40 Years of Smart Growth

Arlington County's Experience with Transit Oriented Development in the Rosslyn-Ballston Metro Corridor

A Presentation by Robert Brosnan
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For South Korea
April 2012

PRESENTATION OVERVIEW

- Review of Smart Growth Principles in the US
- Review of Arlington's efforts to embrace those principles and use transit to both redevelop an older commercial corridor and ensure future riders for the system
- How we planned and some of the tools we used
- Identify some of the successes and lessons learned

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TRANSIT ORIENTED DEVELOPMENT

- TOD and Smart Growth are current “buzz” words representing the desire for another form of growth
- Arlington has been in the forefront of this trend for over 40 years

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Smart Growth

- Many American cities and regions are at a crisis point
- We know we can’t continue to grow as in the past
- It’s too expensive to serve
- Work and home trips take too long and must always be via car
- Roads are often clogged

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Traditional Development

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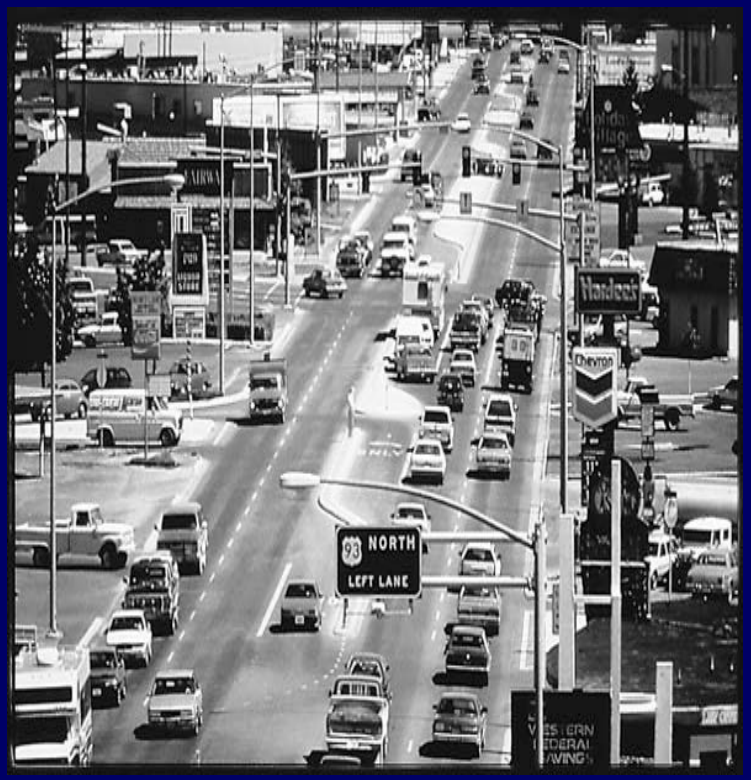
Traditional Development



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Development Today

Vacant stores and parking lots

Where's the bus stop

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More Sustainable Patterns

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What is Smart Growth?

Smart growth is well-planned development that protects open space and farmland, revitalizes communities, keeps housing affordable and provides more transportation choices.






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Ten Principles of Smart Growth

- **Mix land uses**
- **Take advantage of compact building design**
- **Create a range of housing opportunities and choices**
- **Create walkable neighborhoods**
- **Foster distinctive, attractive communities with a strong sense of place**

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Ten Principles of Smart Growth

- **Preserve open space, farmland, natural beauty, and critical environmental areas**
- **Strengthen and direct development towards existing communities**
- **Provide a variety of transportation choices**
- **Make development decisions predictable, fair, and cost effective**
- **Encourage community and stakeholder collaboration in development decisions**

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What Smart Growth "Is" and "Is Not"

More transportation choices and less traffic	Not against cars and roads
Vibrant cities, suburbs and towns	Not anti-suburban
Wider variety of housing choices	Not about telling people where or how to live
Well-planned growth that improves quality of life	Not against growth

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Planning in the United States

- First – a planning primer
- Planning done primarily at the local level
- Zoning done at the local level
- Most development done by private developers and mostly includes privately owned property not government property

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Planning in the United States

- While it is true that the real estate industry help determine and develop the use of private land – **THE MARKET**
- The local government is the **BODY** with an opportunity to coordinate the overall pattern of physical development of the community thru the plan

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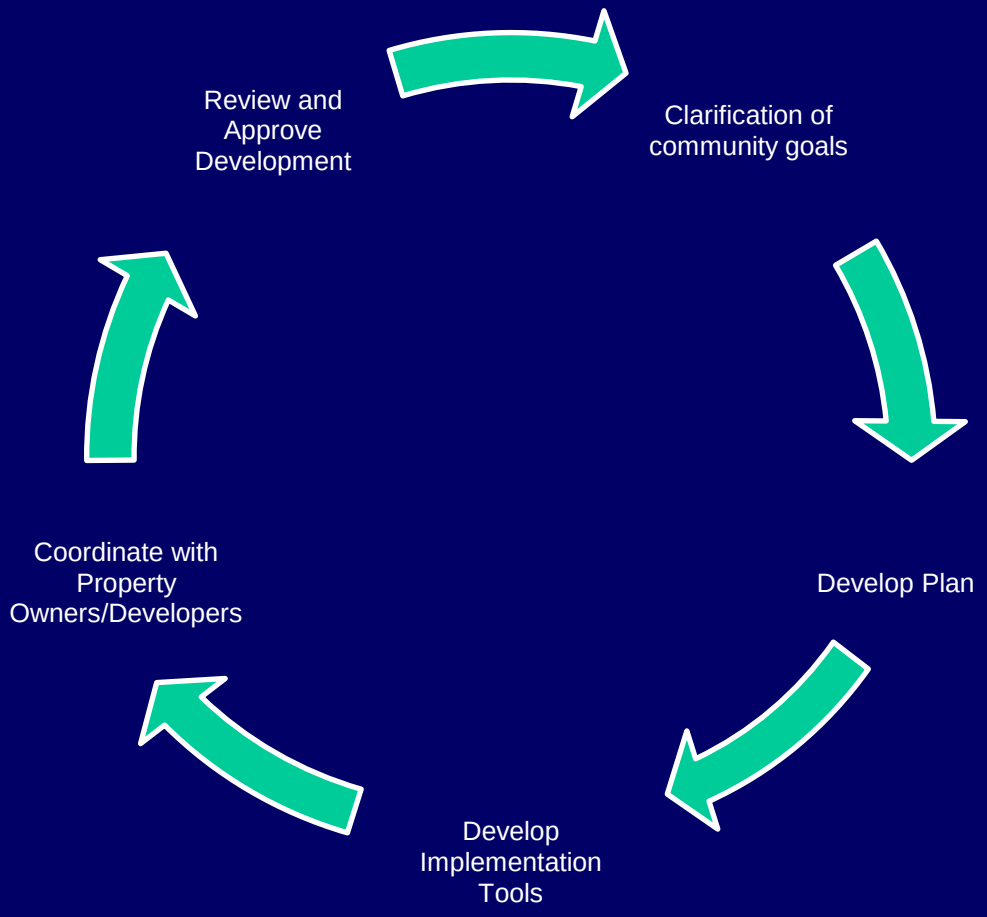
Planning And Development Process



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We Plan at the Local Level

- Why we do it
  - Coordinate activities and services
  - To be fiscally efficient
  - To control or influence what the future looks like
  - To match goals with outcomes
  - To understand our community

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We Plan at the Local Level

- Why we do it
  - The buildings, facilities and improvements provided by a city affect the daily lives of many
  - Give form to the community
  - And either stimulate or retard development on privately owned land

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We Plan at the Local Level

- And Maybe Most Importantly
  - To coordinate investments in public projects such as transportation, streets, water and sewer
  - These are costly systems and Smart Growth and Planning is all about making these systems more efficient and effective

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Arlington

- Takes us to Arlington
- Have embraced these concepts and provide an excellent example on how it can be done
- Maybe at a slightly different scale but still some valuable lessons

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Arlington Overview

- 25.8 square miles
- Population 211,700 (2012)
- Employment 227,500 (2012)
- Housing Units 105,404 (2010)
- Daytime Population 283,000 (2010)
- 11 Metrorail Stations

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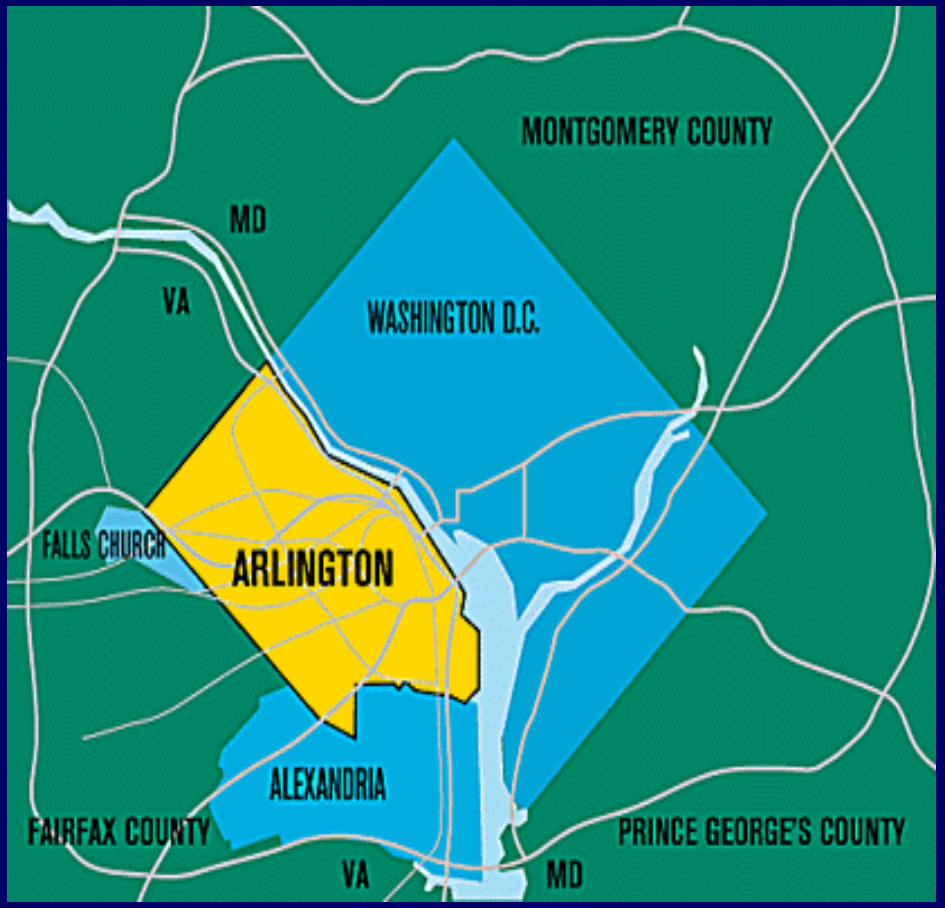
SETTING THE STAGE

- 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)



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SETTING THE STAGE

- 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

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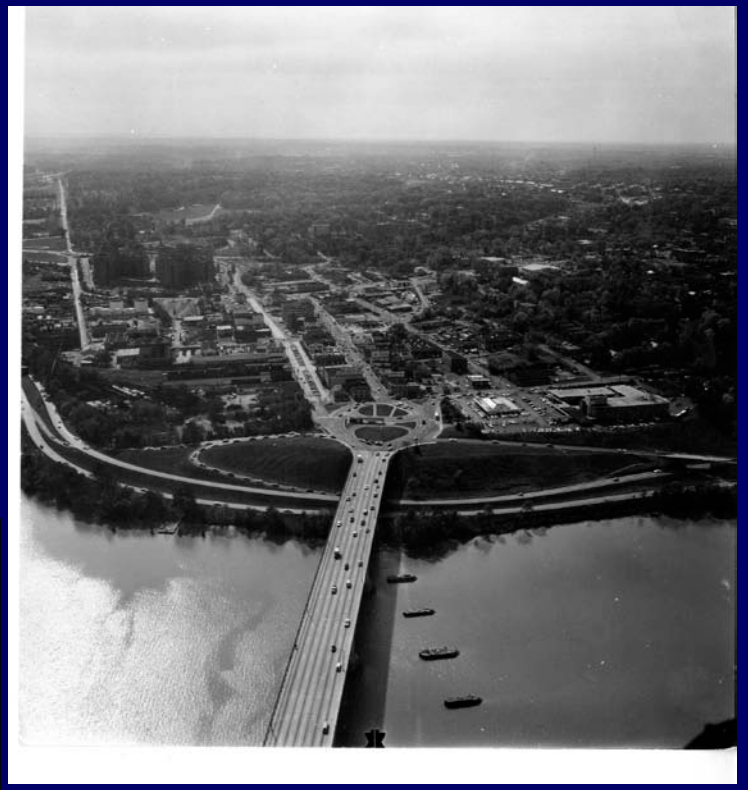
ROSSLYN THEN



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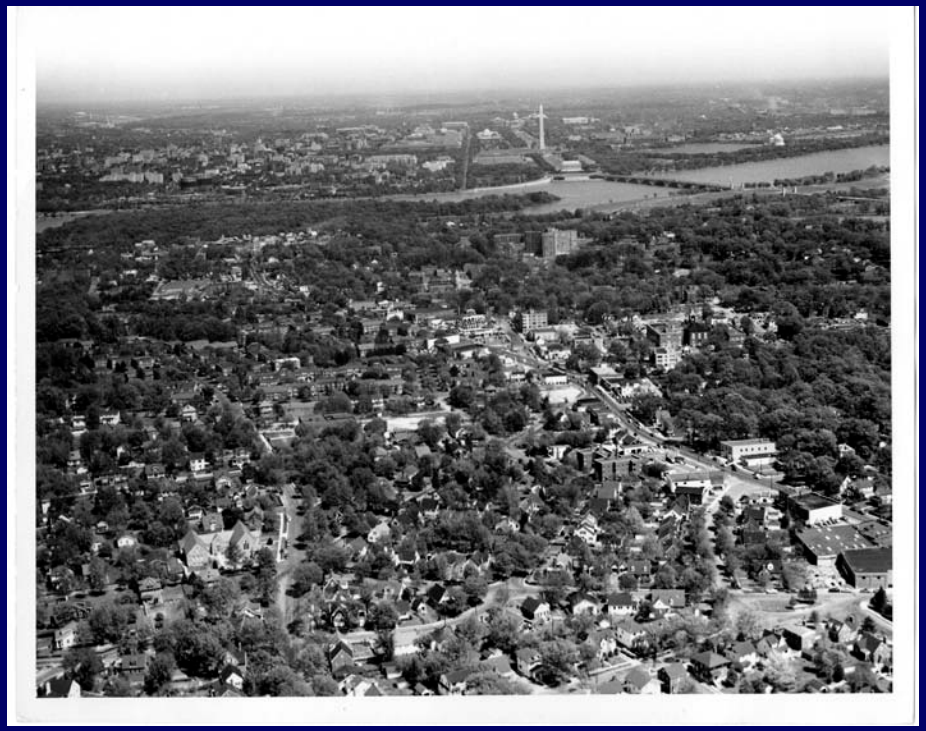
COURT HOUSE THEN



