

City of Alexandria, Virginia

MEMORANDUM

DATE: JANUARY 22, 2019

TO: THE GREEN BUILDING POLICY UPDATE TASK FORCE

FROM: KARL MORITZ, DIRECTOR, DEPARTMENT OF PLANNING AND ZONING

SUBJECT: GREEN BUILDING RECOMMENDATIONS AND COST ANALYSIS
CONSULTANT REPORTS

At its last meeting, the Green Building Policy Update Task Force (“Task Force”) prioritized five green building strategies for consideration in the update of the City’s Green Building Policy. Over the past couple months, two consultants investigated these potential initiatives:

- **Integral Group** has reviewed the initiatives for their potential to help us meet our EAP goals;
- **WSP** has evaluated their financial feasibility

Enclosed are the Preliminary Analysis and Recommendations prepared by both consultants. The consultants have provided many options for consideration that the Task Force can choose to integrate into the Green Building Policy as the green building guide for private and public development. Staff can incorporate remaining green building strategies of interest into the Environmental Action Plan Phase 2 update for mid and long-term actions which the Environmental Policy Commission and Staff are developing concurrently.

In summary, Integral Group proposes:

- **For private development**, that the City consider raising the level of third-party certification to LEED Silver for all private residential and non-residential projects subject to site plan review. In addition, they recommend that the City require these projects meet specific performance targets, which are equated into LEED credits, that align with the greenhouse gas, water and stormwater goals of the EAP.
- **For new public buildings**, Integral Group recommends that the City consider a goal that all new public development projects will be certified at the LEED Gold level, with specific performance targets in order to be more ambitious than private sector development, including designed to achieve net zero energy (NZE) through a combination of energy efficiency and renewable energy systems.

WSP found that:

- **For private**, the costs for increasing certification standards for private development can range from -5% to +13% depending on the project type and certification level, and

- **For public development**, the costs for increasing the green building standard from LEED Silver to LEED Gold and up to Net Zero Energy for public buildings, including schools, has the potential to increase City capital costs by \$30 to \$50 million over the next ten years. This makes it clear that setting a stretch goal for the City has real costs.

The analysis of both consultants provides the opportunity for a thorough discussion with the Task Force regarding balance of the City's desire to effectively meet its environmental goals and its need to be fiscally prudent in its own development program and financial reasonable in its expectations for private development.

In summary, Staff finds both consultants' reports thorough and informative in guiding the forthcoming Green Building Policy update, and offers the following comments to the Task Force to consider regarding the level of ambition for public development vs. private development summarized in the consultants' reports:

- As illustrated in Section 5.1 (page 22) of WSP's report: The high, low and median incremental cost increases for new, private office and multifamily development are equivalent or nearly equivalent to that of the most common new public development types, schools and fire/police for levels of green building certification equal to or greater than LEED Gold with net-zero energy performance targets.
- As shown in Table 4 (page 15) of WSP's report: The Yield on Costs (YOC), Internal Rate of Return (IRR) and Return on Investment (ROI) for the private development green building case studies are generally equivalent across each "type" of private development studied as analyzed across each level of green building certification equal to or greater than the LEED Gold, including the mean of the range for net-zero energy financial performance metrics.
- Given the points above, Staff encourages the Task Force to consider the necessity for public development to serve as an example or operate at a higher threshold of performance than private development. For example, should public development, including schools, meet at a minimum the same level of green building certification as private development with a stretch goal of being more energy efficient than private development? With, perhaps, each building evaluated on a case-by-case basis in regard to how much higher a standard a government/school building would seek.