Large Community Case Study:

Rosslyn-Ballston Corridor, Arlington, Virginia

Aerial view of the Rosslyn-Ballston Corridor looking north toward the Potomac River and Washington, D.C.

Image courtesy of Arlington County Department of Community Planning, Housing and Development, Planning Division

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Envisioning a Vibrant Future

Arlington County’s Rosslyn-Ballston corridor, approximately 2.5 miles in distance, offers one of the country’s most prominent examples of successful Transit-Oriented Development policy thanks to a rare combination of community foresight and resolute political will. In the absence of these, the route as originally planned for the Metro Orange Line would have followed the alignment of Highway 166, completely bypassing the Rosslyn-Ballston corridor’s established commercial areas. Instead, Arlington County residents, led by a visionary County Board, waged and won a campaign to build an underground line with stations situated in Ballston, Virginia Square, Clarendon, Courthouse and Rosslyn. Their strategy worked not only to protect the single-family neighborhoods of Arlington County by directing growth to transit-oriented districts but to preserve the qualities valued by residents by strengthening the economy and making it more resilient.

When the regional planning for a Washington Metropolitan Transit System began in 1960, Arlington County was already providing millions of square feet of office space to the District of Columbia area and the demand for more office space was growing. County Board Members understood that growth was probably inevitable and certainly necessary to build the strong economic base required to maintain the community’s desired standard of living, but they recognized the importance of revitalizing the area’s existing retail corridors without jeopardizing the character of the single-family neighborhoods. They concluded that growth would be acceptable to county residents only if directed to areas immediately adjacent to a Metro line that would traverse their established but declining
commercial centers. Board Members Joseph Fisher and Joe Wholey and then County Manager Bert Johnson spearheaded the effort to have the Metro Orange Line go beneath the existing commercial corridor and instigated the formation of the Committee on the Long Range County Improvement Program, which brought together business interests, civic groups and others to frame the planning issues.\(^1\) The assurance that single-family neighborhoods would be preserved and that the redevelopment of the commercial corridor as a high density district would provide the tax base augmentation that would help keep their property taxes low convinced voters to support the Metro alignment, to pass the bond issue that would help fund the transit improvements, and to get involved in the local planning process. To ensure that growth would go where it was wanted, the Arlington County General Land Use Plan was drafted over the course of a dozen years beginning in 1972.

At the outset of the General Land Use Plan development, Arlington County residents established four keystone policies.

1. Foremost was the policy to preserve their established single-family residential areas.
2. Second was to build a strong tax base by pursuing development that would result in roughly equal total valuations for commercial and residential properties.
3. Third, redevelopment efforts would target areas within a quarter-mile radius of Metro stations.
4. Finally, within these radii high density projects designed to combine commercial, retail and residential uses would be encouraged. Countywide, the areas designated for high-density development comprised roughly 11 percent of the total land area, while 89 percent was reserved for low-density development.

After the overall plan was agreed upon in 1977, sector plans specific to each of the five station areas along the Rosslyn-Ballston Corridor followed. The drafting and adoption processes for both the General Land Use Plan and the sector plans were as inclusive as they were lengthy. Those initial plans have been periodically updated and additional plans have been drafted for other areas of the county, but the core plans and objectives have guided development ever since.

**Typical Arlington, Virginia, Single-family Residential Neighborhoods**

Images courtesy of Arlington County Department of Community Planning, Housing and Development

From Broad Brush to Brass Tacks

Once the overall policy and development template was set, County officials and residents began work on the individual sector plans that would ensure the existing distinct characteristics of each of the five station areas would be preserved and enhanced.

- Rosslyn, the station closest to Washington, D.C., and the gateway to the County, was planned as a sophisticated urban environment typified by high-density high-rise offices and residential buildings.
- The Courthouse area, where the County Government offices are located, retained its identity as the governmental center.
- Clarendon was to continue as a commercial center—a locus of shops, restaurants and entertainment.
- Virginia Square was identified as the corridor’s educational and cultural center by virtue of the location of two university campuses, the Arlington Central Library and the Arlington Arts Center.
- Ballston, home of the National Science Foundation, was the science and technology center.

