

**Policy Committee
Government Center Complex
Large Conference Room, Building A**

February 24, 2011 - 7:00 p.m.

A. Roll Call

B. Minutes

1. February 3, 2011

2. February 7, 2011

C. Old Business

D. New Business

1. Mixed Use Districts Zoning Ordinance Updates

- Mixed-Use Policy Committee Report
- Mixed-Use Public Comment
- Form-Based Code Policy Committee Report

2. Green Building Zoning Ordinance Updates

- Green Building Memorandum
- Green Building Attachment 1 - Roundtable Report

E. Adjournment

POLICY COMMITTEE MEETING

February 3, 2011

6:00 p.m.

County Complex, Building A

1) Roll Call

Present

Mr. Reese Peck, Chair

Mr. Tim O'Connor

Mr. Jack Fraley

Absent

Mr. Al Woods

Staff Present

Mr. Allen Murphy

Ms. Tammy Rosario

Ms. Sarah Propst

Mr. Scott Whyte

Ms. Jennifer VanDyke

Mr. Steven Hicks

Mr. Darryl Cook

Mr. John Horne

Mr. Reese Peck called the meeting to order at 6:00 p.m.

2) Minutes

a) January 5, 2011

Mr. Jack Fraley moved to approve the minutes. The minutes were approved (3-0).

b) January 6, 2011

Mr. Fraley moved to approve the minutes. The minutes were approved (3-0).

3) Old Business

Mr. Peck discussed the start time of the Policy Committee meetings. It was agreed that starting with the February 23 meeting, the start time would move to 7:00 p.m.

4) New Business – Development Standards zoning ordinance updates

a) Floodplain

Ms. Sarah Propst presented proposed changes to the language in the Floodplain Overlay District.

Mr. Tim O'Connor asked if there is a definition of "substantial improvements" as found in Sec. 24-595 (a)(3).

Mr. Darryl Cook stated that changes that exceed 50% to any structure would be considered "substantial improvements."

Ms. Propst stated that it could be provided within the text.

Mr. Fraley asked that staff make a recommendation.

Mr. Allen Murphy stated that staff will make a recommendation during Stage Two.

Mr. Fraley stated that in his research he had found that federal regulations encourage localities to enact more stringent regulations than what the federal government requires. Mr. Fraley asked if James City County (JCC) had achieved this measure.

Mr. Cook stated that the proposed changes to Sec. 24-595 (a)(1) would exceed the National Flood Insurance Program (NFIP) requirements. JCC also participates in the community rating system which recognizes those communities that exceed federal standards. Currently JCC has achieved a class eight status, which is several steps above the minimum.

Mr. Fraley asked what the highest step on this rating ladder is, and what could JCC do to achieve a higher rating.

Mr. Cook stated the highest rating is class one. JCC is high above the average with its class eight rating; there are only 12 other localities within the state that have a class eight rating or above.

Mr. Fraley made a recommendation for additional language to be included in Sec. 24-595: "New construction and substantial improvements shall be constructed with materials resistant to flood damage as well as construction methods and practices that minimize flood damage."

Mr. John Horne stated that staff can consider the language.

Mr. Fraley asked, if a restriction can be placed on building in the floodplain.

Mr. Cook stated that JCC did not adopt a floodplain ordinance until February 1991. There are many parcels that are undeveloped within the floodplain.

Mr. Fraley asked if one can state "No future development in the floodplain."

Mr. Horne stated the word "build" could have two different meanings. One meaning would relate to building a structure below the floodplain elevation; this is already addressed in the ordinance. The other pertains to platting new lots in the floodplain. There can be parts of lots that are in the floodplain and other portions out of it.

Mr. Fraley stated he remembers the troubles JCC went through when Peleg's Point was developed. Parcels were flooded with water, leaving property owners unsatisfied with the condition of their property after purchase.

Mr. Horne stated that Sec. 24-596 speaks to platting new lots within the floodplain, creating new standards for new lots. The current ordinance requires that portions of the property in the floodplain be identified by showing elevations. It also talks about the two types of floodplains within JCC, tidal and non-tidal.

Mr. Cook referred to Sec. 24-596 where the two new changes not included in the Planning Division memo are highlighted for discussion. One is to remove the phrase: "any floodplain district having a 100-year elevation greater than 7.5 feet." The other is changing the elevation of those building sites from one foot to two feet above the 100-year flood elevation. JCC has two different types

of flooding: riverine and tidal. The ordinance currently requires for platting, that a lot must have a natural unfilled building site at least one foot above the 100-year flood elevation. The two new studies listed in Sec. 24-590 indicate that flooding has increased in the study areas, above what is shown on the official FEMA floodplain maps. Based on the increased elevation of flooding, Mr. Cook recommends increasing the natural unfilled building site elevation requirement.

Mr. Fraley asked how many parcels would be affected by this change.

Mr. Cook stated that most floodplain areas are already protected by a Resource Protection Area (RPA) under the Chesapeake Bay Preservation Ordinance. There are some low-lying areas along the James River that are not associated with perennial streams. Those areas that could potentially be affected by the change would be around the south east side of Neck-O-Land Road near Gatehouse Farms, Peleg's Point, Page Landing, and the Gilley Property. Another property further up the James River that could be affected would be Gospel Spreading Farm. Areas off the Chickahominy River in Chickahominy Haven could be affected. There is property off of Menzels Road and Arlington Island Road that could be potentially affected.

Mr. Fraley asked what the practicable effect would be.

Mr. Cook stated any property that does not have a viable building site at least two feet above the 100 year flood elevation or 9.5 feet elevation, would not be platted with new lots.

Mr. Fraley asked how many buildable lots would this measure eliminated.

Mr. Cook stated that the property behind Gatehouse Farms, as an example, could potentially be affected but that he did not have an exact number for lots or acres.

Mr. Horne stated that with this regulation change there may be some big parcels that could not otherwise be subdivided to the fullest extent.

Mr. Murphy stated that the property behind Gatehouse Farms is not developable based on current standards.

Mr. Cook stated that there is a section of Peleg's Point that would be impacted by this proposed change.

Mr. Fraley stated he would like to know the number of lots that would be impacted by this change. Mr. Fraley asked if there is a way to make this policy change location specific.

Mr. Horne stated this would be challenging, though staff can consider it.

Mr. Steven Hicks stated it is important to note that change or no-change, the house will not be placed in the floodplain. The surrounding property may be in the floodplain. Mr. Hicks stated he recommends that the Policy Committee move forward with this policy change recommended by planning staff including raising the elevation of the lowest floor and utilities to two feet above the 100 year flood elevation.

Mr. Fraley asked that staff look into the additional language he suggested and determine how much property would be impacted by an increase in ground elevation.

Mr. Peck stated that it would be difficult to defend a location-specific change. It may seem arbitrary and capricious. Mr. Peck asked how JCC can implement the elevation changes noted in the recent studies.

Mr. Cook stated it would be strictly advisory, not regulatory.

Mr. Peck asked what would be the next step in the process to have the elevation changes reflected on the floodplain map.

Mr. Horne stated that staff would have to work through Federal Emergency Management Agency (FEMA) to change the official floodplain based on the more accurate, new information. This is a lengthy and complex process.

Mr. Peck stated that the land owners would have access to public hearings during that process.

Mr. Fraley asked if the new class eight rating gave property owners a reduction in their flooding insurance rates.

Mr. Cook stated yes; there is a ten percent discount associated with this rating. This serves as an incentive.

Mr. Peck asked how many property owners are in this program.

Mr. Cook stated that there are 890 houses in the program.

Mr. Peck asked how much the discount amounts to.

Mr. Cook stated it is about \$40,000 annually.

Mr. Fraley can remember when frustrated home owners from Peleg's Point were seeking assistance from the County government.

Mr. Peck asked what damages were seen.

Mr. Fraley stated that at one time there were plans to correct some of the problems with Peleg's Point, though it has never come to pass.

Mr. Horne stated that this would be done under the existing bonds that I assume are in affect for those sections.

Mr. Hicks asked if staff is aware of any structural damage to the homes in Peleg's Point.

Mr. Fraley stated that he remembers there being damage to garages and decks, not homes. The property owners were very upset.

b) Preserving Vegetation During Development

Mr. Scott Whyte reviewed the staff recommendations concerning landscaping and preserving vegetation during development. The recommendation includes adopting a Specimen Tree Provision, an ordinance option rather than policy. It would then apply to all cases not exclusively to legislative cases.

Mr. Fraley stated he agrees with this.

Ms. Tammy Rosario stated that it should be considered as an incentive.

Mr. Fraley stated his perception is that JCC citizens want more regulation than the sum of recommended changes seen here. At minimum, all related policies should be brought together under one umbrella. It is discouraging to see the Chesapeake Bay Preservation Ordinance cited here; it does not offer enforceable language. Mr. Fraley found several localities in Virginia that offer a tree ordinance; this would be a preferred method. There should be a tree inventory requirement and we should define what it would encompass.

Mr. Whyte stated JCC does have a tree preservation plan requirement, which accomplishes much of the same.

Mr. Fraley stated there should be a tree inventory. The buffer needs to be inventoried in terms of the forested areas. A chart would be provided, identifying and defining the trees. There should be a matrix that provides species of trees, roots severance (tolerant, sensitive, intermediate), soil compaction (whether certain trees are tolerant), mature size growth and the hazard potential rating. We should prohibit clear-cutting in JCC. A general definition of clear-cutting would be the removal of a significant amount of trees and vegetation from an area such that it has a negative effect to the overall character, ecosystem, and/or the water quality of the parcel. Settler's Market should never happen again.

Mr. Fraley cited the *Code of Virginia* that speaks on preservation of trees. Mr. Fraley suggested the following language: "An Ordinance to safeguard trees on private and public property, providing protection to an important asset to the natural ecosystem, character, and quality of life in JCC for both present and future generations."

Mr. Fraley stated that the Board of Supervisors (BOS) would need to support this effort to make it happen.

Mr. Hicks asked if the presented materials are in the ballpark. Staff will need to move forward. Mr. Hicks asked Mr. Fraley if he is suggesting that staff look to get a response from the BOS during their next work session.

Mr. Whyte stated that currently the policies governing this are in the Chesapeake Bay Preservation Ordinance and the Landscape Ordinance. The clearing plans are required under the Chesapeake Bay Preservation Ordinance. These are the most effective tools in preserving existing trees.

Mr. Murphy stated that there are buffer requirements as well. It sounds as though Mr. Fraley would like a generalized inventory within the buffer areas, not tree by tree.

Mr. Fraley agreed.

Mr. Murphy stated that the larger concern is to prevent another Settler's Market. Settler's Market was an anomaly in the sense that there was one large site plan for the entire property. If they would have had the ability to develop it all as planned there would not have been one tree left. The economy was responsible for slowing down the development of this site.

Chris Basic of Greensprings Landscape Architecture stated that the alternative to New Town's compact, urbanized development would be a sprawling development.

Mr. Peck stated that he agrees there needs to be more codification within the policy, making it more predictable. Mr. Peck stated that he would prefer a tree ordinance to pull this all together in one place. The citizens of JCC do appreciate the wooded lots, this is a priority. Mr. Peck asked why there is nothing here talking about residential areas.

Mr. Whyte stated that many other localities do regulate residential areas.

Ms. Rosario stated that JCC has not regulated that area in the past, and staff had not heard dissatisfaction with residential areas during the public input meetings. In the public input meetings the citizens had discussed improving our landscaping policies for commercial sites.

Mr. Murphy stated there is regulation in residential areas with required landscaped or wooded buffers along Community Character Corridors (CCC), perimeter buffers, and street trees.

Mr. Peck stated that other localities do require a tree inventory; it should be considered further.

Mr. Murphy stated overall JCC does have a fair amount of regulation requiring landscape elements.

Mr. Whyte provided an illustration depicting tree preservation requirements for a commercial site. Comparatively JCC requires three-times more tree preservation than the tree canopy ordinance governing Fairfax County, Virginia.

Ms. Sarah Kadec, 3504 Hunters Ridge, stated early on in the ordinance update process the James City County Concern Citizen's group (J4C's) submitted a paper with their own suggestions.

Mr. Whyte stated that staff had reviewed this item.

Ms. Kadec stated that the J4C's paper provided examples of several localities (specifically Virginia Beach) that have a tree canopy ordinance.

Ms. Rosario stated that it is hard to compare the regulations governing those localities that are more urban to JCC.

Mr. Whyte stated that the new legislation enabling localities to further regulate tree canopy benefits urban communities more than others.

Mr. Murphy stated staff will further consider drafting a tree ordinance, one that addresses clear-cutting.

Mr. Fraley stated that this would help with predictability for applicants.

Mr. Whyte stated that another proposed change includes staff assisting applicants by providing a site visit during the conceptual stage of development review.

Mr. Fraley stated this sounds promising, though he would like to add to it documenting an inventory during the conceptual review stage.

Mr. Peck asked if there were different regulations in place during the time frame when Monticello Marketplace was reviewed compared to New Town.

Mr. Murphy stated that there were no proffers offered for Monticello Marketplace. This was an older rezoning dating back to the 1980's.

Ms. Rosario stated that the planner working on this project spent a lot of time on it beyond basic site plan requirements. Also, the planner found an applicant that was very responsive to the suggestions of staff.

Mr. Murphy stated that the applicant, Mr. Jim Gressick, was very helpful.

Mr. Basic stated that the landscaping has also matured over time.

Mr. Jack Fowler, 109 Wilderness Lane stated that he is upset to see entire parcels clear-cut for timbering purposes. A buffer should be required to prevent clear-cutting all the way to the road.

Ms. Rosario stated that there is a portion of the ordinance update process that addresses timbering. This topic will be discussed at the next meeting.

Mr. Fraley stated that the proposed text, "existing specimen and mature trees receive extra tree credits to encourage developers to preserve trees" may need to be strengthened.

Mr. Whyte stated that this will help encourage developers to preserve existing trees rather than clear-cut and replant.

Mr. Murphy stated that this may preserve trees with more value.

Mr. Whyte stated that many replantings also perish before they become specimen trees.

Mr. Fraley stated he has noticed that many plantings in new commercial developments do not fare well. Mr. Fraley asked why commercial centers are not granted access to water for irrigation systems.

Mr. Whyte stated that it is a myth that you need an irrigation system to have planted trees and shrubs survive. Often the plants are perishing because they are over watered, or they have been planted using improper planting techniques. Some plants do not fare well because they are not placed in an ideal location.

Mr. Basic stated that the plant does require more water for the first two years after planting.

Mr. Whyte stated that JCC discourages the instillation of irrigation systems. It is written in the ordinance that landscaping must be maintained, though enforcing is very difficult.

Mr. Fraley asked if commercial centers could be given access to public utilities to water plants.

Mr. Murphy stated that the James City County Service Authority (JCSA) does permit access to public water to establish plants within a specified period of time. It may be for six months or more.

Mr. Peck stated that this is a water conservation issue as well.

Mr. Murphy stated that there are drought tolerant plants.

Mr. Peck stated that there are other water conservation techniques that could help alleviate this problem.

Mr. Tim O'Connor stated landscapers will guarantee the plants for a year or two. When the recreation center for Kingsmill was constructed efforts were taken to preserve certain trees on the site. During the construction phase the roots were disturbed and later the trees perished.

Mr. Whyte stated that this is not uncommon, and in the past it has been an embarrassment. There are methods that could improve the process.

Mr. Fraley stated that even if the tree does perish, it is worth the effort to try preserving it.

Mr. Whyte stated that communication between staff and the applicant is most helpful. In his experience, Mr. Whyte has found that the applicant is willing to work with staff.

Mr. Peck stated that two elements he would like to see are the creation of one governing policy that would be an umbrella for all landscaping and tree preservation elements. Also, he would like to see new regulations for clear-cutting/phased development and residential tree canopy.

Ms. Rosario asked if there was further interest in requiring an inventory.

Mr. Fraley and Mr. Peck stated yes; they are interested in a tree inventory.

c) CCC Buffer Treatment

Mr. Whyte discussed the proposed changes for buffer treatments, and provided a map illustrating where changes would take place.

Mr. Fraley asked that staff explain what "treatments" are in the section Explanation for Proposed Treatments and Designations on Map. Mr. Fraley noted there is a study for Toano and another for Five Forks. Mr. Fraley asked would those studies affect these considerations in any way.

Mr. Whyte stated yes.

Mr. Fraley questioned how Toano and Norge are considered urban/suburban.

Ms. Rosario stated that the term urban/suburban would also include village. The older historic buildings establish the streetscape in those areas rather than a wooded buffer.

Mr. Hicks made one suggestion to the map, to designate the intersection of Centerville Road and Route 60 as an urban/suburban CCC. This section would encompass Thomas Nelson and Premium Outlets.

Mr. Fraley stated he liked the proposed map.

Mr. O'Connor asked if it would be easier to provide codified information rather than the suggested illustration.

Mr. Whyte stated that the illustration will serve as a visual representation to augment the other requirements spelled out in the text.

d) Parking Lot Landscaping

Mr. Whyte discussed the proposed changes for parking lot landscaping requirements. This area has been very problematic for a number of reasons, one reason being that it is an inhospitable location for plants. One portion of the text was conflicting with another in regards to parking lot design. The original intent was to promote a staggered design with parking islands but, this is difficult for designers to achieve. It is far easier to line-up the islands. Traditionally staff had been accepting of trees being about 90' – 100' apart along with the islands. Staff's proposed changes would coordinate these elements with islands and trees.

Ms. Rosario stated that this was the first part of the recommendation. There are other parts of the recommendation that speak to distribution and excavation.

Mr. Whyte stated that part of the proposal includes changing the distribution of the recommended one tree and two shrubs for every five parking spaces. Often a significant portion of the required landscaping for parking lots was placed in strips near the perimeter of the parking lot; the changed text would require the plants be located and evenly distributed within the perimeter of the parking lot. Lastly, staff is suggesting changes in policy regarding excavation. Often developers are not putting quality top soil within the islands, making it difficult for any plant to thrive.

Mr. Peck stated that plantings being evenly distributed are advisable, though should not appear to be repetitious. Having variation would be ideal.

Mr. Whyte stated variety can be seen in the different species of plants. This is intended to be a minimum for parking lot requirements; if the applicant wants to stack shrubs along the drive isles they can exceed the requirement.

Ms. Ann Hewitt, 147 Raleigh, asked if certain species of plants can be required.

Mr. Whyte stated that native plants are suggested. There also is a requirement for a mixture of plants: 35% deciduous shade trees, 15% ornamental trees and 35% evergreen trees. Staff has

recommended a change to these percentages for 25% evergreens rather than 35%. Staff also recommends limiting evergreens to large parking lots.

Mr. Fraley asked why we do not require native plants.

Mr. Whyte stated that the market could not support it. Designers would be left with too few options.

Mr. Basic stated that requiring native plants would eliminate a landscaper's creative license. A plant being non-native does not mean that it is either invasive or inappropriate for this area.

Mr. Fraley stated that it would bring greater predictability to have all these elements spelled out.

Mr. O'Connor stated that the current percentage requirements are enough.

Mr. Whyte stated that in the *Community Appearance Guide* native plants and drought-resistant plants are recommended. Mr. Whyte asked if Mr. Basic has more feedback on the presented materials.

Mr. Basic stated that from a landscaper's perspective the proposal looks good.

Mr. Whyte noted that the proposal still exceeds the parking lot requirements of most other jurisdictions.

e) Outdoor Operations and Storage

Mr. Whyte discussed the proposed changes for outdoor operations and storage requirements. Mr. Whyte asked if there were any comments or concerns to address.

There were no questions from the committee or any members of the audience.

f) Streetscape Policy

Mr. Fraley asked if it was possible to delay Streetscape Policy until the next Policy Committee meeting.

Ms. Rosario stated that delaying would be fine.

Mr. Fraley did ask staff to consider reviewing sidewalk waivers administratively rather than with the Development Review Committee (DRC).

Mr. Hicks stated staff will discuss this matter.

5) Adjournment

Mr. Peck moved to adjourn.

The meeting was adjourned at 7:50 p.m.

Reese Peck, Chair of the Policy Committee

POLICY COMMITTEE MEETING

February 7, 2011

6:00 p.m.

County Complex, Building A

1) Roll Call

Present

Mr. Reese Peck, Chair

Mr. Tim O' Connor

Mr. Jack Fraley

Absent

Mr. Al Woods

Staff Present

Mr. Allen Murphy

Ms. Tammy Rosario

Ms. Leanne Reidenbach

Mr. Scott Whyte

Mr. Luke Vinciguerra

Mr. Brian Elmore

Mr. Reese Peck called the meeting to order at 6:00 p.m.

2) Old Business – Streetscape Policy

Mr. Scott Whyte stated the County had received applications proposing street tree placement too far from the road. He stated staff proposed restricting the distance between the road and street trees, calculated using a percentage of the distance from the right-of-way to the building envelope, while retaining some flexibility. Another new clause states all agencies will work together to implement the new standards.

Ms. Tammy Rosario stated the streetscape policy is specifically noted in R-1, R-2, and Cluster Overlay district ordinances in order to achieve higher densities.

Mr. Allen Murphy stated the policy is applied to other districts only during the legislative process and through proffers.

Mr. Jack Fraley stated the ordinance should be clear on when and where to apply the streetscape policy, as well as types of acceptable trees. He stated the County should develop a list or graphic illustrating acceptable tree types, arrangements, and sizes.

Mr. Whyte stated the policy currently encourages the use of large, deciduous shade trees.

Mr. Fraley stated the ordinance reflects a one-size-fits-all approach. He stated it should be expanded beyond residential districts, with varying requirements, like setbacks. The expanded policy should have clear guidelines.

Mr. Murphy stated staff can develop an approved tree list with an administrative variance attached if an applicant wants to deviate from the list.

Mr. Tim O'Connor asked about the relationship between street trees and sidewalks.

Mr. Whyte stated there is a conflict between the streetscape, sidewalk, and utility policies. He stated trees should be kept as close to the road as possible to maintain streetscape policy goals. Trees

and sidewalks should be complementary, since some root systems can damage sidewalk. Some types of trees with shallower roots could be encouraged when installed near sidewalks.

Mr. Fraley stated he preferred that design guidelines accompany an ordinance update.

3) New Business – Development Standards zoning ordinance updates

A. Sound Walls

Mr. Fraley stated staff should consider sound wall design guidelines to reduce monotony, including different colors, setbacks, and landscaping.

Mr. Whyte stated the Virginia Department of Transportation (VDOT) regulates landscaping inside its right-of-way.

Mr. Fraley stated VDOT only regulates sound walls when certain thresholds require their purchase and placement.

Ms. Rosario stated staff would discuss with the County Attorney's office what power the county can exert over private sound walls inside VDOT's right-of-way.

Mr. Fraley stated any attempt to regulate sound walls must go through VDOT.

B. Lighting

Mr. Fraley stated Fairfax County issued an illustrated outdoor lighting standards guide for lighting, signage, and landscaping. He stated Fairfax also writes performance standards into their ordinance. The County should adopt a similar guide or at least consolidate guidelines into a single ordinance.

Mr. Peck stated ordinances give citizens public notice of changes and the ability to comment on standards. He stated stand-alone guidelines are less predictable, more subject to modification, and result in less citizen input.

Mr. Fraley stated performance standards give staff and the applicant more flexibility than an ordinance.

Mr. Murphy stated the Board could adopt a design guidelines booklet along with the ordinance changes recommended by the Commission

Mr. Peck stated there should be a venue for public comment when guidelines are changed.

Ms. Rosario asked if the Committee was comfortable with ordinance changes on energy efficient fixtures and expanding the ordinance to buildings, walkways, and canopies.

Mr. Fraley stated he agreed with staff conclusions. He stated illustrations would be helpful.

C. Timbering

Ms. Leanne Reidenbach stated staff recommended consolidating the timber ordinances and updating them to reflect any new state laws or best management practices (BMP)s. She stated there is no timbering setback or buffer required for parcels zoned A-1 and outside the Primary Service Area (PSA).

Mr. Fraley asked if the same rules should apply to R-8 zoning outside the PSA. He also mentioned that there have been discussions about requiring buffers on A-1 properties outside the PSA.

Ms. Reidenbach stated there were very few R-8 properties outside the PSA. She stated staff would review that change. She also noted that in the late 1990's an ordinance requiring buffers in A-1 outside the PSA was proposed but not adopted due to public input.

Mr. Peck stated certain county-promoted corridors were still required to meet the setback requirements to maintain view sheds. He stated the economic impact applies equally to commercial and agricultural property owners. He also asked whether land owners could clear within stream buffers.

Ms. Reidenbach stated that timbering restrictions within the buffer would directly reduce the profitability of those properties. She stated a previous County attempt to create A-1 timbering buffers met heavy resistance. Timbering operations with an approved state forestry management plan may clear without stream buffers. As part of their management plan, timberers must replant within a certain time or convert the land to pasture. She noted that York County requires buffers along all roads and streams.

D. Pedestrian Accommodations

Mr. Luke Vinciguerra stated the zoning ordinance currently requires sidewalks in front of any development requiring site plans. He stated staff has developed a draft master plan that targets pedestrian accommodation in high population areas and areas of future growth.

Ms. Rosario stated staff would like input on both pedestrian ordinances and the master plan map itself.

