40 Years of Smart Growth
Arlington County’s Experience with Transit Oriented Development in the Rosslyn-Ballston Metro Corridor

A presentation by the Arlington County Department of Community Planning, Housing and Development, Planning Division

December 6, 2012
• Arlington Overview
• Setting the Stage
  • Arlington History
  • Planning for Metro
• How We did It
  • Sector Plans
  • Site Plans
• Mid Course Review
• Then & Now
• Where are we now?
• Measuring Success
• Lessons Learned
• Challenges
Arlington County

- 25.8 square miles
- Population 214,500 (2012)
- Employment 227,500 (2012)
- Housing Units 107,519 (2012)
- Daytime Population 301,100 (2012)
- 11 Metrorail Stations
Located in the core of a rapidly growing Washington region (over 5 million residents, 3 million jobs and 1,200 sq. miles of urbanized area)
Arlington County - 1960

- 7.5 million sq. Ft. Office
- Declining retail corridors
- Emerging market for government office space
- Strong single family neighborhoods
- Large number of garden apartments, some of which were beginning to decline
- 97,505 jobs
- 71,230 housing units

Photo Credit: Arlington County Department of Community Planning, Housing & Development.
1960s and 1970s

- Beginning of the planning for a regional transit system
- Embarked on an ambitious community planning effort
- Had already debated the impacts of development vs the benefits of growth and decided we wanted to encourage growth as well as encourage riders
Arlington lobbied strongly for an underground route along the old commercial corridor vs along the median of future highway.
Setting the Stage

The Roads Not Built

Image Source: Arlington County Department of Community Planning, Housing & Development.
1979 – First Year Metro Started Service

Ballston Metro  Virginia Square Metro  Clarendon Metro

Photo Credit: Arlington County Department of Community Planning, Housing & Development.
Setting the Stage

2009 – 30 Years of Metro

Ballston Metro  Virginia Square Metro

Photo Credit: Pictometry International Corporation.
Setting the Stage

1979 – First Year Metro Started Service

Virginia Square Metro

Clarendon Metro

Photo Credit: Arlington County Department of Community Planning, Housing & Development.
Setting the Stage

1979 – First Year Metro Started Service

Court House Metro  Rosslyn Metro

Photo Credit: Arlington County Department of Community Planning, Housing & Development.
Setting the Stage

2009 – 30 Years of Metro

Court House Metro

Rosslyn

Photo Credit: Pictometry International Corporation.
The Bull’s Eye

- Concentrate high and mid-density redevelopment around transit stations (highly targeted) and taper down to existing neighborhoods
- Encourage a mix of uses and services in station areas
- Create high quality pedestrian environments and enhanced open space
- Preserve and reinvest in established residential neighborhoods

Image Source: Arlington County Department of Community Planning, Housing & Development. Found in the RB '72 Land Use Alternatives.
Walkability & Multimodal Transportation Planning

- Focus community development around transit and require appropriate investments in transportation
- Emphasize community walkability
- Maximize travel choice for residents, workers and visitors
- Provide comprehensive and easy to access information about travel options
- Employ transportation demand management strategies
- Manage curb-space and parking efficiently
- Emphasize multi-modal street operations

Photo Credit: Arlington County Department of Community Planning, Housing & Development.
**Sector Plans**

- Adopted a corridor-wide GLUP based on agreed-to development goals
- Then focused on developing sector plans to create distinctive “urban villages”
  - Overall vision for each station area
  - Desired public improvements
  - Location for retail
  - Urban design standards
  - Public infrastructure needs
  - Open space, streetscape standards
  - Each focused on an area of approximately 1/4 mile to ½ mile from the metro station

Source: Arlington County Department of Community Planning, Housing & Development.
Clarendon Sector Plan - 1984

Clarendon Sector Plan - 2006

Illustrative Plan

Concept Sketch

Zoning

Planning for Metro

- 11% of county (2 rail corridors) re-planned to encourage mixed-use, high density development
- Zoning in the 89% was primarily low density so little unplanned development can happen

