

Problems and Cost Increases Likely from Proposed Expansion of Prince Frederick Town Center

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Prepared by Members of Keep Calvert Country

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I. Statement of Issue

In July 2021, the Calvert County Department of Planning and Zoning (P&Z) proposed a revision of the Prince Frederick Town Center Master Plan¹ that could add as many as 10,024 new residences² to the county seat. Approval of this proposal would significantly accelerate the county's population growth and could significantly increase near and long-term annual budget costs because it would require the county to deal with: worsening traffic congestion, overloaded sewage processing capacity, accelerated water consumption, overcrowded schools, and increased county services. These added costs would require officials to either pass them on to Calvert taxpayers or reduce essential public services, such school funding.

Despite requests from citizens and standard professional planning practices, there is no indication that P&Z staff prepared studies to determine the potential impact of the proposed construction on the potential problem areas listed above. These would enable Calvert officials and residents to determine the program and budgetary impact of the proposed expansion. Without this information, *county officials cannot make informed decisions on the costs of correcting future problems.*

A group of citizens committed to protecting their quality of life formed Keep Calvert Country (KCC). Its members researched federal, state, and professional planning guidelines as well as county budgets and plans to identify the impacts and costs that the county is likely to incur from this proposal. This KCC report identifies the problems that the county will probably face from the expansion and outlines the county's potential long-term financial risks. It found three major potential problems from the proposed growth. It:

1. will worsen traffic gridlock in Prince Frederick and increase traffic stoppages all along the MD 2/4 corridor,
2. will concentrate growth in an area that is likely to exceed the capacity of Prince Frederick's Wastewater Treatment Plants (WWTPs) to treat sewage, and
3. will likely generate future Calvert budget increases of \$510 million or more.

While KCC researchers tried to make this report as accurate as possible, we encourage Calvert officials to provide us documented evidence where they believe this report is mistaken.

¹ Town Center Master Plan, Prince Frederick, July 2021.

² P&Z January 26, 2022, presentation to Calvert Planning Commission, Slide 11.

II. Overview of the Calvert FY 2022 Adopted Budget

Apart from some funds from federal or state sources, Calvert residents pay most county expenditures with taxes or fees to several parts of the county budget:

General Fund. These funds are collected directly from residents or corporations and are used mainly to cover the county’s operating expenditures. They are collected as property taxes, income taxes, and revenues, including payments in lieu of taxes (PILOTs) negotiated between Calvert officials and management at the nuclear power plant and the Cove Point LNG export facility.

Enterprise Fund. This fund accounts for operations financed and operated like business enterprises where operations are predominantly self-supporting by user charges, such as in the Water and Sewer Fund and the Solid Waste Fund.

Excise Tax Fees These are one-time fees assessed against new development that attempt to recover from the developer the capital cost of additional public facilities needed to serve the development.

Capital Projects Fund. This finances capital projects such as land purchases, construction of a new facility or building, renovation of existing facilities or buildings, or purchase of a major equipment that result in the acquisition of capital assets. In addition, this fund includes recurring capital projects such as roof replacements, mechanical/HVAC systems, and fire & rescue apparatus.

Calvert FY 2022 Budget

Expenditures of Operating Funds³

General Fund

County Government..... \$184,544,369

Calvert Public Schools \$143,395,657

Other \$46,333,025

Total Operating Funds..... \$374,273,051

Capital Improvement Program \$81,626,367

Total All Funds \$455,899,418

³ Budget data obtained from the Calvert FY 2022 Budget, pp. 26 – 28.

Revenues

General Fund Revenues.....	\$455,899,418
Of which ⁴ :	
Exelon PILOT.....	\$19,646,574
Dominion PILOT.....	\$63,445,000

III. Prior Expenditures Suggest Future Budget Costs

The precise costs of the proposed expansion are unknowable in part because of inherent uncertainties regarding the timing, nature, and magnitude of future budget demands from the expansion. However, there are professional analytical methodologies that can provide rough order of magnitude estimates of costs. Unfortunately, P&Z officials did not provide essential data necessary for Calvert officials or residents to make detailed analyses on a range of topics affected by the proposed expansion. This paper identifies the problems likely to emerge and provides rough order of magnitude estimates of the kinds of costs that this accelerated population expansion is likely to generate in future budgets:

IV. Capital Project Costs

A. New Road Construction.

1. Traffic Congestion Foremost Concern of Expansion. The most immediate, expensive, and potentially troubling impact on Calvert residents from the proposed expansion would be increased roadway congestion resulting from significantly more vehicles. Even without the proposed expansion, the State Highway Administration predicted in 2013 that by 2035, seven intersections in Prince Frederick would fail in the morning and nine in the afternoon.⁵ These failures would impact businesses and significantly add to commuting times. Increasing current traffic levels by another 10,000 to 12,000 daily trips to the existing 40,000⁶ trips a day could cause gridlock. The increased traffic would also increase the 42-minute⁷ average commuting time for Calvert residents. The lack of detailed traffic analysis in the draft Prince Frederick Master Plan using approved Adequate Public Facilities Ordinance (APFO) methodologies makes it difficult to estimate the amount and cost of new road construction needed to avoid worsening existing congestion.

