

Crystal City Economic Analysis

*Summary Presentation
to the
Crystal City Planning Task Force
October 9, 2007*

Arlington Economic Development

Economic Starting Points

- BRAC Transition Task Force recommendation:
 - “...Initiate a planning process... for the physical redevelopment of Crystal City [to] encourage and augment Crystal City’s competitive advantages.”
- Provide for a substantially improved urban place without losing the assets and amenities currently valued by residents, employees and visitors
- Locate density and height in the right places
- Provide a “stretch” vision of what may be possible as an alternative to “test”

Three Economic Studies

1. Market demand for office & residential development
2. Market demand for retail by component
3. Analysis of economic factors affecting feasibility

Office Market Analysis

- What is Crystal City's potential absorption/share of future Class A new construction in the region?
- What is the relationship between the amount of office space in this plan and the market analysis?
- What would the phasing of office space look like on the 1.5 Alternative?

Arlington County's Economic Engine

Office Submarket	RBA*
Ballston	6.9 M
Clarendon/Courthouse	5.3 M
Crystal City	10.8 M**
Rosslyn	8.0 M
Virginia Square	1.6 M
Pentagon City	1.5 M

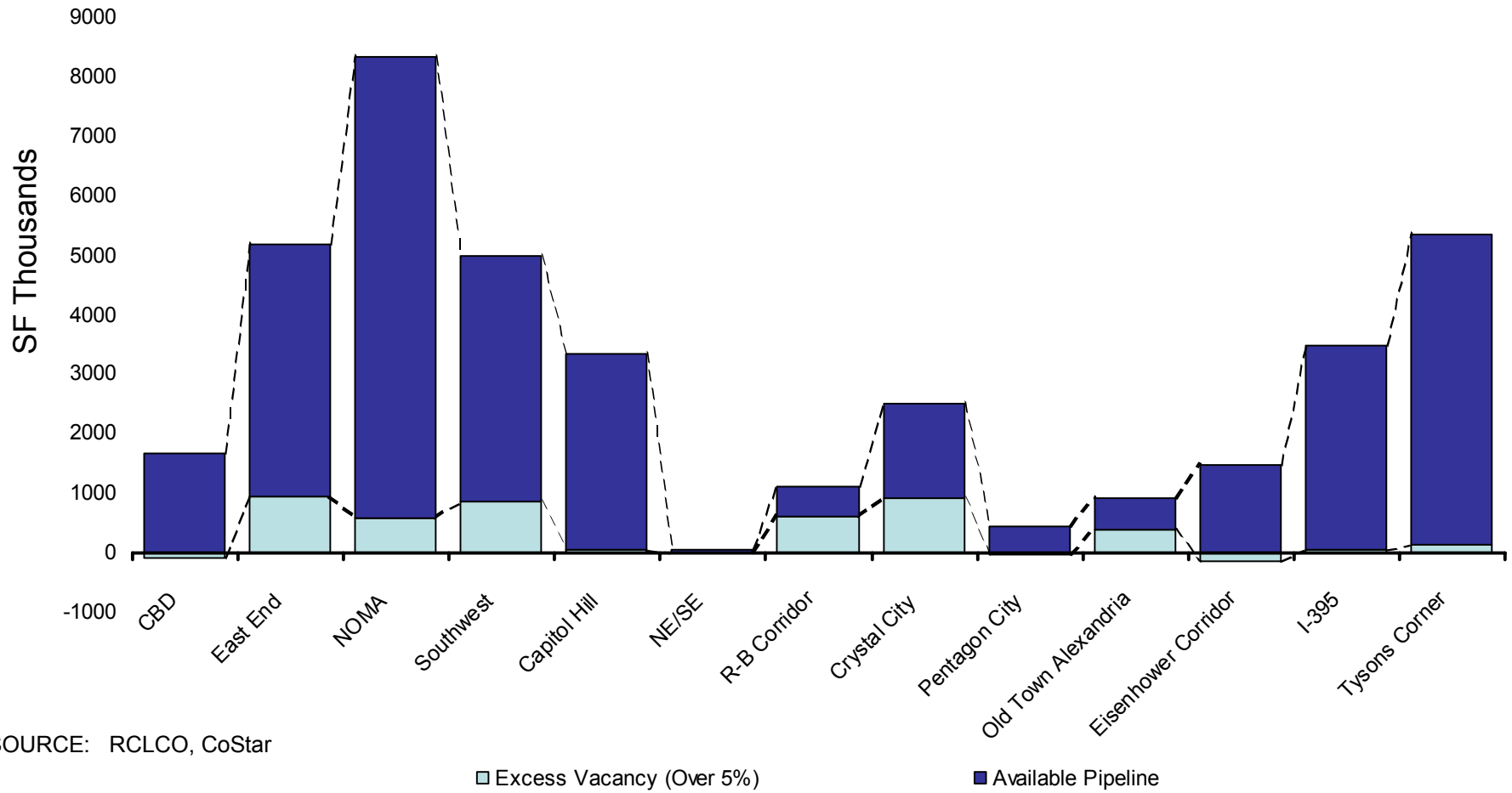
*Source: CoStar, October 2007

**Adjusted to exclude Potomac Yard

Office Demand Methodology

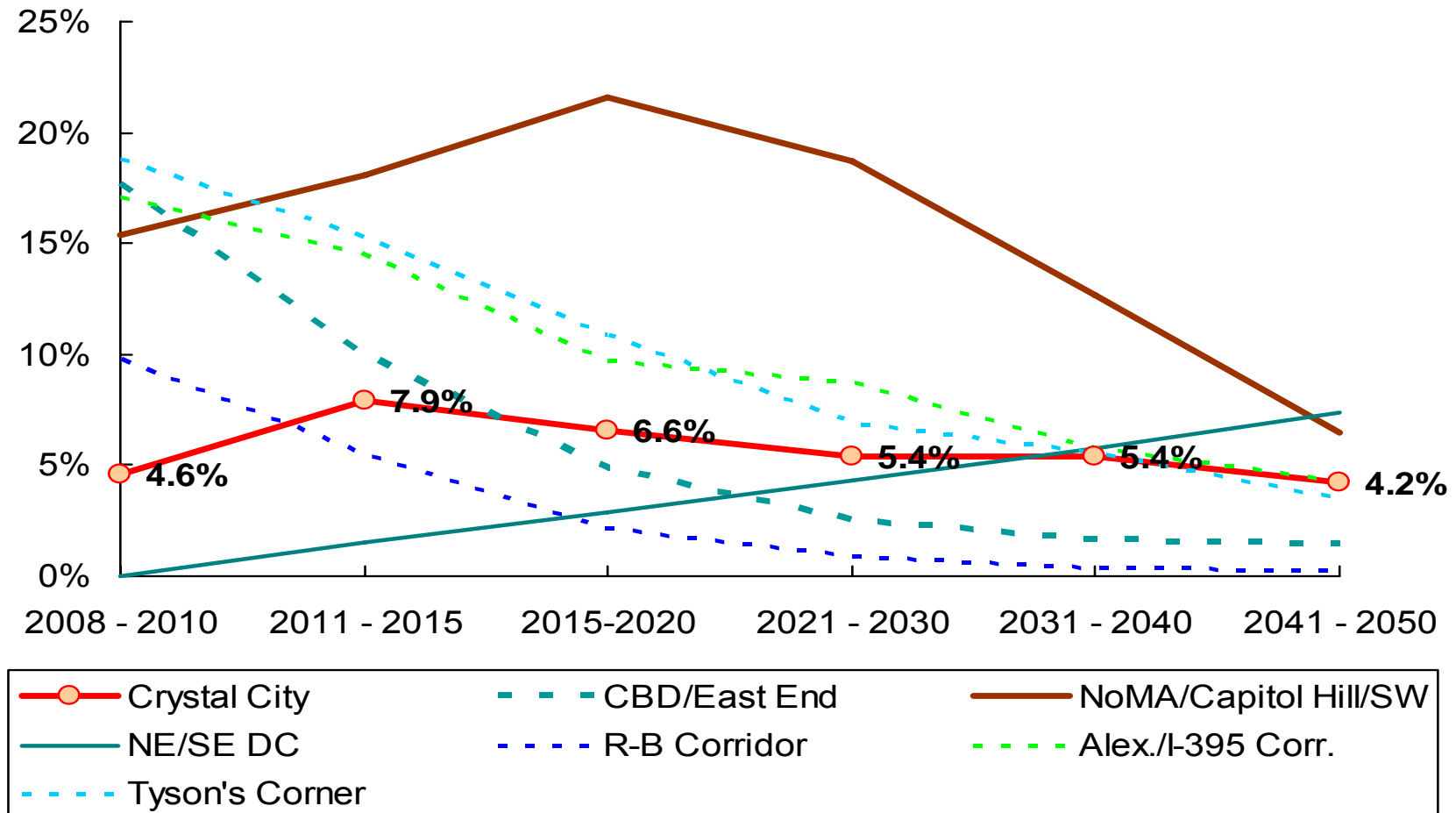
1. Quantified and examined office market trends at a regional level for DC and Northern Virginia using historical and current CoStar data
2. Estimated future office demand for the DC/NoVA region based on employment projections using COG and BLS data
3. Identified key downtown and inner suburban office cores with the greatest influence on office market dynamics and those most likely to compete with Crystal City for future demand
4. Projected likely allocation of future office space absorption across identified DC and Northern Virginia inner cores, including Crystal City
 - Based on a number of metrics – existing share of space, available existing capacity, future development pipeline, and market appeal
5. Approximated likely distribution of demand by class across new and existing space
 - Assumed that all new construction would result from demand for ‘high-end’ class A space
6. Considered implications of BRAC move outs and backfilling of vacant space from net new absorption, and estimating future vacancy rates
7. Determined demand potential for new class A space in the defined Crystal City study area through 2050, considering the likely distribution of demand across both sections of the study area and Potomac Yard

