary of aggressive application efforts and agency attention speaks to the City's active interest in rehabilitating the downtown core and attracting investors to the area under the central aegis of transit-oriented development. Similar efforts to attract markets that favor TOD in historic communities should prove well for the City.



## **Chapter 1: Research Methodology**

Research for this project involved examining a plethora of literature available on the topic of transit-oriented development as well as interviews with professionals in planning and development fields, business and community leaders, and transit riders. Both the literature and stakeholder interviews went far to inform key points from each resource and speak to the many themes future stakeholders should anticipate, consider and advocate not only during the district's implementation but also throughout its management to support ongoing success. Details obtained from these literature and interview surveys were organized into respective sections of a SWOT analysis and further collected into common points in a discussion about transit-oriented development. These points include leveraging private investment to implement TOD, zoning efforts to create a sense of place, access features in a vibrant multimodal setting, and institutional elements to craft and maintain a successful TOD district.

### *1.a: Literature Survey*

This study began with a thorough literature review of TOD-related literature involving a range of issues and providing a basic understanding of common benefits and challenges associated with transit-oriented development. The literature identifies several common issues, which were helpful to anticipate and to expand upon in stakeholder interviews. Given their critical role in and their application to existing and future conditions for the success of TOD districts, these issues ultimately became comparative sections in the SWOT analysis chapters. These issues included:

- financing options to leverage private investment;
- placemaking through zoning;
- access in a multimodal environment; and,
- institutional policies for implementation and management.

### *1.b: Stakeholder Interviews*

This project informally interviewed by phone and in person a variety of stakeholders as suggested by the literature about the benefits and challenges of transit-oriented development in downtown Holyoke. Polling groups of prospective passengers during work hours in March 2007 at the Veterans Park bus stop opposite the ITC served to capture residents', property owners' and riders' perspectives. Staff at the City's Office of Planning and Development further gauged property owners' as well as developers' perspectives over a series of monthly Downtown Revitalization Meetings between local officials and the business community throughout Spring 2007. Local officials from the Office of Planning and Development and the Mayor's Office were sporadically questioned about their professional opinions on the matter during March and April 2007. Regional planning officials from the Pioneer Valley Planning Commission's land use and transportation departments offered professional viewpoints from a familiar super-municipal seat over a handful of personal and phone interviews in April 2007. A representative from the area's regional transportation agency, the Pioneer Valley Transit Authority, was polled by phone in April 2007 to gain input from this critical actor. Finally, state officials from the Department of Housing and Community Development, the Office for Commonwealth Development, the Massachusetts Bay Transportation Authority, and the Office of Environmental

Affairs were asked by phone, email and in person to offer some insight on TOD's benefits and challenges in the Paper City.

Although all of these actors shared varying familiarity with transit-oriented development, their interest in the technique was uniform throughout. Residents and property owners showed the most, if still unaware, support for TOD, considering increased access to services and walkability as well as increased property values. Transit officials and riders spoke to varying levels of awareness and neither felt sufficiently comfortable to speak to the technique further than answering survey questions, but they showed an interest in learning more and encouraging TOD in the area. Business leaders and developers admitted hesitation by nature but pointed to the city's desperate state as a sufficient impetus to pursue the development technique. Local & regional planning officials commented on limited guidance from the State but also spoke to their commitment to implementing smart growth-related initiatives and related techniques in local and regional sphere. Finally, state officials commented on regional challenges for economic development in the Pioneer Valley and spoke to confusion on Beacon Hill about the future of innovative planning programs resulting from leadership turnover after the Patrick Administration's succession, but they were quick to add that these relatively new programs have developed widespread municipal understanding and support. Overall, all participants realized in a rather defeated tone that adapting smart growth in general and TOD in particular to the Pioneer Valley will take time.

#### *1.c: SWOT Analysis*

"Strengths" refers to existing conditions favorable to TOD within Holyoke, while the "Weaknesses" chapter refers to existing conditions that limit TOD's effectiveness in the community. "Opportunities" and "Threats" chapters speak to the respective benefits and challenges perceived with pursuing TOD in downtown Holyoke. The SWOT analysis will identify practical issues at the local and regional levels of public office as well as trends and developments in the interdisciplinary industry of transit-oriented development. Each SWOT chapter will consider those four themes mentioned above for their influence for ongoing discussions, implementation and management of successful TOD districts.

## Chapter 2: Literature Survey

Because transit-oriented development as a multidisciplinary technique in a dynamic field, a literature review for transit-oriented development includes a myriad of themes. This chapter expands on the key benefits and challenges to implementing and managing a successful TOD district briefly mentioned above in general and irrespective of their application to the downtown Holyoke model.

### *2.a: Financing Options to Leverage Private Investment*

Financing is the overwhelming concern for any development project, and transit-oriented development is no different. TOD financing involves common issues like economic feasibility and value capture, availability of public incentives, and local support for the project, but TOD often creates new financing concerns and solutions like unique risk factors, exceptional incentives and supportive legislative programs, distinctive market conditions for a distinct development model, and exclusive industry models.

From the literature, risk appears to be a tremendous and arguably most critical feature to transit-oriented development. Common to all development based on market variability, potential delays from public permitting and litigation, and unforeseen issues during construction, risk is particularly significant with respect to TOD because the development technique is relatively new and, consequently, unfamiliar in the development community. With few comparative projects to learn from or to follow, financiers and developers are hesitant to approach these innovative projects.

There are factors that amplify this risk for TOD projects. As previously mentioned, TOD is new and developers are naïve to its unique challenges and promise. Where TOD does exist in New England – typically around Greater Boston and Southwest Connecticut – it is almost exclusively rail-based transit-oriented development (RTOD). Bus-based transit-oriented development (BTOD) is even less familiar and is greatly unproven across not only the region but also the country as a whole (Currie notes only 8% of American transit is BTOD), increasing risk concerns even more (2). Where BTOD does exist in the region – notably on a new system in Hartford and a new transit line in Boston – it chiefly operates on dedicated infrastructure and follows a transit model known as bus rapid transit (BRT), which greatly mimics light rail's features while avoiding its often prohibitive cost. BTOD as it would apply to Holyoke on common streets with ordinary traffic is greatly untested and unproven.

Implied above, TOD commonly develops around urban centers where there is greater real estate value for developers to realize, greater support for transit through dense and diverse land use, and greater legislative attention for public transportation. Although development costs may be higher in these metropolitan locations, sale and lease agreements for commercial and residential properties often compensate financiers and developers and turn terrific profits. Property values are supported by transit service, allowing residents and workers to conveniently access metropolitan destinations without the hassles of increased traffic congestion and car ownership costs, and by urban location efficiencies, supporting pedestrian densities with several diverse land uses. Finally, state and federal programs regarding TOD – interest in livable communities

and smart growth and the location efficient mortgage, for examples – tend to support urban redevelopment efforts where projects stand to benefit the greatest number of constituents in areas with existing infrastructure and traditional economic centers (Cervero, et al., 3). These features apply to TOD in general, however, and often in an urban context, but there is little reason why BTOD cannot enjoy similar investments and rewards in dense downtowns despite sitting in greatly suburban regions (Currie, 15).

Inherently complex, TOD challenges smaller stakeholders – small-scale financiers and developers, regional transit agencies, local governments, and regional planning agencies among them – which are typically risk-averse and generally have less familiarity with creative but involved financing features. As the search for new sources of operating and capital funds have pushed the transit industry to market its services like any other privately provided service, transit agencies are now exploring and developing extensive promotional strategies and marketing plans. Increasingly, these plans are not only similar to private sector marketing, but also the plans themselves are drawing transit agencies and the corporate sector closer together through partnerships with the media such as radio and TV as well as through corporate sponsorships of transit marketing and promotional campaigns and events. Also, the tendency for agencies to increasingly shift from pay-as-you-go for capital facilities to debt financing, such as bonds, loans, and equity securities has its pros and cons, and it is still controversial for small and mid-size transit agencies, given their limited experience with these funding mechanisms and uncertainties about repayment streams. Finally, the funding shift from the federal to the local has also ushered a stronger reliance on regulatory funding mechanisms such as development exactions and impact fees for the building of transit passenger facilities (e.g., bus shelters and transfer stations) and accessibility infrastructure to these facilities (e.g., sidewalks). (Audirac and Higgins, 139)

Although there is a plethora of financing issues involved with TOD, the last to be mentioned here concerns industry support for the innovative, nascent development model. Typical leaders in the development arena like the Institute for Traffic Engineers (ITE), the American Planning Agency (APA), and the Congress for the New Urbanism (CNU), to name a few, often provide some guidance for both public and private sector stakeholders, but these leaders have been hesitant to offer empirical or otherwise quantitative guidance, particularly in terms of traffic modeling and performance standards for mixed use developments. This absence of guidance adds further hesitation to commit to the development paradigm.

Education is the primary solution to assuage development risk. Although TOD is unfamiliar in New England and developers here are unaware of its benefits and challenges, there are valuable models throughout the United States to learn from and follow. These models exhibit compelling financial considerations, including value capture from complementary investments, special loan and public funding program like incremental financing that support neo-traditional development, and a unique profit consistency from a mixed-use development technique less prone to fluctuations in any one market. Also, TOD enjoys lower development costs compared to suburban developments, because TOD compels decreased parking regulations – often 1 to 1.5 parking spaces per residential unit – in a pedestrian-accommodating environment, thereby requiring less land for parking and resulting in smaller lots with comparably sized structures. Finally, urban centers should educate the development community that its demographic spectrum

– childless couples, immigrants and empty-nesters, namely – historically supports TOD to relieve some risk.

Risk is further reduced when TOD projects are compared to conventional, more familiar projects. Common to development, phasing allows developers to realize early profits from more familiar land uses like retail or banking while engendering greater confidence to explore less familiar or integrated land uses like education or child care services. Simply put, phasing realizes early profits and cushions risk for less proven endeavors. Allowing developers to initially create horizontally mixed land uses as opposed to vertically mixed land uses indicative of TOD is another method used to make the innovative development model more familiar to wary financiers and developers, again allowing the development to prove itself financially before exploring riskier efforts. In addition, communities seeking to create BTOD would be wise to adapt it to its more popular rail-based relative wherever possible, including permanent transit hubs (like the Holyoke ITC), bus-inclusive traffic strategies like transit signal priority systems (TSP) and automatic vehicle location (AVL), and express service between park-and-ride and downtown facilities.

Another financial advantage associated with TOD is its growing connection with joint development – or, as Cervero, et al., prefer, transit joint development (TJD). While the distinction between the two is not always clear, in general their differences lie with scale. TOD generally encompasses multiple city blocks, representing more or less a neighborhood in size and character. TJD, on the other hand, tends to be project-specific, often occurring within a city block and tied to a specific real estate development. Whereas TOD is often spearheaded and choreographed by a public agency, TJD usually occurs through a partnership of public and private interests working in tandem to achieve win-win outcomes, whether in the form of air rights leasing of publicly owned space, station connection fees, or the joint sharing of capital-construction costs. With decreasing government funding, transit agencies have had to creatively partner with the private sector in procuring new sources of revenue through real estate leases and air rights above and around stations, leases of right-of-way space and infrastructure to utility, cable, and telecommunications companies, fees from retail concessions, vending machines and pay phones, the selling of advertising space on and inside buses and bus shelters, merchandising sales, and the commercialization of stations and terminals. While this wide-ranging commercialization of transit property, facilities, and rolling stock is seen as controversial and still raises opposition in many quarters, the trend is increasing rather than declining. (Audirac and Higgins, 139; Cervero, et al., 2)

Finally, local governments can take steps to assume and accommodate private sector responsibilities. For instance, municipalities can conduct market analyses to determine local economic gaps and target businesses in demand, instead of waiting for those businesses to find the community. Also, local officials can offer procedural fee and permitting incentives for TOD projects to entice developers to consider them.

### *2.b: Placemaking through Zoning*

Parking is far and away the greatest challenge to creating a pedestrian-friendly transit-oriented development district. Large parking lots, garages and/or decks encourage users of the district to

drive to their destination. Driving impacts the district two-fold: increased traffic threatens pedestrian perceptions of safety, convenience and comfort; and encouraging driving habits in turn discourages transit use to reach the district. Therefore, it can be understood that parking directly impacts the pedestrian element so critical to TOD and the distinguishing transportation service that elevates the development paradigm above typical smart growth solutions.

Parking also affects development costs. Urban planners typically set minimum parking requirements to meet the peak demand for parking at each land use without considering either the price motorists pay for parking or the cost of providing the required parking spaces. Although depending on the parking requirements in a particular zoning district in a particular community, parking requirements may at times require that half of a property's surface area occupy parking; in other words, a developer must purchase twice as much land as needed for a given structure, greatly inflating development costs and discouraging development in the district (Cervero, et al., 58). As a result, the parking requirements compel developers to pursue low-density projects with smaller – though still encroaching – single-property parking lots. Audirac and Higgins argue that eliminating minimum parking requirements would reduce the cost of urban development, improve urban design, reduce automobile dependency, and restrain urban sprawl (135).

Shared parking responds to the high development costs of parking. The concept of shared parking is based on the simple idea that different destinations attract customers, workers, and visitors during different times of day. An office that has peak parking demand during the daytime, for example, can share the same pool of parking spaces with a restaurant whose demand peaks in the evening. By allowing for and encouraging shared parking, planners can decrease the total number of spaces required for mixed-use developments or single-use developments in mixed-use areas. Developers benefit from the decreased cost of development and from the “captive markets” stemming from mixed-use development. For example, office employees are a captive market for business lunches at restaurants in mixed-use developments (EPA (2), 18).

Shared parking also allows for more efficient use of land and better urban design, including walkability and traffic flow. Shared parking encourages use of centralized parking lots or garages and discourages the development of many scattered small facilities. A sidewalk with fewer driveway interruptions and more shop fronts is more comfortable and interesting for pedestrians and will encourage walking. Reducing driveways also results in more efficient traffic flow because there are fewer turning opportunities on main thoroughfares. This has the added benefits of reducing accidents and reducing emissions from idling vehicles stuck in traffic.

Establishing shared parking requirements involves site-specific assessment or use of time-of-day parking utilization curves, which were developed by the Urban Land Institute in *Shared Parking* (2005). Planners need to consider several factors when developing shared parking requirements, including the physical layout of the development; the number of spaces for each of the individual land uses; the types of parking users (e.g., employees, residents, or hotel guests who park all day, or customers and visitors who park for short periods of time); and hourly accumulation of parking for each land use. Montgomery County, Maryland, allows for shared parking to meet minimum parking requirements when any land or building under the same ownership or under a joint-use agreement is used for two or more purposes. The county's ordinance also allows

parking reductions based on proximity to transit, participation in TDM programs, or location in the central business district. The county uses the following method to determine shared requirements for mixed-use developments:

- Determine the minimum amount of parking required for each land use as though it were a separate use, by time period;
- Calculate the total parking required across uses for each time period; then
- Set the requirement at the maximum total across time periods. (EPA (2), 19-20)

Calculating Parking for Mixed Use Developments  
Montgomery County, Maryland (EPA (2), 20)

	Weekday Daytime	Weekday Evening	Weekend Daytime	Weekend Evening	Nighttime
Office	300	30	30	15	15
Retail	168	252	280	196	14
Entertainment	40	100	80	100	10
TOTAL	508	382	390	311	39

The table above illustrates how peak demand occurs at different times of the day and week for different land uses. While maximum parking demand for the office component of the project occurs during the daytime on weekdays, maximum demand for retail occurs during the daytime on weekends, and peak entertainment demand is in the evening. For this example, setting parking requirements using maximum demand would have resulted in requiring 680 spaces (300 spaces for office, 280 spaces for retail, and 100 spaces for entertainment). By recognizing the shared parking potential, the developer cut almost 200 unnecessary parking spaces (about 25 percent), representing a considerable cost savings. An American Planning Association report, *Flexible Parking Requirements*, highlights factors that facilitate shared parking (Smith, 1983). The report suggests that for shared parking to function effectively, parking requirements for individual land uses must reflect peak-demand land use and common parking facilities must be near one another. Parking spaces should not be reserved for individuals or groups. (EPA (2), 19-20)

Transportation demand management (TDM) programs provide other avenues for decreasing the impact of parking and thereby encouraging a pleasant and vibrant multimodal district. Travel demand management (TDM) programs combine several trip-reduction strategies to meet explicit travel goals. Some TDM programs are put into place by a single employer; others are managed by governments or business improvement districts and focus on a developed area that may include both businesses and homes. These programs typically attempt to decrease the number of trips by single-occupant vehicles, sometimes setting goals such as reduced vehicle trips or reduced miles traveled, while increasing the use of a variety of commuting and travel alternatives, including transit, carpooling, walking, and bicycling. TDM plans can be used by city planners to allow developers to build fewer parking spaces.