Mr. Fraley noted staff recommended Development Review Committee (DRC) approval of sidewalk waivers. He stated the DRC should review sidewalk changes like master plans, with minor changes handled administratively. The differences between major and minor changes should be defined.

Mr. Murphy stated it would be expeditious to review as many sidewalks as possible administratively.

Mr. Peck stated the Commission should defer to staff except during exception cases.

Mr. Peck stated the sidewalks along Monticello Avenue required users to repeatedly cross the street. He asked if the ordinance would deal with dangerous sidewalks and gaps in that area.

Ms. Reidenbach stated the sidewalk requirement is only triggered when the County receives a development plan. She stated the the ordinance changes would give applicants less flexibility in areas targeted for sidewalk expansion. New public streets would be subject to VDOT's SSAR standards, with similar standards being adopted for private streets.

Mr. Murphy stated once a street is accepted by VDOT, the County has no mechanism to require sidewalks.

Ms. Rosario stated the master plan also helps focus limited county dollars for improvements. She stated the plan differentiates between different types of pedestrian accommodations – sidewalks and multiuse paths.

Mr. Fraley asked how the County would adopt the master plan.

Mr. Murphy stated the master plan would move forward with the zoning ordinance. He stated the Commission would recommend approval of both the ordinance and map to the Board.

Mr. Vinciguerra stated the County's reduced sidewalk requirements would reduce the amount of streets needing future sidewalks by 50 miles. He stated staff recommends double sidewalks within Community Character Areas due to area densities and aesthetics. This would allow pedestrians to feed into major corridors going through the CCA.

Mr. Peck stated the Monticello Avenue pedestrian accommodations should be extended past Powhatan Secondary entrances.

Mr. Tim O'Connor asked how the master plan fit with the schools no longer providing transportation to students living within half a mile.

Ms. Reidenbach stated the plan includes sidewalks along frontage roads within a half-mile radius of all schools.

Mr. Vinciguerra stated that new developments would be required to internally connect to any adjacent school, park, or recreation area.

Ms. Reidenbach stated the plan represented a long-term focus for areas where the County would like to incorporate sidewalks. She stated the County would have to wait for development in areas, including the corridor between Norge and Lightfoot, unless it wanted to begin a CIP sidewalk program. Certain sidewalks will be disconnected for periods of time. Sidewalks within the right-of-way are maintained by VDOT.

Mr. Fraley stated he would like additional time to review the master plan. He stated it would be dangerous and difficult to place sidewalks along News Road.

Mr. Peck recommended a multi-use path along News Road.

Ms. Reidenbach stated staff also looked for 'cow paths' or self-made trails around the County to help determine where pedestrians need additional access.

Ms. Reidenbach stated the master plan includes sidewalk spurs along Brick Bat and Lake Powell to feed into the schools there. She stated the plan attempts to pull people off the road and onto sidewalks near Rawls Byrd.

Ms. Rosario stated the County can apply for HRTPO or federal funds for sidewalk funding.

Mr. Vinciguerra stated staff had not developed a total cost for all sidewalks in the plan.

Mr. Fraley stated he had concerns regarding the Brick Bat and Lake Powell sidewalks.

Ms. Reidenbach stated staff recommends construction standards as part of the ordinance update. She stated multi-use trails would be constructed of asphalt and 8 feet wide. Sidewalks would be constructed of concrete and 5 feet wide. Staff has removed the ability to install gravel or mulch trails. Soft trails have proven too difficult to maintain.

Mr. Fraley stated the sidewalks policy is inconsistent with school site selection policy. He stated schools are being sited to rely on busing. He stated there should be a distinction between schools inside and outside of the PSA.

Mr. Fraley asked staff to consider providing a multi-use path rather than sidewalk along Neck-O-Land due to the high number of pedestrians and bikers and Colonial Parkway access. He asked about the public input process for the master plan.

Ms. Reidenbach stated staff had contacted the HTBAC and Williamsburg Active Alliance biking groups about the Committee meeting. She stated neither had responded. This was considered part of the ordinance update so the same input opportunities were available.

Mr. Vinciguerra stated many Class A cyclists will continue to ride in the road regardless of roadside paths. He stated SSAR would require internal connections and either single or double sidewalks based on lot sizes within a development. Staff's recommendations for private streets would mirror this requirement.

Mr. Vinciguerra stated staff also proposed eliminating internal sidewalk requirements in office parks with private streets. He stated SSAR would apply if public streets were built.

Mr. Fraley stated he would like staff to reconsider the business park sidewalk elimination. He stated the various uses in an office park, such as McLaws Circle, should be intermingling. He asked staff to clarify Attachment #4 to point out where requirements would be changing.

Mr. Vinciguerra asked when developments should not trigger sidewalk requirements.

Mr. Peck stated that if the County wants to quickly implement its sidewalk plan, then it should always ensure site plans comply with the pedestrian accommodation master plan. He stated he felt this would be a Board decision.

Mr. Fraley noted the trigger should be set low to encourage sidewalk construction.

Ms. Reidenbach stated other counties grants sidewalk waivers or alternative in circumstances where disproportionate costs for the sidewalk would be incurred by the applicant. She stated in these instances, owners often contribute to a sidewalk fund, which staff has included in this ordinance proposal.

Mr. Murphy stated that staff would want to define “disproportionate.” He stated it may be unfair for a business with a minor site plan and lots of road frontage to be required to install the full sidewalk.

E. Private Streets

Mr. Vinciguerra stated staff does not recommend any changes in the function of the private streets ordinance. He stated staff does recommend consolidation of private street ordinances into a single central ordinance.

Mr. Fraley asked about the origins of the private streets policy.

Ms. Rosario stated the private streets policy was an administrative guideline.

Mr. Fraley stated private streets are not currently held to VDOT standards, lacking geometric specifications, sight distances, and stormwater infrastructure dimensions.

Mr. Murphy stated staff could add clarifying language to private street construction standards.

Mr. Vinciguerra stated staff was working with the County Engineer to include basic geometries in the ordinance.

Mr. O’Connor stated the lack of minimum geometric standards could result in fire and garbage trucks having difficulty navigating neighborhoods.

Mr. Fraley stated some basic geometric standards should be included in the ordinance. He asked if cul-de-sacs and dead end roads fit with the County’s vision for connectivity, sustainability, and character.

Mr. Peck stated he would like to discuss the hierarchy of County ordinances, guidelines, and policies with the County Attorney. He stated understanding the legal status of each type would help the Committee steer changes into appropriate categories.

F. Parking

Mr. Fraley stated the County should be more aggressive in obtaining shared parking agreements and they should be drafted with more action-oriented language. He stated the County should set minimum parking requirements rather than maximums. Medical parking requirements are driven more by number of examination rooms rather than square footage or number of practitioners. Staff should review the medical building parking criteria based on examination rooms.

Ms. Rosario asked the Committee to make any minimum parking standards applicable at the site plan level, such as number of seats in a church.

Mr. Murphy stated that the staff proposed a parking maximum to address issues of sustainability and felt it would encourage shared parking. He stated an administrative waiver revision could be added for circumstances warranting additional parking.

Mr. Fraley, on reflection, agreed that a maximum standard would encourage shared parking.

Mr. Fraley asked staff to review restaurant parking criteria as well. He stated applicants providing offsite parking should be allowed reduced parking requirements.

4) Adjournment

Mr. Fraley moved to adjourn.

The meeting was adjourned at 8:04 p.m.

Reese Peck, Chair of the Policy Committee

MEMORANDUM

DATE: February 24, 2011
TO: Policy Committee
FROM: Jason Purse, Senior Planner
SUBJECT: Multiple Use districts ordinance changes

I. Introduction to Memo

There are three multiple use districts in James City County: MU, Mixed Use; R-4, Residential Planned Community; and PUD, Planned Unit Development. Since the ordinance language allows both residential and commercial/industrial development there are a wide variety of possible options for developers to propose. Throughout the Comprehensive Plan update process, as well as through the public forums on the Zoning Ordinance update process, concerns have been raised over the predictability of the MU district. Some of these concerns are addressed during the legislative review of cases (by way of a binding master plan); however, there may also be ways to enhance the ordinance to achieve a more balanced mix of uses while still providing flexibility to the overall project.

The purpose of the multiple use districts is to promote efficient use of land, allow various densities and land uses, while protecting surrounding property and protecting the natural features and scenic beauty of the land. Furthermore, these districts are focused on promoting multiuse master planned communities in accordance with the uses and intensities described for the specific areas in the Comprehensive Plan.

Staff has also included a number of the same suggestions as proposed for the Economic Opportunity district. Furthermore, the sustainability audit provided a number of suggestions for making the multiple use districts more sustainable in the future. Staff requests the Policy Committee's guidance on which measures may be the most appropriate in providing the predictability desired in the multiple use districts.

II. Discussion Items

A. **Balance of Land Uses**

1. Description of issue/problem

- *While residential development can be an important part of a development in terms of providing households to patronize the commercial uses and workers to be employed there, it is important to ensure that a mixed use rezoning provides an adequate mixing of uses. In the past, some developments have focused more on the residential side of the development, in order to benefit from the relaxed dimensional standards of the ordinance. It is important to note that not all Mixed Use zones are the same. There are very detailed descriptions of the Mixed Use areas in the Comprehensive Plan. All the descriptions provide both primary and secondary use suggestions, so any rezoning should follow closely to the language provided. Not all Mixed Use areas are appropriate*

for a certain blend of uses; in fact, some areas may be more predominantly residential, and some may be more industrial (with very limited residential). There is no “magic” number for a balance of uses that would fit all of the comprehensive plan descriptions for the Mixed Use areas in the County.

2. History

- *The Mixed Use zoning district was created and will be needed in the future to allow a mix of both commercial/industrial and residential uses. There have been concerns that the Mixed Use zoning district does not provide enough certainty with respect to actually achieving a mix of uses in a development. Mixed Use is viewed by many as a means to achieve maximum density by promising positive cash flow through commercial development. That often does not occur in the manner it was initially described or proposed. Tighter residential limits should be addressed in proffers through phasing.*

3. Comprehensive Plan GSAs, public input, and PC and BOS direction

- *LU-4.6-Encourage developments which provide mixed use development, as further defined in the Mixed Use land use designation and development standards, within the PSA. Support design flexibility to promote mixing of various types of residential and non-residential uses and structures.*
- *LU 1.5-Facilitate continued diversification of the local economy and maintain an adequate balance between residential and non-residential development.*
- *The Chamber and Tourism alliance and the EDA provided comments on mixed use developments, particularly in reference to economic development opportunities.*
- *Mark Rinaldi and Rich Costello spoke about mixed use and redevelopment opportunities.*
- *JAC and Deborah Kratter spoke about mixed use developments, the Comprehensive Plan and citizen’s expectations for multi-use projects.*

4. Solutions and policy options

- *A balance of land uses section could include language that would limit not more than 70% of the development area to one-single use. For instance, in Newberry Florida, the ordinance includes the following language:*

To achieve the intent of a mixed use development, no single use shall exceed 70 percent of the permitted uses within a mixed use zoning district.

North Las Vegas has a similar description (albeit for no more than 75% of the site dedicated to one use), but also includes some other possible ways to encourage a true mix of uses, such as the following:

Mix of Uses.

- a. All mixed use development shall include a minimum of two different land use types, which may include commercial, residential, office, and/or employment uses. Ideally, no one land use type should occupy more than seventy-five (75) percent of a site, but the appropriate mix for each site shall be considered by the city on a case-by-case basis, with primary consideration given to variables such as location, site design, and compatibility with adjacent development.**
- b. Mixed use development may include vertical mixed use (i.e., any combination of compatible uses in a single structure) or horizontal mixed use (i.e., any combination of compatible uses arranged side-by-side on a single site).**

- c. To create and maintain active and interesting pedestrian areas, commercial buildings located within horizontal mixed use development shall include a minimum of two individual retail uses per block length. Each retail use shall have a separate entrance. For the purpose of this section, "block length" means the pedestrian area between two streets and/or drive aisles.
 - d. Mixed use buildings with residential uses planned for the second story and higher shall have retail, commercial or office uses on the ground floor. Lobby areas serving upper story residential uses may also be located on the ground floor, provided that such lobby areas occupy no more than fifty (50) percent of the available floor space. All non-residential ground floor uses shall be compatible with residential uses.
5. Staff Recommendations
Staff recommends including specific language in the ordinance to promote a true mixing of uses. Staff believes that having specific information in the ordinance language counting mixed use buildings (either horizontal or vertical) would help clarify, but also believes that a less specific section could also still provide the flexibility for developers to tailor projects to the needs of the community. Staff believes the threshold (in this instance 70 or 75%) for a single-use is the most important piece to include in an ordinance.

B. Construction Phasing

- 1. Description of issue/problem
 - *Historically, mixed use developments in the County have had their residential and commercial/industrial components develop at different rates. Projects, such as the Lightfoot Mixed Use plan, have seen large percentages of the residential development completed, while sections of the commercial development have yet to be realized. This alteration from the approved development plan can have adverse effects on the proposed fiscal impact analysis that was presented to the Board of Supervisors during the legislative review process. While there is currently no fixed policy or ordinance requirement some projects have included proffers (i.e. Stonehouse) that deal with this topic. In an effort to ensure that developments are providing the benefits to the County that were presented during legislative review, staff has investigated alternative ways to ensure an adequate construction phasing plan. A similar discussion was included in the Economic Opportunity framework.*
- 2. History
 - *The York County Zoning Ordinance has language in its Mixed Use zoning district that addresses construction phasing, and that model will be discussed in greater detail below.*
- 3. Solutions and policy options
 - *Below is an example construction phasing section taken from the Mixed Use section of the York County, VA zoning ordinance.*

Construction within the Major PDMU development shall be sequenced in accordance with a project build-out schedule conceived by the project developer, submitted for review as a part of the initial application, and approved by the board of supervisors. The purpose of such development schedule shall be to provide assurance to the board of supervisors that the project will, in fact, include both the proposed non-residential and residential elements at certain project milestones and/or at build-out. As a

guideline, project proposals that adhere to the following sequencing requirements will be considered consistent with the objectives of the board of supervisors:

- Up to 20% of the residential units may be constructed prior to commencing any commercial construction; and
- Construction of the next 40% of the residential units shall be sequenced in conjunction with construction of at least 40% of the commercial space; and
- Prior to issuance of Building Permits for construction of the final 20% of the residential units at least 80% of the commercial space shall have been completed to the stage that it is ready for individual tenant fit-out and customization.

4. Staff recommendation

Staff recommends considering the inclusion of a construction phasing section with the Mixed Use ordinance, similar to that proposed for the EO district. Furthermore, the model York County phasing requirements could be a starting point for actual ordinance language.

C. **Complementary Design**

1. Description of issue/problem

- *Many successful industrial parks, mixed use communities, and retail centers have a unified design. This can include pedestrian connectivity, focal open spaces, and similarly designed architectural features. A development that incorporates these design features will help to better integrate with the surrounding community, as well as create a sense of place.*

2. History

- *Many of the existing Mixed Use areas (on the Comprehensive Plan Land Use Map) are located at important interchanges or Community Character Corridors in the County. Respecting these viewsheds and corridors will be important to any development (as referenced in the Comprehensive Plan).*

3. Comprehensive Plan GSAs, public input, and PC and BOS direction

- *Mixed Use Land Use Description-Development should be designed to encourage trips by alternative transportation modes and should be concentrated on portions of the site to avoid sensitive environmental features and respect viewsheds from historic and Community Character areas and corridors.*
- *LU 2.1-Plan for and encourage the provision of greenways, sidewalks, and bikeways to connect neighborhoods with retail and employment centers, parks, schools, and other public facilities to effectively connect buildings and activities within individual sites.*
- *CC 3.8-Design streets in commercial/retail centers and residential areas to better encourage street-level activity and a safe and attractive pedestrian environment by encouraging the use of tools such as traffic calming, pedestrian-scale amenities, gathering spaces, pedestrian plazas, street trees, pocket parks, and consolidated entrances with fewer curb cuts. Develop voluntary guidelines that can be used through the special use permit or rezoning process.*

4. Solutions and policy options

- *Complementary design can be incorporated into the ordinance to promote an integrated design with similar architecture, focal open spaces, and pedestrian connectivity as encouraged during the development of the Comprehensive Plan. Additional examples were present in the Loveland, Colorado zoning ordinance:*

Campus-Type Character: E-Employment Center Districts are intended to have a “campus-type” character with strong unifying design elements meeting the following standards:

1. Unified Building Design: Building design shall be coordinated with regard to color, materials, architectural form and detailing to achieve design harmony, continuity and horizontal and vertical relief and interest.

2. Unified Open Space: Projects shall include a unifying internal system of pedestrian-oriented paths, open spaces and walkways that function to organize and connect buildings, and provide connections to common origins and destinations (such as transit stops, restaurants, child care facilities and convenience shopping centers). The development plan shall utilize open space and natural features that serve as buffers and transitions to adjacent area(s). Development plans shall include at least 20 percent of the gross site area devoted to common open space features, including features such as common area landscaped buffers, parks or plaza spaces, entrance treatments, natural areas, or wetlands, but excluding any open space or landscaped areas within required building setbacks or parking lots. Areas dedicated to storm water drainage may also be counted toward meeting the open space requirement, provided they are designed to be recreation space or as an attractive site feature incorporating a naturalistic shape and/or landscaping.

3. Other Unifying Features: Major project entry points shall include well designed signage and entry features such as quality identity signage, sculpture, plazas, special landscape clusters, etc. The visibility of parking lots or structures shall be minimized by placement to the side or rear of buildings and/or with landscape screening. Shared vehicular and pedestrian access, shared parking, common open space and related amenities should be integrated into the project’s design. The overall design and layout shall be compatible with the existing and developing character of the neighboring area.

4. Viewshed Protection: Care shall be taken to minimize disruptions to adjacent neighborhood views of open spaces or natural features through the sensitive location and design of structures and associated improvements. Visual impacts can be reduced and better view protection provided through careful building placement and consideration of building heights, building bulk, and separations between buildings.

5. Unified Design Agreement: In the case of multiple parcel ownerships, an applicant shall make reasonable attempts to enter into cooperative agreements with adjacent property owners to create a comprehensive development plan that establishes an integrated pattern of streets, outdoor spaces, building styles and land uses consistent with the standards in this section.

An additional option would be to have a specific ordinance requirement for design guidelines. Many of the characteristics mentioned above could be required to be included, and legislative cases would be required to include the guidelines along with their master plan and rezoning application (similar to traffic studies and community impact statements).

5. Staff recommendation
 - *Staff recommends considering the inclusion of complementary design elements such as pedestrian connectivity, unified open space design, and coordinated building design with regard to color, materials, architectural form and detailing to achieve design harmony, continuity, and horizontal and vertical relief and interest.*

D. **R-4 Addition of land to an existing community**

1. Description of issue/problem
 - *During past rezoning cases, section 24-283 (and to a lesser extent 24-275) has been discussed with respect to the language “under the same ownership or control.”*

The whole section reads as follows:

“Additional land area may be added to an existing residential planned community if it is adjacent (except for public roads) and forms a logical addition to the existing residential planned community and if it is under the same ownership or control.”

County staff, including the County Attorney’s office and Zoning Administrator, has determined that “control” or “ownership” can reference control or ownership of a master plan/development plan of a community, or the land governed by the master plan. This means that the developer who owns the rights to a master plan can add to that master plan area, even if control of the original property has been passed off to individual owners through sale of lots.

2. Staff recommendation
 - *Staff does not recommend amending the language in this section. Staff believes allowing additional land to be added to a community through a legislative review process is still the correct process to follow and there are many instances where communities have expanded in the past.*

E. **Sustainability Audit** – The following list of recommendations was provided by the consultant in the sustainability audit. Due to the number of possible changes, staff has included a brief response after each item.

1. *Options should be provided for infill and redevelopment similar to the MU District, but that can be applied on smaller redevelopment sites as opposed to going through a long rezoning process to MU. A mixed use redevelopment option could be created for the business districts. This could allow for a mixture of uses and flexibility in dimensional requirements where the development is compact and walkable. **As discussed in the Form-Based Code memo, given the lack of by-right Mixed Use zoned property a Redevelopment district may be the best option for achieving this goal.***
2. *The PUD and MU districts should have provisions to set aside land for public facilities. This could be incentivized through density standards and allowing the developer to transfer the density from the public site to other areas of the PUD. **This process is typically handled during the rezoning/proffer process, as evidenced in the Colonial Heritage and Stonehouse developments. In some instances the County has determined that public facility sites are not appropriate or needed in certain locations and have needed the flexibility to receive different mitigation packages. If this is included as an ordinance requirement that flexibility is no***

longer an option. An additional option could be a density transfer incentive, where the developer would set aside an area for public facilities and the density that could be derived on those acres could be transferred elsewhere in the project. It should also be noted that if cash-in-lieu is used as a proffer, similar to Parks and Recreation proffers, the intended use must be specifically identified (i.e. CIP).

3. *The residential cluster development overlay district, PUD and MU districts should have a provision that the open space could be dedicated for public recreational land if there is a need at that location for a public park. This would not be a requirement, but could be an option that is incentivized through a density bonus in exchange for dedication of public park land and allows the developer to transfer the density from the publicly dedicated land to the remainder of the development. Currently the R-5 district provides a density bonus in exchange for public facilities. Providing park land or open space is important for all neighborhoods, and will continue to be a requirement in these districts. However, staff does not believe it is in the best interest of the County to have smaller-scale parks dedicated for public use. As it stands now, the individual Home Owners Associations are responsible for maintenance and upkeep of the facilities. If the parks are dedicated for public use, the burden may shift to the County for these services. Currently, the County uses proffers during legislative cases for acquiring larger pieces of property for parks and recreation if an acceptable parcels present themselves.*
4. *The PUD and MU districts should provide incentives for ground-floor retail and upper-level residential uses, such as allowing increased density for mixed use buildings. Staff could accommodate density bonuses in the ordinance by restructuring the base density in Mixed Use. There are a number of possible density bonuses to be discussed in this section. If each bonus was for a .25-.5 du/ac increase, the base density could be lowered commensurately, in order to offset any of the increases. Another option would be to include a list of all of the possible bonuses and provide a maximum density bonus if "X" number of the criteria are met. For instance, there could be a list of 7-10 possible items (i.e. mixed use buildings, LEED certified construction, affordable housing, etc.), and if the developer committed to three of the items they could receive a density bonus of 2 du/ac.*
5. *The MU district design standards should encourage general urban buildings that have a form that can be adapted to multiple uses. This could be done through design standards or a form-based code. Architectural review generally occurs legislatively and is specific to the project. Typically, mixed use buildings are designed to accommodate a variety of uses (i.e. Main Street in New Town). Furthermore, each development is different in terms of architectural style and design. A development in Toano is expected to look different than a development near New Town. There is not one example of architecture that could be applied County-wide. For James City County, Form-Based Codes would need to be tailored to a specific sub-area with distinct architectural character. The Toano design guidelines were only established after a long, intensive public meeting process in order to gain buy-in from the citizens on the true desired character desired for Toano. However, the design guidelines that are expected as a part of the rezoning process could be made to require this type of standard.*
6. *The MU district should require residential garages not project out in-front of the living portion of the dwelling, be located in the rear yard. The other residential districts should have limitations on front-loaded garages to limit the distance they can project in front of the dwelling and limit the percent of the front façade that is dominated by garage. Typically the ordinance*

will specify that the garage cannot occupy more than 50% of the length of the front façade and that the garage cannot project more than five feet beyond the living portion of the home. **This has not typically been a problem in Mixed Use as it has been in the residential districts. This could become a policy if there is support for it.**

7. Form-based or pedestrian-oriented design standards could be added to the MU and other districts requiring buildings oriented to the street at a pedestrian scale, with requirements for storefronts and other pedestrian-oriented elements. **As previously stated with the Economic Opportunity discussion, staff is envisioning including more detailed pedestrian oriented requirements to the Mixed Use ordinance.**
8. The PUD, MU and business districts should provide incentives such as increased height or density for energy efficient, LEED certified buildings and other sustainable building techniques. This could be included in the height increase criteria of secs. 24-496 and 24-525. **In conjunction with a possible change to the height limit modification criteria, a density bonus could be incorporated to achieve this goal, or it could be part of a list of possible bonuses as described in #4 above.**
9. *The LB, B-1 and MU districts require 50 foot front yard setbacks (which can be reduced). There may be some area where the Comprehensive Plan recommends creating a more pedestrian-friendly street and the setback could be further reduced and/or build-to requirements adopted with minimal front-yard parking.* **Staff believes this has already been accomplished in our ordinance. The Mixed Use language currently allows a setback reduction based on the specific guidelines, including the character of the area (i.e. pedestrian friendly streetscapes). This reduced setback has been accomplished in a number of Mixed Use areas, including New Town and Colonial Heritage.**
10. The MU district should require that parking be located to the side or rear of the site with the building at or near the sidewalk, with the allowance for other options or waivers for certain circumstances. **Staff does not believe this should be a requirement in the ordinance, but a possible incentive was presented during the review of parking requirements in the Development Standards section of the ordinance update.**
11. The R-4, PUD, MU and residential cluster districts should be used to encourage compact development on small lots. **Staff believes this suggestion is already accomplished in our ordinance. These zoning districts do not have minimum lot sizes and the density in these districts encourages compact development.**
12. The R-4 district, PUD and residential cluster overlay district should be used to encourage clustered development with compact lots. **Staff believes this is already accomplished in our ordinance, as these districts have no minimum lot size requirement.**
13. The ordinance includes incentives and requirements to preserve historic and cultural resources. **This could be incorporated with a density bonus, or it could be part of a list of possible bonuses as described in #4 above. This has also been an expectation of legislatively reviewed cases in the past, but could be helpful for by-right or adaptive re-use.**