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CLARENDON 1980s

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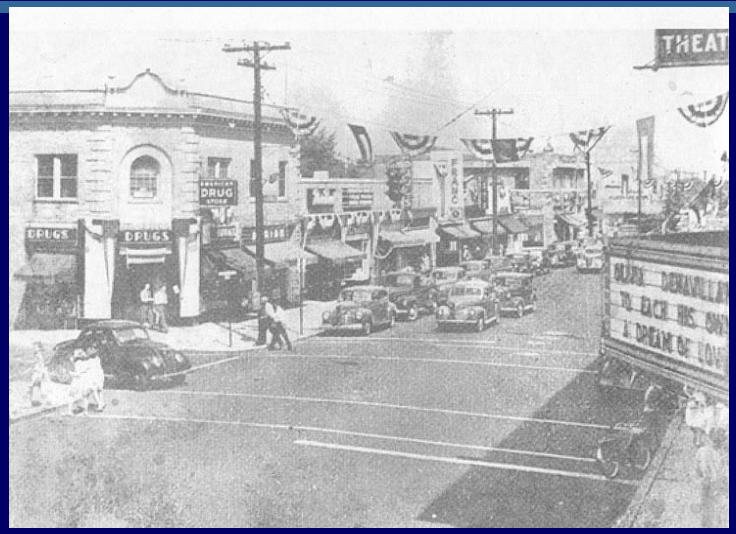
CLARENDON - ARLINGTON'S OLD DOWNTOWN



VIRGINIA SQUARE 70s

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VIRGINIA SQUARE – 1970s

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BALLSTON - THEN

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SETTING THE STAGE

- 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

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Regional Traffic

- There was also a growing recognition of a regional traffic issue
- Strong economic growth in the region had led to gridlock and the need for investment in new roads and forms of transportation.
- Arlington saw an opportunity to capture growth but plan it such that it would be served by transit – NOT CARS

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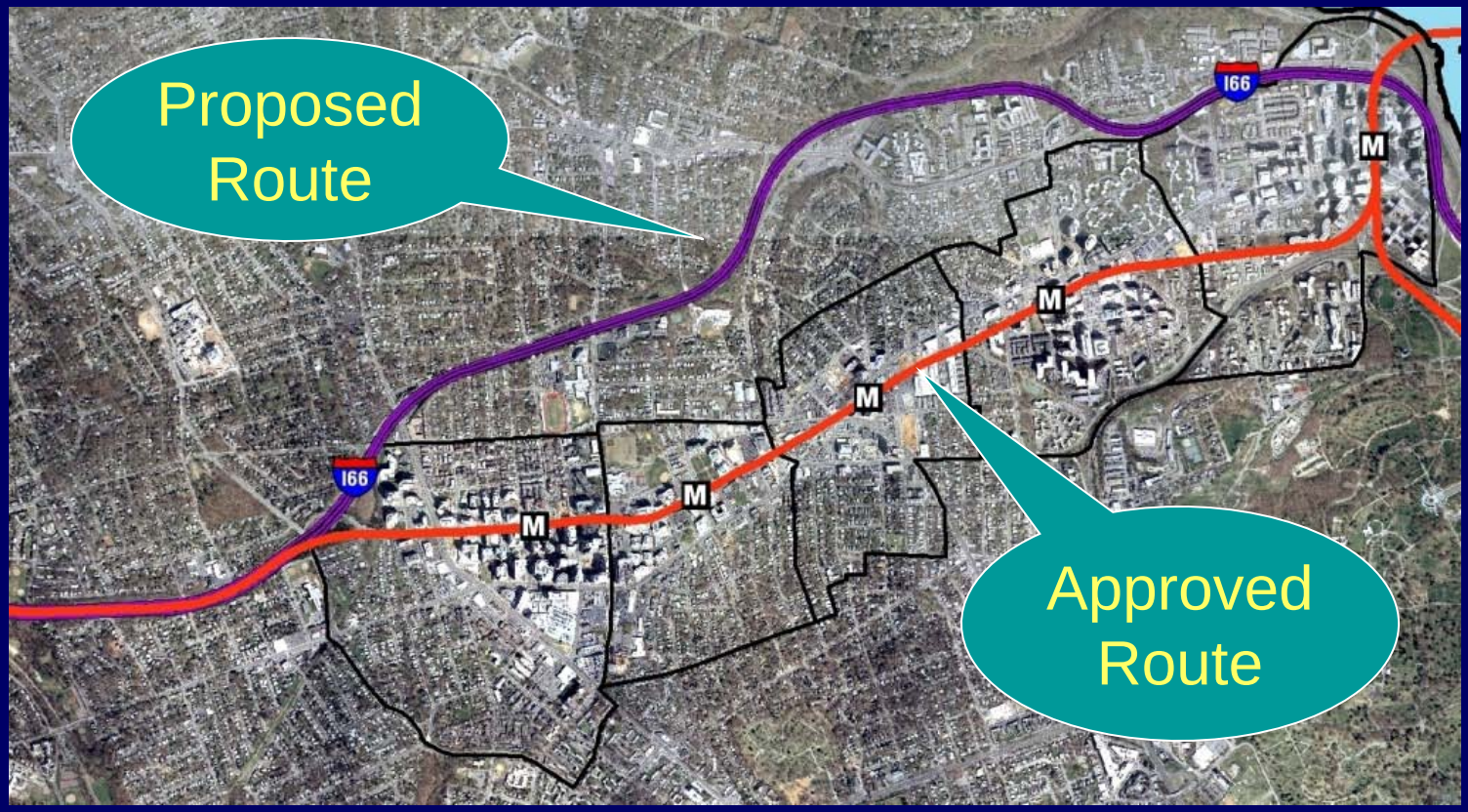
PROPOSED ROUTE

- Arlington lobbied strongly for an underground route along the old commercial corridor vs along the median of future highway



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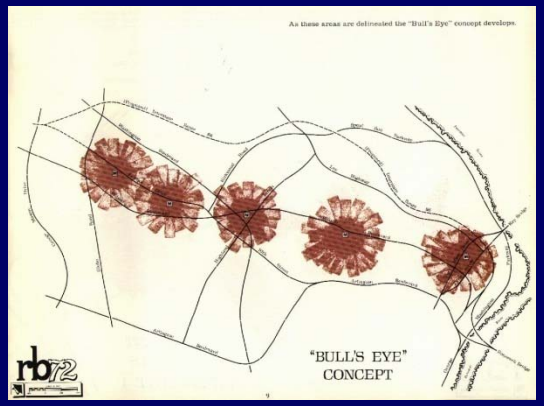
Development Concepts



- 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

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Transportation Concepts

- 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

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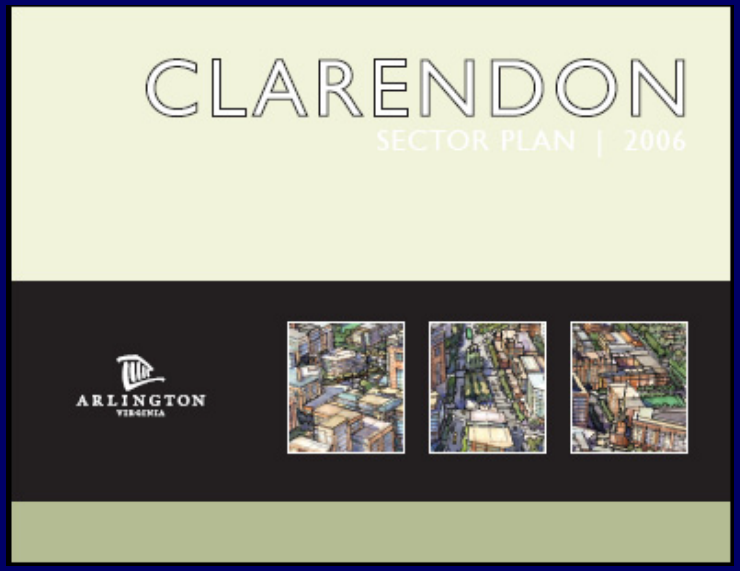
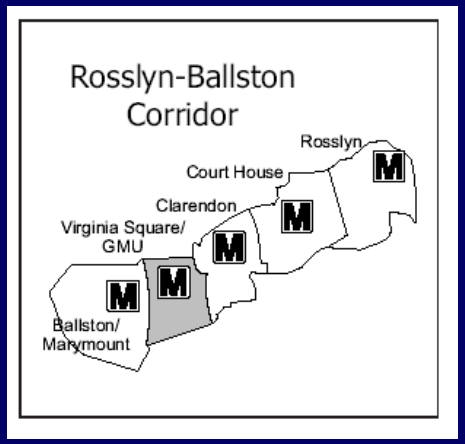
SECTOR PLANS

- 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





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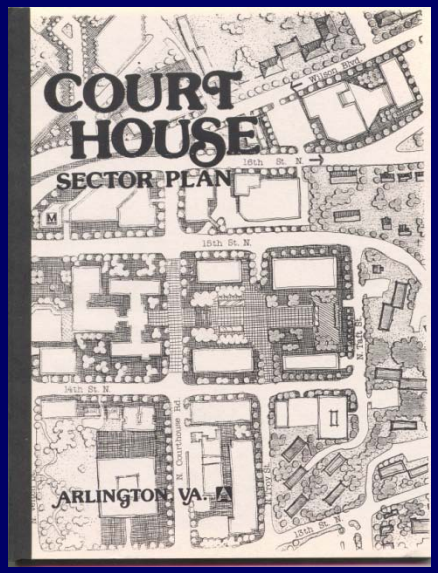
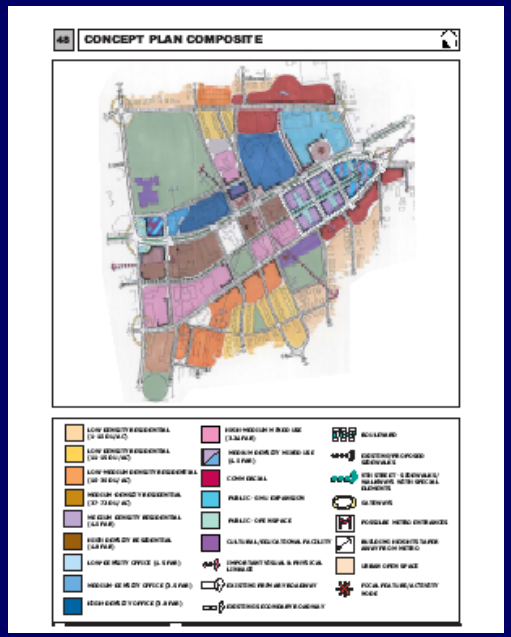
SECTOR PLANS

- Public infrastructure needs
- Open space, streetscape standards
- Each focused on an area of approximately 1/4 mile to ½ mile from the metro station





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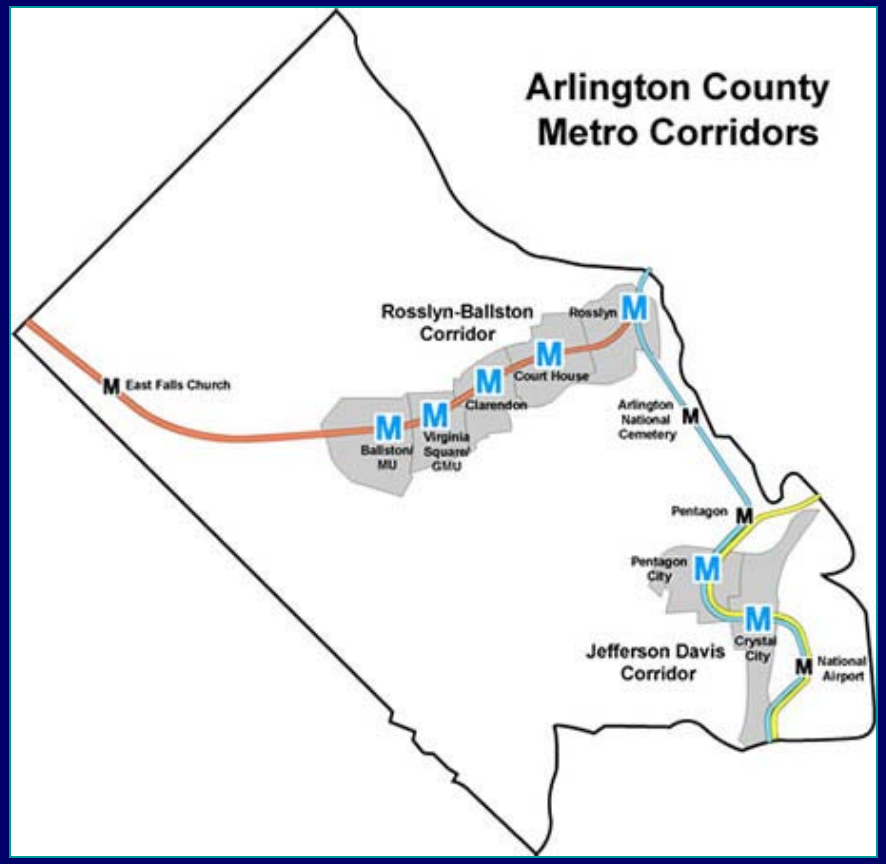
KEY TO SUCCESS



Chose to concentrate development

- 11 % of county (2 rail corridors) were re-planned to encourage mixed-use, high density development
- 89% of county planned low residential, garden apartment/TH or retail

