



# **Green Building Policy Update Task Force**

## **Meeting #3**

### **Topic: Proposed Green Building Policy Outline Review**

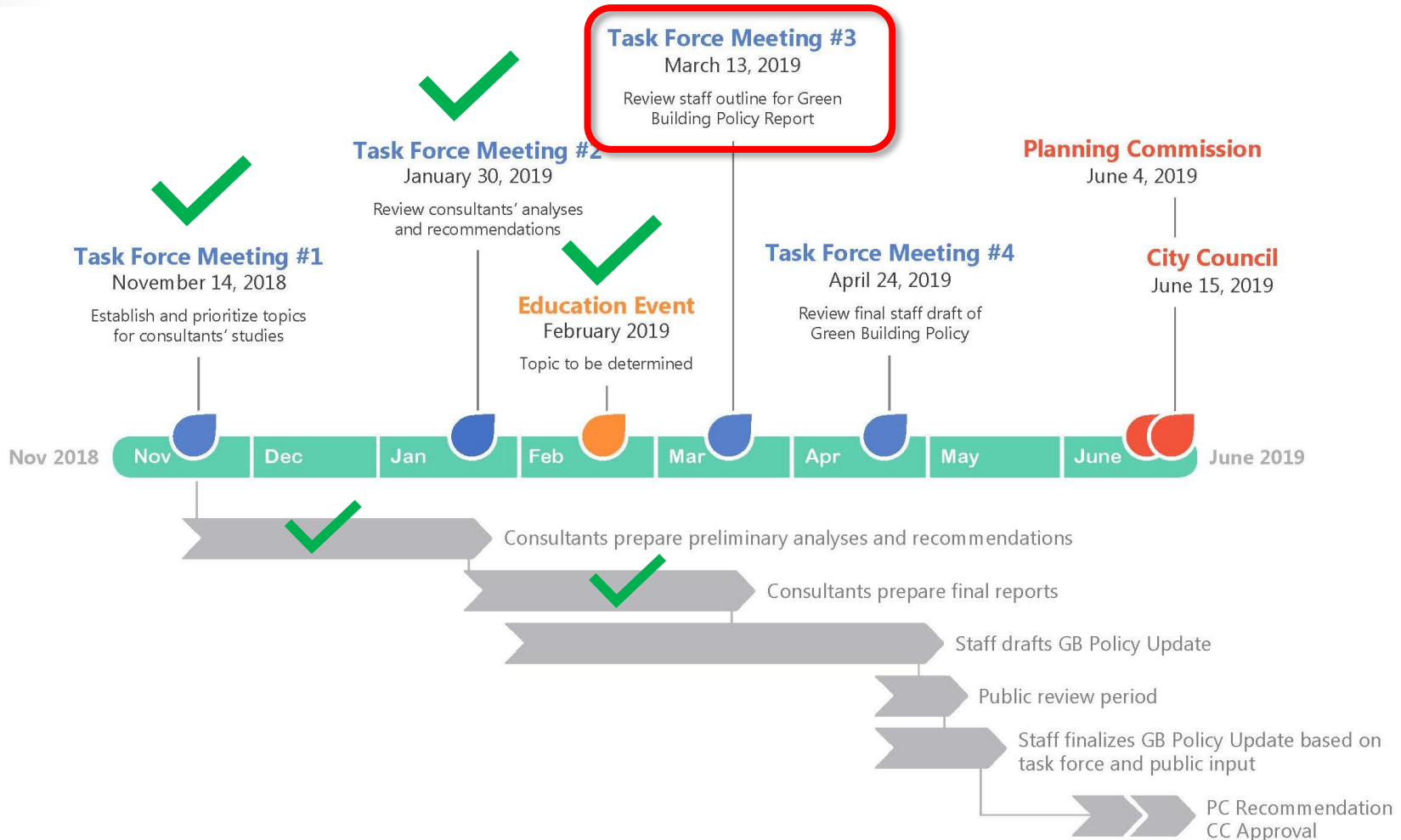
March 13, 2019



# Agenda

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|--|--------------|
| <b>I. Welcome</b>  | 8:30 – 8:35  |
| <b>II. Report on Green Building Forum</b>                        | 8:35 – 8:45  |
| <b>III. Consultants' Final Recommendations and Responses</b>     | 8:45 – 8:55  |
| <b>IV. Proposed Outline for the Green Building Policy Update</b> | 8:55 – 9:15  |
| A. Task Force Questions and Comments                             | 9:15 – 9:40  |
| <b>V. Public Comments</b>  | 9:40 – 9:50  |
| <b>VI. Next Steps and Adjournment</b>                            | 9:50 – 10:00 |

# Green Building Policy Update Workplan and Timeline



# Forum on Green Building



## February 28 education program

50 participants in person and viewing on Livestream  
80 additional viewers after the event

# Task Force Discussion – Integral Group Recommendations

## Strategy:

### Strategy A (A+D Combined):

Increase LEED or equivalent third-party green building certification standards for private development and prioritize specific green building elements in private development.