One of these innovative TDM programs is parking cash-out, in which employers offer employees the cash equivalent of any parking subsidy. Since parking costs in a downtown setting are typically a substantial portion of commuting costs, cashing-out parking subsidies can provide a strong incentive for commuters to choose an alternative to driving alone. The programs help end

the inequity of providing a free parking space benefit to drivers, while offering nothing to those who choose to arrive via transit, foot, or bicycle. Cash-out programs allow employees to choose a transportation benefit, rather than simply accepting the traditional free parking space. Under such programs, employers offer employees the choice of:

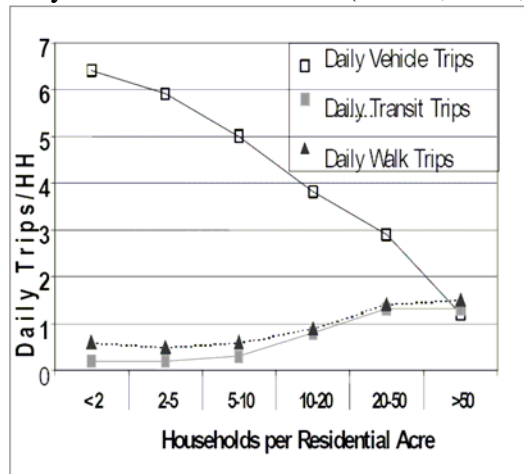
- free or subsidized parking;
- a transit or vanpool subsidy equal to the value of the parking (of which up to \$100 per month is tax-free under current federal law); or
- a taxable payment approximately equal to the value of the parking, essentially cash to commuters who bicycle or walk to work. (EPA (2), 30-31)

Cash-out programs are often easier to implement than direct charges, as they are generally more acceptable to employees, particularly when free parking had been the norm. However, their impact on travel behavior is usually lower, due to the administrative burden on employees, inertia in changing travel habits, and the fact that cash-out payments can be a taxable benefit whereas free parking is not. Cash-out programs provide significant environmental, social, and economic benefits. For example, in response to California's mandatory cash-out requirement, eight firms reported an average 17 percent reduction in the total number of solo drivers. Thus, another benefit of cash-out programs is a reduction in traffic congestion and associated pollution. (EPA (2), 32)

Much of the literature concerning placemaking focuses on location efficiency. This blend of density and mixed land use supports convenient pedestrian movement for residential-, professional- and tourist-related trips through downtown. Parker, et al., contend that successful TOD districts exhibit residential densities of 10 to 20 units per acre and employment densities of 50 to 75 employees per acre (42-48). Traditional development patterns offer complementary mixed land uses, providing ground floor and office or residential units above a variety of high-use ground floor retail. Dittmar and Ohland argue that banks, restaurants, business and personal retail, convenience stores, small groceries, and child care centers are particularly useful land uses to encourage competitive location efficiencies (116-118). Competitive location efficiencies logically relate to decreased vehicle trips and increased transit use. According to the chart below, transit use rates begin to increase at an average overall density of around 6 to 7 households per residential acre and vehicle trips decline, and, at a density of around 50 households per acre, the number of trips taken daily by vehicles, transit, and walking become about the same (Parker, et al., 49).



### Density and Travel Behavior (Parker, et al., 49)



The literature also touts the importance of providing more than an accessible but also an accommodating multimodal environment through micro-design features. A community's micro-design may be improved through pedestrian and bicycle facilities and street connectivity, as well as design and architecture. Typical modern communities often contain a hierarchy of dead-end or cul-de-sac local streets that lead to collector streets and then to major arterials that connect communities to others via freeways. Many communities are bounded by walls, lakes, or other physical barriers, a pattern that makes pedestrian and bicycle travel difficult since circuitous routes and limited access increase the length of trips. Collector and arterial streets tend to be wide to allow vehicles to move faster and to handle the large traffic volumes that are channeled onto a few high-traffic routes. Wide streets are difficult and often dangerous for pedestrians and bicyclists to cross or to share with vehicles, especially if they lack facilities such as sidewalks and crosswalks. Such poor pedestrian environments encourage people to drive, even for short trips. (EPA (1), 71)

#### 2.c: Access in a Multimodal Environment

Bus is the prevalent mode of transit mobility in urban America and, with the exception of bus riders on wheelchairs or on bicycles, every bus trip begins and ends in a pedestrian trip. Accessible bus networks must support pedestrian, bicycle, and disabled bus riders whose needs extend beyond the bus stop, but, since the responsibility for building pedestrian and bicycle facilities often falls outside the purview of transit agencies, many bus stops are physically inaccessible (e.g. across from ditches or swales) or unsafely sited (e.g. across from dangerous and fast moving traffic or busy driveways or parking lots).

Audirac and Higgins argue that bus passenger facilities from the bus stop and shelter to the intermodal station are vital elements of multimodal environments that contribute to people's accessibility to places. The design and location of these facilities with respect to surrounding land uses and the modes of travel they interconnect (particularly for pedestrians and automobiles) are critical to enhancing people's overall accessibility to the bus network, people's transferability within the bus network and, ultimately, people's ability to reach their desired destination. (12)

A design vocabulary of the pedestrian realm identifies appropriate dimensions, amenities, and siting and design recommendations for buildings fronting the pedestrian path and strategies for safe street crossings. Likewise, a design language of the bicycle realm identifies appropriate dimensions for shared-use paths, bicycle lanes, bicycle parking, and bicycle and transit links that support the travel needs of bicyclists. These are ideas that transit agencies in cooperation with local planning departments could adopt to guide the placing of bus stops and shelters and the local land development requirements for bus service provision. (Audirac and Higgins, 17)

One element of this vocabulary that pertains to all modes operating in the multimodal arena is dedicated space. This space provides an opportunity for the various modes to maneuver without disturbance from another mode. Rail, bus rapid transit and highways are all examples of dedicated travel, but they are rarely available to small-scale communities. Instead, multimodal vehicles – including pedestrians – operate in a conflict-prone but active environment indicative of downtowns. Pedestrians often share sidewalks with bicycles, skateboards and rollerblades and interact with traffic at intersections and parking lot and driveway entrances and exits. Bicycles operate on road shoulders often between active traffic and parking lanes. Besides conflicting with each other, cars and transit vehicles must also contend with fluid traffic dynamics like crossing pedestrians and bicyclists, entering and exiting parallel parking, and traffic signals attempting to bring cooperative order to congested spaces. A community should aim to realize opportunities to create, enhance or mimic strategically located dedicated spaces along major single-mode corridors (e.g. a greenway between recreational destinations for pedestrians and bicyclists, a collector artery between districts for cars, or a fixed-route regional avenue for regular bus service).

High-quality, grade-separated direct walk access is an important feature of successful TOD (Cervero, et al., 94). Because a bus station can have numerous lines with significant bus movements, this can be difficult to achieve with bus. Large bus vehicles operating at high frequency in streets with pedestrians can be dangerous, and their activity requires careful management to mitigate its unattractive environmental, street quality, and amenity qualities. Currie contends that difficulties in providing quality pedestrian access are more likely to be an issue for local bus systems, particularly at major bus stations where bus-based transit-oriented development is often focused. (8)

Enhancing the environment for non-motorized travel such as walking and bicycling can lead to a reduction in vehicle travel. Micro-scale urban design features that improve the pedestrian environment include sidewalks, clearly marked crosswalks and walk signals, lighting, and other amenities like shade trees, benches, and streetscapes designed with the pedestrian in mind. Features that improve the bicycling environment include bicycle paths and lanes on streets, bicycle parking, and signage to identify recommended bicycle routes and raise awareness of drivers to bicycle traffic. Traffic calming techniques aim to slow vehicles while providing pedestrians with more equitable access to shared infrastructure. These traffic calming techniques include bulbouts that extend into the parking lane, raised crosswalks that meet the sidewalk, vegetated medians that offer a pleasant relief between wide traffic lanes, and obstructions in the travel lanes that require drivers to slowly navigate around them. (EPA (1), 72)

Just as street connectivity and bike and pedestrian facilities are important, the design and

placement of buildings and the aesthetics of streetscapes also shape people's attitudes toward travel. In residential areas, design for pedestrians includes making the street environment more attractive by placing porches and home entrances in the foreground, and garages and driveways more in the background. In commercial areas, pedestrian design means orienting stores to the street with window displays and pedestrian entrances, rather than entrances through parking lots and garages. Narrow streets, shade trees, well-maintained sidewalks and traffic slowed through traffic calming measures (such as speed bumps, raised crosswalks, traffic circles, and median barriers) also improve the pedestrian environment. In less pedestrian environments, structures are located without reference to neighboring buildings or properties. Some office parks lack provision for foot traffic, so that a walk from an off-site bus stop to an office might involve walking through large parking lots. (EPA (1), 72)

Perhaps one of the more interesting points of the literature survey, research has shown a compelling connection between certain community demographics and transit use. Research strongly suggests that low-income residents are most likely to utilize bus transit, often because the comparably low-cost service appeals to low-income riders and serves neighborhoods with low-value housing (Cervero, et al., 35; Currie, 7; Davis; Good Jobs First, 52). Reconnecting America points out national trends that support typical transit-oriented development projects: singles will soon be the new majority; echo-boomers will outnumber young people by mid-century, numbering 34% by 2010; almost half of U.S. population will be non-white by 2050; and demographic groups growing most quickly – older, non-family, non-white – have historically used transit in high numbers (16).

Somewhat related to the point above, bus-based transit-oriented development suffers from an unfavorable stigma. Research strongly suggests that low-income residents are most likely to utilize bus transit, often because the comparably low-cost service appeals to low-income riders and serves neighborhoods with low property values (Cervero, et al., 35; Currie, 7; Davis; Good Jobs First, 52). Generally, bus service does not serve more affluent districts, failing to accommodate more affluent riders with the service. Also, compared to personal cars, transit vehicles suffer from an uncompetitive replacement cycle of about 10 years, leading to often outdated, inefficient and unreliable equipment (Currie, 8). Compared to other transit service, bus-based service also fails to offer competitive access to popular destinations. Historically a feeder service collecting riders at dispersed suburban locations for connections to more direct regional transit, bus service is indirect by design, making it slower than car trips and unattractive to many drivers. With limited access, availability of personal alternatives, and an insufficient ridership experience, transit service will continue to bear a relegated reputation.

#### *2.d: Institutional Policies for Implementation and Management*

As a highly integrated and involved development technique, transit-oriented development requires exemplary coordination between the several stakeholders and leadership to ensure effective communication. Each stakeholder involved in a TOD district presents a new set of interests that at one time may complement the interests of another stakeholder while opposing the interests of another stakeholder. Dittmar and Ohland summarize that transit agencies often take the lead in managing the district, because their distinct element is of primary concern to the unique area, but the authors are quick to note that local governments are in the best position to

sustain any long-term vision for the space because of its commitment to clear planning and to balancing private interests with the public good. While developers share an interest in managing the space, allowing the private sector to dictate the very public area does not make civic sense. (46-50)

The literature contends that transit-oriented development is most effective as an innovative planning tool when applied at the regional scale. Dittmar and Ohland provide five case studies regarding TOD in metropolitan regions across the country, all pointing to highly effective and well managed systems of complementary transit-based districts. These authors and others urge planners and transit officials to implement region-wide programs to realize the greatest return for environmental, economic and quality of life agendas. (Belzer and Autler; Dittmar and Ohland; Center for Transit-Oriented Development (1, 2); EPA (1, 2))

A final interesting point regarding implementation is the opportunity for public-private partnership as pursued by business improvement districts (BIDs). Local chambers of commerce or other business councils often establish BIDs to manage and market downtown's and to maintain or provide amenities. Identify businesses and industries that would make a good fit with the community and actively market the downtown to these companies (PVPC (2), 127). While the owners' location compels them to want the district to succeed, local civic leaders often play a valuable role in coordinating these owners to see the value of a successful and vibrant district beyond their individual business ambitions. Governments are aware of the potential influence these partnerships could assume, allowing the market to act in its own interest, relieving local officials from overly regulating the space and removing some political wariness from the district's management. (TRB, 80; Parker, et, al., 155)

## Chapter 3: Interview Survey

With a sufficient awareness of the industry, the project's research moved to interviews with an array of stakeholders to gauge practical perceptions about TOD's benefits and challenges in downtown Holyoke. Typically, stakeholders involved in TOD-related discussions include residents, property owners, service riders, developers, and institutional agencies like the municipal government, the regional organization, and the transit agency. The interview process exhibited that, even if they are not uniformly optimistic about its likely benefits, the various stakeholders all understand the potential for TOD in the community.

### *3.a: Residents*

Nine residents interviewed for the project offered a mix of comments about transit-oriented development's potential benefits, including increased investment in the other downtown services and increased bus service to travel to retail and employment destinations. These residents identified the site's proximity to community health services and downtown as a significant advantage, supporting greater access to medical treatment and daily retail needs. Despite these benefits, other respondents worried about congestion in downtown with greater bus traffic and expected commuter traffic; although the ITC will include a parking deck above the service bays, it is unclear whether PVRTA and the City intend to promote the node as a park and ride facility. A few also commented that increased bus service would increase the negative externalities of bus circulation, namely air pollution, noise and decreased visibility around the hulking vehicles.

### *3.b: Property Owners*

Property owners stand to benefit from TOD considerably. Without distinguishing between rail or bus service, the research suggests that TOD generally increases property values around nodes and within the service area, although the affect that either rail or bus service individually leverages is inconclusive. The seven property owners interviewed (some of whom are also residents) frequently identified basic market advantages that TOD could propel. Both commercial and residential property owners stand to gain from TOD, either through selling properties for a higher return or through taking advantage of the increased investment that TOD stimulates. Residential and commercial development support each other: residents are consumers, so it follows that increased residential units provide increased sales opportunities, leading investors to develop commercial properties; also, more commercial services conveniently available in an area entice residential demand. As an aside, a handful of respondents recognized that increased employment density leverages similar affects on commercial investment.

Residents familiar with Holyoke understand the burgeoning cat and mouse game that often ties the City and affects its success: disinvestment begets further disinvestment, challenging interest in the city and personal safety of those enjoying it. The same pattern exists for the Canalwalk district. Although daunting and, at times, discouraging, most residents recognize and appreciate the City's efforts to stop the snowballing effect with federal and state grants as a first step to improve the area and encourage investment.

Transit-oriented development typically increases ridership. In a commercial sense, since riders also serve as prospective retail customers, the potential for increased business in the district is clear. More prospective customers in a district increases demand for services, consequently providing a spike in supply markets to realize and capture that demand. With appropriate steering and allowances through complementary ordinances from local officials, the market reacts to this demand-supply imbalance, inducing commercial business to expand or relocate through the purchase or lease of property.