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HOW WE DID IT

- Incentive Zoning - GLUP for metro corridors indicated the county's willingness to rezone for higher density but land remained zoned for fairly low density
- In response to development proposals, county would rezone for higher density use shown on GLUP
- Most development – requires County Board approval
- Zoning allows flexibility but is tied to the GLUP and the adopted sector Plans in terms of uses, density, height and design

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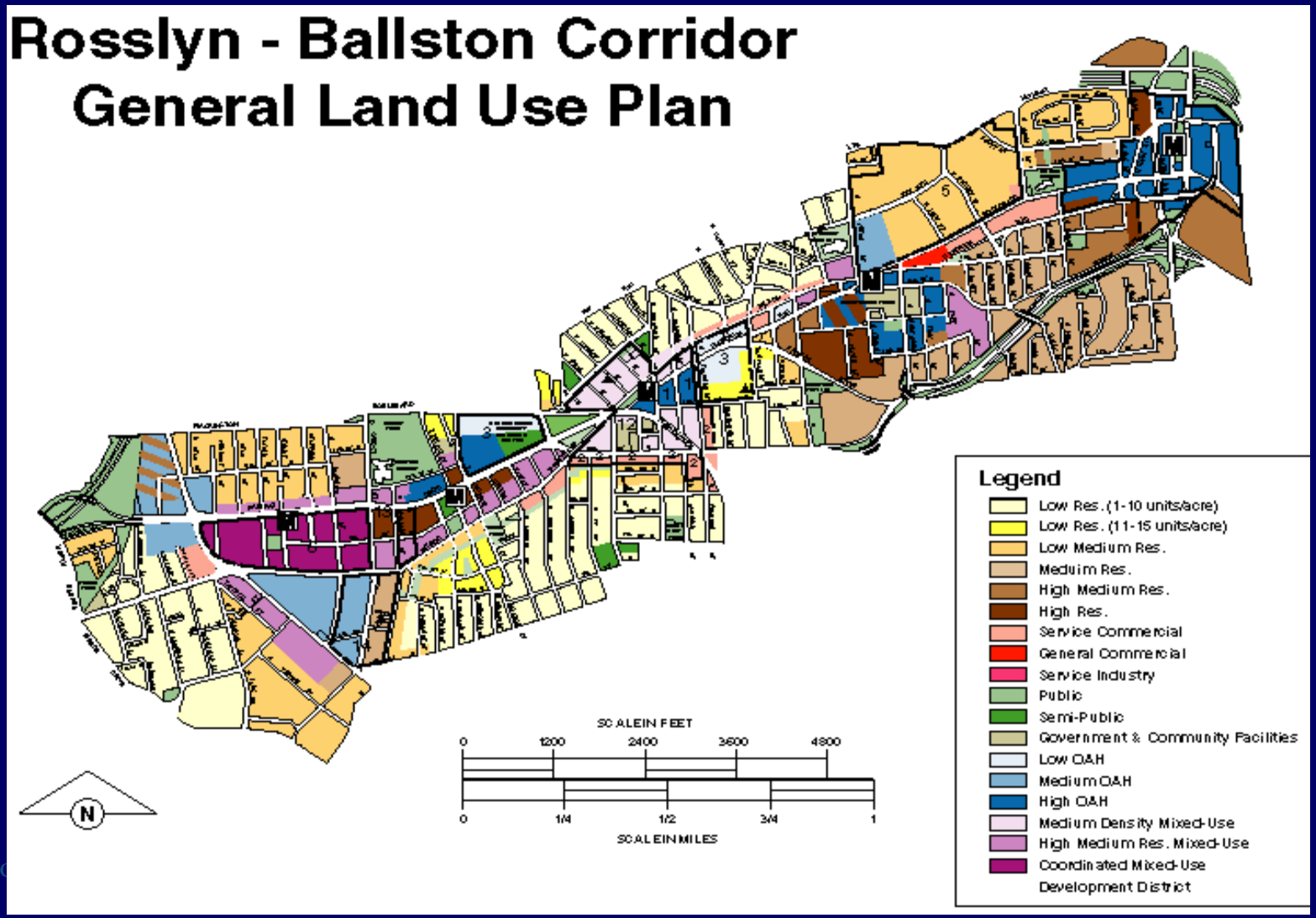
HOW WE DID IT


Rosslyn - Ballston Corridor
General Land Use Plan
Legend
Low Res. (1-10 units/acre)
Low Res. (11-15 units/acre)
Low Medium Res.
Meduim Res.
High Medium Res.
High Res.
Service Commercial
General Commercial
Service Industry
Public
Semi-Public
Government & Community Facilities
Low OAH
Medium OAH
High OAH
Medium Density Mixed-Use
High Medium Res. Mixed-Use
Coordinated Mixed-Use
Development District
SCALE IN FEET
0
1200
2400
3600
4800
SCALE IN MILES
0
1/4
1/2
3/4
1
N

HOW WE DID IT

- The site plan allows significantly higher density & height than underlying zoning

By-right	Site Plan
1.5 FAR	3.8 – 10 FAR
35-45 FT	100-300 FT
4 spaces per 1,000 SF	2 spaces per 1,000 SF

* FAR is a measure of development intensity based on site area – so 3.8 FAR is 3.8 times the site area

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HOW WE DID IT

- Site plan is approved only 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

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SITE 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

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ROSSLYN TODAY

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ROSSLYN TODAY

C-O Rosslyn
Development: 10 FAR

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ROSSLYN TODAY

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ROSSLYN TOMORROW

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AERIAL - COURTHOUSE TODAY

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COURTHOUSE TODAY

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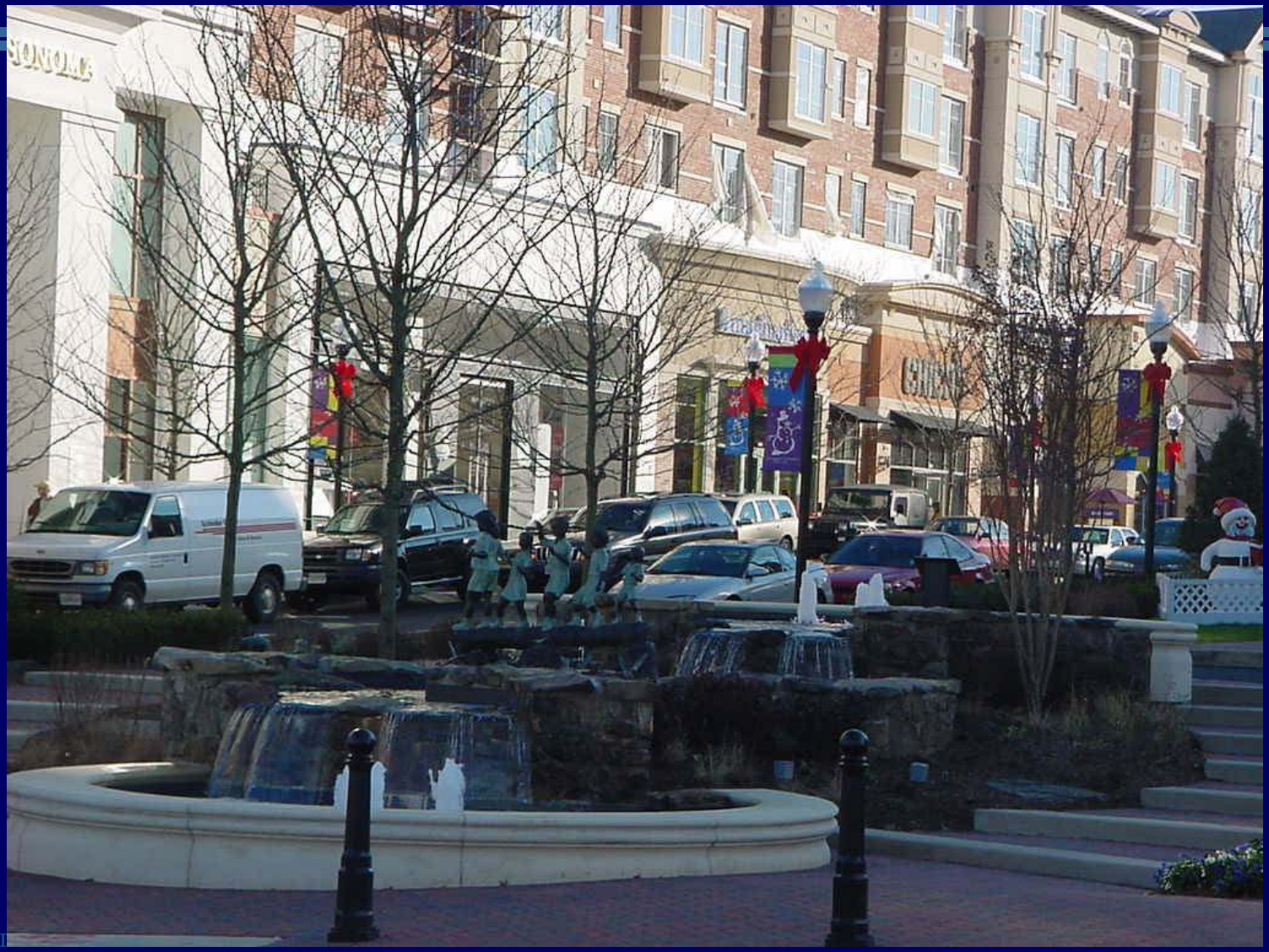
CLARENDON TODAY



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CLARENDON TODAY

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VIRGINIA SQUARE TODAY

VIRGINIA SQUARE TODAY

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BALLSTON TODAY

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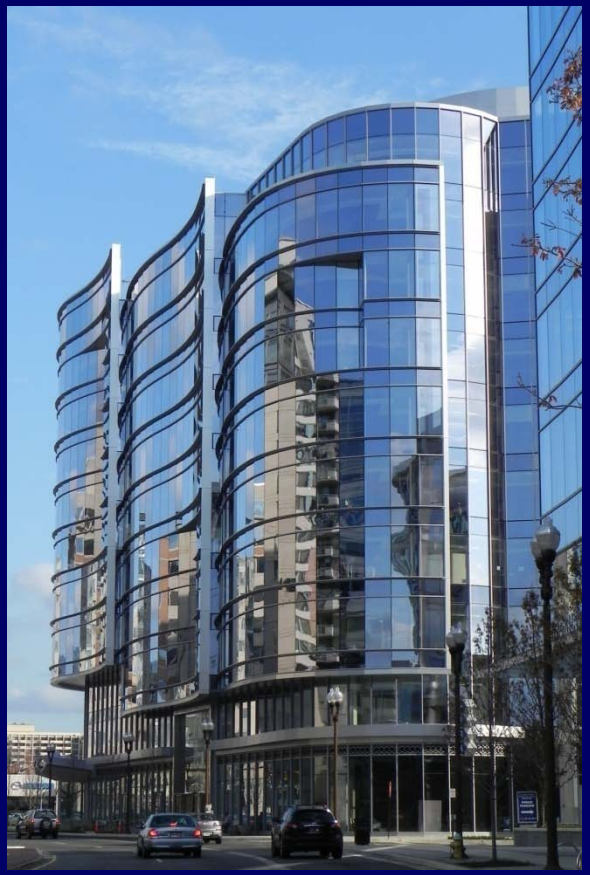
Ballston Today



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Ballston in 1980

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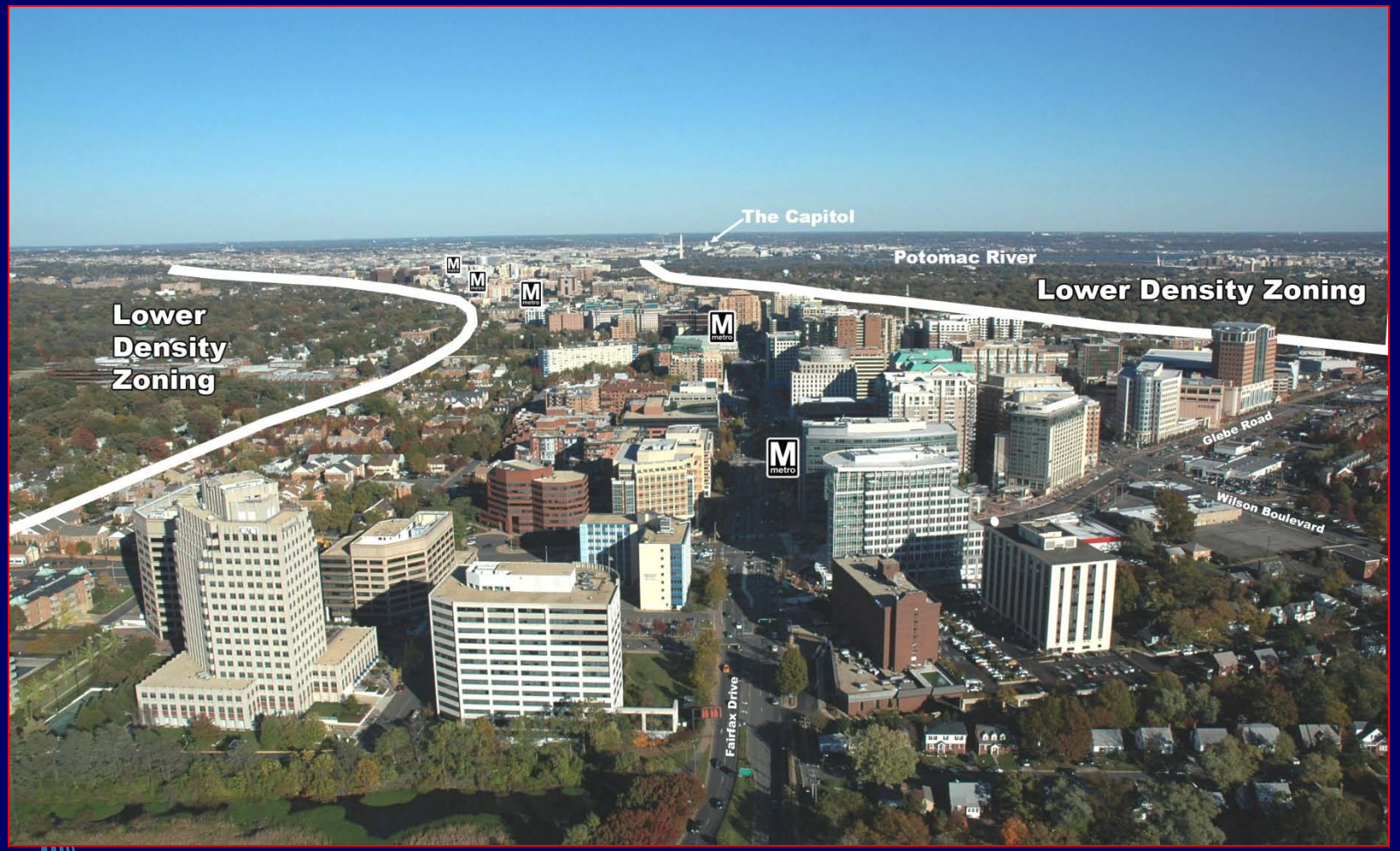
View of Rosslyn-Ballston Metro Corridor Development Patterns



