



DEPARTMENT OF PLANNING & ZONING
INTEROFFICE MEMORANDUM

TO: Planning Commission
VIA: Britany J. Waddell, AICP, Deputy Director/Planning *BW*
Carolyn Sunderland, AICP, Planning Commission Administrator *CS*
FROM: Jenny Plummer-Welker, AICP, Long Range Planner *JP*
DATE: October 9, 2018
SUBJECT: Calvert County Comprehensive Plan Update – Agency Review

Background:

At its meeting on July 18, 2018, the Planning Commission discussed agency review. The Planning Commission voted 4-2-1 to distribute the draft Comprehensive Plan for formal agency review. The Planning Commission did not vote to designate the draft as the Planning Commission's recommended plan.

The *Land Use Article* of the Maryland Annotated Code, states:

“A planning commission shall hold at least one public hearing before the commission recommends the adoption of a plan or any part or amendment to a plan.” (§3-203 (b))

“At least 60 days before the public hearing, the planning commission shall provide copies of the recommended plan and amendments to the plan to:

- (1) adjoining jurisdictions; and
- (2) State units, regional units, and local jurisdictions responsible for financing or constructing public improvements necessary to implement the plan. (§3-203 (c))

“The planning commission shall include in its report to the legislative body the recommendation of each unit and jurisdiction that comments on the plan.” (§3-203 (d))

“A majority of the planning commission, by resolution, shall approve the plan or any part of or amendment to the plan.” (§3-203 (e) (1))

Discussion:

The draft plan was distributed to adjoining jurisdictions, the State Clearinghouse, and county, local and regional agencies with the request to review the draft plan and provide comments by October 1, 2018. As noted in staff's September 12, 2018 memorandum to you, Mr. Griffiths informed Ms. Waddell that the State Clearinghouse would not be distributing the draft plan to other agencies since the draft plan was not designated the Planning Commission's recommended plan.

Agency comments received through September 10, 2018, were previously provided to you as part of meeting packet for September 19, 2018. That set included agency comments from the Calvert County Department of Public Works/Water & Sewerage Division, Southern Maryland Electric Cooperative, and Calvert County Environmental Commission.

Additional comments received through October 5, 2018 are attached for your review. Comments were received from the Calvert County Department of Public Works/Water & Sewerage Division, Division of Environmental Health Department/Calvert County Health Department, Calvert County Environmental Commission, Calvert County Ethics Commission, Anne Arundel County Office of Planning and Zoning, six Town Center Architectural Review Committees (Dunkirk, Huntingtown, Lusby, Owings, Prince Frederick, and Solomons), and Maryland Department of Planning.

Planning Commission Memorandum
October 9, 2018
Page 2

Next Steps:

1. Review, discuss, and consider agency comments at your work session on October 17, 2018.

Attachments: Additional Agency Comments Received through October 5, 2018

cc: Calvert County Department of Planning & Zoning, Comprehensive Plan and Zoning Ordinance Update Staff Team
WSP USA Inc. Staff: Jacquelyn Seneschal, Holly Storck, and Nathan Domme

Comments on the Proposed Calvert County Comprehensive Plan (May 2018 Draft)
 Additional Agency Comments Received through October 5, 2018

NAME	GROUP/AGENCY	DATE RECEIVED	# OF PAGES
Julie Paluda, Deputy Director, and R. Wayne Raither, Division Chief of Water & Sewerage	Calvert County Department of Public Works	9/20/2018 and 9/21/2018	2
Matt Cumers, Director	Division of Environmental Health, Calvert County Health Department	9/28/2018	4
Ron Klauda, Chair	Calvert County Environmental Commission	9/30/2018	10
Jennifer Mazur, Chair	Calvert County Ethics Commission	10/1/2018	1
Philip Hager, Planning and Zoning Officer	Office of Planning and Zoning, Anne Arundel County	10/1/2018	2
Dunkirk Architectural Review Committee		10/1/2018	1
Huntingtown Architectural Review Committee		10/1/2018	1
Lusby Architectural Review Committee		10/1/2018	1
Owings Architectural Review Committee		10/1/2018	2
Prince Frederick Architectural Review Committee		10/1/2018	2
Solomons Architectural Review Committee		10/1/2018	2
Charles Boyd, AICP, Director, Planning Coordination	Maryland Department of Planning	10/4/2018 and 10/5/2018	18

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Ron Klauda, Chair	Calvert County Environmental Commission	9/30/2018	10
Jennifer Mazur, Chair	Calvert County Ethics Commission	10/1/2018	1
Philip Hager, Planning and Zoning Officer	Anne Arundel County, Office of Planning and Zoning	10/1/2018	2
Dunkirk Architectural Review Committee		10/1/2018	1
Huntingtown Architectural Review Committee		10/1/2018	1
Lusby Architectural Review Committee		10/1/2018	1
Owings Architectural Review Committee		10/1/2018	2
Prince Frederick Architectural Review Committee		10/1/2018	2
Solomons Architectural Review Committee		10/1/2018	2
Charles Boyd, AICP, Director, Planning Coordination	Maryland Department of Planning	10/4/2018 and 10/5/2018	18

Holt, Judy C.

Subject: FW: May 2018 Draft - Calvert County Comprehensive Plan

From: Raither, Robert W.

Sent: Friday, September 21, 2018 9:47 AM

To: Paluda, B. Julie <Julie.Paluda@calvertcountymd.gov>; Plummer-Welker, Jenny L. <Jenny.Plummer-Welker@calvertcountymd.gov>

Subject: RE: May 2018 Draft - Calvert County Comprehensive Plan

Page 1-1 – Change bullet “Solid Waste Master Plan” to “Comprehensive Solid Waste Management Plan”

Page 4-15 – Is leachate considered “hazardous” as stated? **EPA does not consider municipal landfill leachate to be hazardous waste.**

Page 9-1 – 10-Year Comprehensive Solid Waste Management Plan 2006 – 2018 will be replaced after Tuesday, September 25th with the 10-Year Comprehensive Solid Waste Management Plan 2019-2028

Page 9-4 – For the Maryland Geological Survey, is there a more recent study than 2008? **I am presently doing research for the triennial update of the W&S Comprehensive Plan and found a USGS Scientific Investigations Report 2012-5165 “Potentiometric Surface and Water-Level Difference Maps of Selected Confined Aquifers in Southern Maryland and Maryland’s Eastern Shore, 1975-2011”.**

Page 9-7 – In first paragraph, iron is discussed. Should we mention that we installed an iron removal system at Cavalier Country in 2018? **Iron is mentioned as trace amounts, but we could add in a simple sentence as the second sentence on page 9-7: “Cavalier Country water system has an iron removal system.” FYI you may want to add Calvert Cliffs water system as another water system with arsenic removal on page 9-6.**

From: Paluda, B. Julie

Sent: Thursday, September 20, 2018 1:35 PM

To: Plummer-Welker, Jenny L. <Jenny.Plummer-Welker@calvertcountymd.gov>

Cc: Raither, Robert W. <Wayne.Raither@calvertcountymd.gov>

Subject: May 2018 Draft - Calvert County Comprehensive Plan

Hi Jenny,

I read through chapter 9 of the *Planning Commission Work Session Version* of the Calvert County Comprehensive Plan. I noticed a few items that need either revision or further clarification. I have copied Wayne on this email to help respond to some clarification requests.

Acknowledgements – Remove “Audrey Piercy”

Page 1-1 – Change bullet “Solid Waste Master Plan” to “Comprehensive Solid Waste Management Plan”

Page 4-15 – Is leachate considered “hazardous” as stated?

Page 9-1 – 10-Year Comprehensive Solid Waste Management Plan 2006 – 2018 will be replaced after Tuesday, September 25th with the 10-Year Comprehensive Solid Waste Management Plan 2019-2028

Page 9-4 – For the Maryland Geological Survey, is there a more recent study than 2008?

Page 9-7 – In first paragraph, iron is discussed. Should we mention that we installed an iron removal system at Cavalier Country in 2018?

And I agree with the changes proposed last night.

Thank you,

B. Julie Paluda

Deputy Director – Enterprise Funds

Department of Public Works

X2520

Holt, Judy C.

From: Matthew Cumers -MDH- <matthew.cumers@maryland.gov>
Sent: Friday, September 28, 2018 12:27 PM
To: Holt, Judy C.; Waddell, Britany J.; Willis, Julian M.
Cc: Champ C. Thomaskutty -DHMH-; laurence.polsky@maryland.gov
Subject: Re: FW: Request for Comments: Calvert County Comprehensive Plan (May 2018 Draft)
Attachments: image001.jpg; County Comprehensive Plans Comments.pdf

All,

The Calvert County Health Department Division of Environmental Health has generated some preliminary comments on the proposed Comprehensive Plan. Those comments are attached, however we would appreciate the opportunity to amend our comments in the near future following further consideration. We appreciate your understanding and the opportunity to collaborate.

Respectfully,
Matt Cumers

On Thu, Aug 2, 2018 at 4:09 PM Holt, Judy C. <Judy.Holt@calvertcountymd.gov> wrote:

We are requesting comments on the Comprehensive Plan Draft (May 2018). Attached is the memorandum of request. You may access the Comp. Plan Draft document using the link below. Comments are due by *Monday, October 1, 2018*.

If you serve on or are responsible for the comments from a Board or Committee, please forward to the appropriate staff member.

<http://md-calvertcounty.civicplus.com/DocumentCenter/View/19405>

We welcome your feedback. [Please take our Customer Satisfaction Survey.](#)

Judy Holt, Planner I

Department of Planning and Zoning

150 Main Street, 3rd Floor

Prince Frederick, MD 20678

Email: judy.holt@calvertcountymd.gov

410-535-2348



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Matt Cumers
Environmental Health Director
Calvert County Health Department
Division of Environmental Health
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410-535-3922
matthew.cumers@maryland.gov

Maryland Department of Health is committed to customer service. [Click here](#) to take the Customer Satisfaction Survey.

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CALVERT COUNTY HEALTH DEPARTMENT
DIVISION OF ENVIRONMENTAL HEALTH

P.O. Box 980
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STATE OF MARYLAND

Laurence Polsky, MD, MPH, F.A.C.O.G.
Health Officer

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SEP 28 2018

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Calvert County Comprehensive Plan (May 2018 Draft)
Comments from the Calvert County Health Department Division of Environmental Health

The Calvert County Health Department commends the County for its planning efforts to maintain or improve the quality and vitality of Calvert as a place to live and work. With an eye toward the impacts of wastewater treatment on businesses and homeowners, we offer the following suggestions.

Lack of wastewater infrastructure has already stifled the expansion of current businesses and prevented the opening of others. This is most obvious in Dunkirk, but affects other areas as well. The vibrant economic corridor in St. Mary's County, just across the Patuxent from southern Calvert, saps millions of dollars annually from our tax base. Lack of wastewater infrastructure also prevents job creation. Along with high costs of housing, this has led to an exodus of young adults from the county. It's no coincidence that school enrollment has declined over the past decade, counter to the statewide trend.