Property owners frequently commented that one of the most critical and obvious challenges to TOD or development in general is the urban streetscape. In its current state of abandoned, vacant buildings and razed lots of asphalt and patches of grass and weeds, the downtown threatens pedestrian activity and recreation, and, without these development engines, respondents perceive investment as far in the future. Simply cleaning up the area to make a vacant or abandoned site at least an attractive vacant or abandoned site may encourage investment, raising property values and improving the streetscape fabric. As the district becomes more popular to investors, the City could transfer maintenance and management responsibilities in part or in full to a business improvement district, a group that would not only oversee the district but could also develop a sense of community involvement and ownership that the neighborhood needs.

Another clear but perhaps more complicated challenge is the perception – and they were clear to distinguish this as a perception, not a reality – of safety in the area. Again, given the spotted streetscape, the area lacks the Jacobsian “eyes on the street” security common to successful TOD districts. Some property owners who newly located or renovated commercial property in the city commented that the Police Department’s efforts to combat gang violence and drug trafficking generated enough confidence in them, suggesting that persistent effort will go far to turn the City’s image around.

Residential investment could come from two distinct impulses. On one hand, residents who consistently use transit may relocate closer to the transit node as a matter of commuting convenience, particularly if the existing area supports a basic level of services and desirable residential amenities. More commonly, however, residential investment follows commercial investment. Creating a transit hub like the ITC provides a focused market of commuters and prospective customers for a business district to capture, inducing commercial investment in the district. Increased commercial investment provides commuter-based services, which, coupled with nearby residential development, also caters to before- and after-work commercial needs. These investments all add to the convenience of living in a commercial district, creating greater demand to live there and encouraging further residential growth.

### *3.c: Riders*

User interviews with twenty riders who use PVRTA service within the Five College Consortium between Northampton and South Hadley (seven) and between Holyoke and Springfield (thirteen) were conducted in Holyoke, Northampton and Amherst between the months of February and April. Results from these interviews speak to perspectives on the transit service at large and community interest in and support of TOD as a new technique to boost ridership and to strengthen downtown Holyoke.

Most respondents thought well of PVRTA service throughout the Valley. They commented that the bus provides convenient, mostly on-time service to all of the colleges – including Holyoke Community College – shopping malls, and downtown destinations and that headways, the amount of time between bus departures, are adequate during the day for local destinations with different routes providing nearby service through popular corridors. Those familiar with downtown Holyoke predicted that the ITC and increased service would boost investment in the area but cautioned that significant public relations efforts and streetscape improvements should accompany the new service. Most respondents believed that greater service to downtown Holyoke with its unique destinations like the Children’s Museum and Holyoke Health Center and other unique downtowns in the Valley would increase ridership.

Negative responses mostly concerned the speed of service, noting that distant destinations can take up to twice as long as private vehicle trips. A majority of respondents made a point to comment on the size of the buses and their cumbersome navigation through traditional downtowns with pedestrian-friendly scales. Many respondents in Greater Holyoke commented that they feel safe on buses but were quick to add that they do not feel secure at bus stops around the city (the existing Veterans Park bus stop opposite the ITC is not included as an unsafe stop).

### *3.d: Developers*

Despite monthly community meetings with a handful of developers, this project did not directly interview developers. Instead, City staff provided second-hand knowledge of developers’ opinions. Developers identified a local demand for improvement – desperate times call for desperate measures – but were cautious to make those investments in an unproven and unfamiliar TOD market. These opinions echo concerns for pursuing the Canalwalk project: developers are hesitant to make the first investment in the underutilized district for fear that other developers will not respond with in kind investment, creating little rate of return for the significant cost. Developers have also mentioned the importance of public investment in the pedestrian stage in order to facilitate steps to market their properties.

### *3.e: Municipal Government*

The interview survey intended to inquire all stakeholders about the perceived benefits and challenges of transit-oriented development in downtown Holyoke, and, while biased, the City serves as a pivotal stakeholder in the matter and provides the most practical yet also a professional vision for TOD in the Paper City. Four staff members at the Office of Planning and Development and the Mayor’s Office were quick to note that creating a TOD district in the downtown would signal renewed attention from the City and cooperating stakeholders for the area’s success. Improvements to the district’s image and new policies to limit or eliminate permitting hurdles as incentives to pursue development should put the district on developers’ radars as an area for significant return on investment.

The staff recognized familiar challenges – blighted streetscapes, perceptions of safety, bus-based TOD limitations, etc. – but, utilizing its unique access to private sector concerns, also mentioned a striking dilemma in the housing market. Most developers place the cost to renovate many of

Holyoke's historic, vacant structures like the Holyoke Catholic High School Campus opposite the ITC at around \$200,000 per unit, a deal breaking number considering that average monthly rents in Holyoke stand around \$500 (U.S. Census). Staff commented that TOD makes more financial sense for developers in affluent metropolitan regions like Greater Boston because rents are hundreds of dollars more per month, allowing developers to recuperate their investments faster. (Mendrala)

### *3.f: Regional Government*

The Pioneer Valley Planning Commission (PVPC) serves both as the regional planning agency and as the metropolitan planning organization for communities in the southern Connecticut River area. With this dual role, PVPC enjoys the unique position to coordinate federal funding for transportation projects throughout the Valley. Earning a favorable perception from PVPC would go far to support TOD's influence in the region.

A transportation planner at PVPC provided familiar professional perspectives about TOD in the Pioneer Valley in relation to rail and bus service. One respondent commented that the ITC station is the most well suited transit node in the region to succeed, given its current popularity, competitive location in the community, and potential gain from consolidated services and rider accommodation where little now exists.

PVPC holds that TOD will not take off in the area without both improved Amtrak service from Springfield to Boston and new commuter rail service from Springfield to New York City via the Metro North line. PVPC adopts the popular, though arguably short-sighted, opinion that bus-based transit-oriented development (BTOD) is ineffective because it does not provide competitive amenities compared to rail-based transit-oriented development (RTOD) in terms of permanence, reliability, predictable fixed-route service and newness. One respondent conceded, however, that significant infrastructure investments like the ITC resolved many of these issues.

Land use planning staff more familiar with the Commonwealth's Smart Growth legislation (M.G.L. 40R) offered some input regarding Holyoke's recent interest to adopt the popular regional growth model. While Pioneer Valley communities like Westfield and Easthampton seem to acknowledge the benefits and issues concerning Smart Growth, the neo-traditional planning paradigm is slow to catch on outside Boston – and it is only slowly working through Greater Boston as it is. With little regional interest in Smart Growth, TOD – one of its techniques – is unlikely to garner considerable regional support in the near future.

### *3.g: Transit Agency*

The Pioneer Valley Transit Authority (PVTA) provides transit service to twenty-four communities from Longmeadow to Deerfield. Although reeling under pressure since 2005 after a slew of missteps, the second largest transit agency in Massachusetts is committed to providing comprehensive service to the region. While staff members at PVPC readily acknowledge many of the challenges associated with BTOD discussed by PVPC planners, bus service is the only option in the community and, with careful management and cooperation between stakeholders, it could achieve many of the same benefits – economic development, clean and efficient high-



quality service, increased property values, etc. – associated with RTOD.

For better or worse, PVRTA is open to the idea of changing fixed route patterns to generate greater ridership in Holyoke and throughout the region. It has been noted that the cost of producing flexible service capable of potentially responding to changing geographic activity patterns is the price of reduced commitment to the system (Currie, 9). PVRTA's malleable pursuit of success could blend well with TOD inception in the Valley, creating new routes and corridor hierarchies for various transit services and destinations.

### *3.h: State Agencies*

As a new planning initiative in Massachusetts, transit-oriented development needs considerable technical assistance and legislative support from administrative officials and political representative in Boston. Since the turn of the century, Beacon Hill has produced a litany of legislation to address statewide planning concerns – sprawl, economic development, dilapidated infrastructure, permitting and housing, notably – so as to enable local governments to take important planning efforts at the municipal level. State agencies have worked to inform the state's cities and towns about the technical procedures required to participate in these new programs, but, admittedly, this effort and the legislation focuses on Greater Boston. More familiar with the Pioneer Valley in general than with the City of Holyoke in particular, four state officials recognized planning challenges in the area greater than transit-oriented development could begin to address, but they all contended that the programs have proven valuable for eastern Massachusetts communities and could deliver similar results to Holyoke.

## Chapter 4: SWOT Analysis

Typically used in the business world, a SWOT analysis fits a strategic planning agenda as well. This chapter points out existing and potential benefits and challenges facing transit-oriented development in downtown Holyoke as they apply to the key themes mentioned in the research methodology chapter. The *Strengths* section focuses on advantageous features currently applied in Holyoke's central business district, while the *Weaknesses* section speaks to discouraging elements exhibited in the area. *Opportunities* refer to future benefits the site could realize, whereas *Threats* highlight those challenges that may persist without a solution beyond the scope of this project. This SWOT analysis facilitates a comparative understanding of a myriad of dynamic issues at work in the Paper City.

### 4.a: Strengths

According to local and regional planning officials, the City of Holyoke is in a great position to realize the benefits of transit-oriented development (Roscoe, Mendrala). Despite general development challenges in this evacuated rust belt district, Holyoke's efforts to attract public funding and statewide attention for innovative planning, competitive location efficiency from its traditional development pattern, accommodating multimodal access, and leadership to stimulate development partnerships all favor a successful environment for the TOD district. The map below depicts downtown's location efficiency.

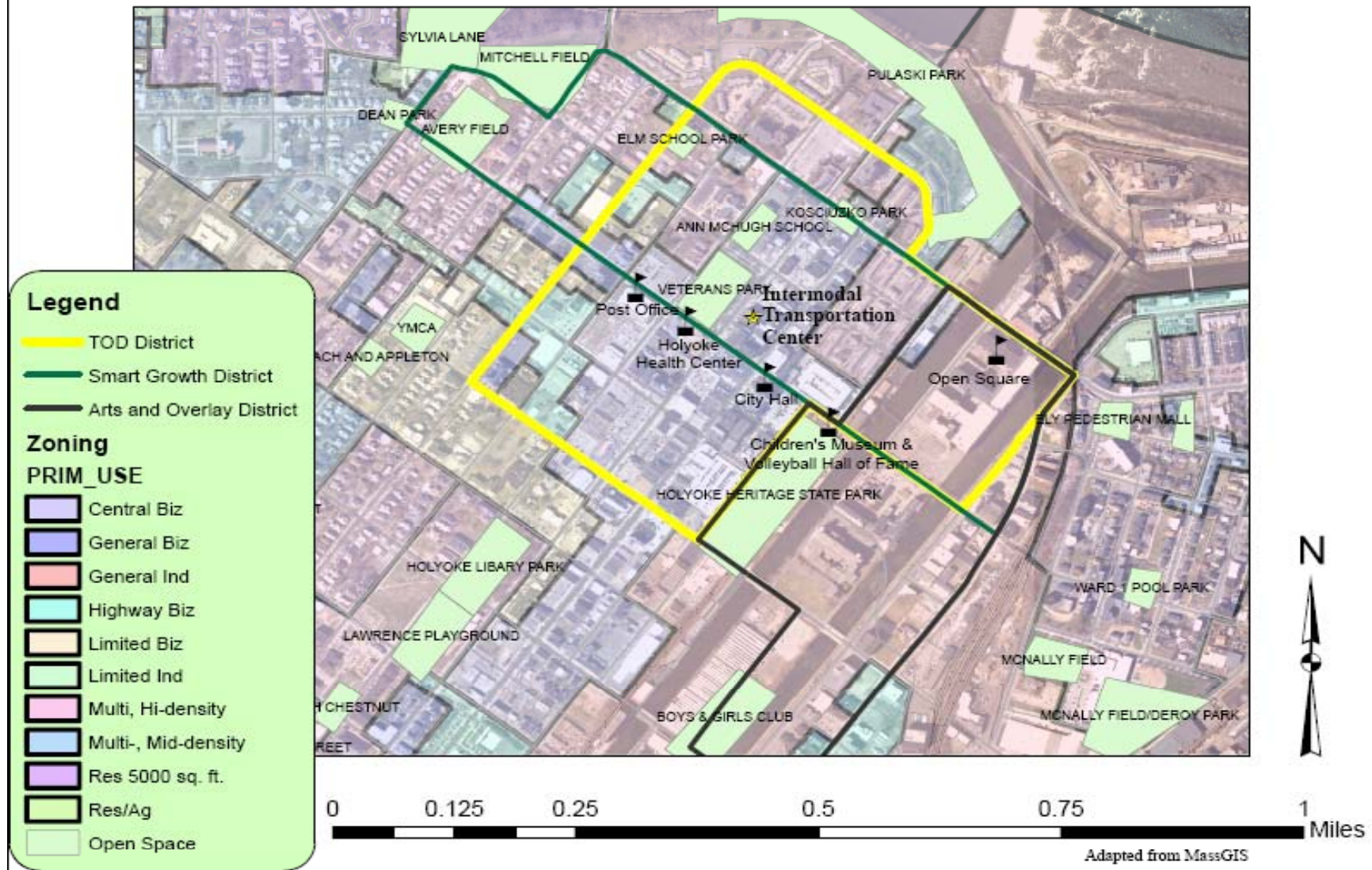
#### 4.a.i: Financing Options to Leverage Private Investment

Holyoke has received considerable funding from state and federal redevelopment programs, and the Intermodal Transportation Center's role as a community landmark and destination nexus has been a pivotal component to leverage this funding. The Intermodal Transportation Center has received \$7.2 million for funding specifically related to the TOD district. The funding includes \$4.5 million from the Federal Transit Administration, \$1.7 million from the Executive Office of Transportation, and \$1 million in local funds. The City also received \$50,000 from the Executive Office of Transportation to connect the Canalwalk industrial district with the downtown TOD district through improvements to the pedestrian network. (Mendrala)

The Canalwalk project and its complementary Arts and Industry overlay district received a design grant for \$238,000 from MassHighway, a federal transportation bond bill for \$1.2 million through efforts by Congressman Olver, and Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) funding for \$3.5 million through the efforts of Senator Kennedy. Additionally, the City received \$96,000 from the Environmental Protection Agency to assess a sizeable brownfields property in the industrial district. (Mendrala)

This summary of generous public funding speaks to a political acknowledgement for issues common to post-industrial cities in the rustbelt, for aggressive strategies to remedy the problems caused by economic flight, and for Holyoke's visionary leadership to approach and resolve the problems. Recognition from state and federal legislatures should translate to the private sector, not only alerting financiers and developers about the City's advantages but also attracting their investment as if to say, "The City is recognized statewide and nationally as a compelling magnet for redevelopment; come and see what others are saying and be a part of our renaissance."

## Downtown Land Uses and Points of Interest



#### 4.a.ii: Placemaking through Zoning

The TOD district currently provides a generous location efficiency, which refers to a district's inclusive mixed-use opportunities that facilitate frequent, pedestrian- or transit-supported trips to home, work, services and open space (Good Jobs First, 34). In less than five minutes, pedestrians leaving the ITC can reach core destinations like City Hall and the Post Office, health and human services facilities like the Holyoke Health Center, food and clothing retail shops, and ample recreational space like Veterans, Pulaski and Feldman Parks, Avery and Mitchell Fields, and Heritage State Park with the Children's Museum, Volleyball Hall of Fame and Heritage State Museum.

