COST OF COMMUNITY SERVICES

SHENANDOAH COUNTY
November 2020

Author: Tyler Hinkle

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Information On CEA And Contact Info

The Conservation Easement Authority (CEA) of Shenandoah County was founded in 2008 after the adoption of Ordinance Number 2007-18, or Chapter 82: Conservation Easement Program, of Shenandoah County on November 14th, 2007. The CEA was founded in order to provide the farming and forestry community support in preserving and retaining their farmland. "The purpose of the conservation easement program is to further the goals of the County's Comprehensive Plan and provide a means to assist County landowners in protecting and preserving farm and forest land, open space, scenic vistas, historic sites, water resources, and environmentally sensitive lands as well as the County's rural character. The easement program provides for a means for the county to acquire voluntary conservation easements either through donation or through purchase if funding is available."[1]

The Shenandoah County Conservation Easement Program is established under the provisions of the Virginia Conservation Easement Act, Chapter 10.1, Title 10.1 (§ 10.1-1009 et seq.), Code of Virginia; the Open Space Land Act, Chapter 17, Title 10.1 (§ 10.1-1700 et seq.), Code of Virginia; and the Public Recreational Facilities Authorities Act, Chapter 56, Title 15.2 (§ 15.2-5600 et seq.), Code of Virginia; and is available for all land in the County.

The CEA is comprised of seven members with at least one member of the Board of Supervisors, one member of the Planning Commission, and five citizen representatives. Members serve four year terms with no term limits. The current members are listed below:

Dee Hockman - Chair

Steve Baker - District 2 Board Of Supervisors CEA Representative

Josh Stephens - District 1 Planning Commission CEA Representative

Douglas French - Member

Kelly Watkinson - Member

Bill Wine - Member

Tyler Hinkle - Staff

To find out more about Shenandoah County's Conservation Easement Authority, reach out to County Planner Tyler Hinkle at THinkle@ShenandoahCountyva.us, or 540-459-6204. You can also find more information at ShenandoahCountyva.us/conservation/

Acknowledgments

A special thank you for all the aid they have provided to the development of this report needs to be acknowledged. This report would not exist without the support from the individuals listed below:

Dee Hockman - CEA Chair
Steve Baker - District 2 Board Of Supervisors CEA Representative
Josh Stephens - District 1 Planning Commission CEA Representative
Douglas French - CEA Member
Kelly Watkinson - Member
Bill Wine - Member
Evan Vass - County Administrator
Mandy Belyea - Deputy County Administrator
Dr. Andrew Mondschein - Professor At The University Of Virginia
John Hutchinson - Executive Director Valley Conservation Council
Kim Woodwell - Alliance For The Shenandoah Valley
Bobby Clark - Virginia Tech Extension Office
Vito Gentile - Chair of the Citizen's Advisory Committee
Gary Lantz - Chair of the Planning Commission and Water Resource Advisory Committee
Debbie Keller - Vice Chair of the Planning Commission
Todd Steiner - Former Planning Commission CEA Representative, District 4 Planning Commission Member
Eunice Terndrup - District 6 Planning Commission Member
Kathleen Curtis - District 3 Planning Commission Member
Dick Neese - Chair of the Board of Supervisors
Brad Pollack - District 3 Representative on the Board of Supervisors
Karl Roulston - District 4 Representative on the Board of Supervisors
Dennis Morris - District 5 Representative on the Board of Supervisors
Tim Taylor - District 6 Representative on the Board of Supervisors
Jason Smith - Shenandoah County Zoning Administrator
Brenna Menefee - Shenandoah County Code Specialist
Mark Griffey - Former Shenandoah County Community Development Coordinator
David Brotman - Executive Director for the Friends of the North Fork

Table Of Contents

Contents

Table Of Graphics

Graphics

Table Of Maps

Maps

Table Of Charts

Charts

Map 1

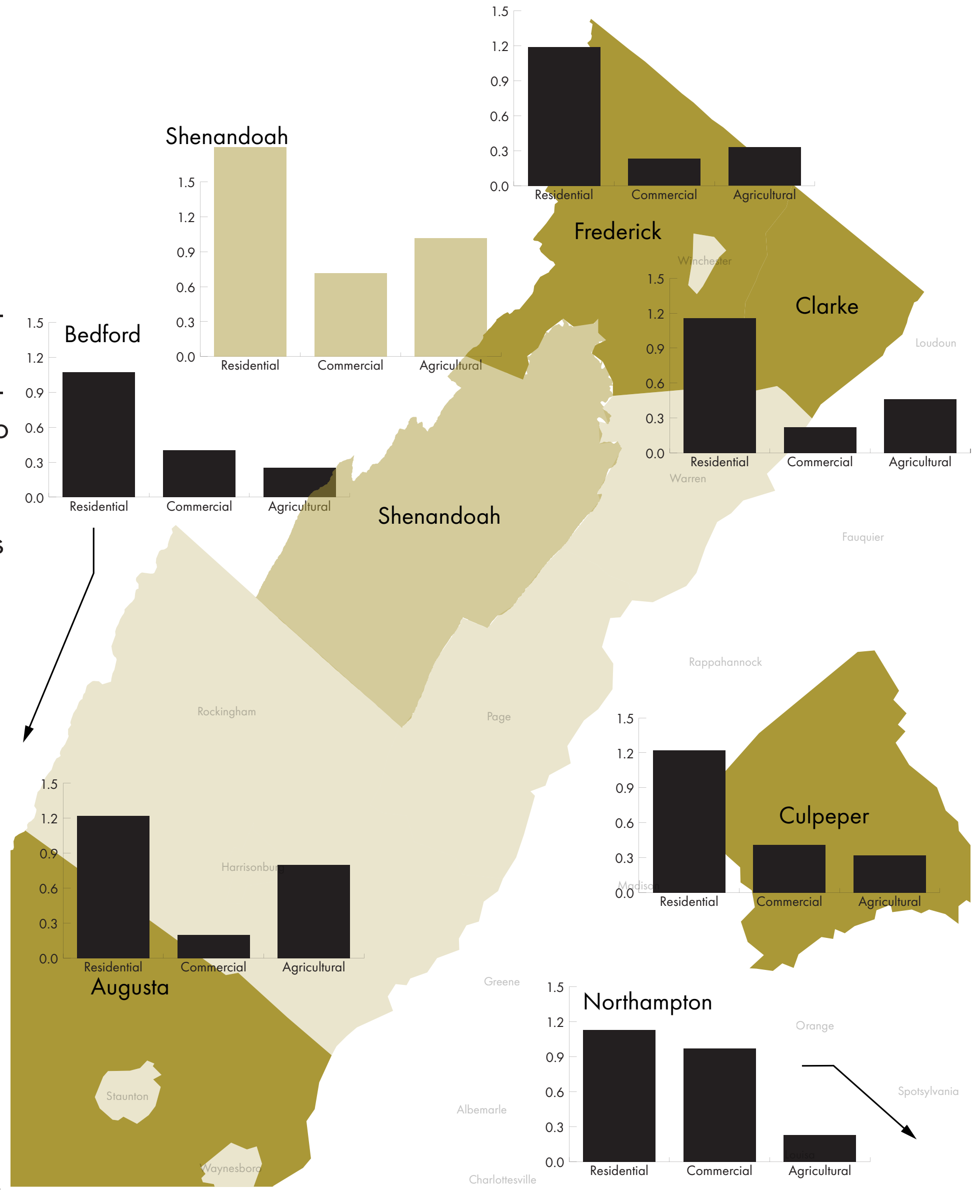
Executive Summary

A Cost Of Community Services (COCS) assessment is an evaluation of a locality's expenditures compared to its revenues in relation to the land uses which produce revenues through real estate taxation, and expenditures through public services. Expenditures are determined through actual expenditures in the most recent financial cycle and are allocated based on the services that specific land uses require as for example a book store while educational in nature, does not send students to school, and cows do not need to go to court or have the chance of being arrested. Revenues are pulled from the most recent tax map data that is associated with the actual expenditure data being examined in order to run tax calculations based on the assessed values of properties in a locality, while also taking into account land use taxation. The Cost of Community Services number represents one side to a ratio as the Cost of Community Services number represents the cost of providing services to a land use in relation to every dollar of tax revenue received from the land use. For example a farmer pays in $1 in taxes, but only receives back $0.18 in terms of services, this means that the locality gains revenue from the farmer. While a resident may require $1.95 in services and cost the locality $0.95 in addition to the $1 the resident paid in taxes. In short, localities benefit from land uses with a lower Cost of Community Services.

Chart 1 to the right demonstrates locations where Cost of Community Service assessments have occurred elsewhere in Virginia. While this report presents numerous combinations to demonstrate the Cost of Community Services in Shenandoah County, the numbers demonstrated on Chart 1 derive from a similar model used by the UVA Weldon Cooper Center. While Shenandoah County is noted as scoring higher than other localities in the state for residential and agricultural land uses, it must be noted that the methods used in other localities is not as accurate as the method used in this report and the general finding across the state is that residential scores highest.

Map Of COCS In Virginia

Chart 1



Frequently Asked Questions

What do the numbers represent?

The numbers that are presented as the "Cost of Community Services" are one side of a ratio. This is a revenue to expenditure ratio and the importance of the results is shown below:

>1

A ratio greater than one means that for every dollar of revenue collected, more than one dollar is spent to provide services, creating a deficit.

<1

A ratio less than one means that for every dollar of revenue collected, less than one dollar is spent to provide services, creating a surplus.

The diagram below helps to reflect the ratio:

Residential $1.00 : $2.18
Agriculture $1.00 : $0.75

The numbers on the left hand side above represent one dollar paid in taxes by the land use for government services, the numbers on the right hand side show the dollar value of government services which a piece of property receives in return for the dollar paid in taxes. In short, for every dollar of taxes that a residential land use pays, it receives $2.18 in government services. The diagram below shows the total revenue from the two land uses in exchange for the services they are provided:

Residential -$1.18
Agriculture +$0.25

As can be seen above, the locality gains revenue from agricultural land while it pays out and receives no revenue from residential land. In this report these numbers will be displayed as the Cost of Community Services, but the reader should always remember that the number presented is one side to a ratio where the Cost of Community Services represents the dollar value of government services the land use receives back for each single dollar paid in taxes.

What is the COST in the Cost of Community Services?

The Cost in a Cost of Community Services assessment comes from the actual budgetary expenses that the locality incurs in order to provide services to individuals and lands in the locality. This report also takes into account the revenues generated from sources other than property taxes in order to provide accurate expenses that property taxes help to cover in each locality.

What is the REVENUE in the Cost of Community Services?

The Revenue in a Cost of Community Services assessment comes from the revenue from property taxes. This report takes into account tax-exempt properties as well as the impact of land use taxation in order to provide a clear and accurate picture on the actual revenues that a locality receives from property taxes.

Do the numbers provide a view of future land use costs?

No. The Cost of Community Services is a snapshot in time of the cost of providing government services to the community at that time. While this report provides a snapshot it still operates on the premise that uses which require more services or cause services to be upgraded lead to higher costs in providing community services.

Does this report show which lands should be taxed more?

No. This report demonstrates the current cost of providing government services to different land uses and whether or not the land uses are providing revenue to the locality or serving as an expenditure.

Why is this report more detailed than a Weldon Cooper Report?

This report is a summary of the actual data that has come from this analysis. The reason that this report and the larger dataset from this research is larger is because this report takes into account more variables and allows for a larger definition of the cost of community services and then summarizes such costs into more general land uses reflected in the report.

What causes a higher or lower cost of community services?

Numerous aspects from the valuation of land and improvements to having an over, under, or adequately met capacity of a service provider. Over capacity may lead to higher costs, while under and adequate capacity can lead to lower costs. The capacity of service providers defines the breaking point of when improvements must be made which contribute to a higher cost of providing services. The increase in property and improvement values may appear ideal for parties in order to increase one's economic equity, but it can also lead to higher taxes which can cause displacement of local residents or force an open space or agricultural land use to change to a residential use in order to pay for new taxes.

Does this report recommend actions?

No, a separate report details recommended actions.

Executive Summary

The first assessment in this report splits Shenandoah County into 126 different zones based on the 53 active different zoning classifications in Shenandoah County and the six Towns within the County, size of the agricultural and conservation parcels, as well as the location of such zoned parcels in relation to the provider of services. The Weldon Cooper Center at the University of Virginia recommends to separate any parcels less than 20 acres and zoned for agriculture or conservation and designating them as residential. This practice of removing smaller parcels was performed in the Clarke County assessment and in order to take this method into account and test for invalidities in the method, this report runs three tests. The first test is known as the Twenty Test and it follows the Weldon Cooper model of considering all agricultural and forestal land under 20 acres as being residential. The second test is known as the Ten Test and considers all agricultural and forestal land under 10 acres as residential. The Zero Test considers all agricultural and conservation land to be analyzed as they are zoned regardless of their size. In addition to taking into account the zoning and validity of the Weldon Cooper method, this report also separates the parcels which fall into the sanitary districts and the town service areas in order to take into account the revenues and expenditures associated with the services to such parcels. This report also accounts for parcels that are in land use taxation or are tax exempt.

Chart 2 displayed on page 5 demonstrates the general breakdown of the cost of community services in Shenandoah County through aggregating all of the data from the 126 zones and running the three separate tests previously discussed. As can be seen the highest cost in terms of providing services in Shenandoah County overall is residential properties and this statement applies to all three of the tests. While overall the cost of community services is lowest for industrial properties for each test this does not imply that all commercial, agricultural, residential, and mixed use areas should be replaced with industrial properties as the trickle down effect will lead to the need for more workforce housing and an increase of residential use and a higher cost for providing services. In addition, agriculture is also a low cost use and the land may be providing the resources for the industry such as lumber or apples. An important finding from this report is also that an alternative to residential use is multi-use development as it offsets the cost of residential services through the addition of a business on the property.

126 Land Use Zones

Map 2

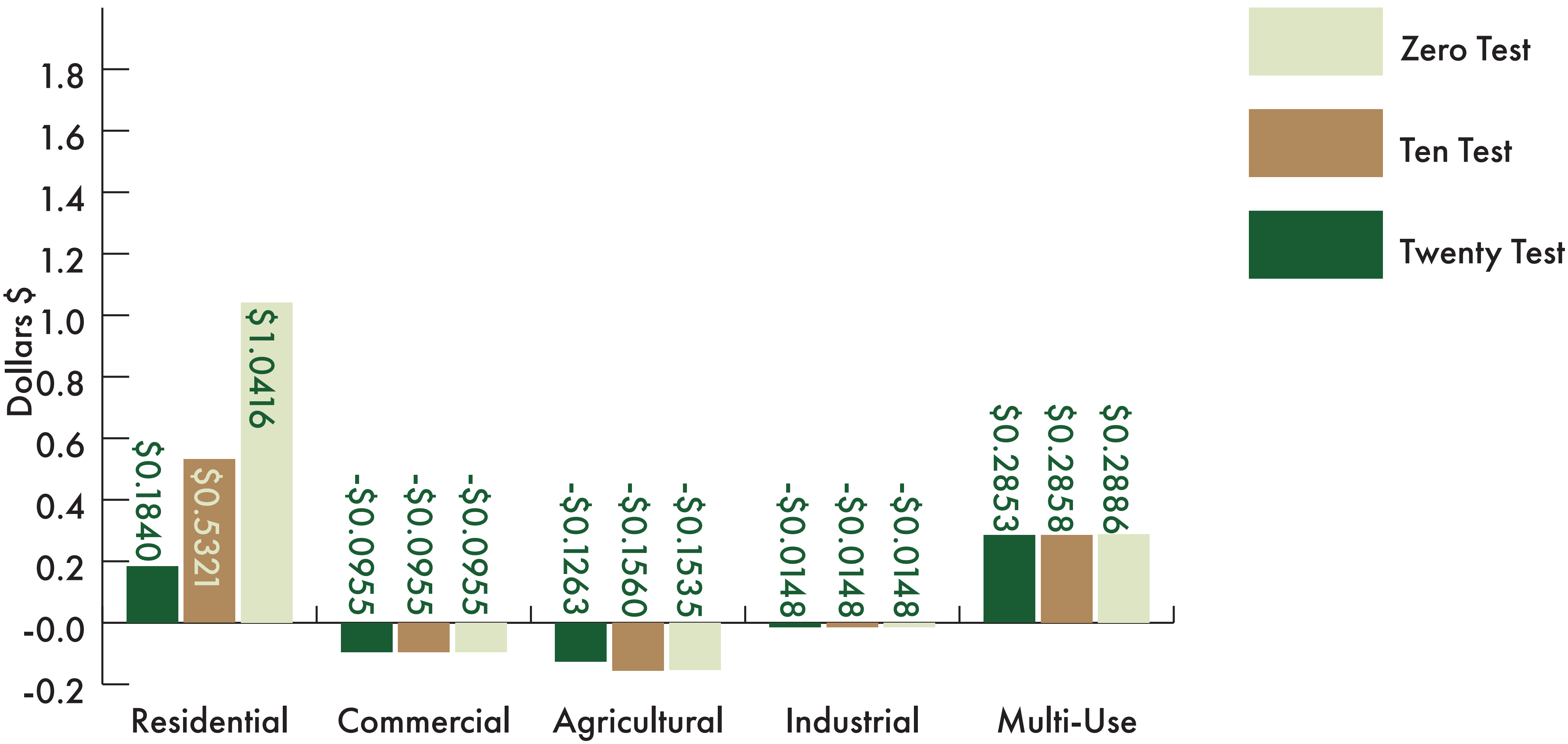
Chart 2

Shenandoah County Actual Cost Of Community Services By Use Assessment I

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.

Author: Tyler Hinkle

Date: November 6th, 2020



Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

The second assessment in this report also splits Shenandoah County into 126 different zones based on the 53 active different zoning classifications in Shenandoah County and the six Towns within the County, as well as all of the methods described in the first assessment description. In addition to splitting the County into 126 zones, this assessment split the County by the real estate occupation code, of which there are 16, and the number of bedrooms on the property. This has resulted in 1,106 different land classifications in Shenandoah County. The accuracy of this dataset and analysis allows for one to state the tax implications of a zoning district, but also the occupation classification of such land and the number of beds that exist on the property.