In many areas of the county, existing homes are exhausting or have already exhausted their septic capacity. As noted on page 9-13, this is a widespread problem that has begun to harm the real estate value of thousands of properties across Calvert. **Without decisive action, this problem will worsen.** No rational prospective homeowner will purchase a home with a potentially failing septic system when properties in neighboring counties offer proper infrastructure capable of handling wastewater for decades to come.

Page 9-12, shows 672 public sewerage connections will take place in the near future. Although this is a step in the right direction, it leaves 98% of current homeowners served by septic systems to deal with the burdens of replacing failing septic systems or resorting to sewage holding tanks that require indefinite and expensive pumping.

Finally, without the expansion of wastewater treatment facilities, we are not certain that business or household growth projections listed in the Comprehensive Plan are realistic. Adverse effects will likely have their greatest impacts in the Dunkirk area, but lack of action will be felt across Calvert.

Since Dunkirk is identified (p. 8-14) as having “the potential to be one of the county’s major employment centers [with] significant commercial growth possible”, we suggest that this area be prioritized for a balanced and sustainable wastewater solution.

We propose a three-tiered plan to protect homeowner property values and stimulate business development. Since both of these outcomes improve long-term county tax revenue, this should be factored into cost assessments of expanding infrastructure. The current Comprehensive Plan calling for greater capacity by 2040 leaves increasing portions of the county at risk of septic failures over the coming decades.

Phase One- Completion Target 2025

- Community-based wastewater treatment facility with capacity for businesses in the Dunkirk Town Center and critical housing lots in Apple Greene and Cavalier Country (p. 9-13). Some infrastructure from existing commercial properties can be joined into a community system.
- Link homes in Summer City and Randall Cliffs to the Chesapeake Beach Wastewater Treatment Plant.

Phase Two- Completion Target 2032

Expansion of existing wastewater infrastructure to serve the Lusby Town Center with connections for homes in Cove Point and possibly White Sands. This would energize economic development in the southern section of the county and stem the hemorrhage of dollars that flow into St. Mary’s.

Phase Three- Completion Target 2040

Construction of a wastewater treatment facility in the Huntingtown area to serve Breezy Point, Neeld Estates, Willows Colony and Plum Point communities, all of which are experiencing losses in septic capacity. This infrastructure development should incorporate Marley Run.

Of additional note:

On page 9-15, I suggest changing the bracketed text to “[EH, MDE]”.

The Health Department is the 10th largest employer in Calvert County (p. 8-4). We now employ 194 staff. We have two grant applications pending. If our submissions are successful, we will move ahead of Safeway and Dominion into 8th position. The expansion of good paying jobs has occurred without any direct cost to Calvert taxpayers, and has benefitted the health and productivity of our community.

MNC 

From: Ronald Klauda <rjklauda@gmail.com>
Sent: Sunday, September 30, 2018 8:51 PM
To: Planning and Zoning
Subject: Comments from the Calvert County Environmental Commission on 2nd Draft Comp. Plan Update
Attachments: EC Comments from Environmental Commission on 2nd draft Comp Plan 30sep2018.docx

Dear Mr. Kernan and the rest of the Planning Commission:

Comments and recommendations from the Calvert County Environmental Commission on Chapter 11, the Executive Summary, and Appendix A of the 2nd Draft Comprehensive Plan Update are attached.

For record completeness, the Environmental Commission's comments on Chapters 1 through 10 that were sent to you earlier appear after our comments on Chapter 11, the Executive Summary, and Appendix.

Sincerely,

Ron Klauda (Chair, Calvert County Environmental Commission)

Ronald J. Klauda, PhD
Aquatic Ecologist (retired)
1401 Foxtail Lane
Prince Frederick, MD 20678

410-535-0570 (office)
410-570-1522 (cell)
rjklauda@gmail.com

**Comments from the Calvert County Environmental Commission
on the 2nd Draft (May 2018, edited 27 July 2018) Comprehensive Plan Update
(27 September 2018)**

Chapter 11 – Implementation

Pg. 11-1: The time frames called “short-term”, “mid-term”, and “long-term” should be defined to have any real meaning to the reader/user of this Comprehensive Plan.

Pg. 11-2: Is the time frame for Sub-objective 3.1.1.6 intentionally left blank? What does “periodically” mean?

Pg. 11-3: Under Goal 2, Objective 1, and in other Goals/Objectives/Sub-objectives on pgs. 11-3 through 11-34, the words “consider”, “encourage”, “pursue”, and “explore” are used several times. What do these vague words mean with regards to implementing a robust updated Comprehensive Plan that “.....*is the official policy document for Calvert County,....a snap-shot in time of the dynamic process of managing growth in Calvert County*” (Executive Summary, pg. ES-1)? The Environmental Commission recommends that these vague words be replaced with more direct words to clearly communicate what actions will be carried out to successfully implement the updated Comp. Plan.

Pg. 11-6: How is the word “substantial” defined?

Pg. 11-7, Objective 3: The two Sub-objectives listed here address only preservation and restoration of vegetated stream buffers---very important tasks. However, for badly degraded streams that may be sediment-choked or have deeply-incised channels with eroding banks, restoring only the riparian buffers will not be sufficient to restore the ecological integrity of these streams. The Environmental Commission therefore recommends that a new Sub-objective be added that says, “Restore degraded stream channels”.

Pg. 11-7, Objective 4, Sub-objective 4.1.4.1: The Environmental Commission recommends that the word “Limit” be replaced with the word “Prohibit”, to successfully achieve the preservation and protection of steep slopes.

Pg. 11-8, Goal 3, Objective 1, Sub-objective 4.3.1.3: Should the word “and” or “including” be inserted after “Critical Area”?

Pg. 11-9, Goal 4, Objective 4, Sub-objective 4.4.4.3: The Environmental Commission recommends that the word “Discourage” be changed to “Prohibit”.

Pg. 11-15, Goal 3, Objective 1, Sub-objective 7.3.1.1: What does the word “Address” mean here and in other places in Chapter 11?

Pg. 11-21, Goal 1, Objective 1, Sub-objective 9.1.1.1: The Environmental Commission recommends replacing “Urge” with “Ask”.

Pg. 11-22, Goal 1, Objective 3, Sub-objectives 9.1.3.1 and 9.1.3.2: The Environmental Commission recommends that these two Sub-objectives be combined to read: “Maintain an education program that will help county residents consume less and waste less water.” We further recommend that two new Sub-objectives, 9.1.3.2 and 9.1.3.3, be inserted that say: “9.1.3.2. Develop water conservation regulations that will allow residential, commercial, and institutional buildings to collect/use rain water and gray water for non-potable uses.” and “9.1.3.3. Investigate the accepted methods of managed aquifer recharge whereby treated sewage can be safely pumped back into groundwater aquifers.”

Pg. 11-22, Goal 2, Objective 1, Sub-objective 9.2.1.3: Please clarify what this statement means.

Pgs, 11-23 and 11-24, Goal 4: Why are there no time frame designations for this Goal?

Executive Summary

Since the Environmental Commission has previously reviewed and submitted recommendations to the Planning Commission on Chapters 1 through 11, we ask that these comments also be considered applicable to the relevant sections of the Executive Summary.

Appendix A

Some of the Environmental Commission members attended one or more of the Issue Identification Workshops that are described and summarized in the Appendix. The information presented here appears to be a complete and accurate summary of comments and opinions from workshop participants. We have a question and comments about the answers to Question 1 on pg. A-7. The fifth most favored action that workshop participants said should be taken so the county can “*preserve even more land*” was “*Limit build-out to 37,000 households*”. This action was tied with “*Rural character – Let’s own that, claim, and communicate it*”. Why is the build-out limit of 37,000 households not a key objective in this draft Comp. Plan Update? A build-out limit was an important part of the 2010 Comp. Plan Amendments, is critical to the protection of the county’s environment and the quality of life for residents, and should therefore be carried prominently into the Comp. Plan Update.

Previous Comments from the Environmental Commission on Other Chapters

Chapter 3 – Land Use

Pg. 3-4: For clarity and completeness, please explain why the county placed a moratorium on the creation of new APDs....at the end of para. 2.

Pg. 3-6: At the end of para. 1, please mention when the county most recently reviewed their Critical Area programs.

Pg. 3-9: Is there a more current version of land use in Calvert County? If yes, please include it.

Pg. 3-10: Lines 3 and 4: Where does Calvert County's current growth rate rank among Maryland's 23 counties?

Pg. 3-9 (Fig. 3-3) and Pg. 3-14 (Fig. 3-4): These two maps look very different at first glance. For starters, there is a lot less 'green' area and a lot more 'yellow' area on the future land use map (Fig. 3-3) than on the existing land use map (Fig. 3-4). It is very likely that these large visual differences will be confusing and perhaps even alarming to most county residents. The Environmental Commission therefore recommends that a brief section be added to explain why these two land use maps look so different. This explanation may be buried in the current text, but it's not easy to extract and digest.

Pgs. 3-11 and 3-12: The Environmental Commission has several recommendations and questions on the Development Capacity Analysis (DCA) section:

1. Please provide a link here to the August 9, 2017 memorandum from MDP to the Calvert County Planning Commission Administrator that forms the basis to the information presented in this section, so interested county residents can read and interpret the contents of the memorandum for themselves.
2. If there is a MDP document that provides details on the DCA methodology, data needed/used, assumptions, etc., please add a link to this document on pg. 3-11.
3. Please explain why Scenarios 4 and 6 "come closest to bracketing the county's realistic development potential."
4. Does the DCA take into account the capacity of the natural and built systems in its projections of new household capacity? For example, does the DCA look at questions such as: Is there enough ground water to supply the projected development? How will new non-point source pollution sources from projected growth impact non-tidal streams, wetlands, the Patuxent River, and Chesapeake Bay? What ecosystem services will be lost if forests and farmland are converted to houses? Can the existing roads handle the increased traffic volume? Have the impacts of global warming and associated climate change been factored into the DCA projections? There are other questions associated with the impacts of new growth scenarios that should be included in the DCA. If the carrying

capacity of natural and built systems in Calvert County were not fully incorporated in MDP's DCA, then how much confidence should be placed in the household capacity projections for any of the six scenarios that were run by MDP for the county, even as "the bookends of what could potentially occur"? For insights on the inclusion of carrying capacity of natural systems in land use and zoning decisions in New Jersey, go to:

<http://www.anjec.org/html/buildoutprint.htm>

5. Given the large differences in land area for Town Centers compared to the rest of the county "Inside 1-Mile Radius" and "Outside 1-Mile Radius", it is no surprise that the DCA Scenarios 4 and 6 project more new household capacity outside Town Centers (Table 3-5). And yet, as clearly stated on pg. 3-12, "the county's policies indicate a preference for new development to locate within Town Centers." To avoid a mixed message and possible confusion, the Environmental Commission recommends that text be added to the first full paragraph on pg. 3-12 containing a summary what will be done to ensure that new development in Calvert County is confined to the Town Centers and does not spill out into rural areas.

Pg. 3-16: The heading "wetlands" should be changed to "Natural Areas" since the text mentions not only wetlands but also beaches, steep slopes, and wildlife habitat.

