

Commissioners of Pooleville

Impact Fee Calculations

The impacts fees for the town of Pooleville are calculated based upon well established principles and practices for developing such fees. They are established by first identifying all capital projects that the town plans to execute for the life of the fee determination period – typically the life of the master plan in force at the time. Each project is then examined to determine if there is a rational nexus of the project to planned development. Or in other words, does the development require all or some of the project. Then the share of the project that is attributed to the new development is determined by looking at the benefit provided by the project such as water and sewer capacity or other service, such as the capital portion of recreation or administrative facilities. Benefits are typically analyzed on a capacity measure basis, such as gallons per day for water and sewer, or on a household basis for other services. These benefits are monetized and become part of a net present value calculation that accounts for the time value of money over the life of the plan. It is also important to determine if existing residents benefit from the project and how they are paying for their share of the project to ensure that future residents are not double paying through both impact fees and property tax contributions. The following sections describe how general variables and each category of capital project are handled.

Variables

There are two primary variables that are somewhat exogenous to the model. They are the discount rate and cost escalation. The discount rate is the value the town places on the cost of capital. There are a number of considerations that are taken into account when selecting this variable including the cost of borrowing, opportunity costs, the length of time that the analysis addresses and alternative uses of funds such as tax reduction etc. The federal Office of Management and Budget suggests in their circular A-94 that 4.7% is an appropriate amount for a 20 year analysis period. We use that rate for this analysis.

The second variable – cost escalation – is used to ensure that fees are escalated to reflect the increased construction costs over time and the time value of money. The fees are escalated to ensure that those paying at the end of the period are paying a fair share of the capital improvements relative to those paying in the first years. Since this fee is analogous to a construction cost we use the average annual cost escalation experienced by the Department of Defense for its construction program for the period 2000 through 2007 which is 1.7%.

Poolesville Impact Fee Calculation Model

Developed for and provided to the Commissioners of Poolesville for their use only. Any other disclosure or use must be approved by the author.

Scenario: 30 Houses per Year Beginning 2009 5/12/2009

Variables

Discount Rate 2.0%
 Cost Escalation 1.7%

Calculated Impact Fee Beginning In 2003 \$10,588

NPV of Benefits = \$4,532,117

NPV of Impact Fees = \$4,532,117

NPV Benefits - NPV Impact Fees = \$0

Summary Statistics

Total Impact Fees Collected \$5,270,937

Legacy Impact Fees & Proffers \$1,679,640

Total Capital Projects \$11,908,386
 Impact Fee Eligible & None Impact Fee Eligible

Town Required Capital Funding \$4,957,809

Impact Fees by Year

	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>
Residential	\$10,588	\$10,768	\$10,951	\$11,137	\$11,326	\$11,519	\$11,715	\$11,914	\$12,116	\$12,322	\$12,532	\$12,745	\$12,962	\$13,182	\$13,406	\$13,634	\$13,866	\$14,102	\$14,341	\$14,585	\$14,833	\$15,085
Commercial per 1,000 Gal.	\$25,277	\$25,706	\$26,143	\$26,588	\$27,040	\$27,499	\$27,967	\$28,442	\$28,926	\$29,418	\$29,918	\$30,426	\$30,943	\$31,469	\$32,004	\$32,549	\$33,102	\$33,665	\$34,237	\$34,819	\$35,411	\$36,013

Pooleville Impact Fee Model

Scenario: 30 Houses per Year Beginning 2009

Project	% New Impact Fee Eligible	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030			
Recreation																										
Trails (1)	0%						\$560,000																			
Northern Quad (2)	100%				\$100,000	\$700,000																				
Community Center/Skate Park (14)	20%	\$279,844																								
ADA Parks (3)	0%	\$300,000																								
Sub-total Impact Fee Eligible		\$56,161	\$0	\$0	\$100,000	\$700,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$781,455	17%	
Public Facilities																										
Public Meeting Facility (4)	19%	\$1,319,546																								
Sub-total Impact Fee Eligible		\$251,573	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$246,640	5%
Streetscape (5)																										
Sub-total Impact Fee Eligible	0%	\$0	\$0	\$0	\$350,000	\$0	\$0	\$350,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0%
Water Supply																										
Wells 9& 10 (6)	0%	\$1,073,000																								
Future Well 11 (7)	0%			\$750,000																						
Future Well 12 (8) 103,680 GPD	100%		\$525,000																							
Future Well 13 (9) 73,440 GPD	100%		\$525,000																							
Future Well 14 (10) 48,960 GPD	100%						\$525,000																			
Future Well 15 (11) 69,120 GPD	100%							\$800,000	\$800,000																	
Sub-total Impact Fee Eligible		\$0	\$1,050,000	\$0	\$0	\$0	\$525,000	\$0	\$800,000	\$800,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,158,204	48%
Sewer/WWTP (12)																										
I&I Capacity Creation (13)	10%	\$846,302																								
Sub-total Impact Fee Eligible		\$1,372,733	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,345,817	30%
Roads																										
Sub-total Impact Fee Eligible	0%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0%
Other																										
Sub-total Impact Fee Eligible		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0%
Total Impact Fee Eligible		\$1,680,467	\$1,050,000	\$0	\$100,000	\$700,000	\$525,000	\$0	\$800,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,532,117	