Existing Office Capacity and Future Office Pipeline by Submarket



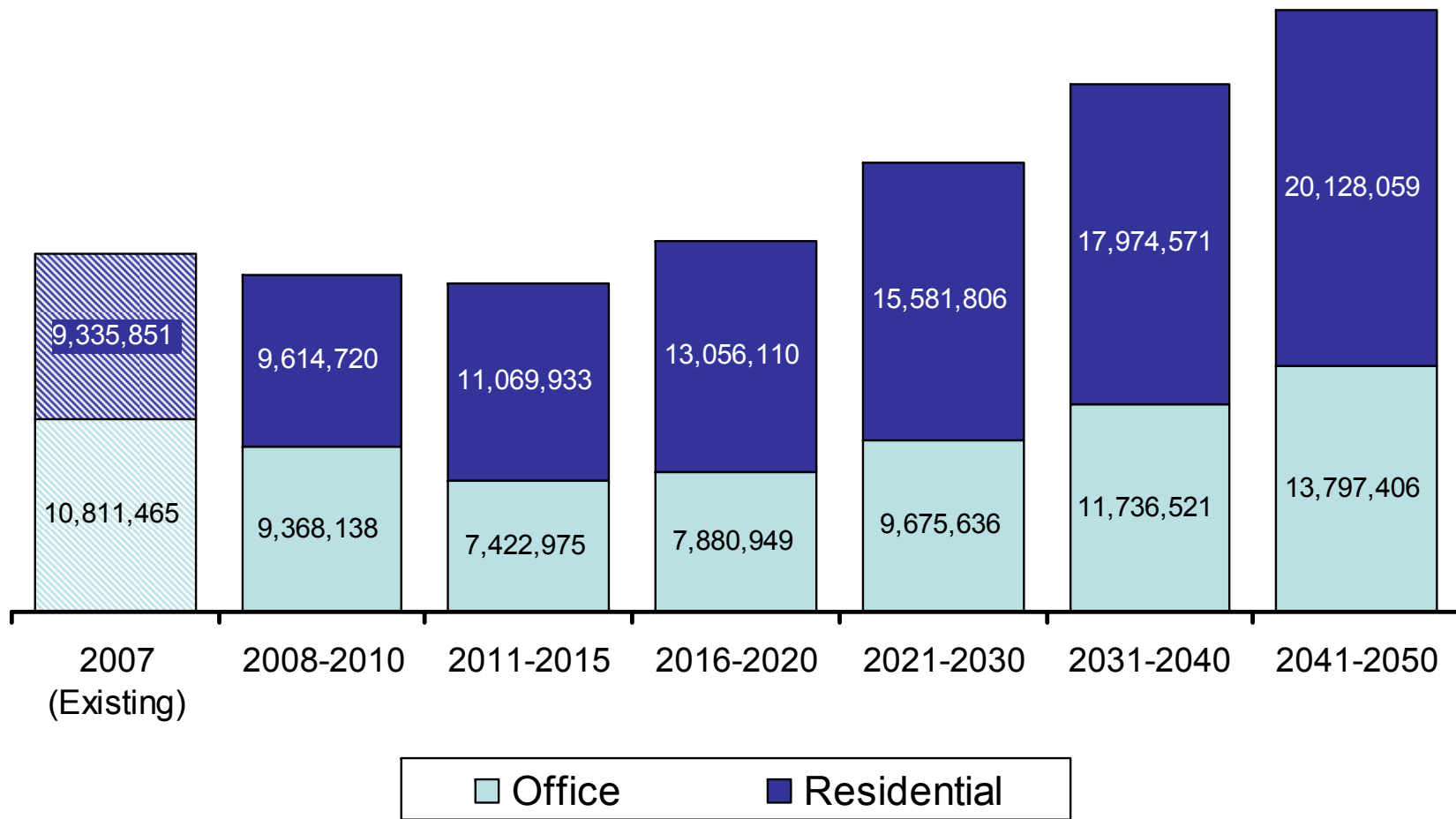
SOURCE: RCLCO, CoStar

Distribution of Projected Class A & B Net New Office Absorption



SOURCE: RCLCO

Total Demanded Office and Residential Gross Square Feet



Office Demand: Major Findings

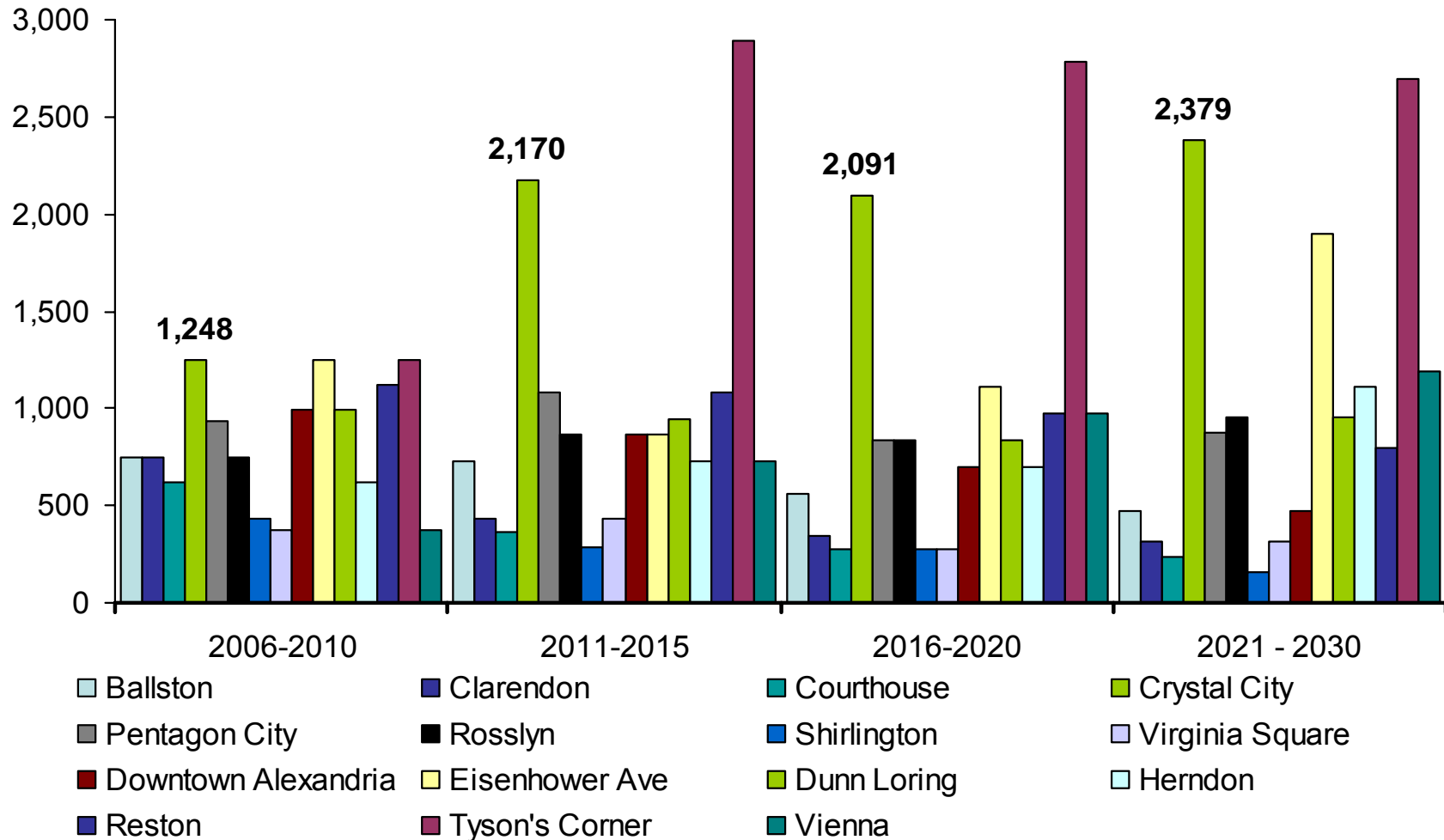
In the long term, office demand is adequate for a redeveloped Crystal City:

