I. Introduction

Over the past decade, the real estate field has begun applying many of the development strategies employed by a number of iconic developers active before 1940. J.C. Nichols (Country Club Plaza in Kansas City), George Merrick (Coral Gables, Florida), the Rockefeller family (Rockefeller Center), and others have become role models, their major developments emulated in recently revived downtowns, suburban town centers, New Urbanism projects, and transit oriented developments. But while nearly all of the attention today has been on the urban design lessons of these developers and their projects, there are financing lessons they can teach us as well.

Until the middle part of the 20th century, real estate was considered a long-term asset class and was financed as such. All of the projects mentioned above were built to be held for a long period by the original developer; none of them had what is referred to today as an “exit strategy.” Today, our cities and older suburbs boast many artifacts of great development from the 1920s and earlier which we could not imagine financing and building today, even though America’s real per capita income has quadrupled.

Several policies still reflect that previous era: The Internal Revenue Service dictates that structures are depreciated over 39 years, for example, and buildings are considered historic by the designating agency, the National Park Service, if they are over 50 years old.

Today, the real estate finance field looks at real estate in a very different way. Most current real estate projects have a seven to ten year life as a “Class A” property, the result of a reduction in the construction quality of projects and the continual outward press of sprawl that leaves lit-
This paper describes how the demand for more walkable, mixed use neighborhoods is growing across the United States, and how the challenges associated with financing these developments is allowing much of this demand to go unmet. It then discusses how more, and more upfront, patient equity in walkable projects—from various sources and providers—would facilitate their development, and yield high returns over the long term. The paper details several examples of how patient equity contributed to the success of several such developments built over the past 15 years, illustrating untapped potential. Finally, it notes the role the public sector can play in providing patient equity investments.

The paper is intended for developers of the entire array of walkable, mixed-use projects, whether New Urbanism projects, downtown redevelopment, suburban town center development, mixed-use lifestyle centers, mixed-income housing, transit-oriented development, or others. It is also intended for investors in those projects, particularly government or non-profit providers of “gap financing.” Ultimately, the paper makes the case that high quality, mixed-use development can and should result in superior financial returns. To get there, however, the metrics employed to measure financial return and the time frame for its achievement need to be considerably revamped.

II. Two Forms of Real Estate Development

Real estate development today comes in two basic forms: Projects are either located in, or help create, walkable environments, or they are car-dependent, “sub-urban” ones. A walkable place is where most and possibly all of life’s daily needs (shopping, recreation, school, restaurants, employment, etc.) are reachable on foot or by transit. The pre-conditions for such “walkable urbanism” include:

- homes within walking distance of local-serving retail and a park;
- having the entire walk being continuously pedestrian friendly and safe;
- an average net residential density of at least 8 dwelling units to the acre to support the local-serv-
ing retail and transit (currently available or anticipated);
■ being within walking distance of work for at least one member of each household and/or within walking distance of transit that links the household to employment.

While having access to a car is a given in any form of development in contemporary society, the goal of developing walkable urbanism is to allow for walking to be the preferred method for the majority of trips from a residence. Walkable urbanism takes many forms and character. In addition to revitalized traditional downtowns, it can include downtown adjacent places (such as Midtown Atlanta or Dupont Circle in Washington, D.C.), suburban town centers (generally 19th century towns absorbed by metropolitan growth, such as Birmingham in the Detroit metro area, or Pasadena in the Los Angeles area), redeveloped strip commercial (such as Ballston in the Washington area or Belmar in the Denver metro area) and green field development (such as Addison Circle in Dallas region, Valencia Town Center in Los Angeles region, and many recently built “lifestyle centers”). Most, though not all, of these places have a light or heavy rail station as an anchor. Their densities vary considerably: floor-area ratios (FARs) are generally over 1.0 in a suburban town center or New Urbanism suburban project, 2.0 to 4.0 in a mid-sized downtown, and from 6.0 to up to 40.0 in more intense downtowns like Manhattan, London, or Shanghai.7

The only other practical alternative to walkable urbanism is drivable sub-urban development. This modular, car-based form of metropolitan development has been the basis of the real estate finance over the past three generations.8 At FARs between 0.05 and 0.30, these low density communities do not efficiently support transit and there are generally no destinations that are walkable on a day-in, day-out basis.