The major difference between Chart 3 displayed on page 7 and Chart 2 on page 5 is that latter does not account for vacant parcels. Chart 3 demonstrates the general breakdown of the cost of community services in Shenandoah County through aggregating all of the data from the 1,106 land classification zones and once again running the three separate tests based on agricultural and conservation land previously discussed. As can be seen the highest cost in terms of providing services in Shenandoah County overall is once again residential properties and this statement applies to all three of the tests. As discussed in the previous analysis, which is demonstrated clearly here, the cost of community services is lowest for agricultural land and multi-use land. The reason that industrial and commercial score higher in this analysis is that they do not have the additional tax revenue from vacant parcels to make up for the services they require. In addition, to be completely fair, vacant land is on its own in all uses, which means that land zoned for agriculture or conservation but listed as vacant in the real estate vacancy codes is considered vacant. This means that agricultural, forestal, and open space land are not receiving any breaks by inflating their revenue with vacant properties. In addition, this means that vacant mixed-use properties are not receiving any breaks through including vacant land revenues. Overall, this means that the lowest cost of services currently comes from the historic downtowns and the agricultural and forestal land in Shenandoah County. In reverse, the highest costs in community services come from the suburban residential and commercial properties. From the information gathered in the first analysis, it can be stated that if the industrial properties were redeveloped then they too would rank low on the cost of services provided.

The vacant class of parcels is not displayed on the charts for their cost of community services as if the land is vacant, then there are no services to provide to it and so if numbers were presented they would be in the negatives.

1,106 Land Use Zones

Map 3

Chart 3

Shenandoah County Actual Cost Of Community Services By Use Assessment II

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.

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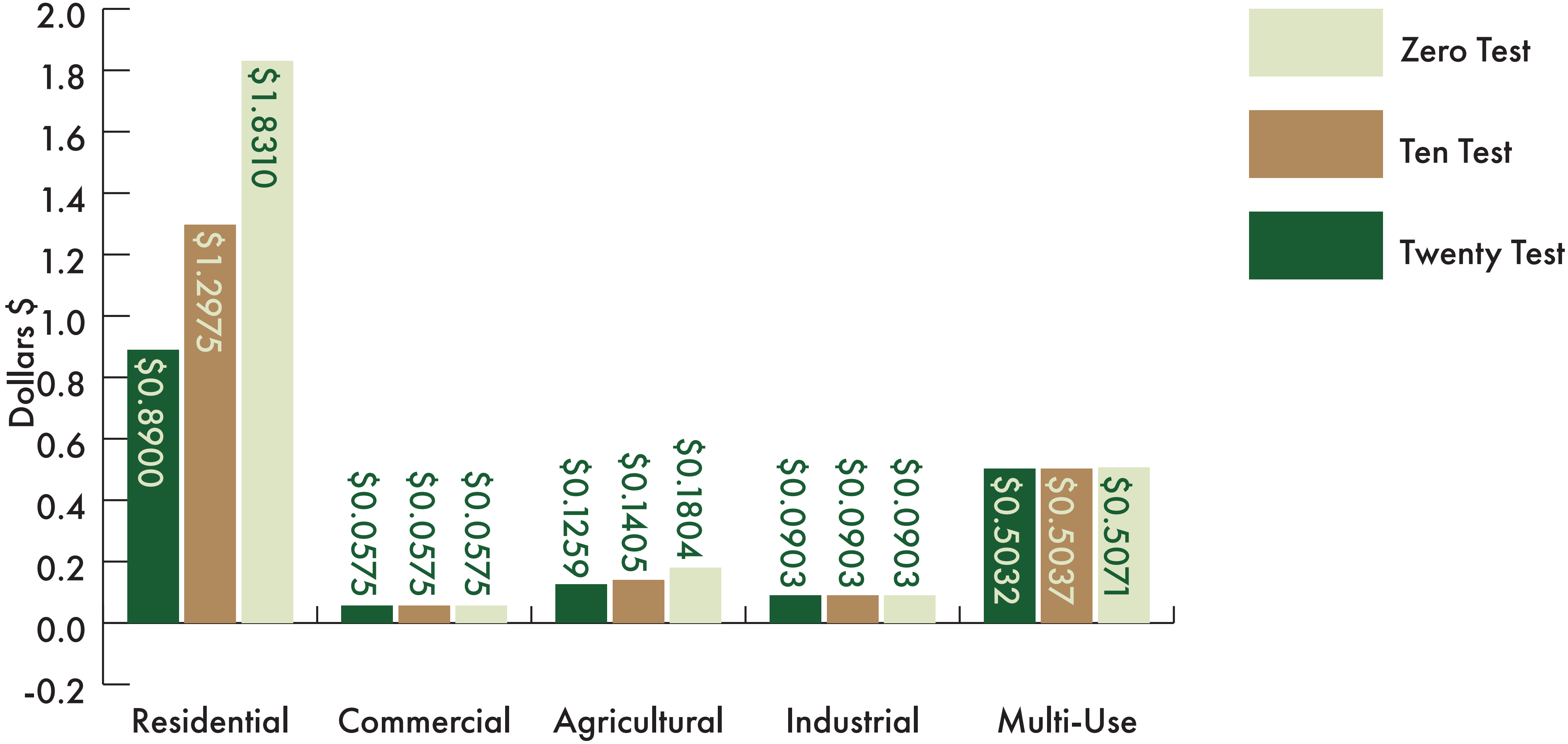


Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

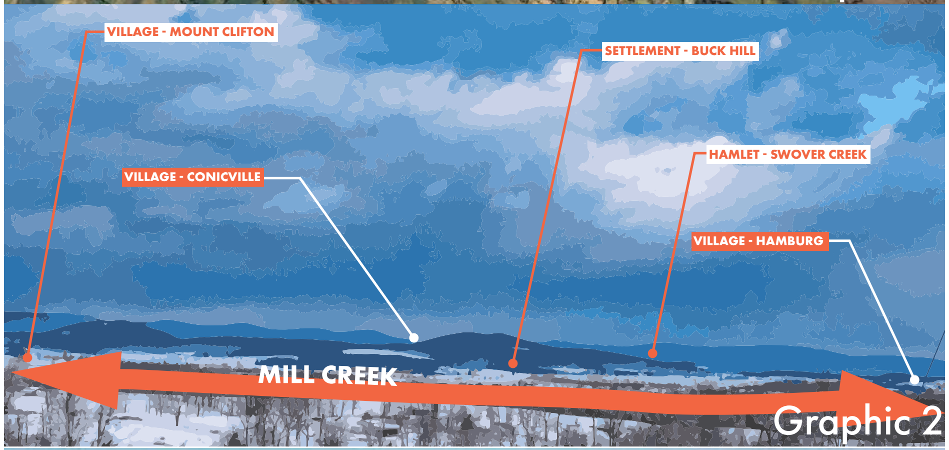
Relationship Of Report To 2045

At the same time as this report was conducted, the Citizen's Advisory Committee started the process of developing the next Comprehensive Plan for Shenandoah County which will look to 2045. Part of this process began with the acknowledgment that there may have been communities that have been forgotten and neglected in the countryside. In addition the Citizen's Advisory Committee has been working on understanding the definition of rural and whether the current plan for 2025 speaks to the retention of a rural identity in Shenandoah County, or to one which is increasingly sub-urban. Part of understanding this complication of the definition of rural the committee has performed research which outlines at least 122 communities that once existed in Shenandoah County other than the six towns which are acknowledged in this report.

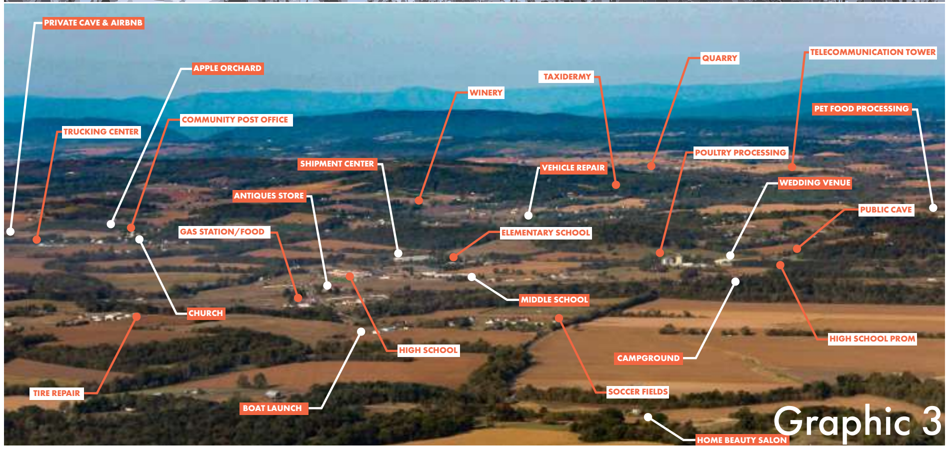
As this report attempts to provide a clear picture on the current conditions of Shenandoah County in terms of the relationship of land use and location with tax revenues and public expenditures, there is also the question of how different land uses may change the results in a future assessment of the County. While a clear result from the analysis is that residential land uses cost the County the most in terms of services that must be provided, there is also a discussion that may occur on how the results on mixed use cost of community services may impact future planning. As seen in this report, the mixed use areas of the County which are seen in the historic downtowns of five of the six Towns, are uses where there are businesses on the street level and apartments or living quarters above the businesses. This use has tested to incur a lower cost of community services than single use residential and single use commercial properties. As the Citizen's Advisory Committee looks to the forgotten communities in the countryside, a question to be asked is whether the mixed use zoning classification could be useful in such community centers.

Since the 1990 Comprehensive Plan created in 1978 for Shenandoah County, there has been a clear struggle to both retain working lands of the County and incur growth in and around the Towns. This report provides an insight into the current conditions of the land uses in the County and the tax structures in place in order to ensure that future decision have the right data available to inform the decisions being made.

Graphic 1



Graphic 2



Graphic 3

Conclusion Of Executive Summary

As many individuals do not have the time to read through the entirety of this report, it is important that key takeaways are provided in order to inform decisions in a concise manner. The following takeaways should be viewed as summaries rather than generalizations and the data and information to support the summaries are provided in the latter part of this report. These summaries are also written in a way that they take into account the implications which are explained in detail in this report.

First to summarize: the type of measurement demonstrated in this report is anchored around the number one. The number one, or $1, represents one tax dollar paid by a land use to the locality. The Cost of Community Services number (such as $2.99) represents the cost of providing services to the land use on the ratio of Cost of Services to taxes paid. This means that if the Cost of Community Services number is above $1 then the land use costs the locality more than it pays in taxes. If the Cost of Community Services number is below $1, then the land use pays the locality more in taxes than it receives back in services. Relating this to the previous example, a land use with a Cost of Community Services of $2.99 costs a locality $1.99 in addition to the $1 the landowner paid in taxes. In short, a locality wants more land uses to have a Cost of Community Services below $1, and as few as possible land uses with a Cost of Community Services above $1.

The following are the key takeaways from this report:

1. Residential land uses cause the highest cost in community services in Shenandoah County and the six Towns.
2. Agricultural, forestal, and open space land uses are a source of revenue for Shenandoah County which help in offsetting the cost of services for residential land uses.
3. Shenandoah County receives the most amount of individual tax revenue from currently active industrial and commercial parcels, vacant industrial parcels produce high levels of tax revenue yet it is not as high as active parcels.
4. Multi-use land uses provide more tax revenue and hold a lower cost of community services than suburban or single use residential properties.
5. There is a high level of excess land on existing lots which could lead to compact infill development in order to increase the productivity of single use properties.
6. There are currently 4,837 parcels or 6,080 acres zoned residential but are currently vacant. This means that if these parcels alone were developed, then there would at least be 4,837 new houses in Shenandoah County, including the Towns, not including the potential for subdividing the parcels to allow additional.
7. There are 264 commercial, 183 industrial, and 188 multi-use parcels that are currently vacant which could bring at least 635 new businesses to Shenandoah County and the six towns, in addition there is the potential for more businesses given the total vacant acreage of 1,854.
8. Land that is already zoned industrial, commercial, or agricultural in Town annexation areas, provide the most amount of revenue.
9. The Toms Brook Maurertown Sanitary District benefits the most from active industrial and commercial land while Stoney Creek Sanitary District benefits the most from active commercial land.
10. This report reveals that all land that is currently under agricultural, forestal, or open space use benefit Shenandoah County more in tax revenue than lands that are in any other form of land usage.

While there are many more takeaways that can be gathered from the materials presented in this report, the largest takeaway is the reader's ability to see the data and draw one's own conclusions. While summaries are provided, it is up to the reader to interpret the next steps Shenandoah County should take based on the data presented in this report.

Methods Discussion

The process of developing this report began in August 2019 as the start to the analysis came from first taking into account all of the parcels in Shenandoah County through acquiring the most recent layer from the GIS Coordinator, Chris Way. Once this data and the data from the Commissioner of Revenue, Kathy Black, was acquired then the two were merged together and layers were extracted using ArcGIS Desktop through determining the zoning of each parcel. Once zoning was associated with every parcel then the acreage of agricultural and conservation parcels was used to determine the three categories for the three tests performed in this report. Once these data sets were developed then the service area GIS data was used to associate parcels with their provider of services. This led to a coding system for the names of the parcels which can be explained in the diagram below:

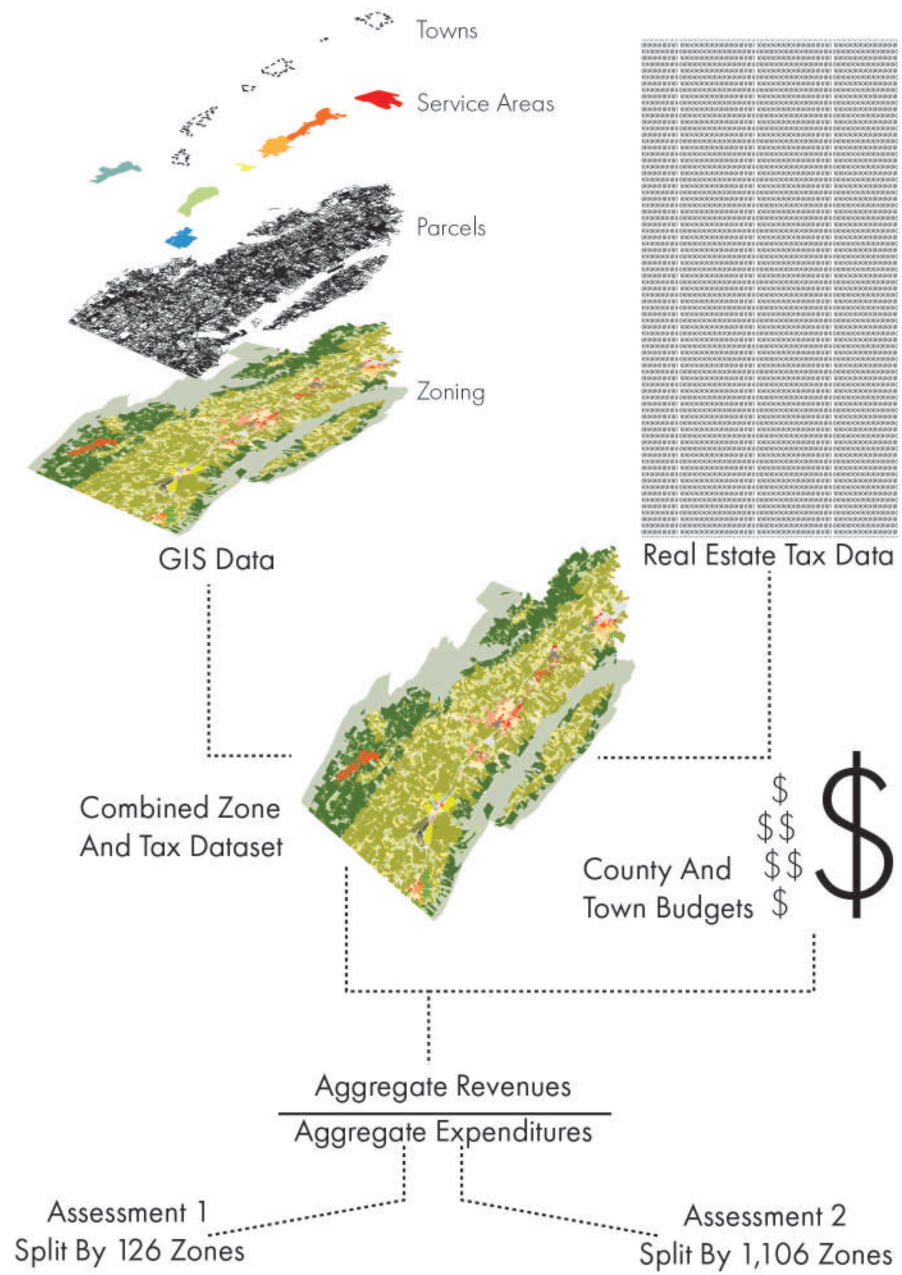
SP_A1B_N 10 4

Locality — **Zone** — **Service Area (If Applicable)** — **Real Estate Occupancy** — **Bedrooms**

This coding system was vital to the process of then exporting the data from ArcGIS to excel to prepare for analysis in RStudio. RStudio is a coding application and through having key codes that are duplicable in some fashions and unique overall allowed for the quickest process of associating costs to the correct parcels and later on breaking down the data in terms of use, location, zoning, occupancy, and bedrooms. Once all of the data was cleaned and pulled into RStudio then the analysis shifted into writing a system of code in order to properly analyze the data in an accurate and reliable manner. In order to perform this analysis the first step was to pull in the packages of stringr, tidyverse, dplyr, readr, tibble, and plyr into RStudio. Once these were installed then the tax revenue from every parcel was determined through first combining the land and improvement value while also accounting for parcels which are in the land use taxation program and the value that they are assessed. Once the assessment value is determined then the value was multiplied against the County taxes, the Town taxes if the property was in

Process

Graphic 4



Methods Discussion

a town or a service area of a Town, and then parcels which are either in the Toms Brook Maurertown Sanitary District or Stoney Creek Sanitary District were multiplied against the respective taxes of such areas. Once this data was determined for every parcel, then the data was split by the 126 zones in this report and within that a test column was dedicated to outlining if a land use was residential or not.

After the parcels were broken down then the Financial Year 2019 expenditures from Shenandoah County, each of the six Towns, and the two Sanitary Districts were used to determine the costs associated with land uses. While the entire breakdown is provided on the following pages, the method to breaking down each budget was based on who would benefit from such services and who would require such services to determine if they are causing the locality to provide such services. While this may be a contentious topic, this report seeks to be transparent and allow for discussion on every aspect including the breakdown of costs.

Once divided the number of properties that fall into each designation are used to find the average expense produced by a single parcel. As some designations apply to other designations, a sum is then produced based on the overlapping designations in order to achieve the accurate sum of how much an average property in a designation expends upon the County. An example of this is that while all properties outside of Town limits only have, “General Government Administration,” and, “Community Development,” the average cost from all properties is added to the sum for all properties outside of Town limits. This ensures that the average cost per parcel is apply equally to each parcel that places an expense on the County. Bulleted items represent sub-items when budget categories are split apart to different designations. Parts of Public Safety were divided in half due to the number of response calls that originate from residential properties.

The “*” serves to note that neither Toms Brook or Edinburg have police departments. The cost of the Sheriff is added to Toms Brook’s and Edinburg’s service areas, including those in the Town limits.

