Toward a Development Model for the Middle Ring Suburbs









Massachusetts Institute of Technology

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Appendices on mapping the middle ring and defining zones of opportunity as well as site studies are available online at http://www.naiop.org/foundation/2012reports/middleringappendices.pdf.

Note: Due to the number of maps in the Appendices, please allow a few minutes for the file to fully open.

Executive Summary

As the demographic and physical landscape of U.S. cities evolves, developers will need a sophisticated framework to identify valuable development opportunities.

The Middle Ring Suburb

The Middle Ring is defined by its demographic, geographic and physical characteristics:

Diversity — Both ethnic and cultural. A significant foreign-born population serves as a wellspring of cultural opportunity.

Income Level — Generally, incomes are at or below the Metropolitan Statistical Area median income level.

Employment Type — High levels of employment in construction, maintenance and personal services, as defined by the U.S. Census Bureau Neighborhood Change data set.

Transit Proximity — In close proximity to both major automobile and public transit infrastructure.

Older Housing Stock — Housing stock was built prior to 1969 and has been filtered in such a way that it has passed on to less affluent residents.

The Middle Ring suburbs are a category of older suburbs, caught between downtowns and (at least until the real estate crisis) the well-off exurbs and outlying suburbs. Some of these Middle Ring suburbs also used to be referred to as the "Inner Ring." Their socioeconomic decline during the past 40 years has been documented as investment went to downtown centers and exurbs. Today, the Middle Ring suburbs may have become an area of opportunity for reinvestment. The real estate crisis has shaved values in the exurbs by 20-40 percent, even in East Coast cities, while Middle Ring suburbs have retained their value remarkably well.

This proof of resilience, in combination with excellent access to urban transit and state and federal highways, as well as a trend toward slow but gradual densification, shows the contours of future investment in our cities. The gradual densification of suburbs is a process one can witness par excellence in Los Angeles. However, the Middle Ring suburb is a phenomenon mostly characteristic of the East Coast and Rustbelt cities, where a particular confluence of mass transit availability, aging infrastructure and housing stock, and particular locational advantages, such as proximity to both exurbs and downtowns can be found.

The basic premise for this particular study, and perhaps the reason why few successful developments have yet been carried out in the Middle Ring, is the need to depart from the development model usually associated with downtowns and exurbs. A novel development model may be essential for the Middle Ring, because it differs from the previous two in its socioeconomic profile, location, infrastructure and density. This study addresses the question of a new development model for the Middle Ring by analyzing its demographic and situational characteristics, as well as its strengths and weaknesses for development. It concludes by outlining the steps to be taken for development site selection and proposes a model to be implemented in such sites. The case study for this research project is Boston, because it allowed the research team to interview the area intensively.

The study first defines the Middle Ring spatially and then identifies particular zones of opportunity within it. It also contains an inventory of 12 such sites, which include three sites where actual development projects are being planned are described in detail (project profiles). Many of the stakeholder interviews, not just for the three sites mentioned, but also for several of the other nine sites, are not included. The transcripts of these interviews have been summarized by the research team noting the strengths, weaknesses, opportunities and threats that are particular to the set of sites discussed.

been identified.

The model proposed here exists in an abstract white space, disregarding the limitations and constraints that any specific site would impose. Its general principle is to:

- re-wirings; and

The model is, more specifically, based on (1) the upgrading of infrastructural joints and relations; (2) the introduction of specific spatial-programmatic ingredients that are not appropriate in exurbs or downtowns; and (3) the insertion of a series of container buildings that can be used as parking first, yet turn into office or loft space within a few years. In fact, ORG has designed such structures in an ongoing project for the conversion of the Brussels meat market area. Finally, the model foresees the deployment of a series of more generic, optimally value-engineered office or residential modules on

Based on the above, a model that includes a series of ingredients is proposed. Put together, they establish a development model particular to the Middle Ring. While it is clear that this model can and should be further developed, the particular elements of the template that make it stand out from other development areas has

• introduce specific value-adding programs;

• attract and mix potential audiences with specific infrastructural

• develop a specific parking solution.

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top of the more generic convertible parking structures. The elements contained in these bases add up to about 12 ingredients, which could be deployed in various combinations of less than 12, and tailored to specific sites. Of course, such implementation, as well as the testing of various combinations of ingredients, should constitute a next step.

The model does not depend on spectacular architecture, or highdensity development, or a big mix of uses — although these elements are all welcome. Such architectural criteria would see the finality of development as realizing something akin to a compact historic city. While such ambitions are acceptable, they are not suitable for a Middle Ring suburban transit-oriented development (TOD), because its formal structure and endogenous potential are too different from that finality. Enforcing a compact model ultimately makes development more difficult, rather than easier. The formal outlook of the model — using big boxes, simple three-story parking/building structures and commuter rail stations — might not seem spectacular or dazzling at first sight. However, we would maintain that it produces its own aesthetic attractiveness. It is neither bucolic (suburban) nor dense (urban). It is a different creature altogether.

Three aspects of the model are worthy of being noted separately:

- first, the introduction of value-adding program and spaces at low cost;
- second, the adaptation of infrastructures to wire a new kind of connectivity between differing modes of traffic; and
- third, the syntactic collaboration between elements.

Value-adding programs serve to trigger the potential of a Middle Ring suburb and make it visible. In other words, the existing situation needs to be seen under a new light, which will be possible thanks to the addition of value-adding elements. Contrary to existing downtowns, the



value-adding elements (e.g. civic spaces, parks, etc.) have not been put in place yet. Nevertheless, contrary to the exurbs, the communities that would attach value to such elements are within reach. The critical "activation switch" process is one where the existing audiences, despite not having substantial purchasing power, may be mobilized in a manner that adds value for other audiences that do. For instance, the provision of an art center would publicize artist groups, activate a community and upgrade a neighborhood, adding value to the district. Another example is a farmer's market, which takes the ongoing trend for "good food" and builds a development space around it. Both programs are simple examples, yet they have in common a low infrastructural footprint and cost, but a high visibility

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and value-adding delivery. This approach has the added advantage that some of the more vocal constituencies that may be against redevelopment are brought on board in a symbolically significant way.

Second, a critical problem regarding Middle Ring development is that its infrastructural layout is based on a fully suburban logic, with buffer spaces and distances fit for car traffic, which brings TOD density problems for both pedestrians and cars. Nevertheless, it is exactly the overlap of a suburban road network with an originally urban transit or commuter rail line that gives the development its latent centrality in the overall regional traffic grid. However, between the transit company (in Boston, the MBTA), the town, bus companies and the state (as owner and operator of highways), ownership structure of this intersection is fragmented. This fragmentation is effectively visible in the landscape of our Zones of Opportunity, and it has profound consequences. It worsens the distances one needs to travel between stations, parking areas, residential and retail — yet the extreme proximity to the station is exactly the promise on which TOD is based.