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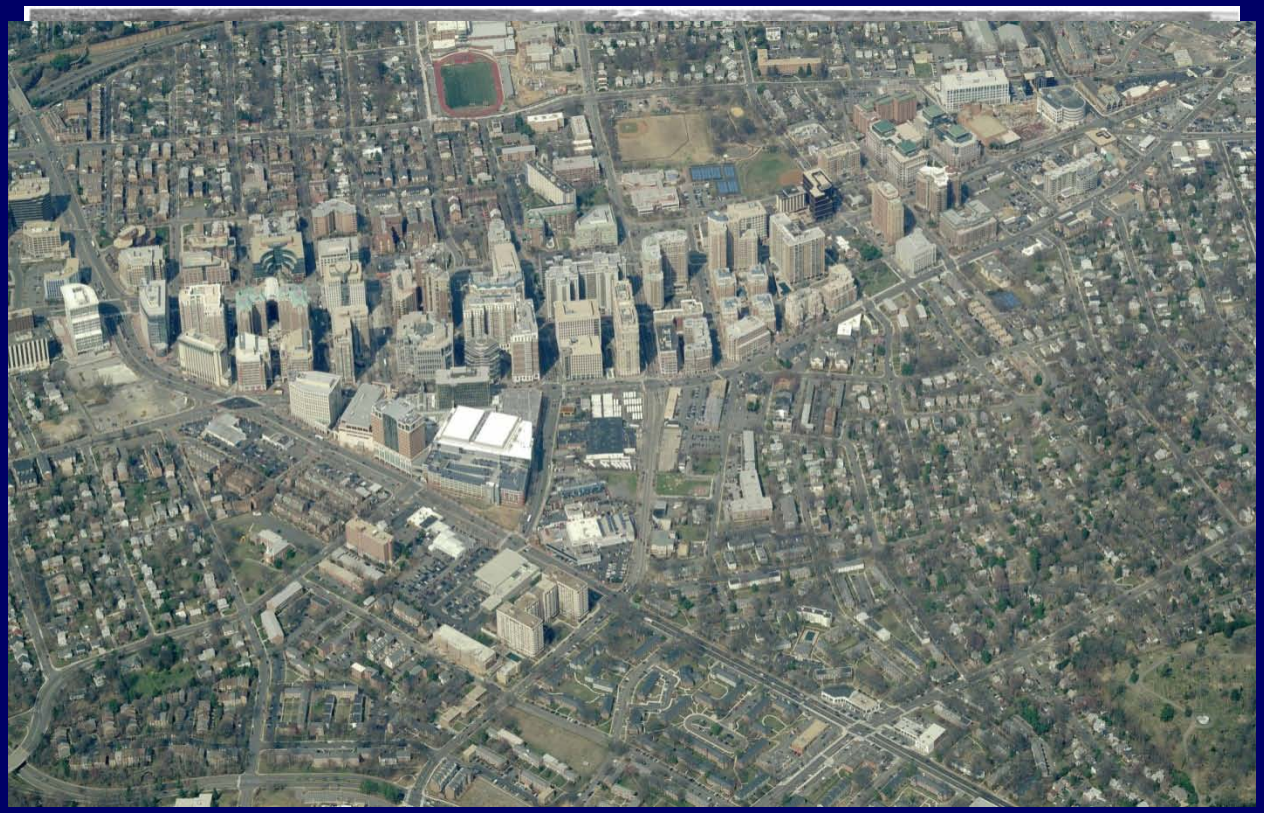
MEASURING SUCCESS
R-B CORRIDOR

1970

22,000 jobs

5.5 million sf office

7,000 housing units



2012

96,300 jobs

21.8 million sf office

29,366 housing units

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METRO CORRIDORS TOTAL

- Both Metro Corridors
  - 34,639,784 sq. ft. office w/ 638,519 under construction
  - 65,500 housing units w/ another 954 under construction
  - Retail – 5,524,320
  - Jobs – 148,977

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MEASURING SUCCESS

METRO RIDERSHIP (Average daily entries and exits)

1991

ROSSLYN

- 13,637

COURT HOUSE

- 5,561

CLARENDON

- 2,964

BALLSTON

- 9,482

2010

ROSSLYN

- 33,891

COURT HOUSE

- 14,640

CLARENDON

- 8,617

BALLSTON

- 23,641

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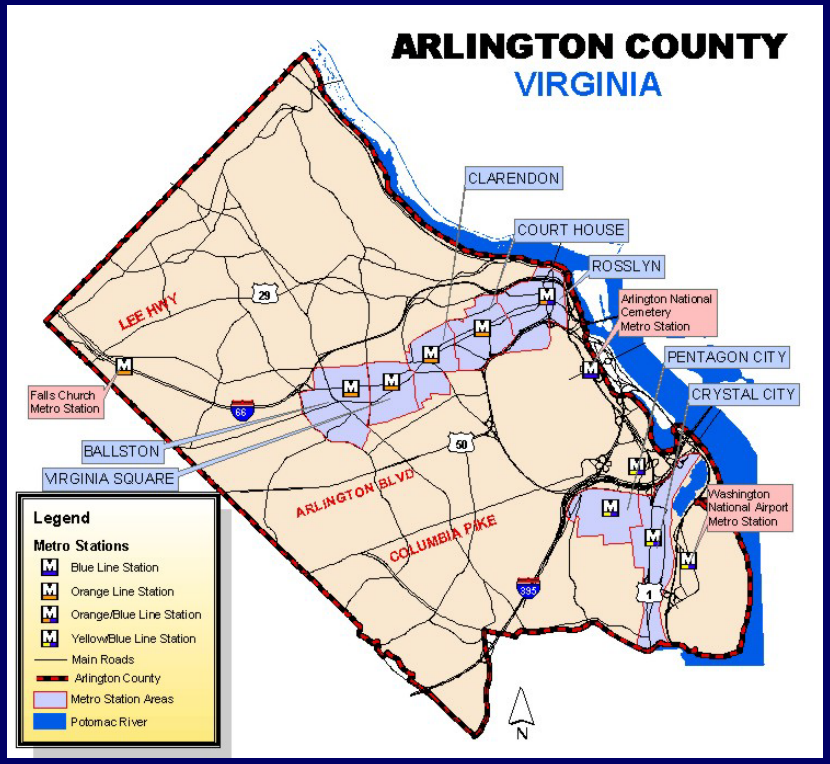
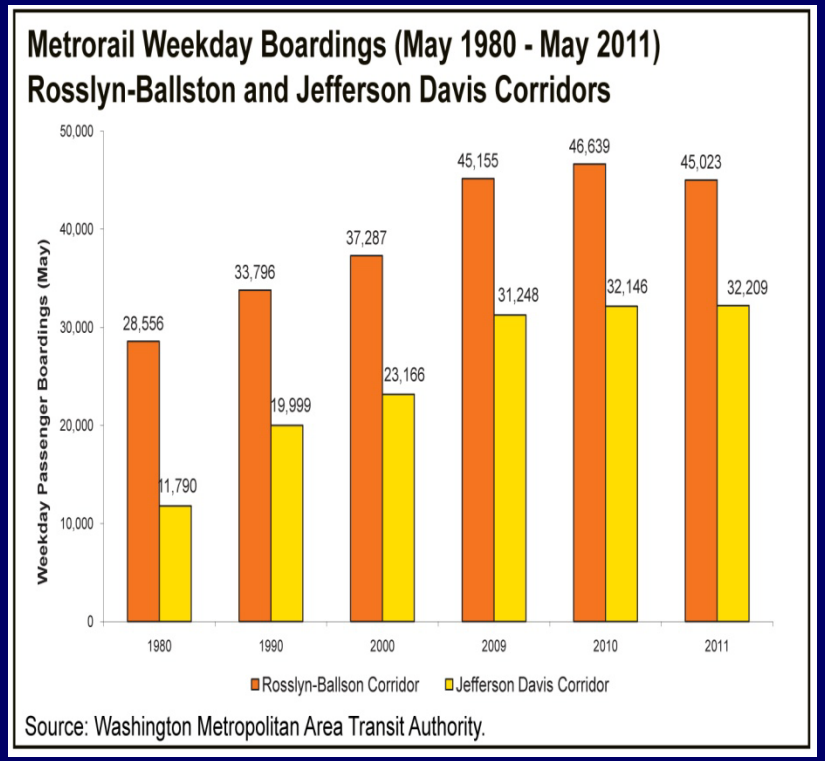
MEASURING SUCCESS

ARLINGTON METRO RIDERSHIP





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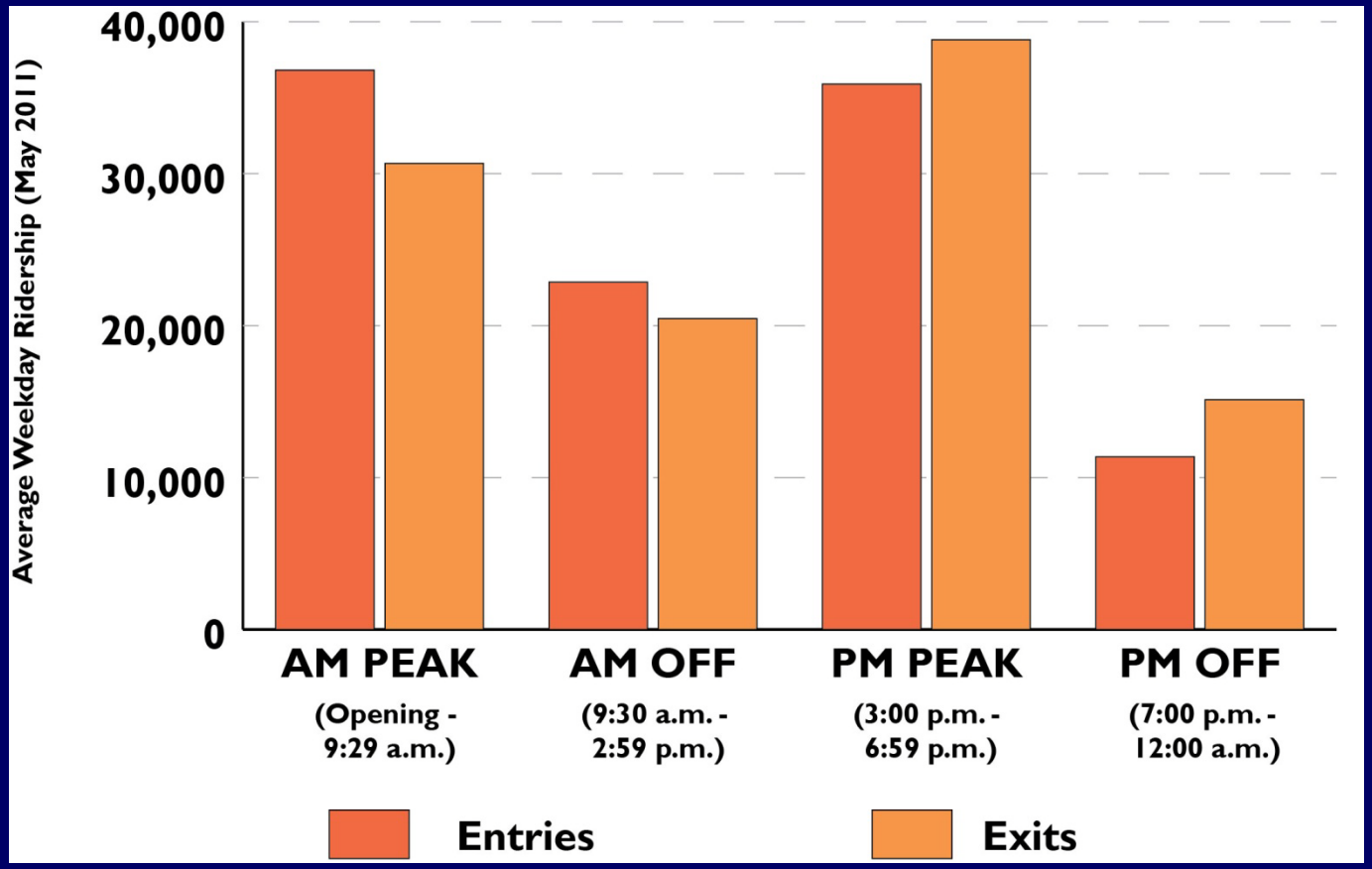
BALANCED DEVELOPMENT = BALANCED RIDERSHIP (2011)