Notes:

- Trails will benefit residents equally and therefore are part of normal town capital budgets.
- North Quad park will provide additional capacity to support new town residents.
- ADA parks will benefit residents equally and therefore are part of normal town capital budgets.
- Public facility will provide new administration facility and public meeting space. It is the proportion of new households to total households adjusted by 5% to reflect activity to support commercial enterprises.
- Streetscape will benefit residents equally and therefore are part of normal town capital budgets.
- For existing residents
- Redundancy for current residents.
- All additional capacity would support new growth.
- All additional capacity would support new growth.
- All additional capacity would support new growth.
- All additional capacity would support new growth.
- Fulfills capacity shortfall of 39,398 GPD needed to support new growth.
- Expansion/upgrade increased permitted capacity by 125,000 GPD with a shortfall of 25,528 GPD to be met by an outyear project.
- The pro-rata share of the I&I capacity created above the 2006-2008 average flows credited for proffers.
- New resident share of the land and initial development funding paid for in total by existing town residents.

Required residential water capacity this plan: 246,000 GPD
 Required residential sewer capacity this plan: 133,250 GPD
 Required commercial water capacity this plan: 14,678 GPD
 Required commercial sewer capacity this plan: 14,678 GPD

Pooleville Impact Fee Model

<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	Total New Units
30	30	30	30	30	30	5	0	0	0	0	0	0	0	410
\$12,116	\$12,322	\$12,532	\$12,745	\$12,962	\$13,182	\$13,406	\$13,634	\$13,866	\$14,102	\$14,341	\$14,585	\$14,833	\$15,085	
\$28,926	\$29,418	\$29,918	\$30,426	\$30,943	\$31,469	\$32,004	\$32,549	\$33,102	\$33,665	\$34,237	\$34,819	\$35,411	\$36,013	
\$363,495	\$369,674	\$375,959	\$382,350	\$388,850	\$395,460	\$67,031	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
\$3,291,613	\$3,661,287	\$4,037,246	\$4,419,596	\$4,808,446	\$5,203,906	\$5,270,937	\$5,270,937	\$5,270,937	\$5,270,937	\$5,270,937	\$5,270,937	\$5,270,937	\$5,270,937	
\$4,855,467	\$4,855,467	\$4,855,467	\$4,855,467	\$4,855,467	\$4,855,467	\$4,855,467	\$4,855,467	\$4,855,467	\$4,855,467	\$4,855,467	\$4,855,467	\$4,855,467	\$4,855,467	
-\$1,563,853	-\$1,194,179	-\$818,220	-\$435,871	-\$47,021	\$348,439	\$415,470	\$415,470	\$415,470	\$415,470	\$415,470	\$415,470	\$415,470	\$415,470	

Scenario: 30 Houses per Year Beginning 2009

Note: Capital projects in the uses of funds section include all project costs not just those that are impact fee eligible.