Therefore, the key is to connect flows emanating from rail, bus, commuter parking, as well as local fabric and life, into a single space that establishes an attractive mix. For this reason, the research team proposes to "domesticate" this fragmented landscape.

A good example of such domestication can be found in the bridges built by transit companies to provide access to train tracks. The security point is often found at the beginning and end of the bridge — the moment where the bridge connects to the city. As a result, the bridge simply functions as a means to access the tracks. However, if the checkpoints were at the escalator/staircase leading down to the tracks, the bridge could be integrated into the city. Furthermore, the bridge could be be designed to make this integration seamless, thus activating the lots right around it anew. Another example is the need to wire the development area correctly: heavy retail programs have logistical needs and require truck access, while more residential and transit-oriented areas do not, the only exception being that buses need similar turning radii and parking slots as trucks. It is important to avoid truck traffic along the valueadding spaces, because it destroys their contribution to the sense of community.

Yet a third example relates to the parking garages. Why are many parking garages built atop commuter rail stations such an abject failure? It is because they are single-use amenities that solely drive car traffic into an area, sometimes even by means of direct ramps from the highway. These cars bring little value to the area where they are drawn, yet they deteriorate the urban landscape.

In short, the effective zone of the TOD is ideally within a radius of 1200-1500 feet from a commuter line station. We already established that the bridge over the tracks would ideally become a public passage, well wired into the new developments. However, a regular block structure around the station reduces the capacity to traverse the TOD effectively (blocking diagonal traffic). For that reason, it makes sense to orient the main value-adding open spaces, such as farmer's markets or big-box art centers, perpendicularly to the main street or path coming off the bridge. Such orientation allows for diagonal traversing and a minimal time lost to walk from the developments along the perimeter of the TOD, and the station itself.

Middle Ring Suburbs have become a popular subject among real estate professionals and scholars. We are in the midst of a generational shift that will continue to create redevelopment opportunities.¹ The increase in value of the city center and the decrease in value of exurbs and outlying suburbs indicate a change in living patterns that will shape our cities for years to come. As the demographic and physical landscape of U.S. cities evolves, **developers will need**

a sophisticated framework to identify valuable development opportunities.

Through a series of mapping exercises that use U.S. Census data, Geographic Information System maps (GIS) and aerial photographs, a lens through which one may view the suburbs as a series of interconnected **"Zones of Opportunity"** is created. These zones are established through specific inputs deemed relevant based on situational criteria, which vary according to region or city specific issues, development types and desired mixed-use combinations. As the number of parameters to be met increases, the number of "Zones of Opportunity" decreases. This systematic approach provides a technique to identify development opportunities that may have been otherwise lost.

The Middle Ring Framework

What is the Middle Ring, and what are its potentials?

Most of the existing literature addressing the development of our cities has focused on urban centers and suburban sprawl. The tendency of scholars to generalize with regards to the suburbs has led many to overlook the complexity of this region. The discussion of sprawl or edge cities has not considered a vital area that is necessary for the rejuvenation of our cities: the Middle Ring Suburbs.

The Middle Ring Suburb is physically, infrastructurally and temporally connected to the city. The term "Middle Ring" refers to an area commonly denoted as the Inner Ring. The former is different in that its definition stresses physical location as a key factor. For the purpose of this study, the research team choose the term Middle Ring, given that "Inner Ring" does not point to the fact that **these** areas are located in the *middle* of metropolitan areas.

Up to this day, the Middle Ring has been portrayed as ground zero for suburban blight. News headlines such as "suburbs nearer to cities neglected"² are common, and it has been widely accepted that Middle Ring suburbs are more likely to be impoverished than newer exurbs.³ Nonetheless, this is only a gross generalization, given that the socioeconomic variety of its inhabitants actually offers an array of opportunities for redevelopment and growth.

The generalized belief that suburbs are mainly bastions of middleclass white families has also been upended. Traditional immigration patterns over the last 10 years have led to a change in suburban demographic composition. In fact, in 2000, the U.S. Census Bureau reported that four out of 10 new immigrants decided to move to the suburbs.⁴ As the complexion of our cities changes, so must our development models.

Middle Ring Commonalities

The existing literature on Middle Ring suburbs identifies its key social, demographic and political aspects. By embracing these challenging characteristics, one can begin to see the latent opportunities for improvement and rehabilitation. For example, William Hudnut⁵ has described the context of Middle Ring suburbs as follows:

- American Cultural Attitudes Success is equated with how far one lives from the center of the city
- Life Cycle The aging process of real estate assets and infrastructure
- Policy Crossfire Development funds are distributed between downtown revitalization and outer suburbs
- Location Near infrastructure, downtown, edge cities
- Increasing Diversity Diversity creates a rich environment for families and cities
- Resilient Spirits Leadership, love of their city and determined to improve their lots
- Investment Opportunities Inexpensive land and buildings

In addition, Hudnut proposes a series of improvements to these areas, such as increased transit stops, mixed-use developments and the creation of a sense of place. Another characterization of the Middle Ring is provided by author Bernadette Hanlon,⁶ who identifies the following characteristics:

- Contiguous census places Adjacent to one another and to the central city where more than half of the housing stock was built before 1969
- Politically separate from the central city
- Ethnically diverse Due to a shift in migration patterns
- Economically diverse Yet trending toward manufacturing and service jobs
- Close to job centers

Hanlon goes on to define specific types of Inner Ring suburbs: Vulnerable, Ethnic, Lower Income Mixed, Old and Middle Class.

Changes in investment and development patterns after the crisis accelerate the relevance of the Middle Ring as an area to profit from both value growth in downtowns and the presence of suburban purchasing power.

The Middle Ring Framework



This map illustrates the rich urban tapestry that constitutes the Middle Ring. This partial aerial map is a footprint of Middle Ring Suburban Boston. **The boundary was traced based on employment type, income level and ethnic diversity.** The white areas represent the inner city, upper income close-in suburbs and exurbs.

The Middle Ring Framework

Appealing to Gen Y

The location of these zones is such that they are "in between places," serving as a sort of urban connective tissue. This fact is vital given that, by creating areas that link to outside poles, those areas can become poles of attraction themselves. These underdeveloped zones might nowadays be "halfway to everywhere," so to quote Hudnut's book. But the question that must be asked is the following: How can these spaces be *somewhere*?

In order to attract regional consumers and tenants, rather than solely local ones, new projects must engage with community leaders, invest in local infrastructure and partner with public organizations. Developers of shopping and entertainment complexes must create a sense of place, attract high-end tenants, provide easy and safe public transportation and automobile access, and emphasize the novelty of their developments and of the Middle Ring experience.