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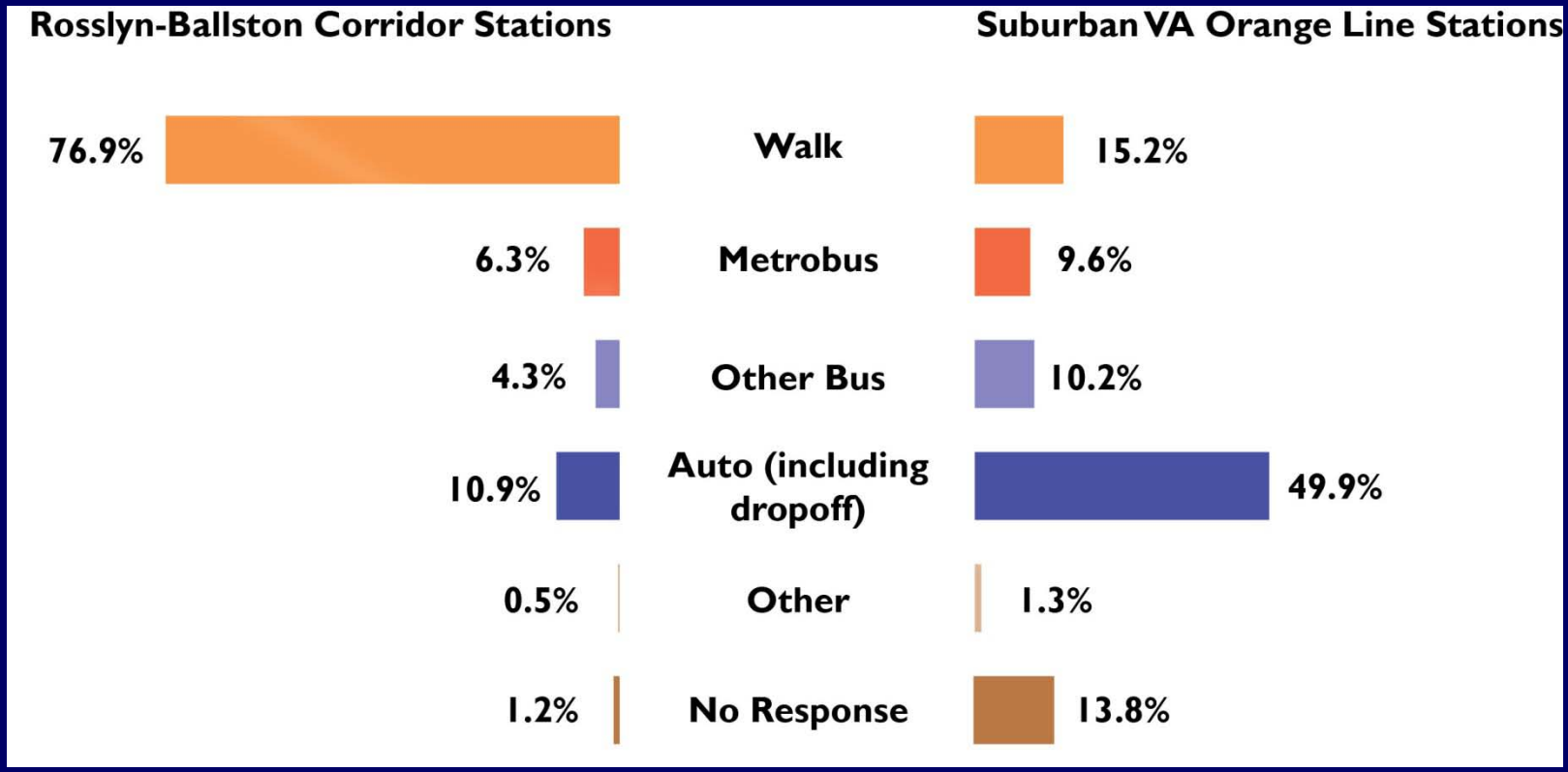
PEDESTRIAN ACCESS

76% WALK TO STATION

5 R-B Corridor Stations (2007)



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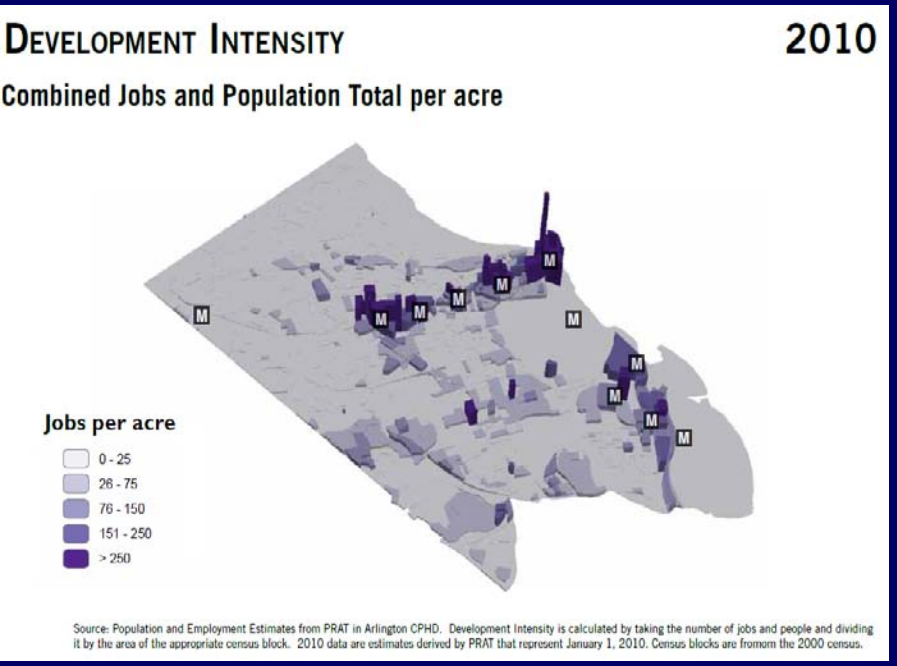
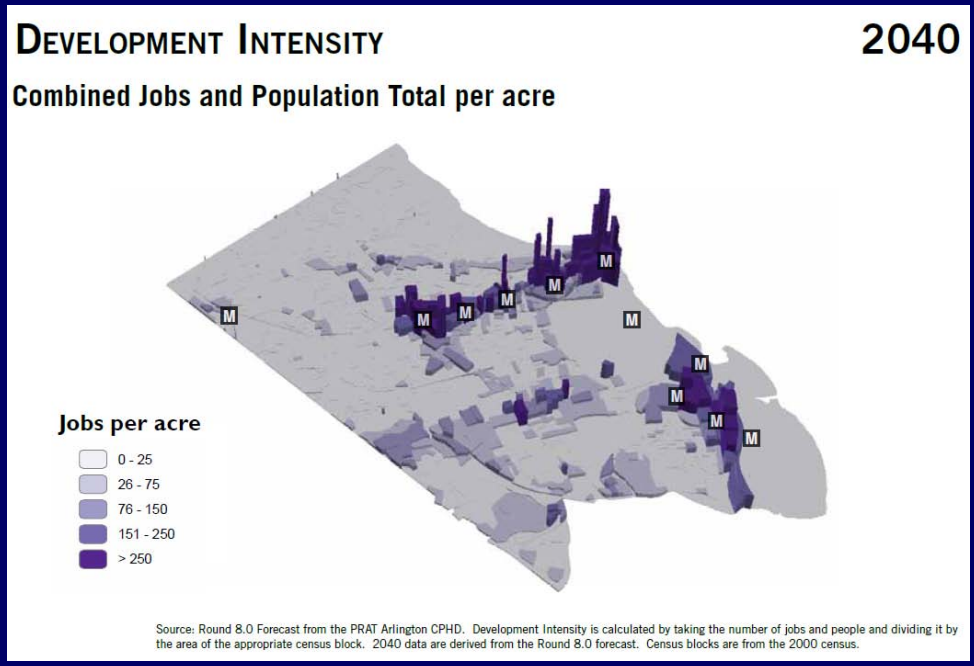
Measuring Success





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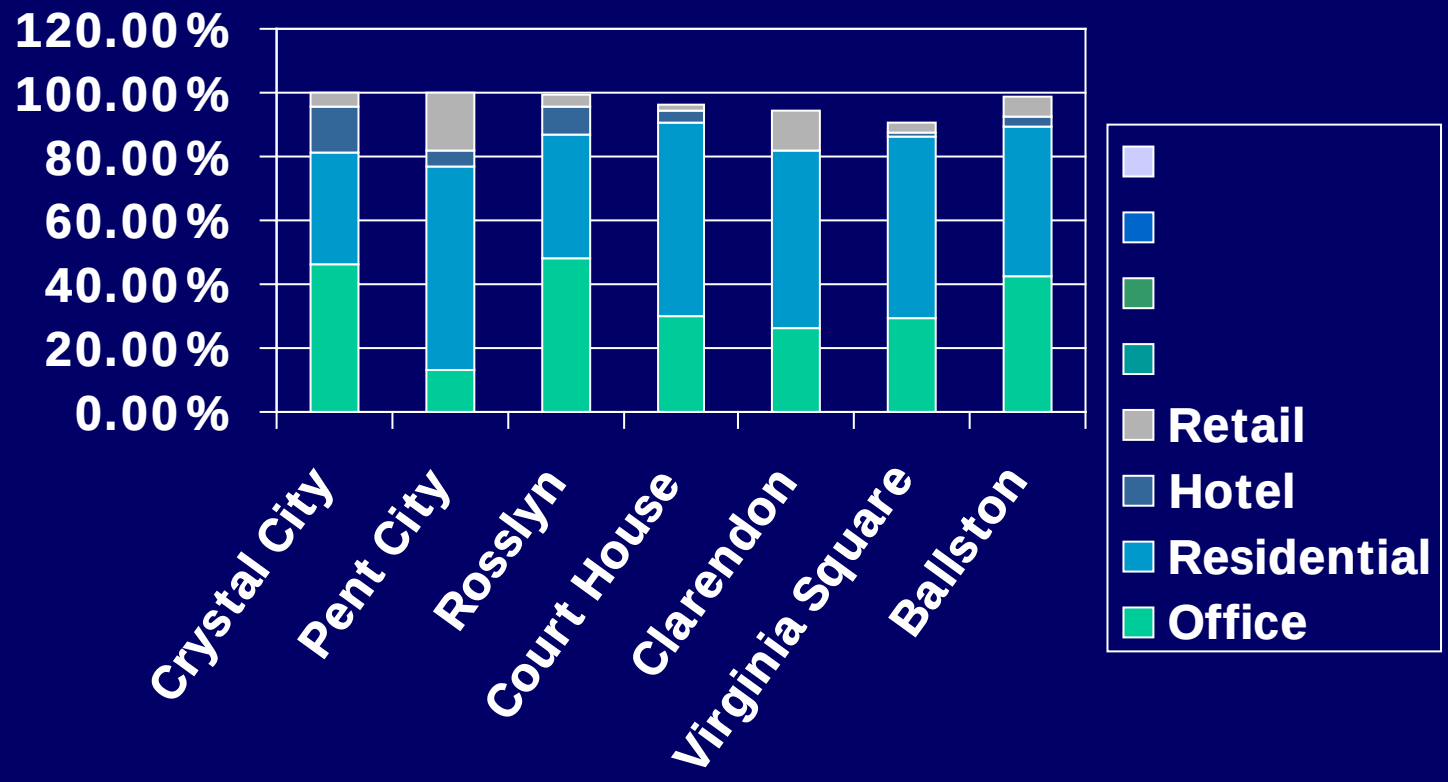
Balanced Development



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- Car ownership (*vehicles per household*)
  - Nationally, almost 90% have a car; 55% have 2 or more
  - Arlington: 12% have zero cars; less than 40% have 2 or more

Source – 2000 Census

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- Numbers are more dramatic in Arlington's Metro corridors
  - Car ownership: 11.8% have zero cars, while less than 38% have 2 or more
  - Getting to work: Less than half drive
    - 41.6% use transit
    - 8.7% walk or bike
    - 3.2 work at home

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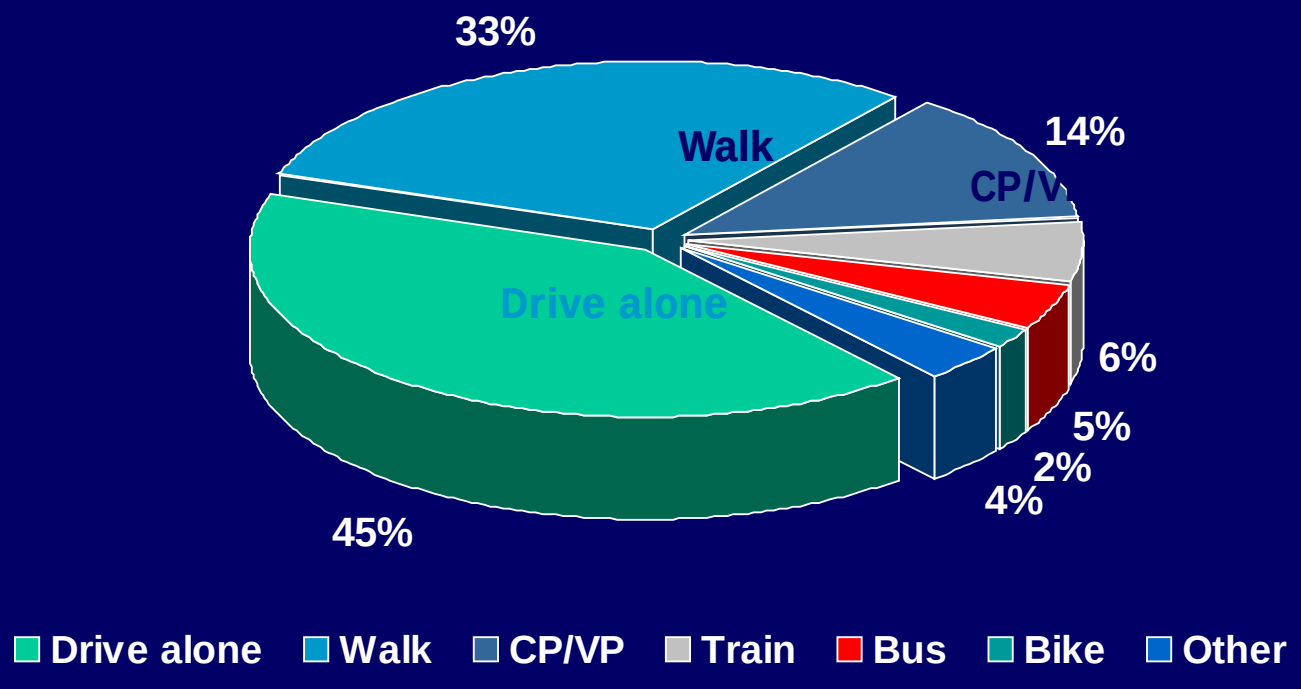
Non-Work Travel Mode

"Drive-alone" trips are less than half.

One-third are made by walking, and one in eight are made by riding or driving with another person.