While drivable suburban development continues to be the most prevalent form of development, the market demand for walkable urbanism has grown steadily since the mid-1990s in most metropolitan areas. The 1990s ushered in a new era of downtown revitalization that led to downtown residential growth in places as diverse as Atlanta (up 26 percent), Chicago (up 30 percent), and Salt Lake City (up 23 percent).9 That decade also gave birth to the New Urbanism movement, which provided planning direction in how to create more walkable, high density suburban communities. The decade ushered in lifestyle centers, a new generation of suburban-based walkable, now generally mixed-use, development. Lifestyle centers, particularly the mixed-use versions, dominate new retail-focused development in the 2000s, joining drivable suburban big box power centers—and replacing regional malls—as the preferred regional-serving retail-anchored suburban development options in many metropolitan areas.10

The increased demand for more walkable retail and housing developments is evident in a range of development statistics. For example, the Washington, D.C., metropolitan area—a bell weather of the future due to the now 30+ year-old Metro subway system—has seen the emergence of 18 regionalserving walkable places over the past 15 years from only two in 1990. According to the National Association of Realtors, in 2003 the average national price per square foot for attached product surpassed that of detached product, a particularly significant fact considering that a generation ago, attached for-sale product was almost exclusively targeted at entry-level households who could not afford a single family detached home. Most metro areas that have experienced successful walkable development have seen the highest for-sale and rental housing on a price per square foot basis in their downtown or in suburban town centers, something no one would have forecast in the 1990s. High end suburban housing in the New York City suburbs, for example, sells for about $350 to 400 per square foot, while downtown White Plains condominiums sell for $650 to $700 per square foot, an 80 percent premium; Midtown Manhattan condominiums start at $1000 per square foot and go up from there, a premium of over 250 percent versus comparable suburban single family housing. In the Washington, D.C., metropolitan area, a sample of various sub-markets in 2006 showed that walkable urban places, generally under 300 acres in size, had a 41 percent rental premium per square foot basis for office rents and a 43 percent premium on a sales price per square foot.
for housing over drivable sub-urban product in the same sub-market. 11

Consumer research has also indicated there is pent up demand for walkable urbanism. While not considered scientific, Anton Nelessen’s “Visual Preference Surveys” of the late 1980s and 1990s indicated an overwhelming desire for walkable urbanism.12 Peer reviewed academic research by Jonathan Levine of the University of Michigan in 2004 showed that between 30 percent and 40 percent of households in Atlanta and Boston preferred walkable urbanism, though most of the respondents could not find such a product, indicating pent-up demand.13 In a 2006 peer-reviewed Journal of the American Planning Association paper, Arthur C. Nelson, currently with Virginia Tech and soon to become the co-director of the University of Michigan Graduate Real Estate Program, projected that nearly all housing product developed between 2005 and 2025 should be small lot single family or attached product, the basis of walkable urbanism.14 Nelson also projects that millions of existing large lot drivable sub-urban housing units over the next couple decades will have difficulty finding buyers, thereby reducing re-sale prices of existing stock and discouraging the construction of new product. The fact that nearly every large national homebuilding company has, since 2005, established an attached urban housing division is yet another indicator of this demand.

III. The Challenge of Financing Walkable Urbanism

With this pent-up demand, why aren’t more walkable developments being created? The reason is that these projects generally (1) cost more to develop and, (2) have higher financial risks than drivable sub-urban development. Financing more costly, riskier development with a financial system used to relatively cheap, instantly performing development is not a match made in heaven.

Walkable developments are more costly for several reasons:

- Multi-story Construction. High density residential and commercial product cost more to build per square foot, due to the need for more expensive construction systems for mid- and high rise buildings, compared to low rise sub-urban development. Sub-urban products tend to be wood-frame, one to two-story single family houses. Many commercial buildings tend to be one to three story wood-frame or cinder block. Higher density walkable products tend to be reinforced concrete or steel construction, which are much higher cost construction systems. Wood frame construction is possible for dense three and four story walkable product, which costs less than concrete or steel, though still more than low rise wood frame.

- Urban Character. Walkable products tend to be woven into the fabric of the neighborhood such that people are walking directly past it, seeing its quality up close; this also means greater wear and tear. Drivable sub-urban development is generally seen from a distance from a moving car, which means construction quality and finishes can be less expensive.

- Land. Due to the higher projected market prices per square foot that walkable product tends to command, land prices also tend to be higher on a FAR per square foot basis than sub-urban land prices. Higher density also contributes to higher land prices, since the land is being more intensively used.

- Zoning. Most zoning regulations are based upon drivable sub-urban, single use development, hence in many jurisdictions, developing mixed-use walkable urbanism requires an extensive public approval process to obtain variances, or even a rewriting of the zoning code. This may require considerable time and upfront expense.