This proximity enhances the pedestrian experience in downtown Holyoke. Considerable open space nearby provides plentiful opportunities to meet friends, to escape the indoors for lunch or a quick break from work, and to find refuge from a vibrant downtown space. The active environment implicitly encourages perceptions of safety, placing more eyes on the street as a deterrent for criminal activity. Also, nearly every street in the district allows on-street parking, an important feature in the multimodal environment to accommodate cars while buffering pedestrians on sidewalks from traffic in the streets (Kunstler, 84).

Attractive lighting and paving accent downtown sidewalks and offer seasonal amenities, including shade trees, colorful banners and street furniture like benches and trash cans for added pedestrian comfort and convenience. Sidewalks along Maple and High Sts. include detailed brick or cobblestone paving, adding to the area's artistic character, and run along parallel parking lanes, offer protection from traffic. Also, Maple and High Sts. utilize bulbouts to narrow street widths in order to facilitate crossing and slow traffic as well as traffic lights with pedestrian crossing signals at busy intersections. Finally, bus bays cut into wide downtown sidewalks mitigate traffic congestion while providing sufficient space for riders to wait for, board onto and exit from transit vehicles. Images of these and more traffic calming devices are reproduced below from a 2006 report to the City (Calcina, et al., 13-14).









Beyond the spaces present in downtown, the built environment provides the city with a leg up over suburban counterparts trying to adapt to the more accommodating pedestrian scale. Particularly important to the authority of zoning and land use regulations, elements like building dimensions, architectural detail and permeability provide an attractive and accommodating outdoor living room in the district (Dittmar and Ohland, 58-61). Downtown's existing architectural features add to its streetscape appeal. Stately buildings typically exhibit four stories, encourage short walking trips, and make driving for errands virtually unnecessary. Similar building façades, height and setback dimensions give the district a distinct character while each building's unique architectural – and often historical – details allow the structures to stand out and remind users of the city's robust past. These features offer a comfortable confinement and convenient horizontal density for pedestrian traffic. Large windows on the ground floor support retail uses while passively illuminating the sidewalk with interior lighting. Large windows above ground level retail give buildings distinguishing features and an enjoyable interior space with panoramic views of the scenic area (Dittmar and Ohland, 64-70).

#### 4.a.iii: Access in a Multimodal Environment

Downtown Holyoke accommodates a multimodal environment. Allowances for pedestrians and cars on a traditional grid pattern of streets and sidewalks provide ample space for both modes to navigate conveniently through the space, while transit offers sufficient service to many of the community's neighborhoods and surrounding regional destinations.

Pedestrian access and circulation are typically better in town or city centers due to physical design of such places. Shops, offices, restaurants and other amenities are generally clustered together and connected by a pedestrian network which is often more accessible and efficient than the vehicle network. Sidewalks and walkways are extensive, crosswalks are signalized and access points for persons with disabilities are incorporated. (PVPC (1), 79)

Requisite for its multimodal use, the downtown district in Holyoke accommodates pedestrians in a vehicular context with wide and attractive sidewalks corresponding with the intricate street network and subsequently small blocks. Mid-block service alleys offer another option, though less accommodating, for pedestrian access and further relieve stretches of built facades. Whereas the literature often recommends block widths between 200 and 400 ft. wide, the City's mid-block alleys and frequent residential streets with intermittent traffic often exceeds these ideal design standards (Goodwill and Hendricks, 9).

Dedicated pedestrian spaces include the plethora of pocket parks in the district as well as public easements between and, in some cases, through buildings. The city's downtown parks add to pedestrian allowances, offering a considerable tree canopy, monuments and benches, while Pulaski and Feldman Parks provide an inviting space to walk along the Connecticut River through one of Frederick Law Olmstead's attractive landscapes. Access between and through buildings, particularly within the Holyoke Health Center and within the Steigers Building, additionally presents pedestrians with occasion to navigate through permeable blocks and business owners with greater space to attract customers.

Downtown Holyoke accommodates vehicles in many of the same ways it accommodates pedestrians. The traditional street grid provides even unaware drivers with predictable routes to the downtown and greater opportunity to access both on- and off-street parking from numerous side streets. In addition to parallel parking on nearly every street in the district and occasional off-street lots, there are two parking garages requiring \$.25 per hour within a five-minute walk of the Intermodal Transportation Center. When the ITC is complete, it will include a parking deck above the ground-level bus bays to accommodate employees and visitors to the businesses in the facility.

Transit accommodates nearby destinations for scheduled daily trips, and existing downtown land uses blend well with trends in transit service. The existing bus stop opposite the Intermodal Transportation Center at Veterans Park is one of the busiest in the region, providing service on eight routes predominantly operating in Hampden County in the southern portion of the Pioneer Valley but also in Northampton and in South Hadley with connections to the Five College Consortium and northern extensions of the system (Roscoe). A common location efficiency feature around transit stops, the area's several municipal offices and spaces add to the stop's popularity. Particularly in Holyoke, City Hall, Heritage State Park, and Pulaski Park host weekly, monthly and annual events throughout the year; offering considerable transit access to this destination core makes sense for the community and should profit the transit agency. Perhaps more importantly, transit users often frequent health and human service facilities and may serve as a development niche for this industry. The Whittier St. Neighborhood Health Center at Roxbury Crossing in Boston actively sought a location jointly developed with the MBTA to directly accommodate its clientele (Transportation Research Board, 34-35). Also, frequent and attractive open spaces facilitate informal and dynamic meeting spaces for newly arriving riders to meet with friends.

The transit system's popularity and the City's demographics fit industry patterns between transit use and population trends in terms of income, age and family status. As you will recall, research points out that demographic groups growing most quickly on a

national scale – older, non-family, non-white – have historically used transit in high numbers (Reconnecting America, 16). According to the 2000 Census, Hispanic residents make up 41.4% of Holyoke’s population, while non-family households compose 36.7% of Holyoke’s population. Moreover, the region’s population of residents older than 50 yrs. old is expected to increase into the year 2030 (PVPC, 22). These statistics strongly speak to the community’s ability to support existing PVRTA service in downtown Holyoke.

#### 4.a.iv: Institutional Policies for Implementation and Management

Institutional advantages include assistance from state and regional agencies and interest in joint development at the ITC. As mentioned above, legislative support for downtown projects and top-down leadership for smart growth initiatives from state and regional officials have helped the City pursue a progressive planning agenda. This leadership signals clear institutional support for projects and encourages interest and investment from the private sector.

Advocating for transit-oriented development, the City and its partners share a common vision for the district. Public funding from state and federal sources indicates this vision well. Particularly critical has been Representative John Olver’s leadership in Congress, consistently advocating for assistance to rebuild the Pioneer Valley’s economically competitive metropolis at the crossroads of New England. PVPC’s guidance with many of the Commonwealth’s progressive planning initiatives also signals a coordinated effort to sponsor the region’s growth.



#### *4b: Weaknesses*

Despite the City's significant advantages for providing an accommodating environment for TOD to succeed, Holyoke presents considerable challenges to attract private sector support, to develop a sense of place in the downtown, to secure access around the ITC, and to implement a transit-oriented vision. This section catalogues these features based on what literature and interviews have provided to this project.

##### 4.b.i: Financing Options to Leverage Private Investment

Exemplified by its broken streetscape tapestry, the City faces daunting development challenges for several reasons but this report will refer to them generally as the three Rs: significant risk to redevelop brownfields and vacant or underutilized properties under the aegis of TOD; limited return on a significant investment; and challenging zoning regulations that affront TOD strategies. This section will first explore these challenges.

Transit-oriented development in downtown Holyoke deters investment because of its considerable risk. Risk refers generally to TOD in the area insofar as the planning technique is unfamiliar to practitioners and is unproven to attain the success it promotes. Another element of risk is particular to Holyoke and its rustbelt contemporaries: brownfields liability. In the mind of a conservative investor, these three factors not only stop groundbreaking and ribbon cutting ceremonies but also the very idea of such an investment (Davis).

Transit-oriented development and its smart growth umbrella suffer in Massachusetts as unfamiliar nascent planning techniques. Just starting to take root in Greater Boston on the MBTA's commuter and light rail services, TOD has not blossomed outside of I-495 – an hour-long drive away from the Pioneer Valley – and has not been implemented on a bus-based transit system in Massachusetts. Neither lenders nor developers in the Pioneer Valley are very familiar with TOD. While local planning offices may clamor for TOD projects in their communities, without interest from developers to create these projects and commitments from banks to fund them, these projects will continue to sit on shelves. Without projects to rely on and leadership to direct, transit-oriented development initiatives have grown slowly in western Massachusetts a prescriptive directive from state and federal incentives for communities that try to adopt the technique, but these incentives cannot substitute for practical experience and trusted familiarity in the region.

This lack of awareness also stems from unfamiliarity in private sector leadership circles; industry institutions typically relied upon for conservative empirical development data fails to provide and sufficiently understand regarding TOD. Whereas single-use office, retail and residential districts follow prescribed traffic volumes, demand in dense, mixed-use districts is more difficult to predict accurately. The odds become more challenging when the district involves transit as well. Factors related to complementary land use, non-motorized trip volume resulting from those land uses, connectivity of the transit system, and the location of the TOD district in the region push quantitative research to the realm of impossible. Despite these challenges, there are numerous examples from which to draw expectations for traffic demand management policies, and conclusive evidence supports transit as a benefit to walkability, employment density, land use, and quality of life. (Dittmar and Ohland, 45-49)

Although profitable in theory and in practice in affluent metropolitan centers, transit-oriented development's marketability and subsequent economic feasibility is unproven in second-tier metropolitan markets like the Pioneer Valley and even less proven in terms of bus-based TOD. Limited industry capability is a significant reason for TOD's limited use and interest in the private sector. Conventional single-use development is tested and predictable, and it profits from proven engineering standards for traffic volume, efficient architectural dimensions, and targeted marketing campaigns, to name a few. TOD, particularly BTOD, does not have the same resources at this period in its young life, because industries have not determined how to account for its dynamic features. Cookie-cutter big-box retail will attract the same parking demand in Michigan as it does in Colorado, but mixed-use district's with pedestrian-friendly accommodations and conveniences are unique for each location, making the technique less predictable and replicable and deterring lenders and developers from comparably more difficult projects. (Goodwill and Hendricks, 43; Majias and Deakin, 126)

Another element of the technique's unproven character is its limited permanent infrastructure. RTOD and bus rapid transit (BRT) often induce swift land speculation and increased property values, because the cost to implement those systems points to long-term investments along committed and invariable routes for economic development. As a less costly alternative, however, BTOD lacks comparably permanent infrastructure and does not generate similar increases in proximate property values, because land owners and developers cannot rely on consistent and unwavering route patterns and resulting economic growth. Indeed, PVTA has indicated an interest in altering its bus routes to accommodate dynamic demands in the Pioneer Valley as they develop, assuming a reactionary role instead of a directive role in regional development patterns (Roscoe). While the ITC is a tremendous permanent investment and may increase property values in the immediate area around it, property values throughout the system will remain sluggish without some signal of service commitment from PVTA and region-wide TOD will likely suffer.

Brownfields are a significant development risk factor because, by definition, they are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Brownfields liability stems from federal and state legislation holding property owners responsible for cleaning contaminated properties so that they may be reasonably returned to the market for reinvestment. Any person owning property to which contamination has migrated in an aquifer faces potential uncertainty with respect to liability as an owner, even where such owner has had no participation in the handling of hazardous substances, and has taken no action to exacerbate the release. Some owners of property containing contaminated aquifers have experienced difficulty selling these properties or obtaining financing for development because prospective purchasers and lenders sometimes view the potential for liability under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the issue's governing federal legislation, as a significant risk (Johnson, et al., 24-26). Public companies involved in industries such as heavy manufacturing, chemicals, railroads, and utilities that produced hazardous substances or by-products are hardest hit by this liability legislation (Lange and McNeil, 101-103). Holyoke built its heritage on these dirty industries, and its landscape is consequently dotted with specters of these industrial kings.

Developing in downtown Holyoke also presents considerable concerns about limited return on an increasingly significant investment. Rate of return is affected by the City's interest in historic preservation and adaptive reuse of its unique and historical downtown structural assets – there's no place quite like Holyoke, and local leaders want to keep it that way – however, this interest in reuse coincides with an tough-luck reputation, resulting in decreased demand for the district as exhibited through diminished property values and rental rates throughout the city.

As a city with a unique heritage for industry and technology, Holyoke aims to preserve its historic structures as a matter of community pride, architectural integrity and traditional functionality, but this aim is not always a realistic one when a rehabilitation project is too costly for a developer to pursue. Most developers contend that rehabilitation of many downtown buildings approaches \$220,000 per unit, a figure relying heavily on the cost to update multi-unit fire systems, to remove lead and asbestos, to convert predominantly single-use residential properties to mixed-use or multi-family dwellings, and to retrofit elevators in compliance with American with Disabilities Act (ADA) access standards (Mendrala). While these preservation efforts make business sense for TOD projects in more affluent historic regions like Greater Boston, limited rental income in the Pioneer Valley provides little incentive to approach expensive rehabilitation and renovation projects in the area. While average monthly rents in Metro Boston approach \$1,000, average monthly rent in Holyoke in 2000 was \$503 (Mendrala; U.S. Census).

This sizeable disparity in part speaks to the Paper City's reputation as dirty, dangerous and destination-less, making it difficult for the City to compete for tourist dollars and for business to profit from hometown consumers. Whether a boarded factory or a vast lawn of pavement and shrubs, impressions of unkempt properties throughout downtown go beyond property lines and even district borders to affect the entire community's reputation for security and cleanliness. A city with a tough image reduces demand for the area, leading to reduced property values and reduced rental rates. Low expectations for income from sale or lease discourage investment, because the period of return would take longer compared to similar projects in communities with better reputations for safety and higher values of property and rent. (Belzer and Autler, 22-25; Johnson, et al., 34-35)

The last risk factor to leverage private investment is an unsupportive regulatory framework. These regulatory costs include TOD-obstructive development requirements and limited incentives for pursuing projects that the City favors. The City should do more to accommodate TOD by approaching these challenges and adapting its policies to facilitate transit-oriented development.

It is common for cities to have zoning ordinances and land development requirements designed for automobile-oriented, single-use, suburban-scale development, but the physical requirements of zoning ordinances often restrict the necessary development density for TOD through such provisions as maximum floor area ratios, height limitations, minimum front setback of buildings, landscaping requirements, lot coverage maximums, and minimum parking requirements (Goodwill and Hendricks, 12-14). Typically a pointed and contentious issue, parking requirements unnecessarily increase costs to purchase more land around the structure for parking

in an environment less dedicated to automobile ownership. Reconnecting America estimates that it costs a developer or municipal agency \$20 to \$200 per month to finance, build, operate and maintain a single parking space, and, depending on parking requirements, parking space can consume up to 50% of a property used in development (17). Given its pivotal role in creating and sustaining a successful transit-oriented development district, parking requirements will be a critical feature of this report.

Although Holyoke's zoning ordinance allows traditional urban densities up to 80 units per acre and requires building dimensions typical of historic areas, the City's parking requirements serve as a contemporary suburban retrofit and fails to amplify the district's valuable and unique scale. Discussed more in the next section, the ordinance gets in its own way, failing to realize its intended interest in dense, pedestrian-friendly downtown spaces because of a perceived need to supply users with threatening parking allowances.

Although the City offers tax-increment financing for projects in qualified districts, the City does not offer incentives for favorable projects in the TOD district, and all projects experience similar procedures with respect to time and cost of application submission. Permitting for development projects in downtown Holyoke can take up to two months and typically involve costly legal and engineering fees that accrue over time (Mendrala). Holyoke officials currently do not offer decreased fees or expedited review procedures for favorable projects, be they TOD-guided or otherwise laudable. Without these incentives, wary developers have no reason to pursue projects that the City and the Commonwealth advocate.