⁴ Ibid., p. 50.

⁵ Maryland State Highway Administration, Prince Frederick Study, May 2013 Revision.

⁶ July Master Plan, p. 7-1.

⁷ Ibid., p. 7-3.

2. Plan Favors as Pay-per-Unit Fees Instead of Developer Studies. According to the wording in the draft plan’s Chapter 7. Transportation, the county proposes as Objective #1 to “Eliminate Project-Specific Traffic Impact Studies & Mitigation Requirements” to “... equitably apportion costs among developers, the county, and state rather than imposing all improvements on the first developer whose impacts would trigger mitigation due to a falling level of service (as presently defined in the APF regulations).”⁸ This means that, contrary to past practices, developers would no longer need to conduct studies to determine the number of additional vehicles that their proposals would add to local roadways and identify the structures they would have to build to avoid worsening congestion. Instead, county officials would collect a fee designed to effectively shift the costs of mitigating congestion caused by new residences that developers are currently required to pay to the county and state. As the P&Z Plan points out, the current APFO could prohibit a development from being built unless the developer mitigates the additional traffic created by the development. So, P&Z is proposing to revise APFO criteria to enable developers to avoid having to conduct the studies and thereby be able to build with the county and state absorbing much of the costs that they would currently be required to pay.
3. Without APF Traffic Studies, P&Z Cannot Determine “Equitable” Fees. *Without detailed traffic analysis in advance of approving permits for new developments using APFO methodology, there is no way that county officials could know whether the fees they are proposing to impose on developers would be adequate to cover all the costs of the additional road improvements needed to mitigate increased traffic congestion.*
4. Plan Advocates Flawed Methodology for Traffic Studies. Instead of using methodologies recognized by professional planners for projecting the impact of additional vehicles on existing congestion, P&Z advocates replacing State Highway Administration criteria for measuring intersection congestion with a flawed methodology that systematically understates the increases in congestion resulting from added vehicles. If these proposals are adopted without the recommended traffic analysis, Calvert officials would be denying themselves and the public the data necessary to accurately project the amount of future traffic congestion caused by new developments and determine what road and intersection improvements would be needed for APFO compliance.
5. Road Maintenance Less Costly Than New Construction. Below is a list of significant road improvements through 2027 that are in the county’s FY 2022 Budget⁹ :