Beyond the higher overall costs, there is also increased risk for developers, which translates into higher financing costs. The reasons for this—some of which are structural and some temporary—include:

- Drivable Sub-urban Development Commoditized. Coming out of the real estate depression of the early 1990s, much of real estate finance became controlled by public markets (i.e. Wall Street). For public market financing, there needs to be a commodification of the product. Since drivable sub-urban development had been the prevailing real estate model for the previous 50 years and real estate
developers generally had the skill-set to build drivable sub-urban development, this became the form that was commoditized. Attempting to finance "non-conforming" mixed-use and/or high density walkable projects, such as housing on top of retail, office on top of retail, mixed-uses surrounding big box retail ("burying the box"), etc., increases the cost of financing due to a lack of developer and financier experience. In addition, there may be few comparable walkable projects currently in the market place, which are required by bank appraisers and provide comfort to investors and bankers.

- Higher Selling/Lease Prices. The higher cost of construction, mentioned above, means that selling prices or rental rates have to be much higher than market comparables, especially if the area is a revitalizing district with little recent track record of new development.

- Need for Critical Mass. Walkable urbanism means that many mixed-uses must be in place to achieve critical mass, or have a high probability of critical mass being achieved in the near future, for the consumer to be attracted to the area the project is located in. It is hard to promise that the very amenity the consumer wants—walkable urbanism—is coming in the future...“trust me” is a rather weak selling proposition. This means that either (1) the critical mass of mixed-use product is built at one time, which is a large, complicated, and intensely risky project; (2) the development is a catalytic project for a hoped-for but unproven revitalization of a downtown (traditional or suburban), narrowing the consumer market to urban pioneers, or; (3) the development is in a fringe walkable condition, e.g., near but not directly in a downtown. These conditions increase the project’s market risk. Once critical mass has been achieved in an area, the market risk may decline but the land costs go up tremendously. The decline in risk is more than made up for by the increase in the price of land.

- Size of Product Delivered. The larger size of many products delivered to the market in a walkable environment—such as condominium development, a mixed-use retail/office project, etc.—tend to have larger number of units or square footage than drivable sub-urban development per deliverable phase. For example, even a relatively small 50 unit condominium project comes on to the market all at once, while a suburban single family detached housing project can come on the market one unit at a time. When there is a market slowdown, there is a higher risk of overbuilding in a walkable place, a factor mitigated only by the fact that the smaller amount of land in a walkable district helps limit competition. In addition, many U.S. state laws allow for single family housing to be put under contract before construction begins with a significant, non-refundable, down payment. These same U.S. states may have regulations that require condominium sales to have low down payments and these down payments may even be refundable until after the construction is complete. Pre-sales for suburban product generally commit buyers to close on their house or lose a significant down payment. In other words, pre-sales for condominium units may be worthless commitments.

- Not-in-my-Backyard (NIMBY) Opposition. Many communities have very little experience with mixed-use, walkable development, which results in knee-jerk, sometimes hostile, opposition to it. The fact that walkable urbanism may change the character of a neighborhood means that neighbors living in a low density, conventional development may be particularly opposed to it. Even the risk of a neighborhood lawsuit could deter equity investors and banks from committing to a project. If a lawsuit is filed, this generally means the project and its financing has to wait until it is resolved, which increases costs for the developer, increases the risk, and drives away investors.

- Entitlement and Regulatory Risk. The lack of mixed-use building codes in most jurisdictions and the lack of familiarity of local code enforcement officials with walkable product type make obtaining zoning variances and permits more difficult. The time involved in obtaining those variances—not usually needed for sub-urban developments—may delay the project into a less robust time in the market than when the project was conceived.

The net result of higher cost construction and perception of increased risk is that it is significantly more difficult to finance walkable urbanism. This “double whammy” is the primary reason that walkable product has proven more difficult to finance than drivable sub-urban development. However, there is a third contributing factor...how capital is allocated today.
Measuring Real Estate Capital Allocations

The primary reason for the reduction in the economic, and therefore construction, life of real estate projects over the past 50 years has been the nearly complete reliance on discounted cash flow (DCF), and its real estate incarnation, internal rate of return (IRR), to evaluate equity investments.\textsuperscript{16} DCF is perfectly appropriate for short-term (one to seven years) investment decisions but is less able to evaluate mid- to long-term returns (beyond year five), which is when a walkable development has the strongest financial performance. This bias is the major reason most real estate equity funds have a seven to 10 year sunset provision; the sponsors cannot measure returns beyond years seven to 10 so they sell the assets in the fund and return the capital. One of the largest real estate portfolios in the United States, managed by a major insurance company, had an average age of 10 years in 1995 but it had been cut in half by 2005, turning the portfolio management strategy into one that requires it to buy, re-position, and quickly re-sell assets. This method is employed not just by large institutional investors, but by most small developers and investors as well.