General Land Use Plan

For Metro Corridors

- Land remains zoned for low density, but GLUP indicates willingness to rezone for higher density.
- In response to proposals, county would rezone to higher density as shown on GLUP
- Requires a special exception. **Site Plan** is used to approved the development. Requires County Board approval.
How We Did It

The General Land Use Plan (GLUP)

Photo Credit: Arlington County Department of Community Planning, Housing & Development. Image from 2011 GLUP map.
Site Plan

- Site Plan allows flexibility but is tied to the GLUP and the adopted sector Plans in terms of uses, density, height and design.
- Property owner always maintains underlying by-right zoning until they implement approved site plan.
- By-right development is at a much lower density with a more limited array of uses allowed.
- The site plan allows significantly higher density & height than underlying zoning.

<table>
<thead>
<tr>
<th>By-right</th>
<th>Site Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5 F.A.R.</td>
<td>3.8 – 10 F.A.R.</td>
</tr>
<tr>
<td>35-45 ft (height)</td>
<td>100-300 ft (height)</td>
</tr>
<tr>
<td>4 Parking spaces</td>
<td>2 Parking spaces per</td>
</tr>
<tr>
<td>per 1,000 SF</td>
<td>per 1,000 SF</td>
</tr>
</tbody>
</table>
Site Plan

Site Plan is Approved IF:

- It complies with the standards of the zoning ordinance,
- Is in compliance with the mix required by the GLUP
- Provides the features called for in the sector plan for the area - including public improvements
- Matches the FORM identified in the Sector Plan

Increased density in return for

- Building the development we want
- Where we want it
- And building significant amount of the required and desired public improvements
- LEED & Affordable Housing
New Zoning Tools

- Some of the zoning tools we’ve created include
  
  **Mixed use**
  - C-0-A: 50/50 res/off mix up to 6.0 FAR can be 100 % residential
  - R-C: 1.24 FAR office, 2.0 FAR residential - residential must proceed first or concurrent with office

  ** Redevelopment 
  - C-O Rosslyn: 10.0 FAR
Mid-Course Review

Early Results
• Early results were successful from a development perspective
• But not from a place making perspective

Rosslyn – 1960s

Photo Credit: Arlington County Department of Community Planning, Housing & Development.
Mid-Course Review

Early Results

Rosslyn – 2000s
Mid-Course Review

Early Results

Photo Credit: Arlington County Department of Community Planning, Housing & Development.
Responding to Early Results: Mid Course Review - 1989

- Worked with a group of Architects and Urban Designers to evaluate efforts to date
- Led to development of corridor-wide urban design concept
- Raised awareness of design issues
- First new Sector Plan to utilize what we learned was Rosslyn followed by Clarendon
- Going forward design and architecture became much more important
  - First critical lesson was that it’s not about the density
  - It’s about the form, and what place we were trying to create
Then & Now

Rosslyn 1950s-1960s

Photo Credit: Arlington County Department of Community Planning, Housing & Development.
Then & Now

Rosslyn 2000s

Photo Credit: Cameron Davidson 2010.
Rosslyn Today

C-O Rosslyn
Development: 10 FAR
Rosslyn Today
Then & Now

Rosslyn Tomorrow
Then & Now

Courthouse 1950s-1960s

Photo Credit: Arlington County Department of Community Planning, Housing & Development.
Then & Now

Courthouse Today

Photo Credit: Arlington County Department of Community Planning, Housing & Development and Pictometry International Corporation.
Then & Now

Clarendon – 1920s-?  Arlington’s Old Downtown

Photo Credit: Arlington County Department of Community Planning, Housing & Development.
Then & Now

Clarendon 1990s

Photo Credit: Arlington County Department of Community Planning, Housing & Development.
Then & Now

Clarendon 1980s
Then & Now

Clarendon Today
Then & Now

Clarendon Today
Virginia Square – 1970s
Then & Now

Virginia Square 1980s

Metro Entrance
Then & Now

Virginia Square Today

Photo Credit: Arlington County Department of Community Planning, Housing & Development.
Then & Now

Ballston – 1970s

Metro Entrance

Photo Credit: Arlington County Department of Community Planning, Housing & Development.
Then & Now