Estimated Sources of Funds	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
Impact Fee Revenues		\$158,818	\$323,036	\$378,854	\$673,185	\$339,793	\$345,569	\$351,444	\$357,419	\$363,495	\$369,674	\$375,959	\$382,350	\$388,850	\$395,460	\$67,031	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Existing W&S Fee Balance	\$65,474	\$65,474																					
Existing Public Facility Fee Balance	\$192,916	\$192,916																					
Winchester WWTP Proffer	\$750,000	\$750,000																					
Winchester Water Proffer	\$350,000	\$350,000																					
Elain/Kettler Water or Sewer Proffer	\$221,250	\$221,250																					
Elain/Kettler WWTP Proffer	\$100,000	\$100,000																					
Total	\$1,679,640																						
Estimated Uses of Funds																							
Recreation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Trails (1)	\$0	\$0	\$0	\$0	\$0	\$560,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Northern Quad (2)	\$0	\$0	\$0	\$100,000	\$700,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Community Center/Skate Park (14)	\$279,844	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ADA Parks (3)	\$300,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Public Facilities	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Public Meeting Facility (4)	\$1,672,175	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Streetscape (5)	\$0	\$0	\$0	\$350,000	\$0	\$0	\$350,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Water Supply	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Wells 9& 10 (6)	\$1,073,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Future Well 11 (7)	\$0	\$0	\$750,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Future Well 12 (8) 103,680 GPD	\$0	\$525,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Future Well 13 (9) 73,440 GPD	\$0	\$525,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Future Well 14 (10) 48,960 GPD	\$0	\$0	\$0	\$0	\$525,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Future Well 15 (11) 69,120 GPD	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$800,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Sewer WWTP (12)	\$1,352,065	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
I&I Capacity Creation (13)	\$2,046,302	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Estimated Capital Project Costs	\$6,723,386	\$1,050,000	\$750,000	\$450,000	\$700,000	\$1,085,000	\$350,000	\$800,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Cumulative Estimated Revenues All Sources	\$1,838,458	\$2,161,495	\$2,540,348	\$3,213,534	\$3,553,327	\$3,898,896	\$4,250,340	\$4,607,759	\$4,971,253	\$5,340,927	\$5,716,886	\$6,099,236	\$6,488,086	\$6,883,546	\$6,950,577	\$6,950,577	\$6,950,577	\$6,950,577	\$6,950,577	\$6,950,577	\$6,950,577	\$6,950,577	\$5,340,927
Cumulative Estimated Expenditures	\$6,723,386	\$7,773,386	\$8,523,386	\$8,973,386	\$9,673,386	\$10,758,386	\$11,108,386	\$11,908,386	\$11,908,386	\$11,908,386	\$11,908,386	\$11,908,386	\$11,908,386	\$11,908,386	\$11,908,386	\$11,908,386	\$11,908,386	\$11,908,386	\$11,908,386	\$11,908,386	\$11,908,386	\$11,908,386	\$11,908,386
Net Cumulative Cash Flow All Sources	-\$4,884,928	-\$5,611,891	-\$5,983,038	-\$5,759,852	-\$6,120,059	-\$6,859,490	-\$6,858,046	-\$7,300,627	-\$6,937,133	-\$6,567,459	-\$6,191,500	-\$5,809,150	-\$5,420,300	-\$5,024,840	-\$4,957,809	-\$4,957,809	-\$4,957,809	-\$4,957,809	-\$4,957,809	-\$4,957,809	-\$4,957,809	-\$4,957,809	-\$6,567,459
Additional Required Capital Funding Over the Life of the Plan	\$6,567,459																						

Specific Details on Each Impact Fee

Public Facility Impact Fee

The New Town Hall provides administration and public meeting space. It was sized to reflect the expected growth and was paid for by existing funds with no borrowing. The impact fee portion eligible is the proportion of new households to total households reduced by 5% to reflect the administrative capacity that is used for activities in support of commercial enterprises.

The total cost was \$1,659,093. Funding consisted of \$189,547 of previously collected Impact Fees and a \$150,000 Bond Bill. The balance necessary to complete the project, \$1,319,546 was collected tax revenue, of which 19% is Impact Fee eligible.

Wastewater Capacity Impact Fee

The funding of the Waste Water Treatment Plant expansion/upgrade was broken into two specific funding streams. The Maryland Department of the Environment determined that 48% of the total cost was attributed towards the expansion. The upgrade, 52%, was funded through a State grant and Poolesville general funds. All plans, grants and the expansion loan approvals were based on the percentage breakdown.

The overall cost for the construction was \$2,816,803. The expansion portion of \$1,352,065 was funded through \$65,474 of previously collected Impact Fees, General funds and a State loan in the amount of \$1,250,000. As Impact Fees are collected, they will repay the State loan.

Using 325GPD per household and WSSC standards for commercial use, 150,528 GPD are required to fulfill the 2002 Water and Sewer Allocation Plan. The expansion/upgrade of the Waste Water Treatment Plant increased the permitted capacity by 125,000 GPD leaving a shortfall to support the new development of 25,528 GPD, which was provided through I&I repairs. The impact fee eligible amount is the pro-rata share of the I&I capacity created above the 2006-2008 average flows (911,000 GPD – 660,201 GPD) credited for proffers which offset some costs.

The total I&I repairs required \$2,046,302 of funding. \$100,000 from the Elgin Family proffer and \$1,100,000 from the Winchester Homes proffer was utilized to fund a portion of the project. Of the \$846,302 remaining balance, only 10% is impact fee eligible for created capacity.