Generation Y consumers have indicated a strong preference for living in transit-oriented, mixed-use communities. The spending power of this group, identified as persons born from 1979 to 2000, is on the rise. As the first wave of this generation moves into their early 30s, these new consumers expect to buy a home in the next three to five years. However, Patrick Phillips, CEO of the Urban Land Institute, believes that such purchases will be delayed for many years due to the fallout from the economic collapse.⁷ Regardless of the delay, Gen Y already has massive buying power — a yearly estimate of \$200 billion — according to Carol Ruiz, assistant chair of ULI's Residential Neighborhood Development Council.

As this new generation comes of age, they will play an increasing role in shaping the recovery of housing. Subsequently, their preferences will define the new public and private forms of the city. Their desire to live in active, urban neighborhoods will drive the need for highdensity multi-family housing, the development of mixed-use retail districts and the creation of novel suburban downtowns. The value of these new "downtown" locations will depend on the anchor tenants, the originality of the public spaces and the accessibility of these spaces by public transport and car.

To emphasize the uniqueness of a potential development site within the Middle Ring, a dialog with local residents is necessary. Through an ongoing discussion, local residents can play a role in ensuring the success of a new development. They can assist with the establishment of an authentic sense of place. In addition, if the development offers a variety of restaurants and markets similar to those of the adjacent city, it will acquire a more urban character.

The marketing and promotion of new developments in the Middle Ring must speak to the desires and needs of young professionals, families and "empty nesters" looking to move back into the city.

S.W.O.T. Analysis

S.W.O.T. (Strengths, Weaknesses, Opportunities and Threats) analysis is a tool used by businesses to define core principles and identify competition. The model employed here frames the study of Middle Ring suburban development.

STRENGTHS

- High amount of political will for capital injections.
- Tax and investment incentives: TIFs, tax abatements, Brownfield redevelopment, Community Development Block Grants (CDBGs), state level TOD grants, Federal TIGER grants, etc.
- Abandoned or rescued projects can lead to lower acquisition costs.
- Support from community for change, which can lead to less resistance from resident groups.
- Existing and easily accessible infrastructure, both public transit and automobile oriented.
- Physically adjacent to higher income areas that can serve as a retail or residential market.

WEAKNESSES

- Difficult capital market environment in some cities due to lower tax revenues than their exurban or urban neighbors. This can stifle the much-needed public infrastructure investment and the potential for public/private partnerships.
- Security concerns can increase costs for monitoring public safety and private property protection.
- · Brownfield remediation is sometimes necessary due to industrial past, which may increase costs.
- **Political resistance** to change or lack of political will. In some cases entrenched politicians are reluctant to change, as their position may be threatened by the influx of a new block of voters.
- Capital accessibility can be an issue due to economic uncertainty. Projects deemed risky or non-core can be hard to finance. Due to

low loan-to-value ratios, more equity is required to finance deals. Thus, it becomes necessary to find more equity partners, which takes time and may affect ROI.

• Existing housing and building stock quality is low due to a lack of investment over time. This leads to a specific demographic profile that lacks the spending power to attract high-quality tenants. Therefore, developers must attract visitors and residents from outside the community.

OPPORTUNITIES

- Shifting demographic living paradigm Generation Y and Baby Boomers are interested in a walkable lifestyle that is connected to retail, fitness and leisure activities. A brief history of generational living pattern shifts — the 1950s and 60s saw the World War II generation move out of the city to what is today the Middle Ring. Their children grew up and then moved further out to establish their homes in the sprawling suburbs or exurbs. Finally, the children of those people have now decided that they want to live in places that are closer to their work and leisure activities. The parents of those children are now looking to simplify their lives and live in walkable communities. Connectivity and mobility have become more valued than excess space.
- **Centrality** The location of the Middle Ring suburbs is vital, due to the prioritization of personal time. This means an increase in the price per square foot.
- Utilities and vacant formerly industrial land Many Middle Ring suburbs are dominated by large swathes of vacant industrial or former electric plants that have been relocated. These large-scale land parcels are some of the last big blocks of land located centrally within metropolitan areas. Many cities or utility companies are looking to redevelop this land.
- Neighborhood culture can be leveraged to convert a formerly identityless area into a memorable place. For example, large amounts of Chinese-Americans have settled in Quincy, Massachusetts. One idea is to create a district that is fundamentally focused on Chinese-American culture, food and lifestyle. This could attract new businesses and brand the area in a new manner.
- Stimulus funding available for public infrastructure projects - despite a recent decrease in available funding, this is still a possibility.

THREATS

Development Comparison

MIDDLE RING VS. CITY CENTER

- undeveloped tracts.

• Parking in these areas, especially within transit-oriented developments, can be unpredictable and unstable. This can lead to a loss of investment dollars.

• Redevelopment success could cause land scarcity. The resulting rise in land prices could cut into profit margins.

• Traffic mitigation may be necessary due to current industrial uses of the surrounding neighborhood. One example is Chelsea, where the redevelopment of 35 acres next to the New England Produce Center requires the city to reconfigure roads and travel patterns to reduce truck noise and other residential impacts.

• Regulatory environment in many Middle Ring cities is more supportive and works to attract investment. The approval process in many city centers can take months or years, adding significant costs to permitting, lost rent, etc.

 Community involvement in many Middle Ring cities is often lower than in established cities. This can lead to shorter permitting times and cost efficiencies.

• There exist isolated land tracts ripe for redevelopment in many Middle Ring cities. City centers are generally mature with few

• No affordable housing is necessary in some Middle Ring suburbs, thanks to the fact that cities meet the affordable housing minimums required by the State of Massachusetts.

• Land acquisition prices in the Middle Ring are generally lower than in established markets.

 Construction costs can be lower due to an abundance of available labor and small, local construction companies.

• Financing and grants available for certain types of projects, and many local Middle Ring governments are proactively seeking investors.

• Some cities in the Middle Ring are increasing their FAR and height restrictions to entice investment. City centers generally show little sign of change on this front.

Investing in the Middle Ring

Why and how should it be done?

To gain insight into investment strategies in the Middle Ring, a series of interviews with real estate developers, bankers, brokers and government officials was conducted. Despite the fact that the complexity of the real estate development environment has served as a deterrent to the Middle Ring, this area does have significant potential for investment. Mixed-use transit-oriented development (TOD) is the widely held belief that it is the future of redevelopment in the United States.

The seven themes that emerged from the conversations summarized below are are: Suburban Cores, New Audiences, Public/Private Partnership, Programmatic Mix and Infrastructure.

