

Green Building Incentive Program 2014 Update

Arlington County Board
Arlington County, VA
November 15, 2014

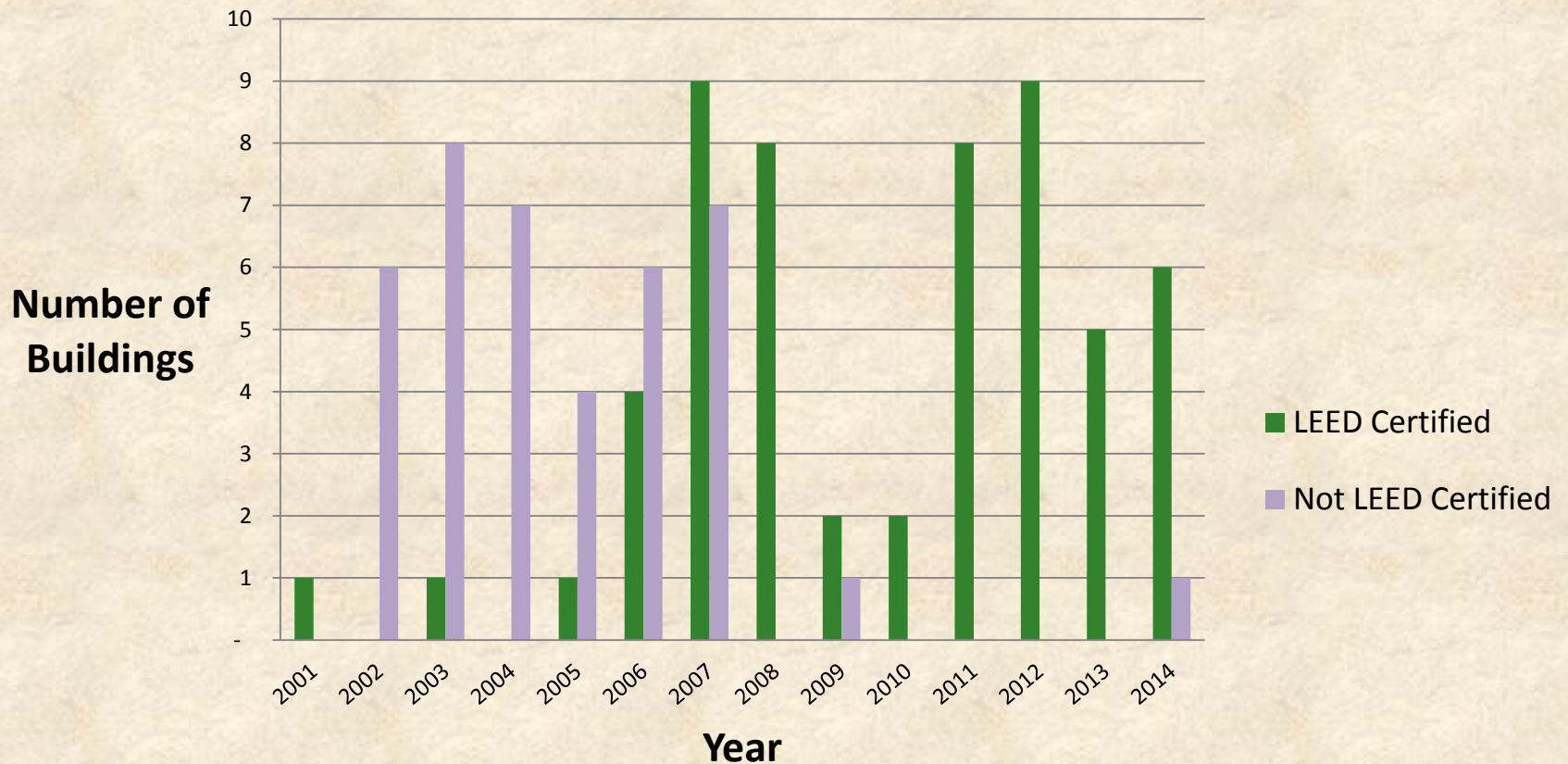
History of Green Building Incentive Program



- Began in 2000
 - Incentive for LEED Silver only, commercial office only
- Update in 2003
 - Included all LEED levels and all site plan projects
- Update in 2009
 - Adjusted bonus to reflect market transformation
- Update in 2012
 - Focus on energy efficiency to align with Community Energy Plan goals, minor bonus adjustment
- Update in 2014
 - Energy performance, Arlington specific, minor bonus adjustment

Green Building Trend

Green Buildings Approved in Arlington







Arlington Initiative to
**Rethink
Energy**

2014 Update

- LEED version 4
- ENERGY STAR building certification – prerequisite for office, optional for multifamily
- Arlington Priority credits
- Earthcraft for VHDA tax credit affordable housing
- Net Zero Energy Certification