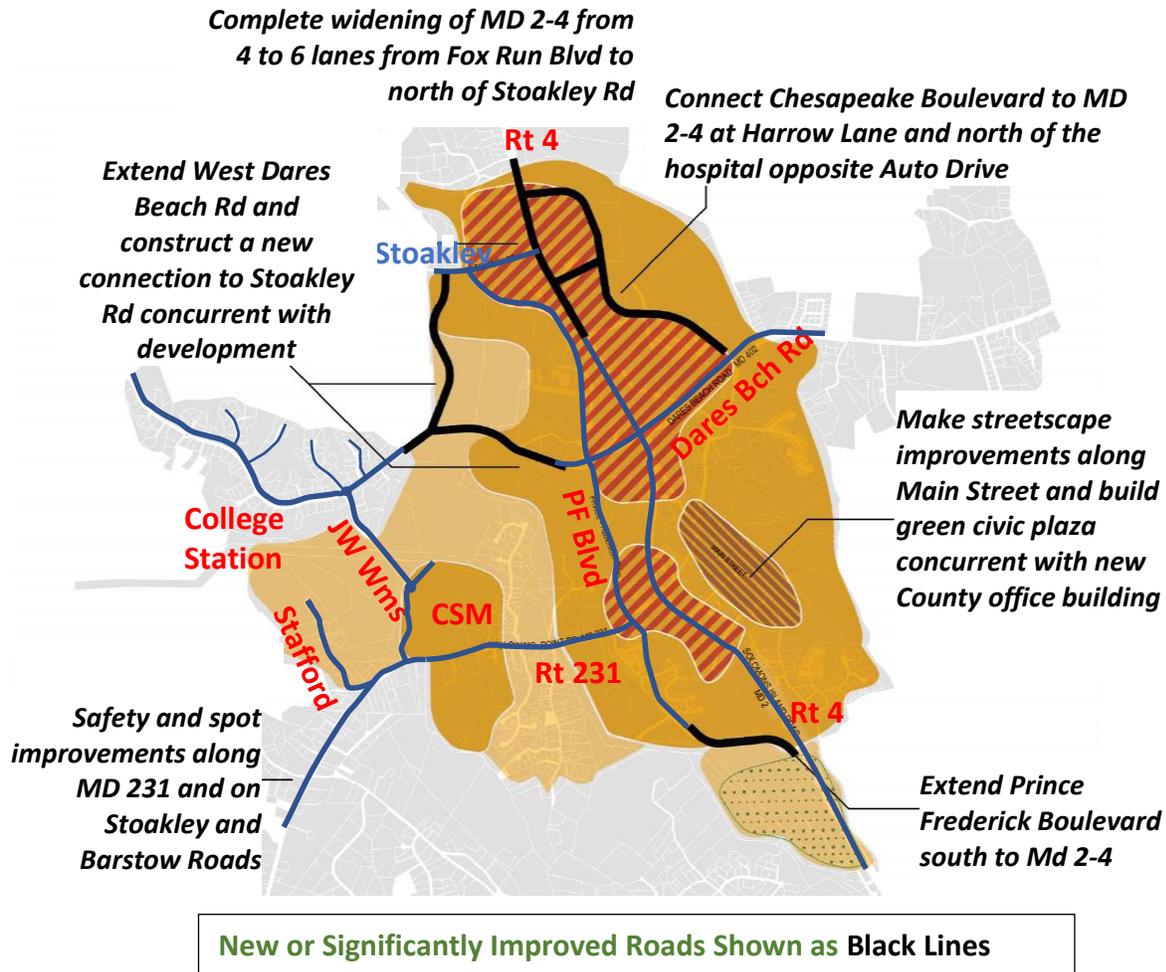
⁸ Ibid., p. 7-18.

⁹ Calvert FY2022 Budget, pp. 245 and 400 – 407.

- Stafford Road Intersection Improvement: \$3,000,000. This project would improve the safety of the intersection with MD Route 231 and install a traffic light.
- West Dares Beach Road Improvements: \$2,100,000. This project would widen the existing roadway to 4 travel lanes with curb, gutter, and sidewalks.
- Mount Harmony Road Safety Improvements: \$2,500,000. Improves safety between MD Route 2 and MD Route 260.
- Little Cove Point Road Curve Improvements: \$1,700,000. Improves alignment along 0.25 mile stretch of road.
- St. Leonard Road Widening: \$2,340,000. Widens road to permit emergency egress.
- Lusby Parkway Extension: \$1,075,000. Extends parkway to Gunsmoke Trail.
- Prince Frederick Loop Road – NE – East Side Connection: \$2,800,000. This project would connect Chesapeake Boulevard with Fox Run Boulevard.

The above projects projected to cost the county \$15,515,000 are only for maintenance and minor upgrades of existing roads. While such improvements can be cumulatively expensive, they are significantly less costly than the construction of new roadways that require land acquisition, vegetation removal, grading, drainage structures, and material for the road base and surface.

6. Examples of New Construction Costs. The county's transportation consultant mapped out approximately 3.3 miles of new county roads needed for the new growth as part of the town center expansion that includes: the completion of Chesapeake Boulevard, the extension of Prince Frederick Boulevard south to MD Route #2/4 over the rugged lands of Sullivan's Branch, the extension of West Dares Beach Road to College Station, and a new road west of Prince Frederick Boulevard that would be constructed over the headwater streams of Hunting Creek to serve a combination of new single-family houses and apartments. The proposed road segments will cross steep slopes and wetlands making the construction more expensive. (See map below)



7. Road Costing Model. In addition, the county has been planning another major road construction project that is not only expensive in and of itself, but also provides a useful measure of how much new construction projects could cost:
- Chesapeake Boulevard Extension: \$25,000,000. This would connect MD Route #2/4 with Dares Beach Road and Fox Run Boulevard. It would be between MD Route #2/4 north of Calvert Health Medical Center to Calvert Middle School and Fox Run Boulevard and provides a useful yardstick for how expensive new road construction would be in the new developments in the proposed expansion. P&Z reports that it would cost between \$20 million and \$25 million, exclusive of right-of-way and acquisition costs, to build this 4,300-foot roadway.¹⁰ The same terrain considerations that make this project more expensive would also apply to virtually all the areas included in the proposed expansion.