Pg. 3-24: The Environmental Commission applauds Sub-objective 3.1.3.3, but would like know what specifically will be done to "reduce negative environmental impacts of subdivision roads." If these details appear in another document, please reference that document here.

Chapter 7 – Transportation

Pg. 7-3: In order for the reader to accept what's stated in the 1st sentence in the next to last paragraph on this page, please show traffic volume numbers in the county for the "years of rapid growth" (1970's, 1980's, and 1990's). Also, Table 7-1 (pg. 7-4) tells us that, overall, average daily traffic counts in Calvert County between 2000 and 2015 (a period of slower population growth) increased everywhere except in Prince Frederick. So, we don't agree with what's stated in the 2nd sentence in the next to last paragraph on pg. 7-3. In the paragraph beginning with "In the long term....", the Environmental Commission recommends that the Comp. Plan acknowledge the more near-term expected increase in the number of electric vehicles and their potential effects on the transportation system.

Pg. 7-9: In line 7 of para. 1, the Environmental Commission recommends deleting the word "likely". Many negative changes will absolutely occur if a Chesapeake Bay road crossing is anchored in Calvert County. Also, in line 6 of para.1, we recommend inserting "is incompatible with the Visions, Goals, and Objectives of this Comprehensive

Plan” after “MD 4”. If these changes are made, the last sentence of para. 1 can be deleted.

Chapter 10 – Government and Community Facilities

Pg. 10-3, 4th bullet under Recent Accomplishments: Of the \$5 million provided for land preservation in the county’s FY 2017 budget, how much was actually spent “to maintain the county’s rural character”? If the amount spent was far less than \$5 million, this bullet point is misleading and should be expanded to include all the facts.

Pg. 10-13: The Environmental Commission recommends that the county look into building a solar power project on the closed and capped landfill in Barstow, along the lines of what Anne Arundel County just completed on an 80-acre closed and capped landfill. The Barstow landfill is open space that can’t be used for anything else.

Pg. 10-21: Sub-objective 10.6.2.8 is critical to increasing the country’s recycling performance. Why can’t the private residential trash collectors operating in the county be required to provide plastic tubs for recyclables to their customers, and also be required to transport these recyclables to one of the county’s Convenience Centers?

Chapter 4 – Environment and Natural Resources

Pg. 4-1: We recommend deleting “Encourage” as the first words in Goals 1 and 3, and changing “preservation” to “Preserve”, “protection” to “protect”, and “conservation” to “conserve”. We also recommend deleting “of” before “natural” in Goal 1 and “of” before “land-based” in Goal 3. The word “Encourage” weakens these four strong goals.

Pg. 4-1: Is 1993 the most recent watershed management plan for Hunting Creek?

Pg. 4-3: In the 1st line, we recommend adding “and sediment” before “loads”.

Pg. 4-4: In the 1st paragraph in “Areas of Critical State Concern”, should the word “area” in the first line after “geographic” be “areas”? If so, then singular words in this paragraph need to be changed to plural words. Also, who is the “secretary” mentioned in line 3 of this paragraph?

Pg. 4-6: Please add a link to the written report referred to in the last paragraph on this page.

Pg. 4-7: We recommend inserting the word “high” before “diversity” in the last line of paragraph 4.

Pg. 4-8: Please add this sentence to the end of paragraph 3: “In early 2018, a new Interactive Watershed Map titled “What’s My Watershed and What’s In It?” was posted on the county’s website. This map shows citizens in which of the county’s 23 watersheds they live and also provides information about their watershed (<http://www.co.cal.md.us/index.aspx?NID=264>).”

Pg. 4-9, Figure 4-2: This map showing the county’s watersheds would be more informative if each of the 23 watersheds was named with a label on the map.

Pg. 4-10: We recommend rewriting the 1st sentence to read as follows: “Forest cover is the most natural and least polluting land cover in Calvert County.”

Pg. 4-11: Is this the most recent “Forested Areas” map available for Calvert County?

Pg. 4-12, Air Quality section: This discussion is thin on information about current air quality conditions in Calvert County. Also, projections on air quality into the future based on predicted increases in traffic volume would be informative.

Pg. 4-13: Are there any “Prospect Mineral Resources” in Calvert County? We couldn’t find a green dot on this map.

Pg. 4-15: In line 20, we recommend changing the word “discourage” to “prevent”. In line 25, we also recommend deleting the word “Consider” in subobjective 4.1.2.3 and changing “raising” to “Raise”. In the last line on this page, delete “discourage” and replace it with “prevent”.

Pg. 4-16: In Objective 2, do the initials “EC” refer to the Environmental Commission? We did not see “EC” defined in the Acronym list on pg. i-6.

Chapter 9 – Water Resources

Pg. 9-1: In Goal 4, we recommend inserting “county streams,” before “the Chesapeake Bay”.

Pg. 9-2: In line 2 of the “Sustainability Approach” section, we recommend inserting “/other aquatic resources” after “fisheries”. In line 4 of this section, we recommend inserting “and ecological” after “human”. In the “Water Quality Regulations” section, please clarify that the county’s wastewater plants met the 2017 target loads levels for both nitrogen and phosphorus, if that’s true? Where does Calvert County stand now with regards to meeting target loading reductions for other nitrogen and phosphorus sources?

Pg. 9-3: In line 3 of the “Water Supply” section, we recommend deleting “prevent surface contaminants from entering the aquifers” and replacing these words with “greatly reduces the chance that surface contaminants will reach the aquifers.”

Pg. 9-7: In line 3, please include a definition for “MCLs”. In line 5 of the “Wastewater Assessment” section, please insert “county streams” after “health of”.

Pg. 9-11: Is there a plan for what happens in a developer-funded extension of a public sewer system fails? Will the developer be bonded to pay for all required repairs and updates?

Pg. 9-14: Under Objective 3, why not include 'capture/use of rainwater' and 'reuse of gray water' as two more strategies to decrease water consumption?

Pg. 9-15: Under Objective 2, item 9.3.2.5, we suggest you also include "EC" to reflect our "Pump for the Bay" contest.

Pg. 9-16: We applaud everything stated under Objective 2 to deal with unmanaged impervious surfaces. We also hope that progress toward achieving the objectives stated here will be reported annually to county residents.

Chapter 1 – Purpose, Mission, and Visions

Pg. 1-2: The Environmental Commission applauds the inclusion of sustainability in the Comp. Plan Update. Because there are several definitions of sustainability, the concept might be fuzzy to some county residents. We suggest that the text be revised to include a sentence along these lines early in the Sustainability section: "*In a general sense, achieving sustainability requires that development and other societal actions meet the needs of the present generation without compromising the ability of future generations to meet their needs.*" Achieving sustainability involves a commitment to sound operating practices through the responsible management of building design, construction/renovation methods/materials, landscape practices, energy use, water and waste management, emission controls, transportation, and procurement—all done within a framework of regulatory compliance and fiscal prudence. Integration of environmental, social, and economic goals in policies and activities is essential to achieving sustainability. But so is conservation of biodiversity and ecological integrity.

Pg. 1-3: Is there a time table for achieving the county's 40,000-acre land preservation goal? If so, please state it here. If not, why not? The Environmental Commission suggests that the first sentence of the last paragraph on this page be rewritten as follows: "*The county remains committed to the 40,000-acre land preservation goal and will continue to protect rural lands through both the direct actions of these programs and also to expand agricultural opportunities to assist farmers in growing their businesses.*"

Pg. 1-5: For consistency with the emphasis that appears in the rest of the Comp. Plan, we suggest that the mission statement "*Preserving the natural, cultural, and historic assets of Calvert County*" be moved to the top of the list.

Pg. 1-5: Why is there no direct mention of "sustainability" in any of the 10 visions, especially since this topic was mentioned prominently on Pg. 1-2? As a related aside, the Environmental Commission recommends that P&Z staff consider calculating the per capita carbon footprint for Calvert County residents and including this information in the

next version of the Comp. Plan Update. This calculation would be expressed as the average annual CO2 emissions per person per year in metric tons. There are several carbon footprint calculation tools available on the internet (e.g., <https://www3.epa.gov/carbon-footprint-calculator/>). One source stated that the carbon footprint in the U.S. overall is around 20 metric tons of CO2 emissions per person per year. Because of the high percentage of county residents that commute many miles to jobs, our per capital carbon footprint is likely to be higher than 20 metric tons of CO2 emissions per year. The worldwide average is 4 to 5 metric tons. Having an estimate of the county's per capita carbon footprint now could help direct management actions aimed at reducing our carbon footprints and increase the chances of achieving the county's sustainability goals.

Chapter 2 – Key Issues

Pgs. 2-3 and 2-4: Public outreach is clearly an area where there is still much room for improvement in Calvert County. Even though the Comp. Plan states that “Over 430 people provided responses” in the first round of participatory public meetings held in the summer of 2016, that's only 0.7% of the county's 2015 population of people between the ages of 20 and 65+. The 210 people who attended the four Issue Identification Workshops held in the fall of 2016 represent only 0.3% of the county's population ages 20 to 65+. And, as you know, the age composition of those attending most public meetings is skewed toward the older segment of the county's population. If the Environmental Commission comes up with any useful recommendations on how to find out what a broader spectrum of people who live in Calvert County think about any given issue (a hefty challenge), you'll hear from us.

Table 2-2: These data show that population growth rate projection for the county will likely increase rather than decrease from 2015-2020 to 2020-2030. The text drawn from this table should be changed to reflect this projected growth rate increase. While it may be accurate to state that population growth rate projection will likely decrease from 2020-2030 to 2030-2040, we should all keep in mind that the further into the future projections are attempted, the more uncertain these projections are likely to be.

Chapter 5 – Heritage

Pg.5-5: Can you please clarify what's meant in item 5.1.1.4?

Chapter 6 – Housing

Pg. 6-3: What types of sustainable building practices are currently being required (or encouraged) by the county and will be promoted by the proposed policies? Are “green”

building practices (e.g., use of solar power, energy-efficient designs and materials) being encouraged now? If yes, where? If not, why not?

Chapter 8 – Economic Vitality

Pg. 8-5, last paragraph: Is the percentage of county residents who commute to work in their private vehicles and who also carpool known? If so, the Environmental Commission thinks this statistic is important/relevant and should be included here.

Table 8-5: The 2011 report this table draws from is outdated, includes some shaky assumptions about current and future shopping patterns, and should therefore be deleted from the Comp. Plan Update. The Environmental Commission is not convinced that the information in Table 8-5 is helpful in developing sound guidance for controlling development in Calvert County during the next 20 to 25 or more years.

Pg. 8-11, Solar Energy section: Conversion of X acres of tillable and productive farmland to solar panel arrays is controversial and may not be helpful in reducing CO₂ emissions to the atmosphere, when compared with the amount of CO₂ that would be removed from the atmosphere and sequestered by plants growing on these same X acres of prime farmland. The Environmental Commission encourages the increased use of solar-derived energy, but we want stress the important role for the county to control and manage the places where solar panels arrays are built. Siting solar panel arrays on fallow and unproductive farmland is one desirable way to go. In addition, the Environmental Commission recommends that solar panels be installed on all public building roof tops and also on roofs built over current and future parking lots. These approaches constitute a much wiser use of land for solar-power development in Calvert County, practices that will reduce CO₂ emissions and thereby help to mitigate global warming and associated climate change.