The sector plans established urban design guidelines, providing not only the broad brush vision for each area but highly detailed requirements for various elements contributing to the function and feel of the individual areas and to preserve their neighborhood identity. The guidelines established in the sector plans vary by station area as to how tall buildings may be, how much and where density is allowed, and what mix of uses is encouraged. During project review, architectural elements were scrutinized for compatibility with the surrounding neighborhood, as were pedestrian, bicyclist and parking facilities.
Despite the County’s intention to load density into the station corridor, under the Arlington County Zoning Ordinance the by-right zoning remains low-density and all new development proposed within the corridor is subject to a site plan review (special exception) process. This process compares new development to the guidelines of the appropriate sector plan and finally culminates in a zone change if and when project plans are deemed compatible. This allows the County to keep a tight rein on development, making sure it squares with the objectives for the area in which it is located and includes the desired public improvements and amenities that contribute to attractive, engaging communities.

As was the case in drawing up the sector plans, the public is involved in the project approval process, too. Deeply invested in the General Land Use Plan and the individual sector plans because of their involvement in the adoption process and concrete evidence of the effectiveness of the plans, Arlington County residents demand that developments conform to both the vision and the details set out in these documents.

A Vision Taking Shape

By every measure, Arlington County’s strategy along the Rosslyn-Ballston Corridor has been a success. Since 1990, the County’s population has increased by 24.3 percent to about 212,470, while the population within a quarter-mile of the Rosslyn-Ballston Metro stations has increased nearly 107 percent (about 28 percent of the County’s total growth).

Office space in the Rosslyn-Ballston Corridor expanded from approximately 6 million square feet in 1970 to more than 23.5 million square feet by 2002. An additional 4.5 million square feet of office space was added between 2002 and 2009 (Table 1), and between 2002 and 2010, the number of jobs increased by 9 percent. Job density in Rosslyn in 2005 was about 91 jobs per acre, while that in Ballston/Virginia Square was 62 jobs per acre. Largely because of its proximity to the nation’s capitol, Arlington has enjoyed relatively low unemployment and vacancy rates. The commercial vacancy rate was 8.6 percent in the 2nd quarter of 2010, though rates were lower than average in Ballston, Rosslyn and Virginia Square. The 2009 unemployment rate was reportedly 4.4 percent. Of the more than 26,000 people working in the Rosslyn-Ballston corridor at the time of the Census 2000, 38 percent reported taking public transit to work while 8 percent reported walking to work. Weekday Metro boardings on the Rosslyn-Ballston line increased between 2000 and 2009 by 21 percent, from 37,287 to 45,155.

Countywide, properties located in the metro corridor account for 47 percent of the assessed land valuation. Commercial property currently accounts for 43 percent of the tax base, but the

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4 Ibid.
proportion has ranged between a high of 50 percent and a low of 41 percent. The balance between residential and commercial properties has kept Arlington County property tax rates relatively low compared to the rest of the Washington, D.C., metropolitan area. Arlington County Manager Barbara Donnellan\(^5\) attributes this not only to the proportion of commercial to residential, but to the healthy mix of properties found within each category—office, retail and hotels within the commercial; single-family detached, townhouses, condominiums, garden apartments and high-rises in the residential. The current real property assessment rate (2010) is $0.958 per $100 valuation\(^6\), which is equal to the 2004 rate. The rate was as low as $0.818 per $100 valuation in 2006 and 2007, but declining property values following the sub-prime mortgage debacle and general economic downturn beginning in 2008 necessitated increases in the 2008, 2009 and 2010 rates.\(^7\)

### A Closer Look at Clarendon

The sector plans that guide the development along the Rosslyn-Ballston corridor each contain the same components, but differ from one another in specifics in order to preserve the distinguishing characteristics of each of the station areas. The density allowed in Rosslyn far exceeds that allowed in any other Arlington Community. Clarendon is examined here as its neighborhoods are much like those found in many Long Island communities.