¹⁰ This project is 980 feet short of a mile (roughly 20%).

- Given additional acquisition costs, this roadway construction in Prince Frederick could be roughly \$30 million a mile. ¹¹

But road construction within the town center expansion area would not address the existing congestion on MD Route 2/4 and would require an overpass to enable southbound drivers on MD Route 2/4 to turn east toward Dares Beach Road without adding to congestion at that future intersection. This overpass was not included in the town center expansion plan, but was recommended by the State Highway Administration in 2013.

- An **additional estimated \$15,000,000 to \$30,000,000** would be required to build an overpass from the west side of Route 2/4 to the new boulevard extension.

Without a study before approval of developments, major residential growth would likely occur before the need for road and intersection improvements could be identified, let alone completed, so, the county, instead of developers, would absorb most costs.

- The proposed new construction in and near Prince Frederick would do nothing to eliminate:
 - the PM rush hour backup at MD Rt 2/4 southbound at Stoakley Road,
 - increased traffic tie-ups in Dunkirk, and
 - congestion further west along Rt 231.
8. **Costing Model.** In the absence of P&Z data, this study used recent per mile construction costs of other proposed county road projects to provide a general estimate of the future impact on the county budget and county taxpayers.
- The estimated 3 to 4 miles of new roadway construction (at roughly \$30,000,000 per mile) required by the proposed expansion of the Prince Frederick town center, would compel Calvert taxpayers, not developers, to **add \$120 million or more** to its budget for new road construction. (Maintenance would be additional.)

B. New School Construction and Expansion.

1. **Significant Increase in Students.** If the estimated 10,024 new residences are added as proposed and the decline in the COVID pandemic enables more students to return to in-person instruction, the county will need to build and

¹¹ The data on the costs of building Chesapeake Boulevard were presented in October 10, 2019 in a Memo from John A. Cosgrove, Calvert County Capital Improvement Projects Division Chief to the Calvert BOCC regarding Northeast Prince Frederick Loop Rd from Calvert Middle School to MD RT 4 North, Slide #6.

expand school facilities to cope with additional students. Over and above the need to accommodate returning students throughout the county, the proposed large developments would concentrate most new students in Prince Frederick that may not have adequate school capacity. For purposes of estimating the potential impact of the proposed expansion on Calvert schools, this paper assumes that expansion would add roughly 3,000 additional students to the Calvert Public School system.

2. Guidelines for Building New Schools. Using APFO guidelines for determining the number of students, the school system would have to accommodate:

Number of Students	Type of School	New Schools Needed
1,450	Elementary	2
650	Middle	1
880	High	1

If that number of new students were to appear in Prince Frederick, Calvert officials would face two difficult choices: redistrict school districts (always controversial) or build new schools. Based on recent costs of new school construction in the county, such construction would be very expensive:

- Two New Elementary Schools: \$100,000,000
- One New Middle School: \$70,000,000
- One New High School (with auditorium and purchase of land): \$100,000,000

3. School Costing Model. Calvert Citizens pay roughly half of the school construction costs, and the state pays the other half. Allowing for the inflation in construction and the added costs of procuring land, this means that the total cost of future school construction needed to replace existing or build and maintain new schools to accommodate additional students and maintenance could reach roughly \$275,000,000 after the proposed expansion is approved and built out. This estimate is based on costs of recent school construction. They would be *in addition to* its FY 2022 budget plans for accommodating the projected school population in the rest of the county.

- To accommodate the additional students, Calvert would need to add **\$135,000,000 or more** to its long-term CIP budget to cover its share of school construction costs.

Note on Capital Projects: There are other Capital Projects that are not addressed in this report because it would be too difficult to identify and price them, but they would be necessary and add to Calvert County’s overall budget costs:

- Sidewalks,

- *Senior Center,*
- *Community Center, and*
- *Recreation trails and fields.*

V. Capital Project Income

If all the proposed 10,024 new residences in Prince Frederick were to be apartments, the one-time Excise Tax Fees used primarily for roads and schools would be \$77,500,000; if all new residences were single-family homes, the revenue would be \$129,500,000. While this proposed increase in housing would be concentrated in Prince Frederick, it would increase the overall number of residences in the county by 2040 above the 37,600 units included in the comprehensive plan by more than ten thousand.