Pg. 8-13: The Environmental Commission likes the idea of assigning a county staff person to each Town Center. How about also establishing a citizen-based Advisory Commission in each Town Center, if such advisory groups don't already exist? A group of 7-11 volunteers living in each Town Center could gather ideas from residents and businesses and work with the county staff person toward achieving the goals of all entities in each Town Center?



CALVERT COUNTY ETHICS COMMISSION

Post Office Box 1104
Prince Frederick, Maryland 20678

October 1, 2018

Mr. Gregory Kernan
Planning Commission Chairman
c/o Department of Planning & Zoning
150 Main Street
Prince Frederick, Maryland 20678

Planning & Zoning

OCT 01 2018

RECEIVED

Dear Mr. Kernan:

This letter is in response to Carolyn Sunderland's Interoffice Memorandum, dated August 2, 2018, on behalf of the Calvert County Planning Commission requesting comments from the Calvert County Ethics Commission on the draft "Calvert County Comprehensive Plan (May 2018 draft)."

As established by the Board of County Commissioners, the Calvert County Ethics Commission (CCEC), "shall be the County's advisory authority responsible for interpreting this chapter and advising persons as to its application. [§ 41-9, B.] The Ethics Code is part of the Calvert County Code of Ordinances, Chapter 41. The CCEC provides advice and assistance to citizens seeking Advisory Opinions on ethics matters and investigates and acts upon complaints submitted.

As stated in the Purpose of the Plan, "The Calvert County Comprehensive Plan (Plan) is the official policy document for Calvert County. The Board of County Commissioners, the Planning Commission, and county departments use the Plan as a guide when preparing functional plans and small area plans, evaluating proposed projects or considering changes to legislation, such as the zoning ordinance."

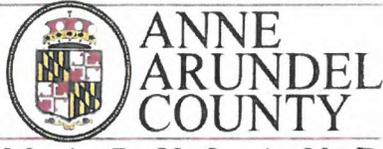
The CCEC takes no position on the substantive merits of the draft Comprehensive Plan. We note, however, that the Plan's Chapter 10 section 16 titled "Goals, Objectives and Strategies" include "[maintaining] a high standard of [...] ethics among county employees." As the County's Ethics body, the CCEC strongly supports this objective and will assist with any ethics-related inquiries that might arise.

Thank you for seeking our comments on the Comprehensive Plan. If we can be of any further assistance, please feel free to contact us.

Sincerely,

A handwritten signature in blue ink that reads "Jennifer J. Mazur".

Jennifer J. Mazur
Chairman



M A R Y L A N D
Office of Planning and Zoning

2664 Riva Road, P.O. Box 6675
Annapolis, MD 21401
410-222-7450

Philip R. Hager
Planning and Zoning Officer

9/28/18

Carolyn Sunderland, AICP, Planning Commission Administrator
Calvert County
150 Main Street
Prince Frederick, MD 20678

Dear Ms. Sunderland,

Thank you for the opportunity to comment on the May, 2018 draft Calvert County Comprehensive Plan. The Anne Arundel County Office of Planning and Zoning has reviewed the Plan and has the following comments to offer:

Land Use Compatibility:

- Anne Arundel County is supportive of your designations of Major Town Centers in Dunkirk, Prince Frederick, Lusby and Solomons. The primary land use of Rural Residential in the northern portion of Calvert County at a density of one lot per 20 acres is compatible with Anne Arundel County's Rural land use of equal density.
- Anne Arundel County is supportive of the reclassification of land use in the northern area of Calvert near North Beach to Marine Commercial however, when developed, should be compatible with the surrounding rural areas and not detrimental to the existing interior forested areas.
- Reclassification of the current designation of Owings as a Town Center to a Hamlet would be more compatible of with the surrounding Rural character in both Anne Arundel and Calvert counties. Reclassification of Owings from the draft plan's proposed "Minor Town Center" to a Hamlet would also be more favorable for limiting traffic in the MD 2 corridor and drawdown of water levels in the aquifers.

Connectivity

- There are opportunities for collaboration between Calvert and Anne Arundel counties in implementation of regional connectivity of trails and greenways (see the draft Anne Arundel Green Infrastructure Plan <https://www.aacounty.org/departments/planning-and-zoning/long-range-planning/green-infrastructure-master-plan/index.html>). This



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Philip R. Hager
Planning and Zoning Officer

Planning & Zoning

OCT 01 2018

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9/28/18

Carolyn Sunderland, AICP, Planning Commission Administrator
Calvert County
150 Main Street
Prince Frederick, MD 20678

Dear Ms. Sunderland,

Thank you for the opportunity to comment on the May, 2018 draft Calvert County Comprehensive Plan. The Anne Arundel County Office of Planning and Zoning has reviewed the Plan and has the following comments to offer:

Land Use Compatibility:

- Anne Arundel County is supportive of your designations of Major Town Centers in Dunkirk, Prince Frederick, Lusby and Solomons. The primary land use of Rural Residential in the northern portion of Calvert County at a density of one lot per 20 acres is compatible with Anne Arundel County's Rural land use of equal density.
- Anne Arundel County is supportive of the reclassification of land use in the northern area of Calvert near North Beach to Marine Commercial however, when developed, should be compatible with the surrounding rural areas and not detrimental to the existing interior forested areas.
- Reclassification of the current designation of Owings as a Town Center to a Hamlet would be more compatible of with the surrounding Rural character in both Anne Arundel and Calvert counties. Reclassification of Owings from the draft plan's proposed "Minor Town Center" to a Hamlet would also be more favorable for limiting traffic in the MD 2 corridor and drawdown of water levels in the aquifers.

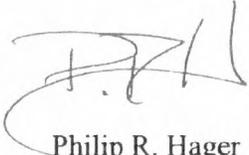
Connectivity

- There are opportunities for collaboration between Calvert and Anne Arundel counties in implementation of regional connectivity of trails and greenways (see the draft Anne Arundel Green Infrastructure Plan <https://www.aacounty.org/departments/planning-and-zoning/long-range-planning/green-infrastructure-master-plan/index.html>). This

collaboration of preservation is compatible with your stated goals and objectives for establishing a greenway system and protecting scenic quality.

Please note that the Transportation Division that used to be part of the Office of Planning and Zoning is now its own department. We forwarded the draft Calvert County Comprehensive Plan to them for review. The Office of Transportation has no comment. For future reference on transportation elements, please contact Ramond Robinson in the Office of Transportation at trrobi45@aacounty.org.

Sincerely,

A handwritten signature in black ink, appearing to read "P. Hager", with a large, sweeping flourish underneath.

Philip R. Hager
Planning and Zoning Officer



**CALVERT COUNTY
ARCHITECTURAL REVIEW COMMITTEE**

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Steven R. Weems

October 1, 2018

Planning & Zoning

OCT 01 2018

RECEIVED

Greg Kernan, Chair
Planning Commission
175 Main Street
Prince Frederick, MD 20678

RE: Request for Comments: Calvert County Comprehensive Plan (May 2018 Draft)

Dear Mr. Kernan:

The Dunkirk Architectural Review Committee met on September 13, 2018, to review and discuss the Calvert County Comprehensive Plan (May 2018 Draft). The following comments were received and a majority of members were in favor of submitting these comments in response to the Request for Comments, dated August 2, 2018. The Committee members requested that I submit these comments on their behalf.

There should be a traffic study done prior to any expansion of Town Centers. There is already rush hour gridlock.

A cohesive design for development in the residential areas outside the Town Centers is needed, such as location of new roads. Any future development should require the use of a design standard. There is concern that there are too many access points on MD 2/4, existing and future.

Thank you for the opportunity to comment on the Calvert County Comprehensive Plan (May 2018 draft).

Sincerely,

A handwritten signature in blue ink that reads "Judy Holt".

Judy Holt, Planner I
Long Range Planning

cc: Dunkirk Architectural Review Committee Members: Gary Armstrong, Bob Arscott, Dana Noone, Frank Radosevic (an active member at the time comments were discussed; resigned from Committee September 18, 2018)

Jess Alexander and Ed Baddour (appointed to the Committee on September 18, 2018, comments were received at a meeting prior to their appointment).



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October 1, 2018

Planning & Zoning

Greg Kernan, Chair
Planning Commission
175 Main Street
Prince Frederick, MD 20678

OCT 01 2018
RECEIVED

RE: Request for Comments: Calvert County Comprehensive Plan (May 2018 Draft)

Dear Mr. Kernan:

The Huntingtown Architectural Review Committee met on September 13, 2018, to review and discuss the Calvert County Comprehensive Plan (May 2018 Draft). The following comments were received and a majority of members were in favor of submitting these comments in response to the Request for Comments: Calvert County Comprehensive Plan (May 2018 Draft) dated August 2, 2018. The Committee members requested that I submit these comments on their behalf.

This expansion would place Huntingtown High School in a Priority Funding Area (PFA) designation. Northern Middle School and Northern High School are not located in PFA designated areas and they have had much success. Why expand the boundaries of Huntingtown Town Center to give PFA status to Huntingtown High School? The Board of Education did not ask about putting Huntingtown High School in the Town Center. There is no clear reason to incorporate Huntingtown High School in the Town Center now. The state has a waiver process for schools located outside PFAs. The Committee recommends Huntingtown Town Center retain its current boundaries. If the Town Center is expanded across MD 2/4 to include the Huntingtown High School parcel, it will be easier to further expand the Town Center in the future.

With the increase in population, there is a greater need for more park land. Land for parks and recreation in the Town Center should be purchased when land becomes available.

Thank you for the opportunity to comment on the Calvert County Comprehensive Plan (May 2018 draft).

Sincerely,

A handwritten signature in blue ink that reads "Judy Holt".

Judy Holt, Planner I
Long Range Planning

cc: Huntingtown Architectural Review Committee Members: Frank Arbusto, Darryl Hatcher, Mary Ballard-Jenkins, Tom LaMoure and Tom Sasscer



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October 1, 2018

Planning & Zoning
OCT 01 2018
RECEIVED

Greg Kernan, Chair
Planning Commission
175 Main Street
Prince Frederick, MD 20678

RE: Request for Comments: Calvert County Comprehensive Plan (May 2018 Draft)

Dear Mr. Kernan:

The Lusby Architectural Review Committee met on September 24, 2018, to review and discuss the Calvert County Comprehensive Plan (May 2018 Draft). The following comments are in response to the Request for Comments: Calvert County Comprehensive Plan (May 2018 Draft) dated August 2, 2018. The Committee member requested that I submit these comments on their behalf.

The Committee is in favor of the proposed expansion to the north of Lusby Town Center. The Committee requests that a clear line of demarcation between the expansion areas of Lusby and Solomons Town Centers be determined prior to the recommendation by the Planning Commission, as each Town Center has a specific expectation of aesthetics.

Thank you for the opportunity to comment on the Calvert County Comprehensive Plan (May 2018 draft).

Sincerely,

A handwritten signature in blue ink that reads "Judy Holt".