The Clarendon Sector Plan was first adopted in 1984 and subsequently updated in 1990 and 2006. The Vision Statement, reprinted below, reflects the community’s desire to retain that which drew its residents there in the first place and to extend its viability into the future.

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**Clarendon Task Force Vision Statement**

In Clarendon’s urban village, people of all income levels, ages and household make-ups can walk to home, work, shop, and play. Clarendon’s superior physical environment also attracts tourists, shoppers and other visitors, who are encouraged to leave their cars or arrive by Metro or bicycle. From the street level walkability and well-designed buildings to the character and charm of its public art, community events and well-defined public open space, people see Clarendon as a destination. Clarendon’s older buildings provide a sense of continuity and honor the time when Clarendon was Arlington’s first downtown. The integrity of surrounding low-density residential neighborhoods is protected and higher density development tapers up from neighborhoods toward Clarendon’s core. Residents, visitors and workers can walk in safety and comfort regardless of the time of day.

Excerpted from Clarendon Sector Plan, Arlington County, 2006

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\(^6\) The real property assessment rate includes school district taxes.

\(^7\) Decline in commercial real estate valuation reported for 2009 was 13.6 percent, while the residential valuation decline reported was 2.5 percent.
In keeping with the desire to have Clarendon serve as an urban village, a major shopping district, anchored by the Clarendon Market Common, has been established near the Metro station. Mixed-use transit-oriented development in the area combines not only retail, office and restaurant space, but apartments, condominiums and townhouses as well. Clarendon has developed into a highly desirable location for young professionals, many of whom—despite relatively high incomes—would otherwise be unable to afford a home in the area. The estimated 2010 population for the quarter-mile radius of the Clarendon Metro station is 1,630, of whom 45.3 percent are aged 25 to 44 and about 51 percent own their home. The average household is 2.03 people with a median household income of $114,396. Roughly 45 percent take public transit or walk to work. Over 86 percent of residents have attained a bachelor’s degree or higher.\(^8\) Twelve percent of households have no cars, and less than 40 percent have 2 or more. In nearby Fairfax County, 67 percent of households have 2 or more cars and only 4 percent have none.\(^9\)

Since 2002, more housing units have been added in Clarendon than in any other station area on the Rosslyn-Ballston corridor and more than half of the retail square footage has been built there (Table 1), and yet traffic counts in 2006 were 16 percent lower on Wilson Boulevard and only 4 percent higher on Clarendon Boulevard (Table 2).

### Table 1

<table>
<thead>
<tr>
<th>Projects Completed 2002-2009</th>
<th>Office (sq.ft.)</th>
<th>% of Total</th>
<th>Retail (sq.ft.)</th>
<th>% of Total</th>
<th>Residential (units)</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rosslyn</td>
<td>967,871</td>
<td>21%</td>
<td>32,333</td>
<td>5%</td>
<td>1,691</td>
<td>22%</td>
</tr>
<tr>
<td>Court House</td>
<td>247,995</td>
<td>6%</td>
<td>53,414</td>
<td>8%</td>
<td>1,426</td>
<td>19%</td>
</tr>
<tr>
<td>Clarendon</td>
<td>449,565</td>
<td>10%</td>
<td>383,230</td>
<td>58%</td>
<td>2,174</td>
<td>28%</td>
</tr>
<tr>
<td>Virginia Square</td>
<td>835,716</td>
<td>18%</td>
<td>70,772</td>
<td>11%</td>
<td>1,216</td>
<td>16%</td>
</tr>
<tr>
<td>Ballston</td>
<td>2,026,558</td>
<td>45%</td>
<td>120,454</td>
<td>18%</td>
<td>1,116</td>
<td>15%</td>
</tr>
<tr>
<td>Totals</td>
<td>4,527,705</td>
<td>100%</td>
<td>660,203</td>
<td>100%</td>
<td>7,623</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Arlington County Department of Community Planning, Housing and Development