14. Higher densities of residential and intensity of employment may be appropriate for the MU and R5 districts in areas served by WATA transit and where in accordance with the Comprehensive Plan. **Higher densities are currently expected and promoted in the Mixed Use ordinance. WATA stops have generally been included if WATA is planning a route in the vicinity of the development. Staff believes this is already accomplished.**
15. Where a site is located adjacent to a transit stop, parking should be located away from transit stop, particularly surface parking. Front yard surface parking should be limited along sidewalks near a transit stop. **The routes run by WATA are not set prior to the layout of a development. Transit stops (bus transit is currently the only transit in JCC) are usually set by WATA after a development has been established.**
16. The MU and other business districts should include increased floor area ratio and density standards for uses that provide structured parking. **There are currently no floor area ratio standards in the Mixed Use ordinance, and while not prohibited, there are no requirements for parking structures either. Special financing, such as a CDA, is usually required to support structured parking. A density bonus could be provided for developments that incorporate structured parking, or it could be part of a list of possible bonuses as described in #4 above.**
17. The zoning regulations should be inclusive and provides diverse housing opportunities by encouraging a mixture of housing types in the R-4, R-5, PUD and MU districts. **Staff is supportive of this measure, but has not yet determined how to adequately incorporate it.**
18. The PUD and MU districts could require a variation in housing types and lot sizes to avoid a uniform type of housing. **See above #17**
19. The PUD and MU districts should provide for affordable housing density bonus, similar to the residential cluster development overlay. **This could be incorporated as a density bonus, or it could be part of a list of possible bonuses as described in #4 above. This topic was also addressed in the review of the residential districts. An affordable dwelling policy is another possibility.**
20. Regulations such as form-based codes or design standards could include design guidelines so that streets, buildings, and public spaces work together to create a sense of place. **Design guidelines are presented on a case-by-case basis and are not appropriate for County-wide development.**
21. Use the MU district to create nodes of pedestrian-oriented mixed use “places” as opposed to linear commercial along major roads. The MU district will allow for the mixture of uses, density and pedestrian-oriented character of a place. **Staff will be proposing a number of “pedestrian-oriented” amendments to help create a sense of place, similar to what was presented for the EO district.**
22. Pedestrian plazas or other urban open spaces should be required as part of any major development. **See above #21.**

23. The open space that is required in the PUD, MU and residential cluster development should be required to be visible, usable and integrated with the pedestrian system – not just remnant landscaped areas, as noted previously. **See above #21.**
24. The PUD, MU and business districts should be required to provide street furniture, including street trees, benches and ornamental lights. **See above #21.**
25. Building setbacks shape the public space along the streetscape. Build-to lines can be used to create desired pedestrian oriented streetscapes in certain areas such as the MU district. The MU district should also include minimum building heights to facilitate shaping the streetscape as a human-scale public space. This could be required through a form-based code. **Form-based codes require a public input process to determine the acceptable “form”, and given the variety of areas in our County designated Mixed Use this task is not likely to be feasible. Staff will also be promoting other pedestrian oriented measures similar to what was proposed for Economic Opportunity (i.e. unified pedestrian connectivity, focal open spaces, etc.). Build-to lines could be implemented if desired, or as part of design guideline expectations (see #9).**
26. The MU district should encourage parking to be located to the side or rear of the building. Large front yard parking lots should be discouraged in the LB and B1 districts. **This was previously discussed (#10), as a possible density bonus or incentive, or it could be part of a list of possible bonuses as described in #4 above.**
27. The MU district includes a number of uses that are not pedestrian-oriented and may not contribute to the intent of the district. The MU district is being reviewed with the understanding that different mixed use areas have different function. The following uses should be reconsidered:
 - a. Automobile repair and service **Possible deletion**
 - b. Contractor equipment storage yards **Possible deletion**
 - c. Lumber and building supply **Unlikely deletion**
 - d. Manufacturing **Unlikely deletion**
 - e. Warehousing **Unlikely deletion**
 - f. Fast food restaurants (drive thru) **Possible deletion**
 - g. Petroleum storage **Possible deletion**
 - h. Solid waste transfer **Possible deletion**
 - i. Truck stops **Possible deletion**
28. Form-based codes, design standards or other regulations can be used to limit the amount of parking that may occupy frontage in areas such as the MU district. **Parking standards/requirements are being evaluated in a different section.**
29. The zoning ordinance should be used to encourage noise-compatible land use near I-64 and other major highways. This can be done through non-residential zoning where consistent with Comp Plan such as the M-1 along I-64 and the A1 district which restricts residential density. Where residential is located along major highways requirements can be added for additional setbacks/buffer strips and the PUD district and cluster development option can be used to cluster homes away from major highways. **This is more so a zoning map issue than a zoning ordinance concern. There are also right-of-way buffers of 75'-150' for PUD (75' for I-64). No action is recommended.**

F. **Conclusion**

Staff has proposed a number of ideas that address a balance of uses, construction phasing, complementary design, as well as sustainability audit items. Staff requests the Policy Committee's guidance on which measures may be the most appropriate in providing the predictability desired in the Multiple-Use districts.

Attachments:

1. Public comments from the zoning ordinance public forums

**Comments Regarding Ordinance Review – Mixed Use
Zoning
September 27, 2010
Deborah Kratter**

As a preliminary matter, I would like to thank the commission for responding to my request that this additional session for comments be added. I am glad that I am not the only one speaking here today.

The J4C has previously suggested a complete re-evaluation of the need for Mixed Use Zoning. But if you do determine to retain this Division, at a minimum the sections should be revised to include provisions that will assure approval ONLY of developments that are designed to and are likely to meaningfully effectuate the intent expressed in 24-514:

.....to promote a broad spectrum of land uses in more intensive developments on lands designated mixed use by the Comprehensive Plan. *The mixed use district is designed to:*

(1) *Promote a multiuse master-planned community which may include residential, commercial, industrial (with a predominant focus on light industrial), office and other nonresidential uses;*

(2) *Provide flexibility, unity and diversity in land planning and development resulting in convenient and harmonious groupings of uses, structures and common facilities; varied type, design and layout of residential, employment and social centers; and appropriate relationships of open spaces to intended uses and structures which include attractive and usable open space linked by pedestrian walkways and/or bicycle paths;*

(3) *Reduce commuter driver demands on highways and roads by concentrating employment, housing and*

***recreation opportunities in locations served by, or convenient to, public transportation; and
(4) Permit densities and intensities of development in excess of those normally permitted in customary residential and commercial zoning districts.***

Currently, the designation is subject to abuse by those who wish to use land not otherwise zoned for primarily high density residential developments which are not a part of a true mixed use development. *A recently withdrawn proposal for multiple residential units tried to circumvent zoning requirements by throwing in a couple of low rise office buildings and a “wouldn’t it be nice someday” retirement facility – neither of which would have provided significant employment opportunities to those living in the homes – and thus none of the goals of the mixed use district would have been realized.*

Thus, in doing your rewrites add some specificity to the requirements to assure that each proposal actually fulfills the stated intent of the district. 24-514 (b) would be an ideal place to add concepts such as proper proportions of residential to other uses.

Among other issues to consider are these:

To the extent permitted by state law, put in provisions for expirations of any permitted zoning. What we need today may be inappropriate 10 years from now.

Sec. 24-515, relating to “Documents required for submission,” has ample room for improvement. Develop more rigorous requirements for the Community impact statement, by a combination of mandated assumptions to be

used in its preparation (for example, cumulative impact of already approved projects along traffic corridors, and within existing school districts) and requirements for clear disclosure of assumptions used to determine the conclusions to be offered under subsection (c), 1-4. These assumptions should be set forth in their own section, with academically testable bases for their use, rather than in obscure footnotes that require the commission and the staff to be armed with both magnifying glasses and crystal balls.

Either in the ordinance or procedural rules make it clear that potential employment for a use that has no sponsor, developer, financing or timeline – simply doesn't count. If the only reasonably likely (again in terms of sponsors, developers, financing etc.) near term use in a proposed mixed use district is residential, for example, it should not be approved for mixed use zoning.

Special care in rewriting should be taken to assure that the proposed mixed use zoning is used for viable, currently-planned projects and not merely as a way to increase the value of property that is likely to be sold to an unknown developer for unclear or unspecified purposes.

Under 24- 517 (c), add requirements to assure that the guarantees are of sufficient amount, quality and duration to accomplish their purpose. If any of the obligations for maintenance of project facilities are to be left to residents or owners or users of commercial structures, specify metrics to test whether the ability of those constituencies to pay is real.

Also, throughout your reviews, consider whether the fees for submittals are sufficient to meet the county's current budget needs. Large mixed use projects may be better able to absorb higher costs than small residential ones.

In Sec. 24-519, “Addition of land to an existing mixed use development” – consider increasing the approval level from the DRC to the full planning commission, and specifically require that the additions be consistent with the existing uses in the mixed use district as well as those uses outside the district. Addition of land to mixed use district should not be allowed where it will adversely affect nearby property owners –and this should be made clear.

Section 24-521 sets out a variety of permitted uses – many of which are not necessarily compatible with other permitted uses. Ordinances should be revised to require that the proposed uses within the mixed use development be specifically identified before a master plan is approved and more importantly, not subject to change for another permitted use without a special use permit.

In Section 24-523, to the extent permitted by law, use the total developable area rather than Gross Acreage to avoid structures or projects which are inconsistent with the county’s vision.

As always, in doing these revisions, keep in mind the goals set forth in the recent Comp Plan and those expressed by the people who pay taxes and vote here. Remember that those folks have property rights that are in every way, equal to the property rights of those who wish to sell or develop their property.



James City County Planning Commission Forum

August 24, 2010

There has been considerable discussion about the potential use of economic opportunity zones by planners and the business community and my remarks will draw upon these ideas.

The Chamber & Tourism Alliance believes that growth in the county's economic base must be accommodated in the plan. Without some growth in that base, we will have increasing tax burdens caused by growing imbalance with planned residential expansion. Our members recognize the importance of maintaining the uniqueness of our area. James City County's quality of life is our key competitive advantage to attract businesses, residents, and visitors. We need a balanced economic portfolio that preserves the uniqueness of our historic area and attracts and maintains complementary businesses. One important part of achieving balance will be clear guidance in the plan concerning large tracts of land that are appropriate for development and those that are not. Economic opportunity zones are one means of ensuring that the scope of growth is measured and the location is established in a proper area.

James City County's 2009 Comprehensive Plan Update included a new Economic Opportunity Zone designation to encourage developments that have a positive fiscal contribution, provide quality jobs, enhance community values, are environmentally friendly, and support local economic stability. Master planning is at the core of this designation. The Comprehensive Plan anticipates that no

development should occur unless it is incorporated into area/corridor master planning efforts, which should be shielded from jurisdictional boundaries.

The Comprehensive Plan specifically notes the regional planning and cooperation opportunity for the Lightfoot/Hill Pleasant Farm and Quarterpath areas, but it notes that collaboration opportunities in other areas must be considered, as well. Areas that have already been developed along borders among the city, counties, and William & Mary, can provide insight on how to collaborate on future inter-jurisdictional developments.

Both James City and York Counties recognize the Lightfoot/Hill Pleasant Farm section as an area for significant development, much of which could be enhanced by extending Mooretown Road. This area includes approximately 1,100 acres – 600 in York and 500 in James City. The York comprehensive plan includes extension of Mooretown Road into this area and anticipates mixed use development. Both counties desire that the area develop through a master plan to include commercial and possibly some residential areas. James City County's suggested uses of the area include industrial, light industrial and office uses; primary uses would follow the recommendations for the general Economic Opportunity. York County has designated the Lightfoot area for Economic Opportunity with a Mixed Use overlay designation.

In addition to the Lightfoot/Hill Pleasant Farm area, other areas that would benefit from inter-jurisdictional collaboration include the Eastern State property, Camp Peary intersection, and the Rt. 199/Rt. 60/I-64 intersections. Further research among James City, Williamsburg, York and William & Mary is necessary to completely identify large and small scale opportunities for collaboration.

The issue of collaboration involves staff other than just economic development. Planning issues will surely arise as the three jurisdictions have their own separate zoning ordinances. A thorough review of each locality's development procedures will be necessary to determine conflicting ordinance permissions and uses. While all three localities are subject to the same Virginia Building Code and Chesapeake Bay regulations, each jurisdiction has its own standards and interpretations for these and other policies. A regional development policy for site and building

plans review within collaboration areas could also be beneficial. Having only one review and enforcement agency would ease confusion for developers and land owners. Finally, involvement of public utility staff is necessary to coordinate the effects on our regional water and sewer systems. Planning, Environmental and Building Code staffs would have to adopt consistent standards for projects within collaborative areas. Ideally, the master plan would include consideration of types and sizes of units, inclusion of workforce housing, and apartments. The plan would consider the infrastructure impacts, particularly on school enrollments, and would consider how those impacts would be apportioned across jurisdictions.

Preliminary engineering work and a master plan for collaborative development would address the site and building plans approval issues. When developing a master plan, it will be important to consider the businesses and end-users for the area. Coordination with both VEDP and HREDA would be useful to develop target industries for the region, and incorporate features that attract those general industries into the sites.

We urge the Planning Department and Commission to craft ordinances that enable the planned growth of economic opportunity zones to succeed in collaboration with other jurisdictions.

M. RINALDI
8/24/10

6:50

Commercial and Mixed Use District

Thank you Mr. Chairman, members of the Planning Commission, good evening. I am Mark Rinaldi and I can be found most days of the week at 4029 Ironbound Road.

I am confident that most of you understand the important role economic development plays in our community's well-being. Indeed, it intersects with nearly every other aspect of community life. To be sure, there are citizens in this County who would be content to see no new or expanded business and industry within our borders. But I suspect these well-intentioned people have not fully considered the implications of such a future. For a glimpse of that future, one need only look at the current fiscal stress the County is experiencing. There are ways to manage growth and maintain a sustainable community. Perhaps some of the following observations will be helpful as you begin to envision useful changes to our zoning and other regulatory ordinances to that end.

Redeployment of vacant or underutilized facilities and redevelopment of distressed or obsolete properties should be important emphases in our overall community development strategy. It is my hope that as a community we can quickly begin to view distressed properties not as temporary blights upon the landscape, but as unique opportunities to reset these properties and benefit from gains in energy efficiency, aesthetic improvements and contemporary functional relationships. In order to meaningfully capitalize on the opportunities that such sites offer, however, our ordinances, policies and programs will need to offer flexibility, reward creativity and encourage the use of offsets to achieve and maximize area-wide benefit where constrained site specific solutions may not be possible or practical.

With specific reference to commercial uses, I first want to applaud the County's efforts to date in moving a variety of business uses from Special Use Permit to by-right. Some of you were involved in several important modifications that occurred prior to the Comp Plan process, but there is more work to be done, and it is my hope that this ordinance update process will complete the task. As I recall, the pre-Comp Plan changes were described by Staff as relatively minor, low hanging fruit if you will. I stand here before you this evening to encourage you to now do the hard work necessary to move forward with this important, increasingly important, initiative. Businesses now, more than ever, need certainty as they plan for major capital investments. They will work with communities that establish clear expectations and avoid communities where it's let's make a deal. Establishing appropriate performance standards for by-right uses cannot be done in a vacuum. Genuine and sincere collaboration between the regulated and the regulators and with other vital community stakeholders is the only way to achieve the desired results of increased predictability, for both businesses and interested citizens. Working teams including all the various stakeholders is the best way to success.

While a member of the County's Economic Development Authority, I participated in a number of discussions among and between EDA Directors and OED Staff about various issues related to the County's existing Enterprise Zone and the benefits to be derived from the creation of one or more Technology Zones. It is my understanding that there may be additional acreage available to add to the existing Enterprise Zone, and some acreage could reasonably be removed from the zone, all in an effort to better match suitable land inventory in the revamped zone with desirable economic development uses.

With respect to technology zones, the EDA recognized over 18 months ago that certain classes of technology business activities can have

special economic significance to the county due to the nature of the technology developed or employed, their interrelationships with other Hampton Roads based federal, institutional and private organizations/businesses and their potential for high growth in employment and capital investment. The EDA felt that an appropriate method of offering effective incentives to certain classes of technology businesses is to create one or more technology zones in the county. The establishment of technology zones in other communities has been found to hasten redevelopment, serve as a retention mechanism for existing businesses and incubator clients and provide significant hi-wage and benefits employment and tax generation. To take charge of our economic future, the County must move forward in this update process to geographically designate one or more technology zones, identify the industry classes and clusters we wish to encourage therein and determine the types and magnitude of incentives the zones will represent.

Finally, the creation of an Economic Opportunity district in the recent Comp Plan is the first step towards creating a sustainable economic future in JCC. Building up, not out, and with multiple modes of transportation access to and away from significant employment centers will help to insulate JCC from the increasingly grim future of the single-occupancy private vehicle. Establishing the EO district as a receiving zone for the transfer of development rights will provide the ying to the rural land preservation yang. Conversion of residential development rights from the sending zone into commercial and office development rights in the receiving zone can lessen the pressures rural landowners face when they need or desire to monetize their land assets for retirement, health expenses and other necessities of daily living. Other mixed use, higher intensity districts can also be designated as receiving zones. In time, this market based approach to growth management could even replace the antiquated and ineffective PSA tool that the County has struggled to explain, implement and revise for decades.

I would like to thank the Planning Commission for this opportunity to speak. My name is Rich Costello and I live at 10020 Sycamore Landing Road in the Stonehouse District of JCC. I am also President of AES Consulting Engineers, a firm that principally practices Land Development in Central and Eastern Virginia with its largest office located in JCC.

I will speak this evening to the Commercial and Mixed use Districts. Commercial properties pay for themselves, which means they pay more in taxes to the local government than services they receive, compared to almost all Residential development which costs local government more money than they take in, principally due to the education of school children. Due to this fact Commercial Development is usually desired by local government.

Commercial Development is not a static process, it is all about change with major innovations in how it Markets itself ^{every} ^{occupying} five to ten years. You all have seen it, strip shopping centers evolving to enclosed shopping malls, then power centers, and now Lifestyle Centers and the latest being Town Centers which usually combine both retail and residential development.

The County Commercial and Mixed Use Districts Ordinances are not in sync with current development trends. Our ordinances are generally out-of-date and unable to manage development without resorting to proffers and SUP's for almost all cases. And that is bad because it more often than not locks down the use and the architectural look of the building or buildings in a development. Many people would argue that's good, however I would argue that it is not. We are currently are seeing a lot of free standing drugstores, with the 2010 look. Most of these sites have proffers or SUP's that specifically tie the site to that use and look. What if these drugstores end up like video stores and are all gone in 10 or 15 years.

What do you do then - the short answer is come back to the Board of Supervisors and spend \$30k to 50k to get another SUP that's good for another 5 or 10 years or do nothing and leave the site sit vacant or put any user in the building to maintain some cash flow. What if you want to just update the look of your building? Well, once they know the answer is go to the Board of Supervisors, what happens many times is no update occurs. The long term result of this process is neither good for the developer or the Community.

The last Zoning District created was the Research and Technology District in 1998. To my knowledge it hasn't been used yet. Then looking ^{for a} ~~at~~ District that ~~is~~ ^{is} misused or overused we have the Light Industrial District M-1 which was generally intended for manufacturing, currently being used for numerous shopping centers and many other commercial projects.

My point is if **the County** wants to encourage more Commercial Development it needs to update and realign its Districts allowing more development by right. This means:

- Revisit each Zoning District's uses and do not try to make each districts work for the entire County, but supplement them with Overlay Districts for portions of the County where more restrictive development controls are wanted. A good example of this is the Limited Business District that have stricter uses for areas that are designated Neighborhood Commercial.
- On traffic tie SUP's not solely to traffic generation but also to the existing capacity and level of service of the roads that the site traffic flows unto.
- Also if there needs to be architectural controls handle them by SUP with a 5 year expiration for most of the controls so architectural updates can occur without difficulty.

Thanks for listening.

AUGUST 22, 2010

MEMORANDUM TO POLICY COMMITTEE – PUBLIC HEARING (AUGUST 24TH)

FROM: JAMES CITY COUNTY CITIZENS COALITION (J4C)

SUBJECT: MIXED USE ZONING

In 2007, the Board of Supervisors approved an amendment to Section 24-527 of the Mixed Use District (MUD) Ordinance, specific to reducing setbacks. At that time, the J4C opposed the amendments for a number of reasons that apply equally today:

1. A few recent applications are insufficient reason for amending an established ordinance that has worked well overall.
2. Developers are using the MUD to avoid restrictions and to increase density. This places additional stress on water resources, schools, traffic, etc.
3. The proposed amendment is confusing. It appears to remove the Board's authority to determine setbacks in specific cases. We believe the Board has ultimate responsibility to define and protect the character of the district by prescribing required setbacks. This authority must be retained by the Board.
4. The Comprehensive Plan should be followed. We should not be using the MUD ordinance outside of its designated mixed use areas.
5. We favor making an exception for affordable housing if the area meets all the requirements for mixed use.
6. School and other proffers need to be required of mixed use, as well as other types. In many instances, these could be expected to be higher due to the uncertainty of what the mixed use might be in the long term.
7. One of the important purposes of any Mixed Use project is to make more efficient use of the land. Buildings should be tightly packed to accommodate walking and biking. Any Mixed Use design should therefore produce a significant amount of open space, either on site or off (TDR).

As reflected in a number of our positions, we believe Mixed Use zoning should only be used when specifically defined in the Comp Plan. The J4C supports a removal of, or at least a major revision of the Mixed Use Ordinance that will make it more consistent with the current Comp Plan. We specifically believe the ordinance needs to be tightened and cover only particular development types not currently covered by the business and commercial zoning ordinances (M1, M2 and LB, etc.). We, and it seems, the majority of residents, believe it is essential to maintain the rural character of much of James City County and thus would oppose the rezoning of any A-1 land to Mixed Use (MU).

Likewise, the J4C is opposed to the addition of an Economic Opportunity (EO) zoning designation until such time as a thorough examination of its impacts has been completed. Governmental processes, like its services must be sustainable over time. We believe that defining a zoning category for a one time case is wrong and the ordinance should prohibit it. In general, we believe that there are already far too many ordinances governing the development process –for the benefit of developers, development staff and citizens.

We also believe that mixed use should not be applied to an application that does not bring with it a fully designed site plan. Local government officials still carry the responsibility for approving land uses only when they have been specifically defined and it is clear what the “mixed uses” will be and how they will look.

A comprehensive review of MU could determine that there is no need for this specific ordinance. The current business and commercial, and residential zoning ordinances appear to cover current requirements for MU. The review needs to examine carefully the permitted uses, the setbacks, and the use of this designation for areas proposed for development and/or requiring rehabilitation.

The J4C has reviewed the Comprehensive Plan text and its GSAs, as well as independent and local government “mixed use” documents, and find nothing that would not support our recommendations. Our review of the GSAs resulted in Figure 1 below, a summary of the 2009 Comp Plan’s GSA’s relative to mixed use (MUD). **(SHOW FIGURE 1) AND READ THIS:**

A large number of these uses would apply primarily in agricultural and forested areas of the County. If agricultural ones are determined to be of value and cannot be incorporated in the A-1 ordinance, they should then be separated into rural applications as opposed to urban or suburban development, within the MUD’s several sections. Another example of misplacement of uses would appear to be in the rental of rooms to a maximum of three. Isn’t this a factor in residential zoning districts? These questions lead to our suggestion that if an MU zoning is retained, it should be tied to the other residential and commercial districts where specific design standards can be retained.

As has been mentioned earlier, we believe the following Land Use GSA should be removed, consistent with citizens’ desires relative to growth and until the MU ordinance has been reviewed and determined to be relevant to lands not developed within the PSA.

“LAND USE GSA 1.4.6, pg. 248 – Encourage developments which provide mixed use development, as further defined in the Mixed Use Land Use Designation and Development Standards, within the Primary Service Area. Support design flexibility to promote mixing of various types of residential and non-residential uses and structures.”

During the last few months, we have examined a number of ordinances and program descriptions from other jurisdictions. Attached to our paper submissions is a power point description of the

City of Chesapeake's program that we believe would meet James City County's needs, should the need for such an ordinance be identified. It describes the benefits of the designation as well as specific aspects of how it works.

We have not had the time to review specific problems we have with the current ordinance other than those mentioned earlier in this statement. We hope to be able to factor these into our review of the revisions that will be made over the coming months. We would ask that specific attention be paid to citizens' concerns and that their wishes be incorporated into the final text. Where these apply to a very limited number of lots/developments, they should be considered for elimination. We believe that MU is one that fits this category. No attempt from developers to use this designation for dubious reasons should be approved. If it is to be retained, then it needs to be more specific and completely revised.