LEED Version 4

- U.S. Green Building Council updated the LEED green building rating system
- Multi-family mid-rise
- Energy efficiency



ENERGY STAR Building Certification

- Verifies performance based on one year of energy use
- Office vs. residential



Arlington Priority List

- Environmental issues addressed
 - Energy – efficiency and renewables
 - Site ecology – light pollution, habitat, stormwater
 - Building and materials reuse





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Affordable Housing

- Allow use of Earthcraft to support green affordable housing
- VHDA program
- Gold and Platinum levels only



Net Zero Energy Certification

- International Living Futures Institute
- Annual energy use = Annual clean energy generated
- Negotiate bonus separately





Proposed Revision

Office and Residential			
Certification Level	LEED v4 (+E* for office)	Two Arlington priority credits	Total FAR available
Silver	0.25 FAR	+ 0.05 FAR	0.30
Gold	0.35	+ 0.05 FAR	0.40
Platinum	0.50	+ 0.05 FAR	0.55

Comparison

<u>2012 Policy</u>			<u>2014 Proposed Policy</u>	
			Office and Residential	
LEED 2009	Office	Residential	LEED v4 (plus Energy Star for Office)	
Silver	0.20 FAR	0.25 FAR	0.25 FAR	
Gold	0.35	0.40	0.35	
Platinum	0.45	0.50	0.50	
Additional 0.10 FAR for LEED-EBOM or Energy Star			Additional 0.05 FAR for Arlington Priorities	
			Energy Star <ul style="list-style-type: none"> • Office – prerequisite Energy Star score of 75 • Residential – Arlington Priorities allow an option for 0.025 FAR for Energy Star score of 75 	
			Net Zero Energy certification: Negotiate additional density above 0.55 FAR for at least LEED Gold plus two Community Priority credits plus Net Zero Energy certification	



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Discussion



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Supplemental Slides

Example - Silver

Office

Existing - LEED Silver office earns 0.20 FAR bonus

Proposed - LEED Silver office + Energy Star earns 0.25 FAR bonus

Residential

Existing - LEED Silver residential earns 0.25 FAR bonus

Proposed - LEED Silver residential earns 0.25 FAR bonus

Example - Gold

Office

Existing - LEED Gold office earns 0.35 FAR bonus

Proposed - LEED Gold office + Energy Star earns 0.35 FAR bonus

Residential

Existing - LEED Gold residential earns 0.40 FAR bonus

Proposed - LEED Gold residential earns 0.35 FAR bonus

Example - Platinum

Office

Existing - LEED Platinum office earns 0.45 FAR bonus

Proposed - LEED Platinum office + Energy Star earns
0.50 FAR bonus

Residential

Existing - LEED Platinum residential earns 0.50 FAR
bonus

Proposed - LEED Platinum residential earns 0.50 FAR
bonus

Arlington Priority List

Arlington Priority Options – Select up to two Earn 0.025 FAR for each - up to 0.05 bonus	Office	Residential / Hotel	Compliance Review
Energy Star Certification with at least a score of 75 (Residential only)		✓	U.S. DOE / EPA
Optimize Energy Performance (nine percent improvement over LEED baseline)	✓	✓	LEED
Further Optimize Energy Performance (twelve percent over LEED baseline)	✓	✓	LEED
Envelope Commissioning	✓	✓	LEED
Renewable Energy Production (one percent)	✓	✓	LEED
Habitat Restoration – Onsite	✓	✓	LEED
Light Pollution and Bird Friendly Façade	✓	✓	LEED
Building Reuse and Materials Salvage	✓	✓	LEED

Timeline

- Design Thinking Process – March-June 2014
- E2C2 – July 2014
- NAOIP and subgroup – July-Oct 2014
- Community Energy Plan Implementation Review Committee (CEPIRC) – August 2014
- LRPC – September 2014
- EDC – October 2014
- Planning Commission – November 2014
- County Board – November 2014