Q J-7, J-8, J-13 What type or types of transportation did you use for <these trips>?

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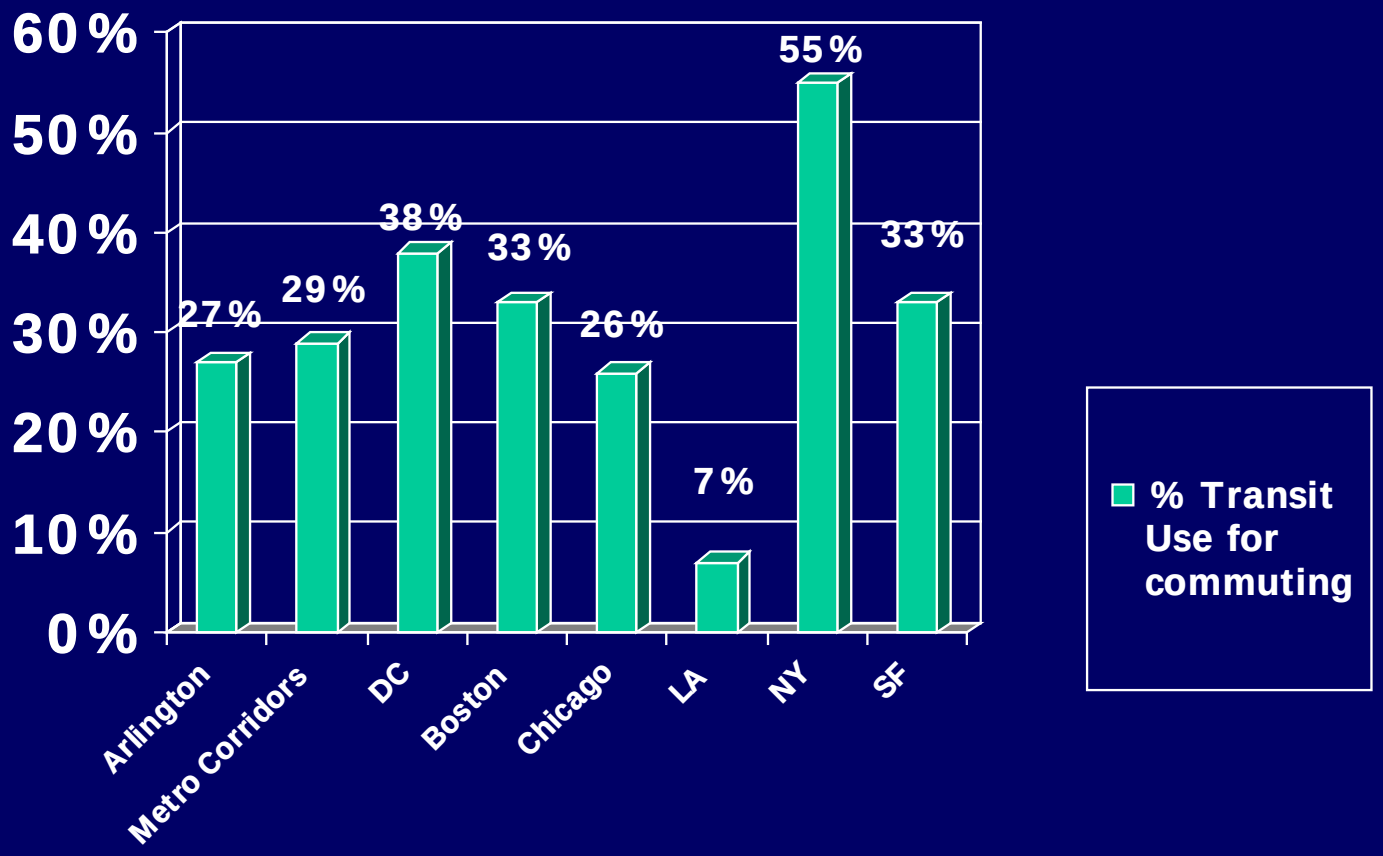
Public Transportation for Commuting (2005)



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MEASURING SUCCESS- Transit Ridership Trends

Arlington-Related Trips

	FY1996 Actual	FY 2001 Actual	FY 2008 Estimate	% Growth
Metrorail – Arlington Stations	45,335,000	56,278,412	65,500,000	44.5%
Metrobus – Arlington Routes	12,049,000	11,614,599	15,500,000	28.6%
VRE – Crystal City Station	567,000	586,069	950,000	67.5%
Arlington Transit (ART)	105,000	147,813	1,225,400 (actual)	1167%
Total Annual Ridership	58,076,000	68,626,893	83,175,000	43.2%

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Station Proximity is Important

- Transit Rates are affected by distance to station
  - Work Based

Transit % 0-2 Blocks	40%
Transit % 3-5 Blocks	43%
Transit % 6-10 Blocks	25%
Transit % >10 Blocks	11%

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Station Proximity is Important

- Transit Rates are affected by distance to station
  - Home Based

Transit % < ½ Mile	51%
Transit % > 1 Mile	16%

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Limiting Parking

- 2008 Survey found
- Drive alone rates increased when more parking was available ranging from 40% where the ratio was .25 spaces per employee to 67 % with a ratio of .91 or more.
- When parking rates increased to over $100 a month drive alone rates dropped from 65% to 54% and dropped to 30% when the rate grew to $125

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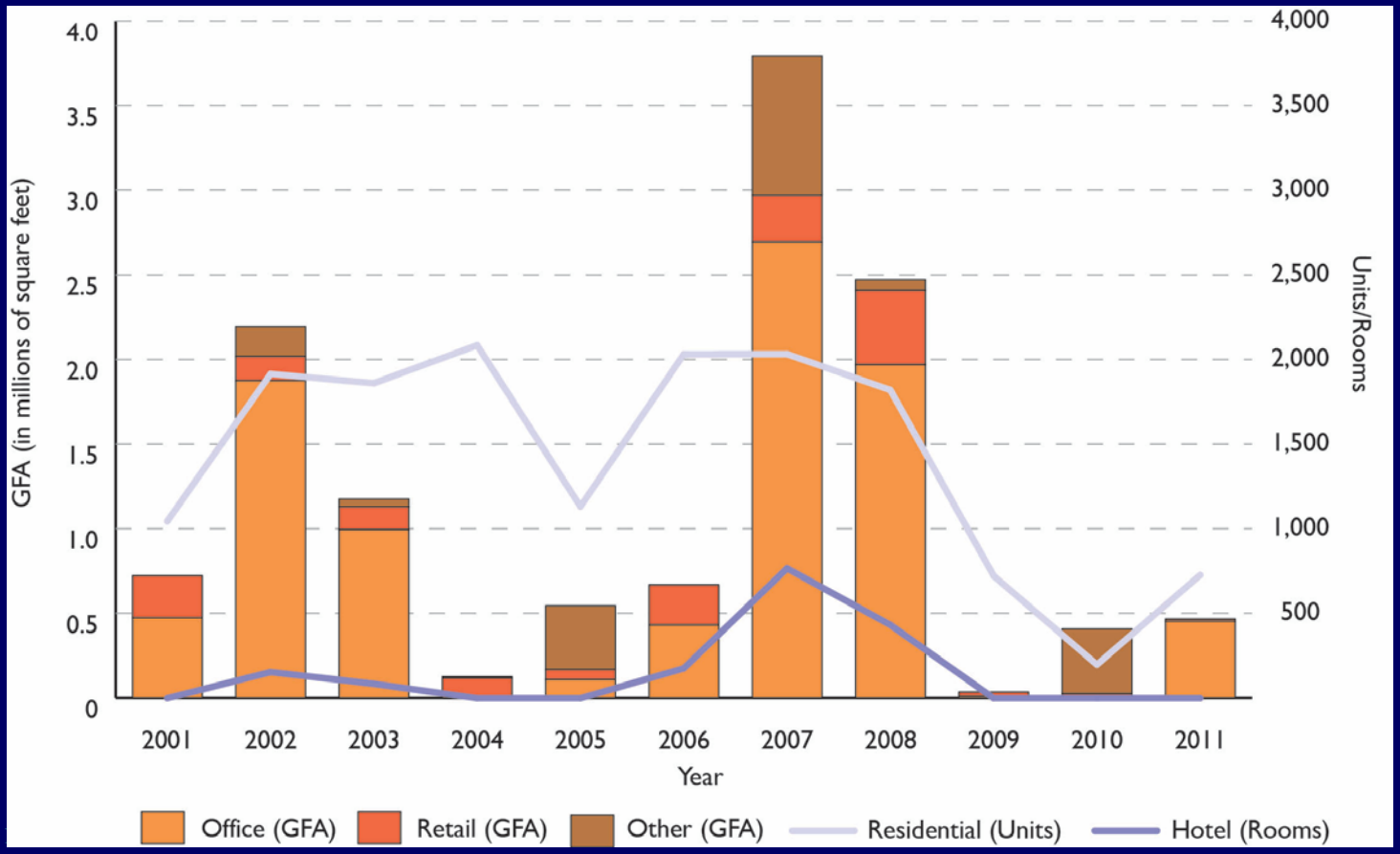
MEASURING SUCCESS

Development Approval Trend 2001-2011



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MEASURING SUCCESS

Traffic Trends on Arterial Streets

Street Segment	Street Type	1996	2001	2006	% Change 1996-2006
Lee Hwy - Rosslyn	EW 6-lane arterial	37,770	33,632	32,428	-14.1%
Wash. Blvd – VA Sq.	EW 4-lane arterial	20,469	19,478	18,069	-11.8%
Clarendon Blvd.	EW 2-lane 1-way arterial	13,980	14,199	14,539	4%
Wilson Blvd. - Clarendon	EW 2-lane 1-way arterial	16,368	16,265	13,797	-15.8%
Arlington Blvd.	EW 6-lane arterial	55,865	63,272	60,223	7.8%
Glebe Road - Ballston	NS 6-lane arterial	35,230	39,409	35,900	1.2%
G. Mason Drive – west of Ballston	NS 4-lane arterial	20,002	22,578	23,386	16.9%

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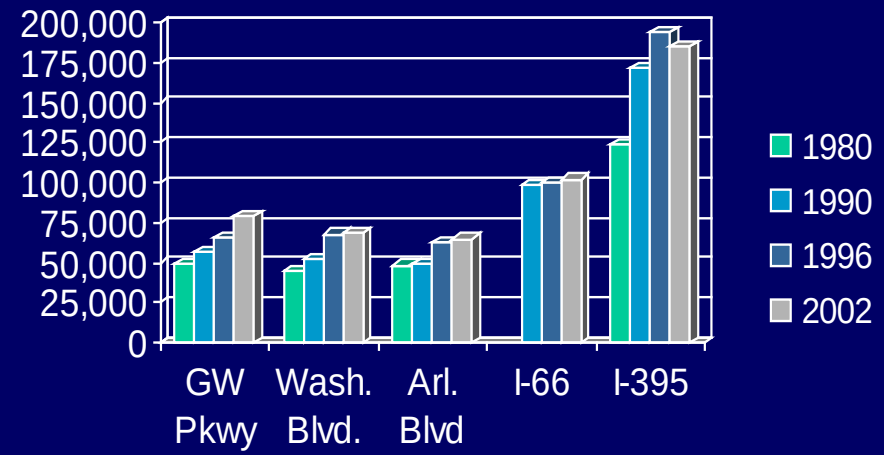
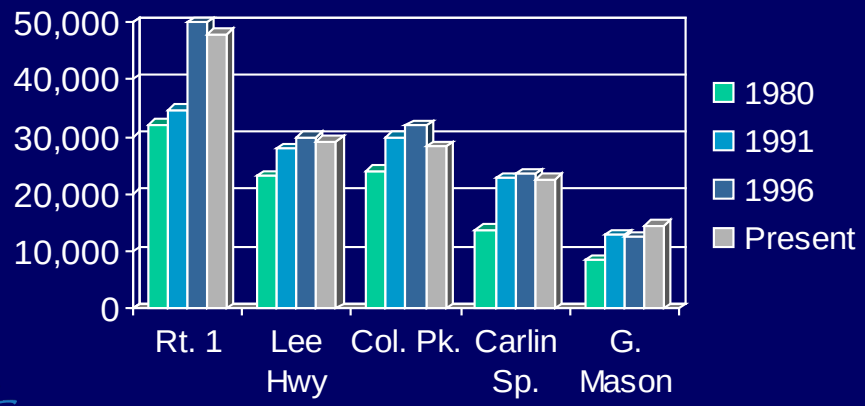
Traffic Trends – Regional & Local Facilities





- Substantial growth in traffic volumes on regional limited access highways, with most of the growth between 1980 and 1990
- Modest growth in traffic on arterial and local streets which has flattened out in the last 10 years (averaging less than ½% per year on many streets)

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MEASURING SUCCESS

- $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
  - Boston

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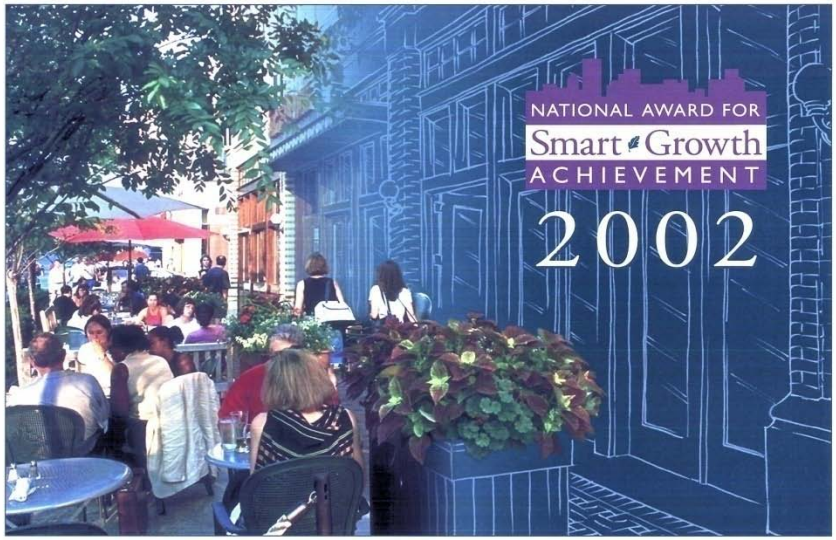
EPA SMART GROWTH AWARD



National Award for Smart Growth Achievement

For effective planning, policies and **Overall Excellence in Smart Growth**, the U.S. Environmental Protection Agency recognizes the

Arlington County Government

for

Smart Growth in the Rosslyn-Ballston Metro Corridor.