All expenditures shown take into account all revenues that are related, other than real estate taxes to provide clear results. While designations with, “Residential,” in the title incur all costs from previous designations, those with, “All Properties,” only incur costs from those with, “All Properties.”

Let’s first assume that each designation’s average is assigned a letter of the alphabet from A-E, with the average of expenses from, “All Properties,” equaling, “A,” and the average of expenses from, “All Residential Properties Outside Of Town Service Areas,” equaling, “E.” Then to account for the lack of police forces in Edinburg and Toms Brook the, “T&E,” will represent the parcels in the Toms Brook and Edinburg Service Areas, including those in the Town limits. “X,” will serve as the final calculation. “Y” will serve as any revenues. The diagram below will better explain the formula:

All Properties	All Residential Properties	All Properties Outside of Town Limits	All Properties Outside Of Town Service Areas	All Residential Properties Outside Of Town Service Areas	All Residential Properties Outside Of Town Service Areas, And Inside Of Toms Brook And Edinburg Service Areas
X = (A)-Y	X = (A+B)-Y	X = (A+C)-Y	X= (A+C+D)-Y	X= (A+B+C+D+E)-Y	X= (A+B+C+D+E+T&E)-Y

The Shenandoah County FY18 Sanitary District Budgets were not divided into designations as all properties receive and contribute the same expenses yet accounting for revenue reveals there are negative expenses.

Toms Brook Sanitary District Expenses = 64,626
Stoney Creek Sanitary District Expenses = -363,846

When the average is calculated for the expenses of each sanitary district, the number of users is used as the denominator rather than the number of parcels in the district as not all use the services. The number of parcels in the district is used in the tax calculations as all members of the districts pay taxes even if they do not receive the services.

Shenandoah County Budget Breakdown

Table 1

	All Properties	All Residential Properties	All Properties Outside Of Town Limits	All Properties Outside Of Town Service Areas	All Residential Properties Outside Of Town Service Areas	All Residential Properties Outside Of Town Service Areas, And Inside Of Toms Brook And Edinburg Service Areas*
	Public Safety • Forest Fire Protection • Building Code Enforcement • Animal Shelter	Public Safety • Corrections and Detention • Processing Center • Juvenile Probation	General Government Administration	Public Safety • Half Volunteer Fire and Rescue • Half Fire and Rescue)	Public Safety • Animal Control • Medical Examiner • Half Volunteer Fire and Rescue • Half Fire and Rescue	Public Safety • Half Sheriff
	468,727	**3,534,208**	**2,661,475**	**2,921,287**	**4,573,279**	**2,740,205**
	Community Development	Health And Welfare	Planning And Zoning			
	713,218	**9,240,789**	**281,890**			
	Judicial Administration	Education	Public Safety • Half Sheriff			
	2,297,440	**30,412,369**	**2,740,205**			
	Public Works	Recreation And Cultural				
	1,627,059	**2,198,531**				
	Debt Service • County Debt Service					
	6,531,665					
	Capital Projects					
	4,152,533					
	Landfill Fund					
	2,830,512					
	North Fork Wastewater Treatment Plant					
	179,363					
Ex	$19,013,199.00	$45,385,897.00	$5,683,569.50	$2,921,286.50	$4,573,279.00	$2,740,204.50
Rev	$33,337,350.42	$7,951,830.97	$1,026,960.45	$91,586.54	$91,586.54	$1,130,461.57
Total	-$14,324,151.42	$37,434,066.03	$4,656,609.05	$2,829,699.96	$4,481,692.46	$1,609,742.93

New Market Budget Breakdown

All Properties In Town Service Area	All Residential Properties In Town Service Area	All Properties In Town Limits
Cultural and Economic Development • Marketing And Events	Cultural and Economic Development • Donations (Except Façade Enhancement Grant) • Public Safety • Crossroads Music Series • Fairway 5K	Cultural and Economic Development • Façade Enhancement Grant • Economic Development • Town Wide Enhancement Projects
15,650	**86,885**	**24,785**
Capital Outlay • Half Cultural And Economic Development	Parks And Recreation	Financial Administration
12,807	**60,989**	**180,031**
Water/Sewer Services	Capital Outlay • Community Park Improvements • Half Cultural And Economic Development	Public Works
1,752,645	**140,937.50**	**273,273**
Water/Sewer Capital Outlay	Half Public Safety	General Government & Capital Outlay Administrative
144,294	**228,999**	**204,833**
Half Public Safety		Sanitation
228,999		**85,491**
		Capital Outlay • Administrative • Public Works • Contingency
		107,610
$1,942,934.00	$481,674.00	-$101,833.00

Table 2

Mount Jackson Budget Breakdown

All Properties In Town Service Area	All Residential Properties In Town Service Area	All Properties In Town Limits
Water And Sewer	Half Public Safety	General Government Administration
1,446,490	**272,363**	**669,310**
Capital Projects	Parks And Recreation	Community Development
111,530	**67,246**	**45,196**
Half Public Safety		Public Works
272,363		**445,558**
		Debt Service
		57,456
-$1,078.50	$318,125.50	-$11,576.00

Table 3

Edinburg Budget Breakdown

All Properties In Town Service Area	All Residential Properties In Town Service Area	All Properties In Town Limits
Water Department	Half Public Safety	General Government Administration
143,619	**49,337**	**201,288**
Sewer Department	Cemetery	Public Works
237,407	**61,098**	**121,034**
Non-Departmental Water & Sewer	Parks, Recreation & Cultural	Non-Departmental
204,830	**147,459**	**78,233**
Water Debt Service	• Half Fire And Rescue	Debt Service
70,554	**7,100**	**874,788**
Sewer Debt Service	General Properties	Community Development
38,590	**85,008**	**800**
Half Public Safety	Cremation Memorial	Trash Services
49,337	**16,000**	**57,000**
Half Fire And Rescue		
7,100		
-$16,487.00	$319,052.00	$861,429.00

Table 4

Woodstock Budget Breakdown

All Properties In Town Service Area	All Residential Properties In Town Service Area	All Properties In Town Limits
Water And Sewer	Half Public Safety	Government Administra-tion
3,503,753	**976,367**	**855,065**
Half Public Safety	Parks And Recreation	Public Works
976,367	**381,941**	**1,975,588**
Capital Projects		Planning And Community Development
1353633		**463,547**
		Interest On Long Term Debt
		40,900
		Debt Service
		207,112
$1,799,497.00	$1,057,359.00	-$842,973.00

Table 5

Toms Brook Budget Breakdown

Table 6

All Properties In Town Service Area	All Residential Properties In Town Service Area	All Properties In Town Limits
		Administration
		35,875.00
		Government Compensations
		41,000.00
		Town Maintenance
		32,045.00
		$31,000.00

Strasburg Budget Breakdown

Table 7

All Properties In Town Service Area	All Residential Properties In Town Service Area	All Properties In Town Limits
Water Fund	Half Public Safety	General Government Administration
2,585,652	**923,750**	**1,290,466**
Sewer Fund	Parks And Recreation	Community Development
2,653,443	**177,662**	**245,263**
Half Public Safety	Health And Welfare	Public Works
923,750	**11,721**	**1,137,039**
		Debt Service
		258,264
		Trash And Recycling
		326,688
$1,378,071.50	$1,064,774.50	$63,186.00

Methods Discussion

Once all of the budget costs were assigned to their appropriate land uses, then the cost of community services for every aggregate land use was determined by dividing the sum of the tax revenue by the sum of the expenses. This results in a number where if the result is over one, then the land use produces more expenses than revenues. In contrast, if the final number is less than one, then the land use produces more revenue than the expenses that it requires. An easy way to understand this is through the following scenario set in a world where all tax payers must pay $1,000, unless they produce more revenue than expenses:

Farmer Sally owns a farm outside of Conicville that is only used for farming. She pays $1,000 in taxes at the end of the year. When she goes to pay her taxes the clerk informs her that because her land is zoned agricultural and is being used for farming, she only incurred $180 in expenses that the County had to provide, or $0.18 to the dollar. Since she is at a deficient, she is provided a reimbursement check of $820 by the clerk. Behind Farmer Sally is Mayor Bob who owns a house in Mount Jackson with his wife and two children. When Mayor Bob comes to the counter to pay his $1,000 he asks how much his reimbursement will be based on his land use. The clerk informs Mayor Bob that because his land use is residential, his reimbursement was already worked into his taxes as the actual expenses he incurred on to the County were $1,831, or $1.831 to the dollar.

In the real world, Farmer Sally would not be able to receive a $820 reimbursement check as the funds actually go towards making up for the costs not paid by Mayor Bob. Note that this scenario takes into account land use taxation already and it only serves a means to explain the dollar ratio and not how taxes work.

Shenandoah County

This section of the report will focus on Shenandoah County overall through examining all of the data and results from the analysis on a County-wide basis. In addition to providing charts to highlight the cost of community services if the cost of services for the Towns and Sanitary Districts were not taken into account, as well as an overview of all of the localities within Shenandoah County and the County itself in terms of the cost of community services as well as attributing facts. This section is the most intensive section in this entire report and lays the ground for the discussion to be had with the data that this report reveals. In order to help the reader find the narrative in the data that is presented, the start of this section, as it will be with every section, will attempt to summarize the data and provide a concise statement on the vision being set forth from this data and the overall report.

The charts take into account the two separate assessments where Assessment II takes into account vacant parcels and Assessment I does not. In addition, the charts take into account the three different tests that were run to take into account parcels that are twenty acres, ten acres, and parcels based on their zoning.

Charts 4-7 take into account the additional cost of services of the six towns and the two sanitary districts in Shenandoah County. In addition these charts take into account all of the parcels within the six towns. The uses that are listed were developed from aggregate data of all of the parcels in Shenandoah County, including those that are in each of the six towns and the two sanitary districts.

On pages 20 to 25, data is presented on the number of parcels, acres, vacant parcels, vacant acres, average size of parcels, and the tax revenue from the general land uses in Shenandoah County and the six towns combined.

On pages 26 and 27, data is presented on the cost of community services without taking into account the cost of services from the six towns or two sanitary districts, in addition it does not include the parcels from all six towns. This means that the data presented on pages 26 and 27 are the most accurate numbers for the cost of services for parcels outside of all town boundaries.

On pages 28 to 31, data is presented on the number of parcels, acres, vacant parcels, vacant acres, average size of parcels, and the tax revenue from the general land uses that are only in the unincorporated areas of Shenandoah County and not in the six towns.

The following will seek to provide a brief summary on the data and results that is presented in this section of the report. While each spread with text in this section of the report will attempt to provide a concise summary based on the data on such spreads, the following will be a general summary of the data on Shenandoah County, including the six Towns.

1. Residential land use causes the highest cost in community services in Shenandoah County and the six Towns.
2. Active industrial parcels produce the highest amount of tax revenue individually, and nearly twice the amount of revenue compared to vacant industrial parcels.
3. There are currently 4,837 parcels or 6,080 acres zoned residential but are currently vacant. This means that if these parcels alone were developed, then there would at least be 4,837 new houses in Shenandoah County, including the Towns.
4. Multi-use, or non-euclidean zoning, provides a greater tax revenue value to Shenandoah County and the Towns than euclidean or single use residential and commercial zoning.
5. Residential use parcels range in average size from 2.3 to 0.7 acres depending on the test. Productivity of such existing land use can be raised through allowing smaller parcels or multi-use zoning in existing residential zones.

Assessment I

Charts 4 and 6 demonstrate the actual cost of community services and then the predicted cost of community services if the Towns were to annex parcels that are within their service areas. As noted earlier in this report, the service areas of Towns extend past the administrative boundaries of the Towns in order to allow for those who live outside of the Town boundaries to share the same benefits as those who live within the Town boundaries. This means that an individual in the service areas of Towns experience all or most of the same services as Town residents do, yet they do not have to pay Town taxes. Due to this complication, Towns will tend to be negatively impacted through having to provide services to more individuals without being compensated for providing such services. The bottom charts on the spread serve to demonstrate a possible future where different land uses are annexed by the Towns and the impact that each land use has on the Town through being annexed.

The two charts to the right demonstrate the cost of community services for Shenandoah County without taking into account vacant parcels. Both charts demonstrate that single-use residential land uses cause the highest cost in community services in Shenandoah County even if residential parcels in the Town service areas are annexed by the Towns. The second highest cost is split between commercial and agricultural with the actual assessment, and then the annex assessment reveals that multi-use would be the second highest cost. On both assessments the data reveals that the lowest cost in community services is the industrial use.

While the highest reduction in the cost of community services through annexation is seen with residential and agricultural lands, the annexation of agricultural lands would likely result in such lands changing in their use to account for the increased taxes levied on the land, which may in turn increase the cost of community services of the Town and County. Similarly, the annexation of residential properties into the Towns as they stand will reduce the cost of community services slightly, yet such properties may be subdivided and transformed into new residential lots and individuals to serve.

Shenandoah County Actual Cost Of Community Services By Use Assessment I

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.
Author: Tyler Hinkle
Date: November 6th, 2020

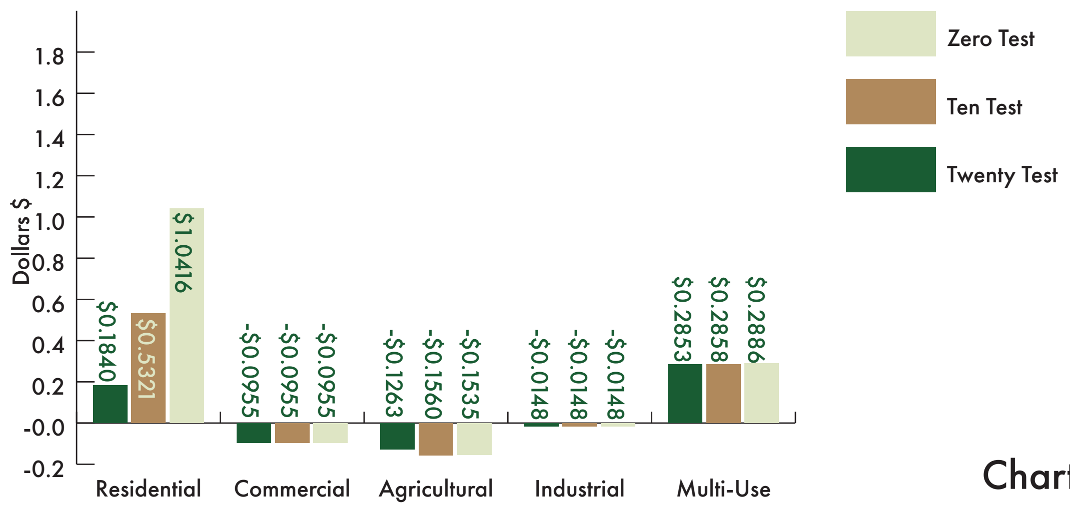


Chart 4

Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

Shenandoah County Predicted By Town Annexation Cost Of Community Services By Use Assessment I

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.
Author: Tyler Hinkle
Date: November 6th, 2020

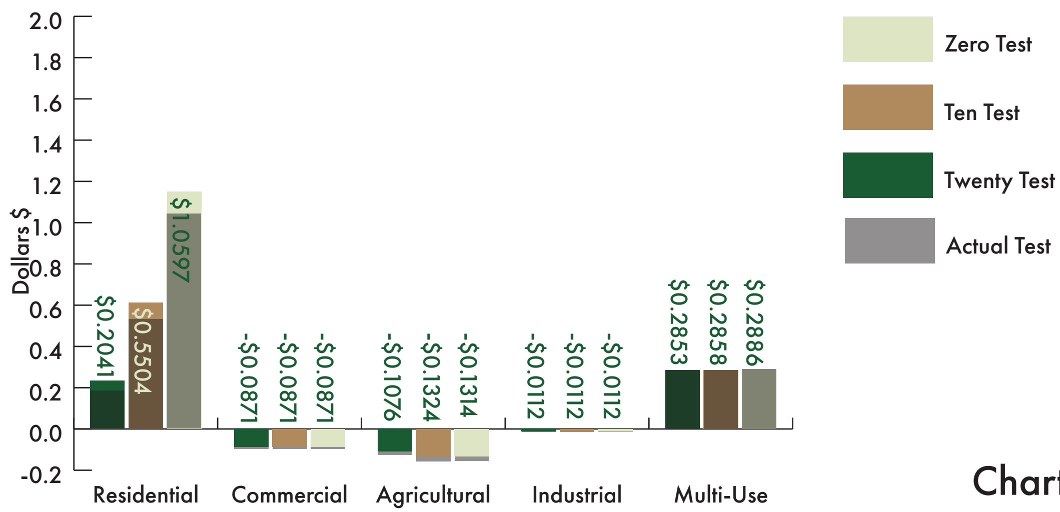


Chart 5

Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

Shenandoah County Actual Cost Of Community Services By Use Assessment II

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.
Author: Tyler Hinkle
Date: November 6th, 2020

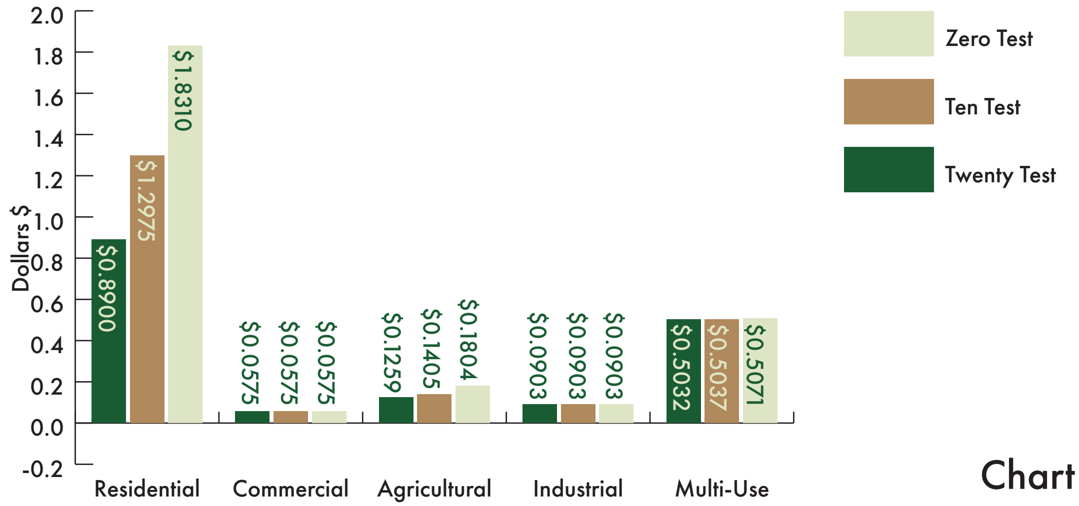


Chart 6

Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

Shenandoah County Predicted By Town Annexation Cost Of Community Services By Use Assessment II

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.
Author: Tyler Hinkle
Date: November 6th, 2020

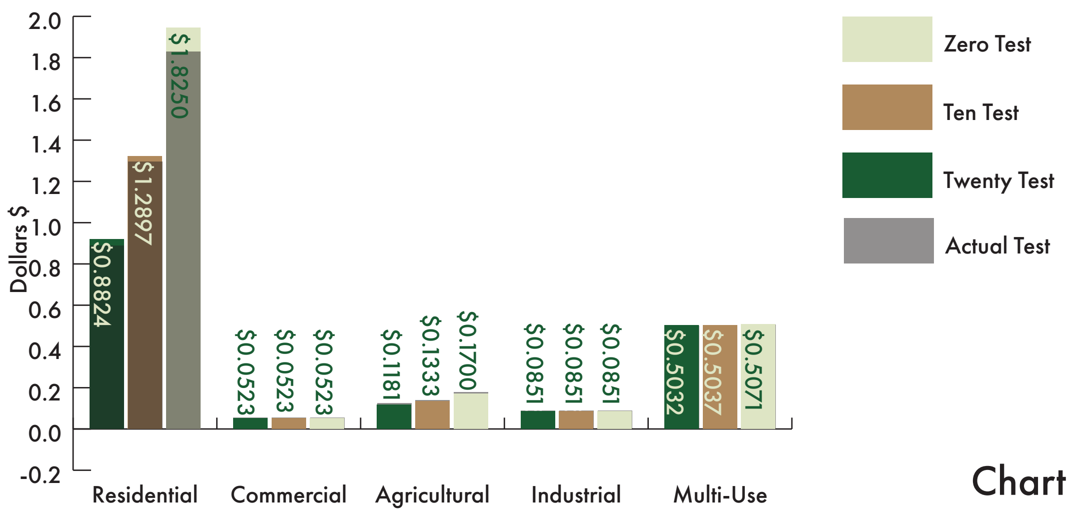


Chart 7

Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

The charts to the left demonstrate the cost of community services in Shenandoah County while taking into account vacant parcels. Both charts demonstrate that the highest cost of community services comes from residential land uses and the second highest cost comes from industrial land uses. The third highest cost of community services comes from commercial land uses and the lowest cost of community services come from multi-use lands and agricultural lands. While the charts on this page provide a more clear picture of the actual productivity of specific land uses, the charts on the previous page demonstrate the productivity of land uses based on their current administrative classifications and not if the lands are actually being used for such uses. While it may be entirely possible for vacant uses such as industrial and commercial to become more productive for tax revenue production, vacant residential parcels will generate more needs on more expensive services such as education and emergency services.