VI. Enterprise Fund Expenses

A. Prince Frederick Sewage Processing Facilities.

1. Facilities Capacity Not Addressed. The proposed addition of as many as 10,024 new residences to Prince Frederick, raises serious questions about the adequacy of current and planned sewerage facilities to treat the added wastewater. The issue of sewer treatment capacity needed to accommodate the proposed expansion was not explicitly addressed in the proposal. It arises because county officials are not following their own planning documents in two ways. First, they have been approving more new residences than projected in long-term planning documents. Second, they have not provided any documentation that confirms that current and planned upgrades of the Prince Frederick Wastewater Treatment Plants (WWTPs) facilities will be able to handle the additional sewage generated by significantly more residences than the 37,600 residences projected in 2014 for 2040.
2. Pipeline Proposed to Divert Wastewater. The lack of clarity in the P&Z expansion request became even more confusing during its February 23 meeting when the Planning Commission voted unanimously to approve a Department of Public Works (DPW) request for 16 (of 200) projects¹² because they were consistent with the county's 2019 Comprehensive Plan and the 2021 Town Center Plan. Included in that list of projects was item #15, a "force main" (pressurized pipe) from Prince Frederick to Solomons, that would pump *all liquid sewage* from Prince Frederick to be processed in Solomons. This vote was taken without determining how much sewage would be pumped from Prince Frederick from its

¹² This vote was taken at roughly 53+ minutes into the February 23, 2022, Planning Commission meeting: https://calvertcounty.granicus.com/player/clip/1574?view_id=24&redirect=true.

current population and how much more sewage would be transported from the county-estimated increase of up to 10,024 new residences in the proposed Prince Fredericktown center expansion.

At the February 23 meeting, the PW representative reported that this new pipeline was necessary because the fields used for “spray irrigation” were past their useful lives and unable to continue receiving liquid sewage and were failing. He further reported that DPW could transfer all Prince Frederick’s liquid sewage to the Solomons WWTP facility that uses “rapid infiltration” not “spray irrigation” to dispose of the waste liquid. The PW representative said that recent studies showed that they would soon need to shut down the Prince Frederick WWTP operations because of the pending failures on the spray fields.

3. Senior DPW Official Adds to Confusion on WWTP Capacity. To confuse matters even further, in subsequent county P&Z and BOCC meetings Kerry Dull, DPW Director, reported that, “The Prince Frederick Sewer System is not failing” and that the two Prince Frederick WWTP systems were operating at 71% capacity. At a March 22 BOCC meeting, Director Dull provided additional detailed information that raised even more serious questions about the adequacy of Prince Frederick’s current WWTP facilities and how many new Equivalent Dwelling Units (EDU¹³) could be added to the municipality before the Prince Frederick WWTP facilities would reach full capacity. The discussion between DPW and the BOCC revealed important additional facts:
 - WWTP’s current capacity is at 71%.
 - When WWTP volume reaches 80% of capacity, Maryland MDE would require the county to find/build an alternative for expansion of processing capacity.
 - Over the past 5 years (at current growth rates), the volume of waste processed increased by 6% to 7% (roughly 1% per year).
 - The Prince Frederick WWTP system has the capacity to accommodate only 450 more EDUs to reach its 80% capacity and 1,200 EDUs before it reached 100% capacity.
 - County officials have already approved 3 development permits that, when built, will push WWTP capacity to 80%.
 - Once that level is reached, MDE would require Calvert to complete an alternative WWTP facility within 6 years.
 - It would be difficult to prevent communities along the alignment of the pipeline from tapping into it given that septic systems in the southern part of the county were nearing capacity.
 - Three options for expanding Prince Frederick WWTP capacity:
 - Expand current PF WWTP – need 150 more acres

¹³ EDU is a unit used by Departments of Public Works to measure amounts of sewage generated by new residential and business entities. One EDU equals 200 gallons per day.

- Build pipeline to Solomons
 - Limit growth
4. BOCC Schedules Public Meeting to Identify Facts on Sewage. Because of the complexity of the DPW proposal and the need to clarify whether current facilities can process added growth, the BOCC decided to hold a public meeting in mid-April to give DPW the opportunity to develop alternatives and give the public an opportunity to express their opinions about proposed options.
 5. Poor Coordination between County Departments on WWTP. There is no indication that P&Z officials are following good planning policies as outlined in the APFO that states that “Providing adequate capacity at the endpoint of the sewer system, the WWTP [Wastewater Treatment Plants], involves expensive improvements the costs of which are borne by local and State government.”¹⁴ During a recent Planning Commission meeting, a P&Z staffer admitted that the department did not know the capacity of the current WWTP system. Instead, the staffer directed the Planning Commission to ask Public Works to provide that information. Maryland Code, Environment, §9-512 (b) says that:
 - (1) A state or local authority [such as Calvert County] may not issue a building permit unless:
 - (i) The water supply system, sewerage system, or solid waste acceptance facility is adequate to serve the proposed construction, taking into account all existing and approved developments in the service area;
 - (ii) Any water supply system, sewerage system, or solid waste acceptance facility described in the application will not overload any present facility for conveying, pumping, storing, or treating water, sewerage, or solid waste.