Specifically we offer the following recommendations:

1. Consider removing the "mixed use" ordinance from Code; relying on related ordinances
2. Reduce the number of permitted uses, if the ordinance is retained.
3. Remove Land Use GSA 1.4.6, page 248 from the Comp Plan.
4. Require binding and specific site plans to show approving officials the exact layout and configuration for any mixed use application.
5. Remove potential for variances and exceptions from applications; require specific setbacks and buffers, particularly on Community Character Corridors.
6. "If an MU ordinance is retained, it should be divided into "residential", commercial", "business", etc.
7. Mixed Use must not result in an increase in population over that expected from by-right.
8. Mixed Use data from the Kimley-Horn "James City County 200 Development Potential Analysis" should be updated and factored into decisions on the ordinance.

We will be pleased to be part of any working group considering the "Mixed Use" rewrite.

FIGURE 1. Goals, Strategies and Actions (GSAs) from the 2009 Comprehensive Plan that impact on Mixed Use District ordinance.

Environment. 1.1.5 continues regional efforts to ...identifies lands best suited for development. This should include type of development.

Economic Development. 1.1 would indicate expansion of the Enterprise Zones rather than creating a new category (EO). 1.4 places more emphasis on infill development, much of this may end up in a request for mixed use zoning.

Community Character. 1.1.1 focuses on development along Community Character Corridors protecting the natural and historic views of the area; development along the CCCs often includes MUD zoning.

1.1.3 encourages initiatives to ensure the development of quality industrial and office parks for potential economic development prospects.

1.2.1 relates primarily to development along CCCs in New Town Toano and Five Forks; possibly mixed use zoning.

1.3.9 focuses on consistency with the Development Standards in the Comp Plan.

1.5 relates to the preservation of existing vegetation during development.

Land Use, 1.2.1 provides for connecting neighborhoods with retail employment centers, parks, etc.

1.4 directs growth into designated growth areas. within PSA.

1.4.5 focuses on infill development, redevelopment within the PSA, providing strategies. Within 1.4.6 and 1.4.7 developments using MUD are encouraged (not supported by J4C).

FIGURE 2. PERMITTED USES (all structures to be erected or land to be used) THAT MIGHT BE CONSIDERED FOR DELETION

Residential Uses:

Accessory structures, as defined in section 24-2. (If this remains, it must have more specific descriptions)

Non-Residential Uses:

Automobile repair and service

Automobile service stations

Funeral homes, cemeteries and memorial gardens

Group quarters for agricultural workers

Heavy equipment sales and service

Home occupations as defined. (NOTE: Aren't these covered in Residential ordinances?)

Convention centers

Houses of worship and cemeteries accessory hereto

Manufacture and bottling of soft drinks and wine

Manufacture and processing of textiles and textile products

Manufacturing, compounding, assembly or treatment of products

Manufacturing, compounding, processing or packaging of cosmetic, toiletry and pharmaceutical products

Manufacture of carpets and carpet yarns

Manufacture or assembly of appliances, tools, firearms, hardware products and heating, cooling or ventilating equipment

Manufacture or assembly of electronic instruments, electronic devices or electronic components.

Manufacture of assembly of medical, drafting, metering, marine, photographic and mechanical instruments.

Processing, assembly and manufacture of light industrial products or components

Warehouse, storage and distribution centers

Welding and machine shops with storage

FIGURE 3. RECOMMENDATIONS

1. Consider removing the “mixed use” ordinance from Code; relying on related ordinances
2. Reduce the number of permitted uses, if the ordinance is retained.
3. Remove Land Use GSA 1.4.6, page 248 from the Comp Plan.
4. Require binding and specific site plans to show approving officials the exact layout and configuration for any mixed use application.
5. Remove potential for variances and exceptions from applications; require specific setbacks and buffers, particularly on Community Character Corridors.
6. “If a Mixed Use ordinance is retained, it should be divided into “residential”, commercial”, “business”, etc.
7. Mixed Use must not result in an increase in population over that expected from by-right.
8. Mixed Use data from the Kimley-Horn “James City County 2002 Development Potential Analysis” should be updated and factored into decisions on the ordinance.

We will be pleased to be part of any working group considering the “Mixed Use” rewrite.

**James City County Zoning Ordinance and Subdivision Ordinance
Planning Commission Public Forum
Tuesday, August 24, 2010**

**WILLIAMSBURG AREA ASSOCIATION OF REALTORS®
DISCUSSION POINTS**

The Williamsburg Area Association of REALTORS® is a professional trade association that represents the real estate profession and property owners throughout the communities of James City County and the City of Williamsburg, as well as a portion of both New Kent and York Counties. The Association, with its 500-plus members, works diligently to promote pro-housing and pro-business interests and supports legislative, regulatory and political efforts that reflect our mission.

Inherent to the Association are five guiding principles upon which we have based our comments.

1. Provide Housing Opportunity and Choice

Homeownership is the cornerstone of the American dream and deserves a preferred place in our system of values as it contributes to community responsibility; civic, economic, business and employment stability; family security and overall well being of a community. These objectives can be met through market-driven housing approaches that foster a wide-range of urban, suburban and rural housing choices at all price levels to suit a diverse population.

2. Build Better Communities

Real estate of all types flourishes best in livable communities that offer a high quality of life at a reasonable cost. Livable communities offer a variety of affordable housing choices, good schools, low crime, quality public services, efficient transportation systems, ample recreation and park areas, open space, strong employment base and an economically viable commercial sector. To promote these essential livable community elements, growth policies should encourage market-driven and culturally diverse growth patterns that sustain and enhance a community's quality of life.

3. Protect the Environment

To maintain a region's quality of life and to protect the environment, governments should consider policies and programs that aid the control of pollution; provide for programs that encourage preservation of natural resources, significant lands and properties of historic significance; and further encourage, through incentives, the protection of endangered species, aquifers, rivers/streams, agricultural lands, wetlands, scenic vistas, natural areas, and open space.

4. Protect Private Property Rights

Private property rights are fundamental to our free-market economic system and are protected by the 5th and 14th Amendments to the United States Constitution. Our

nation's economy depends on the preservation of the right to freely own, use and transfer real property.

5. Implement Fair and Reasonable Public Sector Fiscal Measures

To support adequately the infrastructure needs of communities resulting from growth, governments should cooperate in the adoption of balanced, fair, equitable and incentive-based approaches to finance and pay for the development, expansion and maintenance of roads, schools, water and sewer facilities. Revenue and financing mechanisms established to pay for necessary infrastructure costs should be shared proportionally by those segments of the population served by improvements and not just be borne by property owners.

Relative to the Zoning and Subdivision Ordinances, and specifically to the topics tonight regarding commercial and mixed-use land use districts, we offer the following comments and observations:

- We all know that business and industry are vitally necessary for a balanced tax base, employment, the health of a community and the growth of a community.
- Local real estate professionals are of the opinion that the County's current commercial and mixed use districts are old and outdated, allowing for very little in the way of "new" industry and commerce--i.e. web-based businesses, alternative energy industries, etc.
- The current districts are inflexible and do not allow for future industries tomorrow that none of us can predict today.
- The County should be highly creative about permitted uses in the various districts to maintain and expand current businesses, and to attract new businesses.
- The County should establish real incentives as part of creating more flexibility in the commercial districts. In other words, the County needs to do more to entice businesses to stay and to locate here. While streamlining the permit process and waiving fees are appreciated, it may not be enough in today's economic climate. There should be additional incentives—such as tax credits for the number of or types of jobs created, tax abatements for certain businesses, more technology incubators and enterprise zone approvals, etc.
- The County should encourage developments which provide mixed-use development and support design flexibility to promote mixing of various types of residential and non-residential uses and structures.
- The County should approve the Economic Opportunity land use designation, which through the Comprehensive Plan is designed to increase the non-residential tax base and stimulate the creation of jobs. This designation also will

promote mixed-cost housing with a strong emphasis on workforce housing and higher density development. We believe that the housing component of the Economic Opportunity land use designation is the key factor in driving its success, and we offer our assistance to work with the County on the housing sector within these areas.

The Association follows trends in today's marketplace, and we can work with the County to share the features that buyers many want including walkable communities, green design, small lot size and small square footage, as examples. We are working with a local government in another community on its zoning ordinance re-write, and have provided policy makers and staff with details on current trends in the homebuyers market. It appears that those details are providing beneficial to that community as it works toward framing its future land use and zoning decisions for its neighborhoods and residents. We can provide the same information to James City County.

It is through the zoning designation process, specifically commercial and mixed-use zoning, that James City County can increase the balance of our tax base so that less pressure is applied to residential properties.

We support the creation of jobs and area businesses so that additional opportunities are created for a skillful, young workforce. A strong local economy results in a diverse local community. However, the backbone of any of these job opportunities also is a strong housing market that allows employees to live and work in the same place.

To that end, we ask that the following be incorporated into the new ordinances:

- Encourage a balanced mixture of commercial, industrial and residential land uses, including redevelopment.
- Incentivize developers to incorporate workforce housing into their developments by allowing for bonus densities.
- Encourage infill development, the redevelopment of existing parcels and the adaptive reuse of existing buildings to efficiently use infrastructure and natural resources.

WAAR offers itself as a resource to the County. Having worked on a variety of local government enabling legislation at the state level, we can provide specific language and details that have the potential to be very positive and fit into the County's goals and objectives.

We look forward to engaging with you in zoning, land use and subdivision discussions, and to developing solutions in order to create an achievable vision for our community.

MEMORANDUM

DATE: February 24, 2011
TO: Policy Committee
FROM: Jason Purse, Senior Planner
SUBJECT: Multiple Use Districts/Form-Based Code and Redevelopment of Toano

I. Form-Based Code and Redevelopment

In 2006, the Board of Supervisors adopted design guidelines for the Toano Community Character Area (CCA). Toano was previously a vibrant hub in the County, but because of widening of Richmond Road and a population shift, needed some redevelopment and revitalization. Staff and Renaissance Planning Group established the design guidelines by surveying the remaining important historic structures, as well as working with the citizens to ensure their vision of a future Toano was achieved. Implementation of the guidelines has focused on developers redeveloping the area. During the Comprehensive Plan update process, form-based codes were discussed as a way to promote redevelopment of Toano, and a GSA was included in the final document that recommended evaluation of this option during the multiple use districts ordinance update. No actual form-based code language has been created for the Toano CCA to date. Staff is requesting feedback from the Policy Committee on the options below pertaining to ways to further promote the desired redevelopment and revitalization of Toano.

II. Discussion Items

1. Description of issue/problem and history
 - *One tool that can be explored is form-based code. A form-based code is a method of regulating development to achieve a specific urban form. It is a tool that favors regulating a property's form over its use. Form-based codes set certain standards for the appropriate form and scale of building facades, streets, and blocks within a given community. Whereas conventional zoning limits development of land to a single-use, form-based codes do not strictly limit the use of property, and therefore allow for mixed uses within the same block or building.*
2. Evaluation
 - *Finding the most appropriate way to spur redevelopment and revitalization of the Toano Community Character Area (CCA) requires consideration of a number of different variables. First, staff considered the existing zoning and Comprehensive Plan designation of the area. A majority of the southern side of Richmond Road is zoned B-1, General Business, but there are also parcels zoned PL, Public Lands, and A-1, General Agricultural. On the northern side a majority of land is zoned M-1, Limited Business/Industrial, but there are also parcels zoned M-2, General Industrial; A-1, General Agricultural; and PUD-R, Planned Unit Development Residential. The Comprehensive Plan designates the entire Community Character Area Mixed-Use. There are specific descriptions of suggested uses and intensities for different areas of the CCA, but the entire area is designated Mixed-Use with a general emphasis on residential and retail/commercial development.*

- Existing development in Toano varies. On the northern side of Richmond Road there are three historic structures along Richmond Road, as well as a number of small businesses. Behind the historic structures there is an apartment complex. Further down Richmond Road, Toano has a much more industrial appearance, with an established lumber yard, Luck Stone Construction complex, as well as the Bryant construction materials storage facility. Obviously, these uses vary greatly in terms of aesthetics, and ability to meet the design criteria established in the design guidelines. The design guidelines promote redevelopment of the CCA to include residential and retail/commercial space in an effort to bring a sense of place to Toano. The guidelines do acknowledge the existing industrial infrastructure, but also acknowledge that these uses are not compatible with the residential/retail area proposed for most of historic Toano and note that they should be adequately buffered from other land uses.
- Given the varying level of existing development and the majority of land with industrial zoning throughout the entire CCA, a form-based code, may not be appropriate. The existing industrial areas are still viable uses for their location and having a form-based code overlaid on top of those areas may prohibit or prevent expansion of those valuable uses to the County. A use based Euclidian model would be more appropriate.
- For the historic area, a form-based approach may be more feasible. This section of Toano has a very distinct character and has similar uses both on-the-ground and proposed in the Comprehensive Plan.

3. History

- The Toano Community Character Area design guidelines, approved in 2006, have specific recommendations regarding the form of buildings in the Toano CCA. These forms are based on existing structures that were deemed important during the study process. The building forms could be translated into a code for future developers to follow.
- Similarly, there are complete street, landscaping, setback, and building massing designs that could be built into the code.
- The existing adopted design guidelines serve as a legislative version of form-based code currently. In other words, during review of cases that require approval from the Board of Supervisors, the criteria listed in the guidelines is evaluated along with the Comprehensive Plan language and designation description.
- Only two form-based codes have been adopted in Virginia. Arlington County and Portsmouth both have form-based codes, but both of these codes are for infill sites in dense urban areas.

4. Pros and Cons

- The primary incentives to promote redevelopment are greater potential development densities and more permitted uses. Projects under 60,000 s.f. that conform to the code are permitted by right. The code also lists administrative adjustment standards to provide relief from the form controls. Since these are primarily infill codes, infrastructure responsibilities are shared by private developers and by the cities. All provisions will be incremental. For example, developers must install utilities, sidewalks, street trees, and street furniture but would only be required to build new roads if the project site included these proposed roads. Meanwhile, the cities could bring existing roads up to standard using whatever revenue sources are currently used for transportation improvements.

- *Proponents have used the certainty afforded by a form-based code as a major selling point. In other words, if the code has been tailored to a specific area, and if that tailored code was developed through a participatory planning process, most development approvals could be handled administratively.*
 - *Since form-based codes are not designed to limit uses or density, having a form-based code for Toano may allow more residential density than would be desirable. A number of residential rezoning applications have failed to gain the necessary approvals in Toano because of their impacts on the area. Allowing a form-based code, which limits the building size and scale but does not address the possible density of a development, could have adverse impacts on the infrastructure network, if the developer does not have an adequate balance of uses. One of the benefits of using the Toano design guidelines as a legislative form-based code is that the impacts of the development can still be evaluated, while the form of the buildings is still paramount to the success of the project.*
 - *A by-right form-based code would not produce cash proffers for residential uses.*
 - *Because of the complexities of drafting a form-based code (and possibly rezoning the land), the actual form-based code document would not be produced during this ordinance amendment update process. Actual language would need to be drafted after the completion of this process.*
5. Comprehensive Plan GSAs, public input, and PC and BOS direction
- *LU 4.5-Promote infill, redevelopment, revitalization, and rehabilitation within the PSA.*
 - *LU 4.5.3-Promote infill, redevelopment, revitalization, and rehabilitation within the PSA...Revisions to the Zoning Ordinance to create a form based code or code overlay that could apply to specific areas, such as Toano.*
6. Solutions and policy options
- *Given the existing zoning and uses in Toano, staff does not believe a form-based code is the best way to promote redevelopment for the entire Toano Community Character Area. The “historic” section of Toano may be more appropriate for a form-based code. However, for the form-based code to truly benefit developers, the form-based code would need to include a by-right development option. This option, as seen in Arlington and Portsmouth, would require the County to take responsibility for some of the infrastructure improvements in the area. The County will most likely need to undertake studies of the transportation corridor to determine the adequacy of the network and the acceptable amount of development that the current infrastructure can handle, prior to any by-right development being approved.*
 - *If a by-right form-based code is not implemented it will lessen the impact on spurring redevelopment, as it would entail the same legislative review required with a rezoning and no guarantee of added benefits (i.e. added density). The existing Toano Community Character Area Study Design Guidelines are currently acting as a legislative form-based code.*
 - *Staff will discuss a redevelopment district in the next section that may also be an effective tool to promote redevelopment in both Toano and the entire County.*
5. Staff recommendation
- *Staff recommends against adopting a form-based code for the entire Toano CCA. However, the groundwork for a code is currently present in the adopted Toano CCA design guidelines. Staff believes it could be most appropriately applied to the “historic” section of the Toano CCA. Alternatively, staff believes a modified form-based code is currently being implemented through guidelines for legislative cases. Staff believes that the flexibility provided by the*

redevelopment district, that will be discussed in the next section, may provide the both the flexibility desired by developers and assurances afforded the legislative process to be an acceptable alternative that will still meet the goals of the Comprehensive Plan.

B. Redevelopment District Ordinance

1. Description of issue/problem and history

LSL, the consultant hired by the County to work on the sustainability audit, has provided the County with a number of suggestions to help the County become more sustainable. One of the fundamental concepts of the study is making redevelopment more attractive to potential developers. One tool they have suggested is a redevelopment district. The purpose of the redevelopment district is to encourage redevelopment by providing design flexibility to the developer in terms of the height, area, and dimensional requirements. Currently, in the various business/industrial districts uses are limited by setback, yard requirement, lot size, and other dimensional requirements. There are examples of lots created before the zoning ordinance was in effect that, because of current regulations, would not be able to redevelop easily. A new ordinance, that allowed this type of dimensional flexibility with the inclusion of certain public benefits, could be a solution for developers and for the County.

2. Comprehensive Plan GSAs, public input, and PC and BOS direction

- *LU 4.5-Promote infill, redevelopment, revitalization, and rehabilitation within the PSA.*
- *ED 5- Encourage infill development, the redevelopment of existing parcels, and the adaptive reuse of existing buildings to efficiently use infrastructure and natural resources.*

3. Solutions and policy options

As described in the residential district memo, using the Redevelopment District would require a legislative review (rezoning); however, it would provide needed flexibility to the developer if the project meets the criteria established for redevelopment parcels. The suggestions provided by the consultant to include as criteria for qualifying for a Redevelopment District include:

- a. Mixed-use development with residential and non-residential uses or a variety of housing types;
- b. Redevelopment of brownfield or greyfield sites;
- c. Pedestrian/transit-oriented design with buildings oriented to the sidewalk and parking to the side or rear of the site;
- d. High quality architectural design beyond the site plan requirements of this chapter;
- e. Extensive landscaping beyond the site plan requirements of this chapter;
- f. Preservation, enhancement or restoration of natural resources (trees, slopes, non-regulated wetland areas, views to the river);
- g. Preservation or restoration of historic resources;
- h. Provision of open space or public plazas or features;
- i. Efficient consolidation of poorly dimensioned parcels or property with difficult site conditions (e.g. topography, shape etc.);

- j. Effective transition between higher and lower density uses, and/or between non-residential and residential uses; or allow incompatible adjacent land uses to be developed in a manner that is not possible using a conventional approach;
- k. Shared vehicular access between properties or uses;
- l. Mitigation to offset impacts on public facilities (such as road improvements); or
- m. Significant use of sustainable building and site design features such as: water use reduction, water efficient landscaping, innovative wastewater technologies, low impact stormwater management, optimize energy performance, on-site renewable energy, passive solar heating, reuse/recycled/renewable materials, indoor air quality or other elements identified as sustainable by established groups such as the US Green Building Council (LEED) or ANSI National Green Building Standards.

Staff understands that many of these points would require additional definition (and possibly graphics) to ensure conformity. The list has been offered as a starting point for discussion before more specific language is crafted.

Under this model, the County would promote flexibility for developers who wish to redevelop property, but would still have controls over the outcome of the development, as it would require a legislative review (including proffers to mitigate impacts that would not be possible under a by-right model). As can be seen from the ordinance language, any redevelopment must meet the goals of the Comprehensive Plan and must be compatible with adjacent property and uses.

5. Staff recommendation

- *Staff recommends creating the Redevelopment District as a tool to promoting redevelopment in Toano and in the County at large. This type of district would maintain protections from incompatible uses through the legislative review process, while also providing developers with added flexibility from the design requirements of the underlying zoning for the Toano CCA. Specifically, the design guidelines would still be considered during the review of any Redevelopment District application, and would still be applied as a legislative form-based code, but the Redevelopment District would allow the rest of the County to have additional options for redevelopment of property.*

III. Conclusion

There are many options to help promote redevelopment, both in Toano and throughout the County. Since the existing Toano CCA design guidelines are currently functioning as a legislative form-based code, having a by-right form-based code option would be the next possible step. Further study of the existing infrastructure and development capacity may be needed to implement a by-right option, as many of the improvements guaranteed during a legislative process (from the developer) would fall onto the County under a by-right scenario. Given the limitations of a form-based code, staff also investigated other redevelopment strategies. A Redevelopment District is another means of promoting the re-use of land, rather than relying heavily on Greenfield development. Both of these options can be implemented, but the form-based code approach would only be possible in the Toano CCA, as currently that area is the only area that has approved form-based design guidelines. Staff requests guidance from the Policy Committee on which options for redevelopment may be appropriate for the County to

undertake. Staff has also included links to the Toano CCA design guidelines and form-based codes for Arlington and Portsmouth. The sample form-based code ordinance is being attached as a hard copy.

Associated Links

Toano CCA design guidelines

<http://www.jccegov.com/pdf/devtmgmtpdfs/planning/toano/Final%20Adopted%20Guidelines.pdf>

Arlington (Virginia), County of. 2004. The Columbia Pike Special Revitalization District Form Based Code.

<http://www.arlingtonva.us/Departments/CPHD/Forums/columbia/current/CPHDForumsColumbiaCurrentCurrentStatus.aspx>.

Portsmouth (Virginia), City of. 2009. *Uptown D2 District Form-Based Code*.

http://www.portsmouthva.gov/planning/images/destinationptown/PortsmouthUptownD2_Nov24-FINAL.pdf.

MEMORANDUM

DATE: February 24, 2010

TO: Policy Committee

FROM: Ellen Cook, Senior Planner II
Sarah Propst, Planner

SUBJECT: Green Building

I. Introduction

Green building and design is the practice of creating and using resource-efficient models of construction, renovation, operation, maintenance and demolition. Green building focuses on sustainable site planning and design, safeguarding water resources and promoting water efficiency, energy efficiency and renewable energy, conservation of materials and resources, and indoor environmental quality. When viewed on a regional scale, green building and design includes the interconnectivity of neighborhoods and communities, alternative forms of transportation, and preservation of natural resources. Investigating application of green building principles in James City County was included in the Ordinance update methodology.

II. History

A Green Building Design Roundtable stakeholder group met from March 2009 to June 2010. Among other activities, the Roundtable researched the methods other localities are using to encourage or require the use of green building techniques for private development in their communities. The Roundtable created a report with recommendations which was adopted by the Board of Supervisors at its July 27, 2010, meeting. The report contains two major directions for ordinances and policies as they apply to land development. First, the report recommends that for rezoning or SUP projects that involve a building over a certain size (for instance, 10,000 square feet), EarthCraft or LEED certification, or an equivalent certification, is justified and should be expected. Second, the report also recommends that for development that doesn't require legislative approval, the best approach is to encourage, rather than mandate, sustainable development by the use of incentives, education, and a positive example set by the County in the development of public projects. To this end, the Roundtable report includes an appendix listing possible methods to encourage sustainable development. The Roundtable report will be provided to the Policy Committee electronically and will also be posted on the Ordinance update webpage materials section at: <http://www.jccplans.org/schedule.html>.

III. Board Direction, Comprehensive Plan Goals, Strategies and Actions, public input, Sustainability Audit

- The Board adopted a policy for public facilities on March 23, 2010.
- The Green Building Roundtable Report presented to the Board is summarized in the History section above.
- At the Ordinance update kick-off work session on August 10, 2010, the Board generally expressed support for green building concepts, and discussed voluntary versus mandatory requirements.
- Several speakers made comments on Green Matters at the Planning Commission forums, including Robert Duckett of the Peninsula Housing and Builders Association (his comments were primarily in relation to the Residential sections) on September 1, and Susan Gaston of the Williamsburg Area Association of Realtors on September 27. Their remarks can be found at: <http://www.jccplans.org/what.html>.

- The 2009 Comprehensive Plan’s Residential Development Standards includes adhering to green building guidelines, such as LEED (Leadership in Energy and Environmental Design), EarthCraft, or successor or equivalent as an element of enhanced environmental protection.
- The Sustainability Audit encourages addressing use of green construction and technology, efficient provision and use of energy, and reduction in waste in the ordinance.

IV. Discussion Items

The items below discuss not only thresholds (size, use, etc.) for application of green building techniques, but also a number of related issues, such as certification types, verification, exemptions, program/policy administration, and enforcement.

A. How Can the County Verify that Green Techniques Have Been Used?

A number of programs have been developed over the years that have put together a standard set of green building practices, while allowing for customization and innovation. The most prominent among these programs is LEED (Leadership in Energy and Environmental Design). (Page 7 of the Roundtable report discusses other programs such as the NAHB’s Model Green Homebuilding Guidelines.) LEED is a comprehensive green building program (covering energy efficiency, water conservation, etc., and a wide range of construction types¹), while other programs focus on certain aspects of green building such as energy efficiency (such as Energy Star) or are developed for specific construction types (such as schools or laboratories). Based on the research and discussion of the group, the Roundtable recommended use of two programs – LEED and EarthCraft. Subsequent review of localities further supports the Roundtable’s recommendations, as many localities use LEED or a LEED-based system as the primary benchmarking green building program in their communities. Including EarthCraft as a second benchmark program complements LEED, as the EarthCraft focus is on residential units, and the EarthCraft program has been used locally for Office of Housing and Community Development projects and other projects, thus creating a certain level of local expertise.