Suburban Cores: Factors for Redevelopment

One of the defining elements of Middle Ring suburbs is their lack of a recognizable center. How to create a suburban core is a widely debated topic. One option is to leverage the existing downtowns. Opportunities for redevelopment also lie along existing Main Streets, unused industrial sites or abandoned rail yards. Many times electric, water or sewage sites that used to be on the periphery of the city are now surrounded by these suburbs.

One example of this is a nine acre site adjacent to downtown Malden. The site is owned by the electric company National Grid, who is talking with the city to dispose of the site. One potential owner is trying to determine the feasibility of building a minor league baseball stadium there. If this deal doesn't go through, another option is the creation of a mixed-use TOD project, as the site is only one block away from the MBTA subway stop (see site studies of appendices for more detail). All across Boston, city government officials have expressed an interest in the relocation of these types of land uses. Regardless of whether a project builds out a vacant or abandoned site from scratch, or rebuilds an existing downtown, the most important factor is the creation of place and identity.

The identity or branding of a community should engage the past, while looking toward the future. To achieve this goal, as well as to gain the acceptance from neighbors, consensus building is necessary. Dialogue with existing immigrant groups residing in these areas can improve relations and serve to create a unique identity. These groups can enrich the culture of a project and leverage it to a positive result.

One example in the Boston area is the City of Chelsea, which has a significant population of Latinos. The Market Basket, a supermarket chain that targets some of their products to ethnic communities, has one of their most successful stores there. Retail Management & Development, Inc. represents Market Basket's development interests and is currently looking to redevelop a 35-acre site. The director at RMD, Joe Pasquale stated, "Our high opinion of the city, its management and the neighborhood has prompted us to take a long-term interest in the project." The way in which RMD and Market Basket are engaged with the surrounding community increases their development's chances of success.

The most important factor in a redevelopment project is the creation of place and identity.

Personal safety must also be considered in these projects. Urban issues do exist in the Middle Ring and crime and vandalism need to be addressed. A new development located in a mid- to low-income neighborhood must appear safe to potential tenants or customers. Scale can sometimes serve to address these issues, but the need for shuttle buses, gated or underground parking, security guards and other monitoring systems may also need to be considered.

Density is another important aspect of the transit-oriented suburban core that requires a significant amount of consensus building. Often, communities are opposed to change due to a wariness of increased traffic and utilities usage. When Marie Mercurio, a Senior Planner at the Boston Redevelopment Authority (BRA), attempted to establish TOD zoning principles in the Hyde Park neighborhood of Boston, she found that many people in the community were "suspicious of the merits of TOD, which would increase FARs and decrease parking ratios near transit lines." But Tad Read, also a Senior Planner of the BRA, noted that "other neighborhoods in Boston are more receptive to the features of City Planning that, over the long term, create more sustainable places. Mixed-use development concentrated around transit is not only more sustainable, but also more livable and vibrant." This sentiment is echoed by Ted Tye, Managing Partner at National Development. When discussing the Station Landing project (see site



Above: New Quincy Center, by development company Street-Works.

studies of appendices), he points out that "Density was something that needed to be explained in a sustainable way. The project would not have been feasible unless we built more units and more retail than was originally zoned — and we had to build it quickly to establish a sense of place. The City of Medford was looking to reposition the area and they were very supportive."

Sustainability can work well to gain support for increased density, although the promise of **economic prosperity** can also be persuasive. Kristina Johnson, Principal Planner with the Quincy Planning and Community Development Department, notes that for the rezoning of Quincy Center "consensus building was necessary. This was accomplished through educational programs, but overall there was broad support for increased building heights and decreased parking ratios once the economic and lifestyle benefits were explained."



Above: Station Landing, a development by National Development in Medford.

In many new suburban core situations, the perception of an area needs to be significantly altered, which calls for **building big.** According to Lynn Economic Development and Industrial Corporation (EDIC) Project Manager Bill Bochnak, "A minimum of 500 market rate residential units must be built to generate enough foot traffic to attract retail and to ensure that an area is safe at night." The minimum space necessary for large format retail in mixed-use developments is generally 300,000 SF. Station Landing has 600 residential units, 160,000 SF of office space and 115,000 SF of retail. Ted Tye notes, "[Station Landing's] residents and office tenants utilize and enjoy the retail, but because of the scale of our project, automobile and commuter traffic is necessary to fully support it."

In order to create a **vibrant core**, it is vital to have a healthy mix of retail, residential, civic and cultural programs. Two major projects under way in the Boston area are Waterfront Square in Revere and the New Quincy Center in Quincy. Waterfront Square, profiled on page 90, focuses on the residential, hotel and retail mix along with a beachfront civic plaza. The New Quincy Center project (see site studies of appendices) focuses on a diverse downtown retail environment, office space, a wellness complex and a significant amount of civic space that acknowledges the city's rich history. A diverse program attracts greater demographic variety and creates an identity for an area that can be marketed to both young professionals and seniors. Suburban cores like these are under development all across the U.S. To be successful, they aim to make competitive offers that engage the imagination of both existing and potential residents.

However, in some cases redevelopment can be viewed negatively as gentrification. Regarding this issue, Joshua Host, Principal of Urban Village Development Company points out, "With suburban sprawl reversing course, turn-key living with its walkable live/work/play anthem has become the beat for a new wave of urban infill development. That development does not need to be explicit gentrification if properly planned, but rather returning balance and investment to urban centers in dire need." Framing new developments in this manner can provide a positive platform for reinvestment.

A **balanced redevelopment approach** is sought by many government officials through regulation, state and federal grants, and public/ private partnerships. Unfortunately, many feel that investment in these underserved areas is being stifled in the State of Massachusetts due to over-regulation. One developer who asked to remain anonymous commented, "If I want to make a profit I have to minimize my soft costs, which are primarily government related, and the regulatory environment continues to deteriorate."



Above: Architectural model of the New Quincy Center⁸

New Audiences

Time and time again, developers speak enthusiastically about the future of growth for the multi family residential market. This emerging trend can be directly attributed to the Generation Y and Baby Boomer groups. When asked about the intended audience for the residential portion of New Quincy Center — a project carried out by the development company Street-Works — co-founder Richard Heapes says that "Generation Y is a big target, those young professionals who place a high value on their time and easy, walkable access to amenities. Another very important group that we are targeting is retiring Baby Boomers." Gen Y is defined as young adults age 18 to 34 and is the largest American generation, 80 million strong. This number now surpasses Baby Boomers by five million individuals. The report goes on to say that the resistance to household formation by this generation is likely to continue. Many attribute this shift to the collapse of U.S. home prices, high unemployment and underwater mortgages. Whatever the reason may be, young adults and Baby Boomers are quickly moving out of the exurbs and the demand for multi family housing has skyrocketed.