Judy Holt, Planner I
Long Range Planning

cc: Lusby Architectural Review Committee (Valerie Miller, Chris McNelis, and Nance Pretto-Simmons).



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October 1, 2018

Planning & Zoning

OCT 01 2018

RECEIVED

Greg Kernan, Chair
Planning Commission
175 Main Street
Prince Frederick, MD 20678

RE: Request for Comments: Calvert County Comprehensive Plan (May 2018 Draft)

Dear Mr. Kernan:

The Owings Architectural Review Committee reviewed the draft Comprehensive Plan at its meeting on September 19, 2018. The Committee members requested I submit these comments on their behalf.

The Committee is in favor of the expansion of the Owings Town Center across MD 260. The proposed area for expansion should include small scale commercial development, which would limit the size of buildings as this would protect the existing residential lots located in the area of expansion. The Committee would like to propose that three lots located on the west side of Old Solomons Island Road, not currently located within the Town Center, be included in the Owings Town Center. The additional area proposed would not include any lots of the Owings Hills or Wm. McLaughlin property subdivisions. A parcel map is attached, and the lots are highlighted.

Thank you for the opportunity to comment on the Calvert County Comprehensive Plan (May 2018 draft).

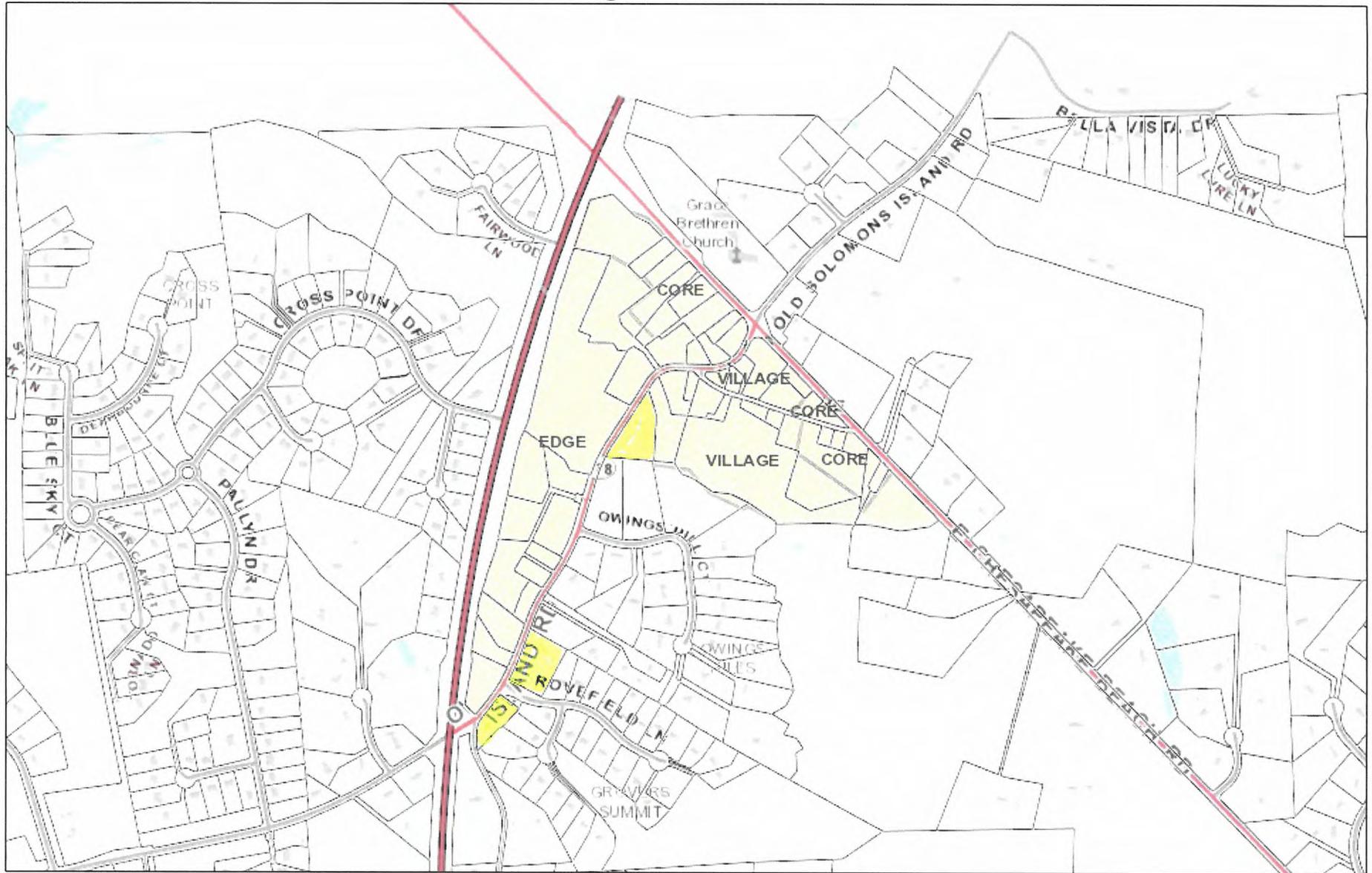
Sincerely,

A handwritten signature in blue ink that reads "Judy Holt".

Judy Holt, Planner I
Long Range Planning

cc: Owings Architectural Review Committee (Maureen Royle Donn, Brian Lazarchick, and Karen Towne).

Owings Town Center



The data represented here are maintained to the best ability of the Calvert County Government. Users assume any and all risks associated with decisions based on this data.

THIS MAP IS NOT TO BE USED FOR NAVIGATION.

© Calvert County Department of Technology Services



MAP PROJECTION:

NAD_1983_StatePlane_Maryland_FIPS_1900_Feet

1: 9,600



1 in = 800.00 ft

Notes

Comprehensive Plan (May 2018 Draft). Comments provided by OARC at meeting on 9/19/18. OARC would like to propose including three lots (highlighted) in the Owings Town Center. Not to include any lots of Owings Hill



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October 1, 2018

Greg Kernan, Chair
Planning Commission
175 Main Street
Prince Frederick, MD 20678

RE: Request for Comments: Calvert County Comprehensive Plan (May 2018 Draft)

Dear Mr. Kernan:

The Prince Frederick Architectural Review Committee met on September 10, 2018, and September 18, 2018, to review and discuss the Calvert County Comprehensive Plan (May 2018 Draft). The following comments are in response to a request for agency comments dated August 2, 2018. The Committee members requested that I submit these comments on their behalf.

Calvert County's unique geography and land shape offer many challenges to meet the main goal of the Comprehensive Plan, which is to provide citizens with local services while maintaining its rural character. Calvert County continues to be successful in preserving its agricultural and natural resources. We suggest providing more encouragement for agro-related leisure activities for the residents of Calvert County.

The Comprehensive Plan, Chapter 10.3.2.2 states, "Continue to improve and expand opportunities for public access to the Chesapeake Bay and the Patuxent River..." The Committee suggests using the word "maximize" in place of "improve."

VIBRANT TOWN CENTER

Process:

The committee recommends a specific outline for further study, and it believes that these investigations will have a material impact on development. We recommend starting with a traffic study of all intersections on MD 2/4. Then, follow with a land use study of the Town Centers to identify opportunities for growth. Afterward, we can address how vibrancy can be brought to Town Centers.

Traffic:

Because there is one route in and out of Calvert, we consider traffic to be one of the most important factors that will define growth potential. The Prince Frederick Architectural Review Committee is concerned that traffic studies need to be performed prior to the proposed expansion of Town Centers. Traffic studies should be performed at all intersections along MD 2/4. The expansion of the Town Centers will cause increased congestion on MD 2/4. The transportation chapter of the draft plan provides average daily traffic information of MD 2/4; but this information cannot tell the level-of-service (LOS) of each major intersection. The level-of-service at each main intersection should be an important plan indicator.

The Committee recommends performing additional traffic studies, specifically focus on the major intersections on MD 2/4 to find out the existing level-of-service of each major intersection and

recommends Level of Service E as the Comprehensive Plan goal of transportation service for the entire county.

In addition, based on this LOS of E, additional trips can be calculated for each intersection, this can be one of the bases to predict how much development the county can accommodate.

Land Use Study

The Committee recommends a Town Center land use study to be carried out for each major Town Center as another basis to determine how each major Town Center can be expanded. The study should focus on the land within a quarter mile radius of the Town Center and to see how much land is left for each Town Center. Based on the inventory of the vacant land, a reasonable growth for each major Town Center can be predicted. To delineate a growth boundary, direct and incentivize the development in the Town Center boundary should be another important goal of the land use element of the Comprehensive Plan.

Land Use:

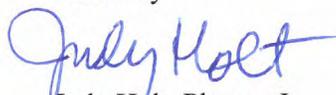
Creating compact, high density mixed-use, pedestrian friendly Town Centers should be one of the more carefully considered parts of the land use policy. Many national best practices show that vibrancy of Town Centers comes from mixed-use, high-density, pedestrian friendly environments.

There should be no increase of Town Center boundaries until there is an idea of the areas of developable land. In fact, the Prince Frederick Town Center south boundary should be shortened and cut off at the intersection of MD 765/Main Street and MD 2/4. Density within Town Centers should be increased to direct a substantial growth in those areas without creating sprawl. An area of development should be walkable (measured out by ¼ mile) and contain a civic element. The Market Square Shopping Center successfully incorporates a civic element with the library but is not walkable. The developed area should be mixed-use. To obtain the goal of a vibrant Town Center, the scope of authority of Committees, such as the Architectural Review Committee, would need to be increased.

If expanding, population studies should be performed based on actual county population projections. Other studies such as water supply and adequate public facilities information should be based on those population figures. As mentioned above, without knowing how much developable land is located in the expansion area it would be hard to do these types of studies.

Thank you for the opportunity to comment on the Calvert County Comprehensive Plan (May 2018 Draft).

Sincerely



Judy Holt, Planner I
Long Range Planning

cc: Prince Frederick Architectural Review Committee Members (Ed Apple, Elizabeth Ashley, Bill Midgett, and Henry Zhang)



**CALVERT COUNTY
ARCHITECTURAL REVIEW COMMITTEE**

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Steven R. Weems

Planning & Zoning

October 1, 2018

OCT 01 2018

Greg Kernan, Chair
Planning Commission
175 Main Street
Prince Frederick, MD 20678

RECEIVED

RE: Request for Comments: Calvert County Comprehensive Plan (May 2018 Draft)

Dear Mr. Kernan:

The Solomons Architectural Review Committee met on September 10, 2018, and October 1, 2018, to review and discuss the proposed draft Comprehensive Plan. The following comments are in response to the Request for Comments from Agencies dated August 2, 2018.

Chapter 3 - Land Use (Expansion of Solomons Town Center)

Concerns:

Expanding the Town Center Boundaries of Solomons and Lusby:

Concerns:

- 1) The Committee is concerned that the expansion of the Solomons Town Center north and Lusby Town Center south will result in both Town Centers losing their individual architectural design standards.
- 2) There is concern about the potential for strip commercial development along MD 2/4 since the proposed expansions includes land along MD 2/4. The existing tree buffer should remain.
- 3) There is currently too much developable land on MD 765 between the two Town Center boundaries. This might result in a competition for Town Center growth and create sprawl.