While using these programs as the primary benchmarking programs, it may be reasonable to make provisions for developers to use other equivalent programs, subject to Planning Director consideration and approval on a case-by-case basis. In addition, given that development of programs in this field is active and on-going, it may be reasonable to make provisions for examining and reconsidering the primary benchmark programs on a semi-annual or other reasonably frequent basis to allow for changes or additions to the Policy.

Staff Recommendation:

Use LEED and EarthCraft as the County’s primary benchmark programs, with provisions for use of equivalent programs.

B. Should the County Look for Actual Program Certification or Verify Checklist Points Itself?

Green building programs such as LEED and EarthCraft are set up as a checklist of practices in a set of categories, each of which is noted as either a prerequisite/required item or an optional item, and each of which has a point value associated with it. Obtaining basic (i.e. “Certified” level) or higher levels of certification entails carrying

¹ There are specialized LEED programs for each of the following: new construction (which includes high-rise residential buildings); existing buildings: operation and maintenance; commercial interiors; core & shell; retail; healthcare; homes (which includes single family units through mid-rise multi-family, and can include mixed-use buildings with at least 40 – 60% residential floor space); and neighborhood development.

out the prerequisites/required items and accumulating points from enough of the other practices to reach a specified threshold. Obtaining certification also means registering with the program, paying the program fee(s), submitting the documentation paperwork, and completing any required inspections.

Some localities have opted to use the checklist of a program such as LEED, but not require actual certification. This potentially allows for the program fee and program documentation process to be eliminated and/or for the locality to adjust, if desired, which items are prerequisites/required. These could be viewed in a positive light, so it is worth examining the implications for both the fee and program documentation aspect, and prerequisite adjustment aspect.

With regard to fees and program documentation, staff has been able to identify the following information:

- **EarthCraft** - The EarthCraft program fee for certification of a home is \$950. (If the home is over 3,000 square feet, there is an additional fee of \$0.15 per square foot.) This fee covers everything, including design review, energy modeling, technical assistance, site inspections by the local private-section inspector affiliated with EarthCraft, and final testing. The fee does not depend on the level of certification that is being pursued, and there can be discounts for townhouses or identical models; this discount would be negotiated on an individual project basis.
- **LEED for New Construction** - The registration fee is \$900 for members or \$1,200 for non-members. The certification fee depends on the size of the structure, the desired review type (separate or combined design and construction reviews), whether the developer is a member, and whether expedited review is sought. For example, for a member seeking certification of a building less than 50,000 square feet with combined design and construction review on a non-expedited time frame, the fee would be \$2,250.
- **LEED for Homes** - For single family homes, the member fees are \$150 for registration and \$225 for certification. However, LEED for Homes requires completion of on-site inspections prior to certification, so additional LEED Provider verification costs would apply.

If actual certification is not required, it means that the responsibility of verifying compliance with the checklist falls to the County. From the research that staff has done, other localities that have pursued this route appear to have dedicated green building program staff to review documentation and meet with applicants, and dedicated green building inspection staff to conduct inspections. Planning staff has reviewed the EarthCraft checklist with Code Compliance and Environmental Division staff to determine which, if any, items are currently inspected by their staff as part of their existing duties². This review indicated that inspection of many of the prerequisite/required items is not part of their current duties, and that many of the credit/optional items which allow for developer customization and flexibility are also not part of current duties. This indicates that County verification using the EarthCraft checklist would not be possible without additional resources.

Some localities have eliminated certain items as prerequisite or required items. One example of a LEED prerequisite which has been eliminated by a locality is the commissioning aspect (LEED Energy and Atmosphere Prerequisite #1). Building commissioning verifies that the project's energy-related systems are installed and calibrated to perform according to the owner's project requirements, basis of design and construction documents. Benefits of commissioning include reduced energy use, lower operating costs, fewer contractor callbacks, better building documentation, improved occupant productivity and verification that the systems perform in accordance with the owner's project requirements. However, as a downside from a cost and process

² Note that in many localities where the building inspection staff serves to verify compliance, the green building program has been inserted in the local building code. Local adjustment of the building code is not an option in Virginia.

standpoint, for buildings over 50,000 square feet, it does mean that a commissioning authority separate from the design and construction team must be hired. If prerequisite items are altered, it automatically means that compliance verification fall to the locality. In addition, adapting the checklist to decide if some of the prerequisites should be removed would likely mean a time and work-intensive process, and could result in building outcomes that provide less community benefit and potentially less investment payback. Since both LEED and EarthCraft are time-tested and established programs, it seems reasonable that items they indicate as prerequisites/required serve a fundamental purpose in achieving green building goals. Staff would note that a number of legislative projects in James City County, even in the absence of a policy, have proposed certification by LEED or EarthCraft (examples include Stonehouse Amenity Center, Premium Outlets expansion, and Candle Factory Food Lion).

Staff Recommendation

In concurrence with the Roundtable report, staff recommends that actual program certification be the expected County standard, given the desire for verification of the practices committed to by the developer and given current resources.

C. Three Interrelated Issues: Level of Certification, Sizes or Percent of Development, and Expected versus Incentivized.

The Roundtable report recommends that basic certification be expected for buildings over a certain size, citing 10,000 square feet. (The Roundtable report did not specify a recommendation for number or percent of residential units.) The report also recommends that for other development, the best approach is to encourage, rather than mandate, sustainable development by the use of incentives, education, and a positive example set by James City County in the development of public projects. Achieving green building certification requires additional effort to plan and document and some up-front additional cost (both for program administrative fees and for the actual design, materials and construction). Given this, staff investigated how this recommendation compared to other programs. Staff found that the policies or ordinances adopted by localities across the country vary fairly widely in terms of these three elements:

- **Level of Certification** - The LEED program has Certified, Silver, Gold and Platinum levels. The EarthCraft Program has Certified, Gold and Platinum levels. Attaining higher levels means expending additional effort and potentially additional cost. Many localities set the standard at Certified for private development, while in other localities, the level depended on the two factors below. (The James City County policy for public facilities specifies LEED Silver as the general standard.)
- **Size of Structure/% of Development** - While many localities require adherence to their green building program for all new construction, many others specify buildings over a certain size. Some localities also link building size to achieving certain certification levels (for example, buildings between 5,000 and 50,000 square feet should achieve LEED Certified, and buildings between 50,000 and 100,000 should achieve LEED Silver, etc.). In terms of residential, a decision would need to be made about whether certification expectations would apply to all units or a certain percentage/number of the units.
- **Expected versus Incentivized** - In some localities (such as Arlington County, VA), adherence to their green building program is expected or required, either generally, or in circumstances where a special type of approval or exception is sought by a developer. In other localities (such as Gainesville, FL) , adherence to a green building program is linked to incentives such as density/floor area ratio bonuses, expedited review of plans or permits, or waiver of review fees. Some localities expect/require adherence for a basic level (such as LEED Certified) for most development, but provide incentives for higher levels of certification.

Staff Recommendation

In concurrence with the Roundtable report, staff recommends expecting by policy that rezoned or specially-permitted buildings over 10,000 square feet application achieve green building certification at the basic certified level. In terms of residential development, the Roundtable did not specify a level of development for which the certification standard would apply. Staff has also not been able to find much information to date on how this is treated in other localities. Therefore, at this time, staff is making a preliminary recommendation that the policy expectation be achieving basic level certification for 35% of homes within proposed developments. Staff also preliminarily recommends that this apply to major subdivisions (developments of greater than 9 lots). In addition, staff recommends including opportunities in the ordinance to incentivize higher certification levels (Silver, Gold, etc.), such as density bonus provisions in the Cluster Overlay District, and/or for development that would otherwise be below the Policy threshold. Finally, staff recommends investigating ways to provide recognition to individuals and companies that achieve certification; one possibility would be to present resolutions of recognition at Board of Supervisors meetings.

D. Administration/Enforcement

With any policy or regulation the question of administration and enforcement is important to ensure that the envisioned goals are met. In the case of green building, the questions are how to ensure that compliance is achieved, what time period to allow for demonstration of compliance, and how to address situations of non-compliance. It is important to note that there is a high level of ability to achieve certification once the commitment is made for the project. EarthCraft Virginia staff stated that of the 702 homes that have been registered with them (i.e., the builder/developer indicated that they would be seeking certification), 700 were able to complete the process and achieve certification. While this is very encouraging, it still seems prudent to have a process in place and to provide for circumstances if some problem were to occur.

Based on a review of other localities, staff recommends a process that seeks to keep compliance on track as the project moves along. Such a process could entail the following steps:

- Turn in proof of registration and checklist indicating items to be pursued during site or subdivision plan review.
- Update/verify the checklist during building permit review.
- For EarthCraft, the certification is issued once final tests are done prior to Certificate of Occupancy (CO), so proof of certification within one month of CO seems feasible.
- For LEED, the system requires commissioning which can mean extended timelines beyond CO, and certification processing time can take longer. In other localities that have been surveyed, staff has seen time periods of 6, 12 and 18 months post-CO for producing proof of certification. It may be reasonable to choose 12 months and evaluate after a year or two to see if this proves reasonable. It also seems prudent to include a provision for extending proof of certification past the specified time period, if there is good reason and with the approval of the Planning Director.
- For other programs as approved by Planning Director, a decision on the timeframe could be approved by the Planning Director prior to site or subdivision plan approval.

As noted above, it is unlikely that once registered, a project would “default” on its certification commitment within the specified time period; however, should this occur, an enforcement provision would need to be in place. Strategies used in other localities include the following:

- Holding the project at temporary CO and not issuing final CO until certification is complete (this could be used to address situations where the specified time period commitment was not yet met);
- Giving authority to the Planning Director to have the developer/builder pursue other/additional program credits instead of those it did not complete; or

- Requiring up-front contribution to a green building fund that is refunded or forfeited depending on the certification outcome (forfeited funds would be used for green building education or projects);
- Pursuing civil/criminal penalties (generally associated with instances where the green building language was a part of the local building code).

A combination of these approaches, such as the ability to require a developer to pursue alternate credits prior to actual forfeiture of a green building fund contribution, may be worthwhile. Planning staff has consulted with the Attorney’s Office, and the preliminary determination was that such a green building fund process could be legally feasible for the County.

Staff Recommendation

Staff recommends including certification process and timeframe information in the policy, as well as provisions for enforcement should it become necessary. Staff welcomes any input on the suggestions listed above.

E. Exemption of Certain Types of Development

There may be certain uses that could be exempt from the general policy. Similar to the County’s Sustainable Building Policy, examples could include:

- Buildings without any climate-control systems, due to the smaller impact that buildings would have.
- Businesses that are lessees in spaces of less than 8,000 square feet gross floor area. While there is a LEED system that is designed to apply to leased space (LEED for Commercial Interiors), it may be reasonable to set a separate minimum size for these situations.

One other item that could be considered is instances of proffered affordable housing. The concern might be raised that the additional up-front costs of green building would impact the developer’s ability to offer units at affordable prices. While acknowledging this concern, there have been a number of instances in the County where the two elements have been combined. On the private side, Health-E Communities has included green building elements in their proffers for a number of developments that included affordable units, including Michelle Point and Pocahontas Square. On the public side, units in the Office of Housing and Community Development’s Ironbound Square redevelopment project have been both affordable and EarthCraft-certified. From the point of view of long-term affordability for the homeowners, use of green building techniques can assist in keeping energy and other bills minimized.

Staff Recommendation

Staff recommends including certain limited exemptions in the policy, such as the two categories listed above. Staff does not recommend including affordable housing units in the exempt category.

F. Certification that Includes Specification of Certain Checklist Items

Some localities specify that as part of meeting the certification, one or more of the certification program’s elements must be selected for completion (as opposed to being an option). This essentially creates additional local-level prerequisite/required items on the checklist. Staff has discerned that this has been done in response to certain issues identified as critical at the local level. For example, in an area where landfill space has been identified as a specific concern, the locality may specify that construction waste management is a required element, whereas under the LEED program it is one of several options a developer could pick in the “Materials and Resources” category. Selection of certain local-level required elements could be a possibility for inclusion in a James City County green building policy.

Staff Recommendation

While this approach has the advantage of tailoring national or Virginia-wide system to suit specific local goals, staff does not recommend pursuing this approach at this time. Given that the policy would be a new instrument

in the County, the greatest degree of flexibility in meeting the certification target would likely be useful to developers and builders. Specifying certain local-level prerequisites could be added at a later date once additional experience has been gained by all parties, and if it appeared to be warranted.

G. Development that Falls Outside the Certification Triggers Discussed in Item C Above

One option that may be worth considering is to require meeting a lesser standard for development that falls outside the triggers that are selected for the expectation of certification. For example, it may be desirable to look for all new legislatively-approved homes to earn an Energy Star rating through the Energy Star program, which is a verified process that results in homes 20 – 30% more energy efficient than standard homes. There is also an EnergyStar energy performance target system that has been developed for certain commercial building types. Note that the EnergyStar program is solely related to energy conservation, and does not cover the other categories that the green building certification programs cover (sustainable sites, water conservation, materials and resources, indoor air quality, etc.). However, there could still be energy conservation benefits that would be beneficial to the community and potentially provide cost savings to building owners.

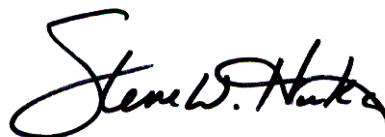
Staff Recommendation

Staff recommends investigating inclusion of an Energy Star expectation in the policy for development that falls outside the certification triggers discussed in item C above.

V. Conclusion

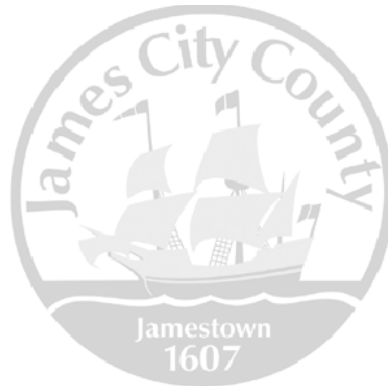
Based on the framework provided by the Roundtable report, staff’s research, and input provided at various stages of the update process, staff recommends development of a Policy that sets forth size/percent thresholds for certification and provides guidance on administration, enforcement, exemptions, and other relevant matters as discussed above. Staff also recommends investigating use of incentives in various sections of the ordinance (Cluster, Mixed Use, etc.) for achieving higher levels of certification and/or for development that would otherwise be below the Policy threshold. Staff requests Policy Committee feedback on the information and staff recommendations discussed above, particularly items C and D, which are two of the most central issues moving forward.

CONCUR:



Attachment

1. Green Building Design Roundtable Report



James City County Green Building Design Roundtable Report

June 7, 2010



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ACKNOWLEDGMENTS

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1. Introduction

Supervisor Jim Kennedy initiated the Green Building Roundtable Forum with the purpose of developing and promoting green building best practices to be used for public and private facilities in James City County. The kick-off meeting was held on March 2, 2009, and the Forum subsequently met on a monthly basis. The Forum members included a diverse group of individuals from the public and private sectors, and with a range of expertise in engineering, design, and construction, among others.

As discussed further in Section 2, green building and design covers a broad range of topics, from sustainable site planning, to water and energy use and conservation, to materials and resource conservation, to indoor air quality. In addition to the range of topics, the Forum recognized that different challenges and opportunities might apply in different contexts whether it was existing development versus new development, residential construction versus commercial construction, or public versus private facilities. Finally, the Forum recognized the need to help provide education and engage the community and private sector in discussion of green building and green design efforts. In recognition of the scope of the effort, the Forum created five sub-committees which met separately to discuss a set of specific topics. These sub-committees were as follows:

- **Finance:** This subcommittee looked at funding, incentives, legislation and economic development opportunities.
- **Housing:** This subcommittee looked at green building practices for existing homes, such as retrofitting and weatherizing.
- **Design and Construction:** This subcommittee focused on sustainable development practices for commercial, residential and mixed use applications including sustainable sites, water efficiency, energy and atmosphere, materials and resources, indoor environmental quality and certifications.
- **Communications:** This subcommittee considered ways to actively engage with the community and the private sector to promote green building practices.
- **Research and Development:** This subcommittee explored best practices for sustainability and coordinated speakers for the Forum.

The report that follows provides background and context for the efforts of the Forum (Sections 2, 3, 4 and 5), and presents the findings and recommendations of the Forum and its sub-committees in Section 6.

2. What is Green Building and Design?

Green building and design is the practice of creating and using healthier and more resource-efficient models of construction, renovation, operation, maintenance and demolition. Green building focuses on sustainable site planning, safeguarding water and water efficiency, energy efficiency and renewable energy, conservation of materials and resources, and indoor environmental quality. When viewed on a regional scale green building and design includes the interconnectivity of neighborhoods and communities, alternative transportation, and preservation of resource corridors.

The United States Department of Interior has forecast that 75% of all U.S. buildings will be built new or renovated by 2035. The Environmental Protection Agency has reported that building construction, maintenance, and disposal account for:

- 39 percent of total energy use
- 12 percent of the total water consumption
- 68 percent of total electricity consumption
- 38 percent of the carbon dioxide emissions
- 60 percent of total non-industrial waste

If the forecasted future development follows the model that has characterized much of the conventional United States urban development to date, then the County will face major costs in necessary services, infrastructure and city administration and to its quality of life. However, sustainable development which applies green building practice can reduce or eliminate the negative impact of buildings on the environment while promoting enhanced building performance and occupant health, thereby creating a civic asset rather than an on-going liability.

Green building practices provide both site specific and County-wide benefits through savings in energy, resource use, and through the reduction of outdoor and indoor pollutants. The many new green building projects in the U.S. in recent years has begun to provide significant data about the benefits of green buildings. In general, green buildings:

- **Consume** 30% to 50% less energy;
- **Produce** 35% less in carbon dioxide emissions;
- **Consume** 40% less water;
- **Produce** 70% less solid waste; and
- **Improve** public health and building occupant productivity.

Green buildings create economic efficiencies for building owners and operators, increase real estate value, and reduce the tax burden by using existing urban infrastructure more efficiently and through load reduction, and reduce otherwise urgent and expensive infrastructure upgrading.

A General Services Administration (GSA) survey of 12 of its green buildings found the following specific benefits:

- 26% less energy usage than national average (65 kBtu/sf/yr vs. 88 kBtu/sf/yr);
- 13% lower aggregate maintenance costs than the national average (\$2.88/sf vs. \$3.30/sf);
- 27% higher occupant satisfaction than the national average;
- 33% fewer carbon emissions than the national average (19 lbs/sf/yr vs. 29 lbs/sf/yr)
- Two Leadership in Energy Efficient Design (LEED) Gold buildings in the study consumed 54% less water than the national average.

It is important to acknowledge that some green building features and systems can result in added initial design and construction costs. The *Costs and Financial Benefits of Green Building* (Katz 2003) study found a 0.66% cost premium for LEED Certified buildings, a 2.11% for LEED Silver buildings, a 1.82% for LEED Gold buildings, and a 6.5% premium for LEED Platinum buildings. The overall average cost increase was 1.84%. It should be noted, however, that each project has a unique set of factors including size, location, certification level, project credits, timing, architecture and a host of other items that will determine specific project cost. Trends show that costs for green buildings are decreasing as the market continues to grow and mature. It is expected that these costs will decrease even further as designers, builders, subcontractors and manufacturers gain experience in an expanding market. Rather than seeing green building features as an added cost element, green features should be recognized as a way to increase the building's value for owners and developers by lowering operating costs and providing a more desirable environment for occupants. As one illustration of this point, the *Costs and Financial Benefits* study found that an upfront investment of less than 2 percent of construction costs yields life cycle savings of over 10 times the initial investment.

Over the years, a number of certification systems have developed that will provide third party verification that green building standards have been achieved, not only for new construction, but also to projects like renovations and to operations and maintenance activities. Most prominent among these certification systems is LEED, which was developed by the U.S. Green Building Council. Similar to other certification programs, the LEED program consists of a checklist of items in categories of sustainable sites, water efficiency, energy and atmosphere, materials and resources, indoor environmental quality, locations and linkages, awareness and education, innovation in design, and regional priority items. Developers can achieve points in the different categories and as a result, there is flexibility in how any given project achieves the certification points needed. The LEED system also allows flexibility in the desired level of certification to be reached: the program offers Certified, Silver, Gold and Platinum levels, reflecting an increasing level of points reached. It is also important to note that systems often offer certifications tailored to the type of project being constructed. For example, there are specialized LEED rating systems for: New Construction and Major Renovation; Existing Buildings: Operations and Maintenance; Commercial Interiors; Core & Shell; Schools; Retail; Healthcare; Homes; and Neighborhood Development. The LEED for Homes system covers single family homes and low rise multifamily development, however, LEED is currently piloting a LEED for Mid-Rise multifamily (4-6 stories) system.

There are a number of certification and/or recognition systems other than LEED that have been developed, some of which are focused on specific types of development such as residential construction, or on specific aspects of green building such as energy efficiency. The following are very brief summaries of some examples:

- The EarthCraft House Program system provides certification of single and multi-family housing, for both new construction and renovation activities.
- The Collaborative for High Performance Schools is a nonprofit organization that has developed a best practices manual and a building rating and recognition program for schools.
- Energy Star is a program administered by the U.S. Environmental Protection Agency that awards ENERGY STAR ratings to buildings, manufacturing plants, and homes that meet energy performance standards after verification by a nationally trained energy rater.
- Green Globes is a program owned and operated in the United States by the Green Building Initiative (GBI). The program is designed for use on building projects of any size, and is suitable for large and small buildings including offices, multi-family structures and institutional buildings such as schools, universities and libraries. It also can be applied to new construction, retrofits and management and operations of existing buildings. In 2005, GBI became the first green building organization to be accredited as a standards developer by the American National Standards Institute (ANSI), and began the process of establishing Green Globes as an official ANSI standard. The GBI ANSI technical committee was formed in early 2006. Green Globes certification is achieved by undergoing third-party verification by trained regional verifiers.
- National Association of Home Builders (NAHB) developed the Model Green Homebuilding Guidelines, a set of guidelines for residential construction that includes guidance and a point scoring system. In 2007 the National Association of Home Builders (NAHB) and the International Code Council (ICC) partnered to form to establish a standard definition of what is meant by “Green Building.” The standard was developed in compliance with the requirements of the American National Standards Institute (ANSI). The resulting ANSI approved ICC-700-2008 National Green Building Standard defines green building for single and multifamily homes, residential remodeling projects and site development projects. Compared to the NABH Guidelines, the Standard includes more mandatory items and suggests that higher thresholds be met in several categories. A new threshold – “Emerald” - was added to denote the highest achievement in residential green construction. The NABH program includes the option of National Green Building Certification based on the Guidelines and the ICC Standard.
- Laboratories for the 21st Century Environmental Performance Criteria (Labs 21 EPC). This is a program dedicated to improving the environmental performance of U.S. laboratories.
- Sustainable Sites Initiative (SSI) developed by American Association of Landscape Architects (ASLA). SSI is an interdisciplinary effort to create voluntary national guidelines and performance benchmarks for sustainable land design, construction and maintenance practices.

In addition to the certification program examples described above, some states and localities have developed their own sets of green building standards.

A final topic to note in relation to green building and design is building codes. In Virginia, the Virginia Uniform Statewide Building Code (USBC) contains the building regulations that must be complied with when constructing a new building, structure, or an addition to an existing building. They must also be used when maintaining or repairing an existing building, or renovating or changing the use of a building or structure. The USBC is based on model codes developed by the International Code Council (ICC). Over the years, the ICC has developed the International Energy Conservation Code, and has recently launched an initiative to develop an International Green Construction Code, a model code focused on new and existing commercial buildings. The evolution of the building codes, including the USBC, will include increased energy efficiency in the future.

3. Green Building in Virginia

The Commonwealth helps set the green building agenda by its own actions, through funding choices, and, because Virginia is a Dillon Rule state, through its legislative framework. On the first front, Governor Kaine set the state government on the road to greener building. In June 2009, the Governor Kaine signed Executive Order 82, “Greening of State Government” as part of the greater RENEW VIRGINIA Initiative. Building upon Executive Order 48 “Energy Efficiency in State Government” which was signed in 2007, Executive Order 82 states that all executive branch agencies and institutions entering the design phase for construction of a new building greater than 5,000 gross square feet in size, or renovating such a building where the cost of renovation exceeds 50 percent of the value of the building, shall meet Department of General Services (DGS), Division of Engineering and Buildings “Virginia Energy Conservation and Environmental Standards” for energy performance and water conservation. In addition, all such buildings shall conform to LEED silver or Green Globes two-globe standards, unless an exemption from such standards is granted by the Director of the DGS upon a written finding of special circumstances that make construction to the standards impracticable.