Many retired (or soon to retire) Baby Boomers are looking to downsize their lifestyle and living spaces. Nonetheless, these older adults continue to be active and want to participate in the life of their communities. "The concept of retirement is changing, which is why we have incorporated active adult amenities and a wellness complex into our plan," notes Richard Heapes in relation to the New Quincy Center project. Developers such as Street-Works recognize the demand for communities that offer an easy transition from active adult communities to assisted living, and then to nursing homes. This eases life transitions and offers older adults a seamless and worry-free set of options.

Young adults and [retiring] Baby Boomers are moving out of the exurbs at a drastic rate, and the demand for multi family housing has skyrocketed.

In the case of retail, the prioritization of personal time by Boomers and Gen Y'ers places an increased emphasis on location. The Middle Ring is poised to capture both of these audiences because of its centrality and easy access to transportation links. As James Downey, Executive Director of National Retail Accounts at Cushman Wakefield notes:

Developers are frequently able to take advantage of the infrastructure that already exists in towns like Dedham, Malden, Hingham, etc. By sliding these developments into areas that are already densely populated and planned, the developer can take advantage of existing streets and public transportation to get the consumer into the center. If the tenant mix is right, developments can pull the consumer from the urban area that would normally never have an opportunity to shop at many of these stores. The best example is Target's strategy of focusing many of their new site strategies on underserved markets in the Northeast where per square foot costs of real estate preclude occupying 75,000 SF in Boston, New York and Philadelphia. However, all of these cities have close-in urban areas like Arlington, Somerville, Yonkers, Norwalk, Conn., or Willow Grove, Pa., which are close enough to the center cities to draw shoppers.

Our conversation with Joe Pasquale of Retail Management and Development reflects this trend as well. He noted that his firm's Chelsea Market Basket supermarket shopping center is "getting many young professionals from Boston buying their groceries there, due to easy access and lower prices." In the long term he thinks that "Chelsea is a good place for young and upcoming professionals; they are on the front end of having some great things happen." Generation Y prefers to have easy access to amenities and workplaces, which makes them willing to pay a premium for space. Regarding residential spaces, another developer noted, "You can charge \$1200 a month for a 1,000-squarefoot, non-TOD apartment, or you can charge \$1200 a month for a 600-square-foot TOD apartment. For our bottom line, TOD in these areas just makes sense."

Young professional Gen Y couples in their early thirties are a good example of this trend. One couple that has recently relocated to a Middle Ring suburb was interviewed about their decision to move. In making this decision, they considered her commute to work in Worcester, which takes 40 minutes from downtown Boston, as well as his position in downtown. Moreover, the value of the Middle Ring is progressively increasing as more jobs are relocated to suburban locations. "The logical conclusion," they say, "was to settle between both locations."

Public/Private Partnership

Due to tight credit markets and increased government regulation, it is often beneficial for large scale mixed-use projects to be structured as public/private partnerships. Many of the largest ongoing projects in the Middle Ring of Boston are a close coordination of public and private interests. As with all real estate development projects, the ability to coordinate financing, political support, space market expertise and public consensus is vital for an endeavor's success. Permitting processes and approvals can often be streamlined through a partnership with a public entity such as an economic development department or redevelopment authority.

Many **proactive city planning** and economic development departments in the Middle Ring of Boston have reached out for federal and state **grants to fund public infrastructure and other capital improvements**. TIGER grants (Transportation Income Generating Economic Recovery), which resulted from the 2009 American Recovery and Reinvestment Act, have been used to fund infrastructure projects all across the United States. Some of these funds are being used to rebuild aging parking structures, roadways and public transportation infrastructure in Massachusetts. Final applications for TIGER II were recently concluded by the Federal Department of Transportation (DOT). Unfortunately, it is unclear whether TIGER grants will be available in the future due to political disagreements regarding infrastructural funding.

Other common funding strategies include the establishment of:

- TIF Districts;
- tax abatements;
- brownfield funding;
- new markets tax credits;
- and Community Development Block Grants (CDBGs).

Throughout the United States, a number of states also provide TOD funding on a per project basis. All of these funding sources have served as catalysts for private development, particularly over the economic downturn of the past years.



Above: Waterfront Square, a development by Eurovest Development in Revere.

However, government funding generally comes with strings attached. A knowledgeable and experienced team of professionals is necessary to write the requisite grant applications and to navigate the process. Paul Rupp, Principal of Community Reinvestment Associates, is one such professional. He has been working with the City of Revere on the \$580 million Waterfront Square public/private partnership project over the past 10 years (see appendices for an in-depth project profile). Paul notes that:

"The City of Revere has advanced the TOD project at Wonderland/ Revere Beach by tapping into a number of resources and by utilizing public funding opportunities as building blocks, essentially stacking one atop another to produce the desired end project. Some of this state and federal funding has been used to finance the City's project planning, coordination and legal expenses over the past 10 years as the City has few means of its own with which to undertake these efforts."

Eurovest Development is the Master Developer in the project and Managing Director Joseph DiGangi comments, "It was necessary for us to hire a grant writer and cover some of the soft costs for the project because we understood the importance of having the expertise to correctly address the audiences reviewing those applications." Without public funding for the creation of a \$75 million dollar parking facility, plaza and footbridge, the private aspect of the project would not have been viable. Planning and economic development departments in the Middle Ring often support investment and growth, while the case in more affluent communities is usually quite the opposite. When asked about the opportunities that he sees in the Middle Ring, Chris Maietta of Combined Properties notes, "You have this regulatory layer that permeates projects; if you can minimize the regulatory costs of a project, the savings can be substantial. Some cities in the Middle Ring work hard to shorten the time that things take." As Chris points out, regulations add costs throughout the entire development process, from site acquisition to permitting and construction. Another developer who requested to remain anonymous noted, "When we permitted a project in a Middle Ring city recently it took 60 days. If you compare that to the months and sometimes years it takes [to do so] in Boston, the savings are substantial." Cities recognized as "partners" tend to attract investment.

Nowadays, many cities in the Middle Ring compete for private and public investment. Rob Stevens, Principal Planner with the City of Quincy Planning and Community Development Department, said, "We recognize the need to partner with developers and to facilitate investment, not stifle it. Municipalities cannot expect to put all the risk and burden on developers and attract significant private investment." It is apparent which governments around Boston are working to attract investors.



Above: Station Landing, a development by National Development in Medford.

A strategy employed by planners and city governments in order to be more attractive is the adjustment of land use and zoning regulations. According to Kristina Johnson, "As soon as we increased the maximum height levels to 10 and 15 stories in our downtown district, there was an immediate influx of development interest."