Ballston – 2000s

Metro Entrance

Photo Credit: Arlington County Department of Community Planning, Housing & Development and Pictometry International Corporation
Then & Now

Ballston Today
Then & Now

Ballston Today

Photo Credit: Arlington County Department of Community Planning, Housing & Development.
R-B Corridor – Late 2000s
Measuring Success

Development

1970
OFFICE
• 5,568,600 SF

RESIDENTIAL
• 7,000 UNITS

RETAIL
• 865,507

JOBS
• 22,000

2011
OFFICE
• 21,917,017 SF

RESIDENTIAL
• 29,366 UNITS

RETAIL
• 2,842,169

JOBS
• 96,300

Photo Credit: Flickr User “M.V. Jantzen”.

Prepared by Community Planning, Housing and Development - Planning Division: Planning, Research and Analysis Team (PRAT), April 2012.
Where are we now?

Demographic Overview

- R-B Corridor is 21% of the County Population
- The R-B Corridor is young.
- According to the 2010 Census, Arlington County had the highest percentage of 25-34 Year Olds out of any other city or county in the U.S.

Source: American Community Survey, 2006-2010 5-Year Sample. Tabulated by the Planning Research and analysis Team, Arlington County Department of Community Planning, Housing & Development.
Where are we now?

Demographic Overview

- 70% of R-B Corridor residents are white

- 82% of R-B residents have a Bachelor’s degree or higher.

- Median Household Income for R-B Corridor: $92,000 - $98,000 (2010 dollars)

Source: American Community Survey 2006-2010 5-Year Sample. Tabulated by the Planning Research and analysis Team, Arlington County Department of Community Planning, Housing & Development.
Where are we now?

Demographic Overview

• R-B Corridor: 40% of residents take public transportation to work.

Means of Transportation to Work

- Arlington County
- JD Corridor
- R-B Corridor
- Columbia Pike

- Car, Truck, or Van
- Public Transportation
- Other Means

- No Vehicles Available
- One Vehicle Available
- Two Vehicles Available
- Three or more Vehicles Available

• R-B Corridor has “Car-Light” households
• 16% have no vehicle available. 59% have one available.

Source: American Community Survey 2006-2010 5-Year Sample. Tabulated by the Planning Research and analysis Team, Arlington County Department of Community Planning, Housing & Development.
### Measuring Success

#### Metrorail Station Access

**Rosslyn-Ballston Corridor Stations**

<table>
<thead>
<tr>
<th>Access Method</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walk</td>
<td>76.9%</td>
</tr>
<tr>
<td>Metrobus</td>
<td>6.3%</td>
</tr>
<tr>
<td>Other Bus</td>
<td>4.3%</td>
</tr>
<tr>
<td>Auto (including dropoff)</td>
<td>10.9%</td>
</tr>
<tr>
<td>Other</td>
<td>0.5%</td>
</tr>
<tr>
<td>No Response</td>
<td>1.2%</td>
</tr>
</tbody>
</table>

**Suburban VA Orange Line Stations**

<table>
<thead>
<tr>
<th>Access Method</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walk</td>
<td>15.2%</td>
</tr>
<tr>
<td>Metrobus</td>
<td>9.6%</td>
</tr>
<tr>
<td>Other Bus</td>
<td>10.2%</td>
</tr>
<tr>
<td>Auto (including dropoff)</td>
<td>49.9%</td>
</tr>
<tr>
<td>Other</td>
<td>1.3%</td>
</tr>
<tr>
<td>No Response</td>
<td>13.8%</td>
</tr>
</tbody>
</table>

**Source:** WMATA 2007 Metrorail Passenger Survey
Balanced Development

- Crystal City
- Pent City
- Rosslyn
- Court House
- Clarendon
- Virginia Square
- Ballston

- Retail
- Hotel
- Residential
- Office

Prepared by Community Planning, Housing and Development - Planning Division: Planning, Research and Analysis Team (PRAT), April 2012.
Measuring Success

Development Approval Trend 2001-2011

- Office (GFA)
- Retail (GFA)
- Other (GFA)
- Residential (Units)
- Hotel (Rooms)
### Measuring Success