As noted with all of the charts on this spread of pages, the twelve tests run all show the same result of demonstrating that the highest cost in community services comes from single-use residential properties. Multi-use scores as the second highest cost in community services on both assessments. Agricultural is the lowest cost in community services on assessment I, yet it is the third highest on assessment II. Likewise, industrial scores as the third highest on assessment I and then scores as the fourth highest on assessment II. Finally, commercial scores as the fourth highest on assessment I and then scores as the lowest on assessment II.

Overall these charts demonstrate that the development of new single-use residential properties will not provide the adequate tax revenues to account for the services that the locality will need to provide. In addition, pages 22 and 23 reveal that the most productive uses per individual properties in Shenandoah County in terms of providing tax revenue to offset residential needs are industrial, commercial, and agricultural uses. While multi-use does not score within the top three, it does score higher in individual revenue gain compared to residential properties.

Assessment I

Shenandoah County Number Of Parcels By Use Assessment I

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.
Author: Tyler Hinkle
Date: November 9h, 2020

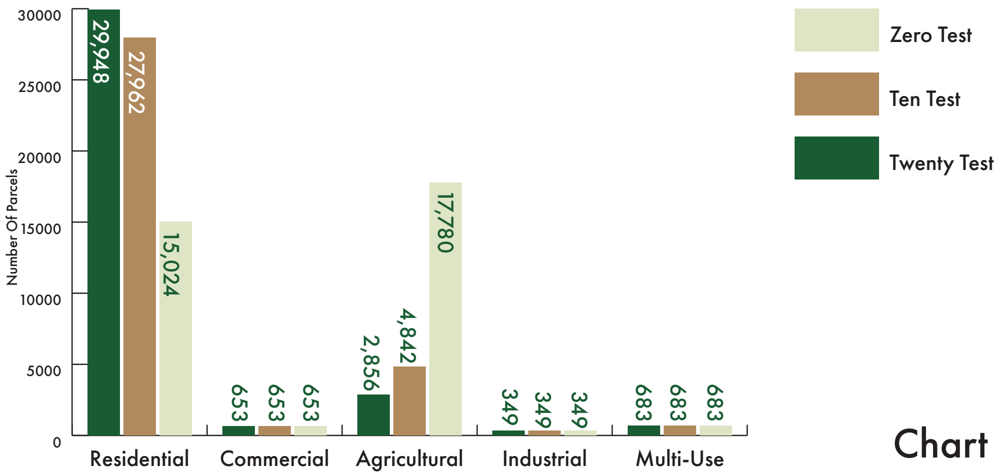


Chart 8

Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

Shenandoah County Total Number Of Acres By Use Assessment I

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.
Author: Tyler Hinkle
Date: November 9h, 2020

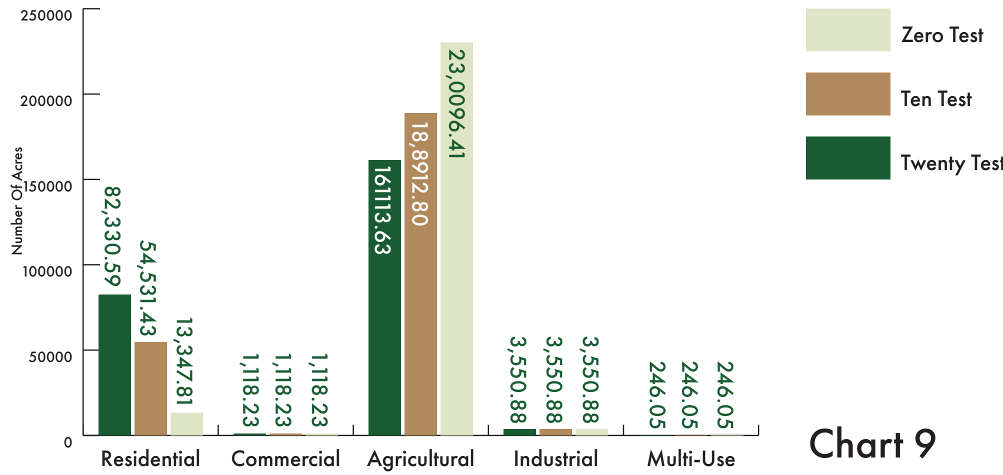


Chart 9

Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

Shenandoah County Average Parcel Size By Use Assessment I

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.
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Date: November 9h, 2020

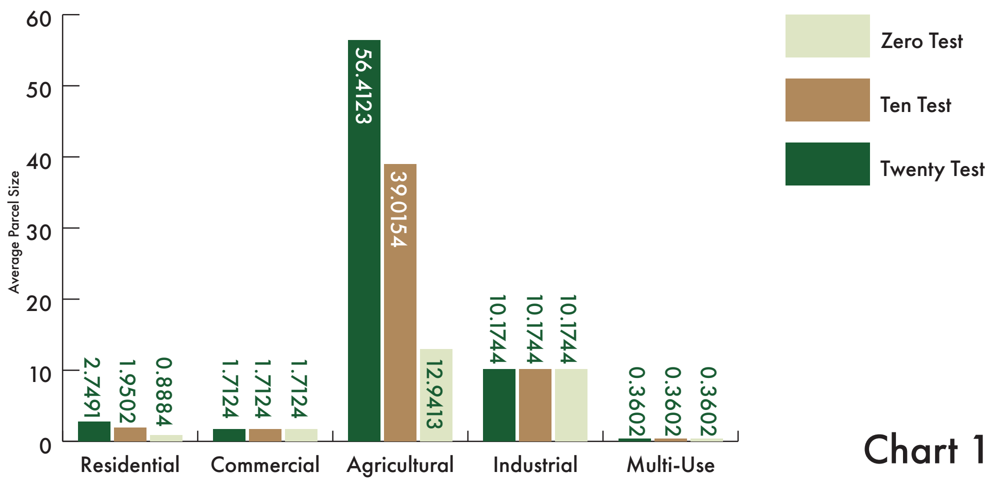

Chart 10

Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

Shenandoah County Total Vacant Acres By Use Assessment II

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.
Author: Tyler Hinkle
Date: November 9h, 2020

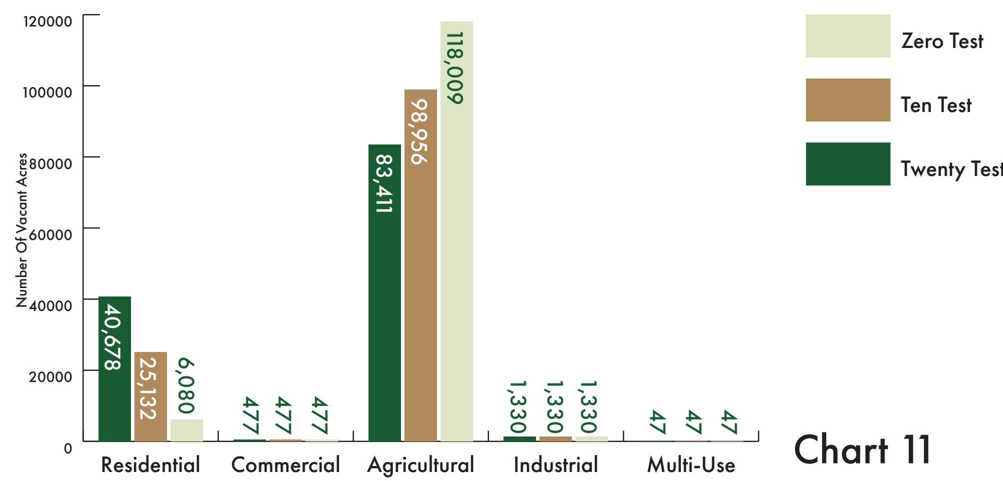

Chart 11

Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

Assessment II

Shenandoah County Total Number Of Acres By Use Assessment II

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.
Author: Tyler Hinkle
Date: November 9h, 2020

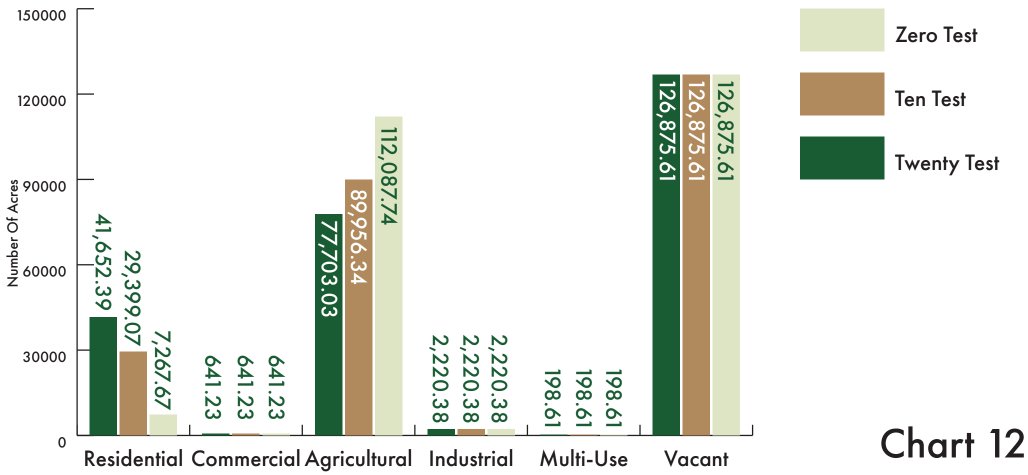

Chart 12

Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

Shenandoah County Number Of Parcels By Use Assessment II

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.
Author: Tyler Hinkle
Date: November 9h, 2020

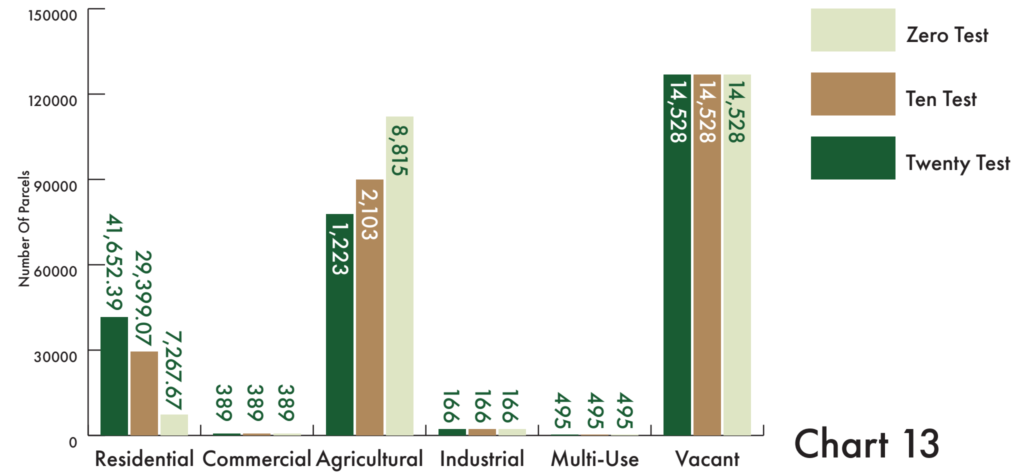

Chart 13

Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

Shenandoah County Total Vacant Parcels By Use Assessment II

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.
Author: Tyler Hinkle
Date: November 9h, 2020

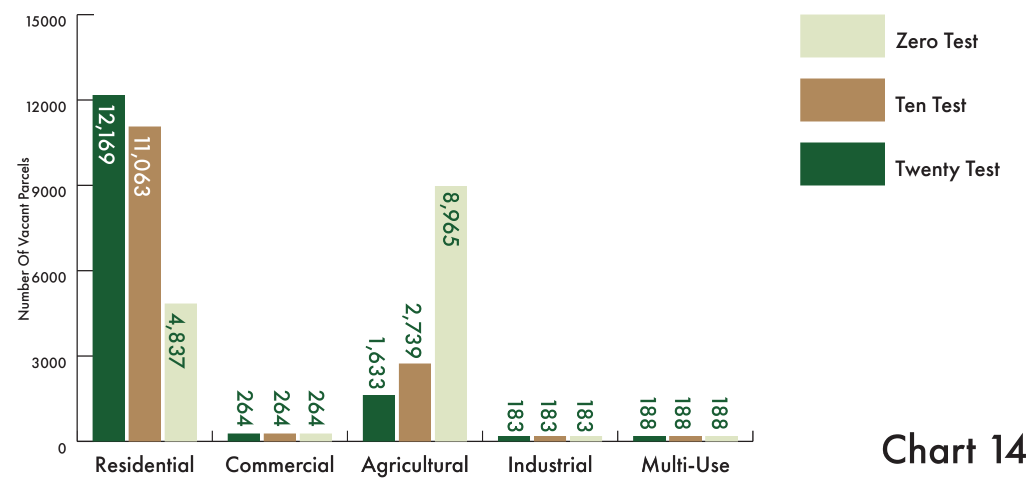

Chart 14

Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

Shenandoah County Average Parcel Size By Use Assessment II

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.
Author: Tyler Hinkle
Date: November 9h, 2020

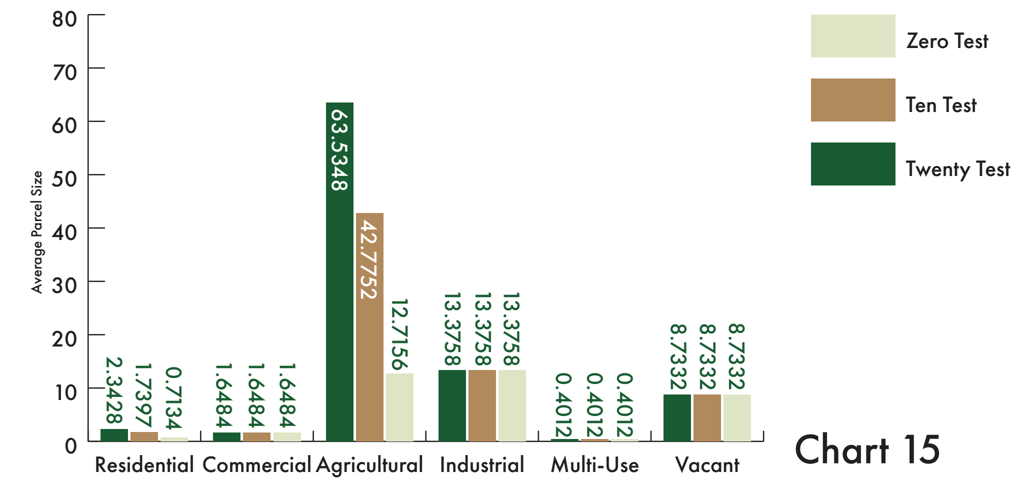

Chart 15

Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

Assessment I

Shenandoah County Total County Tax Revenue By Use Assessment I

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.
Author: Tyler Hinkle
Date: June 15th, 2020

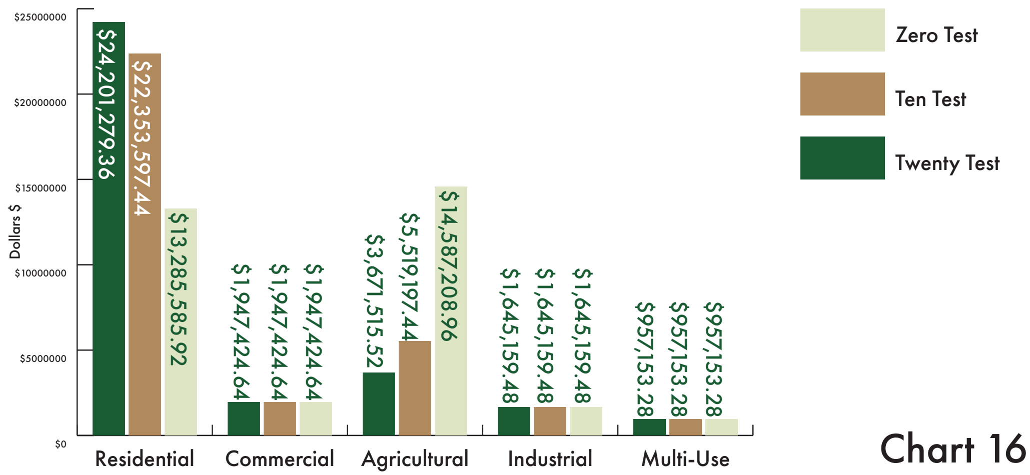

Chart 16

Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

Shenandoah County Total Town Tax Revenue By Use Assessment I

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.
Author: Tyler Hinkle
Date: June 15th, 2020