Another zoning adjustment example is the implementation of a Residential Incentive Overlay (RIO) District in downtown Malden. Michelle Romero, Principal Planner with the city, referred us to the 1998 Malden Square Zoning and Design Plan. The document states that the purpose of the RIO is to stimulate redevelopment and produce the fiscal benefits necessary to implement the plan without any impact on the tax rate. By removing unnecessarily restrictive conditions and replacing anachronistic zoning the development potential of key sites can be unlocked. Like Malden, **Middle Ring communities in and around Boston are seeking to unleash development potential by adjusting land use regulations.**

"City governments recognize the need to facilitate investment, not stifle it."

- Rob Stevens, Principal Planner for Quincy, Mass.

In the City of Lynn, the Economic Development and Industrial Corporation along with the Department for Community Development have invested millions of dollars in capital improvements. These investments include:

- the creation of sidewalks;
- relocation of above-ground electrical wires;
- installation of new lighting; and
- an upgrade to the commuter rail and bus terminal downtown.

The revitalization of the downtown district is one of City Counselor Brendan Crighton's primary focuses. He mentioned the EDIC's coordination with Senator Thomas McGee's office in order to implement a new commuter ferry to downtown Boston, the creation of a Waterfront Master Plan report and the strong presence of various arts groups in downtown Lynn. The EDIC, Senator McGee and city representatives work every day to gain traction with developers. These types of proactive officials make working in the Middle Ring very attractive for firms who have an eye for opportunity and access to capital.

Unfortunately, the flight to safety in real estate today has flooded the market with cheap money for downtown mixed-use or residential deals, but making riskier deals can be daunting. Real estate investment banker Scott Lynn of Metropolitan Capital spoke about these issues during a recent phone conversation:

We just finished making 50 calls on two equity sources for a deal in the Austin (Texas) suburbs. I could have placed it several times over if it was in the core or near the University of Texas. We would have had more traction if we were closer to these areas. In these markets you must have a subsidy to make the numbers work. With every deal, we are kicking and scratching to make the numbers work on land, construction, etc. You must be able to get a certain rent to get sense out of the deal or lower your cost basis, or get a lower tax valuation, use TIF revenues, etc. Other than that, the only place to go is the rent. The market may be at \$1/square-foot but you have to charge \$1.50 to make the numbers work; no one will finance that deal...

In many cases, lenders decreased leverage ratios are squeezing profit margins for investors. According to Lynn, "The biggest challenges come when financing deals north of \$75 million, where the loan-to-value ratio today is 65 percent versus 85 percent only three years ago. Making the numbers work when you need to make \$35 million in equity versus \$15 million is a big pond to cross."

A deal that came up with a novel solution to the financing dilemma is the \$1.6 billion public/private partnership in the New Quincy Center. When Street-Works was initially engaged by the city to consult on the redevelopment of the existing downtown, Co-Founder Richard Heapes recognized the "necessity to be bold and to significantly alter the perception of the old downtown." The group signed a Land Disposition Agreement (LDA) with the City of Quincy which states that, in phases, it will proceed with \$289 million in infrastructural development and the creation of \$1.3 billion of new private housing, retail, offices, entertainment, hotels and parking. Street-Works will assume the risk of building the infrastructure and will sell it back to the city, once they have leased 50-75 percent of the space. After the city reviews all of the work to ensure that it complies with the standards agreed upon, they will buy it back. The purchase will be financed by selling general obligation bonds backed by the new tax and parking revenues. This project is considered to be a new precedent for public/private ventures. As a result, cities across the country have contacted Street-Works to learn more about this strategy. The confluence of challenging capital markets, tax incentives and proactive government officials make the option of public/private partnerships in the Middle Ring more compelling than ever.

Programmatic Mix

To fully realize the potential of mixed-use development one must combine uses in a way that leverages synergies across programs. Mixes that fortify neighborhood identity and address market demand and context will lead to higher demand and rents.

In many mixed-use developments the focus has been on the retail environment. When considering retail anchors for a mixed-use development, supermarkets are a formidable option. It is widely accepted that the grocery store is the least risky anchor and will generate significant foot traffic. The CBRE Boston area August 2011 Cap Rate survey indicates that supermarket-anchored Class A shopping centers are delivering retail cap rates 50 to 25 basis points lower than traditional shopping centers. Thus, the introduction of a grocery store can mitigate risk and improve margins.

The inclusion of supermarkets, small format retail, restaurants, bars and leisure activities are crucial when considering the development of a mixed-use community. Many local Boston developers noted that their residents like to have some distance between their homes and their place of work. In terms of financing projects, Scott Lynn of Metropolitan Capital adds, "There is less traction with capital providers on Live/Work deals right now. Money sources are much more interested in Live/Play."



Above: New Quincy Center, a development by Street-Works in Quincy, Mass.

Grocery stores generate significant foot traffic, and they are the least risky retail anchor.

A popular concept that resonates with this Live/Play focus is the Lifestyle Center. More and more, these shopping focused centers are adding residential units to create Live/Play districts. Brannon Boswell of the website RetailTrafficMag.com defines the lifestyle center as being similar to a power center, but with an area between 600,000 and one million square-feet that integrates category dominant anchors with several specialty tenants, dining and entertainment. Lifestyle centers increase the trade area; while the typical power center attracts people from four to seven miles away, these types of properties will attract customers from as far as 15 miles. As a result, owners are able to charge 20 percent higher rents. With construction costs that are only 20-30 percent higher, the investment quickly pays off. A great example of a lifestyle center in the Boston area is WS Development's Legacy Place in Dedham. This project is a suburban TOD with midto-high-end retail. While it is located too far away from the center of Boston to be considered Middle Ring, it is only a matter of time before projects like Legacy Place locate closer to Boston, so to connect with more high-income, young professionals and Baby Boomers.

Whether the development is a lifestyle center or a smaller project, it is crucial to find the "right" retail tenants. National Development's lead on Station Landing Ted Tye explains, "At Station Landing we worked to get the retail flavor just right to complement our residential buildings and offices. It is important to have the right kind of retail, both to establish an image and to be supportive of our other uses: Starbucks, Boston Sports Club, Not Your Average Joe's... these tenants all add value to the place and create a sense of identity for the project."

Infrastructure

The Middle Ring is well connected. It is physically adjacent to downtown, exurbs, airports, public transit stations and major highways. **The ease of access to these assets should be leveraged for maximum effect.** Marketing the lifestyle advantages of these locations will be important to increase market share, and special emphasis should be placed on connectivity and proximity.

A transit-oriented development strategy should be leveraged by Middle Ring developers because, more often than not, public transit is already in place. As Chris Maietta of Combined Properties notes, **"TOD is usually a good idea in these areas. The infrastructure is usually already there** and the investment has already been made. In the Middle Ring of Boston, the capital is there, the know-how is there, and the market is transit-oriented." By inserting a development into a densely populated area, such as Somerville or Malden, **developers can take advantage of an existing consumer base.**

Mixed-use transit-oriented development does not obviate the need for an automobile when living in the suburbs. Due to uneven population densities and metro area public transit dead zones, most TOD households prefer to have at least one vehicle, which creates a new challenge for land use professionals.