- New Class “A” built by 2050 = 11.0 million SF
- Existing Inventory Remaining = 4.9 million SF
- Total 15.9 million SF built by 2050
- Total 57,400 workers in 2050

Residential Market Analysis

- What is Crystal City's potential absorption/share of future Metro-located new construction in the region?
- Is the amount of residential space in this plan supportable by the market?
- What would the phasing of residential space look like on the 1.5 Alternative?

Estimated Future Absorption of New Multifamily Residential Units



Residential Demand: Major Findings

Throughout the planning period, residential demand exceeds planned supply:

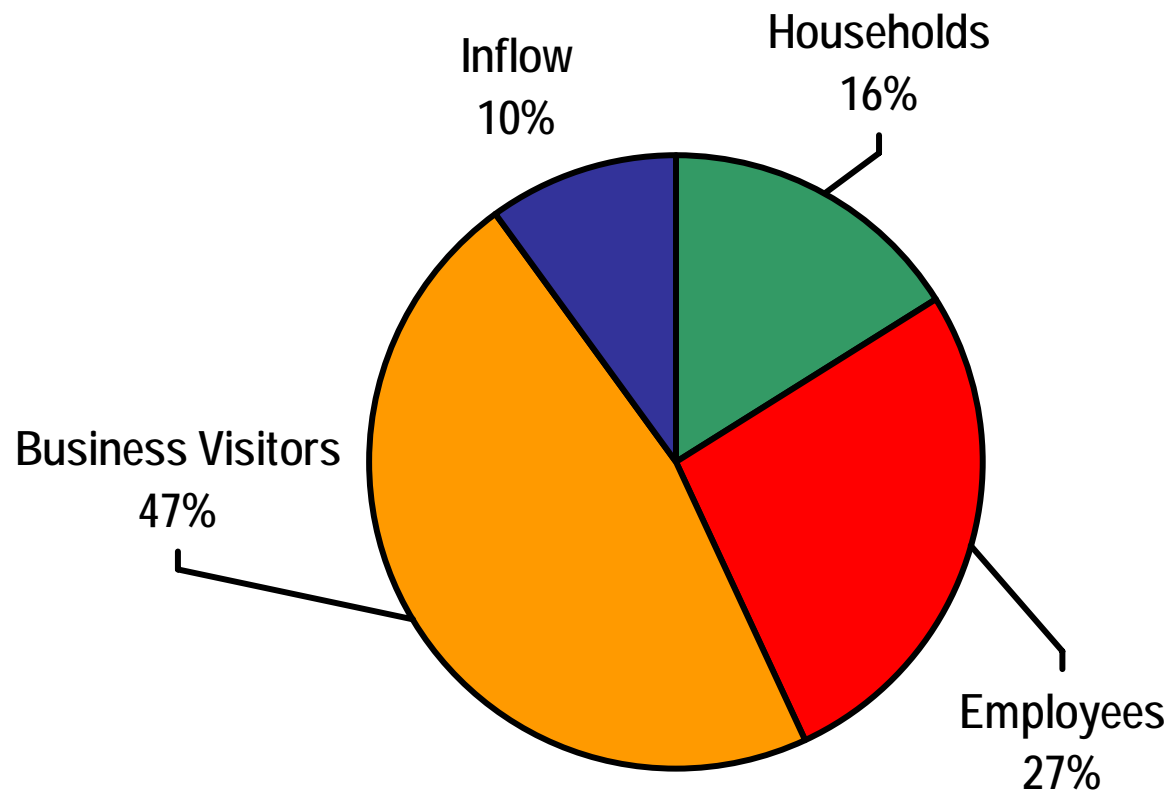
- New units built by 2050 = 13,385
- Total Units in 2050 = 22,000
- Total Residents in 2050 = 30,900
- Increase of 17,800 residents by 2050

Retail Market Analysis

- Conversion of office-residential-hotel development scenario into components of future demand.
- Conversion of components of demand into demand for variety of products & services.
- Matching of demand for products & services to three types of space: street front; interior; and hybrid.
- Staff review of 1.5 Alternative.

Existing Retail Demand

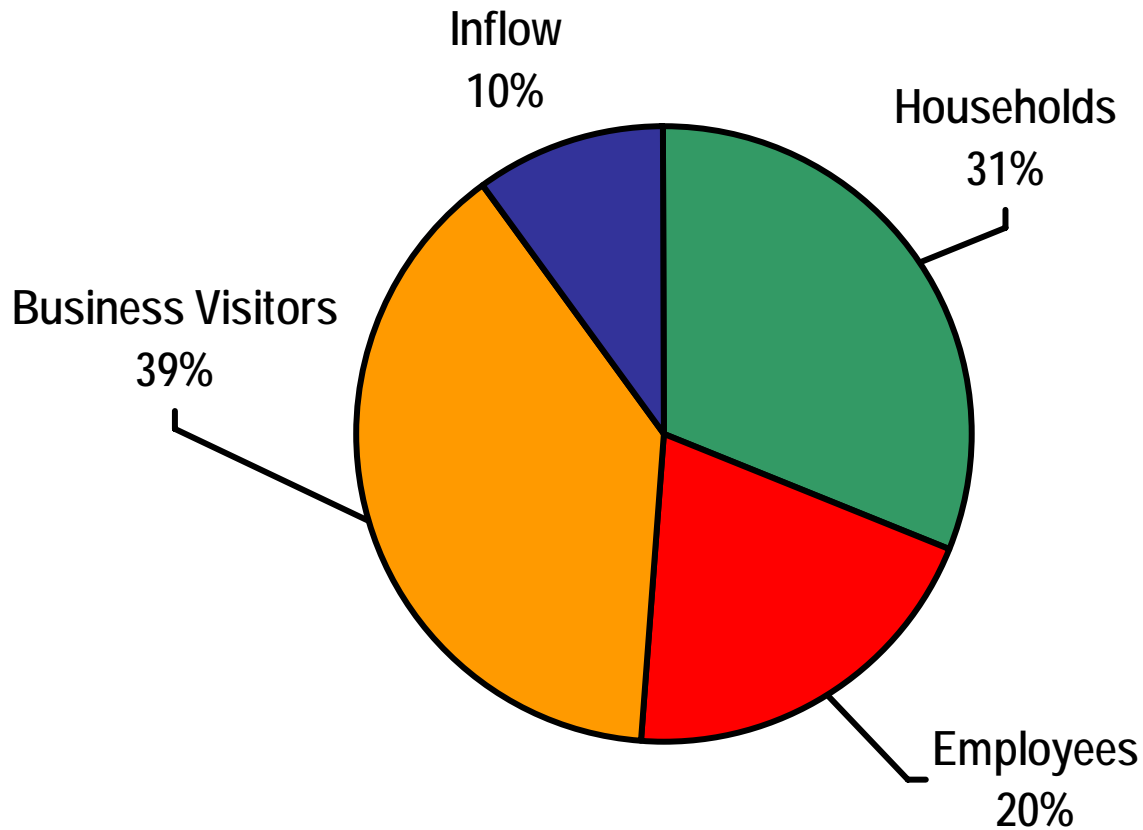
An Employee- & Business Visitor-driven Consumer Market