It is probably not a coincidence that the mid-1950s—when DCF was introduced in business schools—corresponds with the period when real estate began transitioning to a shorter-term asset class. We are building what we can measure. It is for this reason that modern offices rarely have the construction quality of pre-1930 buildings, in spite of technological advances—it is simply not in investors’ best interests to construct high-quality structures if the goal is to get in and out as quickly as possible. And so department stores once known as “retail emporiums,” are now “big boxes,” and wood frame and sheetrock houses have replaced those of made of brick and stone.

There is another reason construction quality has fallen over the past half century: The effect of sprawl. Given the geometric increase in land consumption due to low FAR sprawl—for every one percent population gain there has been officially a four percent increase in land consumption over the past 50 years, and it is probably far more—it does not make sense to permanently invest in any one location since sprawl may quickly take demand further to the ever expanding fringe.\textsuperscript{17} Why invest in any particular place when demand will continually migrate outward?

The result of these two factors, the exclusive use of DCF for equity investment decision-making and suburban sprawl, has been much of the reason why real estate changed from a 40-year asset class to a seven- to 10-year asset class. According to economist Stephen Roulac, the built environment, which combines real estate and infrastructure, is about 40 percent of the asset base of developed economies (i.e., the wealth of the nation). As such, the shift to short-term investment has probably had an impact on economic competitiveness and quality of life: We have been building a disposable built environment.

IV. The Role of Patient Equity in Developing Walkable Projects

Clearly, the existing structure of real estate finance is simply not oriented to the development of more walkable environments—hence the need for patient equity in these sorts of projects. Patient equity pays the increased costs and mitigates the risks of walkable urbanism. Ultimately, it can facilitate a project’s success, and over time yield substantial returns to its investors.

How Patient Equity Works

Patient equity is not a substitute for other financing. Rather, it is additive, layered on top of a conventional development budget such that the overall cost of the project increases.

A development budget is comprised of equity and debt. Conventional equity, which expects a 20 percent to 30 percent IRR, has ownership of the project, provides the construction guarantee, and generally comprises 20 percent +/- of the total development budget.\textsuperscript{18} When patient equity is provided, the role of conventional equity changes and can be referred to as “1st tranche” equity, also called mezzanine debt. In exchange for having additional equity in
the project (which is behind the 1st tranche equity in cash flow priority) and no financial guarantees of the construction loan (which the patient equity provides), 1st tranche equity will receive a lower rate of return and no ownership. Instead, the 1st tranche equity will receive 100 percent of the after-debt service cash flow until both the negotiated cumulative or non-cumulative rate of return is achieved and the principle is returned. In 2006, 1st tranche equity or mezzanine debt receives between 10 percent to 12 percent priority return, far less than conventional equity.

It can be expected that 1st tranche equity is retired between years three and seven of the project’s life so the patient equity providers have to wait until then for financial returns. With the retirement of the 1st tranche equity, 100 percent of the after-debt service cash flow of the project is available for the patient equity providers. The division of the subsequent cash flow is a negotiable decision. If there is no 3rd tranche, then all of the subsequent cash flow goes to the 2nd tranche (the patient equity provider). If there is a 3rd tranche—which is probably filled by some government entity who is getting additional financial and non-financial returns (e.g., increased tax revenues, improved quality of life for the city, etc)—the length of time the subsequent cash flows to 3rd tranche investors should be limited. It is the 2nd tranche investor that should have the long-term benefit of the project. A conceptual cash flow “waterfall” of a patient equity development deal is shown in Figure 2.

**Figure 1. Conventional vs. Walkable Development Project Budgets**

<table>
<thead>
<tr>
<th></th>
<th>Conventional Project</th>
<th>Walkable Urban Project</th>
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<tbody>
<tr>
<td>Conventional Equity</td>
<td>$200,000</td>
<td>20%</td>
</tr>
<tr>
<td>Debt</td>
<td>$800,000</td>
<td>80%</td>
</tr>
<tr>
<td>Patient Equity</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$1,000,000</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>$1,200,000</td>
<td>100%</td>
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*Source: Christopher B. Leinberger*

**Figure 2. Time Frame of Tranched Cash Flow Splits**

**Sources and Providers of Patient Equity**

There are many sources of patient equity. These sources include:

- Land/building. Perhaps the most important source of patient equity, the land (or, in the case of redevelopment, the building and land) should be invested in a patient manner.
- Developer fees. The developer needs to have sufficient alternative cash flow sources to pay for the overhead costs of his/her com-
pany.
- Parking. The use of shared parking resources or assistance in building decked parking is generally important for a walkable project.
- Off-site improvements. Infrastructure improvements to the water and sewer systems, transit, sidewalks, roadways, etc. are generally required for a higher density development, especially if it is built in a location with aging infrastructure.
- Professional fees. Fees from architects, lawyers and other professionals can be deferred or exchanged for ownership in the development.
- Cash. Patient cash investment pays for the soft costs of the project in the early phase, buys out the land/building owner if they are not interested in taking development risk, fills the gap required by the construction loan provider, etc.

