

Assessing the economic benefits of walkable communities

Summary of findings

- Transit-oriented developments have led Metropolitan Washington, DC regional growth over the past 15 years in terms of occupancy gains, rental appreciation and investment performance.
- Demographic and market trends have driven a profound shift in demand from outlying suburban markets to urbanized locations – principally due to public transit accessibility, walkable amenities and other advantages that urban locations provide.
- According to independent studies, 77 percent of Generation Y reports wanting to live and work in an urban core, which has created a new mandate for developers and employers to focus on walkable, transit-oriented communities to attract and retain young talent.
- The social preference of older age cohorts is also driving a shift to mixed-age and mixed-use communities. As the Baby Boom generation enters the “empty nest” phase of their lives, they are increasingly migrating to urbanized communities. Retirees are now reported to favor walkable, mixed-use environments for the conveniences and cost savings these areas provide.
- The majority of Americans report wanting to reduce their dependence on vehicles, which has helped fuel demand across all age groups for walkable developments.
- Transit-oriented developments have proven immensely successful in other Washington, DC, regional submarkets; office buildings served by mass-transit command a 68.1 percent rental rate premium over outlying properties not served by Metro and have witnessed 20.1 percent more occupancy growth than outlying markets – despite the land constraints associated with urbanized locations.
- Metrorail helps drive employment growth; according to an internal Jones Lang LaSalle survey, 92.5 percent of employers report that access to retail amenities and mass-transit is a “strong consideration” in location decisions.
- Regional enclaves that are not served by rail but offer walkable amenities (such as Park Potomac and Reston Town Center) also command above-market rents. According to JLL property data, rents in these markets average 42.5 percent more than comparable assets located outside these walkable areas.
- The Dulles Corridor Metrorail project has the potential to transform Fairfax County into a dynamic, mixed-use, transit-oriented environment. This will allow Fairfax County to enhance its competitive position relative to more urbanized locations across the region.

Background

The concept of transit-oriented, mixed-use development has emerged recently as an alternative to the old model of urban planning in which people felt the need to separate the home from commercial buildings, factories and shopping malls. The old paradigm gave light to “suburban sprawl” and instilled a culture based around heavy demand for cars. However, changing social and economic times have drawn attention to the benefits of mixed-use development – particularly those walkable communities located near mass transit hubs that offer residents and employees the opportunity to live, work and play without dependence on a vehicle. In a survey recently conducted by the Urban Land Institute assessing the viability of mixed-use development, 93 percent of respondents surveyed believed that mixed-use development was beneficial and would like to see more of it in the future.

Transit-oriented development as an extension of mixed-use

A transit-oriented development (TOD) is a mixed-use area designed to maximize walkability. The transit station is typically the focal point and it is surrounded by relatively high-density development with progressively lower-density development spreading outward from the center. The American Planning Association surveyed 1,000 public planners and 65.6 percent of respondents said that they believe easy access to public transportation is a key factor in determining the success of an overall mixed-use development project. Also, instead of centering TOD projects in suburban areas, which has so commonly been the method in previous years, many experts asseverate that constructing transportation sites in the business districts themselves is the optimal way to start given that employment uses of public transit have surpassed residential uses.

Given its existing mass-transit infrastructure, Metropolitan Washington, DC, is already among the most walkable regions in the nation. Economic performance over the past 15 years has been strongest in the most walkable, urban locales of the area. A mere 0.9 percent of the land in the entire Washington region is currently devoted to such transit-oriented places, meanwhile these areas house 34 percent of the region's jobs. Arlington County provides another telling example, as less than 10 percent of the land generates one-third of County revenues. TOD has gained momentum given its lucrative and sustainable return on investment. A large margin of this economic growth can be directly attributed to the confluence of educated individuals brought together by a common desire to live and work in walkable, mixed-use localities.

Building the demographic

At the heart of this opportunity are the implications of a massive demographic convergence of an educated population. The Urban Land Institute recently reported that 75 percent of retiring boomers want to live in mixed-age and mixed-use communities. Also, 77 percent of Generation Y reported wanting to live in an urban core. A closer examination of Fairfax County revealed a market primed for mixed-use development, in that 62 percent of the county's population – or 671,000 residents – fall within one of those two age cohorts.