A second way that the Commonwealth sets the green building agenda is through its legislative framework. From a green building standpoint, the abilities given to localities by the Commonwealth to regulate or create green building programs is an important consideration. The Commonwealth does not give localities the authority to create or amend the Virginia Uniform Statewide Building Code, or put in place regulations that have the effect of doing so, to suit a desired local objective. There is some latitude for localities to create green building programs via mechanisms included in the Zoning Ordinance or by Board adopted policies related to the Zoning Ordinance. Under the Commonwealth’s legislative framework, localities may use certain energy efficiency or green building incentives. For example, one recent legislative amendment allows localities to consider energy efficient buildings as a separate class of real property for the purposes of local taxation, while another amendment allows localities to grant incentives or provide regulatory flexibility to encourage the use of green roofs in the construction, repair or remodeling of residential and commercial buildings.

Finally, a third way that the Commonwealth plays an important role is by providing funding, or disbursing federal funding, for certain green building-related programs, such as the existing Weatherization Assistance Program or funds available through the American Recovery and Reinvestment Act of 2009 (see the recommendations of the Finance sub-committee in Section 6 below for more information).

4. A Review of Other Local Governments

A. Trends toward Green Building in the U.S.

The movement toward green building is in evidence from stories in the news across the United States. The following are three examples of localities that are pursuing green building ordinances or policies that illustrate the trend, and which were looked at by the Forum members. These examples help demonstrate the range of different approaches that have been taken by different localities, which is discussed in greater detail in Section B below.

- *Jersey City, New Jersey.* Pursuing local ordinances to be more environmentally conscious by purchasing hybrid vehicles, “greener” supplies and materials, and making renovations and new construction conform to higher standards. In addition, the locality is considering ordinances to provide a cash incentive for developers who meet LEED certification, with more money given for higher levels of certification.
- *Frederick County, Maryland.* Launched an environmental sustainability section on the Frederick County Government website. The section is intended to “serve as a gateway to county programs and provide a consolidated picture of the programs and activities dedicated to sustainability in county government and in the community.” It will also “encourage sustainable living and engage the public in long-term efforts that support a healthy environment, vibrant economy and livable community for all Frederick County residents.”
- *Southampton, New York.* The Village Board is considering adoption of a hybrid of the U.S. Green Building Council's Leadership in Energy and Environmental Design, or LEED, and the International Code Council's National Green Building Standard, known as ICC 700.

B. Virginia Localities

As illustrated by the examples in Section A, there are a number of different ways that localities can encourage the use of green building techniques. Perhaps most useful to examine are the steps that other Virginia localities have taken, since these localities are subject to the same state legislative framework outlined in Section 3.

On the public facilities side, some Virginia localities have developed a green building policy that applies to publicly funded and built facilities, such as schools. These policies sometimes vary in the particulars, such as specifying a certain minimum square footage threshold, a type of green building certification program (LEED, Green Globes, etc.), a certain level of certification (LEED silver, LEED gold, etc.), and whether the policy covers just new construction or is applicable to renovation/remodel projects or existing building operations and maintenance. The City of Richmond recently passed a resolution to require achieving LEED silver certification for City-owned projects. Other localities that have adopted green building policies include: Fairfax County, City of Falls Church, City of Alexandria, City of Leesburg, Loudoun County, Prince William County, Spotsylvania County, and City of Charlottesville/Albemarle County.

On the private development side, a number of initiatives have been undertaken by Virginia localities. These initiatives include expectations about achieving green building goals for site development plans, and use of mechanisms such as green building funds and density incentives. More detail is provided in the examples from the City of Alexandria and Arlington County below.

1. **City of Alexandria.** At its April 18, 2009 public hearing, the City of Alexandria City Council unanimously voted to adopt a proposed Green Building Policy. Per this Policy (not ordinance), the City expects that all new development requiring a Development Site Plan or Development Special Use Permit will achieve LEED Silver, or an equivalent rating, for non-residential development and LEED Certified, or an equivalent rating, for residential development. On their website, the City recognizes that a commitment to green buildings does not stop with the adoption of the Policy and states that a second phase is anticipated. This second phase will include the identification of methods to encourage existing buildings to incorporate green improvements, such as through improved outreach and incentives.
2. **Arlington County.** Arlington County uses a number of measures to encourage green building. The first measure is to encourage site plan projects to incorporate green building components and processes. Site plan projects are development projects seeking special exception to the Zoning Ordinance, exceptions which allow more flexibility in building form, use, and density than is normally allowed in the specific zoning district. The goal of this program is to reduce the environmental impacts of development. This program includes a set of six requirements:
 - **LEED™ Accredited Professional.** The program requires that all site plan projects have a LEED™ Accredited Professional on the development and construction team.
 - **LEED™ Scorecard.** All site plan applications in Arlington County must include the LEED™ scorecard with an explanation of all the LEED prerequisites each LEED™ credit, describing how they intend to achieve the credit, or why they are unable to incorporate the component into the project.
 - **LEED™ Tracking.** During project negotiation, a final number of LEED™ credits are identified and the commitment to incorporate them into the project is formalized in a site plan condition. This condition requires that reports be submitted with specific building permit applications. These reports track the progress of LEED™ prerequisites and components throughout the demolition and construction process. Permits will not be issued if LEED™ reports are incomplete.
 - **Construction Waste Management.** The developer agrees to provide a plan for diverting from landfill disposal the demolition, construction, and land clearing debris generated by the project. The plan should outline recycling and/or reuse of waste generated during demolition and/or construction. The plan should outline specific waste streams and identify the means by which waste will be managed (reused, reprocessed on site, removed by licensed haulers for reuse/recycling, disposal, etc.).

- **Energy Star Appliances for Multi-family Residential Development.** In order to reduce energy used by standard appliances and fixtures in high-rise residential projects, a set of standard language on use of EPA Energy Star appliances, fixtures and building components is included as a green building site plan condition (modifications may be made on a case-by-case basis).
- **Standard Site Plan Language.** The county has developed standard site plan language covering green building and LEED issues.

A second measure used by Arlington is a Green Building Fund (the “Fund”). The County established a policy of having site plan developers who do not commit to achieving a LEED rating from the U.S. Green Building Council (USGBC) contribute to the Fund. The Fund is used to provide education and outreach to developers and the community on green building issues. If a project receives LEED certification from the USGBC, the Fund contribution is refunded when final LEED certification is received. A third measure used by Arlington is a Green Building Incentive Program (the “Program”), which allows a private developer to apply for additional density if the project achieves a LEED award from the USGBC. The Program applies to all types of building projects (office, high rise residential, etc.) achieving any one of the four LEED awards.

Finally, other Virginia steps have been taken by Virginia localities to encourage green building. Examples include education and outreach (via websites like the City of Alexandria), and the provision of incentives (such as the adoption of a separate class of real property for energy efficient buildings in Roanoke).

5. Existing Policies and Activities in James City County

A. Public Facility Construction, Operations and Maintenance

James City County has already made progress on addressing environmental and energy stewardship for public facility construction, operations and maintenance. In January 2004, the Board of Supervisors passed a resolution on the Reduction of Transportation Petroleum Use. The resolution set a goal of reducing the County's petroleum usage by 20 percent by 2010. As result the County has been recognized by the National Alternative Fuel by earning the Leadership and Pioneer Efforts in Alternative Fuels Award from Virginia Clean Cities. In September 2007 the Board unanimously adopted the "U.S. Cool Counties Climate Stabilization Declaration" and was recognized by the Virginia Municipal League's (VML) "Green Government" Certification. In 2008, the County received third place in VML's Green Government Challenge. The County has also established a Green Team that, among other efforts, works to improve of efficiency and sustainability of County facilities and operations.

Also in the works through the 2009 Comprehensive Plan are goals for the County's public facilities. The Comprehensive Plan includes the following information under "Design of New Public Facilities" heading in the Public Facilities section of the Plan: "The existing public facilities owned by James City County are a source of pride for citizens and county staff members alike. New facilities should be held to high standards of cost-effectiveness, functional and operational efficiency, energy efficiency, green building design, durability, and, where applicable, aesthetic appeal, so that they complement existing facilities and serve the long-term needs of the County." In the Goals, Strategies and Actions portion of the Public Facilities section, the draft Plan includes the following strategy and actions:

1.4. Design, construct, and operate public facilities in a sustainable manner.

- 1.4.1. Utilize energy efficient heating, cooling, ventilation, lighting, (and similar) systems and designs for newly constructed facilities, and where feasible, for renovations of existing County facilities. Innovation and technology (such as that found in geothermal heating and cooling systems, green roofs, and solar panels) should similarly be employed where feasible, and where appropriate levels of long-term sustainability, cost savings, efficiency, and durability can be clearly expected or demonstrated.
- 1.4.2. Build all new County Buildings and facilities to meet or exceed Silver LEED (Leadership in Energy and Environmental Design) (or industry similar or successor) standard wherever applicable. The Silver LEED (or industry similar or successor) standard should also be sought for renovation projects whenever feasible. Adopt a specific County policy governing the application of sustainable building standards to County built and occupied facilities and buildings.

1.4.3. Utilize Low-Impact Development (LID) designs for newly constructed facilities, and where practical, for renovations of existing County facilities.

Steps have been taken with recent new public facilities/project construction to meet green building standards, such as the inclusion of geothermal systems for the new 9th elementary and 4th middle school designs, and the EarthCraft Home certification of houses in OHCD's Ironbound Square project. In addition, County staff has begun working to achieve LEED Silver certification for the new Police Department and the Warhill Gymnasium currently in the design phase. Most recently, a County policy as mentioned in 1.4.2 above has been developed and was adopted by the Board of Supervisors on March 23, 2010. The policy addresses both the construction and renovation of buildings and the design of the site. In general, the building portion sets a goal of Silver Certification under the Leadership in Energy and Environmental Design (LEED) rating system promulgated by the United States Green Building Council (USGBC). For residential structures, the policy also allows use of the EarthCraft Virginia system which has been used by the County and is well known in Virginia. It is also important to note that the policy allows for considerable discretion by the County Administrator to allow variations to the policy where needed for other County purposes, and it is shown that alternate measures would improve the overall environmental performance of the building.

B. Zoning Ordinance

As described in Section 4 above, many localities have developed green building and design policies and regulations not just for public facilities, but for private development within their borders as well. James City County currently does not have a comprehensive green building policy or regulation for private development, but, as described below, some steps have been taken to encourage green building, or certain aspects of it. The County's zoning ordinance currently contains one provision to encourage green building. In the Cluster overlay section of the ordinance, applicants can get a density bonus of 0.5 dwelling units per acre for "superior layout and quality design which incorporates environmentally sensitive natural design features such as preservation of scenic vistas, preservation of natural areas as suggested by the Natural Areas Inventory, protection of wildlife habitat corridors, the creation of buffer areas around RMA wetlands, and sustainable building practices as referenced in *The Sustainable Building Sourcebook* from the City of Austin's Green Building Program, or the *Sustainable Building Technical Manual* by the United States Department of Energy. (This section of the ordinance was last amended in 1999.)

The Villages at Whitehall development is an example of a development that used this provision to help them achieve their desired residential density. This development committed in a proffer to incorporating sustainable building practices in their design guidelines. Staff and the Planning Commission's Development Review Committee (DRC) reviewed the sustainable building language when the design guideline document was submitted.

C. Legislative Cases (Rezoning and Special Use Permits)

There have been a number of other cases in recent years that have committed via proffers or Special Use Permit (SUP) conditions to green building, not in order to achieve the Cluster density bonus available in the ordinance, as described above, but to help meet the expectations of staff and elected and appointed officials regarding the environmental protection development standards of the Comprehensive Plan. Two projects have committed to meeting LEED standards: the Stonehouse developers committed to a LEED certified 18,000 square foot Amenity Center (not yet designed or constructed), and the Prime Outlets expansion, which was approved by the Board of Supervisors with a green building SUP condition, recently achieved LEED Certified status (currently the only LEED certified structure in James City County).

Other developers have committed to certain aspects of green building and design. A prominent example is the Healthy-E-Communities company which has developed a number of affordable and mixed-cost residential projects in the County. As an example, the developer included in his proffer set the following two proffers for the Chestnut Grove rezoning:

- a. Energy Efficient Homes. All the townhouses shall be certified by a HERS rater to meet or exceed the Energy Star Certification. Each ENERGY STAR qualified new home must achieve a HERS score of at least 86. A copy of the HERS Energy Star Certification for each unit, once available, shall be provided to the Director of Planning.
- b. Green Building/Sustainable Materials. The developer shall incorporate the use of “green” building practices and materials in each unit in the development as follows: paints low in volatile organic compounds (“VOC”), carpets certified by the Carpet and Rug Institute to be free of formaldehyde, low VOC sub-flooring, built-in dehumidifiers, transfer grills in each bedroom for balanced heating and cooling, value engineered framing, engineered lumber, and cellulose insulation. These items shall be shown on the architectural drawings for each unit, and shall be approved as part of the building permit review and inspection process.

While green building conditions or proffers such as those described above have been developed on a case by case basis, certain green building and design-related items have been consistently applied to legislative cases due to adopted Board policies or ordinances. One of these is water conservation measures that apply to water efficient landscaping, irrigation systems, and indoor appliances. Another of these is the use of stormwater management criteria associated with adopted watershed master plans. An important consideration for County staff with regard to conditions and proffers is the ability of staff to verify and enforce compliance with the item in question; depending on the wording, green building related proffers can present challenges in terms of staff expertise and resources. As a final note, the 2009 Comprehensive Plan includes commitment to LEED (or similar or successor programs) among the examples of enhanced environmental protection in the Land Use Section’s Residential Development Standards, and also includes as an Action that the County will conduct a sustainability audit of ordinances and policies as a lead-in to a comprehensive update to the Zoning Ordinance.

D. Sustainable Site Design

The County Board of Supervisors adopted priorities from the Powhatan and Yarmouth Creek watershed management plans in 2002 and 2003, respectively. These adopted priorities as well as the Chesapeake Bay Ordinance have driven sustainable site design initiatives like Better Site Design (BSD) and the use of special stormwater criteria (SSC) and LID stormwater management practices in the County. In 2004, the County received a grant from the National Fish and Wildlife Foundation to install an LID known as a rain garden to handle stormwater runoff at the Courthouse (Courthouse Bioretention Demonstration Project). At the new Warhill High School, all irrigation water is obtained from the stormwater basin, reducing the impact on groundwater.

In 2003, the County initiated a BSD Roundtable project based on a series of model development principles. The model development principles are sustainable site and development practices developed by the Center for Watershed Protection (CWP) and Builders for the Bay. Participants in the Roundtable project included: CWP, JCC, Builders for the Bay, Peninsula Housing and Builders Associations, and other stakeholders in JCC. The purpose of this initiative was to review existing development codes, identify barriers to established national model development principles, foster more environmentally sensitive site designs within the County, and promote incentives, flexibility, and guidance for developers to implement BSD on their development projects. Twenty-four model development principles specific to JCC were developed in the general categories of lot design and development, natural areas/stormwater management, and residential streets and parking lot design. In 2007, a BSD Implementation Committee recommended strategies to incorporate the 24 model development principles into county ordinances and policies. The recommendations are still in the process of being implemented.

E. Housing and Community Development Activities

On another front, James City County currently offers some programs that help meet green building and design related goals (weatherization, etc.) for existing buildings. These programs are administered through the County's Office of Housing and Community Development and include Indoor Plumbing/Housing Rehabilitation, Community Development Block Grants, and Emergency Home Repair. In 2007 the Office of Housing and Community obtained a grant from the Enterprise Green Communities and conducted a Green Building and Sustainable Design for Affordable Housing Workshop. This workshop included a presentation by EarthCraft of Virginia and was attended by 33 participants including representatives of nine local builders. Following this workshop OHCD issued a request for proposals for builders to construct single family homes in the Ironbound Square Redevelopment area. The RFP specified these single family homes were required to be built to EarthCraft certification standards. Since then eight EarthCraft certified homes have been sold in Ironbound Square and the number of EarthCraft certified local builders has increased significantly.

F. Education and Outreach

Finally, on the education and outreach front, General Services staff is currently working on an environmental sustainability section to add to the County's web site. These pages are in draft form and are currently under review by the County's Green Team. These pages will be similar to the Frederick County, MD site in that they will provide a consolidated picture of the programs and activities dedicated to sustainability in county government and in the community.

6. Sub-Committee Recommendations

A. Finance Committee

I. Goals

To obtain County-wide reductions in resource use by stimulating improvements to existing residential, institutional, and commercial buildings, and to appropriately “raise the bar” for new construction to achieve a higher level of performance and resource efficiency.

It is the intent of these recommendations to foster these changes in such a way as to obtain the maximum impact/maximum improvements in performance at the least cost and to stimulate a widespread movement to improve the performance of buildings in the County. We affirm that these improvements have the potential to improve quality of life for County residents in their homes and places of work, while reducing costs, stimulating local business, and increasing local tax revenues.

II. The Nature and Types of Incentives

What motivates us to act the way that we do, or to change our behavior patterns? It could be argued that our lives are largely energized by various kinds of incentives. These could be categorized into two basic types of incentives, commonly known as the “carrot” and the “stick”. Positive (or carrot) incentives motivate us by reward, and negative (or stick) incentives motivate us by the desire to avoid their negative effects. In this context, things like tax credits, savings on our energy bills, or availability of grants or stimulus funds are positive financial incentives that help motivate us to commit to retrofit our buildings for energy conservation. Non-financial positive incentives might include recognition for actions taken, or the good feeling that comes from taking action to reduce our environmental impact. Negative financial incentives might include the monthly impact of high energy costs, while other negative incentives that might motivate us to action might include everything from disapproval from friends or family to having to comply with tighter regulations governing our energy or water use. We all know how our driving habits by the negative incentive of skyrocketing gas prices in 2008.

Another type of positive incentive that can be quite helpful in motivating action toward a desired goal is information. Often people have a desire to make changes, but just don’t know how to go about making those changes, or evaluating whether it makes sense for them to do so. Most people may not have enough time or the motivation to do the research to determine whether it makes sense (for example) for them to change the light bulbs in their house to fluorescent bulbs, or to spend the money required to weatherize their house. It is therefore helpful if impartial information can be provided that both helps people decide whether these improvements make sense, and if so, who can help them to make these improvements, and how they can pay for them. It is therefore helpful not only to educate, but to provide simple steps that can be taken for people to be able to make these changes.

III. Incentives

We have attached to this report a summary of positive financial incentives that are available for homeowners and for commercial building owners (**Attachments #1 and #2**). This is not an exhaustive list, but a starting point that may highlight some resources that people may not have been aware of. We believe that it still remains for the County and for citizens of the County to take things to the next step – using these incentives and other creative strategies to demonstrate to others that it is possible for them to afford to renovate their homes and businesses to improve energy and resource performance.

With the development of a “toolkit” of financial incentives, the intent is to provide practical pathways for people to use to make changes to their own homes and businesses by:

1. Demonstration – Fostering pilot projects that will demonstrate what can be done, and how it was accomplished. This could begin with an energy audit, and recommendations on how to make improvements, and then be followed up with obtaining financing to make the changes. Once the improvements are complete, the energy rater would follow up to quantify the level of performance improvement, and to demonstrate the energy/water savings.
2. Resources – Recruiting partners and resources that can help people accomplish needed changes. These resources will range from energy raters/auditors to banks willing to provide financing, to weatherization contractors, to working with the state to obtain block grant or weatherization funding from the Federal Government.
3. Big Picture changes – Working at the larger scale to help bring about policy changes that can “change the game” and speed the scope of these conservation improvements. This could include getting the Mazria 14x Stimulus Plan (see <http://www.icleiusa.org/action-center/financing-staffing/14x-stimulus-a-plan-for-state-and-local-governments>) implemented locally to provide funds to “buy down” mortgage interest rates for those wanting to do energy improvements. This could also include working at the state level to foster a policy at Dominion Power of investing in conservation measures vs. building new power plants. It could also include advocating for state incentives to foster adoption of solar, wind, and geothermal technologies, including use of net metering. Another possible program that could bring benefit to our citizens is the citizenre REnU (renu.citizenre.com) solarPV program which would install solarPV systems on people’s houses.
4. Prioritizing Buildings for Renovation – Survey and identify buildings and citizens that would most benefit from improvements that would reduce their energy and water costs. Take the initiative to facilitate improvements with citizens who own these facilities and would be responsible partners.
5. Education – Communicate with and help motivate our citizens to pursue making needed changes to their homes and places of business. Tell the stories of success. Help people understand the tools/resources that are available to them.

See the attached summaries of incentives available to homeowners and businesses (**Attachments #1 and #2**). The next section is the Finance Committee's initial recommendations for County action to address/impact the goals stated above.

IV. Recommendations

Since our buildings consume 70% of the nation's electricity, use 12% of our water, and generate 30% of the nation's greenhouse gas emissions, it only makes sense to focus our attention on improving the performance of these buildings, if we want to have an impact upon the problem. Since existing laws and laws that will soon be enacted are addressing the energy and resource use of future construction, and since the biggest "offenders" in the three categories mentioned above are the older buildings in our community, it makes sense that we focus our efforts on finding ways to impact the efficiency of these existing structures. For this reason, the Finance Committee has developed a series of initial recommendations to pursue in attempting to impact the problem. We recommend the following:

1. Use the completed ICLEI CACP greenhouse gas emissions baseline information to compare to other communities, and set goals for improving our performance.
2. Develop partnerships with Virginia Power and Virginia Natural Gas to better understand utility usage patterns and where improvements could have the biggest impact. Survey the properties in our community to supplement findings from the utility partners.
3. Establish specific goals to impact the energy and resource use and the greenhouse gas emissions of our community, and develop strategies to implement to achieve the goals.
4. Consider creating a County position to facilitate the achievement of these goals, and to begin to seek funding and partnerships to implement them. Consider also having an appropriate citizen advisory/working board to help and work with this County coordinator
5. Develop a partnership with William and Mary to take advantage of the benefit that this could bring to both the County and the College.
6. Partner with the City of Williamsburg to develop and implement these initiatives.
7. Develop a "toolkit" of evaluation, financial, and rehabilitation strategies to use in rehabilitation of both residential and commercial properties for improved performance.
8. Identify local expertise that can be involved in developing and implementing solutions. Look for ways to develop additional local partners in order to stimulate local businesses, and develop local expertise. Work with TNCC for "green jobs" training where appropriate.
9. Develop partnerships with local financial institutions and corporate citizens to assist in implementing rehabilitation strategies.
10. Seek stimulus and other grant funding to help in implementing the rehabilitation goals of the Community.
11. Consider partnering with Energy Star to sponsor a Home Performance with Energy Star program, which would train local contractors to provide comprehensive energy audits and then implement energy improvements under the oversight of the program. (This is the program that is currently being implemented in Charlottesville, and has the potential to create "market transformation" within a community, and radically impact county energy use).
12. Develop relationships with other communities that are attempting to similarly impact their resource use (such as Charlottesville) to share lessons learned.

13. As quickly as possible, implement pilot rehabilitation projects that can become “poster children” for the impact that these rehabilitations can have. Carefully document before and after performance, and use these projects to help promote ongoing efforts.
14. Develop educational strategies to help people and businesses understand the nature of the problem, how it impacts them, and what they can do about it.
15. Develop a user-friendly website that becomes a resource to educate and inform our citizens and to tell the stories of what is being done to impact these problems. The website should also be a resource center for tools and strategies that people can use for themselves, along with appropriate links to other online resources that they can access for more information.
16. Develop partnerships with the Community Action Agency, the Redevelopment and Housing Authority, JCC Housing and Community Development, Housing Partnerships, and other local “players” to coordinate rehabilitation efforts, so as to have the maximum impact and avoid redundancy.
17. On a regular basis, reevaluate how we are doing against the indicators that were a part of the original baseline energy, resource and emissions study.

V. Funding Sought

There are quite a number of funding opportunities available at the current time, including several possible streams of funding that stem from the ARRA (American Recovery and Reinvestment Act). The Finance Committee has made an application to EPA’s Climate Showcase Communities for funding to renovate houses for energy efficiency in concert with a project that JCC’s Housing and Community Development is undertaking to purchase and renovate foreclosed properties in the County.

VI. Conclusion

Due to the nature of the resource challenges that face us as a nation in the long term, it is important that we take immediate steps to help our citizens transform the homes and businesses in which we spend the majority of our lives. When completed, the impact of these energy efficiency retrofits will be immediate – not only improving quality of life, but putting money back in the pockets of our citizens, while stimulating our local economy with the jobs that this work will create. There is no reason why James City County and the City of Williamsburg cannot take a place of leadership in the nationwide movement to “green” the buildings in which we live and work every day. There has never been a better time to commit to make an impact upon this problem, when the tools to make our efforts successful lie right around us and wait for us to take the initiative. It only remains for us to have the courage to make the commitment to really pursue them.