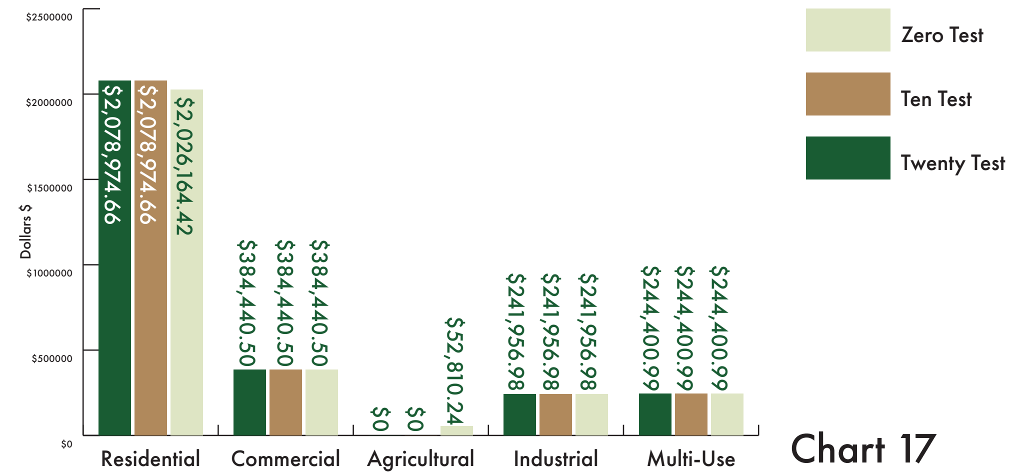

Chart 17

Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

Shenandoah County Average County Tax Revenue By Use Assessment I

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.
Author: Tyler Hinkle
Date: June 15th, 2020

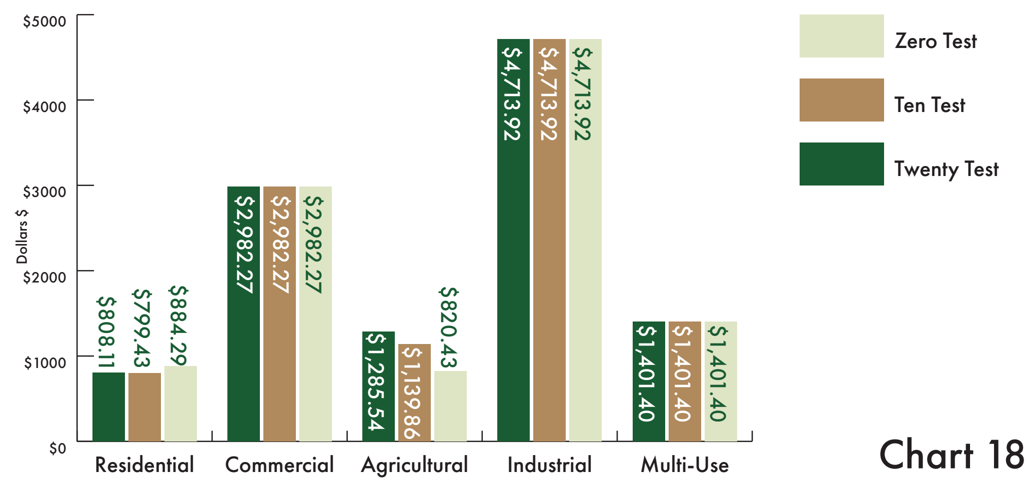

Chart 18

Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

Shenandoah County Average Town Tax Revenue By Use Assessment I

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.
Author: Tyler Hinkle
Date: June 15th, 2020

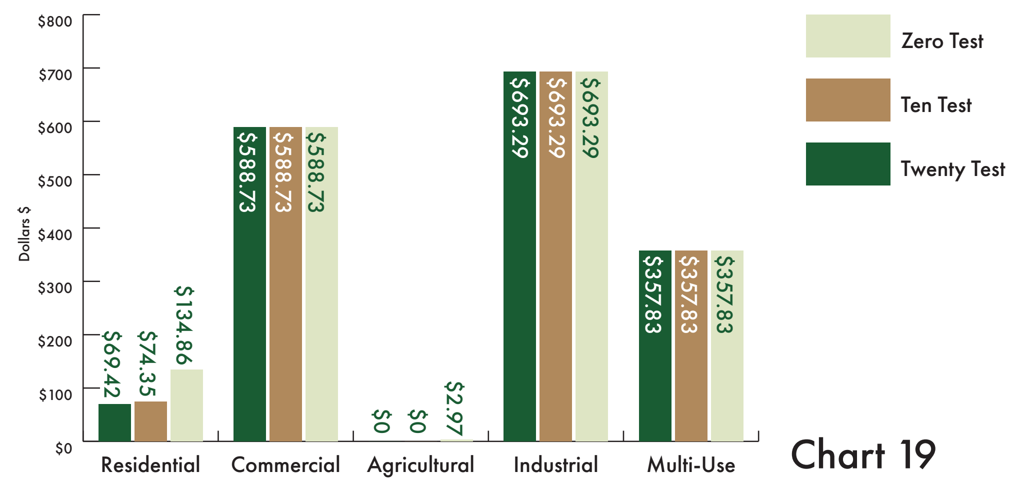

Chart 19

Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

Assessment II

Shenandoah County Total Town Tax Revenue By Use Assessment II

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.
Author: Tyler Hinkle
Date: June 15th, 2020

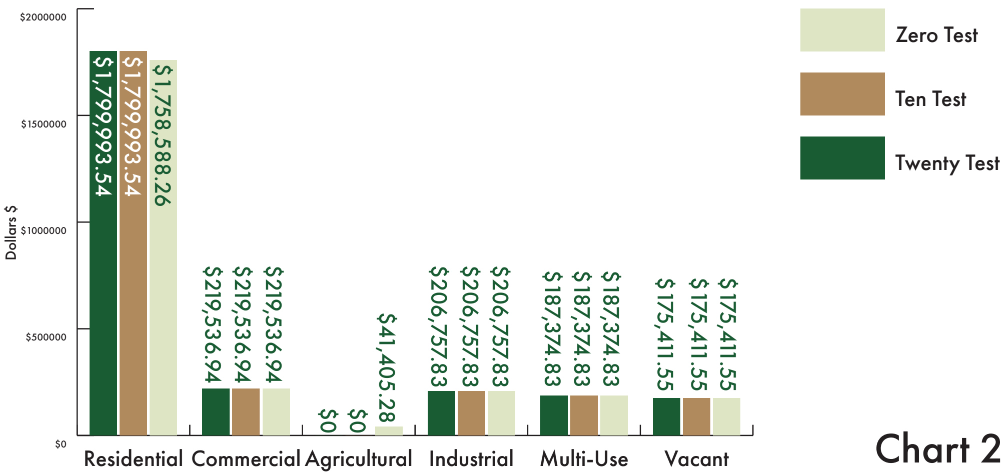

Chart 20

Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

Shenandoah County Total County Tax Revenue By Use Assessment II

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.
Author: Tyler Hinkle
Date: June 15th, 2020

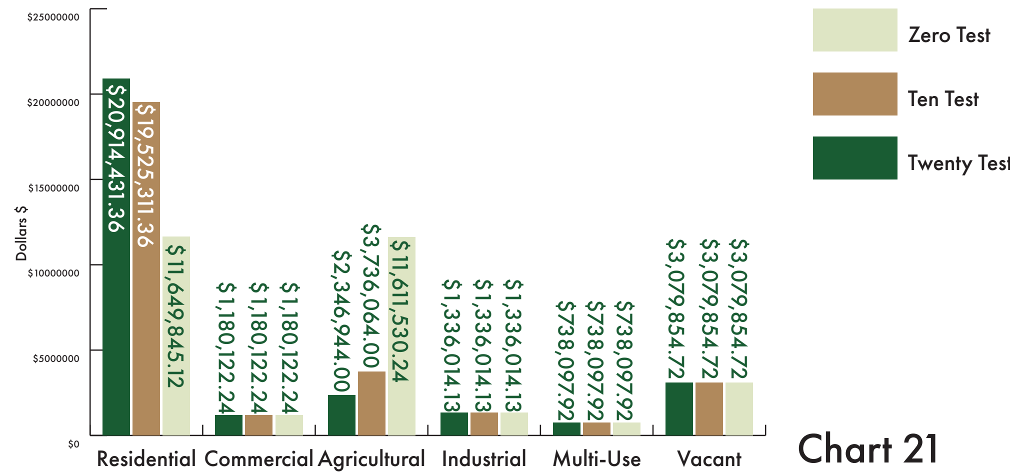

Chart 21

Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

Shenandoah County Average Town Tax Revenue By Use Assessment II

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.
Author: Tyler Hinkle
Date: June 15th, 2020

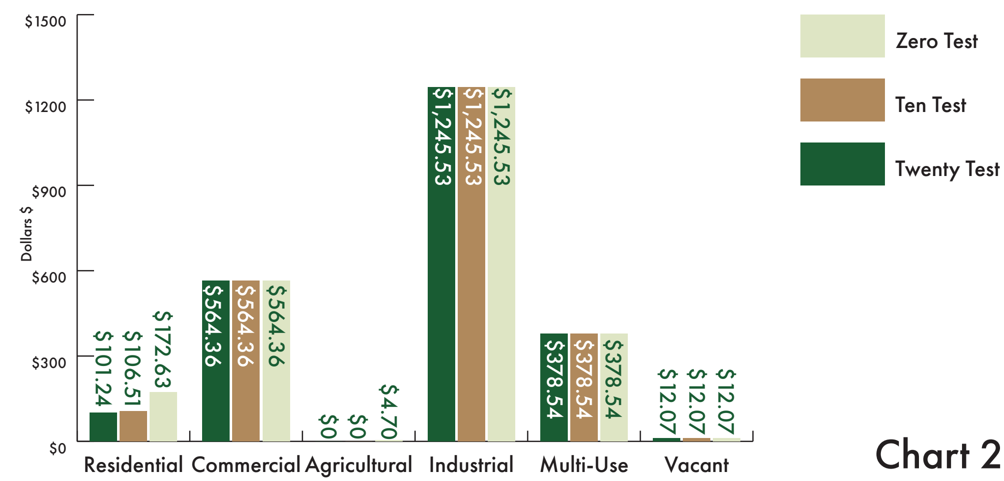

Chart 22

Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

Shenandoah County Average County Tax Revenue By Use Assessment II

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.
Author: Tyler Hinkle
Date: June 15th, 2020

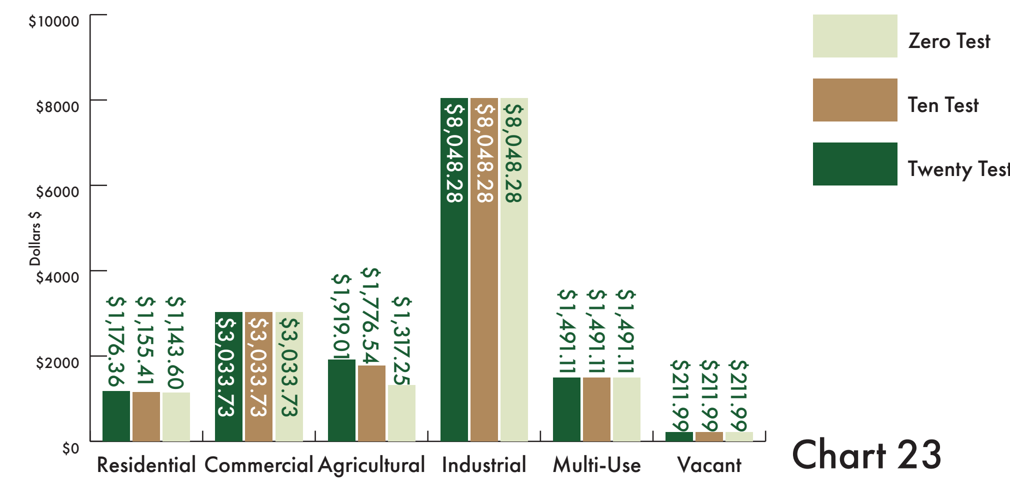

Chart 23

Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

Assessment I

Shenandoah County Potential New Town Tax Revenue Through Annexation By Use Assessment I

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.
Author: Tyler Hinkle
Date: June 15th, 2020

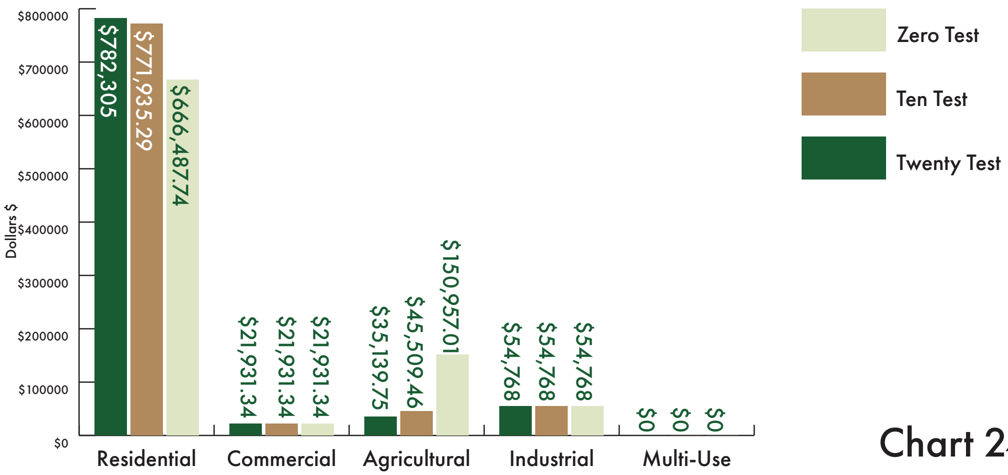

Chart 24

Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

Shenandoah County Total Tax Revenue By Use Assessment I

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.
Author: Tyler Hinkle
Date: June 15th, 2020

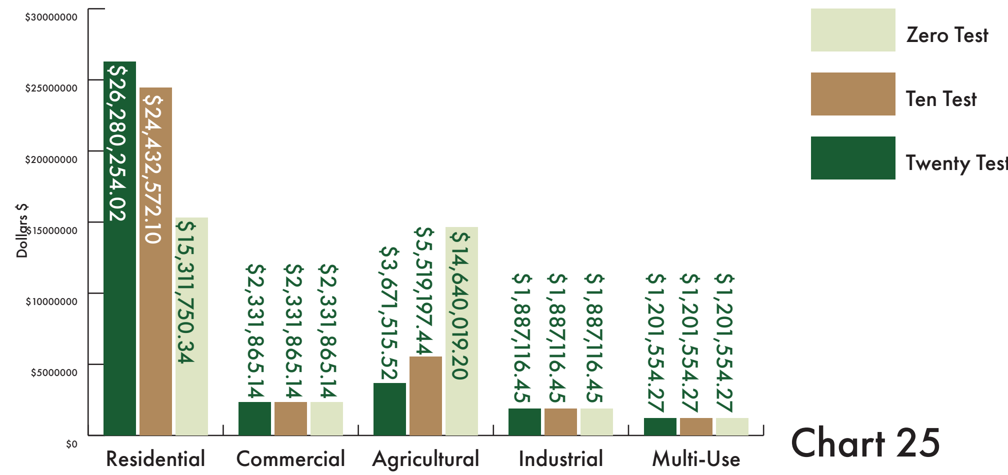

Chart 25

Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

Shenandoah County Average Parcel New Town Tax Revenue Through Annexation By Use Assessment I

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.
Author: Tyler Hinkle
Date: June 15th, 2020

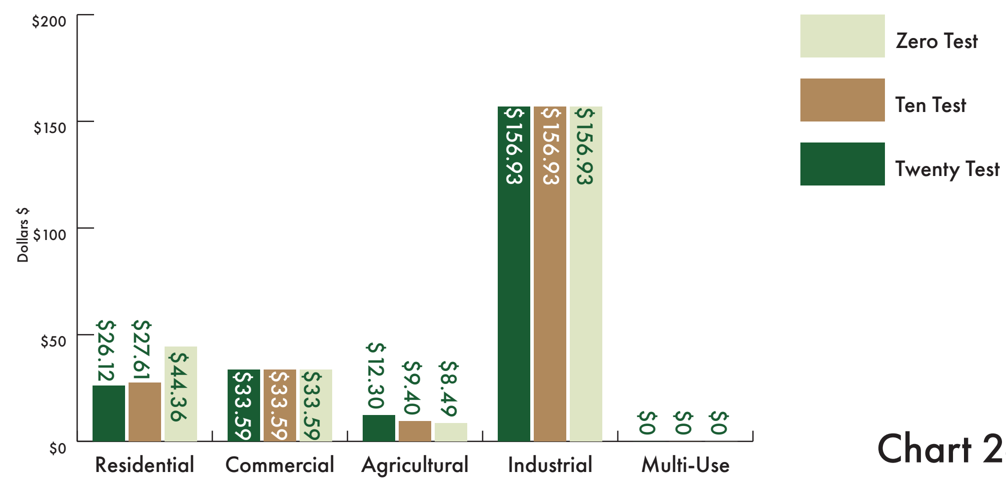

Chart 26

Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

Shenandoah County Average Parcel Total Tax Revenue By Use Assessment I

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.
Author: Tyler Hinkle
Date: June 15th, 2020

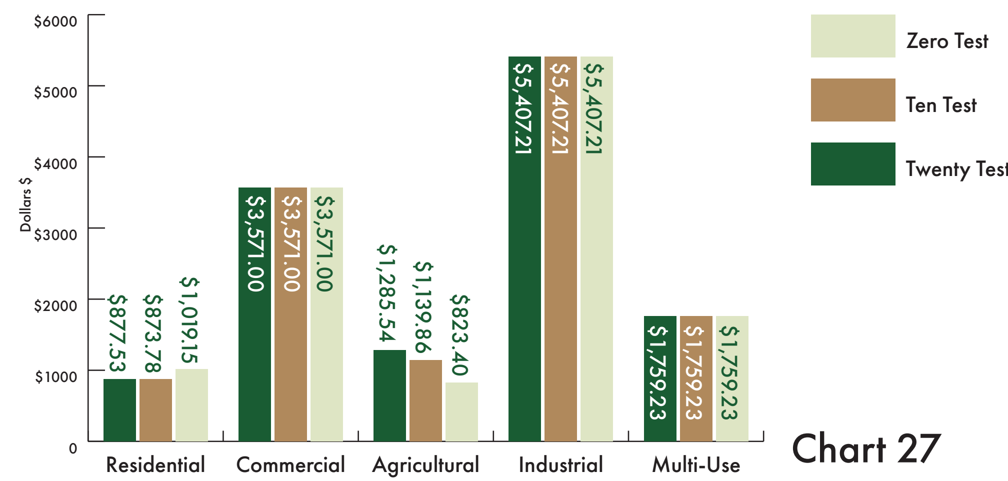

Chart 27

Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

Assessment II

Shenandoah County Total Tax Revenue By Use Assessment II

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.
Author: Tyler Hinkle
Date: June 15th, 2020