Population trends and human capital

Transit-oriented development impacts population density more than overall population growth. Fairfax County and Arlington County populations have both grown at an average rate of 1.4 percent per year, showing no explicit correlation between Metro-access and population growth. However, Metro-proximate population density has grown tremendously in Arlington County and now over half of its residents (~130,000 people) are within one mile of a station. This shift underscores the importance of offering a residential population and workforce access to transit-oriented development. Given that acceptable property substitutes are available in the District and Arlington County, Fairfax County risks "brain drain" if future development is not aligned with the population's changing work/life preferences for TOD.

Put simply, mixed-use developments act as a magnet for highly-educated individuals. For example, 82 percent of Rosslyn-Ballston Corridor residents possess a college and/or advanced degree. Economists have traditionally identified human capital as a central factor in economic growth. Studies have shown that the accumulation of well-educated people in clusters leads to higher rates of innovation and entrepreneurship. According to a Harvard University study that analyzed industry performance and human capital, it was found that talent-based industries (reliant upon a highly-educated workforce) generated a greater volume of employment and economic growth than goods-producing industries. The human capital variable played a larger role in driving regional economic growth than any other industry dynamic. Accounting for factors such as population size and industry diversification, it was reported that a higher density of educated talent helped drive economic growth more than any other variable.

Mixed-use development is therefore essential for aggregating this talent pool needed for economic growth, and based upon employees' desire for transit-oriented development, developing a sound urban plan that leverages walkability is critical for economic growth. According to the University of Chicago's Input-Output Model for economic growth, even a marginal increase in the average level of human capital yields measurable increases in economic growth. On the Input-Output scale, a one percent increase in the average level of human capital yields average output of gross regional product (GRP) growth of 0.076 percent. The indirect effects of such an output growth then provide resident economy growth of 0.143 percent of the original output.

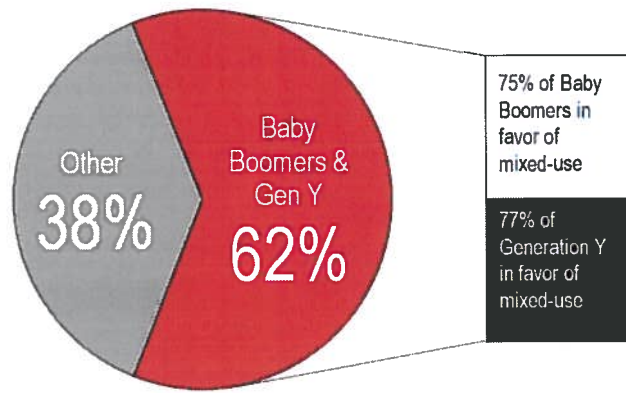


Figure A: The success of mixed-use development is heavily contingent on demographics. Municipalities that house a wealth of educated Generation Y employees, such as Fairfax County, have the potential to thrive if development is configured in a way that addresses their preference for walkable communities.

Using this model, should Fairfax County's population of 1.1 million increase professional services human capital by one percent (or 11,000 "talented" individuals – as measured by college-educated residents), the economy, as measured by GRP, would grow by a factor 0.143 percent. Northern Virginia therefore stands to gain (or lose) a great deal from this economic multiplier given that Arlington County (68.4%) and Fairfax County (59.2%) have some of the highest ratios of college-educated residents of any county or municipality in the country. Individuals must both live and work within the jurisdictional borders to generate these outlined benefits. As Figure B below shows, Northern Virginia has historically attracted a disproportionate share of job growth, but recently more gains have shifted to the District of Columbia – due in large part to the area's walkability, mass transit availability and subsequent access to human capital.

Economic value

High-density metro-served communities drive underlying values of real estate. According to proprietary research from Jones Lang LaSalle as of the end of the second quarter of 2012, retail and office space in walkable urban places possessed a 68 percent rental premium per square foot over properties located more than one mile from Metro. In terms of tax-assessed property values, the Brookings Institution reported that within one year of opening Rosslyn-Ballston Metro Stations, property values rose by \$1 billion.

