TWO THOUSAND TWENTY TWO LAND REPORT



THE LAND GROUP





Welcome to our 7th Annual Land Report. The Land Group has completed another trip around the sun, and we are pleased to bring you our findings from another year working in the dirt. 2021 was to put it in basic terms, OUSTANDING!

The Company saw over 100% growth in two critical areas of our

vital factors, that being Sales Volume and Total Transactions. These two categories grew by 117% and 125%, respectively. Additionally, the number of acres transacted grew by over 30% to 13,000 acres.

Broadly speaking, the land market is extremely strong and land values are experiencing measured increases except in small areas of the region where transitional land use is occurring around small towns and municipalities in the region. In these areas of land use change land values do exponentially change in value. Land use change is a primary driving force for significant changes in land value historically, and this trend remains true. The impact of land use change effects land values beyond the transitional areas as we can document a radiating impact in what the land buyer will pay when transitional lands are nearby. These markets have been arduous to evaluate in recent years as the land value in those markets near the coastal beach towns around the Delmarva or Southern Maryland areas are highly influenced by development. While we do not report development land sales as a data set in this report, transactional data demonstrates land values in this category can exceed \$50,000 an acre for residential or commercial land use.

Farmland transactions are interesting to review as buyers vary widely their economics and criteria for land acquisition. In our review of land sales data, we studied over nearly 200 farmland sales and reported on 170 transactions for the last two-year period. Farmland as a product type is perhaps the most sought-after land commodity in the Chesapeake Region. Agricultural producers generally had a positive year due to a good growing season and increased commodity pricing. Together these two factors yielded good outcomes for farmers throughout the region. The celebration in the agricultural community is extremely muted however, due to increased input costs to the farm. These increased input

costs to the farm operation are often blamed on supply chain issues and cost of natural resources throughout the world. While some of this may be true, many producers argue it is simply a response to the pricing of corn and there is no need to look or explain further. In any case, the agricultural sector continues to be the backbone of landownership in the Chesapeake Region and production farming continues to become more competitive in each passing cycle. There seems to be no factor that will influence this trend otherwise. Average farmland values for high quality farmland in Maryland and Delaware reach nearly \$10,000 per acre in several counties.

Timberland investors have seemed to return to the market in recent years, even as economics in the timber industry face difficult times with little to no margin in the operation of commercial timber mills. These economic forces have forced many commercial timber buyers out of the market in past decades. On the bright side, in 2021, we worked with several timberland buyers that from an investment perspective with much attention being given to the fiber resource. Additionally, on the Delmarva Peninsula, one sawmill was purchased and given new life, while another specialty mill was opened to focus on value ad wood products. The timber industry in the Chesapeake Region is critical to maintaining our economy and rural communities. These investments in the timber sector were positive signs and we see an upside in the future of timberland investing in the region as there has been a limited amount of commercial timber planting in recent decades as the industry has struggled. We remain optimistic that new investment and creative thinking by current industry leaders will create more value at the stump for the landowner. The Maryland Forest Association and other like-minded groups are working throughout the Chesapeake Region to support growth and investment in the timber industry and the work they are doing is clearly making a difference.

Recreational land buyers are the shining star of the land market in 2021, as the economic factors driving investments in these property types are nearly an index of the equity markets and track nearly in the same direction. Recreational timberland and farms managed primarily for wildlife have been driving this product type in the data, and