### Strategy B:

Establish a separate green building standard for new public development, at a level more ambitious than required for private development and evaluating the feasibility of a net zero standard for new public development, including schools.

### Strategy C (Partial E):

Introduce voluntary green building practices for small buildings not subject to review.

### Strategy D (Partial E):

Introduce voluntary green building practices for existing buildings (including historic).

### Strategy E (Former C):

Establish incentives for private development participation in green building certifications.

## Recommendations to Consider:

- All private development (residential and non-residential) achieve LEED Silver certification as a minimum with energy and water performance targets that equate to specific LEED credits.
- No additional requirements over and above the City's current standards for stormwater (updated April 2018).
- All new public development projects, including schools, be certified at the LEED Gold level, as well as be designed to achieve net zero energy (NZE), water, and stormwater performance targets.
- Home Rating and Labeling Programs, and Education and Capacity Building for small buildings not subject to site plan review.
- Establishing challenge and benchmarking programs, educational programs, and green leases as voluntary green building practices for existing buildings, including historic.
- Incentives such as FAR exclusions, tax reductions, and/or density/height bonuses in designated areas of the City "stacked" with affordable housing bonuses.

# Task Force Discussion – Integral Group Recommendations (Updates)

- Performance target for indoor environmental quality (health/wellness) in public development, including schools.
- Flexibility for Earthcraft (Viridant) certification and an alternative compliance path for affordable housing developments.
- Exemptions process.
- Clarification of Green Globes point allotment/certification standards.
- Emphasis on performance monitoring and the necessary resources to implement as a future program.

# Task Force Discussion – WSP Cost Analysis

## Strategy:

### Strategy A (A+D Combined):

Increase LEED or equivalent third-party green building certification standards for private development and prioritize specific green building elements in private development.

### Strategy B:

Establish a separate green building standard for new public development, at a level more ambitious than required for private development and evaluating the feasibility of a net zero standard for new public development, including schools.

### Strategy C:

Establish incentives for private development participation in green building certifications.

### Strategy E:

Introducing mandatory and/or voluntary green building practices for existing buildings (including historic) and for small buildings not subject to site plan review.

## Summary WSP Analysis:

- Costs associated with increasing certification standards can range from -2% to +13% with many of the variables that impact first costs can be managed by an experienced, integrated project team.
- Water efficiency strategies have the lowest up-front costs to implement but have the lowest operational cost savings.
- Energy upgrades and ongoing performance verification of energy systems have the highest up-front costs but have the largest operational savings.
- An increased standard for public buildings has the potential to increase City capital costs by \$25-\$40 million over the next ten years.
- Incremental cost increases for new private development are nearly equivalent to that of new public development for levels of green building certification greater than or equal to LEED Gold with NZE performance targets.
- A green building density bonus is an effective mechanism for private development but has the potential to impact existing affordable housing density program unless the combine to meet the parcel's maximum FAR.
- Smaller scale incentives such as tax credits or fee reductions/waivers are most effective in gaining participation in voluntary green building practices.





# Task Force Discussion – WSP Recommendations (Updates)

- Clarified Matrix baseline: LEED 2009 New Construction, Silver and 2012 Virginia Uniform Statewide Building Code.
- Analysis of 50-year build cycle and operating cost savings for public buildings.
- Refined potential capital cost impact to \$5-\$35 million over the next ten years.
- Includes range of incremental percentage costs for multifamily from LEED 2009 Certified to LEEDv4 Silver.
- Summary of affordable housing development cost caps and recommendation for flexibility as a case-by-case review.
- Additional appendices clarifying assumptions and indicate options that correspond with Integral's recommended performance-targets.





# Proposed Policy Outline Review

## *Environmental Action Plan (EAP) Short-Term Action*

**\*Strategy A:** Increasing LEED or equivalent third-party green building certification standards for private development.

**\*Strategy B:** Establishing a green building standard for new public development at a higher level than required for private development. Evaluating the feasibility of a net zero standard for new public development, including schools.

**\*Strategy C:** Establishing incentives for private development participation in green building certifications.

**\*Strategy D:** Prioritizing specific green building standards in private development projects.

**\*Strategy E:** Introducing mandatory and/or voluntary green building practices for existing buildings not subject to site plan review.

**Strategy F:** Instituting a building performance monitoring program.

**Strategy G:** Establishing a Green Zone in the City.

**\*Additional Task Force Strategies:** Establish a Green Building Code, include Health and Wellness certification



# Proposed Policy Outline Review

## *Two Phase Approach for Policy Update*

### **Stage 1:**

Green Building Policy Updates implemented by Fall 2019 after City Council review in June 2019.