Captured Expenditures (\$) by Consumer Group, 2010

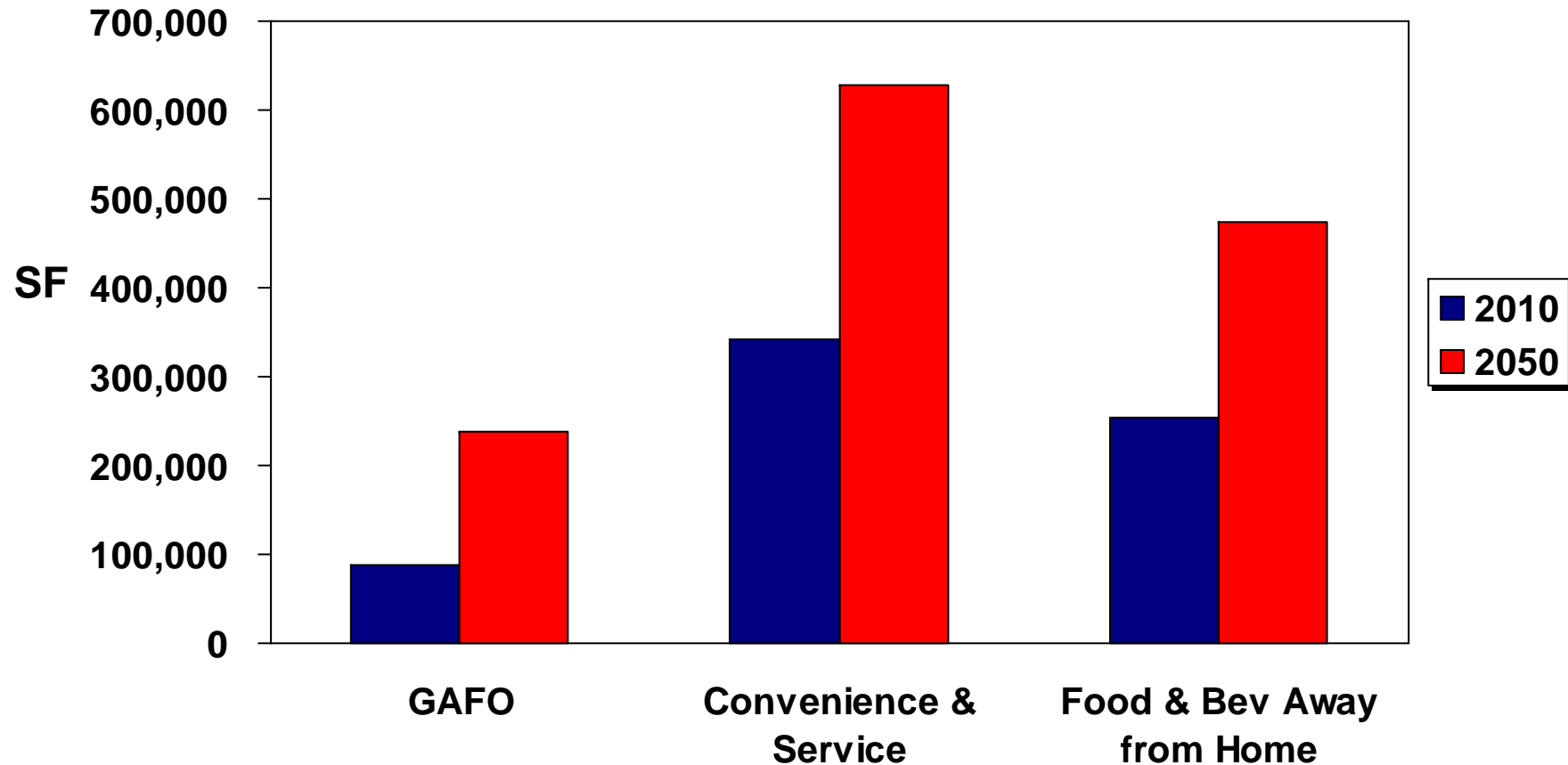
Future Retail Demand

A More Balanced Consumer Market



Captured Expenditures (\$) by Consumer Group, 2050

Supportable Retail by Category

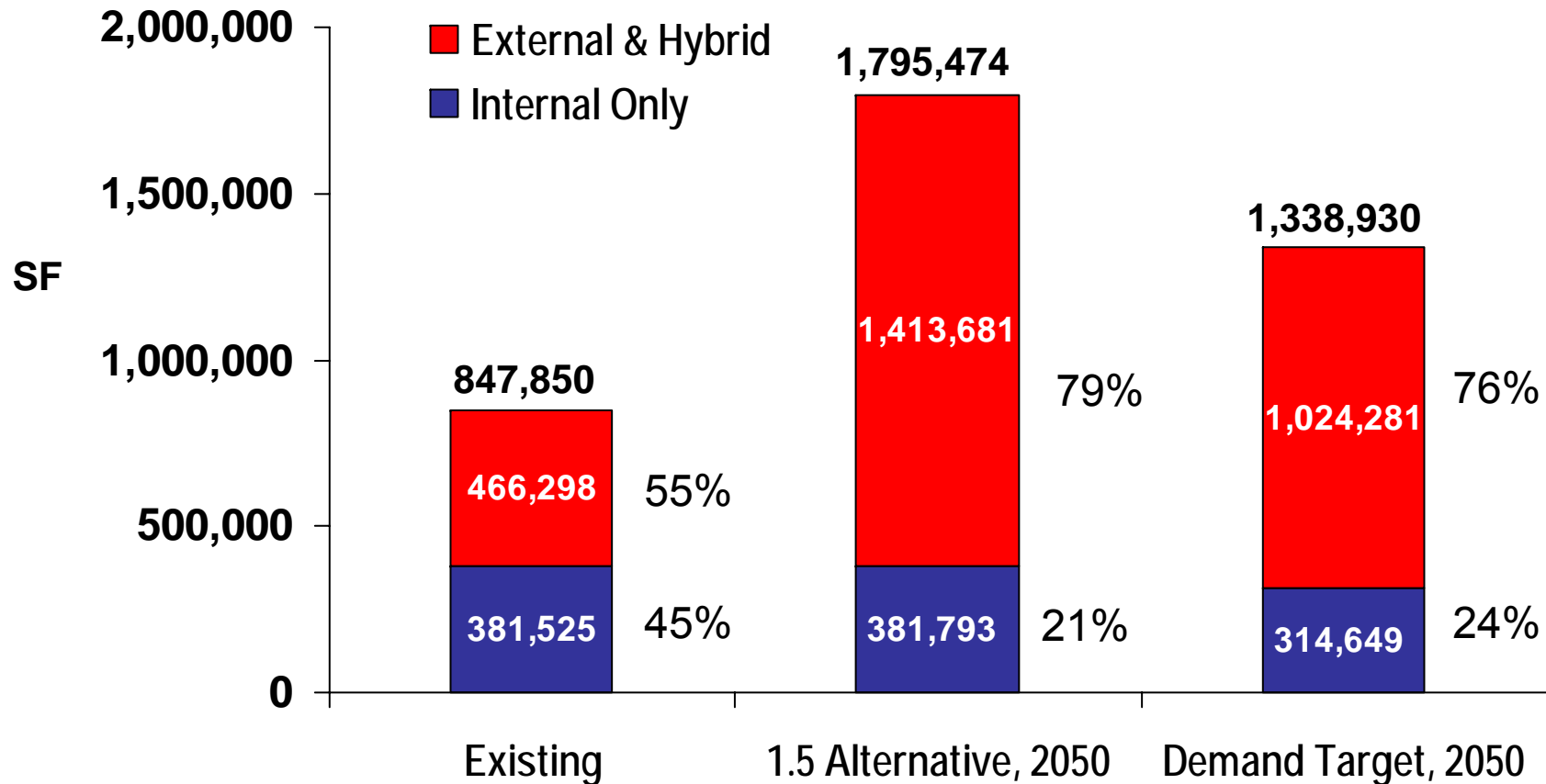


Retail GFA Demand by Type: 2010 & 2050

Internal-External Program for Retail

- **Internal:** Can function as Crystal City's secondary retail "streets" offering mostly convenience & service.
- **External:** Food and beverage uses, namely restaurants, function best when placed in highly-visible (external) locations.