B. Housing Committee

The Housing Subcommittee of the Green Building Round Table reviewed the need and potential for incorporating green building improvements to existing residential properties in James City County. The Committee concluded that, although the County’s housing stock is relatively new, maintenance and renovation of existing homes provide significant potential for improving the resource efficiency of residential property in the County. Potential actions to encourage “green” improvements to existing residential property include:

- Continue the existing practice of including energy audits and improvements in housing rehabilitation projects administered by the County's Office of Housing and Community Development. Seek to incorporate, where economically feasible, the comprehensive EarthCraft Single Renovation Program designed to achieve a 30% or greater increase in energy efficiency and resource efficient practices in major housing rehabilitation projects administered by the County's Office of Housing and Community Development.
- Assist the Williamsburg-James City County Community Action Agency, the designated administrator of the federally funded Weatherization Program, to fully utilize significantly increased funding provided by the ARRA economic stimulus program to weatherize and increase energy efficiency of existing homes occupied by lower income households within James City County.
- Seek grant funding available from the ARRA economic stimulus program and other government, private, and non-profit sources to develop education, outreach, and financial incentive programs to promote energy audits, analysis, and green energy efficiency home improvements for a broad range of County homeowners.
- Publicize, through providing information to the media, the beneficial results of green energy efficient housing weatherization, rehabilitation, and renovation projects undertaken in the County.

C. Design and Construction Committee

I. Design and Construction Committee Objective

The objective of the *Design and Construction subcommittee* was to assess and make recommendations regarding the following sustainable development practices: sustainable sites, water efficiency, energy and atmosphere, materials and resources, indoor environmental quality and certifications (rating systems).

II. Background

Recommendations are based on discussions among group members, presentations to the Green Building Roundtable committee, review of existing rating systems, and a review of green building studies, programs and policies of other Virginia jurisdictions. These jurisdictions include: Arlington County, the City of Alexandria, Fairfax County, the City of Falls Church, the City of Leesburg, Loudoun County, Prince William County, Spotsylvania County, the City of Charlottesville, and Albemarle County (see **Attachments #5 and #7** for additional information on Arlington County). One valuable resource prepared by the City of Alexandria (**Attachment #4**) summarizes the green building policies and programs adopted by jurisdictions within the greater Washington DC metropolitan area.

In the process of formulating recommendations, the subcommittee made the following qualifying decisions:

1. The JCC green policy program should recognize limitations associated with the Dillon Rule therefore; policy objectives are best achieved through the use of

incentives, education, and positive examples as exhibited by the County with public project development (see **Attachment #3** for a list of possible incentives).

2. JCC should utilize existing green building rating systems as benchmarks and recommended frameworks for design, rather than designing its own rating system
3. The green building efforts of other Virginia jurisdictions should be referenced and modified to be County specific rather than repeated.

III. Assessment of Green Building Program Elements

The following is a list of typical elements and/or characteristics of sustainable policy programs of other Virginia jurisdictions:

- A Mission Statement of Green Building Benefits
- Policy statement with county-specific Environmental/Green Priorities
- Select and establish an existing green building rating system as a benchmark – but allow flexibility to use an equivalent system
- Distinguish between Public vs. Private policies
- Assume that Public facilities should set examples and educate (see **Attachment #8** as an example)
- Provide development standards, guidelines, checklists for Public Facilities
 - New construction (commercial and residential)
 - SUPs and Rezoning,
 - By-right (encourage and incentivize)
 - Sustainable renovations and site retrofits
 - Neighborhood Development
- Provide Incentives, Education, and Outreach for stakeholders (see **Attachment #6** as an example)
- Require Third Party Certification
- Allow for Flexibility – case by case determination for unique circumstances
- Plan a Phased Approach
- Encourage Innovation
- Monitor Program Progress and Re-evaluate for improvements

Third-party green building certification and rating systems currently being implemented within this area and/or other jurisdictions in Virginia include LEED, Energy Star, Green Globe, EarthCraft, and NAHB Model Green Home Building Guidelines. These rating systems are described in Section 2 of this document and typically applied in the following areas:

- **PUBLIC FACILITIES** – LEED, Green Globe, Energy Star
- **RESIDENTIAL** – LEED, EarthCraft, Energy Star, NAHB Model Green Home Building Guidelines
- **COMMERCIAL** – LEED, Energy Star
- **MIXED USE** – LEED ND

The Energy Star system is being utilized in several jurisdictions to implement county-wide or city-wide energy efficient building renovation programs. This system seems to be a cost-effective and well-developed system with third party energy audits for building renovations; however, site elements such as landscaping, LID features, etc. are not addressed.

LEED is comprised of several rating systems including: New Construction, Existing Buildings: Operation and Maintenance, Commercial Interiors, Core & Shell, Schools, Retail, Healthcare, Homes, and Neighborhood Development. The EarthCraft rating system is specifically designed for residential construction of neighborhood developments, individual single-family homes, and multifamily units 3 stories or less. In comparison to LEED for homes, EarthCraft tends to be more cost effective. Of the rating systems reviewed, LEED and EarthCraft have the following key features:

- The most comprehensive with respect to sustainable development practices for site design, water efficiency, energy and atmosphere, materials and resources, and indoor environmental quality. (Please note, however, that programs such as the National Green Building Standard from NAHB are evolving to be more comprehensive in nature. Evaluation of other programs should be on-going.)
- Require a systematic and integrated design and implementation process.
- Require third party certification.
- Have successful track records and trained/skilled professionals within Virginia jurisdictions.

Because of these characteristics, for new construction, this committee suggests utilizing EarthCraft and LEED rating systems as the benchmark rating systems with enough flexibility to allow innovation and alternative equivalent systems. EarthCraft is suggested for single and multifamily units 3 stories or less. LEED is suggested for Subdivisions, Multifamily units (3 or more stories), commercial properties, and public facilities.

One should note; however, that the level of sustainable site design requirements for EarthCraft and LEED can vary considerably according to design priorities selected by the design team. Therefore, with respect to established JCC sustainable site design initiatives, practices, and priorities such as LID, Chesapeake Bay Ordinances, Better Site Design, and special stormwater criteria these ratings systems should be consider complimentary rather than all-inclusive.

The American Association of Landscape Architects (ASLA) has developed the 2009 Sustainable Sites Initiative (SSI), a sustainable site design rating system which is designed to be complimentary to LEED rating system. The SSI system is a comprehensive site design rating system; however, the system is new and is currently in the pilot phase.

IV. Public Facility Policy Recommendations

The subcommittee members agreed that our public facilities and programs should set an example for the private sector. As noted above, a County policy as mentioned in 2009 Comprehensive Plan Action 1.4.2 above has been developed and was adopted by the Board of Supervisors on March 23, 2010. The policy addresses both the construction and renovation of buildings and the design of the site. In general, the building portion sets a goal of Silver Certification under the Leadership in Energy and Environmental Design (LEED) rating system promulgated by the United States Green Building Council (USGBC). For residential structures, the policy also allows use of the EarthCraft Virginia system which has been used by the County and is well known in Virginia. It is also important to note that the policy allows for considerable discretion by the County Administrator to allow variations to the policy where needed for other County purposes, and it is shown that alternate measures would improve the overall environmental performance of the building. The subcommittee members reviewed and commented on this policy prior to its adoption by the Board of Supervisors.

V. Private Construction Policy Recommendations

Subcommittee members suggest that the best approach for a JCC Green Building Program for private construction is to encourage rather than mandate, sustainable development by the use of incentives, education, and a positive example as exhibited by JCC in the development and restoration of public projects. In order to provide some guidance, the majority of subcommittee members concurred with the policy statements (many of which were derived from policies already adopted by other Virginia localities) listed below. (Note that the language of these statements exactly replicates what was considered by the committee – however, for the committee’s final recommendation; please see the summary statement below.)

- Develop a checklist that tracks green building/sustainable development practices.
- Require new developments to complete LEED (or equal) assessment checklist explaining how the development will voluntarily comply with LEED or equivalent.
- Ongoing public education to encourage the implementation of green building practices. Much of this is to be accomplished by links to appropriate web sites. JCC will consult with EarthCraft or equivalent organization for such sites.
- New Development: JCC should develop incentives, appropriate standards, submission requirements and a review process for green development.
- Existing Development: JCC should develop a model program with audits, incentives, etc. for “greener” existing building and sites.
- Density incentive of 0.15 to 0.35 Floor Area Ratio for LEED or equal certification, ranging from Certified to Platinum. Bond to ensure compliance.
- Create a LEED or equivalent scorecard for site plans.
- Develop Energy Star or equivalent requirement for appliances and fixtures in multifamily buildings.
- Create a Voluntary Green Home Choice program based on EarthCraft or equivalent.
- Comprehensive Plan amended to incorporate support for green building practices.

- Energy Star or equivalent home designations for residential development proposals at the high end of the Comp Plan density range.
- Policy plan support for better site design, LID's and energy/water conservation.
- Proffer commitments during zoning process for a variety of green building and LID practices.
- LEED, EarthCraft or equivalent projects will have expedited review of building permits and site plans.
- The cost of LEED, EarthCraft or equal certification will be offset by reduced cost of JCC permits, fees, tap fees, etc.

The following italicized policies statements have been adopted by other locales but were not supported by a clear majority of the subcommittee members:

- *\$0.03/SF contribution to Green Building Fund for projects not seeking LEED or equal certification.*
- *Comprehensive Plan linkages established between the incorporation of green building/energy conservation practices and the attainment of certain Comprehensive Plan Options, planned uses, and densities/intensities of development.*
- *LEED certification or equivalent for nonresidential and multi-story residential zoning proposals in growth centers seeking the high end or overlay of the planned density/intensity range, a Comprehensive Plan Option, a change in use from what would be allowed as a permitted use under existing zoning.*

VII SUMMARY

In summary, the subcommittee suggests that the best approach for a JCC Green Building Program is to encourage, rather than mandate, sustainable development by the use of incentives, education, and a positive example as exhibited by James City County in the development of public projects. A list of possible incentives and potential issues associated with the incentives are provided as an attachment (**Attachment #3**). Committee members particularly encourage the incentive approach for small commercial and residential projects. However, the committee suggests that when the public facility, rezoning, or SUP project involves a building over a certain size (for instance, 10,000 sf), EarthCraft or LEED certification, or equivalent, is justified and should be required. (Please note that this document represents knowledge as of a June 2010, and that ordinance or policy language should be based on on-going evaluation of the most recent information and programs.)

D. Communications Committee

I. Communications Overview

The purpose of the Communications sub-committee is to actively engage with the community to promote green building practices (sustainability). The Communications sub-committee will provide an opportunity for the Roundtable to raise public awareness, gain support, engage community members, promote successes, deliver calls for action, and inspire behavioral change.

II. General Communications Strategies

To communicate effectively, the Green Building Roundtable Forum (GBRF) will address the following issues:

- The GBRF message
- The target audience
- How to reach the target audience
- What does your audience know and think now?
 1. What you would like them to know, think, and do?
 2. What are perceived benefits to sustainable development?
 3. What are perceived barriers of sustainable development?
 4. Why is it in the best interest of the target audience to take action?

III. Message

The message will need to be tailored depending on the target audience and the particular subject that is being communicated (i.e. financial incentives that are available, upcoming zoning ordinance amendments, etc.).

IV. Identifying the Target Audience

The first steps in conducting an outreach campaign are to identify the target audience, the message objective and the appropriate messenger or medium. Below is an outline of selected segments of populations along with suggestions on potential communications strategies that are generally effective for reaching out to that group.

The Communications subcommittee developed communications strategies that required no, or minimal at most, expenses to execute.

- ❖ County Employees
 - A valuable community source of information.
 - Web Site, TV 48, paperless messages (i.e. e-pamphlets), social networking, Green Team.
- ❖ Residential Sector
 - What are the questions, incentives, and options?
 - Home Owners
 - Renters & Landlords
 - Media releases, magnets, web site, TV 48.
- ❖ Business Sector
 - What is the methodology to incorporate green practices?
 - Large Scale Businesses
 - Small Scale Businesses
 - Greater Williamsburg Chamber and Tourism Alliance, media releases, social networking, partnerships.
- ❖ Youth
 - Higher Education
 - Social responsibility.
 - Concentration on “why to go green”.

- Encourage input. Show we value their input.
 - Facebook, Twitter, YouTube, Web Site. Internal publication, i.e. Flat Hat, social networking.
- Elementary and Secondary School Children
 - Already part of their culture.
 - Offer recycling at sports venues.
 - “It’s the right thing to do” message.
 - What is the county doing for me?
 - PTA, web site, media releases
- ❖ Retirement Community
 - Show that they can change and in doing so provide real leadership.
 - Connection with youth.
 - Social networking, media releases.
- ❖ Development Community
 - How do we encourage, incentivize and reward them?
 - Streamline permit process?
 - Eliminate regulatory review (DRC)?
 - How to reduce costs?
 - Quicker project Turnover – 5 projects in a month vs. 3 non-green projects.
 - What is the correct message to this audience?
 - Audience = Associations, i.e. Builders, Realtors. Suppliers, Architects, Engineers, Home Improvement Co., Surveyors.
 - Greater Williamsburg Chamber and Tourism Alliance, media releases, social networking, partnerships

V. Connecting with Target Audience

Getting your message out to local media can be one of the most effective ways of education the public and gaining the support needed for sustainable community efforts. Below are a sample press release and a list of local media resources.

Sample Press Release (excerpt)

FOR IMMEDIATE RELEASE Local Government and Business Partnerships on Outreach

Chicago, Illinois: The Chicago Green Office Challenge engages major property managers, building owners, and tenants in a friendly competition to significantly increase the environmental performance of buildings in the City’s central business district. Participants work to decrease energy consumption, increase their recycling rates, and find others ways to reduce their environmental impacts. The Challenge brings together the tools developed by key partners including the US EPA’s Energy Star program, the Building Owners and Managers Association, ICLEI – Local Governments for Sustainability, the Clinton Climate Initiative, and the US Green Building Council. Participants get to reap the benefits of lower energy bills as well as recognition from the Mayor in print and online media

VI. Media Type

❖ Newspapers

- Virginia Gazette
- Daily Press
- Toano Norge Times
- Richmond Times Dispatch
- El Eco De Virginia
- Tidewater Hispanic

❖ Online Newspapers

- wydaily.com,
- Pilotonline.com

❖ Magazines

- Next Door Neighbors
- Williamsburg Health Journal
- Inside Business

❖ Radio

- The Tide 92.3 FM
- WBach 107.9 FM
- WMBG 740 AM
- WHRV.89.5
- WNIS790
- WTAR 850 AM
- KICK 106.1 FM
- BOB 93.7

- Eagle 97
- JAMZ 103
- 2WD 101.3
- The Fox 106.9
- FM99 WNOR
- Extra 99.1 FM
- Radio Selecta 1050 AM

❖ TV

- Channel 3 WTKR
- Channel 10 WAVY
- Fox 43
- Channel 12 WWBT Richmond,
- Channel 13 WVEC, Channel 15 WHRO

❖ Government Publications

- Virginia Municipal League
- Virginia Town and City
- Update, Virginia Association of Counties
- County Connections,
- Ship's Log
- FYI

VII. Community's Current Knowledge of Sustainable Development

By understanding what the community already knows about sustainable development will help the GBRF address key issues and close the knowledge gap. With our limited amount of resources the GBRF should focus on educating the community. Sustainable development is about avoiding wasteful practices; the GBRF will adhere to this concept by not wasting resources educating the community on issues they already know. Rather, we will be strategic in conveying and promoting our message.

VIII. Post GBRF Knowledge

Our communications efforts will focus on what we want our community to do. Communicating action and the means to act will simplify sustainable practices. The GBRF acknowledges that each audience segment has a different way of receiving information and different information that needs to be delivered. By avoiding a one-size-fits-all strategy, the segments will be more responsive to the message and more likely to act.

IX. Additional Resources

1. CLEI, Local Governments For Sustainability Resource Guide
2. <http://jamescity/Departments/Communications/media%20list%20-%20feb.htm>

Attachment 1: Tax and Utility Incentives Available to Homeowners (Sept. 2009)

1. Virginia Natural Gas Incentives
 - a. Free Programmable Thermostat
 - b. Equipment Rebates (temporarily suspended – hope to reinstate them)
 - i. \$500 for a 90%+ AFUE Furnace
 - ii. \$500 for a tankless gas water heater (.82+ EF)
 - iii. \$150 for a tank type gas water heater (.62+ EF)
 - c. Low Income Weatherization Program - Virginia Natural Gas has partnered with state certified weatherization agencies – including the Williamsburg/James City County Community Action Network to provide cost-effective energy efficiency measures for customers with an income below 175% of the federal poverty (\$38,588 for a family of 4).

Besides weatherization measures, the agency may determine that equipment and appliance repair or aid with appliance replacement is needed. Participants are asked to partner with the program to develop and carry out a household energy savings Action Plan. All efficiency measures and energy education services are provided free of charge to the customer.

Peninsula Residents (other than Hampton) should call the Williamsburg - James City County Community Action Network at (757) 229-9389.

2. Federal Tax Credits for Homeowners (<http://www.energystar.gov/taxcredits>)
 - a. Tax Credit for 30% of the cost of materials (\$1,500 cap, and placed in service in 2009-2010 on a primary residence) for the following:
 - i. Insulation
 - ii. Windows & Doors meeting efficiency requirements
 - iii. Asphalt & Metal Roofing meeting energy star reflectivity requirements
 - iv. HVAC equipment meeting efficiency requirements
 - v. Non-solar water heaters meeting efficiency requirements
 - vi. Biomass stove meeting efficiency requirements
 - b. Tax Credit for 30% of the Total Cost (no cost cap, and placed in service by 2016) for the following:
 - i. Geothermal Heat Pump Systems
 - ii. Solar Hot Water Systems
 - iii. Solar Photovoltaic Systems for power
 - iv. Residential Wind Power Systems
 - v. Fuel Cell and micro-turbine systems (limit of \$500 per ½ KW)
3. Renewable Energy Credits – Available through some solar and wind installers, these are available for at least solar hot water, solar PV, and wind systems, and provide an annual cash payment. Estimated payment for an \$8-\$9,000 residential solar hot water system is \$800

annually (in addition to 30% tax credit on installation of system). One source for more information is: Solar Services, Inc. (757) 427-6300.

4. State Tax Exemption Holiday: From Friday, October 9 through Monday, October 12, 2009 Virginia's ENERGY STAR Sales Tax Holiday will take place. During the holiday, Virginians will be exempt from paying the state and local sales tax on ENERGY STAR qualified products that cost \$2,500 or less (products such as compact fluorescent light bulbs (CFLs), Ceiling Fans, Clothes washers, Dehumidifiers, Dishwashers, Programmable Thermostats, Refrigerators, and Room Air Conditioners).
5. Ongoing Virginia State Tax Deduction for certain Energy efficient appliances: 20% of the sales tax paid in purchasing heat pumps, water heaters, oil furnaces, air conditioning systems that meet certain efficiency standards, as well as clothes washers, room air conditioners, dishwashers, and standard size refrigerators that meet applicable energy star requirements. See website for details: <http://www.dmme.virginia.gov/DE/taxcredit.shtml>

Attachment 2: Tax and other Financial Incentives Available to Commercial Building Owners (Sept. 2009)

6. Federal Tax Deduction for Commercial Building Owners (<http://www.energystar.gov/taxcredits>)

Businesses can take a tax deduction for new or renovated buildings by reducing the energy costs associated with three components—lighting system; building envelope; and heating, cooling and water heating equipment. Buildings must exceed the ASHRAE 90.1-2001 standard and be placed in service between January 1, 2006 and December 31, 2013 in order to be eligible. (See IRS Notice 2006-52 and IRS Notice 2008-40 for details) The deduction is available in two levels:

Buildings that save 50% or more of projected annual energy costs across all three system components are eligible for a tax deduction of \$1.80 per square foot.

Buildings that save a percentage of projected annual energy costs for one of the three components—building envelope (10% energy savings), lighting (20%), and heating & cooling (20%)—are eligible for a partial deduction of \$0.60 per square foot.

The organization that makes the expenditures is generally the recipient of the deduction, which can be taken in the year the building is placed in service. In the case of a public building, the designer may take the deduction. The building must be certified by a qualified individual (a licensed engineer or contractor) as meeting the energy cost savings goal.

7. Tax Incentives for Solar, Wind and Geothermal Systems: The incentives apply to solar and wind systems placed in service from January 1, 2006 until December 31, 2016 and to geothermal heat pump systems placed in service from October 3, 2008 until December 31, 2016. The incentives are worth 30% of the installed cost of the solar or wind system, and 10% of the cost of the geothermal system. The economic stimulus legislation also provides the option for businesses to take a grant from the U.S. Treasury Department during 2009 and 2010 in lieu of the investment tax credit. Credit Claimed on IRS Form 3468.
- a. Tax Credit or Grant for Geothermal Systems: Qualified geothermal systems are ground source heat pumps with related equipment used to produce, distribute, or use energy derived from a geothermal source. Commercial customers can get an investment tax credit of 10% of the installed cost, available through 2016. The ARRA legislation also provides the option of taking a grant in lieu of the credit, worth 10% of the installed costs for equipment placed in service during 2009 and 2010.
 - b. Tax Credits for Solar Systems: Qualifying equipment will use solar energy to (1) generate electricity, or heat/cool or provide hot water to a structure, or (2) illuminate the inside of a building by means of fiber-optic distributed sunlight (tube systems and passive solar are not eligible). For more information visit www.seia.org. For solar water heating, systems must be certified for performance by the Solar Rating Certification Corporation (SRCC) or a comparable entity endorsed by the state government in which the system is

located. At least half of the energy used by the system to heat the water must be solar energy. Expenses for heating swimming pools or hot tubs are not eligible.

8. Renewable Energy Credits - Available through some solar and wind installers, these are available for at least solar hot water, solar PV, and wind systems, and provide an annual cash payment. Estimated payment for an \$8-\$9,000 solar hot water system is \$800 annually (in addition to 30% tax credit on installation of system).
9. Performance Contracting - This is starting to emerge as an option for retrofitting existing buildings to improve energy performance. A performance contractor will evaluate your building and propose to make improvements to your building envelope and systems, and will help obtain financing, with the payments to make the improvements to be paid for by improvements in energy performance that will be guaranteed by the contractor. This industry is somewhat in its infancy, but state energy performance contracts are in place now that allow governmental entities to avail themselves of this option, and George Mason University recently completed renovation of campus buildings using this form of contract with great success.

For State ESCO Forms/guidance, see

<http://www.dgs.state.va.us/DivisionofEngineeringandBuildings/DirectorsOffice/DEBContracts/EnergyPerformanceContracting/tabid/393/Default.aspx>).

For information on performance contracting at GMU, see

<http://facilities.gmu.edu/physicalplant/energy/pc/main.html>

Attachment 3: Green Building Design Incentives

The following list includes incentives that have been considered by communities looking to encourage green building or low impact design. The bulleted items below each incentive identify issues that should be considered before pursuing the incentive.

Increased Densities

- Allow greater residential densities with the implementation of techniques.
- With more sensitive design the land is able to manage more units.
- Potentially greater impacts needing mitigation.

Reduced Review Time / Expedited Review

- Commit to a priority status with a maximum time between receipt and review.
- Project may need special studies and reviews that must be identified early.
- Impacts to staffing resources and other project review schedules. Outside consultants could also be used to expedite.

Property Tax Reduction

- Reduce or waive property taxes for a given number of years.
- Lower service requirements result from lower impacts.
- Reduced revenues.

Reduced Application Fees

- Waive all or a portion of the submittal fees on projects.
- Due to lesser impacts to the community, lower fees are charged.
- Impacts to jurisdiction resources. May be offset by reduced habitat restoration and environmental costs

Public Recognition

- Emphasize projects on website, at applicable Board, PC and other (Wetland/Chesapeake Bay Board, etc.) and in utility mailers.
- Highlight the great development projects going on throughout the area & create public awareness.
- Staff resource impacts.

Dedicated Review Team

- Create a review team that is familiar with and dedicated to projects.
- Specialized team with technical expertise is necessary and more efficient assistance and review.
- Initial training of team members in techniques will be required in any event. Outside consultants could also be used - charged to applicant or paid for by jurisdiction.

Flexibility in Bulk, Dimensional & Height Restrictions

- Allow greater building heights and floor area ratios as well as reduced setbacks.
- Provides flexibility in overall site design. Allows reduction in building footprint. Addresses clustering needs.
- Consistency/compatibility with existing development and urban design goals.

Adjustments to the Required Parking

- Reduce parking requirements.
- Reducing parking is a technique for reducing impervious surfaces as well as a way to encourage more projects.
- May conflict with other community objectives.

Lower Stormwater Inspection Fees

- Reduce charges when development meets thresholds.
- Lower impacts to system capacity, so lower fees are appropriate.
- Reduced capital funds. Compensate by raising charges for conventional developments.

Fee Structure

- Develop a fee structure that is based on impervious surface. Fee reduction will be awarded based on implementation thresholds

Reduced Requirements for Conventional Stormwater Management

- Allow developers to reduce the amount of conventional stormwater management when they implement techniques. Example, if roof runoff is re-used onsite, or infiltrated on-site, the development can remove the roof square footage in the calculations for determining detention pond size.

Jurisdiction-Furnished Materials Program

- Jurisdiction could supply materials (pervious concrete, plants, soil, mulch, compost, etc) to offset development costs on projects.