### Table 2: Percentage Change in Traffic, 1996-2006

<table>
<thead>
<tr>
<th>Clarendon Blvd., Clarendon</th>
<th>George Mason Drive</th>
<th>Glebe Road, Ballston</th>
<th>Lee Highway, Rosslyn</th>
<th>Washington Blvd. Virginia Square</th>
<th>Wilson Blvd., Clarendon</th>
</tr>
</thead>
<tbody>
<tr>
<td>4%</td>
<td>16%</td>
<td>1%</td>
<td>-14%</td>
<td>-12%</td>
<td>-16%</td>
</tr>
</tbody>
</table>

Source: Arlington County Department of Community Planning, Housing and Development, Planning Division

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\(^8\) Statistics source: Nielson Site Reports.

Accommodating Density While Preserving Neighborhoods

In order to maintain the character of the surrounding low-density single-family residential neighborhoods while still allowing for growth, the Clarendon Sector Plan establishes not only what types of uses are allowed where (Figure 1), but dictates height and massing as well.

Figure 1

Image courtesy of Arlington County Department of Community Planning, Housing and Development, Planning Division

Density is controlled by limiting the Floor Area Ratio (FAR) allowed in station area (Figure 2). The highest FAR (3.5) is restricted to the immediate station area, where the building floor area may be 3.5 times the parcel size. If a proposed development offers enough public benefit, the County may allow the FAR to exceed the maximum. Public benefit might include desirable economic impacts or improvements to the public realm, such as street improvements or historic building preservation.

Similarly, height limitations are imposed so that adjacent low-density neighborhoods are not overshadowed by high-rise buildings (Figure 3). They also work hand-in-glove with step-back requirements, to ensure that while increasing density in the commercial district, the scale there remains one that is comfortable for pedestrians. Height restrictions can also be used to preserve important views of local landmarks or distant views of the landscape. In Clarendon, the majority of sites are restricted to 7 stories or less.

Certain areas are designated as “receiving sites,” where the County Board may allow density and/or height to exceed the limits established in the General Land Use Plan (Figure 4). But in those areas adjacent to single-family neighborhoods, maximum building heights are strictly enforced.
In addition to height limits, step-backs are established so that buildings do not dominate the streetscape or block views of historic buildings, or important viewsheds (Figure 5). This limitation on the mass of tall buildings is accomplished by requiring higher stories to step-back a given distance (e.g., 20 feet) from the face of lower ones (e.g., the 3rd or 4th floor).

Design issues are addressed beginning with street design. Each street is classified as main, secondary or tertiary. Street cross-sections have been developed for each type (Figure 6) and establish not only street width, but sidewalk width, the line to which building facades must be constructed, awning and signage placement and any other applicable features. Specific species of street trees that may be planted are identified as well.

Frontage types have been established for each street type (Figure 7), and a comprehensive urban design guidelines section of the plan illustrates the preferred architectural principles for each (Figure 8 and 9). Examples are provided for building materials, windows, exterior lighting, signs, canopies, street furniture, public art and landscaping.

For residents, the design regulations give assurance that development will meet the standards that were set during the Sector Plan adoption process. For developers, they provide understanding of what the community wants and will support when a project comes up for a public hearing.

Figure 2
Figure 3

MAXIMUM HEIGHT LIMITS

Map 3.4

Maximum Height (Feet)

- Existing Buildings
- Proposed Buildings

Maximum Number of Floors

- Preservation Structures: Existing heights are the Maximum Annual Heights (in)
- 5 Stories
- 4 Stories
- 3 Stories
- 2 Stories
- 1 Story
- Below 1 Story

Additional Height up to 20' may be considered by the County Board in exchange for community benefits

Building heights, step-backs, and set-backs on blocks in red are disregarded in calculations on development projects approved by the County Board and the building height radius depicted above applies.