Retail GFA by Frontage Type



Retail Market Analysis: Major Findings

- Plan can accommodate demanded retail:
 - Total retail demand is 1.34M SF
 - Plan calls for 1.80M SF
 - Existing retail space is 847,850 SF
 - Additional available space for civic/cultural/entertainment uses
- Demand by type of space:
 - Street front and hybrid: 76%
 - Interior (underground) only: 24%

Analysis of Economic Factors Affecting Feasibility

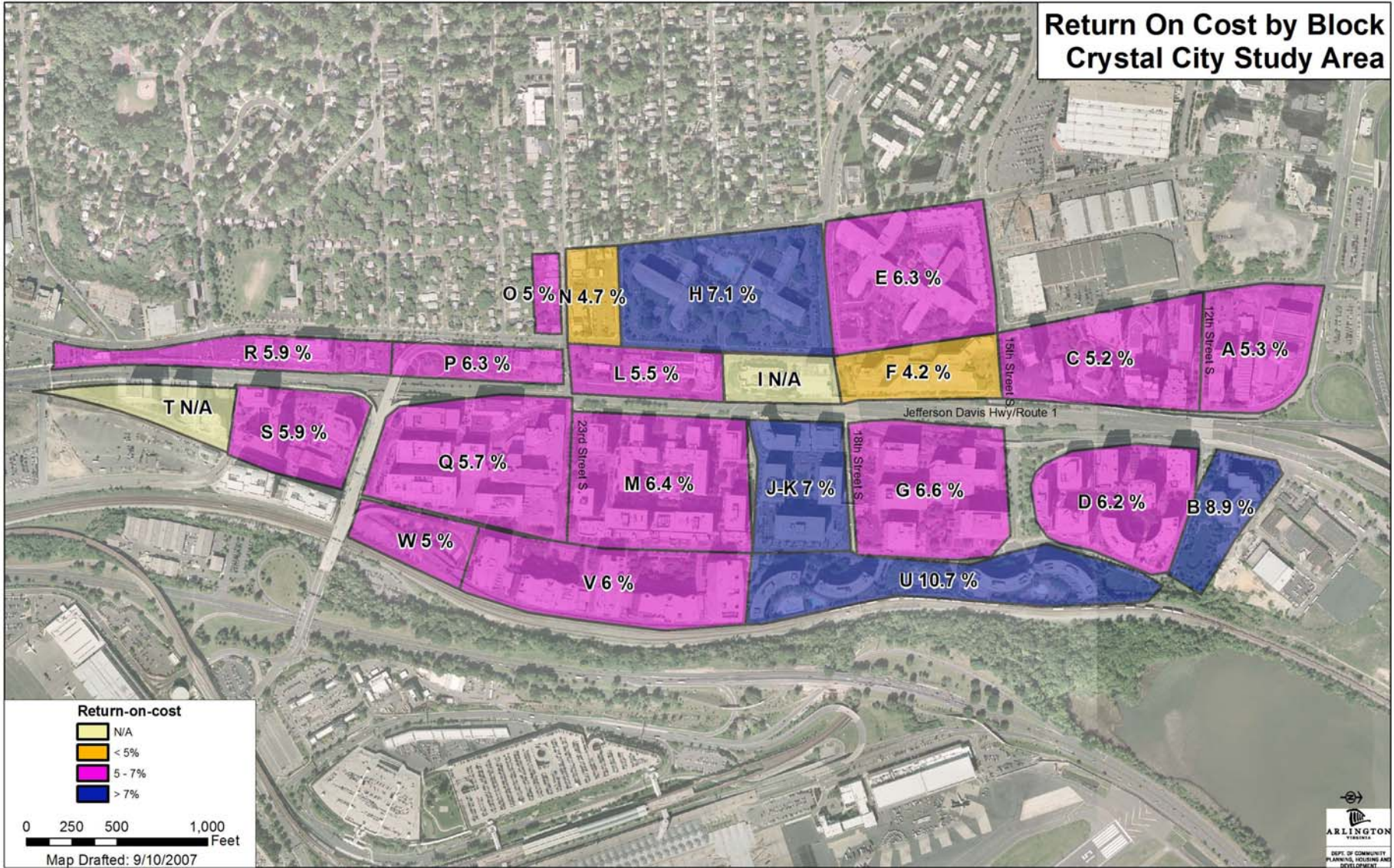
Analysis of density/return:

- AED staff analysis
- Developer analysis
- Metric varies from case-to-case

Returns On Cost Analysis

- Consultant analysis of cost-on-cost returns of 1.5 Alternative by block and by sub-groupings provided by Staff
- Typical developer returns on cost for R-B projects ranged from 12.5% to 15.0%
- Crystal City redevelopment requires demo of substantial existing assets – need to spread “land cost”
- Typical returns on cost in Crystal City, are anticipated to be between 5.0% to 8.5%

Return On Cost by Block Crystal City Study Area



Investor Strategies

- **What is happening to the property:**
 - Rehab, redevelop, new construction?
 - How much/what type of new asset can be built?
 - What is the new asset worth per square foot?
- **Who owns it, and for that investor, what is the value of (re)investing compared to:**
 - Maintaining existing revenue stream;
 - Selling the asset; or
 - Investing money elsewhere

Some Scenarios – Office & Residential

- Tear down office/rebuild office
- Tear down office/rebuild residential
- Tear down residential/rebuild residential
- Tear down residential/rebuild office