In many cases, mixed-use TOD projects in the Middle Ring turn the existing parking ratio logic on its head. In certain situations, outdated parking requirements should be revisited. For example, the Guidelines for Parking Ratios in the City of Boston specify the need for parking according to neighborhood and program. In the Government Center neighborhood, a residential building requires 0.5-1.0 spaces per unit, while projects in the South Boston Waterfront require 1.0-1.5. But doesn't a project a block from a transit station in South Boston require far fewer autos than a 1.0-1.5 ratio suggests? While the document specifies that these are only guidelines, it is likely that projects will be judged initially by these anachronistic standards.

The appropriateness of setting parking standards for an entire neighborhood is questionable. A more granular or block-to-block approach may be a better strategy. In the central business district of Malden, developers are required to build parking for 1.5 vehicles per unit; within 2,000 feet of an MBTA subway station, the number specified is 1.25 and within 1,000 feet, it is 1. This is an example of progressive zoning that acknowledges the flexibility necessary to spur investment.

Nonetheless, sometimes traffic levels do not change at all when TOD developments are inserted into a Middle Ring site. For example, the transit-oriented project of Oak Grove Village, located in both Malden and Melrose, created no significant increase to traffic levels, despite consisting of 550 residential units. The project was created by Pembroke Realty, whose Development Director Tom Walsh notes, "Traffic studies conducted before and after the development was constructed concluded that traffic essentially stayed the same. More than 60 percent of our residents take advantage of public transportation."

One Middle Ring developer with an interest in TOD shared a study that contradicts most current zoning logic. This study reveals that parking needs are often generated by the amount of spaces offered. If a project offers two parking spaces per unit and another across the street offers one, the building with two parking spaces is likely to attract couples with more vehicles. This logic seems reasonable, but is often unrecognized by land use ordinances where the objective is to limit the on-street parking and traffic.

Defining Zones of Opportunity

Where does the potential for redevelopment lie?

The site selection process for redevelopment areas within the Middle Ring is closely related to the redevelopment model itself. The selection process maps out certain demographic and locational characteristics that the model proposed will then leverage.

The research team identified the footprint of Boston's Middle Ring through a series of mapping exercises explained in Appendix A. This process involved overlapping certain demographic, economic and employment data relevant to the definition of "Middle Ring." The result is the footprint as seen in Map 1.

Based on this footprint, the additional data regarding **transportation access, income shift lines, age, employment type, diversity and proximity to major industrial or commercial zones was mapped out.** This second mapping exercise pinpointed certain "Zones of Opportunity" — prime areas for development within the Middle Ring due to the confluence of several of the above mentioned characteristics. For a full description of the site selection process see Appendix B.



Above: Map 1 – Footprint of the Middle Ring.



Above: Map 3 – Areas where high Gen Y density and access to public transit overlap. (Mass state Median Income = \$64,081)



Above: Map 4 – Intersection of income level boundaries, Income Shift Lines and MBTA stations.



1960-69

MBTA STOP + 1/4-1/2 mile radius

Zone of Opportunity

Above: Map 5 – Intersection of public rail stations and the boundaries of high levels of housing from 1930-1969.

Above: Map $2\,$ - Areas where proximity to public transit and ethnically diverse populations overlap.



Defining Zones of Opportunity

The selected sites within the Boston case study all exhibit characteristics that fulfill some portion of the Middle Ring suburban profile. Neighborhood aspects such as high levels of diversity, walkability, lower median income levels and housing prices all lend themselves to reinvestment narratives.

The location of the chosen sites within the Middle Ring is of utmost importance, as their adjacency to job and knowledge centers creates value. As younger generations increasingly prefer personal time over space, these areas become more valuable.

Right: The locations for redevelopment have been pinpointed. All maps in this series use data from the U.S. Census Neighborhood Change 2000.

Below: The overlapped zones from Maps 2-5 are outlined, defining the specific areas from which to select the sites.





What are the key factors for a successful redevelopment project?

Demographic Groups

We characterized the Middle Ring and outlined a method by which zones for development can be identified. With all this information, the research team proposes a series of "Ingredients" for a redevelopment model that will leverage the demographic characteristics and geographic advantages presented by Middle Ring suburbs.

In particular, the demographic groups focused on are:

- the white working class and (lower) middle class (WW);
- ethnic and immigrant communities (EI); and
- the artists who use workshop or storage space (AR).

In general, these communities have lower purchasing power, which is preventing the Middle Ring from attracting investors. However, the ethnic and artist communities have the capacity to attract a more urban-oriented clientele for whom downtown is too expensive. In fact, this process is already occurring in Boston's middle ring suburbs like Malden and Somerville, where people belonging to this group have already started moving in. We refer to this audience as Gen Y, given that a sizeable portion of its make-up consists of Generation Y.

If, in addition to the demographic profile, we take advantage of the Middle Ring's strategic location by making it a center for commuter transfers, we can reconnect these locations to the downtown audiences, as well as the rural and exurban ones. In other words, the Middle Ring will become a center for suburbanites and exurbanites to transfer onto the urban grid.

Redevelopment

Once all these audience have been brought together in the Middle Ring, it is possible to leverage their proximity by identifying certain programs that benefit from having these three groups close, and which act as **value-adders** to the neighborhood (Described in Ingredients 1-6). In addition, the necessary economic engines needed to ensure the success of the project are outlined (Ingredients 7-9) and three "typological upgrades" are proposed. This term refers to the development of buildings and constructions that imply a significant upgrade from their current predecessors on site — rather than big, low-end and short lived structures, they are durable, long term buildings (Ingredients 10-12).

The top diagram shows the current community groups in Middle Rings (red), as well as the incoming Gen Y group (orange). The latter will initially be small compared to the other two, but will grow with time.

The bottom diagram also illustrates the suburbanites that will be attracted to the area once the Gen Y presence has grown in time. The shaded area represents the overlap between groups, and therefore the area where building programs should fall into. Note LPP, MPP and HPP stand for lower, medium and high purchasing power. 2. Then Grow This



- EI = Ethnic and Immigrant
- AR = Artist Space
- WW = White Working Class
- LPP = Lower Purchasing Power
- **MPP** = Medium Purchasing Power
- HPP = High Purchasing Power
- SUB = Suburbanites

Programmatic and Spatial Entities

1. Ethnic Cuisine / Restaurants

Restaurants tend to attract each other. At least three restaurants offering a variety of cuisine should be located in a same district, although five or more would be ideal. Seeing a variety of options concentrated in a same space helps create the sense of an urban meeting area. At least a few of these restaurants could/should develop the (ethnic) identity of the neighborhood.