Notes:
- Union Station is located at the bottom left of the height map; the shading indicates the maximum height limit permitted.

Figure 4

RECEIVING SITES

Map 4.1

- Additional Height above GLP may be approved by County Board; Maximum Building Height may not be exceeded
- Additional Height above Maximum Building Height and Additional Height above GLP may be approved by County Board
- Additional Height above Existing Approved Site Plan Density may be approved by County Board; Maximum Building Height may not be exceeded
- Density controlled under development projects approved by the County Board

All images this page courtesy of Arlington County Department of Community Planning, Housing and Development, Planning Division
Figure 5

All images this page courtesy of Arlington County Department of Community Planning, Housing and Development, Planning Division

Figure 6
All images this page courtesy of Arlington County Department of Community Planning, Housing and Development, Planning Division

Figure 8
Street Section 1—Wilson Blvd. West of Washington
Developing on the Boundary: ZoSo

ZoSo is a mixed-use project designed for a 1.14 acre parcel about 700 feet from the Clarendon Metro station. The site presented a design challenge to Chris Hubbard, the Principal/Designer in charge of the project for WHA Architecture and Planning, because of its location on a boundary—on one side it faced a 10-story mixed-use building while on the other it abutted a single-family residential neighborhood dating from the 1920s.

Working within the Clarendon Sector Plan guidelines for height, density and step-backs, WHA designed a building with five-stories facing North Fillmore Street and four-stories facing the residential neighborhood. The ground floor accommodates nearly 6,850 square feet of retail space. The building also contains nearly 16,600 square feet of office space along with 114 residential apartments and 214 parking spaces. The challenge on the North Fillmore side was to design an engaging pedestrian space given the 400-foot length of the parcel. To soften the aspect facing the residential neighborhood, terraces were added, windows were scaled down, and a masonry wall and linear garden were designed as a buffer between ZoSo and the single-family residence yards. Though Arlington is considered by developers to be a difficult municipality in which to get project approval, the process went smoothly for ZoSo according to Hubbard. He credits this to the community meetings held by the developer prior to the official site plan review process. During these meetings, neighborhood concerns were aired and addressed. Residents of the adjacent neighborhood were anxious to know that the project would conform to the requirements of the Clarendon Sector Plan and how parking would be handled. They were eager to have the retail within walking distance of their homes. While there were minor questions about some of the architectural details, because of the community’s staunch support for the Clarendon Sector Plan, there was no opposition to the design or density of the project.
Figure 10: ZoSo Aerial Map - Site Location

Figure 11: Linear garden at rear of building

Figure 12: View from corner of Filmore Street

Figure 13: Evening view along Filmore Street

Figure 14: View from single-family neighborhood

All images this page courtesy of:
WHA Architecture and Planning, PC, Arlington, VA,
Chris Hubbard Principal/Designer

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Figures 11, 12, 13 ©Maxwell Mackenzie Photography
The hearings for ZoSo’s approval before the Site Plan Review Committee and the Board of Supervisors went smoothly, largely because the adjoining neighborhood supported the project, but also because the developer had worked with neighbors early in the process and had a good reputation for building quality projects in Arlington. Though developers may regard Arlington as a difficult place to win project approval, the process—which may take as long as a year in some cases—is what gives citizens control over not just individual projects but the shape and character of the community as a whole.

**Arlington’s Lessons for Long Island**

Arlington County residents in the 1960s and 1970s faced problems similar to those currently facing Long Islanders. Traditional commercial areas were declining despite increasing demand for office space. Young families were leaving because housing was scarce and largely unaffordable to them. The decline of retail business had placed the greater burden of the tax base on residential properties. Then and now, they also shared a basic desire with Long Islanders: they wanted to preserve the single-family neighborhoods they called home.