Absent the analyses recommended by the APFO and required in Maryland Code, neither county officials nor residents can be confident that existing and planned WWTP facilities will be able to handle the proposed town center expansion without sewage overflows. Accordingly, Calvert officials should not approve the proposed expansion of Prince Frederick until they have conducted the required studies.

6. Construction of Alternative WWTP Facilities Expensive. Even though it’s not possible to predict whether, where, and when additional sewerage treatment capacity will be needed in Prince Frederick or repairs may be needed on older sections of the system, it is possible to derive a rough order of magnitude estimate of potential future costs of new sewage-processing facilities based on

¹⁴ Adequate Public Facilities Ordinances, Models and Guidelines #24, p. 14.

costs of planned upgrades to Calvert WWTP facilities in the Calvert FY 2022 budget:

- Upgrades to Prince Frederick WWTP I: \$30,357,430. Increases facility's capacity and meets more stringent limits on discharges.
- Upgrades to Prince Frederick pump stations #4 and #6: \$3,293,118. Meets increased demands on system and improves energy efficiency.
- Upgrades to Solomons pump stations: \$1,358,500. Meet most urgent needs and improves operational safety.
- Upgrades Solomons Nutrient Removal System: \$27,936,880. Replaces undersized/failing components and meets anticipated future limits.
- Highlands Low-Pressure Sewer System: \$5,672,500. Redirects outflow from failing septic systems to sumps that will deliver effluent to the Chesapeake Beach Wastewater Reclamation Plant.¹⁵

These projects over the next five years will cost Calvert residents \$68,618,428.

7. Uncertain Capacity of WWTP to Process Expansion Sewage. Because of the absence of data on whether the current capacity of the Prince Frederick WWTP facilities will be able to treat the additional waste from more residents in the proposed town center expansion, *it is not possible for either Calvert officials or residents to determine whether that WWTP system will have the capacity to treat the additional sewage without needing to build costly new sewerage facilities.* If significant new projects are needed and the county must significantly increase borrowing for the Enterprise Fund, Calvert's AAA bond rating could be put in jeopardy because of higher debt service obligations.
 - In view of the mixed signals from DPW regarding the need for a pipeline to Solomons, it is not clear whether the proposed CIP-funded work on the Prince Frederick WWTP "spray irrigation" facilities is designed to enable them to continue working in place for the disposal of liquid sewage or to prepare them for transferring that liquid to Solomons for "rapid infiltration."
 - Given the cost of planned upgrades to the current Prince Frederick WWTP system, the high rate of inflation for construction, and proposed, the town center expansion could **add \$100,000,000¹⁶ or more** to the county's capital improvement budgets for increased sewage treatment.
 - County residents have a right to know how much will be borrowed for future sewer projects and residents paying Enterprise Fund fees have a right to know how much more they will have to pay for all this expansion.

¹⁵ FY 2022 Budget, pp. 449-453.

¹⁶ In addition to inflation raising the costs of proposed sewer construction from the roughly \$70 million for currently planned projects to \$100 million, the unknown costs of the roughly 14-mile pipeline would increase future costs to \$100 million.

B. Adequate Water.

1. Adequate Water Assumption Based on Outdated model. Calvert officials' assumptions about adequate supply of water from aquifers is based on studies 15 years old. Given the high growth in Southern Maryland between 2010 and 2020 and the continued high growth in Calvert County projected through 2040, officials cannot be confident that water will continue to be available or drawn at a reasonable cost. Given the potential for an additional 10,024 additional residences in the Prince Frederick town center, water consumption could increase significantly and Calvert residents on public water systems will likely have to pay higher Enterprise Fund fees to absorb added costs for maintaining and expanding the supply of water. Although wells can last for decades, they can also fail. New wells can be needed because of pump failures, significantly declining water levels in the aquifer, or a pollutant (such as arsenic or iron) has migrated into a well. Then, an alternative source of water needs to be found and often a new, deeper well needs to be drilled. New wells can be expensive. Private wells can cost between \$20,000 to \$50,000 depending on the depth required to reach good water. Public wells, because they require larger pipes and pumps, can cost significantly more. Calvert 2040, reports that Calvert Cliffs, Chesapeake Ranch Estates, and Marley Run have installed costly arsenic removal systems.¹⁷ The 2013 Calvert Budget showed that it cost \$1.3 million to drill a new well into the Patapsco aquifer to remediate arsenic in the Chesapeake Heights/Dares Beach water system.¹⁸
2. Most Residents Not on Public Wells. Another problem can arise if the county finds that it needs a new source of water because aquifers start to run low or become polluted. The options the county would face would be very expensive or technically challenging because roughly 74% of Calvert residents are on private wells, not public water systems. Calvert officials could (1) encourage private well owners to drill new, deeper wells to lower aquifers, but which could either be prohibitively expensive for lower income residents or infeasible because their lot is too small to accommodate a new well) or (2) run water lines from public water systems to every house suffering from a water problem. Both options would be expensive for both homeowners and the county.
 - Given the potential for an additional 10,024 residences in Prince Frederick, future annual operating costs for maintaining public water facilities are likely to **increase by at least \$5,000,000** annually.