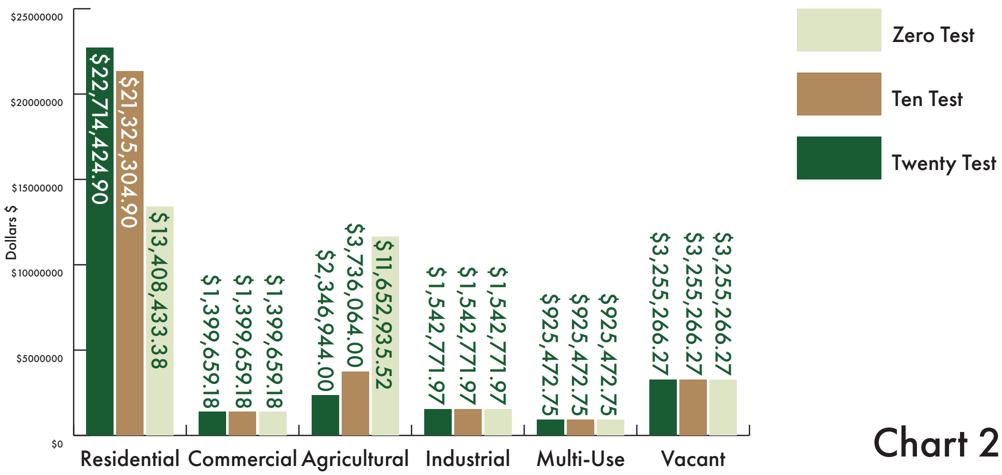

Chart 28

Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

Shenandoah County Potential New Town Tax Revenue Through Annexation By Use Assessment II

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.
Author: Tyler Hinkle
Date: June 15th, 2020

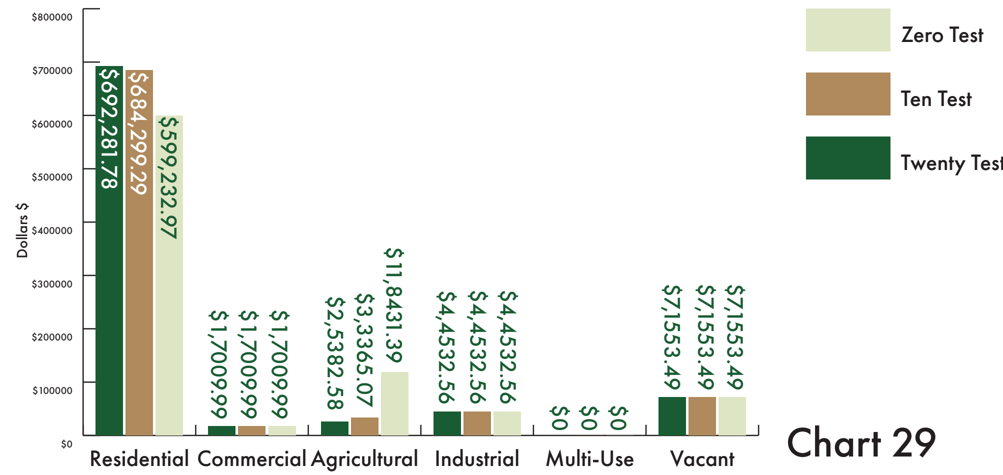

Chart 29

Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

Shenandoah County Average Parcel Total Tax Revenue By Use Assessment II

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.
Author: Tyler Hinkle
Date: June 15th, 2020

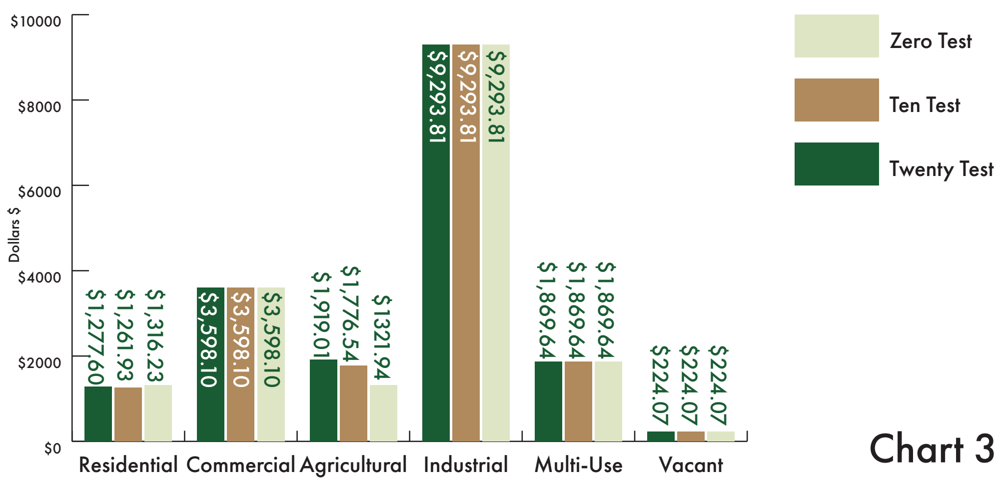

Chart 30

Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

Shenandoah County Average Parcel New Town Tax Revenue Through Annexation By Use Assessment II

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.
Author: Tyler Hinkle
Date: June 15th, 2020

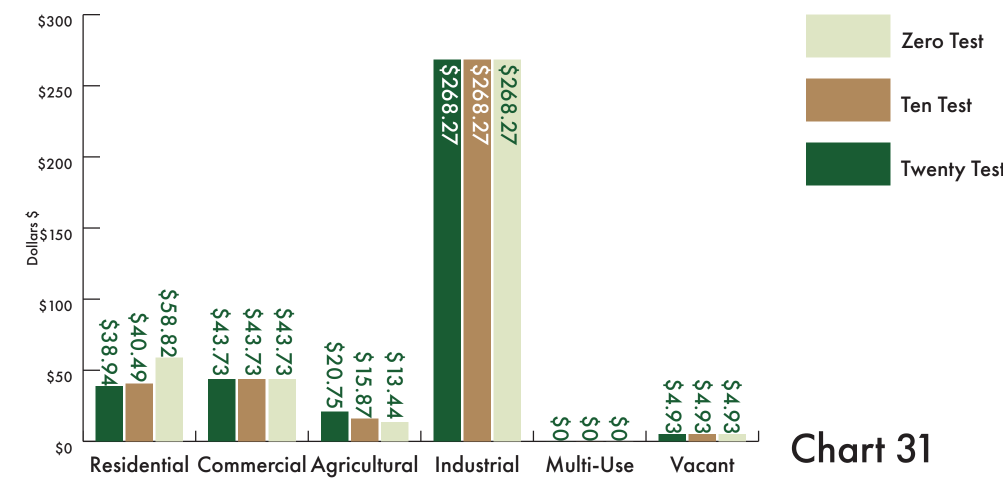

Chart 31

Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

Assessment I

The previous pages demonstrate various statistics on parcels in all of Shenandoah County, including the six Towns. The most notable charts are on pages 20 and 21 as they demonstrate the number of parcels, acres, average acres per use, and most importantly the pages demonstrate the number of vacant parcels and acres by land use. Most notably there are 4,837 vacant residentially zoned parcels in Shenandoah County, which totals 6,080 vacant acres. In addition there are 8,965 vacant agriculturally zoned parcels in Shenandoah County, 1,633 of which are parcels that have more than 20 acres per parcel. This means that there is space to expand agricultural and forestal production in Shenandoah County for new crops or the expansion of existing crops onto larger sums of acres. In addition, there are 1,330 acres of vacant industrial lands in Shenandoah County that could be redeveloped into either processing sites for the additional crops that could be harvested or other industrial or professional jobs in order to increase the number of jobs in Shenandoah County and provide a competitive edge so employers will be enticed to provide higher wages. In addition to the vacant residential, agricultural, and industrial land there is also 477 acres of vacant commercial land that could be developed or redeveloped. Finally, there are 47 acres of land that is already zoned for multi-use development that is vacant and has not been developed or redeveloped for an active use that benefits the community both in services and tax revenues.

There are 112,087.74 acres in active agricultural production, which is nearly 6,000 less than the amount of vacant agricultural acres. Other aspects to pay attention to include that while there are 7,267.67 acres of residentially zoned land that is actively being used for residential purposes, the average parcel size is 0.7134, which is 31,075 square feet. 20,000 square feet is the most common requirement for residentially zoned land in Shenandoah County, while the Towns typically allow 10,000 square feet or less. This means that there may be the potential for infill to occur in places that are already zoned for residential uses rather than developing on agricultural land.

Shenandoah County Actual Cost Of Community Services Without Towns By Use Assessment I

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.
Author: Tyler Hinkle
Date: November 6th, 2020

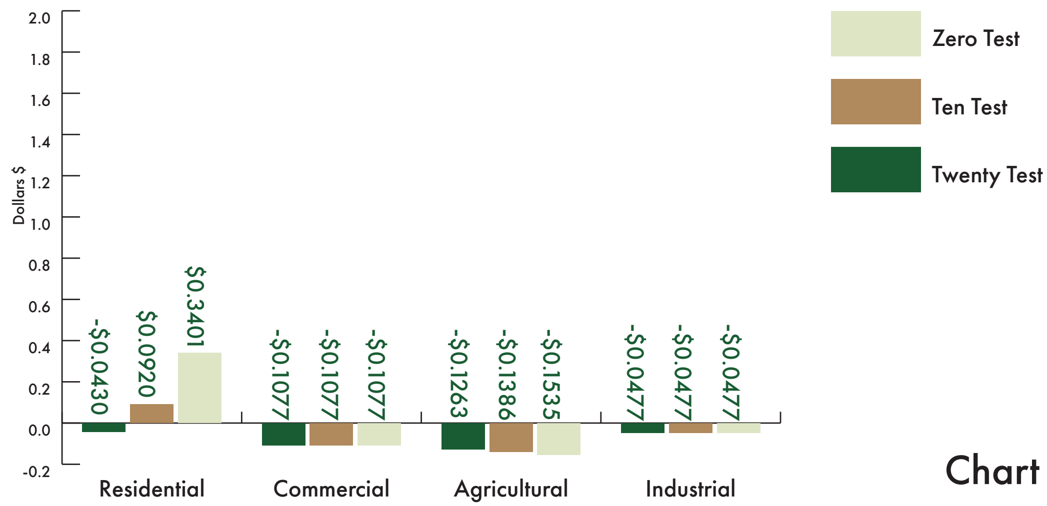

Chart 32

Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

Shenandoah County Cost Of Community Services Predicted Annex Without Towns By Use Assessment I

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.
Author: Tyler Hinkle
Date: November 6th, 2020

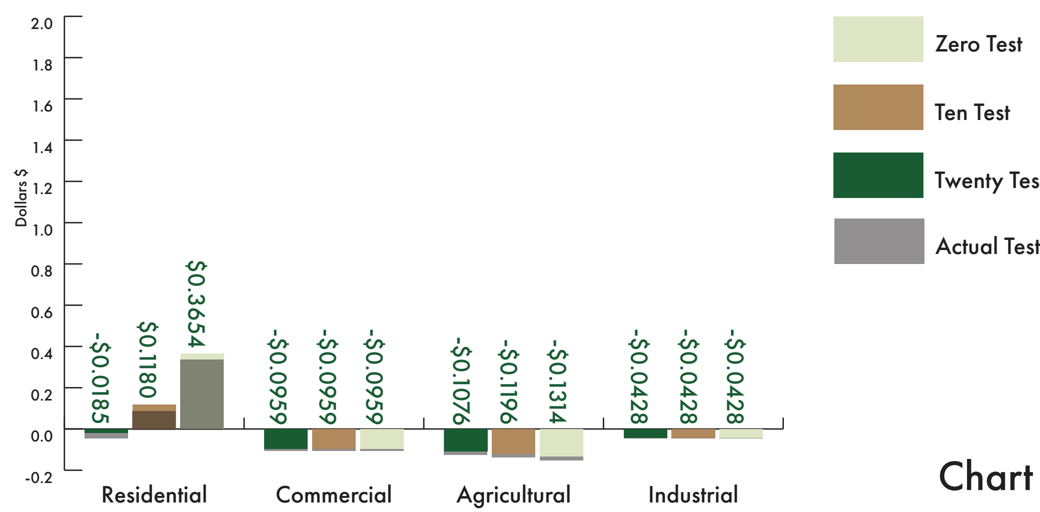

Chart 33

Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

Assessment II

Shenandoah County Actual Cost Of Community Services Without Towns By Use Assessment II

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.
Author: Tyler Hinkle
Date: November 6th, 2020

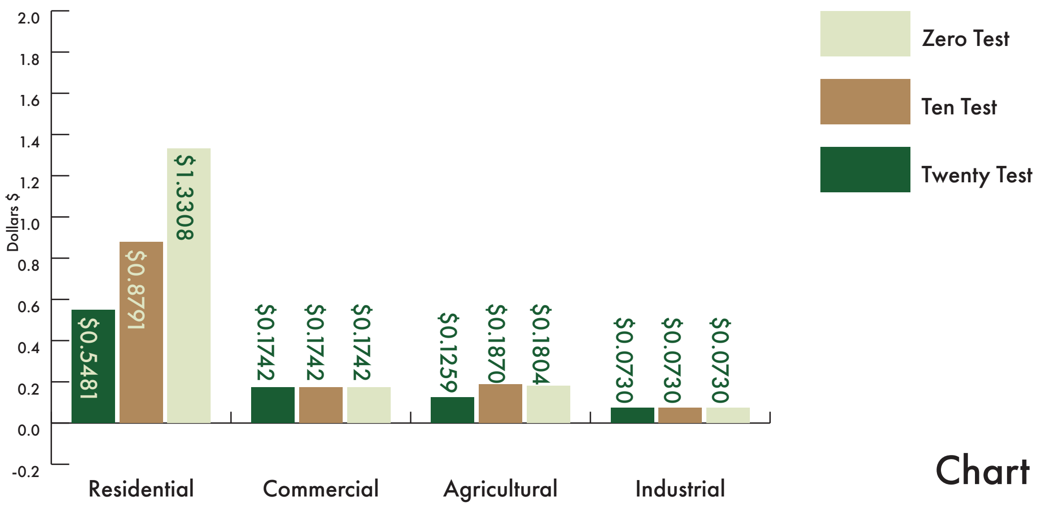

Chart 34

Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

Shenandoah County Cost Of Community Services Predicted Annex Without Towns By Use Assessment II

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.
Author: Tyler Hinkle
Date: November 6th, 2020

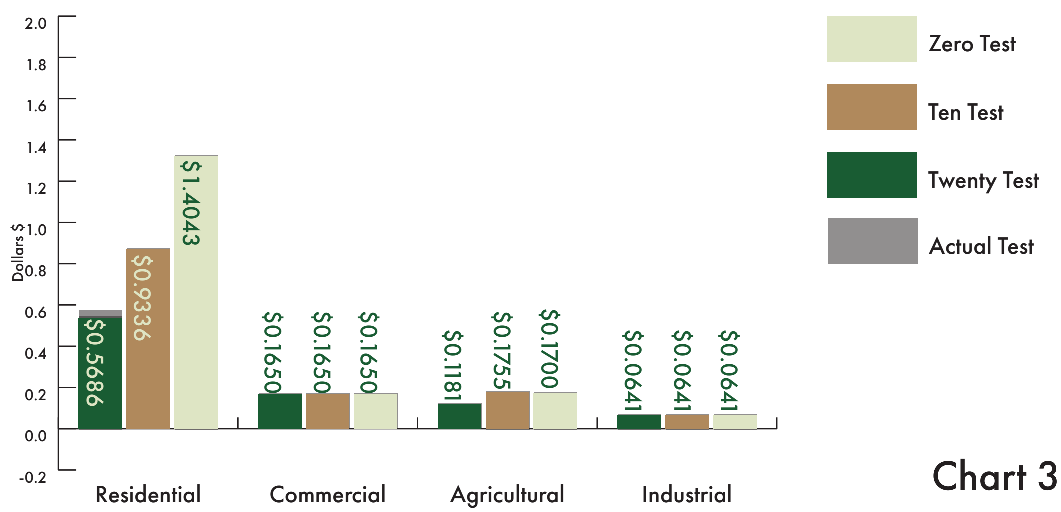

Chart 35

Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

Charts 32 through 35, on this spread of pages, demonstrates the cost of community services by only focusing on parcels outside of the six Town boundaries in Shenandoah County. All four charts demonstrate the same narrative which is that residential land uses are the highest cost of community services in Shenandoah County. Commercial and agricultural land uses can be seen tying on and off for the second highest cost, and industrial can be seen as the lowest cost of community services.

While the results from these charts demonstrate similar results to the overall analysis of Shenandoah County and the six Towns, it does clarify a few aspects:

Firstly the data presented demonstrates that the least productive industrial lands in Shenandoah County that are in active use are within the Towns and not in Shenandoah County. This does not mean that there are not industrial lands in Shenandoah County that have a low productivity level as the cost of community services rises from -0.0477 in the first assessment to 0.0730 in the second assessment.

Secondly these charts demonstrates that there are a substantial number of commercial properties in Shenandoah County that are not producing the level of revenue that they could be producing.

Third, while agricultural properties overall are a productive and low cost producing land use in Shenandoah County, large agricultural properties in particular demonstrate a greater benefit than smaller agricultural parcels. This means that if possible and feasible, there should be efforts to reduce the creation of new small agricultural parcels from parcels that are twenty acres or more.

Fourth, vacant residential properties offset the cost of community services for active residential properties. It is unclear if converting vacant residential properties to active would increase or lower the cost of community services. It is clear that open space, in addition to working agricultural lands, help to offset the cost of services that residential land uses require.