LEED Bonus Awarded – 2010 to present



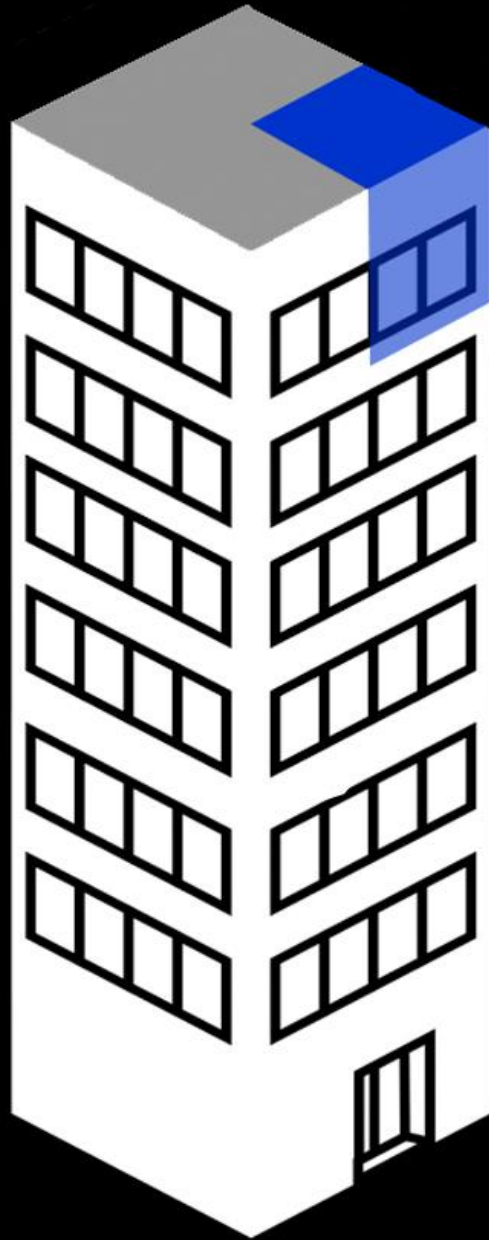
Development Name	LEED level	LEED Bonus FAR awarded	Gross Floor Area	Density Sq Ft	Density as a % of GFA
Dominion Heights	Gold	0.393	77,938	15,472	20%
1900 Wilson Blvd	Silver	0.20	215,563	14,716	7%
Founder's Square north office (C1)	Gold	0.35	426,480	20,200	5%
Founders Square south office (B1)	Silver	0.25	355,530	14,572	4%
Founder's Square hotel (B2)	Silver	0.25	154,380	14,572	9%
Founder's Square resid (C2)	Silver	0.25	238,060	14,572	6%
Wakefield Manor	Silver	0.20	173,600	16,185	9%
Virginia Square Towers	Gold	0.40	508,022	44,618	9%
1300 17TH ST N	Certified LEED EB	0.03	411,679	2,636	1%
3901 N Fairfax	Gold	0.35	183,391	15,928	9%
3001 Washington Blvd - Penzance	Silver	0.15	306,492	7,394	2%
650 N Glebe	Silver	0.20	139,071	7,358	5%
Verde Point (Bergmann's)	Gold	0.40	442,681	32,457	7%
2311 Wilson Blvd	Gold + Energy Star	0.45	157,395	13,375	8%
Pierce Queen	Silver	0.25	194,142	7,500	4%
Colony House (Hilton hotel)	Gold	0.32	128,509	17,325	13%
Latitude Apartments - LEED NC	Gold + LEED EB	0.50	269,615	16,228	6%
Marymount Residential - 1000 N. Glebe Rd	Gold	0.40	256,496	28,703	11%
Marymount Office - 1000 N. Glebe Rd	Gold	0.35	165,204	6,555	4%
2401 Wilson Hotel	Gold + Energy Star	0.50	94,415	7,650	8%
10th Street Flats	Gold	0.40	147,948	18,184	12%
					Average Bonus (% of total)
			5,046,611	336,199	7%

FAR bonus example – Navy League

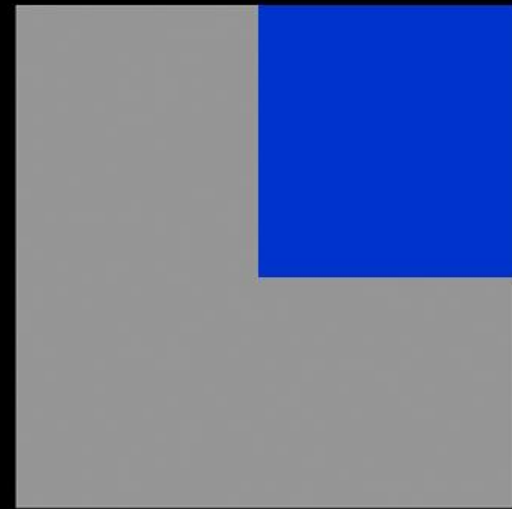
- Site area – 49,273 s.f.
- LEED Silver - 0.25 bonus FAR

$$49,273 \text{ s.f.} \times 0.25 = 12,318 \text{ s.f.}$$

- Total Building Size – 214,350 s.f.
- LEED bonus – 12,318 s.f. (5.7% of total building size)



Floor Area Ratio = .25



FAR bonus example – Navy League

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- LEED Silver - 0.25 bonus FAR

$$49,273 \text{ s.f.} \times 0.25 = 12,318 \text{ s.f.}$$

- Total Building Size – 214,350 s.f.
- LEED bonus – 12,318 s.f. (5.7% of total building size)