#### 4.b.ii: Placemaking through Zoning

Downtown Holyoke's greatest challenges for developing a sense of place stems from issues discussed in the previous section. Frequent brownfields properties discourage feelings of safety, leading to diminished property values and rental income and hindering profit from development. Also, unsupportive regulations do little to change the area's built environment, leaving it with too few residents and employment opportunities to suggest a discernable identity.

Although recent projects like Canalwalk and Open Square point to future large scale redevelopment, the City's current efforts at placemaking are hard for the common downtown visitor to realize. As mentioned in the Literature Survey, Parker, et al., contend that successful TOD districts exhibit residential densities of 10 to 20 units per acre and employment densities of 50 to 75 employees per acre (42-48). These densities are difficult to realize in Holyoke because, for the reasons stated above, prospective residents and tourists are not attracted to the area and, without a critical mass of rooftops, business lacks a competitive in-house consumer base from which to profit. These limitations translate to an unclear identity for a district marginally utilized compared to its potential use.

Parking requirements mentioned above not only unnecessarily increase development costs, they also discourage dense projects appropriate for downtown. To the City's credit, the existing zoning ordinance allows many TOD-supportive land uses at competitive densities, but requirements for these uses often insult transit-oriented development, particularly in terms of parking. Where existing zones allow multifamily housing, restaurants and retail, they require 2 parking spaces per unit, 1 space per 300 square feet and 1 space per 4 seats, respectively (City of

Holyoke (2), 22-25, 37-39). Requiring 2 parking spaces per unit for multifamily housing projects discourages developers from large-scale apartment projects, instead preferring smaller projects with lower parking requirements and significantly less density.

#### 4.b.iii: Access in a Multimodal Environment

Pedestrian access in Holyoke is strongly accommodated by its traditional scale and active mixed-use corridors, but excessive parking presents frequent conflicts within and between the district's small blocks. Also, unwelcoming transit infrastructure without amenities for convenience or protection from the elements reduces pedestrian accommodation in the area. Finally, research contends that pedestrian route choice is determined more by the unencumbered ease of the route than by the route's length or directness to the destination. These factors exist in Holyoke and should be addressed so as to provide a welcoming and supportive environment for a successful transit-oriented development district.

The location and amount of excessive parking and resulting traffic patterns and congestion play some role in encouraging an active and inviting space and result in higher property values and economic development (Cervero, et al., Ferrell and Murphy, 24). The City, however, provides excessive parking, noted by a significant number of empty spaces in minimal fee lots like its Dwight St. and Suffolk St. parking garages and in free lots scattered throughout downtown. Excessive parking in a district intending to curb parking demand encourages driving and, in turn, threatens the critical element of comfortable pedestrian traffic (Nelson Nygaard Consulting Associates, 44). Advocates and planning professionals agree that parking is the critical detriment for creating a unique pedestrian-friendly environment (Belzer and Autler, 5-7; Center for Transit-oriented Development (1), 4; Cervero, et al., 10-14; Kavage, et al., 46-48). Generally, parking accommodates driving, and driving devastates TOD districts, at once challenging the pedestrian environment, diminishing perceptions of pedestrian safety and comfort, and removing an impetus for transit use. Regardless of these detractions, Holyoke exhibits a wealth of parking that borders on excessive and consequently present significant challenges to TOD's success there.

Parking lots challenge pedestrian perceptions of activity and convenience. Although parking land uses encourage pedestrian traffic to and from vehicles during morning and afternoon commutes, parking space has limited value compared to tax revenues from infill mixed-use properties. Streetfront parking lots also unnecessarily add distance between otherwise location efficient land uses, requiring pedestrians to leapfrog these parking spaces, adding time to pedestrian trips, and generally reducing the appeal of downtown walkability.

Parking lots challenge pedestrian perceptions of safety and comfort as well. First, frequent driveways providing ingress and egress vehicle access between parking lots and main streets require pedestrians to be increasingly cautious of driver recognition and generally reduce the pedestrian to a second-tier user in a space intended to place them on a pedestal. Second, evening walks along inactive land uses – whether streetfront parking lots or brownfields – present unnerving land uses and further challenge perceptions of security based on their limited public surveillance and often dimly lit expanse.

Lastly, excessive parking and its subsequent allowance for driving removes the suggestion to use

transit, placing the service at a competitive disadvantage in an area intended to provide it with a leg up on conventional driving. Whereas communities with successful TOD districts provide little and/or expensive parking, thereby challenging drivers to seek alternate transportation modes and persuading them to utilize transit, communities with excessive parking provide little compelling reason not to drive to a destination. Simply put, why would someone take transit when they could drive in a more direct and timely manner? Also, PVTA transit competes for space with private vehicles; more cars on the road further slow transit service and further discourage ridership. Although there may be factors of congestion and ownership costs that continue to deter drivers, these factors are less critical than the factor of unavailable parking. Dittmar and Ohland contend that reducing parking can reduce traffic between 10% and 30% and increase transit use by 17% (121-125). Despite these impressive results, a city with ample parking already in place is unlikely to realize these benefits, and TOD in Holyoke may suffer as a result.

Unwelcoming transit infrastructure in Holyoke and throughout the Pioneer Valley further challenges transit use and, consequently, a vibrant downtown transit hub. These issues involve uncompetitive access compared to car access and a discouraging stigma against bus transit generally.

Local officials have commented on limited transit access and its impact on the community (Moskal). Transit access issues most notably point out limited strategic locations and routes where users would expect to quickly access the system. With a lack of permanent infrastructure in place except in a few choice locations, it is not surprising that PVTA bus stops in Holyoke and in the region generally do not accommodate pedestrian needs. Although some new stops in the system currently or will include elements as complex as park and ride facilities near highway exits or other community gateways with express service between downtowns so as to encourage riders to leave their cars behind without adding congestion, pollution and conflict or as simple as seating and shelter from the elements, an overwhelming majority of stops are nothing more than an 8' pole with a sign distinguishing the spot as a transit stop. Instead of these considerate facilities and services, PVTA services an array of corridors with stops scattered in questionable or inappropriate locations, mitigating access and failing to realize a competitive alternative to car use.

Bus service also suffers from a stigma associated with its ridership and with its vehicle fleet. Although seemingly generalized and discriminatory, survey respondents' claims regarding bus service as a typically blue-collar, low-income transit service are supported by the literature. As noted earlier, research strongly suggests that low-cost bus-based transit serves low-income residents in low-value districts. Adding to the stigma, PVTA's bus fleet was last updated in 1994, nearing the end of its useful 12-year lifespan and operating high maintenance and high noise- and air-pollution equipment while jeopardizing the ridership experience (Roscoe). A perception for low-income ridership coupled with dilapidated equipment leads to a considerable bus stigma – a highly observed point in both in the literature and in user surveys.

In general, the city's corridors experience encumbered access between the downtown and other neighborhoods and between local and regional destinations. Although it is widely understood that proximity is the pivotal determinant for route choice and convenience, recent evidence

compellingly claims that ease of direct access is a determining factor for pedestrian habits. Surveyed about walking patterns and considerations, transit riders commented that obstacles often determine routes and decision to walk or drive (Weinstein, et al., 6-7). What should be a quick and convenient walk to the bank at lunchtime becomes more challenging when parking lots and resulting traffic conflicts from those lots stand between you and your destination. You might even decide to drive instead of walking for five minutes, adding a multiplier effect to the problem. Although the downtown grid accommodates frequent opportunities for more direct pedestrian route choice, it utilizes several one-way streets that tend to frustrate drivers and exists on an intercardinal plane while other parts of the city follow a cardinal pattern, making unusual connections between the disoriented street networks. Typical of state highways in Massachusetts, these regional corridors often indirectly travel on several streets, creating confusing routes to surrounding communities. The City lacks informative signage and a comprehensive multimodal traffic plan to facilitate unencumbered and more direct access for both pedestrians and drivers. A map of these street patterns – *Highway Routes and Downtown Intercardinal Street Grid* – is provided below.

#### 4.b.iv: Institutional Policies for Implementation and Management

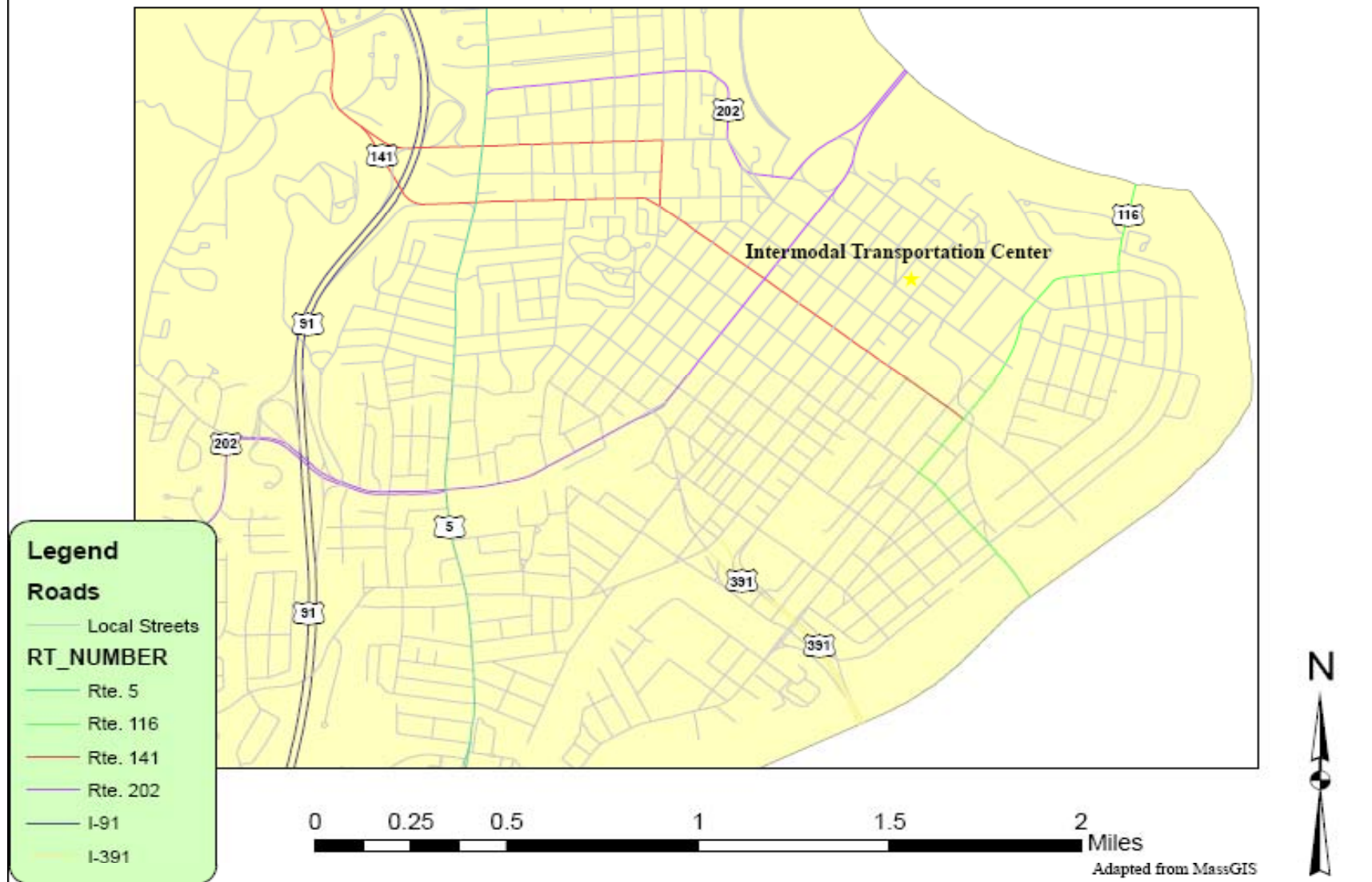
Institutional issues involve stakeholder awareness of TOD, and lack of leadership and vision, and challenges that arise as TOD involves more facets of development and corresponding agendas. While the last point is inherent to TOD and, in some ways, signals the technique's success, the former two points should be addressed sooner than later to remove hurdles from persistent recurrence.

While limited awareness of transit-oriented development from private sector investors has been detailed above, the problem exists in public sector planning agencies as well, a particularly concerning point given the agencies' presumed leadership influence. When surveyed for solutions to many of the challenges facing TOD in the Pioneer Valley, local and regional planning officials admitted a limited knowledge of the issues and their remedies, pointing to a slow trickle-down system of leadership from Beacon Hill as the cause. (Burkott; Curtis)

Without a knowledgeable and active regional leader, transit-oriented development will face significant challenges ahead. TOD produces the greatest gains when it is instituted at the regional level; relying solely on local leadership and direction, TOD achieves only minimal gains and rarely overcomes significant investment costs (Mejias and Deakin, 28). Based on recent interest in smart growth programs in Westfield, Easthampton and Holyoke and on complementary support from PVPC, TOD advocates in the area remain hopeful that regional leadership will follow quickly.

Finally, TOD is persistently challenging to orchestrate because it involves so many agendas that at one time may be complementary while at other times divisive. For that reason, TOD requires dedicated cooperation from all stakeholders involved and leadership from either a local or regional public sector entity. Dittmar and Ohland suggest that local governments are in the best position to defend public interests and to sustain long-term vision, while leadership provides a clear vision and enhances confidence in the private sector (46-53). Whichever the lead agency, it must encourage education, cooperation and coordination to realize the significant benefits available to transit-oriented development.

## Highway Routes and Intercardinal Downtown Street Grid





#### *4c: Opportunities*

While the previous chapter defined several challenges to implementing successful transit-oriented development in downtown Holyoke, this chapter will offer suggestions to remedy many of those concerns.

##### 4.c.i: Financing Options to Leverage Private Investment

Although there is considerable risk and cost to instituting transit-oriented development in a new environment like the Pioneer Valley, solutions are easily offered (though more difficultly achieved). These remedies derive substantially from the literature, noting that, while the survey interviews helped define strengths, weaknesses and, later, threats, few respondents presented constructive solutions to the concerns. As detailed in the previous chapter, development risk is the overwhelming challenge to approaching TOD in Holyoke. Solutions here involve education for the private sector about the planning technique's ideals and tested results, supportive legislation from state officials, considerable municipal improvement projects to improve the area's image for investment, aggressive public relations strategies to garner community support, efforts to assume developers' responsibilities to entice their interests, and improved regulatory standards all serve to improve the climate for development investment.

Financiers and developers want proof that TOD will make money and shows some demand. Education, profit consistency, phasing, value capture, special loan funds, federal funds, and legislation all reduce development risk and encourage innovative development practices in communities like Holyoke, and transit-oriented development holds promise for all of these development interests in the Paper City.

Despite its nascent place in Massachusetts, TOD has proven itself in other regions of the country and has offered tested lessons for other regions to learn. Referenced earlier, education is a critical solution to an uninformed private sector. Top-down smart growth advocacy is moving across the state from Boston, catching communities in its wake and, in the Commonwealth's opinion, affecting communities for the better (Department of Housing and Community Development, 4). The Pioneer Valley would be wise not to wait for this wave, however, instead actively educating the private sector about transit-oriented development, its benefits and challenges, and examples of successful projects in similar regions across the country. Hosting planning conferences and community discussions to area communities invested in the technique would help these communities share resources and make them appear brighter on the radars of visionary lenders and developers enticed to the Valley's development market. The region has to prove its interest and commitment to the technique to get the ball rolling faster than the crawl from Boston allows.