The providers of patient equity are broad-based. They include the following:

- Land/building owners. Many owners have owned the property for decades with minimal cash flow so waiting for a few more years may not be too large of a hurdle. A major concern of these owners will be that they have to subordinate their ownership interest in the land/building to the debt and 1st tranche/mezzanine debt.
- Developer. The developer must be a patient equity investor if there is any hope for other patient equity investors to be attracted.
- Pension funds, insurance companies, and other institutional investors. The largest investors in real estate, they are also the equity providers that have mid-to long-term financial return needs since most of their cash flow needs are many years in the future. The investment of cash as patient equity will probably be a small portion of the total real estate portfolio for any institutional investor. Patient real estate equity could be viewed somewhat similarly to the 10 percent portfolio allocation for venture capital, i.e., high risk money that has mid-to long-term return expectations.
- Real Estate Investment Trusts. While it is difficult for REITs to overcome the constant investment banker demand for short-term returns, as AvalonBay did, once a foundation of high quality, walkable product is in the portfolio, it becomes a long-term, consistent source of cash flowing assets for years to come, bolstering the underlying valuation of the company.
- Individual investors. Many investors take a long-term view of their real estate investments, many times investing for multiple generations. In addition, there are investors who want to invest in the betterment of their communities or for environmental sustainability purposes. Given the smart growth, community building nature of walkable urbanism, there may be “emotional compensation,” as well as long term financial compensation, from investing in a walkable project. These investors, who are probably used to more abstract stock and bond investments, gain a tangible benefit from high quality real estate; one can physically see it and be proud of it.
- Non-profits. The investment in a walkable project may fit both the mission and the desire of a foundation or an operating non-profit, such as an environment group, to put a sustainable financial base under the organization.
- Government. There are many ways that a government benefits from the development of walkable urbanism, including increasing tax revenue from the project, more employment, revitalization of a depressed area, tax increases from surrounding development, and quality of life improvements. In addition, the ability of governments to raise upfront capital dollars through tax increment financing (“TIF”) has proven to be a major source of patient equity.

The Return on Patient Equity

So why would a patient equity provider trade off the lower risk short-term return of conventional financing for higher risk, mid- to long-term return?

First, patient equity lowers the inherent risk of developing walkable, mixed-use projects and places. When patient equity is added to the project budget, the conventional debt provided for the project will probably stay about the same in absolute dollar terms, but will be a proportionally smaller piece of the total development budget. If the debt to value ratio drops from the conventional 80 percent to, say, 66 percent, as shown in the example above, there is the possibility that the bank will not require as much of a construction loan guarantee or any at all, i.e., it
becomes a non-recourse loan. This is due to there being significant equity (patient equity plus 1st tranche or mezzanine debt) in front of the debt on the project. While there is no established market for pricing the value of providing a construction guarantee, it is certainly worth at least 25 percent of the ownership in the project and possibly more. This is a considerable financial benefit and financial return to the developer if a construction guarantee is not required or even if the guarantee required can be negotiated to “burn off” faster than normal.

Second, the developer of a project with patient equity has a much better opportunity to maintain ownership, not having to sell the project to cash out 3rd party equity providers, as is often the case with conventionally financed projects. One major urban developer of high density rental apartments decided to invest patient equity in a new development, not taking development fees or returns for the first three to four years. Up until then, the company had had to sell nearly every one of their previous projects after they achieved stabilized cash flow since their equity investors wanted a return of their equity and the developer did not have the cash to take them out without a sale. After 10 years of developing, they had great income and significant profits but not one project that they still owned.

Finally, investors of patient equity in walkable projects are likely to see substantial financial returns as the project matures. Unlike drivable sub-urban development where the cash flows have been “hybridized” to be front end loaded—the result of lower construction costs and building simple, commoditized conventional product types—cash flows from various forms of walkable urbanism appear to get better over time. There is an upward spiral of value creation as the critical mass of the walkable place is achieved and enhanced. As more development takes place within walking distance, there are more people on the street, which drives rents and sales prices up, resulting in land and building values going up, resulting in higher tax revenues and cash flow. However, it generally takes time to achieve the critical mass or expand the walkable district, hence the time lag in cash flow generation. When developing in an area that has achieved critical mass, the superior rents might be achieved quickly but this is off-set by the increased land costs.