### **Stage 2:**

Green Building Policy Updates implemented as Environmental Action Plan mid-term goals beginning July 2020.

# Proposed Policy Outline Review

## **Stage 1:** New Private Development

Strategies A + D + health/wellness

**LEED Silver** or third-party equivalents with directed-use (“priority”) performance credits.

Directed-use performance credits:

1. Water use
2. Energy use
3. Indoor environmental quality

*\* Projects will continue to meet stormwater requirements*

# Proposed Policy Outline Review

**PROJECT TYPE 1: OFFICE W/GROUND FLOOR RETAIL**

**PROJECT TYPE 2: MULTIFAMILY RESIDENTIAL W/GROUND FLOOR RETAIL**

**PROJECT TYPE 3: FOR-SALE ATTACHED RESIDENTIALS (TOWNHOMES)**

Internal Rate of Return (IRR)						Yield on Cost (YOC)					Return on Investment (ROI)				
Project	Base Case	Silver	Gold	Plat.	NZE	Base Case	Silver	Gold	Plat.	NZE	Base Case	Silver	Gold	Plat.	NZE
Type 1	10.7%	10.5%	10.4%	10.1%	9.7-10.9%	7.9%	7.8%	7.7%	7.7%	7.5-8.0%	-	-	-	-	-
Type 2	8.2%	8.2%	8.1%	7.9%	7.4-8.5%	5.9%	5.9%	5.9%	5.8%	5.6-6.0%	-	-	-	-	-
Type 3	5.0%	4.9%	4.3%	3.6%	0.9-5.8%	-	-	-	-	-	8.2%	8.0%	7.1%	5.9%	1.5-9.4%

**DIFFERENCE: 0.1 - 0.6%**

**0.0 - 0.1%**

**0.9%**

**FIRST COST RANGES FOR LEED GOLDv4 (COMPARED TO LEED SILVERv4): 1.1% - 3.5% INCREASE**

# Proposed Policy Outline Review

## **Stage 1:** New Private Development:

### Strategies A + D

Add procedural checkpoints to Development review to ensure Green Building compliance.

- Concept 2
- Preliminary Plan Review  
and Final 1 Site Plan Review
- Formal compliance exemption process



# Proposed Policy Outline Review

## *Stage 1:* New Public Development

### Strategies B + health/wellness

**LEED Gold** or third-party equivalents with directed-use ("priority") performance credits.

Directed-use performance credits include:

1. Reduce water use above new private development requirements.
2. Energy use to meet or exceed requirements of new private development
3. Indoor environmental quality
4. Meet 100% of the stormwater treatment requirements through green infrastructure provided it is technically feasible and cost effective

# Proposed Policy Outline Review

## **Stage 2:** EAP Mid-term Actions

### Strategies C + E

Encourage **green building renovations** through incentive programs for **existing buildings** -- Green Lease Leader program and C-PACE.

### Strategy C + E

Evaluate changes to regulatory framework for private property renovations to facilitate **"greener" renovations.**

### Strategies C + G

Evaluate a series of regulatory incentives linked to specific green building performance targets in a City-wide **Green Zoning Overlay** and in a Potomac Yard and Eisenhower East Green Zoning Overlay.



# Proposed Policy Outline Review

## **Stage 2:** EAP Mid-Term Actions

### Strategy C

Evaluate **incentive programs** and impact on existing regulatory incentive programs for affordable housing.

### Strategy F

Maintain and expand **performance monitoring** for public buildings and establish a performance monitoring program for private development.

### Strategy F

Advocate for **legislative authority** to require building monitoring reporting for private property owners that are not subject to site plan review.

# Proposed Policy Outline Review

## **Stage 2:** EAP Mid-Term Actions

### Strategy B

Establish a **performance-based procurement pilot** program for one **net zero public building** and consider establishing for all public buildings.

### Strategy B

Identify and **define "major renovation"** for existing public buildings and include this category in the certification requirements for new public buildings.

### Strategy C + E

Public **education programs** added to the EAP Implementation/Education and Outreach chapter.