Fifth, vacant properties in general appear to offset the cost of providing community services to all land uses and not

Assessment I

Shenandoah County Number Of Parcels Without Towns By Use Assessment I

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.
Author: Tyler Hinkle
Date: November 9h, 2020

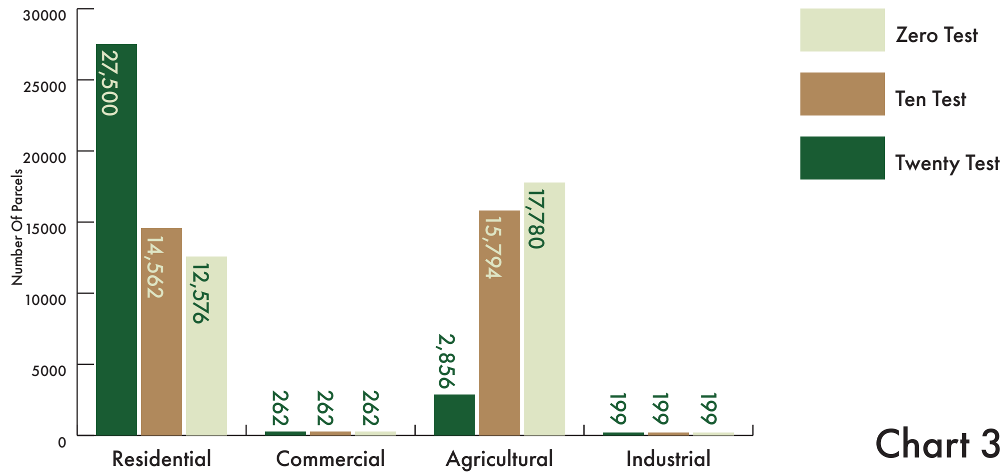

Chart 36

Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

Shenandoah County Total Number Of Acres Without Towns By Use Assessment I

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.
Author: Tyler Hinkle
Date: November 9h, 2020

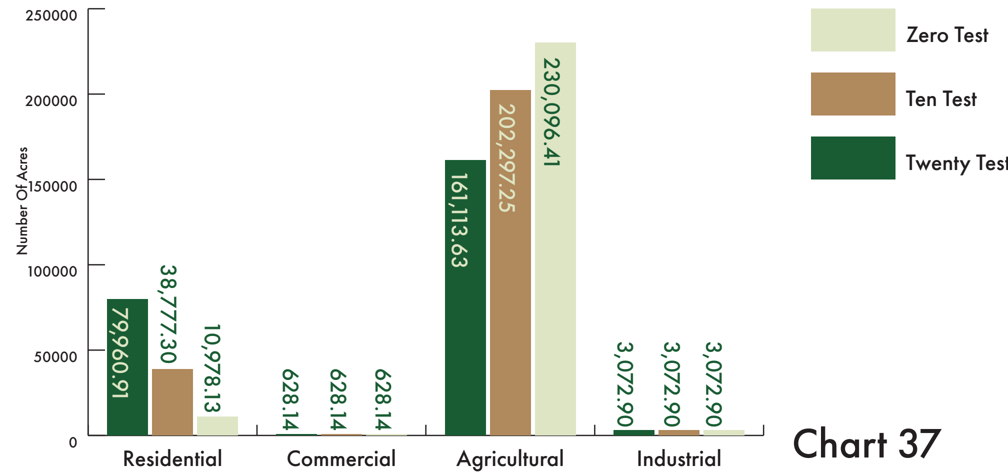

Chart 37

Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

Shenandoah County Average Parcel Size Without Towns By Use Assessment I

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.
Author: Tyler Hinkle
Date: November 9h, 2020

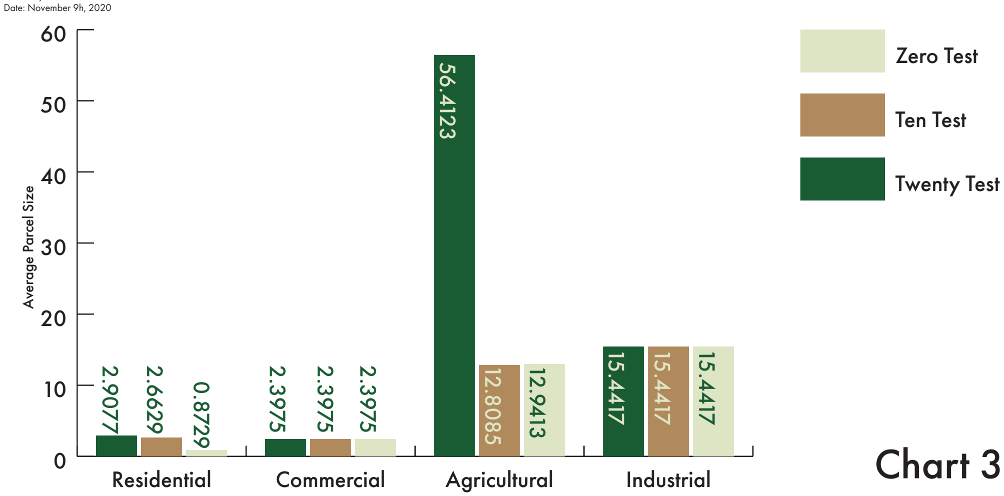

Chart 38

Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

Shenandoah County Total Vacant Acres Without Towns By Use Assessment II

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.
Author: Tyler Hinkle
Date: November 9h, 2020

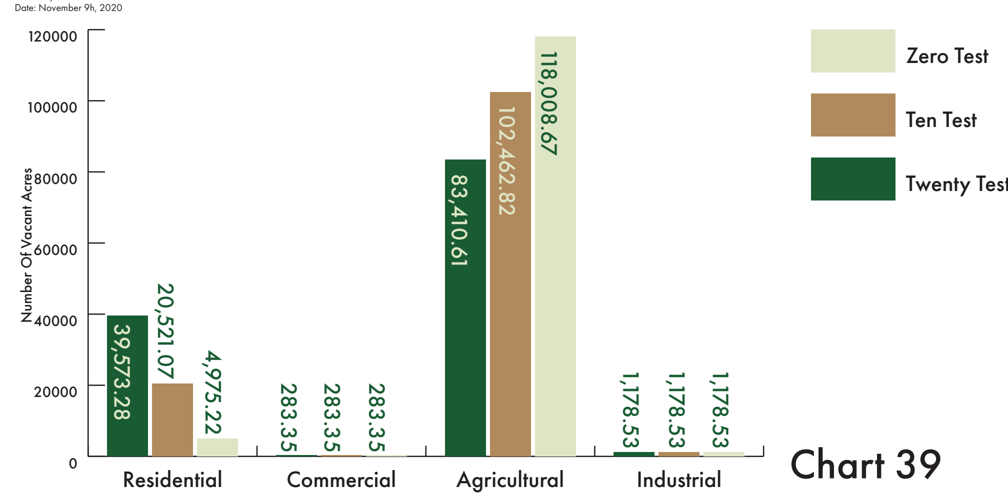

Chart 39

Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

Shenandoah County Total Number Of Acres Without Towns By Use Assessment II

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.
Author: Tyler Hinkle
Date: November 9h, 2020

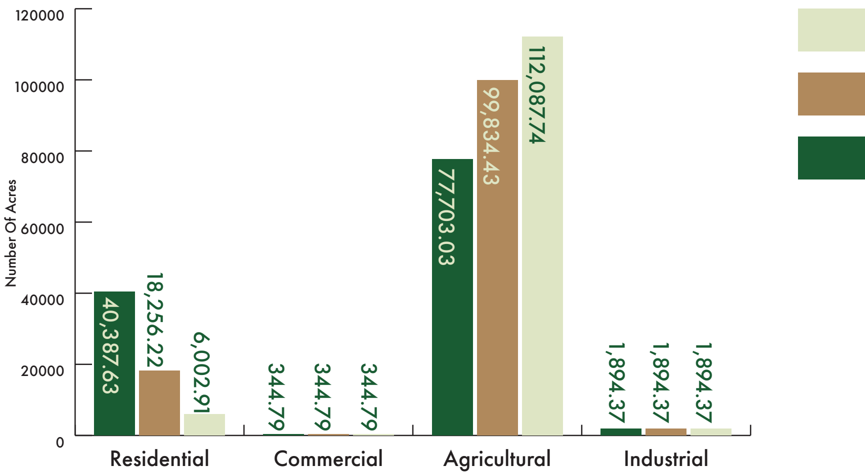

Chart 40

Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

Shenandoah County Number Of Parcels Without Towns By Use Assessment II

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.
Author: Tyler Hinkle
Date: November 9h, 2020

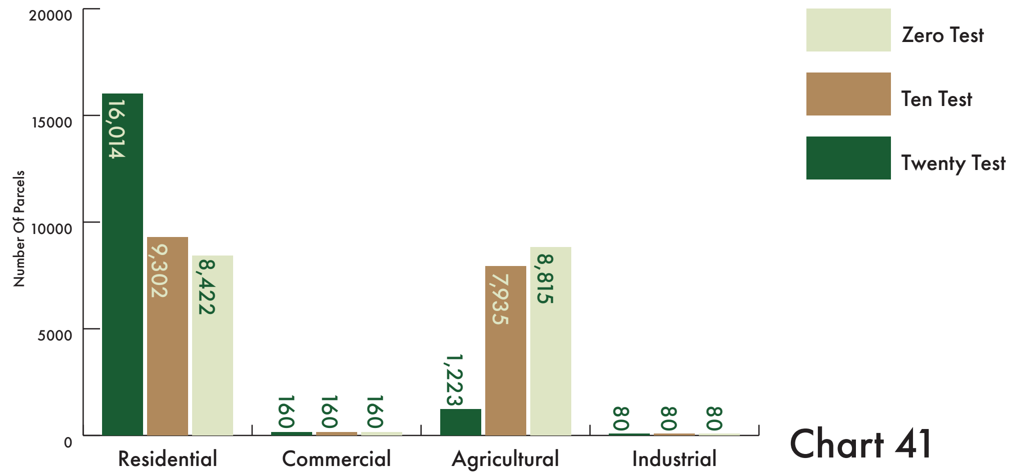

Chart 41

Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

Shenandoah County Total Vacant Parcels Without Towns By Use Assessment II

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.
Author: Tyler Hinkle
Date: November 9h, 2020

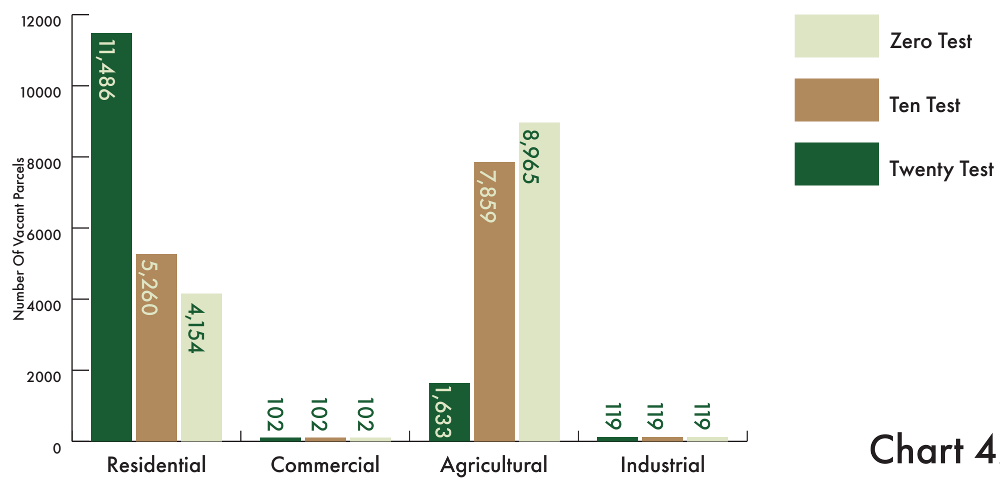

Chart 42

Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

Shenandoah County Average Parcel Size Without Towns By Use Assessment II

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.
Author: Tyler Hinkle
Date: November 9h, 2020

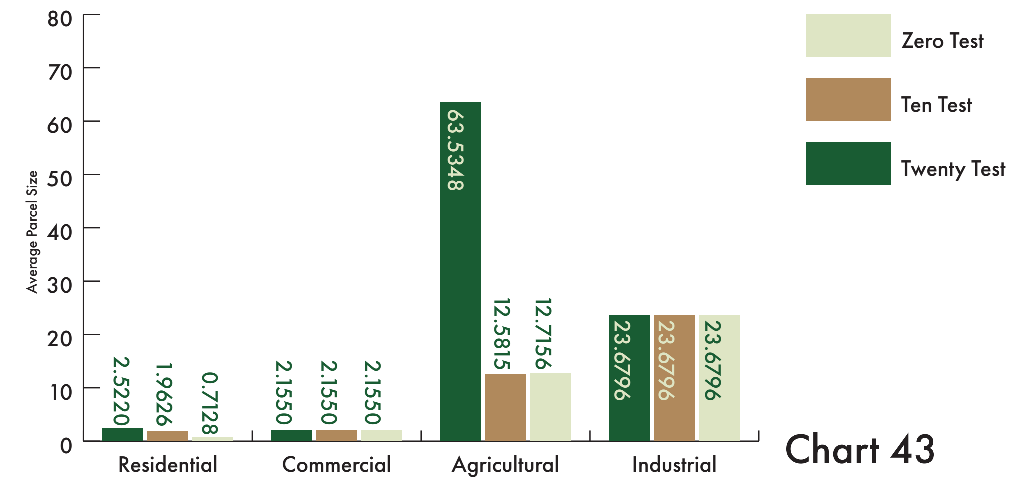

Chart 43

Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

just residential. It is unclear of the impact of making vacant parcels active would have on Shenandoah County, yet an examination of Charts 44 through 47 may help in revealing the impact.

Sixth, while residential and agricultural parcels score the highest for the total amount of County real estate tax revenue garnered, these two uses provide the least amount of tax revenue on an individual basis. As Charts 46 and 47 both demonstrate, industrial parcels produce the highest amount of revenue on an individual basis. Charts 46 and 47 also demonstrate that commercial land uses score the second highest on individual tax revenue, other than the twenty test on assessment II, Chart 47. This outlier may demonstrate that active agricultural land that is 20 acres or more in size is more productive in real estate tax revenue than any size of commercial properties in Shenandoah County alone and not taking into account the Towns.

Seventh, vacant land uses produce less tax revenue on an individual basis than active land uses. While it was stated earlier that vacant land uses aid to offset the cost of providing community services to residential land uses and all other land uses, Charts 46 and 47 reveal that vacant lands do not produce the same amount of revenue as active land uses. This is clear for every land use as for example, while on average agricultural land uses that are 20 acres or more produce $1,050.77 a year, specifically active land uses of the same category produce $1,919.01 per parcel on average. This is clear with the highest producing land use as well as industrial parcels produce $5,157.34 on average, yet specifically active industrial parcels produce $10,791.78, nearly twice the amount of industrial parcels in general. Commercial land uses reveal the same picture as individual parcel revenue increases from $1,288.60 to $1,677.86 when comparing assessment I to assessment II. Residential land, while the highest cost of community services use, produces $811.72 on average in assessment I's twenty test, when vacant land is excluded the tax revenue increases to $1,146.19 in assessment II. Once more, this report does not advocate for any recommended actions based on this, and it is not clear what impact converting vacant land to active land would have on the cost of community services for specific land uses, or in general.

Shenandoah County Total County Tax Revenue Without Towns By Use Assessment I

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.
Author: Tyler Hinkle
Date: November 9th, 2020

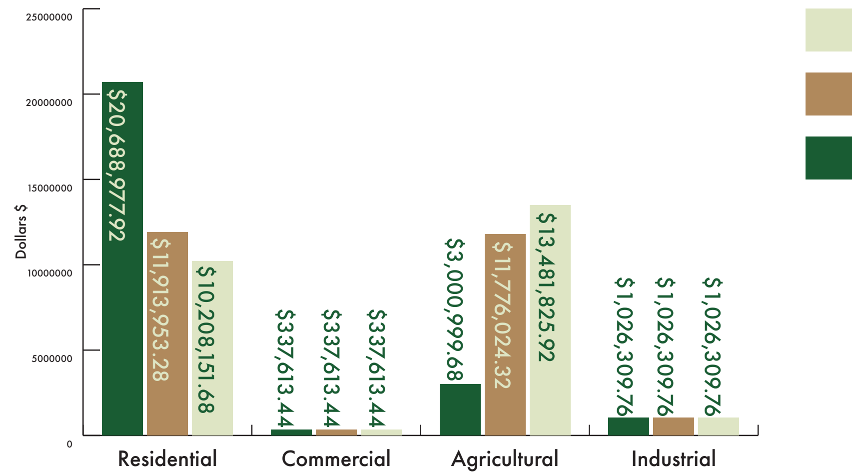

Chart 44

Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

Shenandoah County Average County Tax Revenue Without Towns By Use Assessment I

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.
Author: Tyler Hinkle
Date: November 9th, 2020

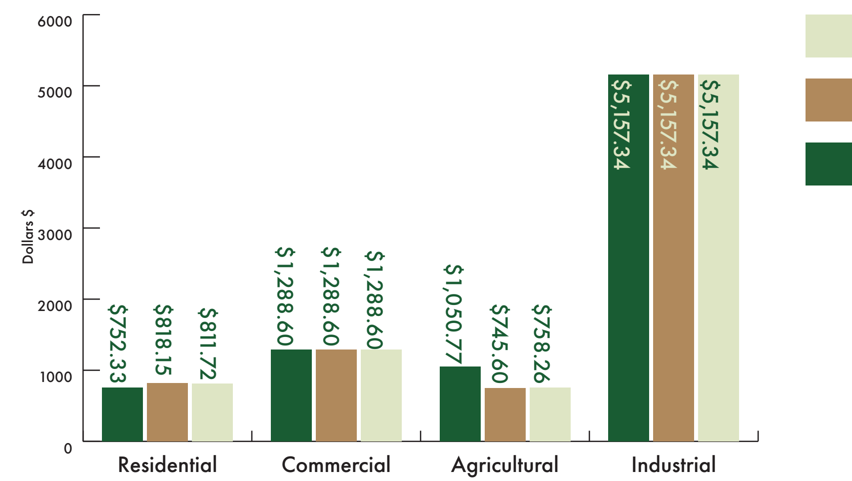

Chart 46

Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

Assessment II

Shenandoah County Total County Tax Revenue Without Towns By Use Assessment II

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.
Author: Tyler Hinkle
Date: November 9th, 2020