in some cases, we have seen multiple offer situations and bidding for such highly sought-after properties. Hunting, fishing and outdoor recreation has witnessed a considerable bump in enthusiasm in recent years as we all look for opportunities to get outside and focus on "space and distance" considering the conditions established through the pandemic. This clearly has driven the economics of the wildlife land buyer. Evaluating these farms from a land value perspective are often challenging in that when breaking down the values achieved in these transactions, through the lens of tillable land, timberland, and marshland as components of the property, the value metrics are often exceeded on per acre analysis. These properties where high natural resource values are present and perceived by the market receive offers and sell for pricing that exceeds the value in the sum of its parts. Continuously, the data is witness to the value of these wildlife farms or wildlands and our reductionist approach to valuing these land tracts is often challenged. Sales for wildlife farms in the region have reached even \$10,000 an acre for high quality hunting farms that are improved with waterfowl impoundments and managed intensely for deer and turkey. A clear trend in this product type is the diminishing interest in highly improved or finished luxury homes. As an asset, class luxury homes are clearly valuable but when mixed with the wildlife farm, they are often undervalued by the wildlife marketplace. The wildlife buyer over and over seeks high quality barns nicely equipped with workspace, ample storage and living space.

In closing, as we enter 2022, The Land Group is incredibly appreciative of all the support you have given us over the years, and we are working hard to advise you in all of your land goals now and in the future. The Land Report is one tool we work to provide you each year. Additionally, this year we have included two informational pieces on land investing along with the land analysis data from the past two years. We trust you will find it valuable, and we look forward to seeing you in the field. Be well.

Onward.



GROWTH

117%

INCREASE IN SALES VOLUME

30%

INCREASE IN ACRES TRANSFERRED

125%

INCREASE IN TRANSACTIONS COMPLETED

3

NEW ADVISORS REGIONALLY FOCUSED IN WEST VIRGINIA, VIRGINIA & MARYLAND

Visit our website to learn more about The Land Group and to browse available properties:

www.thelandgroup.com

A Case Study in Green

CONSERVATION CASE STUDY

The utility of land is a primary factor in measuring land value. By utility, I mean what can you do "on or with" a land tract. Clearly land use zoning also plays a critical role in this equation. Fundamentally, we study the intersection of land use and land utility in determining land value. This is the essence of the work we do for each client and it underwrites the knowledge The Land Group provides.

While there are many land uses in the Chesapeake Bay watershed, a primary land use is land conservation or protected lands. Today, approximately 9.2 million acres of protected lands exist in the watershed. Protected lands are defined as those land tracts encumbered with a permanent conservation easement. Overall, this accounts for nearly 22 percent of total land area in the 5 state Chesapeake watershed. To put this in perspective, protected lands encompass nearly twice the land mass that developed land includes throughout the watershed. Less than 12 percent of the watershed land use is developed. This is not to say land use change is not creating challenging situations to protect natural habitats in the Chesapeake, but it does provide the proper lens through which to review land use and land use change.

The act of protecting or conserving land can take a myriad of forms beyond permanent land protection. Additional conservation programs offered are short-term,10-15-year programs provided through USDA Farm Bill programs and other private conservation organizations focused on private lands.

Through these practices programs pay for land conservation through annual or one-time financial payments to restore, conserve and protect natural resources and ecological function in the watershed.

Since 1997, I have worked with federal, state, and private organizations on behalf of private landowners. Today, natural resource professionals refer to the concept of "monetizing ecosystem services" as a manner to properly align incentives to encourage landowners to act on behalf of wildlife and natural resources to provide clean water, clean air and a sustainable environment for future generations. No matter the word choice, these efforts have been on going since the first Farm Bill was passed to conserve soil after the Nation's Dust Bowl period of the early 1930's. As an advocate for land and resource conservation over the past 20 years, my work has been witness to countless examples of how conservation programs aimed at "greening the landscape" assist landowners in creating a "financial greening" as well.

Below is a "Case Study in Green". The specific land parcel and landowner's personal information is not shared in-order to protect their privacy. While there are many examples of larger farms where these practices are applied, the case study is being demonstrated through an 80 acre farm on the Eastern Shore. The resource management decision is described for each step the landowner made as well as each financial outcome of those decisions.