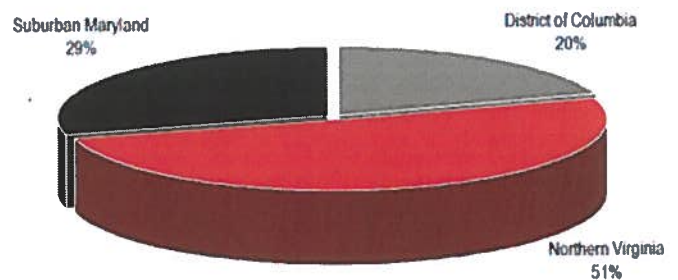


Figure B: Over half of Metro DC job growth over the past 36 months has been concentrated within Northern Virginia. However, workforce demographic trends and a slowdown in the defense contractor segment is gradually increasing Downtown DC's share of gains. TOD may facilitate the job growth needed to reverse the trend.

Metro served, mixed-use developments are among the most impressive income-producing mechanisms of the modern era and produce jobs by clustering human capital in dense, urban areas.

Walkability as measured by Irvine Minnesota-Inventry (IMI) is assessed on a scale of one to five, with one being the lowest grade possible and five the highest. According to this metric, a strong positive correlation exists between walkable, mixed-use districts, property values and rents. On average, a one-level IMI increase in walkability translates into a \$8.88 per square foot value premium in office rents, a \$6.92 per square foot premium in retail rents, and a 80 percent increase in retail sales volume. Additionally, each level of IMI was found to produce a \$30.71 per square foot premium in residential rents (per month) and a \$81.54 per square foot premium in residential housing values.

Since the underlying value of real estate assets in walkable areas is higher, this economic potential promotes greater private sector financing and investment in walkable communities. As of the end of the second quarter of 2012, internal Jones Lang LaSalle data showed that 72.4 percent of all active office construction projects were concentrated within walkable submarkets, involving assets located less than one-half mile from existing or planned Metro stations.

Future economic growth builds upon past performance and present-day market dynamics. Therefore, enclaves with a critical mass of amenities and access to mass transit are likely to outperform outlying areas in the future and receive more private-sector financial investments than their non-transit accessible counterparts. To seize upon this economic opportunity, it is critical that Fairfax County embrace transit-oriented development and establish a critical mass of dense, mixed-use communities to spawn future growth.

Going Green: TOD and the environment

According to regional transportation statistics, 50 percent of Arlington County residents take transit to work and 73 percent of transit riders can walk to Metro stations. This is a significant reduction in automobile dependency that can provide similar benefits to Fairfax County if TOD is successfully implemented in connection with the next phases of Metrorail expansion.

A survey of Jones Lang LaSalle clients indicated that 92.5 percent of DC area employers view access to mass-transit as a "strong consideration" for location decisions. Moreover, evolving corporate strategies related to social and environmental responsibilities have placed a greater emphasis on transit-oriented development. Dense urban neighborhoods require fewer parking spaces per square foot of office space, and as a result, urbanism promotes walkability and decreases vehicle dependency.

Increasing levels of public transit usage through mixed-use developments also stimulates economic growth in more direct ways. In one study by the Victoria Transport Policy Institute, for every one percent of regional travel shifted from automobile to public transit, a subject region the size of 1.2 million residents (the approximate size of Fairfax County) would receive \$2.9 million in revenue and add 226 new jobs. Many people assume that vehicle expenditures support economic development, but expenditures on automobiles, fuel and roadway facilities provide relatively little regional economic activity because they are capital-intensive and rely on goods and services mostly imported from other areas. In the long-run, regions with sustainable communities tend to foster greater economic growth.

Conclusion

Effective transit oriented development has a clear impact on a municipality's triple bottom line: profit (economics), people (equity) and planet (environment). It has been proven that Baby Boomers and cohorts of the Generation Y population desire to live in walkable, urban communities. The influx of human capital is then amassed and harnessed at metro-served, mixed-use to developments. As Fairfax County moves to preserve and grow its human capital, it can ignite a variety of income-producing mechanisms by successfully implementing more transit-oriented development. Factors of economic growth include, but are not limited to: improved employment opportunities, increased real estate values, sustainable growth and an increase in long-term investments from financial institutions and developers. Transit-oriented developments continue to lead both regional and national growth trends, and therefore Fairfax County should focus on developing viable walkable communities that resemble urban cores to capture these economic benefits.