Attachment 4: Green Buildings in Alexandria Policy Recommendations

*Green Buildings in Alexandria: Policy Recommendations
Appendix #5*

**Regional Green Building Policies and Programs
Overview: COG Members**

February 5, 2008 (with updates for Fairfax County)

Jurisdiction and Green Building Contact Information	Policies for Public Facilities	Policies for Private Development
VIRGINIA		
<p>City of Alexandria, VA www.alexandriava.gov</p> <p>Jeremy McPike jeremy.mcpike@alexandriava.gov</p> <p>Erica Bannerman erica.bannerman@alexandriava.gov</p>	<p>Green Building Policy for City facilities. Requires:</p> <ul style="list-style-type: none"> • Analysis procedures for LEED feasibility for facilities 5,000 or greater • Staff green building training • Procurement practices for green Architectural/ Engineering services, buildings maintenance, and supplies • LEED-registered projects in planning and construction. 12, 000 sq ft green roofs. • LID demonstration projects • Participation in Energy Star, Rebuild America, and the USGBC. • Public Schools incorporate energy conservation and green measures <p>Green public projects in construction include TC Williams High School - LEED certification pending (Awarded Virginia Sustainable Building Network's Green Innovation Award), and the Charles Houston Recreation Center.</p> <p>LEED registered projects include the new DASH Bus Facility, Police Department, and Human Services under LEED Existing Building.</p> <p>A 5,000 square foot green roof and 5,000 square foot bioretention area will be installed at Coral Kelly Magnet Elementary School by 2009.</p> <p>Additionally, the Station at the Yard project is a mixed-use building with a LEED registered fire station and retail for the first floor and four stories of EarthCraft affordable/ workforce housing units above.</p>	<p>Checklist that tracks green building/ sustainable development practices</p> <p>Contractors of new developments required to complete LEED assessment checklist explaining how the development will voluntarily comply with LEED.</p> <p>Private Development includes the first LEED - Gold certified condo Project in Virginia at the Cromley Lofts.</p> <p>Ongoing public education to encourage the implementation of green building practices.</p> <p>Planning staff is developing possible incentives, appropriate standards, submission requirements, and the City's review process for green buildings.</p>

Jurisdiction and Green Building Contact Information	Policies for Public Facilities	Policies for Private Development
<p>Arlington County, VA www.arlingtonva.us</p> <p>Joan Kelsch jkelsch@arlingtonva.us</p>	<p>Internal working policy supporting sustainable practices. Formalized policy requiring LEED Silver certification of all public buildings over 5,000 sq ft. in development.</p> <p>Demonstration green roof on County office building.</p> <p>Green public buildings include LEED certified Langston Brown School and Community Center; LEED certification pending for Walter Reed Community Center, the Parks Operations building, and Shirlington Library.</p>	<ol style="list-style-type: none"> 1. LEED Scorecard for site plan projects. Expectation 26+ credits. Staff oversight. 2. Density Incentive of .15-.35 FAR for LEED certification (ranging from certified to platinum). Bond to ensure compliance. 3. \$0.03/sq ft contribution to Green Building Fund for projects not seeking LEED certification. 4. Energy Star requirement for appliances and fixtures in multifamily buildings. 5. Voluntary Green Home Choice program based on EarthCraft.
<p>Fairfax County, VA www.fairfaxcounty.gov</p> <p>Noel Kaplan Department of Planning and Zoning Noel.Kaplan@fairfaxcounty.gov</p>	<p>Sustainable Development Policy for Capital Projects adopted by Board of Supervisors, February 2008.</p> <p>Goal of LEED silver certification for county projects greater than 10,000 square feet in size; project teams encouraged to meet LEED ratings beyond Silver if practicable.</p> <p>Goal of LEED certification for projects between 2,500 and 10,000 square feet; project teams encouraged to attain LEED Silver level if practicable.</p> <p>Highest LEED level practical for smaller projects.</p> <p>Energy Management Control Systems into all new county buildings and retrofits.</p> <p>LID demonstration projects.</p>	<p>Comprehensive Plan Amended in December 2007 to incorporate support for green building practices.</p> <p>Plan linkages established between the incorporation of green building/energy conservation practices and the attainment of certain Comprehensive Plan Options, planned uses, and densities/intensities of development.</p> <ul style="list-style-type: none"> - LEED certification or equivalent for nonresidential and multi-story multifamily residential zoning proposals in growth centers seeking: <ul style="list-style-type: none"> - The high end or Overlay Level of the planned density/intensity range; - A Comprehensive Plan Option; - A change in use from what would be allowed as a permitted use under existing zoning. - ENERGY STAR Qualified home designations for other residential development proposals at the high end of the Plan density range. <p>Policy Plan support for better site design, LID, and energy/water conservation</p> <p>Proffer commitments during zoning process for variety of green building and LID practices.</p> <p>Ongoing public education to encourage LID techniques, including LID</p>

Jurisdiction and Green Building Contact Information	Policies for Public Facilities	Policies for Private Development
<p>City of Falls Church, VA</p>	<p>City Council 2007 Vision and Strategic Plan promotes green building and LID. Directs staff to create green building program for public and private buildings.</p> <p>2006 Comprehensive Plan incorporates policies for green building.</p> <p>Pursuing use of recycled carpets in City building renovations. Energy management system in City Hall.</p> <p>LID demonstration project in City Hall area.</p>	<p>City Council 2007 Vision and Strategic Plan promotes green building and LID. Directs staff to create green building program for public and private buildings.</p> <p>2006 Comprehensive Plan incorporates policies for green building.</p> <p>Successful negotiations for LEED and green roofs on four private projects.</p>
<p>Town of Leesburg, VA</p>	<p>Leesburg Town Plan promotes energy efficiency and use of green building standards such as LEED</p>	<p>Leesburg Town Plan promotes energy efficiency and use of green building standards such as LEED</p>
<p>Loudoun County, VA www.loudoun.gov</p>	<p>Green building practices currently being implemented. Energy efficiency and green design in current RFPs. ENERGY STAR appliances, tankless water heaters, dual flush toilets, waterless urinals, programmable thermostats, and ultraviolet lighting in ductwork are a County standard.</p> <p>LEED accredited professionals on staff. Energy manager on staff since 2001.</p> <p>Energy accounting software in use for public buildings. Undertaking lighting retrofits.</p>	<p>Countywide Housing Policies, CPAM 2007-0001 - Adopted September 18, 2007</p> <p>Guiding Principles Policies - The County encourages development that utilizes energy efficient design and construction principles, promotes high performance and sustainable buildings, and minimizes construction waste and other negative environmental impacts.</p> <p>Mixed Use Business Zoning District - Adopted December 19, 2007</p> <p>Incentive Program - The Board of Supervisors may grant an increase of 0.1 FAR above the maximum permitted floor area ratio when at least 20% of the total floor area of the district achieves the Leadership in Energy and Environmental Design (LEED) Certification at the Gold level.</p>
<p>Prince William County, VA www.pwccgov.org</p> <p>Lou Ann Purkins lpurkins@pwccgov.org</p>	<p>Internal policy for green building under consideration</p> <p>Recently completed green police station and development services building to meet LEED certification</p> <p>Energy management control systems being implemented in all new buildings and building upgrades</p>	<p>Green building for private development under review by senior staff</p> <p>Amendment to the Environmental Chapter of the Comprehensive Plan for green building to be considered during 2008 update.</p> <p>Policy support for better site design, LID, and energy/water conservation in the</p>

Jurisdiction and Green Building Contact Information	Policies for Public Facilities	Policies for Private Development
		Comprehensive Plan. Proffer commitments and SUIP conditions negotiated during zoning process for a variety of green building and LID practices.

Jurisdiction and Green Building Contact Information	Policies for Public Facilities	Policies for Private Development
MARYLAND		
<p>City of Gaithersburg, MD www.gaithersburgmd.gov</p> <p>Erica Shingara eshingara@gaithersburgmd.gov</p>	<p>Master Plan Environment Element states following goals and strategies:</p> <ul style="list-style-type: none"> • Municipal facilities, City funded projects, and infrastructure projects be constructed, renovated, operated, maintained and deconstructed using green building, LID, waste management, and conservation landscaping principles and practices to the fullest extent possible. • Incorporate sustainable requirements in bid requests for new building projects or renovations, when feasible, and utilize construction consultants with green experience. • Perform energy audits of existing City facilities and implement energy retrofits when appropriate. <p>Green building education of City officials and staff</p> <p>City considering legislation requiring LEED Silver certification for municipal buildings.</p> <p>New LEED certified Youth Center</p>	<p>Green building education and outreach to residents, and development community.</p> <p>Partner in M-NCPPC Going Green at Home program with M-NCPPC.</p> <p>Green residential building code standards in development.</p> <p>Development Review: Requires new commercial, institutional, or multi-family development to complete and submit a LEED checklist as part of the site plan and building permit application process.</p> <p>Commercial Incentive Program with tiered incentives discounting City building permit fee according to levels of LEED certification:</p> <ul style="list-style-type: none"> • LEED Platinum: 50% refund; • LEED Gold: 40% refund; • LEED Silver: 30% refund; and • LEED Certified: 20% refund.
Greenbelt, MD	City requires LEED Silver certification for public buildings	
<p>Montgomery County, MD www.goinggreenathome.org</p> <p>Marion Clark, M-NCPPC marion.clark@mncppc-mc.org</p>	<p>Green Building Bill of 2007 requires all new County buildings, additions and major renovations greater than 10,000 square feet, and all building projects receiving County funding of 30% or more meet LEED Silver and Energy Design Standards. Includes life-cycle-cost analysis of alternative systems and components. Required written certification of</p>	<p>Green Building Bill of 2007 requires that all private commercial and multifamily development projects over 10,000 sq ft meet LEED certification or equivalent. The regulation to implement this Montgomery Green Building Law has been adopted.</p> <p>Senior staff developing green building implementation plan,</p>

Jurisdiction and Green Building Contact Information	Policies for Public Facilities	Policies for Private Development
	<p>compliance to energy standards.</p> <p>The regulation to implement this Montgomery Green Building Law has been adopted.</p> <p>Senior staff developing green building implementation plan.</p> <p>Energy conservation practices in all County buildings</p> <p>The Green Building Program for Montgomery County Public Schools (MCPS) works with students, staff and the community to establish MCPS as a model for sustainable school design and operations. www.Schools2Green.org</p>	<p>including tax incentive package.</p> <p>Going Green at Home outreach and education program for homeowners, builders, and contractors.</p> <p>Master and Sector Plans language encourages green building technology. White Flint and Glenmont redevelopment piloting LEED for Neighborhoods standard</p> <p>Development Review promotes and requests use of high performance measures.</p>
Prince George' County, MD	<p>General guidelines for environmentally sustainable development. Green building program launch in mid-2007.</p> <p>Low VOC paint purchasing for all public buildings.</p> <p>Energy Manager to be hired. Energy audits of County buildings underway.</p>	<p>General guidelines for environmentally sustainable development. Green building program under development.</p>
<p>City of Rockville, MD www.rockvillemd.gov</p> <p>Nate Wall nwall@rockvillemd.gov</p>	<p>Environmental Commission studying green building programs from other jurisdictions, and will make recommendations to Mayor and City Council for program.</p>	<p>Environmental Commission studying green building programs from other jurisdictions, and will make recommendations to Mayor and City Council for program.</p> <p>City currently has a moratorium in place on most new construction activities. Would like to have green building program in place before moratorium expires in December 2007.</p>

Jurisdiction and Green Building Contact Information	Policies for Public Facilities	Policies for Private Development
DISTRICT OF COLUMBIA		
<p>Washington, D.C. www.dc.gov</p> <p>Chris Shaheen, chris.shaheen@dc.gov</p>	<p>Green Building Act of 2006 legislates green building practices for government buildings:</p> <ul style="list-style-type: none"> Effective immediately, residential buildings over 10,000 sq ft and all commercial projects that result from lease of public 	<p>Green Building Act of 2006 legislates green building practices for private buildings:</p> <ul style="list-style-type: none"> In January 2009, all commercial buildings over 50,000 sq ft must complete LEED checklist as part of permit process In January 2010, commercial

Jurisdiction and Green Building Contact Information	Policies for Public Facilities	Policies for Private Development
DISTRICT OF COLUMBIA	<p>property through disposition must meet Green Communities or LEED Silver certification standards.</p> <ul style="list-style-type: none"> • Building projects first funded in FY08 budget, including interior renovations, residential, and commercial, must meet Green Communities or LEED Silver certification standards. • Starting in FY09 budget, all new construction or substantial improvement of projects receiving more than 15% of total costs through public financing must meet Green Communities or LEED certification standards. • District of Columbia building code to be updated to include green building practices <p>Energy efficiency, green power, and environmentally preferable purchasing.</p> <p>ENERGY STAR and green design included in RFP's.</p> <p>LID demonstration projects.</p>	<p>buildings greater than 50,000 sq ft and resulting from sale of public property through disposition must meet LEED certification standards</p> <ul style="list-style-type: none"> • In January 2012, all commercial buildings over 50,000 q ft must meet LEED certification standard <p>Expedited permitting of green building projects before policy implementation date</p> <p>Office of Planning Sustainable resource guide for development community</p> <p>Ongoing energy efficiency and conservation programs:</p> <ul style="list-style-type: none"> • Free energy audits. • Renewable Energy Demonstration Project provides up to 50% of installation costs • District Solar Initiative • ENERGY STAR appliance and lighting rebates • Grants for small business energy efficiency measures • Support for energy efficiency/weatherization in low income homes and CDC projects
Anacostia Waterfront Corporation www.anacostiawaterfront.net	Draft green development standards for public and private development in review.	Draft green development standards for public and private development in review.

Source: Greening the Metropolitan Washington Region's Built Environment, 2007, Metropolitan Washington Council of Governments
<http://www.mwco.org/environment/greenbuilding/>
<http://www.fairfaxcounty.gov/news/2008/030.htm>

Attachment 5: Arlington County LEED Submission Requirements



LEED Permit Submission Requirements for Site Plans with LEED Conditions

All permits should be submitted 10 business days prior to the date of the needed permit. This allows for flexibility in the event additional backup documentation is needed. If the documentation submitted does not meet the intent and requirement of the LEED credit, the permit may be held until the needed documentation is completed.

Below is a general list of LEED documentation that must be submitted to DES (Joan Kelsch / Adam Segel-Moss) prior to issuance of the following permits or certificates of occupancy.

Clearing, Grading, and Demolition Permit

- Provide updated LEED scorecard and tracking spreadsheet showing that progress is being made on all credits.
- Obtain approval of the Construction Waste Management Plan as required by the site plan condition. If LEED credit(s) is being sought, the CWM Plan should meet LEED requirements.
- Submit the Green Building Fund Contribution if it pertains to your project.

Excavation Sheet piling and Shoring Permit

- Provide updated LEED scorecard and tracking spreadsheet showing that progress is being made on all credits.
- Provide a floor plan that indicates recycling storage/ collection plan;
- Confirm that a commissioning (Cx) agent is on board prior to any above grade work. If the Additional Cx credit is being pursued, confirm that the Cx agent is reviewing the drawings in the design phase.
- Provide confirmation that water and energy use reduction are being incorporated into the design to meet the required thresholds. Provide documentation showing that an energy model is being used to evaluate insulation, windows, HVAC systems, etc. to meet the energy reduction requirements.

Footing to Grade Permit

- Provide updated LEED scorecard and tracking spreadsheet that shows progress is being made on all credits.
- Submit the Cx plan prior to approval of the Footing to Grade Permit.
- Bicycle rack locations must be shown on site and floor plans as part of final site development and landscape plan.
- Provide IAQ Management Plan for Construction;
- Provide updated information showing that water and energy use reductions are being incorporated into the design to meet the required thresholds.
- Submit the LEED Water Use Reduction template showing the project goals and fixtures considered.

Final Building Permit

- Provide updated LEED scorecard and tracking spreadsheet that shows progress is being made on all credits.
 - It is critical to think about the ENERGY STAR components and reduced lighting density early in the project as they must be met for final project approval. Although specific site plan conditions may vary, common Energy Star components include:
 - Clothes Washers
 - Dishwashers
 - Refrigerators

Attachment 6: Falls Church City Green Home Award Program

Awarded by the Building Safety Division, this program highlights residential construction projects that have been monitored by a Home Energy Rating System (HERS) Certified Rater and have shown to conform to one of several approved residential green building certification programs.

Homeowners and developers who choose to participate in the Falls Church City Green Home Award Program will be awarded for doing something positive to improve the sustainability of the environment and the community.

Customers can sign up for the program at the time of permit application and must submit copies of their certification guidelines and their contract with the HERS Certified Rater. They are then provided a yard sign declaring their participation in the program.

Once construction is completed, the customer will submit the final report from the HERS Certified Rater testifying successful completion of the program. The customer will then receive an award, which will be announced by City Council and on this Web site.

Call 703-248-5080 (TTY 711) for more information.

Attachment 7: Arlington County Summary of Green Building Ordinance Language

<http://www.arlingtonva.us/DEPARTMENTS/EnvironmentalServices/epo/EnvironmentalServicesEpoGreenBuildings.aspx>

Green Building

What is “Green Building”?

Green building is a collection of land-use, building design, and construction strategies that reduce the environmental impacts that buildings have on their surroundings. Arlington County has adopted the [US Green Building Council's](#) Leadership in Energy and Environmental Design (LEED™) Green Building Rating System as a way to measure the energy and environmental performance of buildings in the County. The LEED™ rating system allots points within six specific categories for environmentally beneficial building materials and design, in categories such as site location, water efficiency, energy and atmosphere, materials and resources, and indoor environmental quality. LEED™ is an easy way for any professional, business, or organization to master green building standards and practices. Read a [brochure about Arlington County's Green Building](#) (1 MB, [PDF format](#)) programs.



Cost and Green Buildings

The cost of going green is often raised as an issue. Thoughtful project planning and team coordination – a process known as “integrated design” -- helps ensure that green components are integrated into the project as cost effectively and efficiently as possible. In many cases, “green” does not cost more. In other cases, efficient HVAC equipment, additional insulation, water efficient fixtures, etc. may cost more upfront, but operating costs can be significantly reduced through the life of the building due to lower utility bills and reduced maintenance. Information and studies on the cost of green building are continually being published. The US Green Building Council website ([LINK](#)) maintains an up-to-date list of cost studies for green buildings.

Green Building Site Plan Conditions in Arlington (Private Development)

Arlington County encourages site plan projects to incorporate green building components and processes. Site plan projects are development projects seeking special exception to the Zoning Ordinance. The goal of this program is to reduce the environmental impacts of development. Read a [brochure about Arlington County's Green Building](#) (1 MB, [PDF format](#)) program. The program includes the following requirements:

1. **LEED™ Accredited Professional.** The program requires that all site plan projects have a LEED™ Accredited Professional on the development and construction team.

2. **LEED™ Scorecard.** All site plan applications in Arlington County must include the LEED™ scorecard with an explanation of all the LEED prerequisites each LEED™ credit, describing how they intend to achieve the credit, or why they are unable to incorporate the component into the project. This allows the County to measure a project's overall performance and to collect data on the environmental status of all site plan buildings in the County.
3. **LEED™ Tracking.** During project negotiation, a final number of LEED™ credits is identified and the commitment to incorporate them into the project is formalized in a site plan condition. This condition requires that reports be submitted with specific building permit applications. These reports track the progress of LEED™ prerequisites and components throughout the demolition and construction process. Permits will not be issued if LEED™ reports are incomplete.
4. **Construction Waste Management.** The developer agrees to provide a plan for diverting from landfill disposal the demolition, construction, and land clearing debris generated by the project. The plan should outline recycling and/or reuse of waste generated during demolition and/or construction. The plan should outline specific waste streams and identify the means by which waste will be managed (reused, reprocessed on site, removed by licensed haulers for reuse/recycling, disposal, etc.).
5. **Energy Star Appliances for Multi-family Residential Development.** In order to reduce energy used by standard appliances and fixtures in high-rise residential projects, the following standard language is included in the green building site plan condition (modifications may be made on a case-by-case basis)

For residential development, the developer agrees that all of the following types of appliances, fixtures, and/or building components used in the project shall have earned the U.S. EPA's Energy Star label: clothes washers, dishwashers, refrigerators, ceiling fans, ventilation fans (including kitchen and bathroom fans), residential light fixtures (comply with Energy Star's Advanced Lighting Package), programmable thermostats, and exit signs. The developer shall submit to the County Manager a statement listing all Energy Star-qualified components prior to issuance of the Core and Shell Certificate of Occupancy. For the commercial lighting in common areas of multifamily residential projects, (by way of illustration and not limitation, these areas include lobbies, corridors, stairwells, common rooms, fitness rooms, etc.), the developer shall reduce the need for lighting (through use of daylight where possible) and shall specify the use of energy efficient fixtures, bulbs, light sensors, motion sensors, timers, and interior design, e.g., paint color, that maximize energy efficiency in lighting. The guidelines outlined by the US Green Building Council's LEED for Commercial Interiors (LEED-CI) credit entitled, Optimizing Energy Performance: Lighting Power shall be used toward the goal of maximizing energy efficiency in the lighting of common areas.

6. Standard Site Plan Language

The county's standard site plan language covering green building and LEED issues specifically states the following (modifications may be made on a case-by-case basis):

LEED Credits and Sustainable Design Elements

- a. *The developer agrees to hire a LEED Accredited consultant as a member of the design and construction team. The consultant shall work with the team to incorporate sustainable design elements and innovative technologies into the project so that numerous building components will earn the developer points under the U.S. Green Building Council's system for LEED certification. Specifically, the developer agrees to include sustainable elements in design and construction that are sufficient to meet the requirements for all LEED Prerequisites and include at least the number of LEED components necessary for baseline LEED certification. The developer agrees to use commercially reasonable efforts to achieve additional LEED points which would qualify the building for certified levels.*

- b. *The developer further agrees to submit, to the Department of Environmental Services (DES) and to the Zoning Office, a report prepared by the LEED consultant and documentation upon request to substantiate the report. Such reports will be submitted prior to issuance of the following permits or certificates of occupancy for construction of the project and will summarize the efforts to date of the inclusion of the sustainable elements within the project:*
 1. *Clearing, Grading & Demolition Permit*
 2. *Excavation, Sheeting and Shoring Permit*
 3. *Footing to Grade Permit*
 4. *Final Building Permit*
 5. *Shell and Core Certificate of Occupancy*
 6. *Partial Certificate of Occupancy for occupancy of the last floor of space*
 7. *Master Certificate of Occupancy*

In addition, prior to issuance of the first Certificate of Occupancy after the Shell and Core Permit, the developer will have its LEED consultant submit a certification to the County Manager that the elements to earn the above specified numbers of points have been included in the buildings.

Green Building Fund

The County established a Green Building Fund and a policy of having site plan developers who do not commit to achieving a LEED™ rating from the U.S. Green Building Council (USGBC) contribute to the Fund. The contribution is calculated at a rate of \$0.045 per square foot. (This contribution calculation is based on the fees assessed by the USGBC for registration and evaluation of a formal LEED™ application.) The Green Building Fund is used to provide education and outreach to developers and the community on green building issues. If a project

receives LEED™ certification from the USGBC, the Fund contribution is refunded upon receipt of the final LEED™ certification.

Green Building Incentive Program

Originally adopted in October 1999, the incentive program was revised and enhanced in December 2003 and again in March 2009. The program allows a private developer to apply for additional density if the project achieves a LEED™ award from the USGBC. The program applies to all types of building projects (office, high rise residential, etc.) achieving any one of the four LEED™ awards. The Bonus Density Program for Site Plans allows the developer to apply for densities as follows:

LEED Level	Prior to March 14, 2009	After March 14, 2009	
		Office	Residential
Certified	0.15 FAR	0.05 FAR	0.10 FAR
Silver	0.25	0.15	0.20
Gold	0.35	0.35	0.40
Platinum	0.35	0.45	0.50

Find out more about the [Green Building Incentive Program](#) or contact the Arlington County Environmental Planning Office (703-228-4488) or the Arlington County Planning Division (703-228-3525).

Green Building Resources

Read a [brochure about Arlington County's Green Building](#) (1 MB, [PDF format](#)) program, or check out our [Resources](#) page for more information on Green Buildings.

Review [LEED documentation requirements for Site Plan projects](#) throughout the permit process (1MB PDF Format)

Attachment 8: Fairfax County Green Building Policy Board Adoption
www.fairfaxcounty.gov/news/2008/030.htm

Fairfax County Board of Supervisors Adopts Green Building Policy

At its regularly scheduled meeting today, the [Fairfax County Board of Supervisors](#) adopted a green building policy for county facilities. The policy requires that buildings be constructed to meet minimum green building standards, if not exceed them.

Today's board action supports Fairfax County's many [environmental initiatives](#), including [Cool Counties](#). Last year, Fairfax County pledged to reduce its greenhouse gas emissions by 80 percent by 2050. The county led the development of this new initiative, along with the Sierra Club and two other county governments.

Fairfax County will use the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system. At a minimum, county buildings over 10,000 square feet will be required to reach Silver level LEED certification.

The policy applies to the construction of new county buildings and renovations or additions to existing buildings. However, the policy will not be applied to county-constructed single family homes, town houses and low-rise multi-family buildings. Instead, the Energy Star rating system will be used for these types of buildings.

County officials project that the new policy will cost an additional 2-4 percent in construction costs per building. However, these one-time costs are projected to be offset by annual savings in energy and water bills. Per year, green buildings are expected to slash energy costs by 15-25 percent and water consumption by 20 percent.

One of the county's newest green buildings demonstrates the savings that can be achieved. Built in 2006, Fire Station 40 will save approximately \$15,000 per year in reduced energy and water bills.