STEP 2

RESOURCE MANAGEMENT: FARMLAND & FARM BILL PROGRAMS

In review of the farmland soils it was determined the heavy silt loam soils were at best marginal farmland and better suited to wildlife habitat. To maximize the value of the habitat created, wetland restoration practices were designed for the land to create both managed and natural wetland systems. These habitats create restored lands for wintering waterfowl, wetland dependent wildlife, as well as whitetail deer and wild turkey. Nearly 10 acres of shallow water managed impoundments were constructed in addition to more than 20 acres of upland and natural wetland pools were put back on the landscape.

The Farm Bill program utilized provided cost share for approximately 90% of the installation cost of the habitat restoration and through bonuses offered by the program reduced the total financial commitment to less than \$5,000 for project construction costs that exceeded \$75,000. Additionally, farm income was increased from \$50 per acre or approximately \$2000 annually to over \$4,000 annually. Farmland income therefore more than doubled.

STEP 3

RESOURCE MANAGEMENT: RESIDENTIAL USE & CONSERVATION EASEMENT

It was determined by the landowner residential use for the farm was limited due to the rural nature of the area and together with their goals for the farm, concluded only one residential home was required for the farm. Through work with local land trust a conservation easement program was identified that fit the goals of the landowner to reduce the development rights to one residential unit while creating a permanency to the habitat restoration measures put in place on the farm. Through this practice, the landowner received a conservation easement payment.

FINANCIAL OUTCOME: NET \$160,000 INCOME

Additionally, the landowner conducted some improvements to the property requiring an appraisal at the completion of the habitat work and land conservation easement. The farm appraisal completed yielded a \$420,000 value. Clearly, the habitat improvements, conservation easement and timberland management did nothing to reduce the farm value long term and it is arguable the habitat improvements added value to the farm thus overcoming any impact of the forest management or removal of development rights through the conservation easement.



SUBJECT FARM: 80 ACRES

INITIAL LAND USE: 40 acres Tillable and 40 Acres Woodland - Mix Hard and Soft Wood, Farm Improved By Small Barns for Living and Storage

STEP 1

RESOURCE MANAGEMENT: TIMBERLAND & FOREST MANAGEMENT

Timberland sale was conducted focused on sale of saw log size yellow pine while leaving some "keystone" yellow pines as seed trees per acre and virtually all hardwood species to manage long term for upland wildlife. Targeted hardwood forestland management strategy while allowing for some yellow pine regeneration long term. Long term goal to manage for diverse timberland species mix.

FINANCIAL OUTCOME: NET \$70.000 INCOME

FINANCIAL OUTCOMES

\$360,000

ACQUISITION PRICE

\$160,000

NET INCOME FROM MANAGEMENT PRACTICES

\$130,000

ADJUSTED BASIS OF FARM ACQUISITION

81%

RETURN ON INVESTMENT (\$290,000 APPRAISED BASIS/\$360,000 INITIAL ACQUISITION X 100)

In conclusion of the case study, it is overwhelmingly clear the conservation measures and practices placed on the farm created only positive financial outcomes while increasing the natural wildlife habitats on the landscape. In fact, the return on investment exceeded 80% on the initial investment after only 4 years. As a result, the landowner benefits from improved opportunities for hunting while managing the farm long term for wildlife with the knowledge they have added financial value and net income to the farm as well.

These practices can be completed on nearly any farm on both smaller and larger scales throughout the Chesapeake Bay region. We have provided guidance to assist landowners on obtaining the necessary technical services to accomplish this work and in some cases provided the technical services personally. Several of our team members at The Land Group are seasoned in the implementation of conservation programs and we would welcome the opportunity to assist you or guide you to the proper conservation professional to help you accomplish your goals for your land.

Why Buy Farmland?