The resulting hypothetical cash flow (exhibit #1) compares walkable urban development to drivable sub-urban development.

Evidence of Success

It is rare for retrospective analysis to be performed on the financial performance of a real estate project. Most analysis focuses on the future cash flows a project might produce to justify acquisition or investment but rarely a “look back” over any length of time, especially over the entire life of a project, which probably includes multiple owners. However, there is anecdotal evidence that demon-

![Figure 3. Hypothetical Financial Characteristics of Walkable (Blue) Versus Drivable Sub-urban (Red) Development](source: Christopher B. Leinberger)
strates the financial viability of walkable projects.

**Reston Town Center**

In the late 1980s, Mobil Land, the real estate subsidiary of Mobil Oil, owned the master planned community of Reston, located in Virginia on the Dulles Tollway in the Washington, D.C. metropolitan area. At the intersection of Reston Parkway and the Dulles Tollway, a 200+/- acre (81 +/- hectares) green field site had always been planned as a town center for the drivable sub-urban community growing rapidly around it. The form that town center took was unlike anything developed in the post-war era of the United States up until then. It is comprised of a Main Street with sidewalks and parallel parking on both sides of the street. The buildings were built right up to the sidewalks, and the decked parking was hidden. The first phase of 1.2 million square feet of office, hotel and retail space opened in 1990 immediately became a "place," achieving critical mass of walkable urbanism, such that it became a favorite destination for Fairfax County residents as well as tenants. The second phase of 900,000 square feet of office space added in 1997 increased the walkability of the place. However, it was with the addition of thousands of condominium and rental apartments, as well as additional office and retail space, in the late 1990s and early part of the 2000s that confirmed Reston Town Center's role as a major regional-serving walkable place—what the current owner refers to as "a downtown for the 21st century."19

An analysis of the entire investment over the life of the development has not been undertaken, due to multiple ownerships of Reston Town Center and the only recent recognition that Reston Town Center was the country's first lifestyle center and worthy of analysis. However, the current rental rates and sales prices demonstrate the premium that Reston Town Center's walkable urbanism commands.

Reston Town Center is the only walkable place in the Dulles Corridor sub-market While those who do not reside there need a car to get to it, once there it is possible to walk every where. There is only limited bus service linking it to the region today, a situation that will change in 2012 when the Metro heavy rail system arrives. The general Reston area and the Dulles Corridor require a car for all transportation needs and are comprised of single purpose, drivable sub-urban product. Taking the mid-points of these rental and sales price ranges shows a nearly 50 percent price premium for Reston Town Center over the rest of the market as well as lower vacancy rates. Unfortunately, there is no direct evidence of how much patient equity was in the project but Hunter Richardson, part of the initial development team for the developer, estimates that the first phase of the Town Center had upwards of 50 percent of the development budget as patient equity. The initial developer's motivation for this large amount of equity investment was to catalyze the remaining 2000 acres the developer had under their ownership in the general Reston area, however, the developers found out that they created an financially impressive downtown in its own right.

**Century Theatre Block**

The Historic District Improvement Company (HDIC) developed the Century Theatre Block in Albuquerque as the catalytic project in the revitalization of the downtown. Opened in November of 2001, the project consists of a 47,000 square foot, 14-screen movie theater, 25,000 square feet of retail and 25,000 square feet of office space in a mixed-use, walkable form. Initially HDIC proposed a joint venture of the project with a major international investor, but in the end went it alone. The project includes a 400-car parking garage and a 5,000 square foot market for local businesses. The retail space is occupied by a local market, a coffee shop, a bakery, a flower shop, a wine shop, a law firm, and a real estate agency. The office space is occupied by a law firm, an accounting firm, and an engineering firm. The movie theater is a major draw, and the plaza in front of the theater is a popular gathering place for the downtown area. The project has been successful, with sales of $5.5 million and net income of $850,000 in its first year of operation. The project has received significant public and private investment, including a $10 million grant from the State of New Mexico and a $5 million investment from the HDIC. The project has also received support from the City of Albuquerque, which provided a significant tax abatement and other incentives. The project has been a model for other downtown revitalization projects, and has been widely praised for its success.
development firm, and financial projections were produced by that firm. These projections assumed conventional suburban construction quality and tenant improvements as well as suburban rental rates.