One important lesson for financiers and developers to learn in order to improve perceptions of risk in a dynamic development market is that mixed uses incorporating housing, business and personal retail and/or human services generally are less prone to market forces, providing more profit consistency than single-use development accommodates (Dittmar and Ohland, 94-98). Additionally, the district's spotted structural landscape lends it to infill development, a preferable and profitable method for residential realty markets over large-scale traditional neighborhood development or enclave development characterized by lower land purchasing costs (Ryan and

Weber, 106).

Another method to reduce risk for an unfamiliar project is to phase them over time so as to require minimal investment before the investment proves its value. Unlike shopping malls, which have their highest returns when they first open, TOD projects tend to experience a value gap, because these projects take on considerable challenges to transform neighborhoods and test new methods like higher density or limited parking where profit is unproven (Dittmar and Ohland, 93). Developers may delay creating high-density market-rate housing until commercial office and retail proves it can exist from its proximity to transit (Calthorpe, 45-47). Phasing also allows developers to focus initially on elements with highest projected returns and to participate in a project when a particular phase favors their involvement (Cervero, et al., 51-52).

Infrastructure investments like transfer stations, improved bus shelters and information systems at stops, road improvements like bus bays cut into the sidewalk in order to invite service, and dedicated lanes for BRT all signal permanence and could induce property speculation and increased values immediately around these projects and system-wide. Since both the public and private sectors share an interest in increased property values, this point lends itself to joint development similar to the integrated efforts to make the Intermodal Transportation Center a reality (Audirac, et al., 56-58). Portland Oregon's \$57 million streetcar has generated almost \$3 billion in development along corridor since it opened in 2001 (Center for Transit-oriented Development (1), 9). Although case sensitive and unique in each situation, public-private partnerships for strategically located projects should be considered throughout implementation and management throughout the transit system to improve TOD's regional applicability in the Valley. (Cervero, et al., 34-41)

Wary developers should recognize transit-oriented development's potential for value capture, a term that refers to benefits incurred from complementary investments from other parties. Local government investment can produce solid public returns, including more livable communities, property taxes, sales tax increment, special assessments, parking fees, utility user fees, business license fees, and the "multiplier effect" generated by the new jobs and businesses. Transit agencies benefit from lease and sale agreements with land uses complementary to its riders' demands, generating property revenue and supporting ridership to cover cost of transit service that rarely covers its operational costs. Transit agencies and developers both benefit from reduced parking requirements in TOD districts by supporting pedestrian access to transit services. TOD's onus for integrated responsibilities and benefits helps value capture to compel development, and it should prove to be a valuable tool in Holyoke. (Dittmar and Ohland, 88-92)

The benefits of location efficiency can translate into direct savings for individuals, households, regions, and nations. It seems intuitive – and it has been demonstrated – that residents of denser, transit-rich neighborhoods spend less on automobile transportation than people in auto-dependent areas. This same effect is visible at the metropolitan level. Average household spending in auto-dependent metropolitan areas such as Houston, Atlanta, and Dallas was over \$8,000, compared to less than \$6,000 in New York, Boston, and Chicago and slightly over \$7,000 in Washington, D.C. and San Francisco. Equally striking was the difference in transportation spending as a percentage of total household expenditures, which ranged from less than 15 percent to over 20 percent. (Belzer and Autler, 9-10)

The question is not just how to reduce that spending, but also how to capture the value of the savings. Some methods for doing so have appeared in recent years. The disparities in transportation spending among different locations have been recognized in the form of a new financial instrument called a location efficient mortgage (LEM). They allow people who live in location-efficient neighborhoods and who take advantage of that fact to reduce their spending on transportation by owning no cars or fewer cars. Savings on transportation allows qualified borrowers to obtain a larger loan than they would be eligible for under the standard underwriting formula. For many, this can make the difference between being able to buy a home or not, or at least the difference between an adequate home and one that is too small for the family's needs. (Belzer and Autler, 10)

The location efficient mortgage is the most explicit way of capturing the value from reducing automobile dependence, but there are others. Parking is a significant but generally under-recognized component of high spending on transportation. However, the cost of parking is not always reflected in the cost of driving; rather, parking is often paid for indirectly. The financial analysis in the section on financial return presented below shows that reducing parking requirements could have a significant impact on housing costs. In San Francisco, a 700-square-foot unit that would sell for \$320,000 with parking would sell for roughly \$280,000 without parking. This is in line with empirical research that has found that the average increase in the price of a housing unit with a parking space in San Francisco was \$39,000 to \$46,000 (Jia and Wachs 1997). While it is not feasible in most cases to eliminate parking altogether, individuals can still reap benefits if they can choose whether or not to purchase or rent a parking space. This involves "unbundling" parking from housing and creating a separate market for it. (Belzer and Autler, 10-11)

Efforts to limit development costs include special loan funds available to communities with unique development objectives. In addition to these tax credits, financing strategies for parking and incentive methods improve the bottom line for financiers and developers. Increasingly, special loan funds are supporting retail that is part of mixed-use developments and will take time to build a market. The Downcity Partnership, Inc., in Providence lends a Revitalization Loan Fund for mixed-use rehabilitation projects where there is a lag time for ground floor rents to catch up to the rents that can be generated by upper floor housing and office uses. Dittmar and Ohland expect the New LISC Retail Initiative and Fannie Mae's American Communities Fund, a community development investment fund that provides debt and equity to support neighborhood housing and community revitalization efforts, to be more receptive to urban mixed-use projects. (100-108)

In addition to Fannie Mae's LEM, federal funds include the Federal Transit Administration's Livable Communities Initiative to strengthen the link between land use policies and urban design, to stimulate increased participation by community organizations and residents, to increase access to employment and education, and to leverage resources. The Department of the Treasury's New Markets Tax Credit, a new federal financing program, may help finance more retail in low-income neighborhoods initially intended to focus on small business finance but recently used more heavily for commercial real estate development. The Department of Transportation's Transportation and Communities and System Preservation (TCSP) grant is a

comprehensive initiative of research and grants investigating the relationships between transportation, community, and system preservation plans and practices and identifying sector-based initiatives to improve such relationships. The Department of the Interior's Historic Preservation Tax Credit provides federal income-tax incentives for the rehabilitation of historic income-producing properties. (Dittmar and Ohland, 100-108)

State legislation offers the potential to help Holyoke to attract attention from the private sector and should encourage more interest in redevelopment projects in the city. As summarized earlier, the Commonwealth has adopted unprecedented interest in comprehensive statewide planning initiatives, favoring smart growth and its slew of development techniques.

M.G.L. Chapter 40Q defines district improvement financing (DIF) in Massachusetts as a method to channel tax dollars into targeted redevelopment districts. According to the Executive Office of Environmental Affairs (2), DIF provides significant flexibility in planning for the district's housing and commercial needs and allows the use of tax increments for less than 30 years to fund both affordable and market priced housing projects. The legislation also provides financial benefits to developers by providing infrastructure and surrounding amenities to support their projects. Early public funding takes the initial burden off the developer and minimizes risk. (7-10)

M.G.L. Chapter 40: Section 59 established tax increment financing (TIF) as a method to reduce development costs for qualified projects by delaying local tax payments over a number of years until maturing to full tax payment after a period of less than 20 years. TIF provides a direct upfront benefit to a developer in the form of tax relief, reducing immediate payments to defer a project's construction costs. The City's 1999 Master Plan suggests creating downtown economic opportunity areas to facilitate TIF in the district (4.26). Developers utilizing TIF benefits can also often access other state financial incentives such as Investment Tax Credits, Abandoned Building Tax Deductions and Research and Development Tax Credits (Executive Office of Environmental Affairs (2), 11-14). Advocates contend that this program creates tax revenue and jobs where business may not have located TIF focuses on job creation and provides increased tax revenue and improved standards of living than were possible without development. Detractors, meanwhile, argue that these tax break programs improve specific locations at the expense of the greater community, spending money to make district improvements while starving budgets for programs typically funded with property tax revenue. In any case, the question to use increment financing tools is contentious but necessary for Holyoke to best attract developers with aims of supporting transit-oriented development. (Krohe, 21-25)

M.G.L. Chapter 40: Section 60 provides conditions for communities to establish urban center housing tax increment financing (UCH-TIF) zones in order to create housing in commercial districts using deferred tax abatements for up to 20 years under the stipulation that some number of units – 25% or less defined flexibly so as to not jeopardize the economic feasibility of a project – be reserved for affordable housing in perpetuity. Some local practitioners have commented that the new law – enacted in 2005 – does not translate well with commercial properties in a given mixed-use project or with complementary conventional TIF agreements as prescribed in M.G.L. Chapter 40: Section 59 (Bartolini). The Department of Housing and Community Development, the agency that administers the law, recognizes these challenges and

expects that lessons from the program will help to amend the law to improve its functionality while preserving its intent (Fitzgerald).

M.G.L. Chapter 43D, *The Expedited Permitting Act*, provides technical assistance grants for communities that adopt the state-guided program. The City may appeal proposed projects of 50,000 sq. ft. gross floor area in commercial, industrial or mixed-use zones with established and underutilized infrastructure may appeal to the Commonwealth's Interagency Permitting Board for recognition as a priority development site. In 120 days after approval, the City must put procedures in place to be able to review and approve or deny the development application within 180 days. The Department of Housing and Community Development provides a one-time technical assistance grant up to \$200,000 to help communities prepare for this new institutional structure. The City of Holyoke should consider adopting this law as a method to attract developers with fast-track permitting, a significant interstate and interregional advantage. (Department of Housing and Community Development)

Beyond these general conditions, local officials have taken steps to improve the community's image with far-reaching projects and initiatives. While these impressive efforts have generated hope and ambition in the city, local officials can do more to encourage the qualities of TOD without necessarily becoming invested in state and/or federal programs. These steps include inviting the media to chronicle progressive initiatives, attracting business by approaching business, and refining regulatory barriers to encourage TOD-supportive land uses and features. These steps are described in greater detail below.

The City need not jump at these long-term and litigious options mentioned above to stimulate investment; it may first prefer to see what short-term, low-commitment municipal projects will do improve the area's image and attract private investment conventionally. The City has already taken considerable steps to improve the community center and waits to realize increased demand and investment from its efforts. Although it is behind schedule, the Canalwalk project still enjoys formidable potential for economic development in the Arts and Industry overlay district, and that potential may translate to the Intermodal Transportation Center area with additional funds from the Commonwealth for infrastructure construction and pedestrian improvements. Once it comes online, the ITC itself may realize its potential to encourage speculation in its immediate vicinity. If these projects produce the returns that federal, state and local officials anticipate, that success will allow the City to target specific areas still underperforming with small improvement projects or with the incremental programs mentioned above.

Along the way to an improved climate for development, the City should target the media to improve its image with a broad segment of the regional population to educate residents and prospective tourists about its objectives and goal to encourage investment through transit-oriented development. Not only would this effort serve political ends with constituents, popular press would help to turn the city's unfavorable reputation and attract attention for positive reasons, mitigating discouraging news and, hopefully, encouraging interest and demand for the city. Also, financiers and developers are more likely to engage in a highlighted project if it has the support of the community and, consequently, if it shines well on them. (Dittmar and Ohland, 83-85)

Another way for municipalities to reduce risk and attract investment is to assume the responsibilities that developers often incur. For instance, the Salem Chamber of Commerce conducted a market analysis to determine underperforming, lacking and saturated commercial uses in and around the city's downtown. With this information, the Chamber could target business uses in high demand in the area and could work with the City to develop incentive packages catering to a particular business. Whereas a retail store based on the South Shore may not have been considering expansion opportunities North of Boston or could have been weighing relocation to a number of communities, the Chamber's efforts to do the extra work and find that business has the potential to fill an economic need in an increasingly competitive regional market. The City of Holyoke could follow a similar path to assess its needs and target businesses that would profit from that need.

The City could examine regulatory barriers confronting transit-oriented development in the district. These barriers generally appear in concerns for parking requirements and for development incentives. In both cases, new zoning should appreciate its authority and aim to resolve these barriers.

The most direct way to reduce parking costs for development is to impose maximum parking requirements in zoning codes (Dittmar and Ohland, 115; Nelson Nygaard Consulting Associates, 45). Most TOD communities require 1 to 1.5 parking units per residential unit, while some daring zones do not require parking at all, instead leaving the issue to market forces. Besides decreasing these requirements, another element to reduce costs of parking is to separate requirements for parking from lease agreements, making lease agreements less expensive and allowing leaseholders to pay for what they use in one of the downtown district's long-term parking garages. Both of these strategies should reduce costs of development considerably and provide developers with more creative leeway to meet profitable bottom lines. (Nelson Nygaard Consulting Associates, 47-54)

The City should allow some incentive for developers who choose to pursue valuable TOD-guided projects. One local option applicable almost immediately is to revise review standards to decrease fees and to expedite approval for innovative projects that go beyond the objectives set forth in existing zoning. Another option is to adopt new zoning codes that allow transit-oriented projects by right without costly and time-consuming requirements to meet conditions before construction begins. As noted earlier, the City may also choose to take advantage of M.G.L. Chapter 43D.

#### 4.c.ii: Placemaking through Zoning

Density, prohibited and allowed land uses, and transportation demand management (TDM) all have shown significant benefits in TOD communities. These measures would help to support a pedestrian environment by discouraging vehicular traffic through the space.

Revised zoning should concentrate development around the ITC, focusing employment centers in 500-ft. to 1000-ft. and residential units in ¼- to ½-mile radii around the hub. To that end, density should aim to achieve employment densities of 50 to 75 employees per acre while perpetuating the district's existing residential densities of 40 to 80 units per acre, all with primary entryways opening to main streets in the direction of the transit node. These densities aim to

achieve results similar to contemporary metropolitan centers, and, while Holyoke is a small city in a second-tier metropolis, its existing density allowances and potential development sites coupled with increased transit service lend credence to this comparison. (Belzer and Autler, 18; Dittmar and Ohland, 56-57; Ryan and Weber, 104)

New zoning should prohibit automotive-driven land uses. These land uses typically include:

- drive-thru services;
- gas stations and auto repair;
- general industrial uses; and
- big-box retail that often demands excessive parking allowances. (Belzer and Autler, 18)

In contrast to these prohibitions, new zoning should allow active and convenient land uses by right to encourage a transit-supportive environment with considerable location efficiency. Dittmar and Ohland define the following land uses as particularly supportive to employment centers and residential neighborhoods in transit-oriented development districts:

- multifamily housing;
- banking;
- restaurants;
- neighborhood grocery;
- convenience retail;
- business retail;
- personal retail;
- child care; and
- recreational opportunities. (116-118)

Residents in TOD districts require less parking. While car ownership in small metropolitan regions stands at 1.7 cars per household, households living in TOD districts in those regions own only 1.1 (Center for Transit-oriented Development (2), 10). As an example, 39% of households in the New York City region own more than one car, whereas 8% of households in the region's TOD zones own more than one car (Center for Transit-oriented Development, 12). TOD districts often require 1-1.5 spaces per dwelling unit and variable but considerably fewer spaces for commercial use compared to its conventional suburban counterpart (Office of Commonwealth Development, 9).

To discourage car use in the TOD district, revised residential parking standards should require 1 to 1.5 spaces per unit maximums instead of conventional 2 spaces per unit minimums offered in many suburban communities. This should not be a contentious adaptation, as the 2000 U.S. Census notes that 26.6% of Holyoke households had no car at all, while 44.5% had only one car. To preserve residential parking on neighborhood streets, local officials should consider requiring permits or short-term meters with exemptions for those who live in the active district (Nelson Nygaard Consulting Associates). Additionally, new zoning should require landscaped buffers around parking lots to make a typically desolate area more attractive while reserving space for parking expansion if demand requires the effort (Kavage, et al., 51).