BY: NICK CAMPANARO

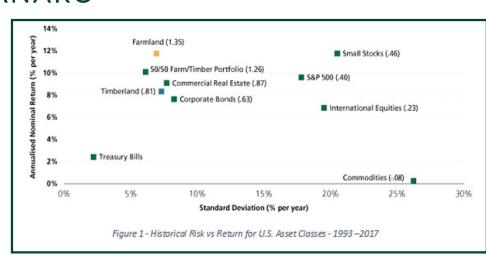
I entered the agricultural real estate market just over 9 years ago. Coming from a background in economics, I was driven to learn the reasoning behind a farmland investment. Through my years of experience speaking with land owners and investors, as well as extensive reading on the subject, here are four reasons why farmland is a great place to invest capital:

1. The economic driver behind farmland's long-term value is undeniable. A growing world population means higher demand for food. The UN estimates the world population to grow to 9.2 Billion by 2050.

This will translate to upward pressure on commodity prices and the need to greatly increase farming yields. According to the UN, in order to feed the world's growing and longer living population, agricultural outputs will need to double by 2050. In order for this to occur, output must increase by 3.4% annually. To put this increasing food demand into perspective, experts are predicting that agriculture will need to produce more food over the next 50 years than what was produced during the previous 10,000 years. Many of the rapidly growing populations around the world are located in countries with relatively little farmland.

For example, China has 20% of the world's population with only 7% of the world's farmable land. As their populations grow, these countries are quickly becoming net importers of food products (and buyers of farmland in the US). United States farmers will prove to be vital in feeding this demand. Only 7% of the planet's surface is suitable for farming, but 50% of land in the US may be cultivated for farming. In addition, US agricultural policy continues to place a high degree of importance on food security and independence (as evidenced by our most recent farm bill). Combined with the growing demand for food, The United States is a prime location for agricultural investment.

2. Farmland offers an excellent hedge against inflation. Many investors face the challenge of simply maintaining the wealth they have already built. The threat of inflation can strongly impact an investor's real worth. Surprisingly, farmland has been a higher returning, lower risk investment than gold in the long run. Farmland provides returns similar to stocks but with similar risk levels to bonds. Over the past 100 years, farmland has only decreased in value three times: during the great depression, the inflation crisis of the early 1980s and most recently during the housing crisis of 2008/2009. Despite three bumps in the road over the past 100 years, historical US farmland returns are one of the most attractive asset classes that compares favorably with more traditional assets such as stocks and bonds. Over the last 20 years, American farmland has provided an annualized return to investors of 12.4% that is a combination of appreciation and



current income from cash rental contracts. Similar long-term appreciation in farmland has been experienced in Europe, South America, and Australia. Research shows a positive correlation between US farmland and the Consumer Price Index (CPI). Farmland's correlation to the CPI exceeds that of stocks, bonds, and non-farm real estate. The farmland asset class has many of the characteristics of an inflation-indexed bond (high positive inflation correlation, and consistent real returns).

- 3. Farmland is an extremely effective way to provide portfolio diversification. Because farmland has not been "institutionalized" to the same degree as other forms of real estate, it provides an excellent way to get away from the mainstream financial system. Unlike owning futures contracts on commodities, a landowner benefits from both increasing commodity prices and increasing yields. Over time, commodity prices have not proven to appreciate. However, farming yields have drastically increased over time. Owning land provides exposure to the technological advancements in farming. Land values and rents are directly connected with yield potential.
- 4. Farmland can be less time and money intensive than other real estate. If the land does not have buildings, there is nothing physical to maintain. Modern technology means that farmers can farm incredible amounts of land; therefore they are constantly looking for new land to work. If a farmer is not leasing your land, it is typically easy to find another tenant.

Whether you are a farmer or investor, our team at The Land Group can help you find and purchase investment grade farmland. As many land transactions on the Eastern Shore never hit the public market, it is valuable to have an agent that is entrenched in the local land markets. For investors looking to maximize rental income from their farm, The Land Group also provides a full-service leasing platform with the goal of establishing long term leases to quality producers. Please contact us to help with your farmland investments.

Will Farmers be Driving Lamborghinis?

BY: BEN ALDER

Before you start sending me hate mail for the title of my article, it is clear that today's commodity prices have taken the wind out of the sail since 2012 when well-known Wall Street investor Jim Rogers made this statement: "The title did however grab your attention enough to read this far, so stick with me."