It became obvious to HDIC that the construction quality of the joint venture development as proposed would not be sufficient for the project to catalyze the revitalization of downtown and the joint venture was dissolved in a friendly manner. HDIC became the sole developer and built a project that had a 40 percent higher construction and tenant improvement budget than the suburban development budget. This required additional equity—patient equity. The development budget became 5 percent conventional equity, 67 percent debt, and 27 percent patient equity. The patient equity included HDIC cash, land, structured parking, and developer fees. It achieved developer nirvana; the construction loan was non-recourse due to the high proportion of equity.

The resulting comparative cash flows between the conventional joint venture development and the actual results are shown in Figure 5. Only the non-theater cash flows are shown since the theater construction costs and lease was the same under both scenarios.

As can be seen, the early actual returns were in fact lower than the conventional projections, as the hypothetical cash flow in Figure 3 would have surmised. However, the cash flows have recently surpassed the suburban development projections and seem set to significantly surpass these conventional projections in the future, also as the hypothetical Figure 3 would have surmised. The primary reason for this is that the achieved rents were much higher than were the conventionally projected rents, pointing to the pent up demand for higher quality walkable product. However, the short-term returns were lower since the development budget was so much higher. In addition, most of these early cash flows were dedicated to the repayment of the principle and interest of the 1st tranche equity (mezzanine...
debt) providers. The conventional equity providers should be completely paid off by 2007 and nearly 100 percent of the cash flow will then accrue to HDIC. The control and ownership of the project is firmly held by HDIC so it will see the mid- to long-term cash flow the project is forecasting.

_AvalonBay Communities, Inc._

Going public as a REIT in 1993 as a spin off of Trammel Crow Residential, AvalonBay has always concentrated on building and owning rental apartment projects in markets with “high barriers to entry.” Many times that strategy has taken the form of developing and owning in walkable districts, such as downtown Stamford, Connecticut, San Francisco, and transit-oriented Ballston, Virginia on the Metro line in the Washington, D.C. area. As a result, about half of the portfolio is in walkable locations. Combined with what is generally acknowledged to be an outstanding management team, the walkable urban portfolio has resulted in AvalonBay being one of the highest regarded rental apartment REITs in the United States. It has consistently been the most profitable apartment REIT, as well as providing the highest shareholder return. AvalonBay achieved this superior long-term financial performance while also having to satisfy the short-term returns that investment analysts on Wall Street were demanding, which was quite a feat.

**V. Conclusion**

Encouraging private and public providers of capital to understand the need for patient equity in walkable projects and places is not easy to do. The capital markets are addicted to the use of the DCF methodology in allocating all capital; the blinders are firmly attached. However, the tide will undoubtedly begin to turn when more successful walkable projects are up and running with many years track record to examine. At this point, investors will hopefully learn what old line real estate families have known for centuries: Well built, well located, walkable real estate assets tend to go up in value over time.

Institutional investors, who have more real estate investments than nearly anyone else, could have an enormous impact on future development trends. And their motives certainly don’t need to be altruistic—they have plenty of reason to invest equity for the mid- and long-term returns. Their cash flow needs to fund pensions and insurance payouts tend to be long-term, and can be spread over many decades into the future. It thus makes sense for them to line up a portion of their cash flow generation with these cash flow requirements.

The public sector, too, has a substantial role to play in providing patient equity. Public sector providers of “gap financing” for in-fill or downtown revitalization projects tend to either provide “soft loans” that may or may not have to be paid back, or land write-downs and on-site and off-site infrastructure improvements that end up taking the form of grants. There are many funds, like the Detroit Investment Fund and the Sacramento Downtown Development Group, that provide these soft loans or grants. However, if there is confidence that walkable places experience the “more is better” upward spiral of values, as shown above, it makes far more sense for these funds to invest as a 2nd or 3rd tranche equity investor. As a mid-term or long-term investor, the project will be as financable as if these funds were provided as a soft loan or a grant—these patient equity funds are junior to conventional debt and 1st tranche equity. In essence, this public investment potentially monetizes a mid- to long-term “hope certificate,” possibly providing not just a means by which to get the principle paid back but also allowing the public sector to share in significant upside if the walkable place achieves critical mass.