2. Well Defined Public Space / Farmer's Market

This space can be either outdoors or indoors, under a roof or inside a big box. It is crucial that it be visible as a civic area — a value-adding event located in a clear, simple space. It should be bounded along two or three of its sides, always leaving one side open in order to make the space visible for nearby traffic. The open space needed to organize the farmer's market could also be used for other events with a more regional community draw.



Programmatic and Spatial Entities

3. Well Defined Indoor Community Space / Art Center

It will consist of a cheap building with large square footage that provides space for installations, shows and ateliers. The art center could be an existing building or warehouse that, with minimal refurbishments, can be set up with immediate viability. It is important that this building can be traversed by the public informally; a few pedestrian routes to the station may pass through it.

4. Parking for the Transfer Station

In order for a parking lot to contribute to the Middle Ring as a space, it must be multi-functional and it should be reusable as other types of buildings. A parking lot that is no taller than three stories, above which office space is then built is proposed. Along the ground level of the parking there should be retail and other types of public facilities—so to contribute to the urban character of the street. The parking lot should also be designed as a quality building, so that with time it can be gradually converted into other building types. (See #12)





Programmatic and Spatial Entities

5. Commuter Rail Access as Public Space

In order to simplify legal or jurisdictional issues, bridges to and across tracks belonging to the transit companies are all too often detached from the urban grid. As a result, this passage, which has high urban potentials, remains unexploited and unattractive. We propose to rewire this connection and make it a public space that is directly connected to the path leading to the parking spaces and the street.



6. (A few) Suburban Mall Brands

To guarantee some basic comforts and conveniences for the shoppers and commuters visiting from the "far" suburbs, a few typically suburban-mall brands and boxes need to be added to the mix. They need not be extremely visible at key spaces such as the center of the development, nor should they be grouped as subunits, as we do not want to create anything that resembles a small-scale suburban mall.

We are seeing a trend in big box retail where, increasingly, warehouse and storage functions are integrated in the store (Home Depot stores, for example). The explosive growth of online retail adds to this merging of functions. While such centers require substantial acreage, proving their feasibility in a Middle Ring environment is a critical factor of the development's success. These retail big boxes (with an increasing warehouse component) could be stacked over two stories tall, as their proximity to the commuter line station implies that their space will be limited.



Economic Engines

7. Lofts & Light Industrial Warehouses

These could be parking buildings that have been effectively converted for other uses. Ideally subject to very feasible zoning regulations, such buildings should be designed for multiple uses and appropriations. This building type is already being implemented by ORG in a project in Brussels.

8. High Quality Residential Space

These can be constituted by about 30-50 percent condominiums and 50-70 percent walkups and townhouses.





Economic Engines

9. Office Space

Offices provide the most flexible type of program. They can be built over parking garages, or be constituted by transformed parking garages.

Typological Upgrades

10. Remove Truck Traffic from Selected Areas

This is crucial in order for the space to feel more urban. A way in which this type of traffic can be removed is by redesigning the streets to have significantly reduced sections.





Typological Upgrades

11. Space between Parking and Commuter Rail

Parking lots for the commuter rail are usually placed right above the train station. In addition to drawing high amounts of car traffic and the concurrent infrastructural demands right into the middle of the TOD, they impact its attractiveness and potential negatively. For these reasons, and because of the latent potential for retail exploitation that exists in the path from parking to station, the research team proposes that such walking paths, run through the city.

12 Parking Structures with Conversion Options

This is a strategy that has been employed by ORG in a Brussels development project with great success. It consists in using buildings as parking structures first, and developing them into offices or residential space later. This allows for the development of land without sacrificing parking capacity.







Typological Upgrades

ORG Precedent for Parking Structures with Conversion Options

This project was carried out by the Oganization for Permanent Modernity in Brussels.

Client: Architects: Urban Design: Real Estate Consultants:

N.V. Abatan **ORG** Permanent Modernity **ORG** Permanent Modernity Jo Huygh (Gut-t) Lara Hinton (Hinton Partners)

PHASING OF THE DEVELOPMENT





- realize first urban warehouse as parking structure

- relocate the outdoor parking lot



PHASE 2

- realize second and third urban warehouse as parking structure
- relocate parking from warehouse 1
- accommodate new program in warehouse



PHASE 3

- realize fourth urban warehouse as parking structure
- relocate parking from warehouse 2
- accommodate new program in warehouse



View of the future development





Organization of an urban warehouse in a parking structure

Model Overview



The residential development will add up to at least 500 units, partly walkups and partly condominiums.

Lofts and light industrial activity are predominantly along heavy traffic routes because of the logistics demands.

The street line of the development and its open spaces serve to facilitate diagonal pedestrian access across open areas (e.g., market, publicly accessible art center). These decrease the time it takes to get to the station.

- 1 = Ethnic Cuisine/Restaurants
- 2 = Well Defined Public Space/Farmer's Market
- 3 = Well Defined Indoor Community Space / Art Center
- 4 = Parking for the Transfer Station
- 5 = Commuter Rail Access as Public Space
- 6 = Suburban Mall Brands
- 7 = Lofts & Light Industrial Warehouses
- 8 = High-Quality Residential Space
- 9 = 0 ffice Space
- 10 = Remove Truck Traffic from Selected Areas
- 11 = Space between Parking and Commuter Rail
- 12 = Parking Structures with Conversion Options

Overview of the model

View of the bus station, farmer's market and art center, as seen from above.



Street view featuring sidewalk cafès and some multipurpose parking structures.



Changes in Conventions about Good vs. Bad Development

SUBOPTIMAL

Building single use parking garages.

Building bad pedestrian bridges to stations.

Placing parking lots adjacent to railway stations.

Below: Example of a Single Use Parking Garage.



Below: Pedestrian bridge over train tracks. "Helix Bridge". Courtesy of Glenn Laubaugh.



Below: Parking Garage next to Malden Station. Image retrieved from Google Maps.



IMPROVED

Designing multi-purpose, convertible parking structures.

Creating a seamless transition from station to urban grid.

Exploiting the retail opportunity between both spaces.







Driving heavy traffic through the city.

Below: Truck traffic through Allston. Image retrieved from Google Maps.



Diverging it from the urban center.



Investment Diagram

Where \$60 million would usually be allocated for a single parking building, the research team proposes the following investment model.



4. Residential, Lofts and Offices

Once the value adders and infrastructures are in place, these buildings can be perfectly value-engineered and optimized building types that maximize revenue.

Key Stakeholders: Defined



STAKEHOLDER LEGEND

- examples of stakeholders

- role/task of the stakeholders

Key Stakeholders: Refined



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