¹⁷ 2019, Calvert 2040, p. 9-7.

¹⁸ FY 2013 Calvert Commissioners Budget, p. 327.

C. County Services.

According to the Department of Finance and Budget, the county would need to expend an additional \$2,000 on each new dwelling unit (with annual increases of \$20,000,000 when all 10,024 residences are built) to cover increased costs for additional services that the county would need to provide for new residents. These include operating costs for road maintenance, schools, first responders, transportation, senior services, prevention of child and spousal abuse, the health department, libraries, parks and recreational facilities, community and senior centers, and other county services. Cumulatively, through 2040, these could reach \$150,000,000, depending on when the proposed residences are built.

- The proposed town center expansion could **add \$150,000,000 or more** to Calvert's cumulative operating budget costs through 2040.

VII. Expansion Ignores Problem with Long-Term Growth

Town Center Expansion Proposal Worsened, but Did Not Create Growth Problems.

Calvert's problems for dealing with critical county services began to take shape in 2014 when the then county Department of Planning and Building (subsequently changed to Planning and Zoning) worked with state agencies to project residential and population growth through 2040¹⁹ as the basis for state and county planners to calculate water availability and sewerage needs. However, Calvert officials immediately deviated from their 2014 residential planning targets by approving the construction of more new residences from 2016 through 2020 than the rate projected in their 2014 plans. Their rate of actual new permit approvals averaged 475 new residences a year as compared to 113. Instead of reaching 37,600 dwelling units, Calvert's current rate of growth, if unabated, could reach as many as 46,642 units by 2040.²⁰

In 2019, Calvert planners used the same growth projections as in their 2014 Plan in their updated Calvert County Comprehensive Plan (Calvert 2040) to project 37,600 housing units and a population of 100,450 in the county by 2040. Both plans projected annual new residential building permits at the rate of 113 units a year, even though the actual growth for residences through 2020 was 475 a year.

Then, in July 2021, Calvert officials accelerated growth even more rapidly with its proposal to significantly expand the Prince Frederick town center by adding an additional 10,024 units to Prince Frederick before 2040. This would add significantly more housing units to the town center and could end up with as many as 56,666

¹⁹ Calvert County Comprehensive Water and Sewerage Plan, 2014 Update.

²⁰ Although page ES-3 of Calvert 2040 showed that the county would reduce its population growth rate from the 2010 to 2020 rate of 9.9% growth to 1.9% in the 2030 to 2040 timeframe, no Calvert document indicates that officials are committed to implementing this reduction in growth or explaining how they would achieve it.

housing units in the county by 2040. However, it is not clear what assumptions the county is using to plan for sewage generated by residences in 2040. Is it:

1. The number in the 2014 Water and Sewerage Comprehensive Plan and Calvert 2040: 37,600?
2. The number at the higher rate of new construction permits that it approved 2016 thru 2020 continues to be maintained²¹ : 46,642?
3. The combined level of new residential approvals at the 2016-2020 rate and the proposed town center expansion: 56,666?