<table>
<thead>
<tr>
<th>Year</th>
<th>Location</th>
<th>Metro Ridership (Average daily entries and exits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>Rosslyn</td>
<td>13,637, 5,561, 2,964, 9,482</td>
</tr>
<tr>
<td></td>
<td>Court House</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Clarendon</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ballston</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>Rosslyn</td>
<td>33,891, 14,640, 8,617, 23,641</td>
</tr>
<tr>
<td></td>
<td>Court House</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Clarendon</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ballston</td>
<td></td>
</tr>
</tbody>
</table>

Source: WMATA
Measuring Success

Balanced Development = Balanced Ridership

For All Arlington Stations

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Average Weekday Ridership (May 2011)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM PEAK</td>
<td>(Opening - 9:29 a.m.)</td>
</tr>
<tr>
<td>AM OFF</td>
<td>(9:30 a.m. - 2:59 p.m.)</td>
</tr>
<tr>
<td>PM PEAK</td>
<td>(3:00 p.m. - 6:59 p.m.)</td>
</tr>
<tr>
<td>PM OFF</td>
<td>(7:00 p.m. - 12:00 a.m.)</td>
</tr>
</tbody>
</table>

Entries | Exits

Source: WMATA
## Measuring Success

### High Transit Accessibility for Jobs and People

The map illustrates the transit accessibility in Arlington County using Round 8.1 population and employment data from August 2012.

<table>
<thead>
<tr>
<th>Transit Accessibility Category</th>
<th>People 2010</th>
<th>Jobs 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metrorail 0 - ¼ Mile</td>
<td>16%</td>
<td>59%</td>
</tr>
<tr>
<td>Metrorail 0 – ½ Mile</td>
<td>34%</td>
<td>80%</td>
</tr>
<tr>
<td>Any Transit 0 – ¼ Mile</td>
<td>97%</td>
<td>99%</td>
</tr>
</tbody>
</table>

Legend:
- **M**: Metrorail Station
- **B**: Bus Station
- **M**: Metrorail
- **Primary Transit Network**: Primary Transit Network

*Categories are cumulative*
Measuring Success

• Car ownership (vehicles per household)
  – Nationally, almost 91% have a car; 58% have 2 or more
  – In Fairfax, 96% have at least one; 66% have 2 or more
  – Arlington: 12% have zero cars; less than 40% have 2 or more

Source: 2010 5-Year American Community Survey
Prepared by Community Planning, Housing and Development - Planning Division: Planning, Research and Analysis Team (PRAT), April 2012.
• Numbers are more dramatic in Arlington’s Metro corridors
  – Car ownership: 16.7% have zero cars, while less than 25% have 2 or more
  – Getting to work: Less than half drive alone (39.8%)
    • 42.8% use transit
    • 9.5% walk or bike
    • 3.1% work at home

Source: 2010 5-Year American Community Survey
Real Estate Assessments

- $27.5 billion of a total $57.5 billion in assessed land and improvements value in the county is in the metro corridors which is 11% of total land
- Today Arlington has more office space than downtown
  - Dallas, Los Angeles, Denver, or Boston
- County has maintained low property tax rate ($.935 per $100 fmv) and maintains amongst the highest levels of services
- Tax base divided between 46% commercial and 54% residential
- County consistently maintains AAA bond rating from all rating agencies
### Measuring Success