Suggestions:

- 1) If the Solomons Town Center is expanded north it should include land along MD 765 and not MD 2/4. Shorten the expansion of each Solomons and Lusby Town Centers and allow residential development between the two boundaries.
- 2) Force commercial and mixed use growth into a community setting to avoid strip development.

The Committee is in favor of expanding the Solomons Town Center to include the rest of the east side of the Dowell peninsula.

RE: Request for Comments: Calvert County Comprehensive Plan (May 2018 Draft)
October 1, 2018
Page Two

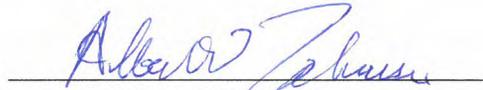
The proposed Residential area is more logical than drawing an arbitrary one-mile radius around the Town Centers.

Thank you for the opportunity to comment on the Calvert County Comprehensive Plan (May 2018 draft).

Sincerely,



Brent Hutchinson


Stacy Hutchinson
Chris McNelis
Albert (Skip) Zahniser

SARC/jh



Larry Hogan, Governor
Boyd Rutherford, Lt. Governor

Robert S. McCord, Secretary

October 5, 2018

Mr. Greg Kernan, Chair
Calvert County Planning Commission
175 Main Street
Prince Frederick, MD 20678

Planning & Zoning

OCT 05 2018

RECEIVED

Dear Mr. Kernan,

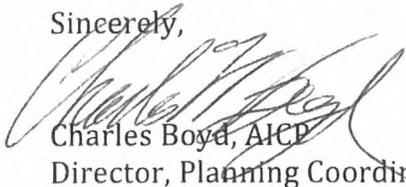
Thank you for forwarding the Draft Calvert 2040 Comprehensive Plan for a second cursory review. The Maryland Department of Planning (Planning) encourages early engagement with local planning departments for a productive dialogue supporting the comprehensive planning process and developing sound planning recommendations and policy. Planning is encouraged by the County's efforts to preserve its rural landscape, create flourishing Town Centers, and incorporate sustainability principles in its comprehensive plan.

The Department's Planning Coordination and Planning Data Research Divisions have reviewed the updated draft and prepared comments for Calvert County planning staff and the Planning Commission. We hope that these comments continue to offer a constructive response to the draft Comprehensive Plan, and provide meaningful guidance.

Please consider that Planning's attached review comments reflect the agency's recommendations on ways to strengthen the County's plan.

If you have any questions, please feel free to contact Karen Mierow, Regional Planner, at 410.767.3837.

Sincerely,



Charles Boyd, AICP
Director, Planning Coordination

Cc: Pat Keller, Assistant Secretary for Planning Services
Joseph Griffiths, Local Assistance and Training Manager
Karen Mierow, Regional Planner

OCT 04 2018
 RECEIVED

**Maryland Department of Planning Review Comments
 October 1st, 2018
 Draft Calvert 2040 Comprehensive Plan**

The Maryland Department of Planning (Planning) has reviewed the July 2018 worksession version Draft Calvert 2040 Comprehensive Plan (Plan) and offers the following comments for your consideration. These comments are offered as suggestions as the County continues to develop and revise the draft comprehensive plan.

Planning was asked to review a July 2018 worksession draft of the Calvert County Comprehensive Plan. This second review is a courtesy to the Plan drafters and does not substitute for a full state agency review of the Planning Commission's recommended plan, which will be completed when the County submits a request at a later date.

Minimum State Law Requirements for Non-Charter Counties

Maryland's Land Use Article sets forth the required components of a local comprehensive plan but does not mandate a specific format. As such, local governments have addressed these required elements in a manner that fits the needs of their community and the resources available to respond to the issues explored during the planning process. The following checklist summarizes an assessment as to whether each required local plan element is addressed in the Draft Calvert 2040 Comprehensive Plan.

TABLE 1

Checklist of Maryland Code (Land Use Article) requirements for local comprehensive plans in Maryland			
State Comprehensive Plan Requirements	MD Code Reference	Additional MD Code Reference	Draft Calvert 2040 Comprehensive Plan page references
(1) A comprehensive plan for a non-charter County or municipality MUST include:	L.U. § 3-102(a)		
(a) a community facilities element	L.U. § 3-102(a)(1)(i)	L.U. § 3-108 -- Community facilities element.	10-1
(b) an area of critical State concern element	L.U. § 3-102(a)(1)(ii)	L.U. § 3-109 -- Areas of critical State concern element	5-1
(c) a goals and objectives element	L.U. § 3-102(a)(1)(iii)	L.U. § 3-110 -- Goals and objectives element	2-1

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Checklist of Maryland Code (Land Use Article) requirements for local comprehensive plans in Maryland			
State Comprehensive Plan Requirements	MD Code Reference	Additional MD Code Reference	Draft Calvert 2040 Comprehensive Plan page references
(d) a land use element	L.U. § 3-102(a)(1)(iv)	L.U. § 3-111 -- Land use element	3-1
(e) a development regulations element	L.U. § 3-102(a)(1)(v)	L.U. § 3-103 -- Development regulations element	These are generally referenced in the Growth Areas section, 3-10
(f) a sensitive areas element	L.U. § 3-102(a)(1)(vi)	L.U. § 3-104 -- Sensitive areas element	4-2
(g) a transportation element	L.U. § 3-102(a)(1)(vii)	L.U. § 3-105 -- Transportation element	7-1
(h) a water resources element	L.U. § 3-102(a)(1)(viii)	L.U. § 3-106 -- Water resources element	9-1
(i) a mineral resources element, IF current geological information is available	L.U. § 3-102(a)(2)	L.U. § 3-107 -- Mineral resources element	4-12
(k) for counties only if located on tidal waters, a fisheries element	L.U. § 3-102(a)(4)	L.U. § 3-113 -- Fisheries element	Discussion in Economic Vitality chapter
Optional: (2) A comprehensive plan for a non-charter County or municipality MAY include: (a) a community renewal element; (b) a conservation element; (c) a flood control element (d) a housing element; (e) a natural resources element; (f) a pollution control element; (g) information concerning the general location and extent of public utilities; and (h) a priority preservation area (PPA) element	L.U. § 3-102(b)	L.U. § 3-102(b)(2)(i)	Hazard Mitigation element 4-14 Housing element 6-1
(3) Visions -- A local jurisdiction SHALL through the comprehensive plan implement the 12 planning visions established in L.U. § 1-201	L.U. § 3-201(c)	L.U. § 1-201 -- The 12 Planning Visions	Integrated with chapters throughout Plan
Optional: (4) Growth Tiers -- If the local jurisdictions has adopted growth tiers in accordance with L.U. § 1-502, the growth tiers must be incorporated into the jurisdiction's comprehensive plan	L.U. § 1-509		3-6
Additional: (5) Sustainability in the Comprehensive Plan Element			ES-1

General Comments

It is Planning's intent that these comments continue to provide insight and guidance to the Plan drafters and planning commissioners. Comments are both thematic and specific, intended to provide recommendations for future consideration. Note that any outstanding comments made previously still apply.

Planning commends the plan drafters for showing marked progress in the current plan version. Formatting improvements, added strategies for recommendations and the inclusion of an Implementation chapter have advanced the draft plan substantially. The plan is well organized, legible, and demonstrates greater development of rational planning concepts.

Planning offers the following general comments:

- Goals and objectives are frequently explained in terms of their definition, rather than through evaluation and analysis. Where objectives are identified, actionable steps on how to achieve these outcomes should be presented. Indicators that measure progress should be identified. The Plan could also identify potential tools, resources, and other stakeholders that could assist with achieving the objectives.
- Where possible, discuss recommendations in terms of all three dimensions of sustainability: economic, equity and environmental benefits, that you have identified. For example, expanding solar array development could provide green jobs, re-use vacant land, offset utility costs, achieve PSC mandates and work toward less reliance on fossil fuels. Property Assessed Clean Energy (PACE) financing may be a potential tool to realize these benefits on a greater scale to consumers. Because sustainability is interdependent upon more than one element, the interrelatedness of issues could benefit from more in-depth discussion.
- Avoid generalizations or subjective statements i.e., 8-15 states, "This would in(sic) encourage entrepreneurship and increase the number of start-up small businesses in Calvert County. It would also incentivize people to create jobs for themselves rather than waiting for jobs to be created for them."

Most changes to data and population have been made. One issue which has not been addressed is the use of the term "rate" in the plan. This may be a misunderstanding of the term and concept.

- The revised first sentence under sub-head Managing Residential Growth: "Implementation of the previous Comprehensive Plan policies has contributed to reducing the county's growth rate for population and households, which has continually decreased since its peak in the 1970's" (page ES-3). Note that Comprehensive Plan policies do not affect a rate, they affect growth. The rate is simply a metric for measuring the pace of growth. Consider the following two alternatives:

Alternative 1: implementation of prior Comprehensive Plan policies contributed to better management of growth in the County.

Alternative 2: implementation of prior comprehensive plan policies may have contributed to slower growth in the county's population and households.

The above alternatives are generic. Either alternative avoids the trap of proving, via a statistical analysis, that A (comprehensive plan policies) explains B (reduced county population/household growth rate). Keep in mind that in contrast to population or household growth, the rate of employment growth in Calvert County is relatively strong. So, the proposition that policies caused/explain reduced growth rate is not self-evident.

See the last section of this document for an overview of population projections methodology

Chapter 2 Key Issues

- Please revise the first sentence to: "Implementation of policies from prior Comprehensive Plans has contributed to the county's **slower growth**." The problem with using a precise term such as "rate" is that nowhere in the document has a statistical analysis been presented that quantifies the relationship between implementation of a policy and growth rates. One cannot make the argument that policies are responsible for a **slower growth rate** when other variables/factors have not been taken into account. It is best to avoid using the term "rate" and better to use descriptive terms.
- The statement "As a result, Calvert County has gone from being the fastest growing county in Maryland to one of the slowest" (page 2-1). What is this result attributable to? Consider this revision to the paragraph: Calvert County was one of the state's fastest growing jurisdictions. However, the implementation of policies from prior Comprehensive Plans has contributed to the county's slower growth in recent years. This trend is projected to continue (Tables 2-1 and 2-2).
- Consider revising the following changes to the paragraph on (page 2-2), "An important trend Calvert County must contend with is slowing population growth. Beginning in 1988, the county government took policy actions to intentionally slow **the pace of development**. Because of **fewer** new households and businesses that locate in Calvert County each year, the location of these developments is critically important.