VIII. Need to Manage Growth with Informed Decisions

Growth Affects Critical Aspect of Calvert Residents' Welfare Managing growth is important because it is central to the county providing critical services on roads, sewage processing, water availability and schools. If the county continues approving new housing permits at the annual rate of 475 *and* were to approve the expansion of the town center, the total number of houses in the county in 2040 could exceed the housing target set in 2014 by 51%. This rate of growth would not only affect sewage processing, but, also, road congestion, water availability, school availability and strain county services. County officials need to study the impact of growth *before* they approve the proposed expansion. *Calvert officials cannot responsibly allow growth to continue at proposed levels without first studying its impact on critical aspects of residents' lives.*

IX. Summary of KCC Findings

The failure of P&Z to provide officials and residents the information they need to determine the potential impact of the Town Center Expansion Proposal on county roads, sewerage capacity, adequacy of schools, water availability, and county services means that no official or concerned citizen can make an informed decision on the proposal. **Implementation of the expansion proposal could raise future budget costs by \$510,000,000 or more** (allowing for high inflation as reflected in major cost increases for the County Administrative Building). These additional budget costs would need to be included in future Calvert annual budgets long after residential construction is completed. ***So, the bulk of the added costs would fall on county residents, not the contractors who would build the developments or the county officials who approve this plan.***

²¹ Even if county officials cut back on the rate of new construction permits in future approvals below 475 residences a year, the annual average of new permits issued between 2016 and 2020 has increased new construction enough that the county will likely exceed its 2040 projection of 37,600 houses by 2023 or 2024. Consequently, all new housing construction for the following 15 or 16 years would exceed the 2040 housing projection. So, it's not a question of *whether* the county will put strains on traffic, sewage, schools, water, and county services by exceeding housing planning levels, but, rather, *by how much and when*. The real concern for county officials and residents is how much more will fixing those problems cost?

X. Potential Costs of Proposed Expansion.²²

New Road Construction	\$120,000,000 or More
New Schools Construction (County Share)	135,000,000 or More
Maintenance/Upgrade/New Sewerage Facilities	100,000,000 or More
Providing an Adequate Supply of Clean Water	5,000,000 or More
<u>Increased County Services</u>	<u>150,000,000 or More</u>
Total Cumulative Increased Costs	\$510,000,000 or More

XI. KCC Recommendations

That Calvert officials:

1. **Update APFO before they approve any town center expansion proposal** to insure adequate roads, sewer, water and public facilities before new construction exceeds ability of county to provide necessary services to residents at a reasonable cost.
2. **Not approve the P&Z proposed expansion of Prince Frederick** until they are provided the information necessary to make informed decisions.
3. **Direct P&Z to prepare the studies** recommended by professional planners and use recognized methodologies in assessing traffic, wastewater treatment, school capacity, environmental impact, and water availability.
4. **Revise planning documents through 2040** to allow sustainable growth in conformity with state planning levels and limit new building permits to revised planning levels.

CITIZENS HAVE A RIGHT TO KNOW!

Note: This study was prepared by a group of members of Keep Calvert Country. The results of their research were compiled by Leonard Zuza. Anyone wanting additional information on points raised here can contact Mr. Zuza at len@seaerie.com.

²² The costs listed below are for current construction costs. Inflation for construction can significantly increase outyear costs as evidenced by the 47% increase in the cost of the new County Administration Building that jumped from \$33.6 million when first conceived, to \$49.5 million at last estimate.

Appendix

Studies Necessary for Calvert Officials to Make Informed Decisions on the Costs of Expanding Prince Frederick

The Adequate Public Facilities Ordinances Guidelines provides a description of the kinds of studies that local officials should conduct before approving major expansions of municipalities that could have a serious impact on the health and welfare of residents. To be effective, these studies must use recognized methodologies that give an accurate assessment of the capacity of roads and highways, sewage treatment facilities, water availability, and school capacity.

- Update the county **Adequate Public Facilities Ordinance** *before* county officials finish their review of the proposed revision of the town center master plan.
- Traffic Congestion **Traffic Impact Assessment** to determine the impact of added vehicles on local roads and highways and the costs of likely improvements needed to avoid increasing congestion.
- Wastewater Treatment Capacity Given the potential problems that county Public Works recently identified with the spray irrigation system in Prince Frederick, Calvert officials need a **Capacity and Load** study of the current load on Calvert's WWTPs, but also the added sewage from 10,024 more residences in the town center.
- School Capacity **State Rated Capacity** study to evaluate the ability of current schools to accommodate additional students and determine whether additional schools are needed.
- Adequacy of Aquifers Given the U.S. Bureau of the Census's 2020 report on the high rate of population growth in Southern Maryland and the fact that the Maryland Geological Survey last updated its **Groundwater Aquifer Flow Model** for Southern Maryland in 2007, county officials need to update that model to assure county officials that the key aquifers that supply our water can sustain current and proposed population growth.
- Environmental Impact County documents acknowledge that the proposed construction of new residences and roads will be in hilly terrain with fragile soil. Given the potential harm to local streams from sediment pollution, Calvert officials need to direct an **Environmental Impact Assessment** to determine potential environmental harm.