The City can also use zoning as a tool to compel the business community to employ transportation demand management (TDM) policies in order to direct parking regulations

towards the objectives of TOD. Although TDM offers several compelling programs, two stand out as particularly applicable and adaptable to the Holyoke TOD example: parking cash-out and shared company vehicles. The policies discourage personal transportation to work while offering incentives and accommodating occasional trips. Parking cash-out reimburses employees who do not use parking spaces paid for and provided by employers, at once discouraging developers and/or employers who demand excessive parking in transit-supportive districts while supporting employees who commute via transit. Shared company vehicles provide employees or others who have bought into the business' program the opportunity to use a vehicle when they need to run an occasional errand without compelling an office of employees to drive to work because of a five-minute midday trips. This policy further supports transit riders and comfortably reduces parking demand. (Nelson Nygaard consulting Associates, 64-72)

Finally, zoning amendments may choose to include elements of low-impact development (LID), an innovative stormwater management approach with a basic principle that is modeled after nature: manage rainfall at the source using uniformly distributed decentralized micro-scale controls. LID's goal is to mimic a site's predevelopment hydrology by using design techniques that infiltrate, filter, store, evaporate, and detain runoff close to its source (Low Impact Development Center). Although not a direct solution related to TOD or pedestrian-friendly districts, LID is a sustainable and compelling technique in line with smart growth initiatives that an infrequent rezoning effort should attempt to include when available.

#### 4.c.iii: Access in a Multimodal Environment

Improved access from the ITC to popular downtown recreational, employment and entertainment destinations like Veterans Park and Open Square should enhance the pedestrian environment and help to achieve the district's lofty TOD-driven objectives. Also, a street hierarchy master plan will facilitate local officials to locate infrastructure as it corresponds to the preferred mode on a given corridor. Finally, the bus fleet could utilize rider convenience features to compete with the convenience and availability of car use.

Closing Maple St. between Hampden and Dwight Sts. between the ITC and Veterans Park would enhance the site's pedestrian and bicycle accommodation and would provide buses, taxis and shuttles with unique space to freely navigate separate from car traffic. Commuters could enjoy unencumbered access to the Park, securing it as an active and inviting meeting place or as an urban people-watching destination throughout the day. Related to this suggestion, PVPC conducted a study of two-way traffic implications on High and Maple Sts., concluding that both streets are capable of handling traffic demand. The report supported converting High and Maple Sts. to two-way traffic between Appleton and Dwight Sts. (Pioneer Valley Planning Commission (2), 19). This report does not address the concept of closing Maple St. between Hampden and Dwight Sts. to transit and rider-related traffic.

Because unencumbered access is more important than distance in a pedestrian commute, the City should pursue providing direct access between the ITC and considerable destinations like Open Square, a sizeable mixed-use redevelopment site in the Arts and Industry overlay district, via John St., involving permeability through an existing storefront on High St. and relocating an historic bridge over the First Level Canal to Open Square for pedestrian use. For that same reason, drivers should access recessed parking lots hidden behind buildings from side streets so



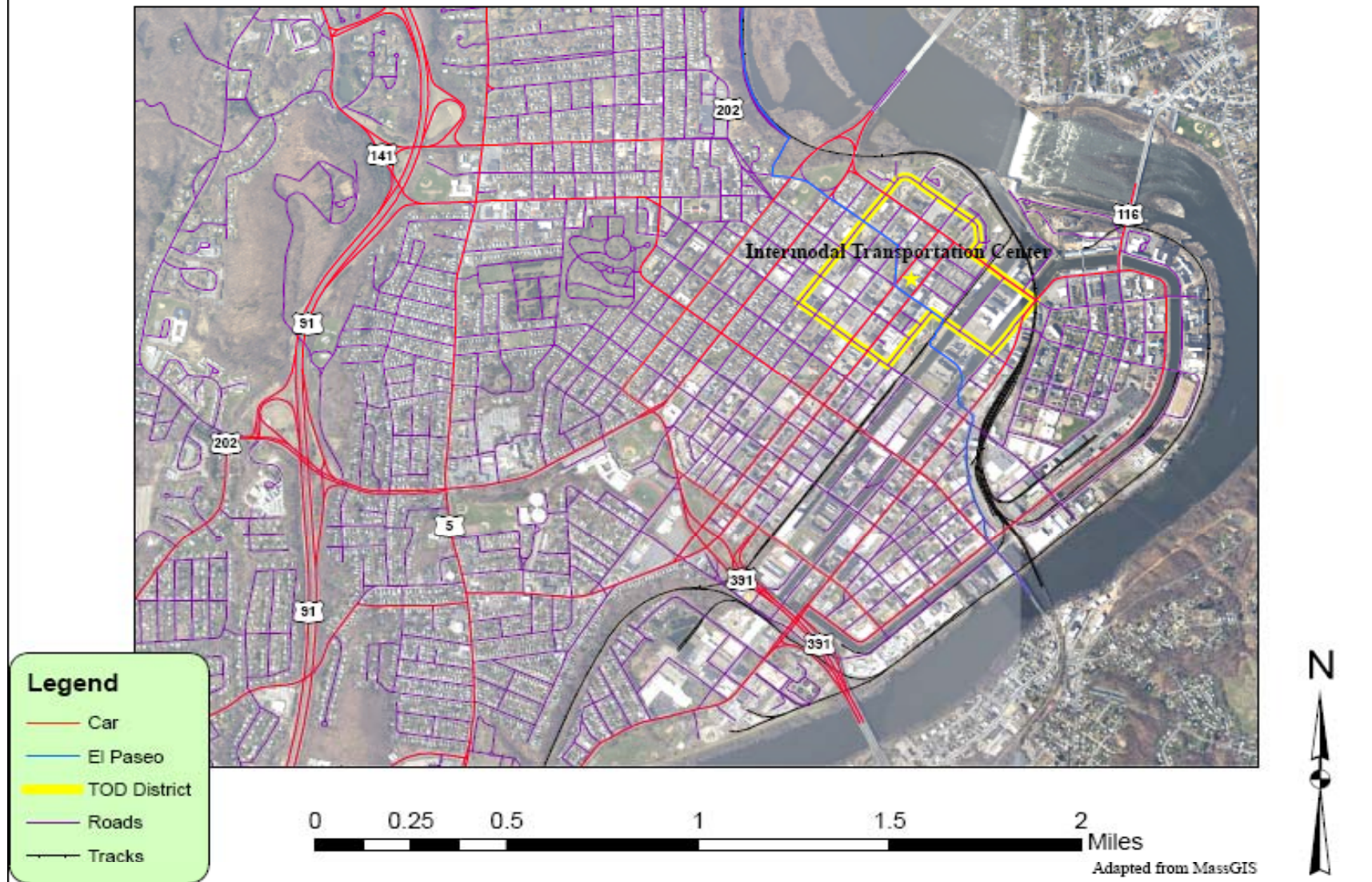
as to avoid ingress and egress conflicts with pedestrians walking on busy corridors. More street calming features like raised crosswalks and intersection tables, narrow traffic lanes and medians would all help to discourage threatening traffic while supporting the primacy of the pedestrian.

Although the City offers little bicycle infrastructure on its streets and in its parks, local officials hope that the Canalwalk project will improve Holyoke's image as a bicycle-friendly community. Itself an extension of the Connecticut Riverway, the Canalwalk corridor may connect South Holyoke with downtown by way of a pedestrian-bicycle path recently advocated by graduate student consultants for establishing ways to connect the Canalwalk throughout the City (Calcina, et al., 13-48).

To further improve bicycle, car and transit access, the City should develop a master plan for its downtown street network, clarifying direct routes to popular district destinations like Canalwalk and the ITC and providing multimodal accommodations on an efficient traditional grid (Swords, et al., 45-47). With similar interest, Charlotte imposed a pedestrian overlay district on fourteen corridors to designate those streets as supportive of pedestrian use and discouraging of heavy vehicular traffic (Goodwill and Hendricks, 18). Holyoke's plan could offer a consistent scheme from which future infrastructure projects and traffic-requisite land uses like general industry and automotive services can consider locations. Following from this plan, the City should cooperate with PVPC's efforts to coordinate regional bikeways, providing bike lanes through downtown on limited traffic corridors. Continued pursuit of the Canalwalk project and its recommended El Paseo bikeway should assist these objectives, too.

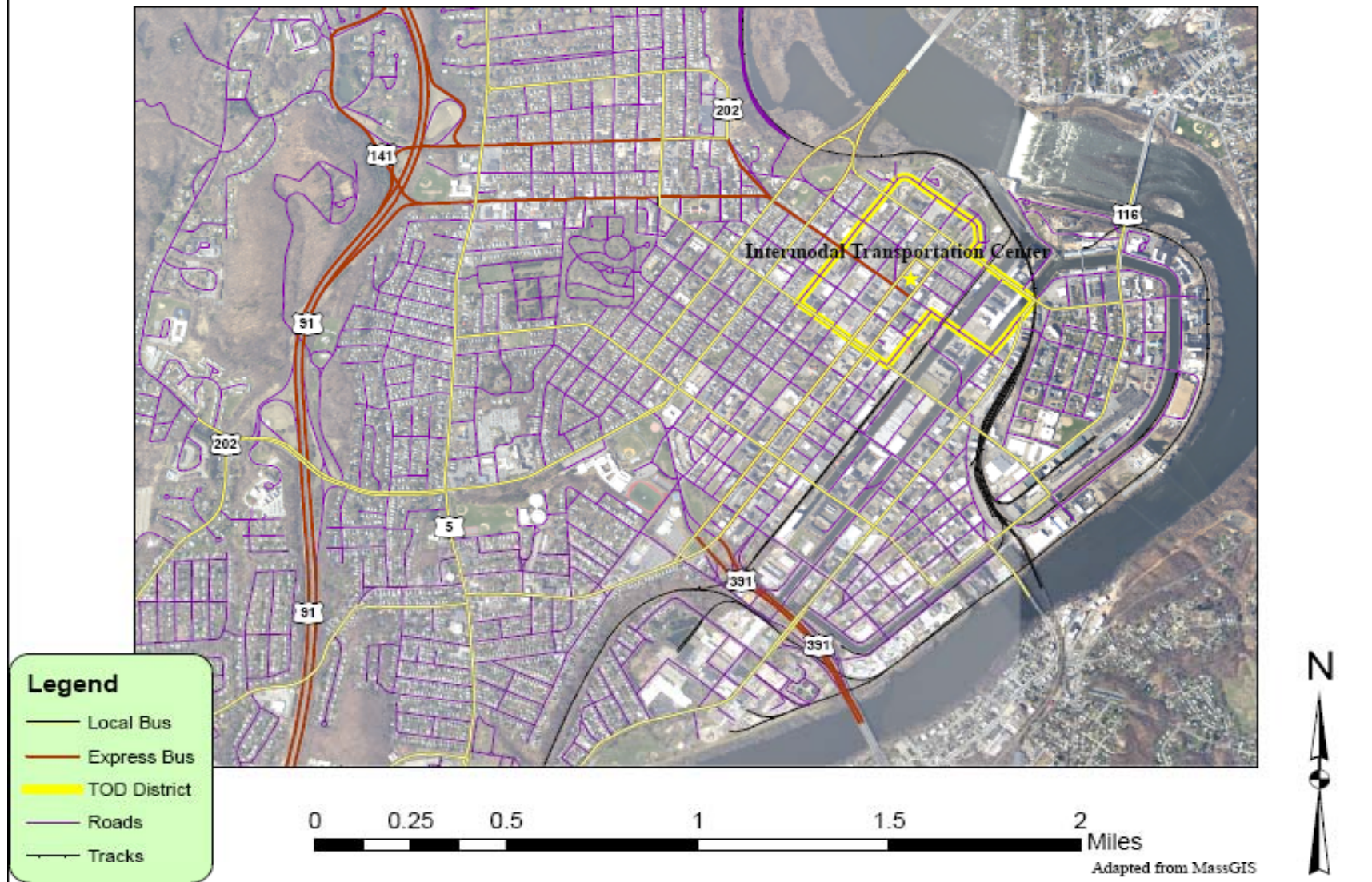
A comprehensive corridor plan could utilize signage to designate regional corridors and to direct large traffic volumes onto accommodating corridors while reserving less congested corridors for non-motorized or transit purposes. Such a plan would provide an overarching vision of appropriate space for competing modes in a vibrant multimodal environment, would be useful to determine appropriate locations for future infrastructure for each mode, and would create predictable and manageable conflict points between the modes. In the absence of such a plan, the city experiences traffic conflicts throughout the downtown network and lacks a committed direction for future issues. The street hierarchy master plan would conveniently direct drivers to parking garages around the downtown for long-term parking. A shuttle service, either municipally or privately funded, could provide door to door service and further encourage use of the parking garages instead of pushing drivers to clamor for a close curbside space. Also, to further facilitate driving access and perhaps spur economic development, the City may choose to reconsider adapting some of its one-way streets to two-way streets. The City should be hesitant to support additional parking and driving conveniences, however, because of its interest in creating an active pedestrian district around the ITC (Pioneer Valley Planning Commission (2), 19). Recommendations for the street hierarchy are provided below (*Car and Bikeway* and *Local and Express Bus Routes* maps).

## Recommendation for Car and "El Paseo" Bikeway Routes





## Recommendation for Local and Express Bus Routes



Compellingly, Holyoke's downtown residents fit a community demographic that has traditionally supported transit-oriented development and should continue to support it in the future. Immigrant families and non-family households, echo boomers, and industry growth are proven familiar actors in TOD's success across the country (Dittmar and Ohland, 10-12). Hispanic residents make up 41.4% of Holyoke's population, while non-family households compose 36.7% of Holyoke's population (U.S. Census). The region's population of residents older than 50 yrs. old is expected to increase into the year 2030 (PVPC, 22). Recent interest in extending commuter rail from New Haven to Springfield has renewed conversations about the extension's implications for regional economic development (Roscoe). Holyoke's Puerto Rican residents, college-aged regional residential market, aging population and burgeoning opportunities to connect Springfield to NYC and Boston all encourage the district's achievement and look ahead to PVTA's growing popularity.

Opportunities to improve rider experiences on to transit service involve policies to encourage transit's speed and comfort and policies to discourage cost and convenience of car use. Park and ride lots at regional gateways outside the community could at once encourage transit use while preserving a comfortable and clean environment in the downtown. Increasing express service along corridors to other downtowns and service centers and concentrating residential development around transit sheds at one-mile intervals could attract more riders to the system. Incorporating intelligent transportation systems (ITS) technologies like real-time automatic vehicle location (AVL) for more predictable commuting times, transit signal priority systems on transit corridors to facilitate on-time traffic flow, and updated community notices greeting passengers at the ITC would enhance the ridership experience to a competitive level with both car and rail use. These ITS technologies often utilize wireless data communication, and a growing number of transit agencies from around the country are "wiring" their vehicles with WiFi to induce those permanently attached to their laptops out of their single-occupancy cars and onto mass transit (Smith). Finally, community identification as employed on a PVTA bus with murals depicting points of interest in Northampton offers an opportunity to literally paint Holyoke in a better light throughout the PVTA service region and to engender a familiarity and comfort between the transit organization and riders. An incoming fleet of new, more efficient buses provides a great time to take advantage of this community project.

#### 4.c.iv: Institutional Policies for Implementation and Management

A successful TOD district in Holyoke may require the following management institutions to coordinate its complex features:

- a business improvement district (BID) group;
- a parking advisory board; and
- an economic development staff and TOD coordinator.