Chapter 3 Land Use

- Please remove “rate” from the italicized sentence and substitute with “pace of development....” (page 3-2).
- While prior suggestions have been taken into consideration, there appears to be an error in Table 3-2 (page 3-10). See Percent Change (By Decade) 2010’s, the 12.9% posted here appears to be incorrect. Wouldn’t the percent change over the 2010-2020 period come out to 6.6 percent? Please take a second look.
- Figure 3.2 illustrates that 59% of residential building permits issued in 2010-2015 were outside the County’s designated Priority Funding Area. The plan suggests that there are options to re-direct growth (page 3-8), but does not explain how these options were identified, nor provide policies to achieve them. What policies or actions can this plan recommend for reversing that trend, given that this has not produced the desired development patterns or character?
- On page 3-12 the plan notes the County’s preference for new development to locate within Town Centers, although there is greater capacity to absorb new growth outside the Town Centers. According to the Build-out capacity analysis (pages 3-11 to 3-12) the proposed Town Centers contain sufficient capacity to accommodate projected household growth with the use of transferable development rights. The County is encouraged to elaborate on specific infill, redevelopment, and/or suburban retrofit opportunities and strategies for individual Town Centers (pages 3-16 to 3-22).
- Good design is a key aspect of sustainable development and should contribute positively to the place and experience. Reinforce the connections between people and places and the integration of new development into the natural, built, and historic environment.
- Develop policies for early engagement to review the design of new buildings and landscapes. Planning is available to assist the County with the development of a design review process, coordinate design review, or assist in the development of standards and guidelines.
- Consider design standards and guidelines for all Town Centers and new developments.

Chapter 4 Environment and Natural Resources

- Regarding the Smart Growth Coordinating Committee condition for growth area designation and minimum base density requirements for Priority Funding Area consideration: The County can address the Smart Growth Coordinating Committee’s condition through two options. The first approach is for the County to set the base density for the Major Town Center at 3.5 units per acre, which isn’t much more than 3 units per acre. This approach not only would meet the Smart Growth Coordinating Committee’s condition, but by designating the areas as PFAs, this would assure the County that if it needs state funds for important amenities and services (e.g., streetscaping, strategic demolition, sewer) in the Major Town Centers at some point in the future, then they would be able to obtain those funds because of the PFA

designation. The second approach is for the County to not revise the base density of its Major Town Centers and to instead amend its water and sewer plan to add language that the areas in question will be allocated a certain amount of the Solomons Island WWTP capacity that existed prior to the WWTP expansion. Please contact us regarding the second approach.

- The Watershed Management section (page 4-8) should indicate that the County now has a Phase II MS4 stormwater permit that requires a certain amount of watershed management during each permit cycle, and how the permit helps to implement the County's watershed improvement program (WIP).
- The link to the Patuxent River Policy Plan (page 4-8) should be changed to: <http://planning.maryland.gov/Pages/OurWork/PaxRierComm/PatuxentRiverCommInfo.aspx>
- Under Objective 4, (page 4-15) of Goal 1, the County could add a strategy to develop and implement a workplan by certain dates to ensure selected recommendations of 2010 Steering Committee Report and the 2014 Advisory Committee Report are realized.
- Under Goal 4 (page 4-17), consider adding language to reflect the need to adjust protection strategies over time due to climate change: "Make periodic adjustments to County hazard mitigation strategies based on updated forecasts of how and where hazard impacts might change over time."
- Planning acknowledges that the Farm and Forest Areas shown in the future land use plan (now figure ES-1) have since been adjusted, and now align more closely with the Tier IV Areas. However, Planning has identified some remaining areas where growth tiers may require revision, such as Tier III areas within Farm and Forest areas, and Tier IV areas within growth areas. Once the comprehensive plan is adopted, Planning will complete a more detailed review of the growth tier map under Section 1-505 of the Land Use Article. If requested Planning can also provide a detailed review of the growth tier map before the plan is adopted.

Chapter 5 Heritage

- Continue to address "strategies for mitigating the effects of water and weather" as mentioned on page 5-4. The City Annapolis's [Weather it Together Cultural Resources Hazard Mitigation Plan](#) is an excellent example of mitigating for weather and water.
- Consider how climate changes will affect all the plan's issues in terms of resiliency, including how the County will anticipate and prepare for future changes?

Chapter 6 Housing

- How can this plan's sustainability approach address housing availability and attainability for individuals at all income levels?

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- Regarding affordable housing, what is the amount of existing affordable housing, is it being lost, and to what factors?
- Consider including estimates of future housing demand, as this can help guide growth, infrastructure, and housing types in the plan.

Chapter 7 Transportation

- The County may want to consider revising the transportation vision statement to include guiding principles as outlined in the transportation and other chapters. For example, the County may want to include language identifying Calvert County's desire to include safe, multimodal facilities for all users, protect air quality by reducing vehicle miles traveled and associated greenhouse gas emissions, reduce local and state expenditures on infrastructure while providing a high quality of life, supporting growth in town centers and designated growth areas, and minimizing impacts to rural resources (i.e. agricultural lands).
- We are encouraged to see the County's desire to incorporate complete streets standards as appropriate. We suggest Calvert County consider developing a complete streets policy to provide increased transportation choices and increased mobility for all users. The Maryland State Highway Administration (SHA) has done extensive work with communities across Maryland to develop roads in local communities that respect the community's character. We encourage the County to review SHA's "When Main Street Is a State Highway." More information on SHA's complete streets efforts is available at: <http://www.sha.maryland.gov/OHD/MainStreet.pdf>
- We appreciate the County's "dual goals of preserving the rural landscape and creating vibrant town centers and villages." The plan indicates that the County considers the gradual conversion of MD 4 and MD 2/4 into an access-controlled expressway as key to resolving traffic congestion (page 7-5). This consideration appears to conflict with the County's twin goals. It will likely increase the amount of development along the upgraded facility by providing new high-speed, convenient access to largely undeveloped land. It may create multimodal access barriers for planned town centers and villages. It will be important to develop strategies on where and what types of development are desired along the corridor. For example, will land adjacent the new facility be re-zoned as highway commercial or will it remain largely undeveloped? Will access control strategies and land use policies be developed and implemented to help limit access and discourage strip and/or low-density development low-density along the corridor? These are some questions the County may want to consider. Staff from the State Highway Administration (SHA), the Department of Transportation (MDOT) and the Maryland Department of Planning (Planning) are available to assist the County in developing transportation and land use strategies to improve traffic operations along the MD-4/MD-2 corridor.

- Roughly 67% of the current Calvert County labor force commute outside the County for employment (page 8-5). To help reduce the impacts of the jobs and housing imbalance, the County may want to consider increasing the density of its employment development within its Town Centers, which would reduce the need for expansion of business/commercial/industrial lands while encouraging and accommodating employment development. In addition, well-planned and high-density employment land uses would make multimodal transportation access feasible, which would help reduce residents' needs for long distance commuting. The County may also want to investigate financial incentives to attract new businesses.
- We encourage Calvert County to update the transportation and circulation plan including bicycle pedestrian facilities planning. We suggest that once the transportation plan is updated, the County incorporate its findings and recommendations into the transportation chapter and the implementation chapter of an amended County Comprehensive plan.
 - The plan may consider including vehicular, pedestrian and bicyclist circulation as well as identifying gaps in the existing transportation network.
 - It would be helpful to clarify the responsibilities (e.g., the state, local jurisdictions, and private developers), funding mechanisms, timeframes and prioritization for proposed roadway, sidewalk or trail improvement projects. The circulation plan should discuss the rationale for the priority, e.g., supporting planned growth in the PFAs, providing needed connections to address local traffic, etc.
 - Information on how the County plans on funding new non-motorized facilities would be beneficial. SHA's Transportation Alternatives Program may be a funding option for sidewalk construction. More information can be found at <http://www.roads.maryland.gov/Index.aspx?PageId=144>.

Chapter 8 Economic Vitality

This draft effectively expands the discussion of opportunities for new economic sectors, such as agri-tourism, and the needed energy to ensure long term viability. (page 8-2). The County should continue to expand and promote the development and diversification of agricultural and other land-based rural businesses.

- There is no Figure 8-2 that is referenced on page 8-5.
- Consider providing a more robust analysis of the potential economic impact of retirees (page 8-10). How will the County compete for them and what other locations are competing for them? This link may help: <https://smartasset.com/retirement/where-are-retirees-moving-2017-edition>
- Explain how retirees as a sector may impact other services, such as health care and transportation.

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- Consider linking goals for workforce development and employment to renewable energy, climate change, and resiliency to support the plan's sustainability focus.
- Support the sustainable growth and expansion of business and enterprise in rural areas, both through conversion of existing buildings and well-designed new buildings.

Chapter 9 Water Resources

- Table 9-2 (page 9-4) indicates that the forecasted 2040 demand for the Solomons water system exceeds the 2014 planned capacity. The paragraph at the top of page 9-6 should recognize this disparity and should describe the County's plans for ensuring sufficient water system capacity for the Solomons water system to accommodate the forecasted 2040 demand.
- The "Managing Stormwater and Non-Point Source Pollution" section (p. 9-13) should acknowledge that the County now has a Phase II MS4 stormwater permit that requires a certain amount of addition of stormwater management controls during each permit cycle. Recognizing this, the County should modify its strategies under Goal 4 (pp. 9-15 and 9-16) to reflect its Phase II MS4 permit responsibilities, and to distinguish any additional stormwater management strategies beyond its MS4 permit responsibilities. The "Related County Plans" section (p. 9-1) and "Water Quality Regulations" section (p. 9-2) should list the County's Phase II MS4 permit as well and how it relates to the County's 2011 WIP II strategy.

Chapter 10 Community Facilities

- This chapter will be reviewed as part of the 60-day review process

Chapter 11 Implementation

Planning commends Calvert County for taking a proactive approach to growth with the interim actions put in place during the plan's development, including new sign regulations, adoption of the Growth Tier Map, and adoption of the updated Land Preservation, Parks and Recreation Plan. As the draft plan continues development, please consider these actions:

- Identify zoning and other regulatory changes that may be necessary to implement the recommendations or policies.
- Identify any strategic regional partnerships that could be effective in meeting goals. The Chesapeake Bay Foundation, Maryland Historical Trust, American Farmland Trust, and the USDA Rural Development Loan and Grant Program are all some of the resources that can help work with communities.
- Link funding sources to action items where possible.
- Include metrics for evaluating progress in achieving desired outcomes.

POPULATION PROJECTIONS: An Overview of the Methodology

September 2018

The Maryland Department of Planning (Planning) produces population and household projections for the state of Maryland and its 24 jurisdictions. The Department's authority to prepare and revise population projections for the State and for each county in the State is described in Annotated Code of Maryland, State Finance and Procurement Article, Division I, [Section 5-306](#). The latest round of projections, published in August 2017, are available to the year 2045. These data are provided at five-year intervals.¹

Detailed projections (total, household, and group quarters populations) are prepared by age (at five-year cohorts from 0-4 to 80-84 and 85+), sex, and race/ethnicity (Non-Hispanic White, Non-Hispanic Black, Non-Hispanic Other and Hispanic).

A Fortran-based computer model is used to generate total, household, and group quarter population projections for each jurisdiction by age, sex, and race. Model inputs are developed in Microsoft Excel. The final output or reports, which are available in PDF and Excel format, may be accessed at the [Maryland State Data Center](#) web page.

This document is an overview of the data and population change components used to generate the state's population and household projections. The paper highlights data sources, the demographic model, and components of change, i.e., fertility, survival, and migration rates.