All told, it will not require proportionally much patient equity, compared to total development budgets, to create more walkable developments. The United States spends $1.2 to $1.5 trillion on real estate development annually. The amount of patient equity would be a fraction of that amount, say 10 percent to 20 percent or $120 to $300 billion. While a substantial amount of money, it will leverage a much larger amount of conventional equity and debt. Clearly, the demand for higher quality, complex communities is there. The financing field now needs to figure out how to meet it. Who knows, maybe real estate will become a long-term asset class again.
Endnotes

2. Christopher B. Leinberger is a visiting fellow at The Brookings Institution in Washington, D.C. (www.brookings.edu/metro), professor and director of the Graduate Real Estate Program at the University of Michigan (www.tcaup.umich.edu/realestate), and a founding partner of Arcadia Land Company (www.arcadialand.com). (Arcadia Land Company was the managing partner of HDIC in Albuquerque when the Century Theater Block was developed.) For 20 years he was managing director and co-owner of RCLCo, the international real estate advisory firm. He was also a board member of AvalonBay during the 1990s. Mr. Leinberger’s web site is www.cleinberger.com and his Brookings web site is www.brookings.edu/scholars/cleinberger.htm.
3. A Class A income-oriented real estate project gets the highest rents in the market place and are generally the newest buildings. Class B projects are “older” buildings that have to offer a discount in rent to obtain tenants, generally 20 percent to 50 percent less than Class A. Class C buildings, the lowest category, are considered depressed and rent for anywhere from 50 percent to 80 percent below Class A rents. These rents generally dictate the capital value of the building.
5. The term sub-urban is used to describe the functionality of this type of development and should not be confused with the term suburban, which refers to an environment, i.e., all of the area outside a city but within a metropolitan area. Both walkable urban and drivable suburban developments can be and are developed anywhere in a metropolitan area, either in the central city or in the suburbs.
6. Walking distance is generally considered to be a radius of @ 1500 feet, or 460 meters, which translates into a district that is approximately 160 to 200 acres or 65 to 81 hectares. Within that district, most of daily needs can be met by walking. Inter-district transit may be used to expand the size of the district, such as the People Mover in Detroit, the electric shuttle bus in Chattanooga, the 16th Street Mall shuttle bus in Denver, etc.
7. Floor-area ratio is a general measure of density. It is measured by dividing the square footage of the building by the square footage of land. For example, a 20,000 square foot building sited on a 100,000 square foot parcel has a FAR of 0.2, whether built as a one-story or a multi-story structure. A 200,000 square foot building on a 100,000 square foot parcel has a FAR of 2.0, regardless of whether it is a two floor building on the entire parcel or a 10-story building on 20,000 square feet of the site. Space for parking is not included in the calculation.
8. There is development that takes place in between 0.3 and 1.0 FAR but it has not proven to have a significant market. These are developments with relatively high density but no urbanism, no street life. Examples of this type of development include Co-op City in the Bronx, the former high rise public housing projects such as Cabrini-Green in Chicago, European affordable housing in the suburbs (infamously known due to the recent race riots), and other “towers in a park” development most associated with the architect Le Corbusier. The reason this range of development density is not particularly acceptable to the market is that it could be described as drivable density, which seems to combine the worst of two worlds.
10. An emerging new regional serving retail-anchored development option is the walkable urban discount power center, such as the 600,000 square foot Columbia Heights big box center currently being built above a new Metro station in Washington, D.C.
11. RCLCo interpretation of On-Star office and residential data.
12. Anton Nelessen, Visions for a New American


17. The reason for the under reporting of urban land use in recent years is that the U.S. Department of Agriculture uses U.S. Census definitions of urbanized land, which only includes residential areas of over 500 persons per square mile. Using 2.5 persons per household, the U.S. metropolitan average, means that the U.S. Census does not consider land that has two acre lots as being urbanized. Two acre lots are many times minimum densities for McMansions and real mansions, not to mention gentlemen farms and ranches that are on the fringe of many metropolitan areas. In addition, the U.S. Census reduced metropolitan land area by 21 percent after the 1990 census due to a technical change in their definition, which was a controversial decision. Finally, The Brookings Institution paper, “Finding Exurbia: America’s Fast-Growing Communities at the Metropolitan Fringe”, analyzed this trend and found that another six percent of the country’s population is technically outside metropolitan areas living on average 14-acre lots yet economically connected to these regions. Exurbia has never been considered urbanized by the Census. To download the paper, go to www.brookings.edu/metro/pubs/20061017_exurbia.htm.

18. The construction guarantee is the bank’s assurance that if the project fails to repay the construction loan, there are additional financial assurances of repayment in addition to the bank’s assuming ownership of the project. The form of the guarantee is generally the net worth of a corporation or individual. Construction guarantees tend to “burn off” following the meeting of pre-determined milestones (construction completion, lease up targets met, stabilization of the project’s financial performance, etc.).

19. For more information about the development history of Reston Town Center, see Alan Ward (ed.) Reston Town Center, A Downtown for the 21st Century (Washington: Academy Press, 2006).

20. Soft loans are provided to certain high risk development projects that take a junior position to just about every other investor in the project, including the developer. In other words, if everyone has been paid back and the investors have all been satisfied, the soft loan and the nominal interest charged get paid back.
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