While a group of stakeholders with presumably local leadership would assume the responsibility of implementing the TOD district and providing an environment for its success, a BID group may be more appropriate to assume management responsibilities of the district. As mentioned in the City's 1999 Master Plan, BID groups typically manage areas where the business community is significant enough to assume management practices (4.20). These practices typically involve maintenance, daily surveillance, and event planning. In general, BID groups encourage ownership of the space, organized representation between the district and City Hall, and district

policy enforcement with trash, parking and signage. (Dittmar and Ohland, 65)

Given the critical role parking plays in TOD issues, a separate parking board would be appropriate to review parking proposals and to hear appeals. This board could include staff from an assortment of invested stakeholders – the City, the business community, neighborhood organizations, the transit agency, etc. – to facilitate a keen awareness of the issues in play. Beyond review and appeal duties, the parking group could assume a more progressive role to coordinate land uses with complementary parking schedules to encourage 24-hour parking lots and to develop shared parking strategies. These efforts would aim to reduce the number of spaces in the city for development but use remaining spaces to their greatest use. (Dittmar and Ohland, 66-67; Nelson Nygaard Consulting Associates, 72)

The City could also designate or appoint dedicated economic development staff to serve as local leadership for issues related to targeting and retaining business for the TOD district. This staff would be responsible for market studies and for an awareness of the district's economic demands and saturations (Dittmar and Ohland, 70-71). Economic development staff may also consider joint development implications with area colleges. Mentioned in the City's 1999 Master Plan, Holyoke Community College, member schools of the Five College Consortium and even the University of Puerto Rico may all have an interest in locating classes in downtown Holyoke (4.20). Again, given the planning technique's complex and integrated features and its inclusion of several stakeholders with a breadth of agendas, this staff would need to be involved in and aware of several synchronistic elements at once.

#### *4.d: Threats*

While factors mentioned in the previous section set a beacon of opportunity for the City to find its renaissance, there will continue to be ongoing challenges along the way. Many of these refer to a conservative development market in a second-tier metropolis while other issues arise from providing and managing a comfortable environment in a successfully vibrant district. Although the City can play some role to direct and encourage solutions to these threats, in many ways, these issues are out of local officials' hands.

##### 4.d.i: Financing Options to Leverage Private Investment

The TOD district will continue to confront a persistent hesitation from the finance and development sectors for the creation of bus-based transit-oriented development. These development leaders are significantly wary of the technique to start with based on its unfamiliar and unproven qualities; to implement BTOD in a community without regional support may be an investment too challenging to risk.

The concept of BTOD will continue to remain risky without champions to tout its potential and to tailor partnerships. Because TOD is most successful as implemented on a regional scale, this leadership should come from a regional advocate. Regional advocates have exhibited both wariness and limited understanding of the issues and solutions presented by TOD and BTOD specifically. The region is only slowly developing an understanding for smart growth implementation – a commonly understood precursor to transit-oriented development; how can communities be expected to understand and implement a more finely tuned planning instrument without mastering its foundation?

Support from industry leaders also has been slow to catch up to regulatory interest in TOD. Whereas most single-use commercial developments rely on predictable traffic patterns and volumes from the Institute of Traffic Engineers (ITE), this group has shied away from offering conclusive empirical evidence regarding similar expectations in mixed-use, TOD districts. A similar criticism holds true for planning organizations like the American Planning Association and the Congress for the New Urbanism, both of whom should have the technical prowess and established reputations to persuade ITE to examine planning research. Individual research addresses observational and practical findings from communities utilizing the technique, but, without far-reaching consensus from a trusted organization like ITE, this research will not translate to individual banks and developers attempting to accommodate an unexpected amount of traffic.

In addition to traffic, there is a lack of understanding regarding TOD's impact on market fluctuations. While research has concluded that mixed-use development protects investors from market cycles better than single-use developments protect, a lack of mixed-use development suggest that there seems to be few persuasive conclusions cycling through the development community. As transit-oriented development establishes itself more in Massachusetts and as BTOD becomes a competitive alternative to costly rail reliance, market favor may turn, but, for now, the market shows little interest in TOD.

A significant threat to any transit-oriented development is the perpetual tendency to create

development along intended TOD principles without supporting the development with transit. Laguna West, a model TOD community outside Sacramento, signaled the beginning of a new metropolitan development paradigm in the United States. Planned by Peter Calthorpe, a notable leader in traditional planning advocacy, the community confronted mixed-use development challenge from the beginning. Despite its vision, the project failed because of little demand for dense neighborhoods and because residents lobbied to move the transit station outside the city's focal point due to traffic congestion. Today, Laguna West is another California low-density suburb. (Tumlin and Millard-Ball, 24-26)

Aside from development, the laudable development programs offered by state legislation in recent years fail to apply to Holyoke. PVPC detailed implications for the Commonwealth's smart growth initiatives in the region in Valley Vision 2, the Commission's long range comprehensive plan, but, at this time, the City is unsure if the program would advance its interests given its already significant and competitive density allowances and available affordable housing. Many of these programs reserve a segment of the development for affordable housing but also offer incentives for the local government and developers alike. In a city with an estimated 70% subsidized housing and an already competitive density allowance downtown, the burdens and rewards do not entice local leaders to pursue these programs (Konstantinidis, Mendrala). This should not be surprising when it is commonly assumed that this legislation was primarily intended for those communities most approximate to Beacon Hill (Curtis). In time the Commonwealth may adapt its legislation to apply to greater statewide interest or allow local and regional authorities to massage overarching legislation to its unique considerations, but that is not the case today and there are few signs of change.

There is limited information on the role Holyoke's existing and projected demographics will have in property values. Although the City's immigrant, low-income, elderly and non-household population tends to support transit service across the country, there is little research about this population's effect on property ownership and value. Already confronted with slumlords and absentee landlords who care little for the quality of the property or for those whom inhabit it, Holyoke leadership needs reassurance that new housing units – whether rental or ownership – will capture the value of its investment.

#### 4.d.ii: Placemaking though Zoning

The City wants to take advantage of many of the state's legislative incentives, but, as mentioned above, they are catered for Boston's suburbs and do not fit the community's unique needs and opportunities. Adopting M.G.L. Chapter 40R makes a community eligible for incentive payments based on the housing it plans to build. These payments range from \$10,000 for 20 units or less to \$600,000 for 501 or more units. In addition to the incentive payments, communities with approved smart growth districts receive bonus payments of \$3,000 for each unit of new housing beyond a density prescribed by zoning. The Commonwealth also favors communities that adopt Chapter 40R for discretionary funding projects. While these incentives provide considerable benefits, they do not help a community already implementing smart-growth densities between 60 and 80 units per acre downtown.

The City's accommodating downtown parking encourages car use in an area designated for increased pedestrian traffic, increased transit use and reduced parking requirements for new

developments. It is hard to imagine the community advocating for transit use as a convenient alternative to car use when two parking garages sit only one block from Maple St., the trunk corridor for buses leaving the Intermodal Transportation Center. The problem is amplified by plans to build a parking deck next to the ITC over passenger drop-off and loading bays. For the TOD district to succeed, the City should require 1 to 1.5 parking spaces per residential unit. Commercial districts are more case-sensitive, but the City would benefit from surveying other TOD districts in Massachusetts to determine satisfactory parking allowances for the several land uses supportive of transit-oriented development.

#### 4.d.iii: Access in a Multimodal Environment

Pedestrians and bicyclists will compete for limited infrastructure as development accommodates the pedestrian scale, but this conflict signifies the success of the district in many ways. To address these conflicts, the City and PVPC should improve bicycle infrastructure like equipment lockers and racks and information kiosks at the ITC, at local parks, or around the district's periphery to facilitate walking in a pedestrian environment.

Personal cars will experience greater conflict as well, competing with increased transit service, pedestrians and bicyclists in or crossing the city's frequent streets. While this conflict may encourage drivers to use transit or a bicycle to travel to downtown Holyoke, the parking garage will continue to lure drivers with only the promise of a downtown space. Consequently, drivers may find it more difficult and more costly to navigate to destinations, but, again, these challenges speak to the district's interest in discouraging traffic and encouraging transit use and pedestrian traffic.

Transit will find the same conflict with pedestrians, bicycles and cars, all competing for the same traditionally narrow space on the road. Unique for transit service, though, PVTA may need to resolve greater demand for bicycle parking and carry-on accommodations. Currently, nearly all buses have seasonal racks capable of carrying two bicycles, but greater bicycle use in Holyoke or in the Valley generally due to bicycle-friendly development patterns may push demand for these racks beyond its capacity. PVTA may have to invest in lockers, racks or on-bus devices to accommodate this new demand.

#### 4.d.iv: Institutional Policies for Implementation and Management

Because of a burgeoning necessity for stakeholder involvement and cooperation, transit-oriented development will require a considerable leadership effort to keep involved parties informed and positive. The role of a TOD director cannot be overstated: someone must ensure an open transfer of information, issues, solutions and agendas between the several stakeholders requisite to transit-oriented development.

Perhaps the most striking threat to implementing successful TOD in Holyoke is its limited acceptance and appreciation in the region. Several research articles have commented on the importance of creating a regional nexus between transportation and land use, and TOD is unlikely to achieve its potential to benefit the local and regional community (Belzer and Autler, 16-17; Calthorpe, 72-76; Kavage, et al., 46-47; EPA (1), 35-79). Hesitation from regional leaders and limited effort to induce the private sector to explore TOD significantly diminish the planning technique's adoption in the area.



## Chapter 5: Summary

The city and region exhibit favorable conditions to implement and sustain a thriving transit-oriented development in downtown Holyoke. Conditions of political and development industry attention, accommodating location efficiency and streetscapes, considerable multimodal infrastructure allowances, continued demographic support for transit, and local efforts to get projects from the shelves to the shovels all point to a beneficial environment in which TOD can establish a positive and competitive reputation. It will take time for transit-oriented development to engender a positive reputation in the Pioneer Valley's development community. In that time, though, the City of Holyoke could fan the development technique's flames to make the downtown area even more suitable for a TOD district.

### *Financing Options to Leverage Private Investment*

The City has received considerable attention from state and federal agencies for its interest in redeveloping the historic downtown core with visionary, regionally supported projects. This attention recognizes local efforts to put Holyoke on the development industry's radar and has helped to rectify the city's image as an enjoyable and safe community. Through its work on Hope VI housing projects, the Canalwalk project, and now the ITC project, the City of Holyoke has a record of providing the foundation for private investment. Laying this foundation is an important first step for the private sector to build confidence with the community and to recognize a profitable investment opportunity.

Transit-oriented development's greatest challenge is financing, and its greatest financing challenge is risk. To be successful, TOD must overcome its unproven and unfamiliar reputation to encourage market demand, particularly in Massachusetts and especially in the Pioneer Valley. Both as a district cornerstone and as a transit hub, TOD must seek financing interested in creating a main street feel, providing mixed-income housing, establishing community services, effectively utilizing parking, and adaptively reusing vacant properties while at the same time committed to accommodating a busy downtown transit node. Advertising TOD's potential for value capture would help to leverage this investment.

### Recommendations:

- Continue to attract competitive state and federal redevelopment grants as a way to improve the community's image in the minds of prospective financiers and developers.
- Develop contacts in the development community interested in and experienced with bus-based transit-oriented development projects.
- Explore the applicability of many of the Commonwealth's innovative planning initiatives and advocating for more appropriate codes for communities in the Pioneer Valley.
- Sponsor municipal market analyses to identify economic needs in the community and targeting businesses to fill and profit from those needs.

### *Placemaking through Zoning*

One of transit-oriented development's many actors is the municipal government, and the most significant way for municipal government to leverage its authority is through zoning. Holyoke's zoning code dictates an attractive and active traditional downtown streetscape. Most importantly, it ensures a location efficiency of density and land use variety that new TOD districts struggle to mimic. A concentration of activity that correlates with both the scale of individual buildings and the extent of the TOD district is a key factor supporting both transit and active uses such as restaurants, banks and shops that contribute to a vibrant street life. Clear and detailed zoning regulations in TOD districts across the country have been shown to achieve exemplary standards of placemaking; there is no reason why Holyoke should not realize similar achievements.

Despite its generous predisposition, Holyoke's zoning code requires excessive parking, the single most divisive issue in a TOD district, affecting residents and guests, pedestrians and drivers, and the enjoyment and safety of all. As a unique area with exceptional qualities and uses, a TOD district reserves the rights to implement distinctive parking standards to achieve its very considerate and clear objective of creating an active transit-supported pedestrian environment. Because existing business owners and residents often find changes to parking policies to threaten a functional system, changing the zoning codes in downtown to reflect a preference for transit-oriented development may prove to be politically risky.

#### Recommendations:

- Utilize traffic calming devices and street furniture to provide a more comfortable pedestrian environment and to establish the primacy of pedestrian traffic.
- Improve the immediate periphery of the ITC to accommodate increased pedestrian traffic – in particular, consider closing Maple St. between the facility and Veterans Park to transit-related traffic (bus, shuttle, taxi, and kiss-and-ride drop-off).
- Impose increased parking fees at public parking garages and lots in the downtown in order to encourage greater transit use while increasing the municipal budget.

#### *Access in a Multimodal Environment*

Holyoke's traditional streetscape accommodates multimodal access exceptionally well and provides a significant advantage for TOD's success there. The street and sidewalk networks offer valuable route choice for a range of modes and offers convenient amenities on nearly every street. New TOD communities typically mimic downtown Holyoke's street pattern, density, open space and connectivity network. Due to its historic planning foresight, the Paper City is significantly ahead of similar TOD efforts in Westfield, Easthampton and Springfield in this respect and enjoys a considerable advantage for tourism dollars.

Regardless of these advantageous opportunities, the City must work to resolve three significant concerns common to TOD districts and prevalent in Holyoke: safety, cleanliness and comfortable streetscapes. Although considerable effort has delivered significant results on these issues, there is much more to accomplish in order to improve perceptions of the Paper City as an

inviting and functional destination.

Recommendations:

- Organize with surrounding communities to agitate PVRTA to provide more frequent, more direct express routes between regional downtowns to further explore park-and-ride facilities at regional gateways at community margins, and to consider implementing rider-friendly features like WiFi internet access, all to better compete with car use.
- Advocate for regional transportation and land use considerations that support TOD throughout the Pioneer Valley. These considerations may include regional bikeway designations, regional corridor hierarchies, or expanded TOD facilities like those currently emerging in Springfield, Westfield and, of course, Holyoke.

*Institutional Policies for Implementation and Management*

Identifying stakeholders is the first critical step in developing a TOD district. The City has identified these stakeholders and has endorsed the discussion from the beginning. In turn, these stakeholders have targeted the Intermodal Transportation Center as the hub for downtown Holyoke and they have taken steps to adapt the building and its surrounding neighborhood to integrate with its potential impact. As the project continues, more stakeholders are sure to enter the development arena, advocating for the rewards that advocates of TOD tout.

Despite this solid base, transit-oriented development in Holyoke suffers from regional direction, widespread recognition and consolidated leadership. As a new planning technique in Massachusetts, state agencies are slow to offer guidance to regional and local offices, leading to limited understanding and appeal in the development community and hesitant coordinated efforts from existing stakeholders. Any project that involves a collection of stakeholders requires a substantial and consistent persistence to encourage patience, inclusion, cooperation and communication through implementation and future management. Providing an institutional structure to involve the several parties that operate in a TOD district is critical to the long term success of the area.

Recommendations:

- Amend zoning regulations to perpetuate downtown's density and mixed land use by either reducing minimum parking requirements, imposing maximum requirements, or eliminating requirements altogether to lower development costs and to realize the zoning's competitive potential for location efficiency.
- Tailor land uses to allow by right TOD-supportive commercial and residential uses while prohibiting or requiring special permits for TOD-challenging uses.
- Develop procedures to expedite permitting and to lower application costs for projects that meet model objectives of a TOD district.
- Garner favorable media relations to highlight the City's efforts and its achievements in order to improve the community's image.

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