- existing asset value
- cost of new construction

- Rehab office
- Rehab residential
- Rehab office/convert to residential



- compatible with plan goals?
- limited community benefit

- Build office on “found” site
- Build residential on “found” site



- “found” ≠ free
- property ownership

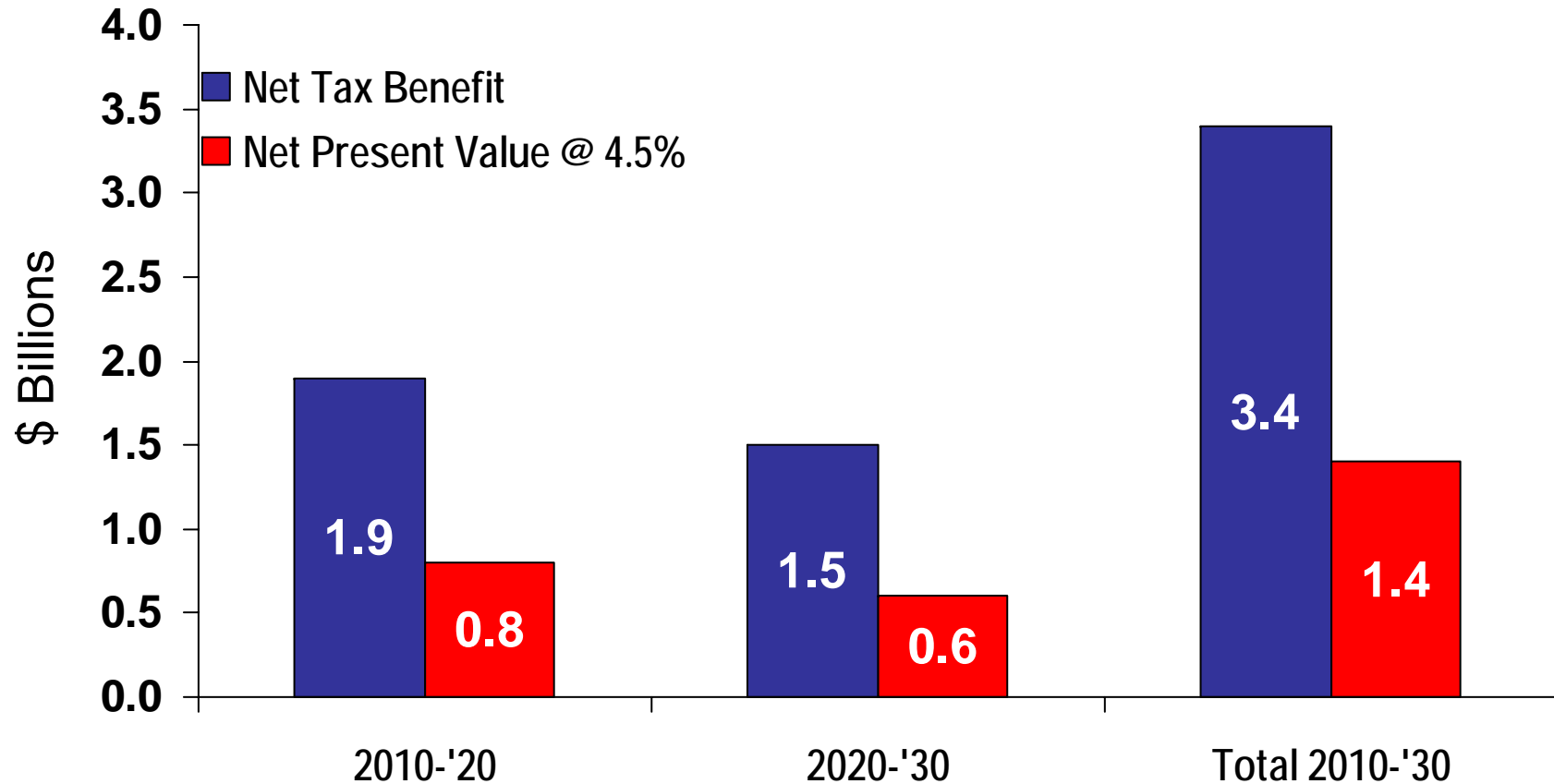
Sample Development Tradeoffs

BUILDING/TYPE	ACTION	GFA	COST/BENEFIT
9C – Office	Demolish	- 381,328	-\$
9D – Office	Demolish	- 271,304	-\$
J1 – Office	Build	560,000	\$
J2 – Office	Build	560,000	\$
U7 – Hotel	Build	383,600	\$
RESULT/NET	----	+850,968	\$ + Central Park

Implications For Crystal City

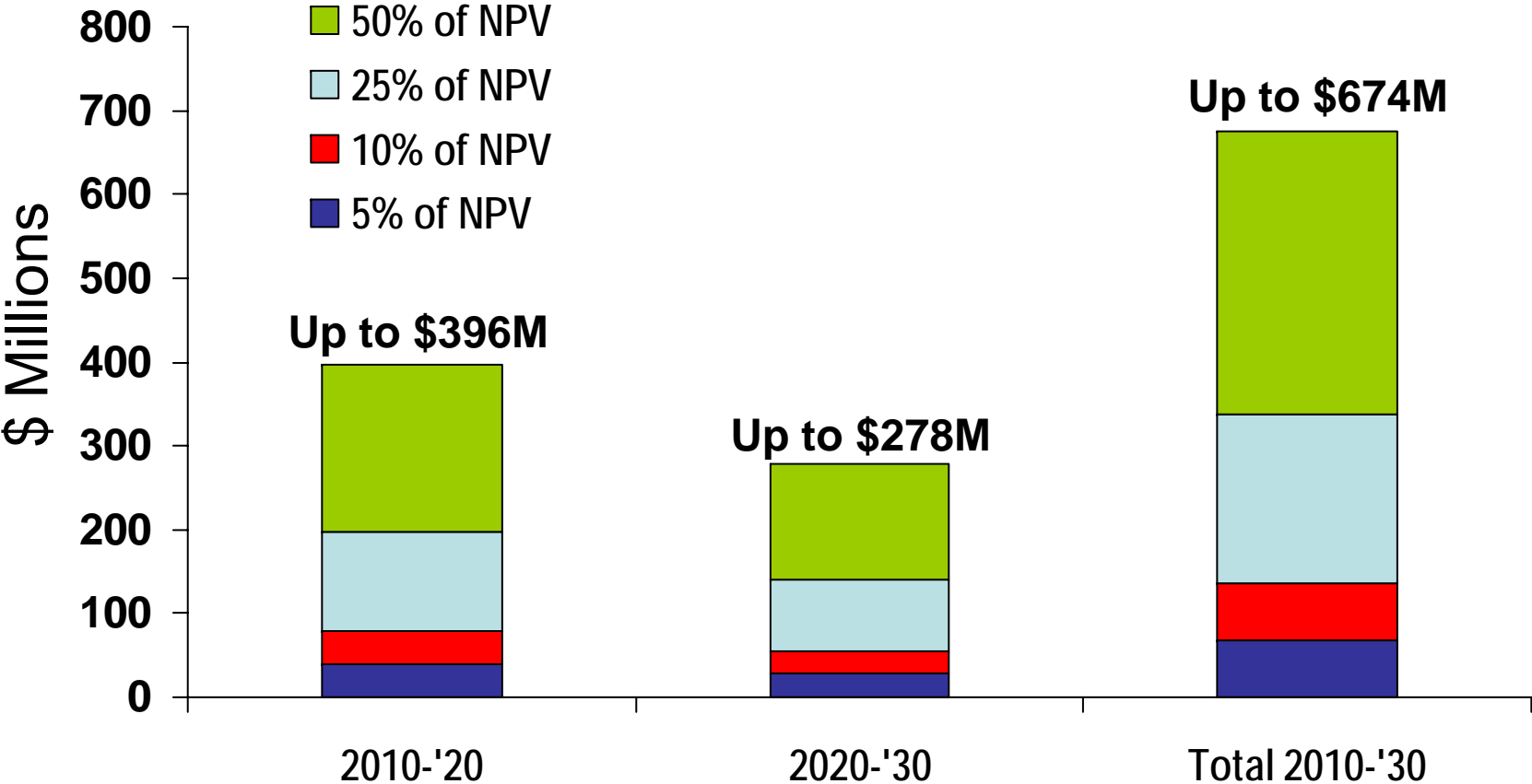
- The Crystal City plan can be realized if redevelopment is pursued by groupings of buildings.
- Aggregation by block, plus an increase in asset volume (density), generates a future return high enough to overcome the lower internal rate of return.
- While returns per project remain 5.0%-8.5%, this rate would be applied to a larger portfolio.
- In turn, the County realizes a proportional increase in tax benefit, and the opportunity to reinvent a principal economic asset.