# Proposed Policy Outline Review

**Stage 2:** EAP long-term vision  
beginning 2021

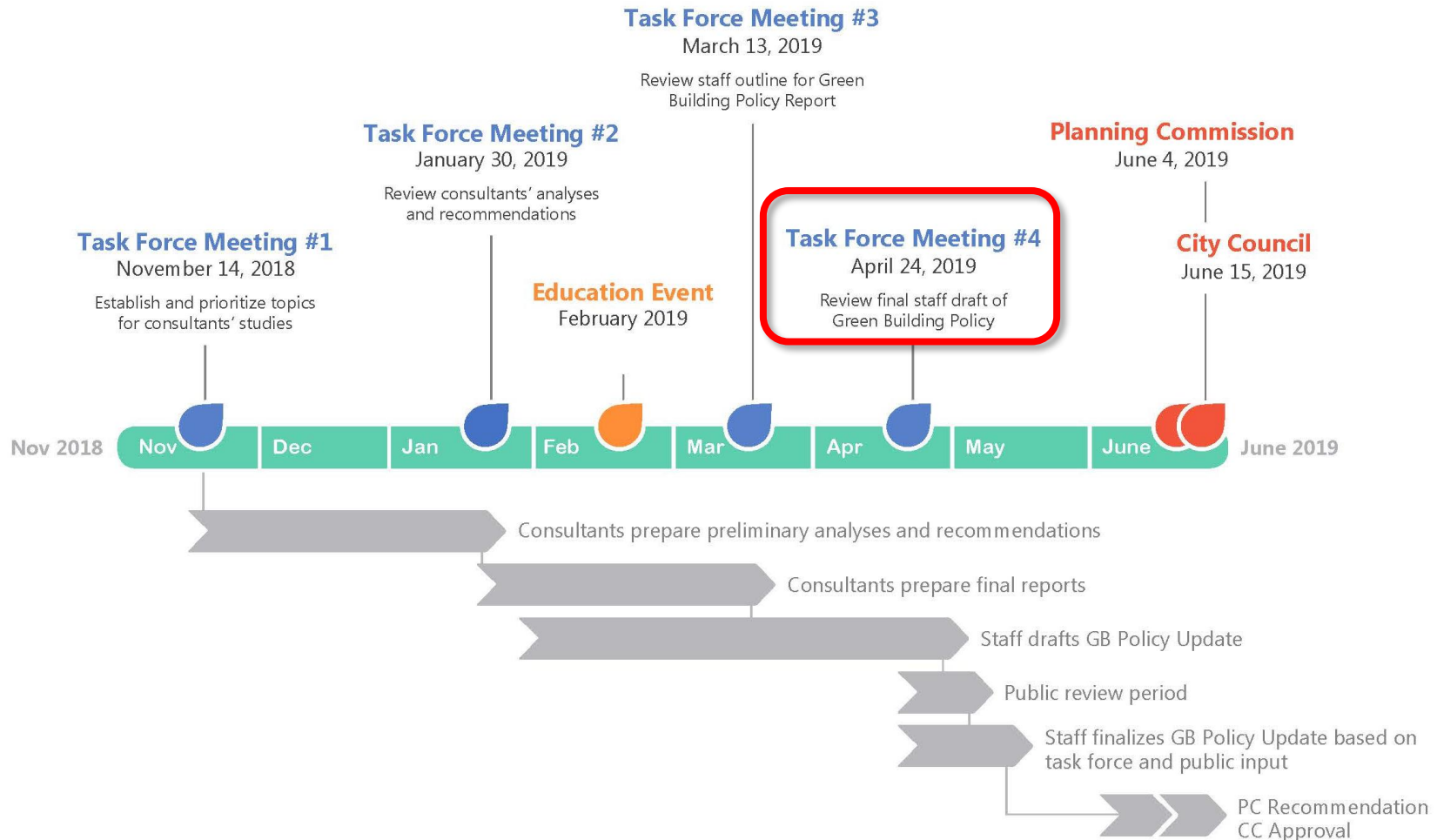
**Future Green Building Policy updates** will coincide with changes in third-party certifications, the revisions to the Building Code, and the implementation of programs established through the EAP mid-term actions.



# Public Comments

# Green Building Policy Update

## Next Steps





# Five Priority Green Building Strategies

## Task Force Meeting #1:

**Strategy A:** Increase LEED or equivalent third-party green building certification standards for private development.

**Strategy B:** Establish a separate green building standard for new public development, at a level more ambitious than required for private development and evaluating the feasibility of a net zero standard for new public development, including schools.

**Strategy C:** Establish incentives for private development participation in green building certifications.

**Strategy D:** Prioritizing specific green building elements in private development projects.

**Strategy E:** Introducing mandatory and/or voluntary green building practices for existing buildings (including historic) and for small buildings not subject to site plan review.

## Integral Group (Recommendations):

**Strategy A (A+D Combined):** Increase LEED or equivalent third-party green building certification standards for private development and prioritize specific green building elements in private development.

**Strategy B:** Establish a separate green building standard for new public development, at a level more ambitious than required for private development and evaluating the feasibility of a net zero standard for new public development, including schools.

**Strategy C (Partial E):** Introduce voluntary green building practices for small buildings not subject to review.

**Strategy D (Partial E):** Introduce voluntary green building practices for existing buildings (including historic).

**Strategy E (Former C):** Establish incentives for private development participation in green building certifications.

## WSP (Cost Analysis):

**Strategy A (A+D Combined):** Increase LEED or equivalent third-party green building certification standards for private development and prioritize specific green building elements in private development.

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