Primary Data Sources

Decennial Census. The official count of the resident population and housing units is conducted once every ten years by the U.S. Census Bureau. The last Census was completed in 2010.

*Annual Population and Housing Unit Estimates.*² Estimates are produced annually by the Census Bureau and reflect the population as of July 1. In the current round of projections, 2015 census estimates serve as the baseline. The estimates or intercensal data, however, is interpolated to reflect population as of April 1.

Maryland Department of Health. The Health Department provides birth and death records for each jurisdiction. Fertility and survival rates are derived based on that information.

Metropolitan Planning Organizations (MPOs). Projections from local MPOs—the Metropolitan Washington Council of Governments and the Baltimore Metropolitan Council—serve as a benchmark for Planning's projections. Planning participates in each MPO's

¹ The next round of projections would be published in 2020 with data forecast at five-year intervals to 2050. The Maryland Department of Planning reviews its projections annually when adjustments are made as needed.

² An estimate is an approximation or best guess of the population based on a sample of the population taken at a specified period when a total count of the population is not available. A Projection, on the other hand, is the expected population for a given area at some future period based on a set of assumptions about future trends.

cooperative forecasting process. To evaluate MPO population projections, Planning breaks the forecasts into their component parts (births, deaths, and migration) for each cohort and moves them forward in time using a standard demographic model.

Note on MPOs: The Cooperative Forecast Committees of the [Metropolitan Washington Council of Governments](#) and the Baltimore Metropolitan Council develop projections based on input from local, state and regional planners. These projections reflect known and expected subdivision activity, local zoning, general and comprehensive plans and, where applicable, capacity constraints. The long-range projections that come out of the MPO cooperative forecasts are generally accepted by Planning. Instances where Planning may modify MPO projections result from different estimates of the near-term population or from alternate assumptions about future growth trends. For counties not taking part in the cooperative forecasts, projections are developed by Planning using a demographic model that incorporates assumptions about fertility, survival, migration, and the group quarters population.

Demographic Model

The cohort-component model is the most widely used projection method in the United States. It has been adopted by 95 percent of all states that produce population forecasts by age, sex, and race. Planning uses the cohort-component model to develop projections for the state's 24 jurisdictions at five-year intervals by age, sex and race. The model can incorporate many types of data and can be used at almost any geographic level (state, county, subcounty).

The basic population forecast formula is:

Projected Population = Initial Population + (Births - Deaths) + Net Migration

$$P_{t+5} = P_t + ({}^{t+5}B_t - {}^{t+5}D_t) + {}^{t+5}M_t$$

t = current period

t+5= forecast period

The graphic below shows, in general, the interactions among the components of change in a Cohort-Component model. Cohort-component simply means that population—i.e., household population in Planning’s demographic model—is disaggregated into age-sex-race categories and moved forward in time based on the fertility, survival, and migration trends of each cohort. The graphic illustrates the projection cycle for one cohort over a single five-year period; the cycle must be repeated several times to complete the projection series.³

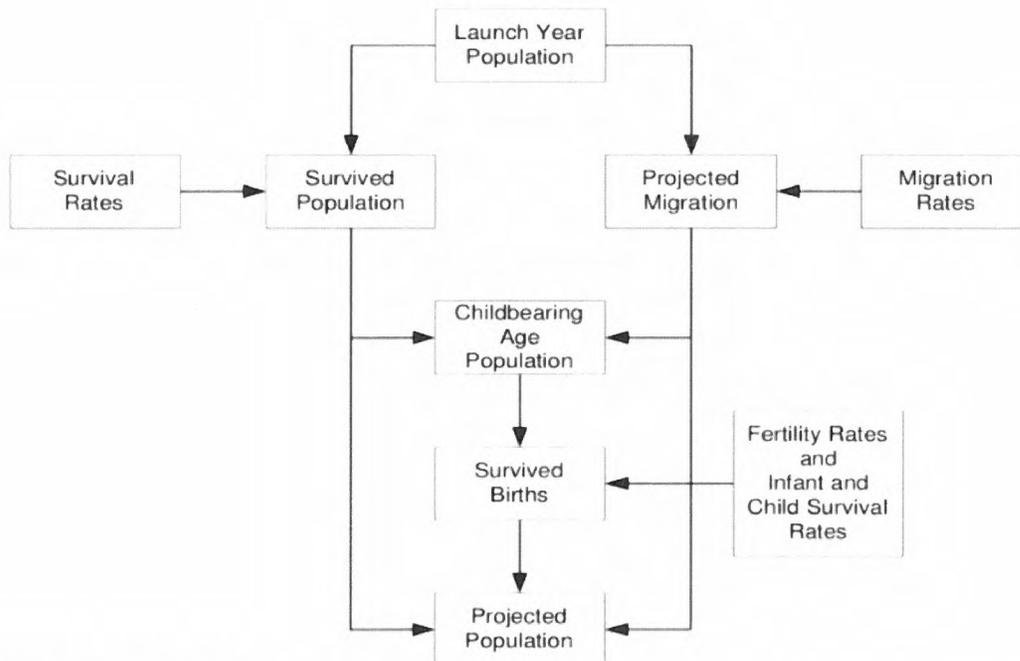


Figure A.1 Overview of the Cohort Component Method

Planning’s model disaggregates household population into four race/ethnic categories (Non-Hispanic White, Non-Hispanic Black, Non-Hispanic Other, and Hispanic) and 18 five-year age cohorts (from 0-4 years to 85 years and over). These household populations are moved forward 30-years in time at five-year increments. Planning’s most recent projections are from 2015 to 2045.

One limitation with using the cohort-component method is it does not incorporate socioeconomic criteria when developing the fertility, survival, and migration rates which are applied to the different age-sex-race groups. Instead, an analyst starts with the assumption that future rates would be in line with historic patterns. The analyst/demographer may then adjust

³ See S Smith, J Tayman and D Swanson (2001).

rates based on scenarios that might happen in the future.⁴ For example, if one expects longer life spans then survival rates would be increased. The demographic approach followed here does not consider economic factors, such as employment trends and business activity, when building model inputs.

Model Inputs

1. Total and Group Quarters Population by age, race and sex for each jurisdiction.
2. Household Population refers to total population minus the group quarters population that is less than 65 years of age.
3. Fertility Rates (estimated and projected) by age, race and sex for each jurisdiction are prepared at five-year intervals from the base year over the forecast period.
4. Survival Rates (estimated and projected) by age, race and sex for each jurisdiction are prepared at five-year intervals from the base year over the forecast period.
5. Migration rate propensities (i.e., the likelihood to move) by age, race and sex for each jurisdiction are prepared at five-year intervals from base year over forecast period.
6. Group Quarters (GQ) population data is extracted from the Decennial Census. Group Quarters population refers to persons who, under care or custody, stay in a group living arrangement that is managed by or owned by an organization. Group quarter arrangements include correctional facilities (e.g., prisons, detention centers, halfway houses), care facilities (e.g., nursing homes, hospice, residential schools for people with disabilities), student housing, military quarters, and other non-institutional facilities (e.g., homeless shelters, group homes, residential treatment facilities). Note: The GQ population is not projected for each jurisdiction rather a proportion of the statewide GQ projection is distributed across jurisdictions. This proportion is based on a jurisdiction's 2010 share of the state GQ population for each age, sex, and race cohort.

⁴ A demographer's expectations or assumptions may be shaped by published research, by consensus among county and regional planners, by experimental analysis or observation or by other available information.

Model Assumptions

Fertility

Age and race-specific fertility rates are developed for each jurisdiction. An age-specific fertility rate is the number of live births to women of a given age cohort (from 15-19 to 40-44) divided by the total number of women in that age cohort. Fertility rates are also developed based on sex of the baby.

Statistics on live male and live female births by jurisdiction and by the age and race of the mother are provided by the Maryland Department of Health. Data on female household populations come from the Decennial Census and Annual Census Estimates.

Fertility rates are affected by several factors including changes in labor market and socio-economic status. Census data show that fertility rates, across all racial and ethnic groups, have fallen each decade since 1990. Based on such observations, Census researchers speculate that, over a 99-year period, fertility rates would converge for different racial and ethnic groups. Given this outlook, Planning has adjusted fertility rates in its forecast model with the gap between Non-Hispanic White and minority fertility rates narrowing by roughly 35 percent over the projection period.

Survival

Data supporting survival rates come from the Decennial Census, Census Estimates, and the Maryland Department of Health. Survival rates based on two censuses⁵ take into account not only deaths but the effects of net migration and census enumeration error as well.

Survival rate, as used in this document, is the probability that an age cohort survives from one period to the next. These rates are developed by age, sex, and race for each jurisdiction at five-year intervals. Multiplying each age-sex-race specific cohort population by its five-year survival rate yields the survived population.

In jurisdictions where the distribution of the non-white population does not meet a minimum threshold, the statewide survival rates for that cohort are substituted for the jurisdiction derived survival rates.

Migration

Migration is the movement of populations across jurisdictions, state boundaries, or international borders to change residence. Net migration is the change in the number of residents in a given geographic area (the difference between those who move into the area and those who move out). This movement may happen for any number of reasons including a change in economic conditions, employment opportunities, housing patterns, or transportation issues. For this reason it is difficult to model migration rates. Thus, to calculate migration rates by jurisdiction by age-sex-race cohorts at five-year intervals over the projection period, Planning uses a residual method.⁶

⁵ Hamilton-Perry Method, defined in J. Siegel and D. Swanson (2006)

⁶ S. Becker, Measurement of Migration.

The migration rates are derived by surviving the population (excluding persons in group quarters less than 65 years old) in year one—accounting only for births and deaths—through year five.⁷ The result is a closed household population, one in which migration has not occurred. This closed population is then subtracted from the true population count (excluding persons in group quarters less than 65 years old) for year five, as reported in the Census. The difference, which is further broken out by age, sex, and race, becomes the five-year net migration. Next, net migration rates are calculated for that five-year intervals for each age-sex-race cohort. Net migration rates are calculated by dividing the net migration for each group by the closed population for that same group.

Group Quarters Population

Changes in this population are assumed to be related to different factors than those influencing the remainder of the population. For purposes of projections, the group quarters population less than 65 years of age is assumed to be largely related to changes in the overall size as well as age, race and sex distribution of the State's population. Persons in group quarters 65 years and older are treated as household population for purposes of jurisdiction projections. After the household population is projected for each jurisdiction, an estimate of the group quarters population over 65 years of age is developed based on the proportion of group quarters to total population in the 65+ age cohorts as reported in the 2010 Decennial Census.

⁷ Note that the 2010 – 2015 five-year interval serves as the control for the current round of projections. The fertility rates and survival rates are developed based on the 2010-2015 period and adjusted for succeeding intervals.

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Appendix

- Verify percent change (by decade) for 2010's. It seems that the percent change between the 2010 value and the 2020 projected value would be 6.6 percent? (Appendix page A-59).
- The projected values for 2020, 2030, and 2040 do not match the numbers shown in Table 2-2 (Appendix page A-59, and page A-62).

END MARYLAND DEPARTMENT OF PLANNING COMMENTS