#### Real Estate Values in Transit

#### Arlington County Real Estate Assessed Values by Sub-area (2011)

<table>
<thead>
<tr>
<th>Sub-area</th>
<th>Comm. Value*</th>
<th>%</th>
<th>Resid. Value **</th>
<th>%</th>
<th>Total Value</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-B Corridor</td>
<td>$8,770,173,300</td>
<td>51%</td>
<td>$9,218,388,700</td>
<td>23%</td>
<td>$17,988,562,000</td>
<td>31%</td>
</tr>
<tr>
<td>J-D Corridor</td>
<td>$6,490,559,100</td>
<td>38%</td>
<td>$3,315,434,200</td>
<td>8%</td>
<td>$9,805,993,300</td>
<td>17%</td>
</tr>
<tr>
<td>Columbia Pike</td>
<td>$342,617,000</td>
<td>2%</td>
<td>$3,604,671,400</td>
<td>9%</td>
<td>$3,947,288,400</td>
<td>7%</td>
</tr>
<tr>
<td>Shirlington</td>
<td>$312,391,700</td>
<td>2%</td>
<td>$816,882,600</td>
<td>2%</td>
<td>$1,129,274,300</td>
<td>2%</td>
</tr>
<tr>
<td>Other ***</td>
<td>$1,128,291,900</td>
<td>7%</td>
<td>$23,399,656,100</td>
<td>58%</td>
<td>$24,527,948,000</td>
<td>43%</td>
</tr>
<tr>
<td>Total</td>
<td>$17,044,033,000</td>
<td>100%</td>
<td>$40,355,033,000</td>
<td>100%</td>
<td>$57,399,066,000</td>
<td>100%</td>
</tr>
</tbody>
</table>

#### Arlington County Real Estate Taxes Levied by Sub-area (2011)

<table>
<thead>
<tr>
<th>Sub-area</th>
<th>Comm. Value*</th>
<th>%</th>
<th>Resid. Value **</th>
<th>%</th>
<th>Total Value</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-B Corridor</td>
<td>$82,878,138</td>
<td>51%</td>
<td>$87,113,773</td>
<td>23%</td>
<td>$169,991,911</td>
<td>31%</td>
</tr>
<tr>
<td>J-D Corridor</td>
<td>$61,335,783</td>
<td>38%</td>
<td>$31,330,853</td>
<td>8%</td>
<td>$92,666,637</td>
<td>17%</td>
</tr>
<tr>
<td>Columbia Pike</td>
<td>$3,237,731</td>
<td>2%</td>
<td>$34,064,145</td>
<td>9%</td>
<td>$37,301,875</td>
<td>7%</td>
</tr>
<tr>
<td>Shirlington</td>
<td>$2,952,102</td>
<td>2%</td>
<td>$7,719,541</td>
<td>2%</td>
<td>$10,671,642</td>
<td>2%</td>
</tr>
<tr>
<td>Other ***</td>
<td>$10,662,358</td>
<td>7%</td>
<td>$221,126,750</td>
<td>58%</td>
<td>$231,789,109</td>
<td>43%</td>
</tr>
<tr>
<td>Total</td>
<td>$161,066,112</td>
<td>100%</td>
<td>$381,355,062</td>
<td>100%</td>
<td>$542,421,174</td>
<td>100%</td>
</tr>
</tbody>
</table>

* Commercial use = office, retail, hotel
** Residential includes apartments
*** All other parcels outside listed areas.
Awards

EPA Smart Growth

• League of American Bicyclists -- Bicycle Friendly Community designation

• APTA -- Outstanding Public Transportation System Award (for ART)

• American Podiatric Association -- Best Walking City in America

• APA Great Streets Award
Lessons Learned

- Transit investments can be used as a catalyst to reshape communities
- Multimodal transportation strategies can result in substantial benefits – allowing continued growth with less reliance on autos
- Establish the vision, design supportive public policies/plans and tools and be patient
- Build community consensus
• Ensure that transit is integrated with development – not secondary
• An attractive and functional pedestrian environment is important
• Develop public-private partnerships to continue consensus building and assist in the implementation
• Integrity of plan – be consistent
• Do the detailed planning at the sector area to avoid the battles at development review time
Lessons Learned

- Station areas must be able to satisfy the daily needs of users if they are to really leave their cars behind (mixed use)
- Reduce parking requirements

[Photo Credit: Arlington County Department of Community Planning, Housing & Development.]
Challenges

Refining the Vision

- Transportation Demand Management (TDM)
- Affordable housing
- Parking
- Pedestrian improvements
- Expansion of transportation options
- Architecture
Refining the Vision

• Affordable housing
  – 22,000 new market rate units in R-B since 1980
  – Few affordable
  – New tools
  • Special affordable housing protection district
  • 25 % bonus
  • State enabled mandatory contribution