Taxable Base will Increase Significantly



SOURCE: AED
BASED ON AED PHASING/RCLCO DEMAND SCENARIO

Tax Results: Potential Share of Net Tax Benefit for Infrastructure

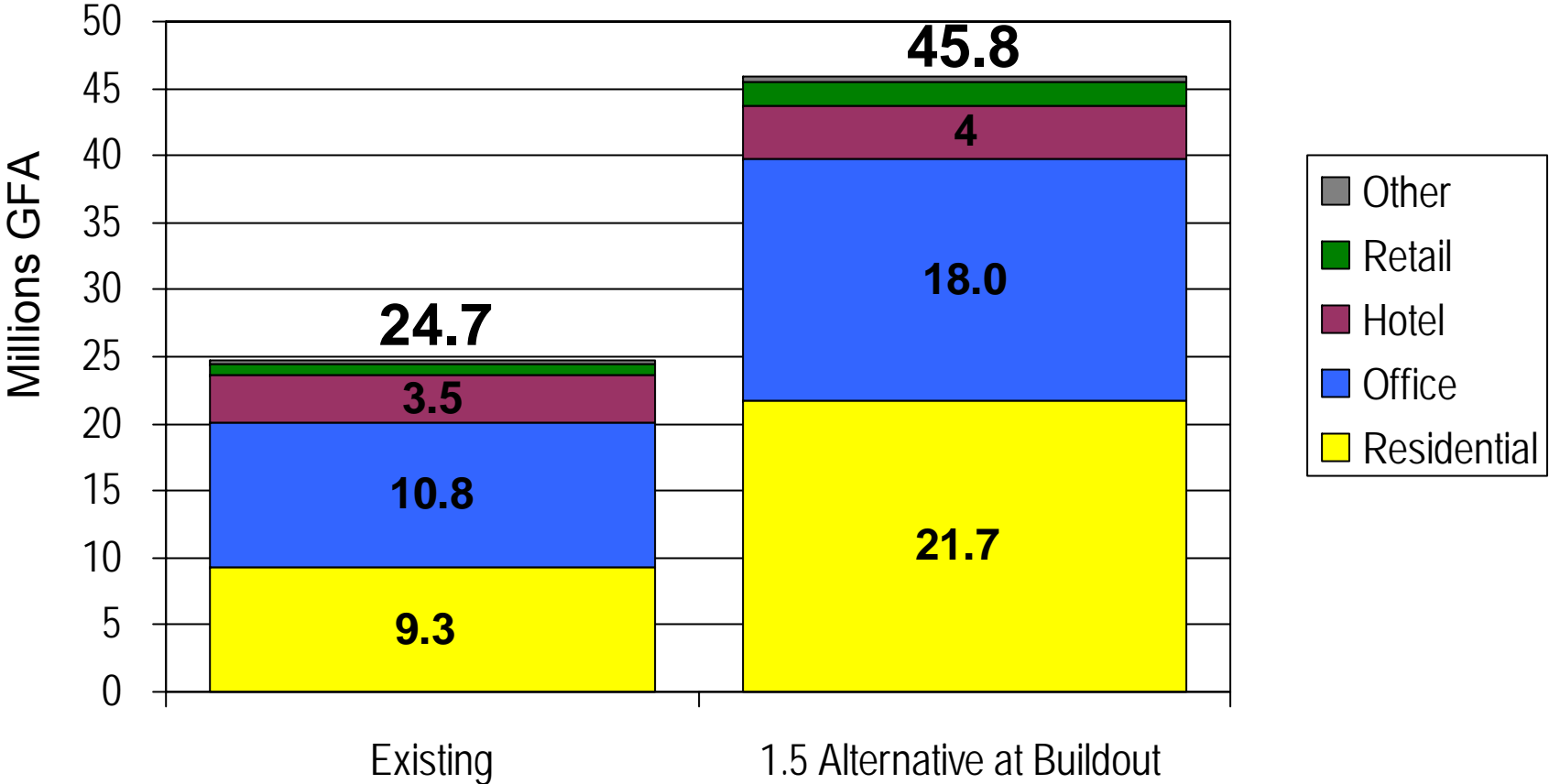


SOURCE: AED
BASED ON AED PHASING/RCLCO DEMAND SCENARIO

Reasons for Proposed Modifications to the 1.5 Alternative

- FAA/Height considerations
- Property ownership issues
- Community feedback
- Phasing/development feasibility
- Minimum level at which key block & public benefit-yielding projects may occur – tradeoffs analysis

Total GFA: Existing & 1.5 Alternative



Crystal City Study Area
SOURCE: Torti Gallas & Partners and AED

Building Counts* with 1.5 Alternative

Office

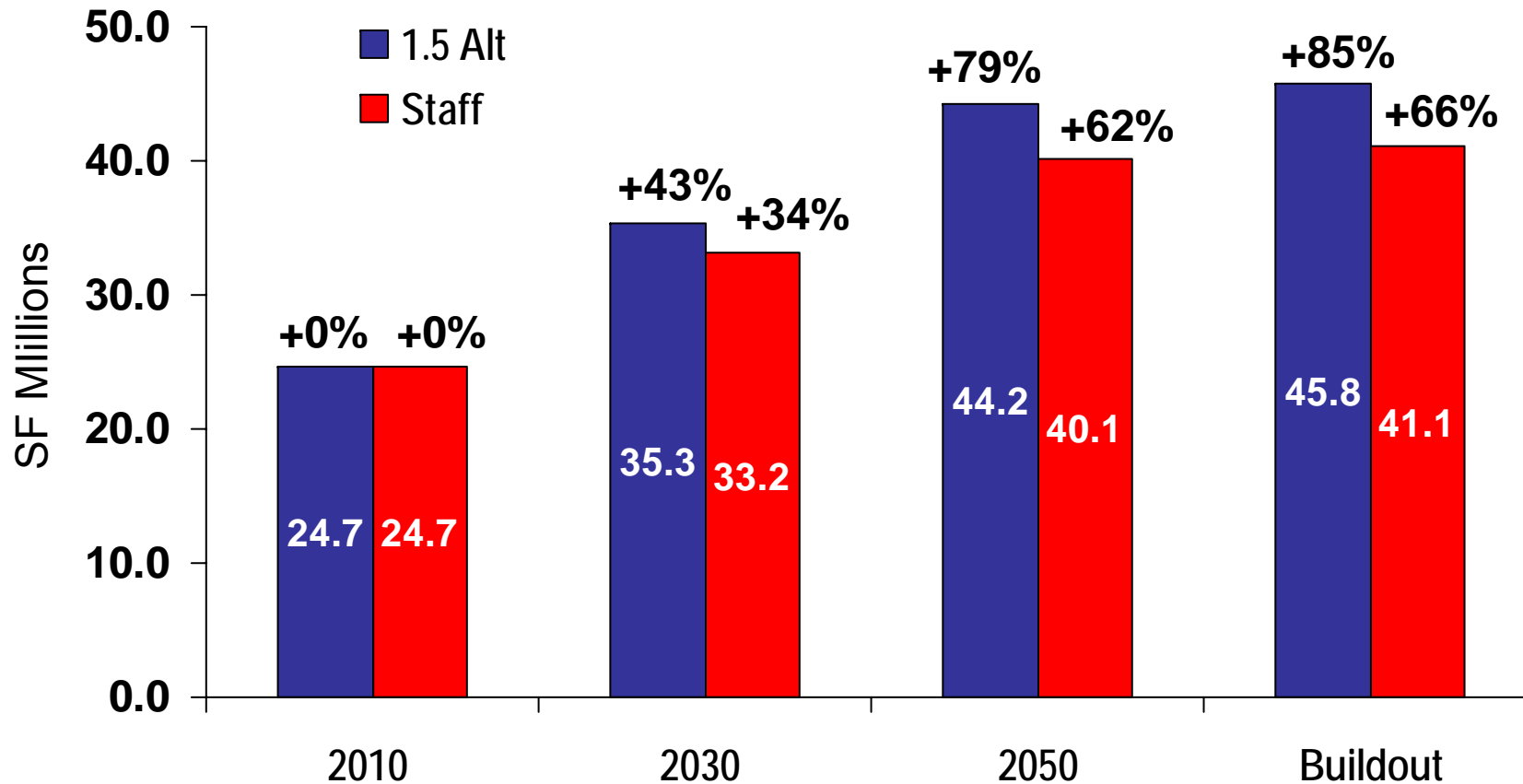
- Remaining: 15
- Demolished: 22
- New: 26