Farmland investing has quietly been a conservative method for farmers and private investors to grow long-term wealth. It appears Rogers was calling the agricultural community out on this grow-rich-slowly strategy when he made his Lamborghini comment. For the record, Lamborghini does make tractors as well as the better-known speedy coups.

Long term farmland investing is now a readily accepted investment vehicle to maintain wealth and protect institutional monies like pension systems, hedge funds and college endowments from financial forces such as inflation. Additionally, as investment vehicles go, it is starting to appear as sophisticated a purchase as a new Aventador Roadster as Rogers points out.

Buying "scalable dirt" has brought the largest retirement system in the United States known as TIAA to control \$8 billion in farmland globally. TIAA is considered an institutional investor not be confused with real estate investment groups, often structured as a Real Estate Investment Trusts. REITs have come into the agricultural investment arena in the last decade and are clearly recognizable now as strong actors in the land marketplace nationwide.

Institutional investors like TIAA and REITs seek returns on investment capital based largely on lease rates for the agricultural land while maximizing farmland returns to ensure the land is managed in the most sustainable manner to maintain aspects of the farm like soil quality and water resources. Gladstone Land Corp. is an example of an agricultural REIT and recently they have been focusing on the rapidly developing organic food demand.

The Gladstone philosophy states their goal is to build an ownership of farms leased on a triple-net basis to tenants with a strong operational background and "deep farming resources." Their role in the land market place is rapidly developing as the generational wealth of farmland accumulated over the past few generations will now transfer to heirs less tied to the land than ever before in history. While farming has become more efficient in doing more work with less labor, the balance of generational farmers have moved into other forms of work. Moving off the farm for other careers leaves the farm to be inherited by a generation removed from agriculture.

This fact has opened the opportunity for REITs and according to David Gladstone as he believes "the long-term values are compelling for investors looking for consistent dividends from the rent paid by farmers to farm the farmland we own in the United States. We pay monthly dividends so investors have the security of the farmland and the farmer has the land without having a lot of money tied up in the land. We act as the farmland provider to the farmer. We do not farm. Just like the seed salesman, the fertilizer salesman, and others selling to the farmer, we are the land-rental salesman. We would like the farmer to rent our land for eternity."



A significant challenge rests in the financial modeling of investment grade agriculture. It is a basic rule in evaluation of the farm for investment and boils down to the income of the property. The net income from primarily the farm lease drives the equation. For the investment to make sense from a capital investment stand point, the income must yield on average a 5-percent return on investment. The calculation of this capitalization rate may be calculated by internalizing all types of income to the property such as hunting leases and/or other ancillary values, but the rate of return must primarily tie back to the agricultural rents. This approach removes any consideration for future value through appreciation or speculative value from transition of land use if part of the farm were developed for another use. The basic evaluation for an investment agriculture acquisition focuses squarely on existing net income from the agricultural operation.

Clearly, on the Delmarva Peninsula this type of analysis is a challenge. Getting the average \$7,000 per acre farmland in Maryland to deliver a 5% return. The cash rent required for this average acre in Maryland would require a \$350 per acre annual rent. While this might be attainable for some truck crops like watermelons, small grain would certainly not support this without irrigation and the highest quality soils. Needless-to-say the conditions under which a 5-percent return is attainable on the Delmarva Peninsula are limited.

This brief mathematical exercise points out that the Delmarva land market is diverse. It is based on more than simply agricultural commodities, and the demand for land in the region rests in a myriad of values from purely recreational, to transitional or changing land use as suburban development creeps out from the urban edge of the city. New land uses such as Solar development have made a big splash in the news, but little impact as far as the value of farmland. The basic values rounding out our market include agricultural, recreational, development, and to some extent conservation value has made an impact. The local, state, and federal government agencies in partnership with national non-profits have purchased thousands of acres of land for conservation thus shaping land values around the Delmarva. In summary, the myriad of values creates stability in our land marketplace, not leaving Delmarva open to one singular market force to push values up or down.