This exceptional example of planning and implementation demonstrates a commitment to growth that makes sense for our environment, our economy, and our communities.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Christine Todd Whitman
Administrator

November 18, 2002
Date

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OTHER AWARDS

- 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

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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

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LESSON LEARNED

- 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

LESSON LEARNED

- Station areas must be able to satisfy the daily needs of users if they are to really to leave their cars behind (mixed use)
- Reduce parking requirements
- Concentrate development near the station with office being the closest

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REFINING THE VISION - CHALLENGES

- Affordable housing
- Expansion of transportation options
- Energy and Sustainability
- Regional Growth

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REFINING THE VISION - CHALLENGES

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

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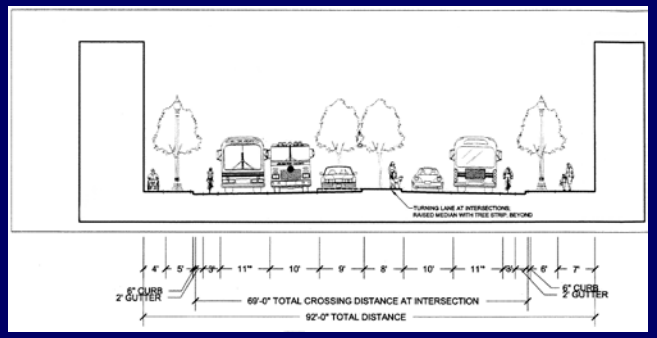
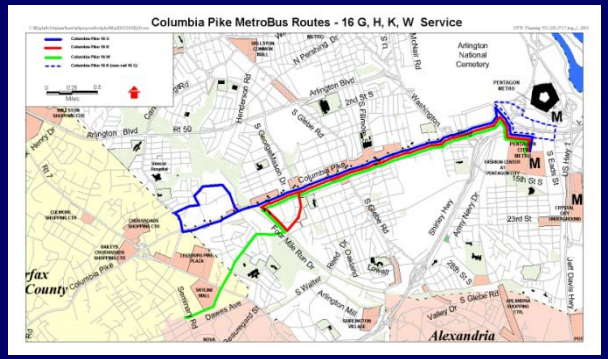
Expansion of Transportation Options

- 99% of Arlington residents live within 1 mile of a bus stop
- Continued investments in expanding Metrorail Station access
- Enhanced integration of bus transit facilities and operations into street design
- Integration of high-capacity surface transit (BRT/streetcar) on selected streets
- Expanding high-frequency local transit service





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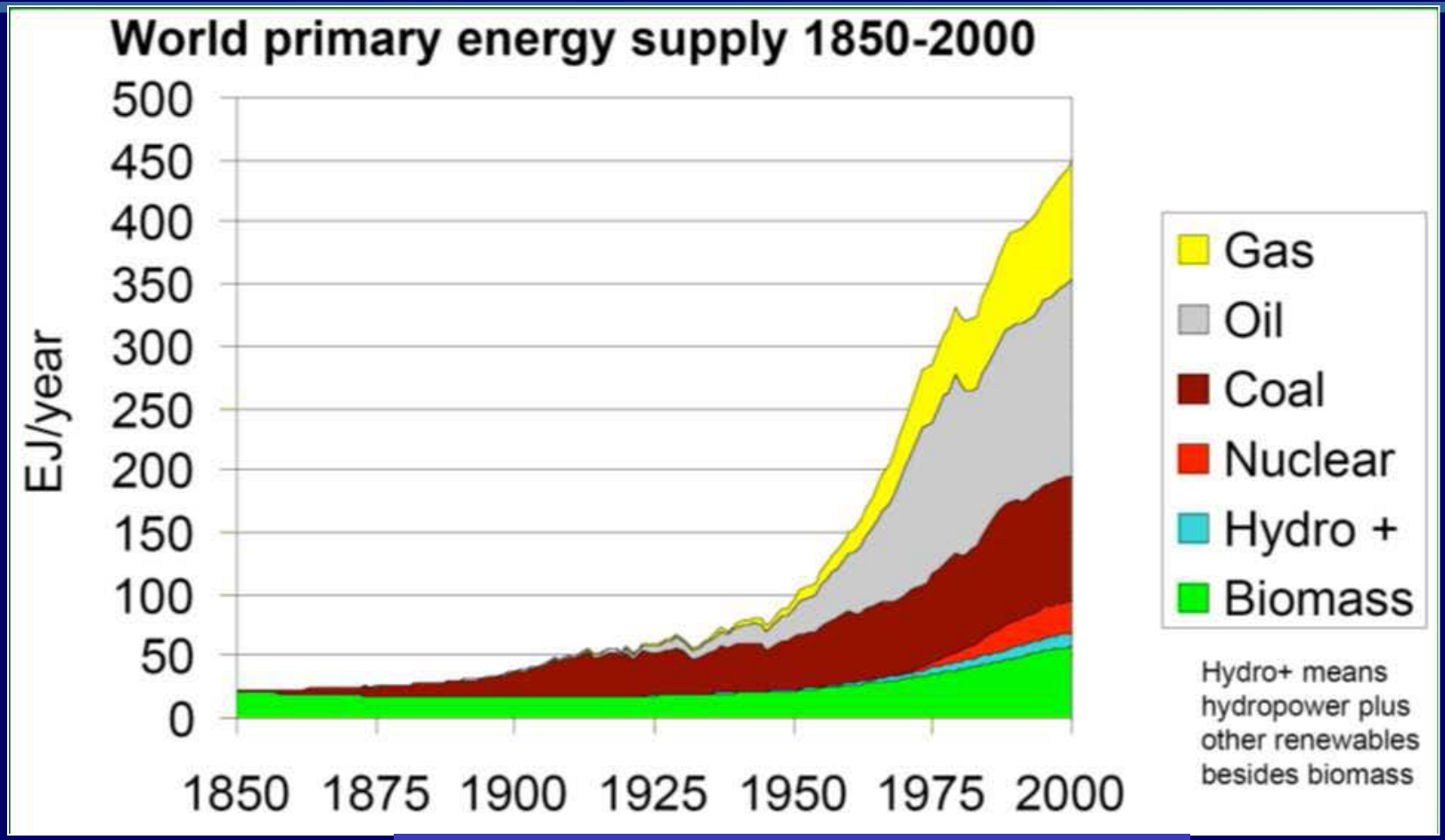
Energy and Sustainability

- Many aspects
- First – investment in transit options to minimize SOV and emissions
- Second – focus on LEED – incentivized buildings being LEED certified
- Third – focus on energy efficiency of buildings
- Fourth – Community Energy Plan

Insatiable Appetite for Energy

About 70% of it in Cities



Forecast to double by 2030

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Community Energy Project: Background

Competitiveness

- Energy cost
- Employment
- Investment

Security

- Supply security
- Supply quality
- Flexibility

Environment

- Greenhouse Gas Reduction

Three Groups of Benefits

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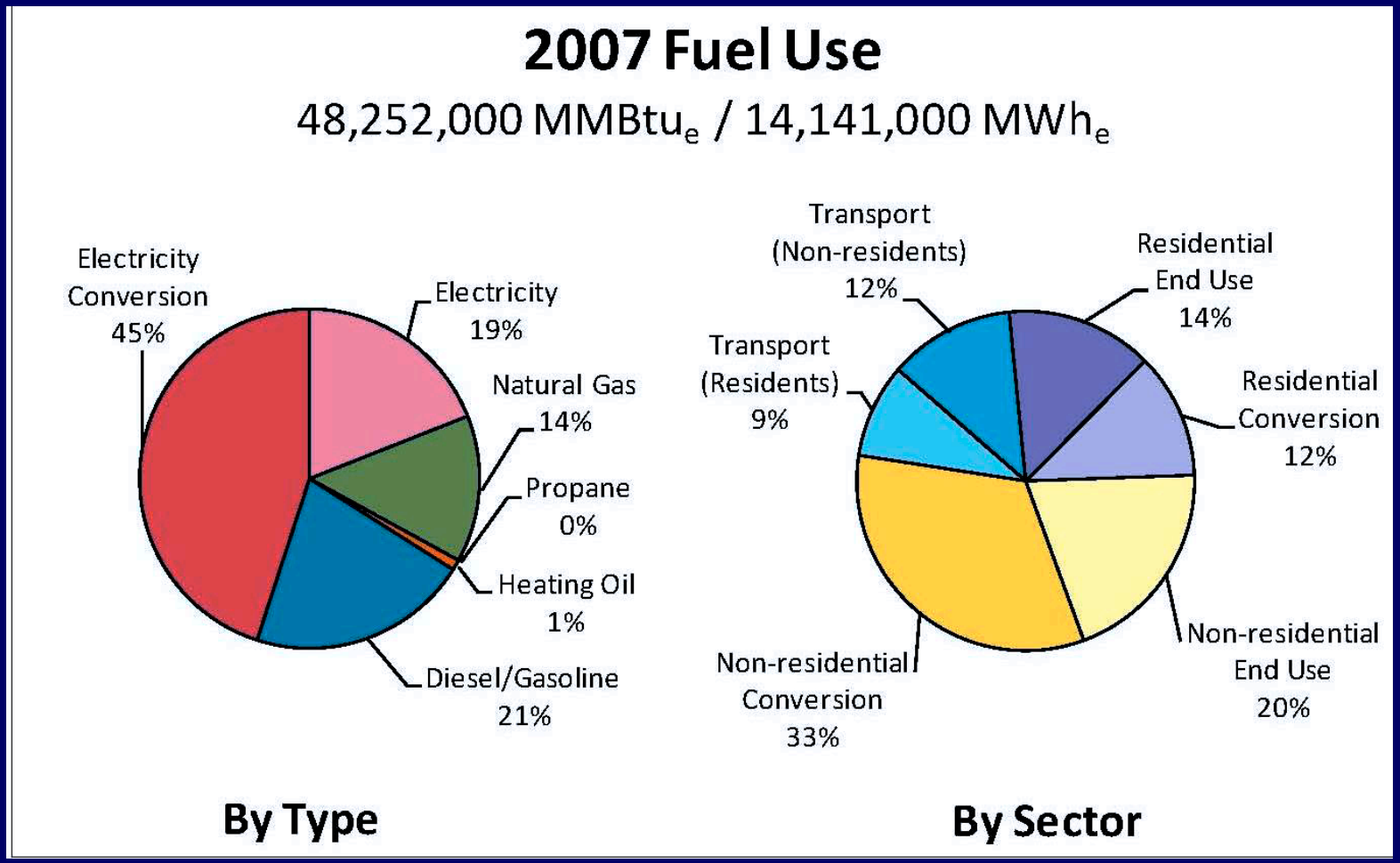
Community Energy Plan



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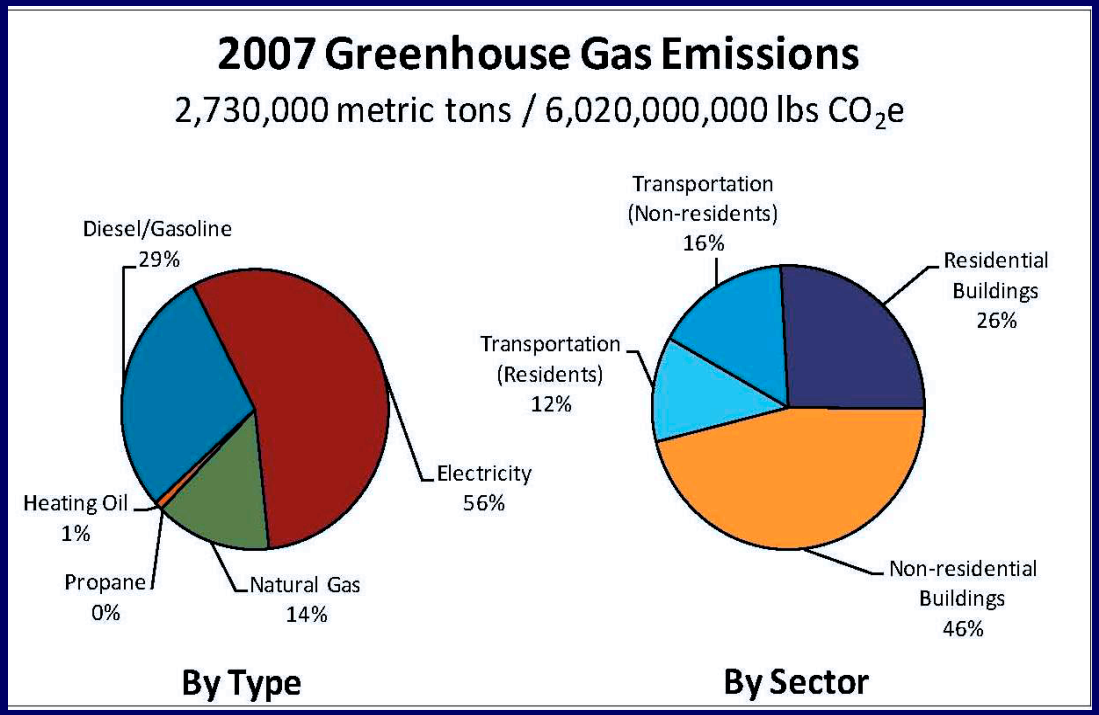
Community Energy Plan

- 2007
- 2.7 million tons
- 13.4 tons per person
  - 2050 GOAL
- 3.0 tons per person



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Community Energy Plan

- Buildings – 72% of our energy use
- LEED Incentive – Gold
- LEED does not ensure energy efficiency in buildings
- More importantly – it does not measure actual energy use
- In order to reduce energy use and be more competitive more is needed

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Community Energy Plan

- Crystal City Plan
- Integrated Energy Master Plan
- Focus on District Energy with a District Energy Company
- Combined heating and cooling systems
- District Energy Ready Buildings