Residential

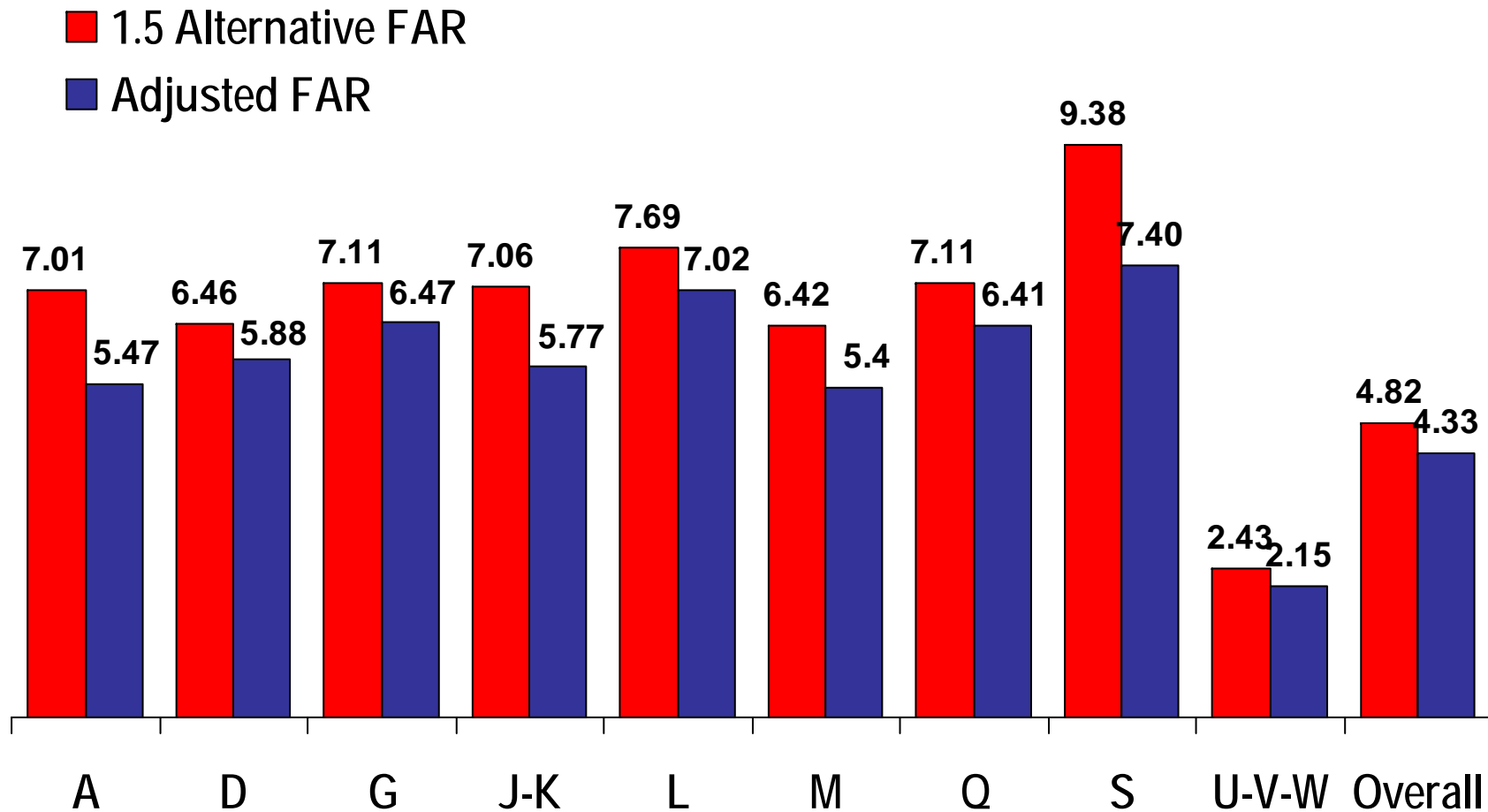
- Remaining: 23
- Demolished: 2
- New: 46

*Principal buildings only

Proposed Staff Adjustments to the 1.5 Alternative Lower Density Increase To 66%



Potential F.A.R. Adjustments by Block

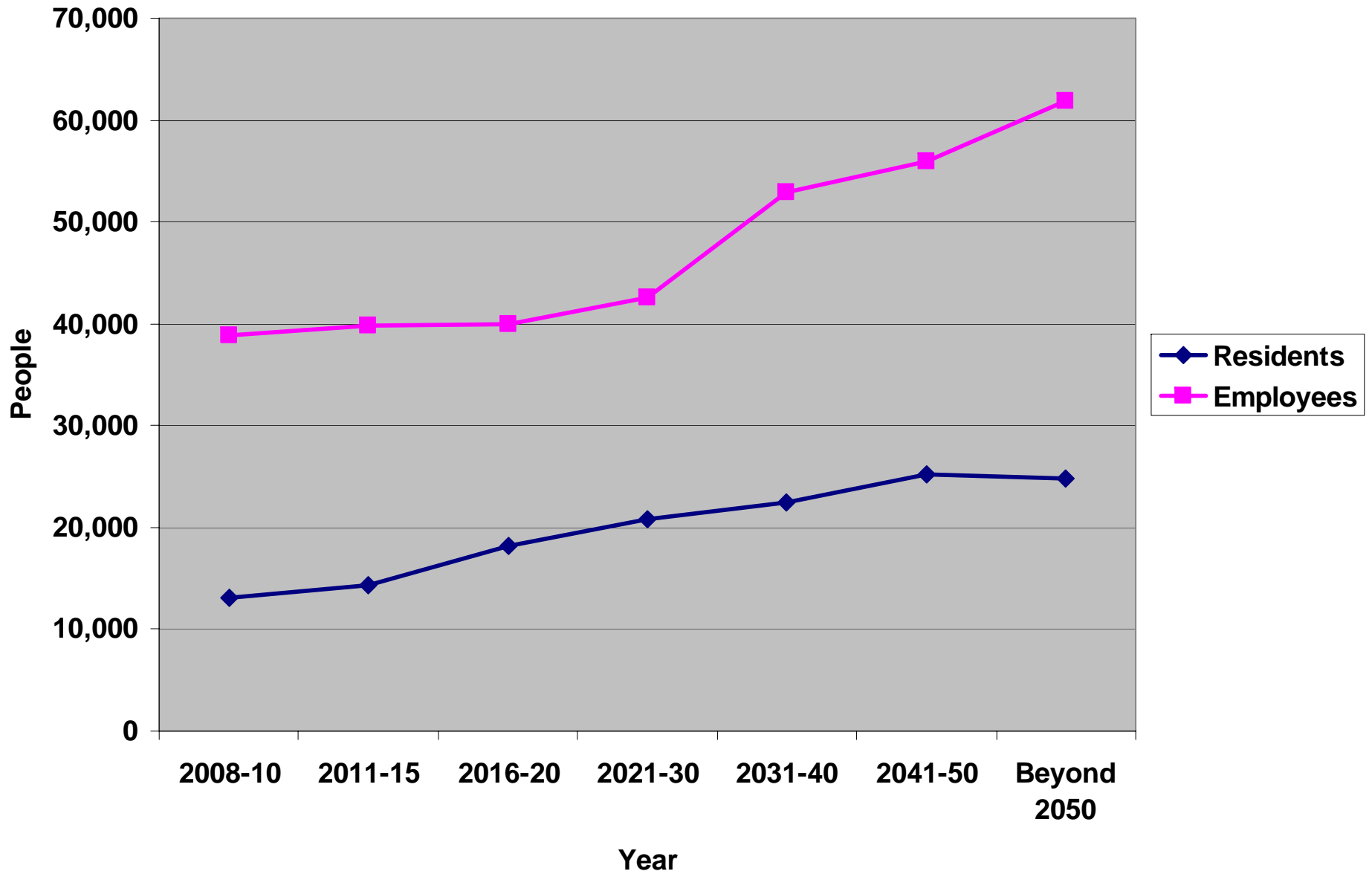


Source: Arlington Economic Development, 2007

Staff Overall Guidelines for Adjustment

- Total density: ~ 41 M SF
- Core blocks: Up to 7 FAR
- Tallest buildings: J-K, M, Q
- Mix (SF Millions):
 - Office: 16
 - Residential: 17+
 - Hotel: 5
 - Retail: 1.5

Adjusted 1.5 Alternative - Residents & Employees



“Paying for the Plan”

- Traditional community benefit policies
- Potential transportation tax district
- Fiscal benefits resulting from redevelopment