While investing in land may not be as exciting as a new red Aventador, I can safely recommend that farmland will prove to be a strong place to put your money. Perhaps the long term returns as Mr. Rogers suggests will give you the ability to purchase more land or a Lamborghini. Don't forget Lamborghini makes tractors and that might look good running across a field on the Delmarva.

Land Valuation Analysis

BY: NICK CAMPANARO

The goal of this analysis is to use comparable sales data to calculate per acre land values for farmland, and timberland in Maryland, Delaware, and Eastern Shore of Virginia. Our focus is on the counties where we are active participants in the land markets & have working knowledge of individual trades. This analysis doesn't include properties containing significant improvements or entitlements. We set a minimum acreage per trade of 50 acres. Emphasis was placed on arms-length raw land trades occurring in 2020 and 2021.

2020 & 2021 Farmland/Pasture

COUNTY, STATE	# OF SALES	ACRES SOLD	AVG PRICE/ACRE
Accomack, VA	9	773	\$2,982
Baltimore, MD	6	125	\$12,143
Caroline, MD	17	2391	\$6,449
Carroll, MD	9	759	\$9,657
Cecil, MD	6	442	\$13,173
Dorchester, MD	22	1844	\$6,088
Frederick, MD	17	1289	\$7,136
Kent, DE	7	525	\$9,536
Queen Anne's, MD	12	1586	\$8,551
Somerset, MD	12	1153	\$5,386
Sussex, DE	12	902	\$8,055
Talbot, MD	5	656	\$9,547
Wicomico, MD	20	1042	\$5,737
Worcester, MD	16	969	\$6,665

MARYLAND: Average tillable farmland values fall between \$5,000 and \$7,000 per acre for lower shore counties. Values on the upper shore come in between \$6,500 and \$9,500 per acres. Cleared land values on the Western Shore are significantly higher and highly depend on location.

DELAWARE: Average farmland values fall between \$8,000 and \$9,500 per acre.

VIRGINIA: Average farmland values in Accomack County were roughly \$3,000 per acre.

2020 & 2021 Timberland

COUNTY, STATE	# OF SALES	ACRES SOLD	AVG PRICE/ACRE
Accomack, VA	10	641	\$1,062
Baltimore, MD	7	440	\$5,299
Caroline, MD	20	1373	\$2,386
Carroll, MD	7	284	\$3,439
Cecil, MD	7	435	\$5,721
Charles, MD	13	2637	\$2,126
Dorchester, MD	29	3342	\$1,918
Frederick, MD	19	681	\$4,748
Kent, DE	15	1358	\$3,482
Queen Anne's, MD	12	653	\$3,704
Somerset, MD	32	3748	\$1,833
Sussex, DE	37	5511	\$2,328
Talbot, MD	6	368	\$3,783
Wicomico, MD	34	2921	\$1,836
Worcester, MD	24	2987	\$2,036

MARYLAND: Average timberland values fall between \$1,800 and \$2,000 per acre on the lower shore. Wooded land values on the mid to upper shore range from \$2,500 to over \$5,500 per acre. Values on the Western Shore range from \$2,000 to over \$5,000 per acre and are highly dependent upon location.

DELAWARE: Due to significant development pressure in Delaware, we see a major difference in the value of conserved timberland versus non-conserved timberland. Non-conserved timberland in DE is trading around \$4,000 per acre, while conserved timberland is trading around \$2,000 per acre.

VIRGINIA: Average wooded land values in Accomack County were roughly \$1,000 per acre.

The 2021 real estate market for farmland and wooded land was strong. Several contributing factors include low interest rates, large amounts of liquidity in the market, and increased demand from buyers looking to escape urban areas. We have begun to see the effects of this increased demand along with low market inventory. As expected, the combination has resulted in rising land values across the region.