Water Supply Impact Fee

The Poolesville Commissioners examined the Town's historical water usage, vulnerabilities and lack of alternate source availability. The Town has had several days over the years in which the existing wells were pumped at capacity for 24 hours straight, resulting in a stressed well field. The Town has also experienced the loss of wells from contamination and increasingly stringent requirements from the MDE. With no alternate

sources available, the Commissioners have determined, for the health and safety of the community, that the well field shall be capable of producing a peak day demand of 600 GPD/household. This results in the adopted policy that existing wells, which meet this peak day demand, are for existing residents; and for new connections, the system shall have additional capability to produce the 600 GPD/household peak day demand.

Following the above water policy, the current Water and Sewer Allocation List requires 265,478 GPD. To meet this requirement, four wells have been identified. The wells are located on the largest development properties and based on past expenditures, engineers estimate that the wells, to be fully developed, will cost a total of \$2,375,000.

From an allocation perspective, which follows the MDE guidelines, 100 GPD/person or 325 GPD/household will be used. The additional capacity will remain in reserve for peak days, drought conditions, emergencies and/or fire fighting capabilities.

Recreation Impact Fee

The Town has developed an extensive park system for its current residents. Existing facilities include two large parks, 15 acres and 11 acres, containing baseball fields, soccer fields, pavilions, concession stands, restrooms, tennis & basketball courts and playgrounds. In addition to these large parks, several smaller neighborhood parks have been constructed. To maintain the current level of parks for the new developments, the Master Plan calls for another large parcel park. With developer land constraints, the Planning Commission has allowed the one large park to be broken down into smaller parcels and developed within the larger developments. The construction of the new park system for the new residents is estimated to cost \$800,000.

As the Town grows, a need for a community center is evolving. To this end the Town has acquired a parcel of land (parcel 840) for this purpose. The purchase price of \$507,844 was funded through a State grant of \$288,000 and the balance from general revenues. An additional \$60,000 of general revenues was also set aside for the construction of a skatepark, which will be an integral part of the community center development plan. 20% of the \$279,844 for the initial purchase and development paid for in total by existing residents will be reimbursed through impact fees.

Notes on Benefit Apportionment e.g. Impact Fee Eligibility

1. The proposed trails will benefit residents equally and will be paid for by all residents through tax revenues as a normal part of the town's budgeting and therefore has no component that is eligible for impact fees.
2. The northern quadrant park will provide additional capacity for new residents and sized to provide those residents the same amenities in close proximity to their homes as other residents of the town and is therefore 100% eligible for impact fees.
3. The ADA park will benefit residents equally and will be paid for by all residents through tax revenues as a normal part of the town's budgeting and therefore has no component that is eligible for impact fees.

4. The new town hall provides administration and public meeting space. It was sized to reflect the expected growth and was paid for by existing funds with no borrowing. The portion impact fee eligible is the proportion of new households to total households reduced by 5% to reflect the administrative capacity that is used for activities in support of commercial enterprises.
5. Streetscape improvements will benefit residents equally and therefore are part of normal town capital budgets and not impact fee eligible
6. Wells 9 and 10 are to provide redundancy for existing town residents consistent with the Town's policy and therefore not eligible for impact fees.
7. Well 11 is to provide redundancy for existing town residents consistent with the Town's policy and therefore not eligible for impact fees.
8. The capacity from well 12 (103,680 GPD) will be used entirely to meet the needs of new residents consistent with the policy of 600 GPD per household and is therefore 100% impact fee eligible.
9. The capacity from well 13 (73,440 GPD) will be used entirely to meet the needs of new residents consistent with the policy of 600 GPD per household and is therefore 100% impact fee eligible.
10. The capacity from well 14 (48,960 GPD) will be used entirely to meet the needs of new residents consistent with the policy of 600 GPD per household and is therefore 100% impact fee eligible.
11. The capacity from well 15 (69,120 GPD) will be used entirely to meet the needs of new residents consistent with the policy of 600 GPD per household and is therefore 100% impact fee eligible.
12. The expansion/upgrade of the waste water treatment plant increased permitted capacity by 125,000 GPD leaving a shortfall to support the new development of 25,528 GPD to be met by another project.
13. The 25,528 GPD was provided through I&I repairs. The impact fee eligible amount is the pro-rata share of the I&I capacity created above the 2006-2008 average flows (911,000 GPD – 660,201 GPD) credited for proffers which offset some costs.
14. The new resident share of the land and initial development funding paid for in total by existing town residents is impact fee eligible. That amount is the ratio of new households planned (410) to total existing households (1,633) times the total cost of land less grants (\$507,844- \$288,000) plus set aside development funds of \$60,000.