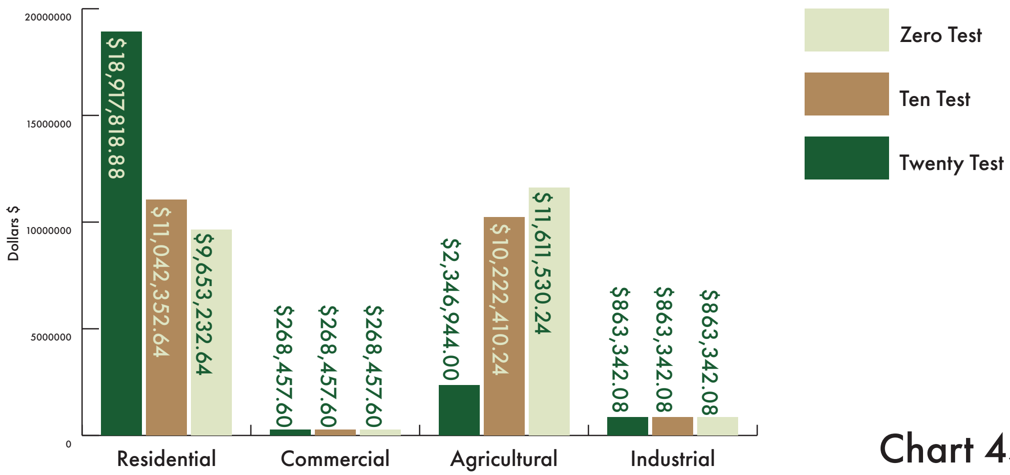

Chart 45

Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

Shenandoah County Average County Tax Revenue Without Towns By Use Assessment II

Data Sources: Shenandoah County Commissioner Of Revenue Office, Shenandoah County GIS Department, Shenandoah County Financial Year 2018-2019 Budget Actual Expenditures, New Market Financial Year 2018-2019 Budget Actual Expenditures, Mount Jackson Financial Year 2018-2019 Budget Actual Expenditures, Edinburg Financial Year 2018-2019 Budget Actual Expenditures, Woodstock Financial Year 2018-2019 Budget Actual Expenditures, Toms Brook Financial Year 2018-2019 Budget Actual Expenditures, Strasburg Financial Year 2018-2019 Budget Actual Expenditures, Shenandoah County Tax Rates, New Market Tax Rates, Mount Jackson Tax Rates, Edinburg Tax Rates, Woodstock Tax Rates, Toms Brook Tax Rates, Strasburg Tax Rates.
Author: Tyler Hinkle
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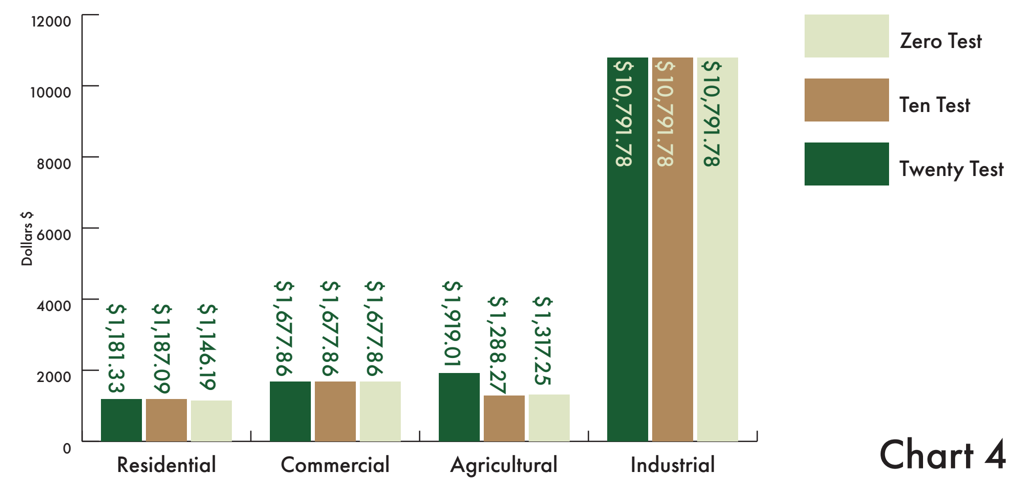

Chart 47

Note: Five of the major outliers were left out of final results in order to ensure they did not negatively impact the accuracy of results. The codes are: TP_RSFD10_TBMSDA, SP_R3_SCSDA, SP_R2_SCSDA, SP_A1_20UP_SCSDA, SP_R3_N.

Eighth, in Shenandoah County alone, not including the Towns, there are 8,422 parcels that are zoned for residential land uses and are active, and there are 4,154 vacant residentially zoned parcels.

Ninth, the 119 vacant industrial parcels, which make up 1,176.53 acres in Shenandoah County alone, not including the Towns, only make up 16% of all industrial real estate revenues. This is in comparison to the 80 active industrial parcels in Shenandoah County alone, not including the Towns, which take up 23.6796 acres and produce 84% of industrial real estate revenues. In short, Shenandoah County nets $162,967.68 for over 1,000 acres of industrial land and $863,342.08 for a little over 23 acres.

Tenth, while the results from pages 18 and 19 reveal the difference in the cost of community services between residential and mixed use land uses in all of Shenandoah County, including the six towns, the Charts on pages 26 and 27 do not have a mixed use land use category as there is no mixed use zoning district in Shenandoah County. It is unclear what impact a mixed use zoning district would have on Shenandoah County, yet the data from the joint assessment may reveal what such a zoning district would hold.

This report is simply a summary of the information found from the Cost of Community Services assessment. More fine grained information on more specific land uses may be helpful for future planning purposes and decision making.

In conclusion, while there is additional information to be gleaned from these charts and how individual parcels perform in terms of real estate taxation, these charts demonstrate a continuation of the same narrative that is seen throughout this report: residential land uses are the highest cost of community service producers in Shenandoah County.

Appendix

Appendix I: Shenandoah County Occupancy Codes

05 - Vacant Tax Exempt
10- Dwelling
11- Apartment
12- Farm
13- Commercial
14- Industrial
15- Vacant Land
16- Fair Value Resident
17- Exempt
20- Townhouse
21- S. W. Mfg House
22- D. W. Mfg House
23- Vacant W/ Mfg House
24- Triple Wide Mobile Home
25- Vacant - Commercial
26- Fair Value - Commercial

Appendix II: Access To Softwares Used

Free GIS software:
QGIS: https://www.qgis.org/en/site/
Grass: https://grass.osgeo.org/

Paid GIS Software (Used for report):
ARCGIS: https://www.arcgis.com/home/index.html

Free Coding Software (Used for report):
R: http://cran.stat.ucla.edu/
RStudio: https://rstudio.com/products/rstudio/

Paid Layout And Graphics Software (Used for report):
Adobe Photoshop: https://www.adobe.com/
Adobe Illustrator: https://www.adobe.com/
Adobe Indesign: https://www.adobe.com/

Free Layout And Graphics Software:
Paint.net (Photoshop): https://www.getpaint.net/
Inkscape (Illustrator): https://inkscape.org/
Lucidpress (Indesign): https://www.lucidpress.com/

Appendix III: Shenandoah County Cost Of Community Services Codes Used For Developing Coding Script

Localities:
SP = Shenandoah County Parcels
NMP = New Market Parcels
MJP = Mount Jackson Parcels
EP = Edinburg Parcels
WP = Woodstock Parcels
TP = Toms Brook Parcels
SBP = Strasburg Parcels

Zones:
A1_20UP = Agriculturally Zoned Parcels 20 Acres And Up
A1B = Agriculturally Zoned Parcels Between 10 And 20 Acres
A2 = Agriculturally Zoned Parcels Below 10 Acres
C1_20UP = Conservation Zoned Parcels 20 Acres And Up
C1B = Conservation Zoned Parcels Between 10 And 20 Acres
C2 = Conservation Zoned Parcels Below 10 Acres

All other codes reflect the zoning codes provided by the localities in their zoning ordinances.

Service Area:
NOSA = No Service Area
N = New Market
MJ = Mount Jackson
E = Edinburg
W = Woodstock
SB = Strasburg
TBMSD = Toms Brook Maurertown Sanitary District
TBMSDA = Parcels within the Toms Brook Maurertown Sanitary District that are paying taxes but are not actively being served.
SCSD = Stoney Creek Sanitary District
SCSDA = Parcels within the Stoney Creek Sanitary District that are paying taxes but are not actively being served.

Occupancy:
05 - Vacant Tax Exempt
10- Dwelling
11- Apartment
12- Farm
13- Commercial
14- Industrial
15- Vacant Land
16- Fair Value Resident
17- Exempt
20- Townhouse
21- S. W. Mfg House
22- D. W. Mfg House
23- Vacant W/ Mfg House
24- Triple Wide Mobile Home
25- Vacant - Commercial
26- Fair Value - Commercial

The number of bedrooms in the data from Assessment II represents the number of bedrooms on a general use of property, these numbers are not codes that represent any other form of information.

Below is a chart from page 8 to help demonstrate the layout of the coding system to name the different land uses in this assessment.

Shenandoah County Budget Breakdown

All Properties	All Residential Properties	All Properties Outside Of Town Limits	All Properties Outside Of Town Service Areas	All Residential Properties Outside Of Town Service Areas	All Residential Properties Outside Of Town Service Areas, And Inside Of Toms Brook And Edinburg Service Areas*
Public Safety • Forest Fire Protection • Building Code Enforcement • Animal Shelter	Public Safety • Corrections and Detention • Processing Center • Juvenile Probation	General Government Administration	Public Safety • Half Volunteer Fire and Rescue • Half Fire and Rescue)	Public Safety • Animal Control • Medical Examiner • Half Volunteer Fire and Rescue • Half Fire and Rescue	Public Safety • Half Sheriff
468,727	**3,534,208**	**2,661,475**	**2,921,287**	**4,573,279**	**2,740,205**
Community Development	Health And Welfare	Planning And Zoning			
713,218	**9,240,789**	**281,890**			
Judicial Administration	Education	Public Safety • Half Sheriff			
2,297,440	**30,412,369**	**2,740,205**			
Public Works	Recreation And Cultural				
1,627,059	**2,198,531**				
Debt Service • County Debt Service					
6,531,665					
Capital Projects					
4,152,533					
Landfill Fund					
2,830,512					
North Fork Wastewater Treatment Plant					
179,363					
$19,013,199	$45,385,897	$5,683,569.5	$2,921,286.5	$4,573,279	$2,740,204.5

Shenandoah County Other Revenues Breakdown

All Properties	All Residential Properties	All Properties Outside Of Town Limits	All Properties Outside Of Town Service Areas	All Residential Properties Outside Of Town Service Areas	All Residential Properties Outside Of Town Service Areas, And Inside Of Toms Brook And Edinburg Service Areas*
General Property Taxes, Not Including Real Property Taxes	Fines And Forfeitures	Planning And Zoning Permits And Fees	Half Revenue From The Commonwealth Other Categorical Aid: Four For Life Grant, Fire Programs Fund	Half Revenue From The Commonwealth Other Categorical Aid: Four For Life Grant, Fire Programs Fund	Recovered Costs: Town Of Edinburg And Town Of Toms Brook Law Enforcement
19,045,005	**41,220.67**	**19,830**	**91,586.54**	**91,586.54**	**123,331.12**
Other Local Taxes	Charges For Services	Half Revenue From The Commonwealth Categorical Aid Sheriff			**Half Revenue From The Commonwealth Categorical Aid Sheriff**
7,067,029	**1,273,507.38**	**905,619.59**			**905,619.59**
Permits, Fees, And Licenses Other Than Planning And Zoning	Recovered Costs Other Than Town Of Edinburg And Town Of Toms Brook Law Enforcement	Half Revenue From The Commonwealth Other Categorical Aid: VJCCCA Grant, Victim-Witness Grant, Wireless E-911 Grant, Extradition Of Prisoners			Half Revenue From The Commonwealth Other Categorical Aid: VJCCCA Grant, Victim-Witness Grant, Wireless E-911 Grant, Extradition Of Prisoners
386,004	**1,502,102.73**	**101,510.86**			**101,510.86**
Revenue From The Use Of Money And Property	Revenue From The Commonwealth Categorical Aid Other Than Sheriff				
759,257.37	**989,070.41**				
Miscellaneous Revenue	Federal Revenues				
388,752.34	**508,607**				
Revenue From The Commonwealth Non-Categorical Aid	Capital Projects Funds				
3,968,964.46	**3,637,323**				
Revenue From The Commonwealth Other Categorical Aid: Litter Control Grant, Commission For The Arts, Other Categorical Aid					
176,688.69					
Landfill Fund					
1,406,250					
North Fork Wastewater Treatment Plant					
139,400					
$33,337,350.42	$7,951,830.97	$1,026,960.45	$91,586.54	$91,586.54	$1,130,461.57

New Market Budget Breakdown

All Properties In Town Service Area	All Residential Properties In Town Service Area	All Properties In Town Limits
Cultural and Economic Development • Marketing And Events	Cultural and Economic Development • Donations (Except Façade Enhancement Grant) • Public Safety • Crossroads Music Series • Fairway 5K	Cultural and Economic Development • Façade Enhancement Grant • Economic Development • Town Wide Enhancement Projects
15,650	**86,885**	**24,785**
Capital Outlay • Half Cultural And Economic Development	Parks And Recreation	Financial Administration
12,807	**60,989**	**180,031**
Water/Sewer Services	Capital Outlay • Community Park Improvements • Half Cultural And Economic Development	Public Works
1,752,645	**140,937.50**	**273,273**
Water/Sewer Capital Outlay	Half Public Safety	General Government & Capital Outlay Administrative
144,294	**228,999**	**204,833**
Half Public Safety		Sanitation
228,999		**85,491**
		Capital Outlay • Administrative • Public Works • Contingency
		107,610
$2,154,394.00	$517,810.00	$876,023.00

New Market Revenues Breakdown

All Properties In Town Service Area	All Residential Properties In Town Service Area	All Properties In Town Limits
Intergovernmental Revenue	Miscellaneous (Park)	Other Local Taxes
193,788	**662**	**854,801**
Marketing and Events	Pool	Zoning and Subdivision Fees
17,672	**30,699**	**2,280**
	User Fees	Fines and Forfeitures
	4,775	**9,902**
		Asset Revenue
		13,413
		Sanitation
		97,460
$211,460.00	$36,136.00	$977,856.00

Mount Jackson Budget Breakdown

All Properties In Town Service Area	All Residential Properties In Town Service Area	All Properties In Town Limits
Water And Sewer	Half Public Safety	General Government Administration
1,446,490	**272,363**	**669,310**
Capital Projects	Parks And Recreation	Community Development
111,530	**67,246**	**45,196**
Half Public Safety		Public Works
272,363		**445,558**
		Debt Service
		57,456
$1,830,382.50	$339,608.50	$1,217,520.00

Mount Jackson Revenues Breakdown

All Properties In Town Service Area	All Residential Properties In Town Service Area	All Properties In Town Limits
Water And Sewer	Charges For Services	Other Local Taxes
1,805,304	**21,483**	**1,072,254**
Revenue From The Use Of Money And Property		Permits, Fees, And Regulatory Licenses
24,550		**1,725**
Capital Projects		Fines And Forfeitures
1607		**12,163**
		Miscellaneous
		7,386
		Intergovernmental
		135,568
		Trash Service
		117,370
$1,831,461.00	$21,483.00	$1,229,096.00

Edinburg Budget Breakdown

All Properties In Town Service Area	All Residential Properties In Town Service Area	All Properties In Town Limits
Water Department	Half Public Safety	General Government Administration
143,619	**49,337**	**201,288**
Sewer Department	Cemetery	Public Works
237,407	**61,098**	**121,034**
Non-Departmental Water & Sewer	Parks, Recreation & Cultural	Non-Departmental
204,830	**147,459**	**78,233**
Water Debt Service	• Half Fire And Rescue	Debt Service
70,554	**7,100**	**874,788**
Sewer Debt Service	General Properties	Community Development
38,590	**85,008**	**800**
Half Public Safety	Cremation Memorial	Trash Services
49,337	**16,000**	**57,000**
Half Fire And Rescue		
7,100		
$751,437.00	$366,002.00	$1,333,143.00

Edinburg Revenues Breakdown

All Properties In Town Service Area	All Residential Properties In Town Service Area	All Properties In Town Limits
Miscellaneous	Charges For Services	Other Local Taxes
30882	**41950**	**336868**
Revenue From Common-wealth	Categorical Aid: Half Fire Programs	Zoning Fees
37042	**5000**	**750**
Categorical Aid: Half Fire Programs		Fines & Forfeitures
5000		**3000**
Water Revenue		Charges For Services: Voluntary Agreements
321000		**11596**
Sewer Revenue		Categorical Aid: Street & Highway Maintenance
374000		**20000**
		Non-Revenue Receipts
		42500
		Trash Revenue
		57000
$767,924.00	$46,950.00	$471,714.00

Woodstock Budget Breakdown

All Properties In Town Service Area	All Residential Properties In Town Service Area	All Properties In Town Limits
Water And Sewer	Half Public Safety	Government Administra-tion
3,503,753	**976,367**	**855,065**
Half Public Safety	Parks And Recreation	Public Works
976,367	**381,941**	**1,975,588**
Capital Projects		Planning And Community Development
1353633		**463,547**
		Interest On Long Term Debt
		40,900
		Debt Service
		207,112
$5,833,753.00	$1,358,308.00	$3,542,212.00

Woodstock Revenues Breakdown

All Properties In Town Service Area	All Residential Properties In Town Service Area	All Properties In Town Limits
Revenue From The Use Of Money And Property	Charges For Services	Other Local Taxes
61481	**300949**	**2785435**
Water And Sewer		Permits, Privilege Fees, And Regulatory Licenses
3,972,775		**415868**
		Fines And Forfeitures
		24047
		Miscellaneous
		56438
		Intergovernmental
		1103397
$4,034,256.00	$300,949.00	$4,385,185.00

Toms Brook Budget Breakdown

All Properties In Town Service Area	All Residential Properties In Town Service Area	All Properties In Town Limits
		Administration
		35,875.00
		Government Compensations
		41,000.00
		Town Maintenance
		32,045.00
		$108,920.00

Toms Brook Revenues Breakdown

All Properties In Town Service Area	All Residential Properties In Town Service Area	All Properties In Town Limits
		All Income But Property Taxes
		77,920.00
		$77,920.00

Strasburg Budget Breakdown

All Properties In Town Service Area	All Residential Properties In Town Service Area	All Properties In Town Limits
Water Fund	Half Public Safety	General Government Administration
2,585,652	**923,750**	**1,290,466**
Sewer Fund	Parks And Recreation	Community Development
2,653,443	**177,662**	**245,263**
Half Public Safety	Health And Welfare	Public Works
923,750	**11,721**	**1,137,039**
		Debt Service
		258,264
		Trash And Recycling
		326,688
$6,162,844.50	$1,113,132.50	$3,257,720.00

Strasburg Revenues Breakdown

All Properties In Town Service Area	All Residential Properties In Town Service Area	All Properties In Town Limits
Revenue From The Use Of Money And Property	Charges For Services	Other Local Taxes
108463	**48358**	**2164887**
Water Fund		Permits, Privlege Fees, And Regulatory Licenses
2346753		**24803**
Sewer Fund		Fines And Forfeitures
2329557		**32282**
		Miscellaneous
		90
		Intergovernmental
		662337
		Trash Fund
		310,135
$4,784,773.00	$48,358.00	$3,194,534.00

Endnotes

Endnotes
1 Shenandoah County. 2014. “Boards and Commissions Shenandoah County Board of Supervisors A Community Guide.” Shenandoah County, Virginia. ShenandoahCountyva.us

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