The demographic profiles for the renewed Arlington station areas are telling. Residents of these areas are younger and better educated, form smaller households, have fewer cars, and generally earn higher incomes than Arlington County residents as a whole. All but Ballston have far more people in the 25 to 34 age group—between 42 and 54 percent—than the County (36 percent). In Nassau and Suffolk Counties this percentage is 22.0 and 24.5 respectively (Table 2). The percentage of the population over 25 years of age holding a bachelor’s degree or higher ranges from 73 to 87 in the Rosslyn-Ballston station areas, compared to 68.7 percent for the county as a whole. **Rather than threatening the single-family neighborhoods of Arlington County, growth directed to transit-oriented districts has helped preserve them by strengthening the economy and making it more resilient.**

From a planning perspective, Arlington residents had one clear advantage—there was only one jurisdiction. That certainly made coordinating their effort to turn things around throughout the corridor easier than it would otherwise have been. But even with that advantage, what has been accomplished in Arlington was possible mainly because it citizens faced up to stark economic realities, realized they needed to make a change, came together to form a vision of the community they wanted far into the future. They forged a plan to actualize the vision and then followed through with steadfast determination. In one respect, their effort was far greater than a similar one would be in Long Island communities because Arlington had to wage a difficult political battle to re-route the Orange Line. On Long Island the tracks are already in place.

While both Long Island counties are far more populous than Arlington County and have a multiplicity of communities, similar plans for transit-oriented development could be charted whether on a regional basis, county basis or by individual communities. As in Arlington, not
every community will have the same goals and each will want to retain its own identity. On whatever scale the planning occurs, Long Islanders can, with careful attention to detail, ensure that change not only preserves the places they love but works to sustain them far into the future.

Table 3: Demographic Profiles of Long Island Counties, Arlington County, and Rosslyn-Ballston Station Areas, 2010.

<table>
<thead>
<tr>
<th></th>
<th>Long Island</th>
<th>Arlington County, VA</th>
<th>Rosslyn-Ballston Station Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nassau County, NY</td>
<td>Suffolk County, NY</td>
<td>Rosslyn</td>
</tr>
<tr>
<td>2010 Population (Estimated)</td>
<td>1,350,384</td>
<td>1,517,773</td>
<td>212,472</td>
</tr>
<tr>
<td>Percentage 25-44 Years of Age</td>
<td>22</td>
<td>24.5</td>
<td>36.4</td>
</tr>
<tr>
<td>Median Age</td>
<td>41.7</td>
<td>39.2</td>
<td>38.8</td>
</tr>
<tr>
<td>Percent Holding BA or Higher Degree</td>
<td>40.9</td>
<td>31.8</td>
<td>68.7</td>
</tr>
<tr>
<td>Median Household Income</td>
<td>$94,046</td>
<td>$85,453</td>
<td>$93,724</td>
</tr>
<tr>
<td>Percentage Housing Units Built 1980 or Later</td>
<td>11.1</td>
<td>27.4</td>
<td>33.4</td>
</tr>
<tr>
<td>Median Value Owner Occupied Housing</td>
<td>$445,850</td>
<td>$376,623</td>
<td>$484,887</td>
</tr>
<tr>
<td>Average Household Size</td>
<td>2.9</td>
<td>2.9</td>
<td>2.2</td>
</tr>
<tr>
<td>Percent Households Owner Occupied</td>
<td>83.4</td>
<td>79.8</td>
<td>57</td>
</tr>
<tr>
<td>Average Number of Auto per Household</td>
<td>1.9</td>
<td>2.1</td>
<td>1.4</td>
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<tr>
<td>Percentage Families below Poverty Line</td>
<td>3.1</td>
<td>3.4</td>
<td>4.6</td>
</tr>
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Source: Nielson Site Reports