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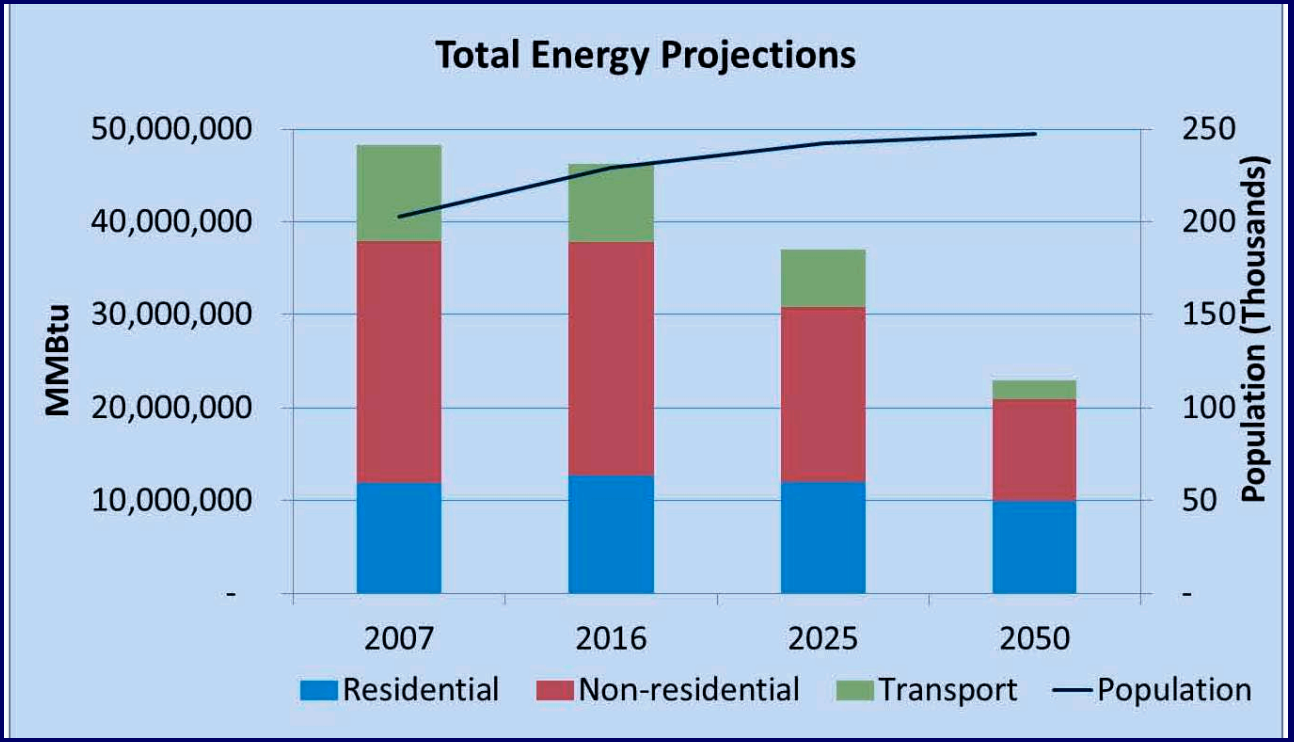
Community Energy Plan

- Reduction from 13.4 tons/person to 3.1 tons/per person
- Absorb continued growth with a 50% reduction in energy usage



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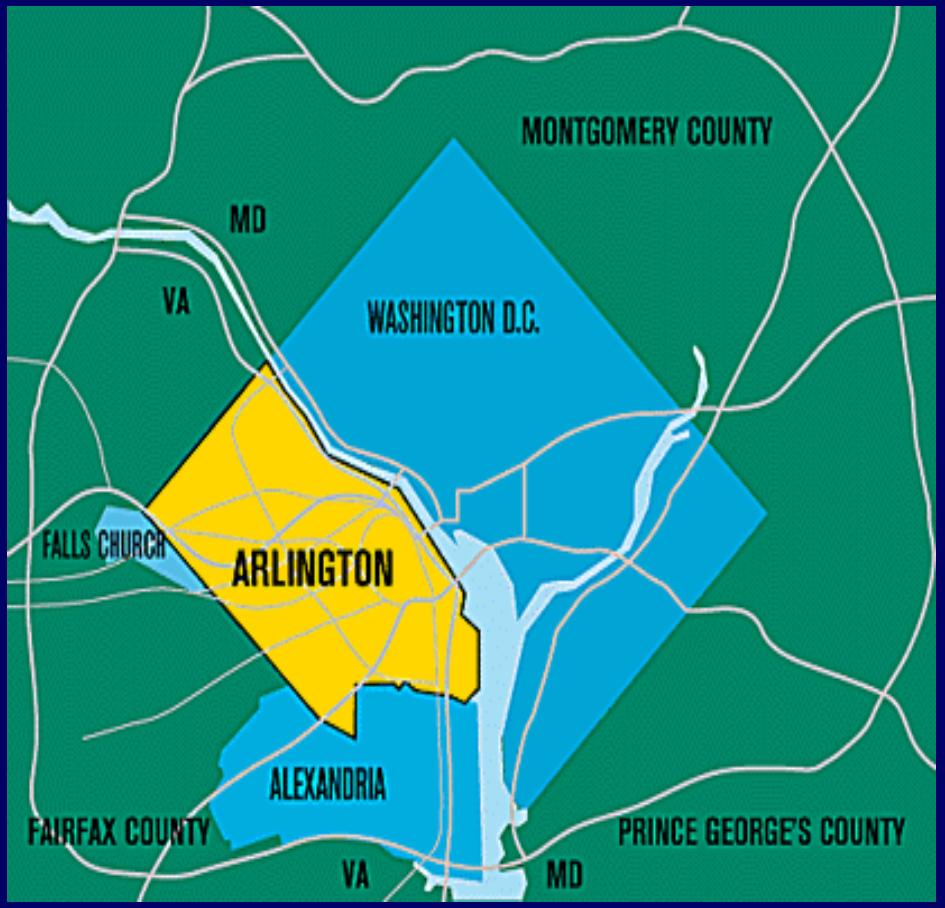
Regionalism

- Arlington is 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)
- Both where it fits within the region and how it contributes to it is important



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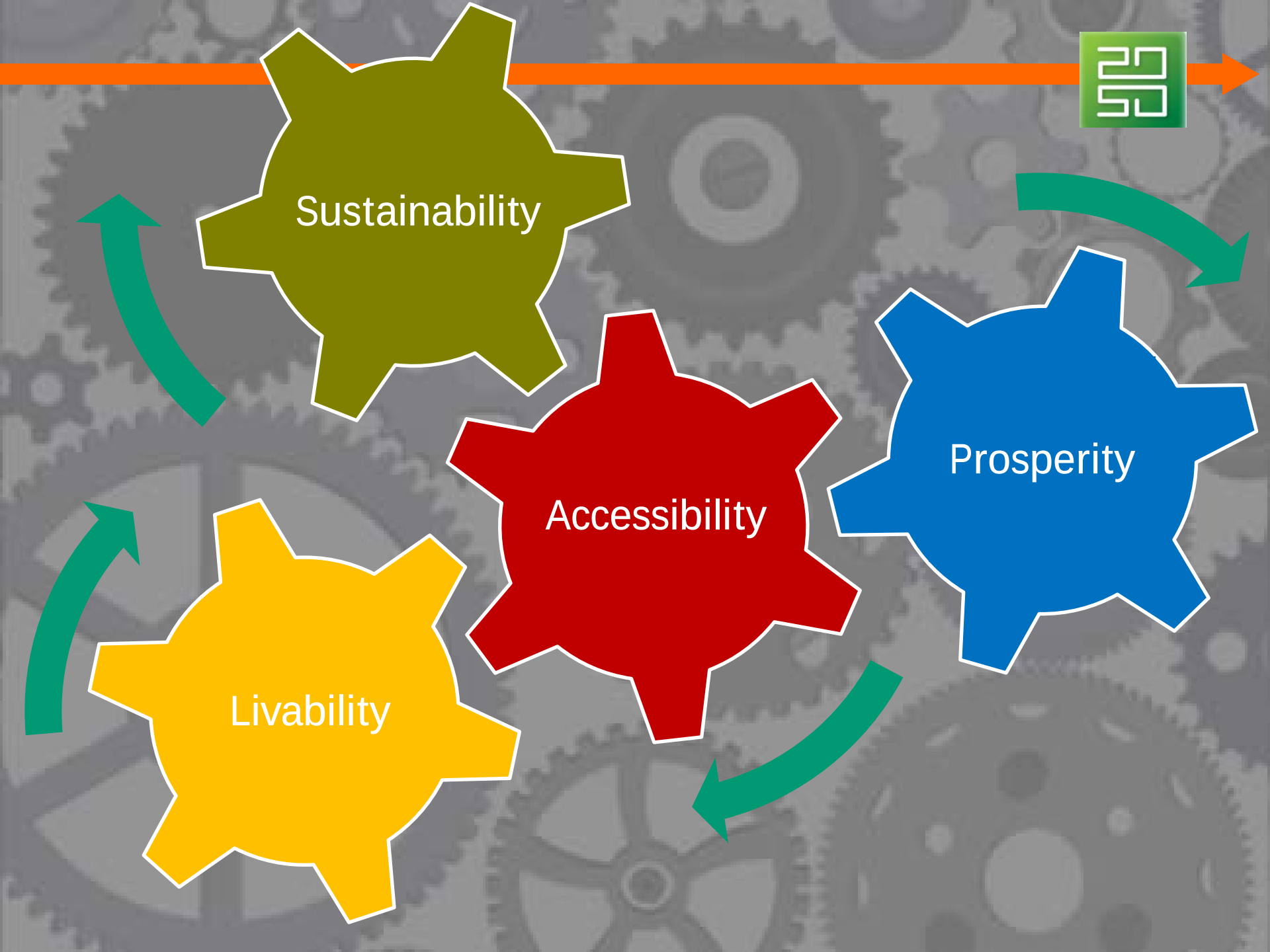
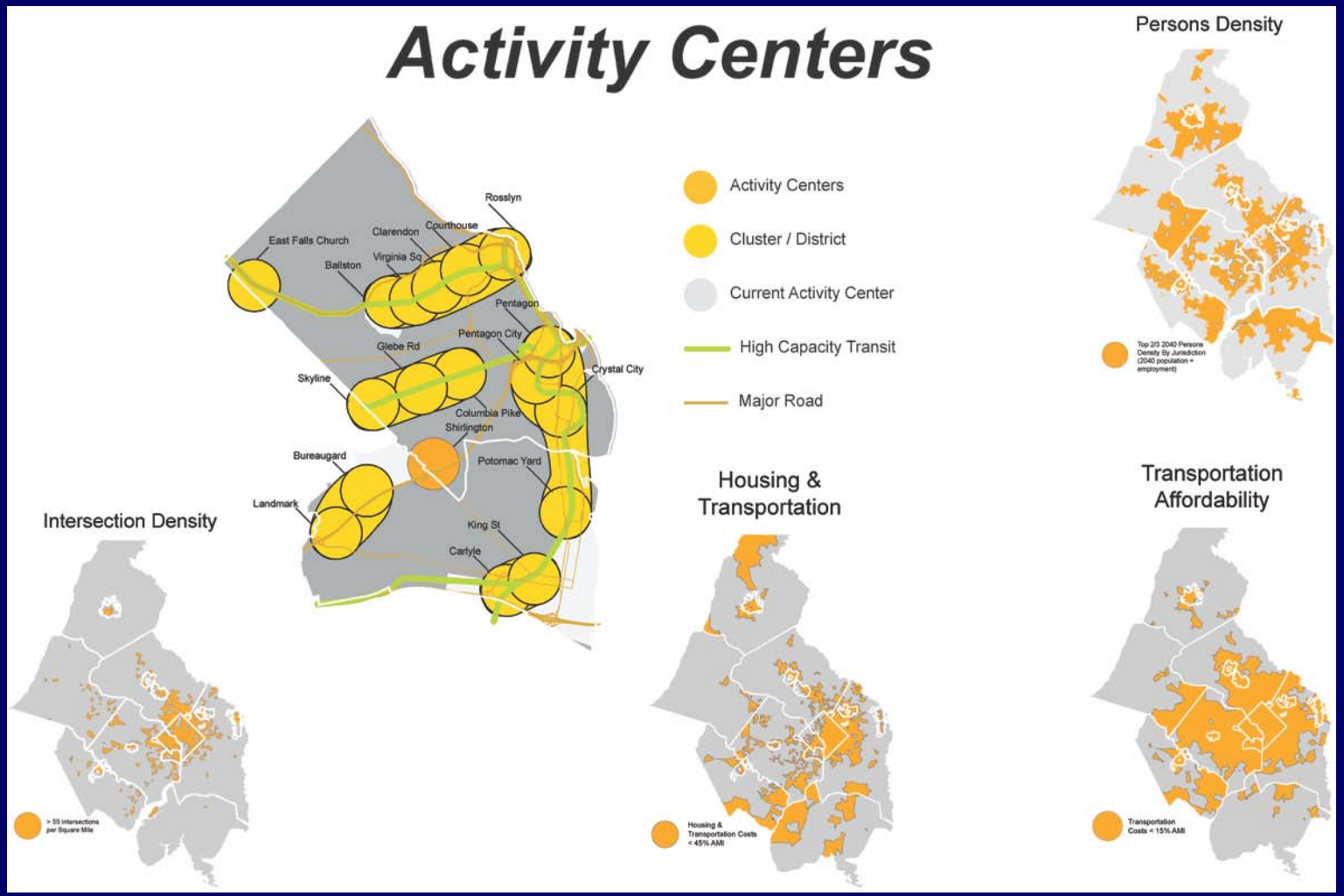
2 million more people by 2050

Source: Chad Roberts


Sustainability
Accessibility
Prosperity
Livability

Regional Planning



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Regional Activity Centers

- At its core – is a focus on how the region can continue to grow
- But in a way that can be efficiently served by transit
- Centers can be served at several levels
  - Between – by rail, rapid bus, street cars etc.
  - Within – by walking, bus and more local serving and thus more flexible options
  - From outside – by bus

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Regional Activity Centers

- Linking back to the Arlington Story
- Activity centers can be viewed as the station areas
- Efficiently and effectively served
- Surround by preserved areas of single family, lower density commercial and open space

CONTACT INFORMATION

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