REGENERATE VIRGINIA

An action plan for regenerative agriculture

American Farmland Trust
SAVING THE LAND THAT SUSTAINS US

ACKNOWLEDGMENTS

Regenerate Virginia is dedicated to the memory of Niamh Shortt, a fierce and joyful advocate for our region's farms and farmers.

With support from a generous and visionary donor, American Farmland Trust (AFT) developed *Regenerate Virginia,* an integrated action plan designed to advance regenerative agriculture in Virginia. The plan's goals, objectives, and strategies are built upon AFT's deep experience and broad expertise, as well as extensive quantitative and qualitative research.

Over a nine-month period, AFT compiled literature reviews, explored geospatial trends, and analyzed farmer-focused statistics. We collected more than 100 survey responses from farmers across the state, conducted interviews with dozens of partner organizations and respected leaders, and hosted multiple in-depth listening sessions. We came to better know the literal and figurative agricultural landscape. These efforts have helped us understand how to better serve Virginia's farms and farmers, work that we see as essential.

We are especially grateful for and humbled by the knowledge and dedication of the following people who provided insights, wisdom, and generous assistance. Without their thoughtful guidance, this action plan could not have been developed.

Ebonie Alexander, Black Family Land Trust
Christian Anderson, Alliance for the Chesapeake Bay
Aaron Berryhill, Virginia Department of Energy
Mary Sketch Bryant, Virginia Soil Health Coalition
Michael Carter Jr., Africulture, The Carter Farms
Ashton Cole, Land Trust of Virginia
William Crutchfield, Virginia State University Small Farm Outreach Program
Judy Dunscomb, The Nature Conservancy
John Fike, PhD, Virginia Tech, Virginia Forage and Grassland Council
Lydia Fitzgerald, Virginia Tech, Virginia Natural Resources Conservation Service
Richard Fitzgerald
Lisa Garfield, Future Harvest
Will Giese, Solar Energy Industries Association
Carrie Hearne, Virginia Department of Energy
John Ignosh, Virginia Tech Extension
Matt Kowalski, Chesapeake Bay Foundation
Alston Horn, Chesapeake Bay Foundation
Kristen Hughes Evans, Sustainable Chesapeake
Ann Jennings, former Virginia Secretary of Natural and Historic Resources
Amy Johnson, PhD, Virginia Working Landscapes
Chris Lawrence, Virginia Natural Resources Conservation Service
Matthew Lohr, Virginia Secretary of Agriculture and Forestry
Elizabeth Marshall, University of Virginia Weldon Cooper Center for Public Service
John McCarthy, Piedmont Environmental Council
Kim Niewolny, Virginia Tech, Virginia Beginning Farmer & Rancher Coalition
Jen Perkins, Virginia Department of Agriculture and Consumer Service, Office of Farmland Preservation
Jake Reilly, National Fish & Wildlife Foundation
Michael Reilly, FoodShed Capital
Ben Rowe, Virginia Farm Bureau Federation
Ellen Shepard, Virginia United Land Trusts
Bill Shobe, UVA Weldon Cooper Center for Public Service
Niamh Shortt, Future Harvest
Andrew Smith, Virginia Farm Bureau Federation
Kevin Tate, Alliance for the Shenandoah Valley
Kendall Tyree, PhD, Virginia Association of Soil and Water Conservation Districts
Kim Woodwell, Alliance for the Shenandoah Valley

We are also grateful to these AFT colleagues who shared their expertise: **Laura Barley, Scott Beck, Bianca Moebius-Clune, Jen Dempsey, Julia Freedgood, Jacob Gilley, David Haight, Mitch Hunter, Bonnie McGill, Gabrielle Roesch-McNally, Ryan Murphy, Michelle Perez, John Piotti, Kate Rossiter Pontius,** and Ethan Winter.

We are perhaps most thankful for the farmers who shared their time, energy, expertise, and insights with us. Whether they responded to our survey, participated in our listening sessions, or spoke with us at events or on their farms, these farmers and their grounded experience helped shape this plan. For all that they've done and all that they do, we are grateful.

Cover photos (from left): top—AgriSolar Clearinghouse, Rebecca Drobis, Rebecca Drobis; middle—Preston Keres/USDA, Preston Keres/USDA, Rebecca Drobis; bottom—USDA, Rebecca Drobis, USDA.

For more information, please contact any of the report's authors: Jamie Mierau (jmierau@farmland.org), Amanda Cather (acather@farmland.org), and Brooks Lamb (blamb@farmland.org).

PREFACE

A Note from John Piotti, AFT President

PAT & CHUCK BLACKLEY/ALAMY

Why focus on regenerative agriculture?

From American Farmland Trust's decades of pioneering leadership at the intersection of agriculture and the environment, we know that broader adoption of regenerative agriculture is critical—both for the future of farming and the future of our planet.

Regenerate Virginia articulates an ambitious but achievable action plan that advances a forward-looking vision for agriculture. It is rooted in the realities of what is needed in Virginia—and what could work here.

AFT has developed some sense of what's possible in Virginia from our grounded engagement in current programming. But to craft a viable plan that recommends specific actions, we needed to learn more about farming here: more about the land itself; more about the kinds of farming done and the types of practices employed; and more about the farmers who steward this land. So we put in the work to improve our understanding. Beyond learning about farms and farmers themselves, we also explored what state government is doing to advance agriculture, and we investigated how Virginia's academic institutions and nonprofit organizations are working to support farming communities.

To this fact-finding, AFT brought our own experience. This includes what we have learned from our work in Virginia, but also through our extensive engagement in other states and regions.

We also brought a bias. AFT does not see regenerative agriculture as being only about better practices. To us, agriculture is a system. There are inextricable linkages between the land itself, the practices that occur on that land, and the people who steward that land.

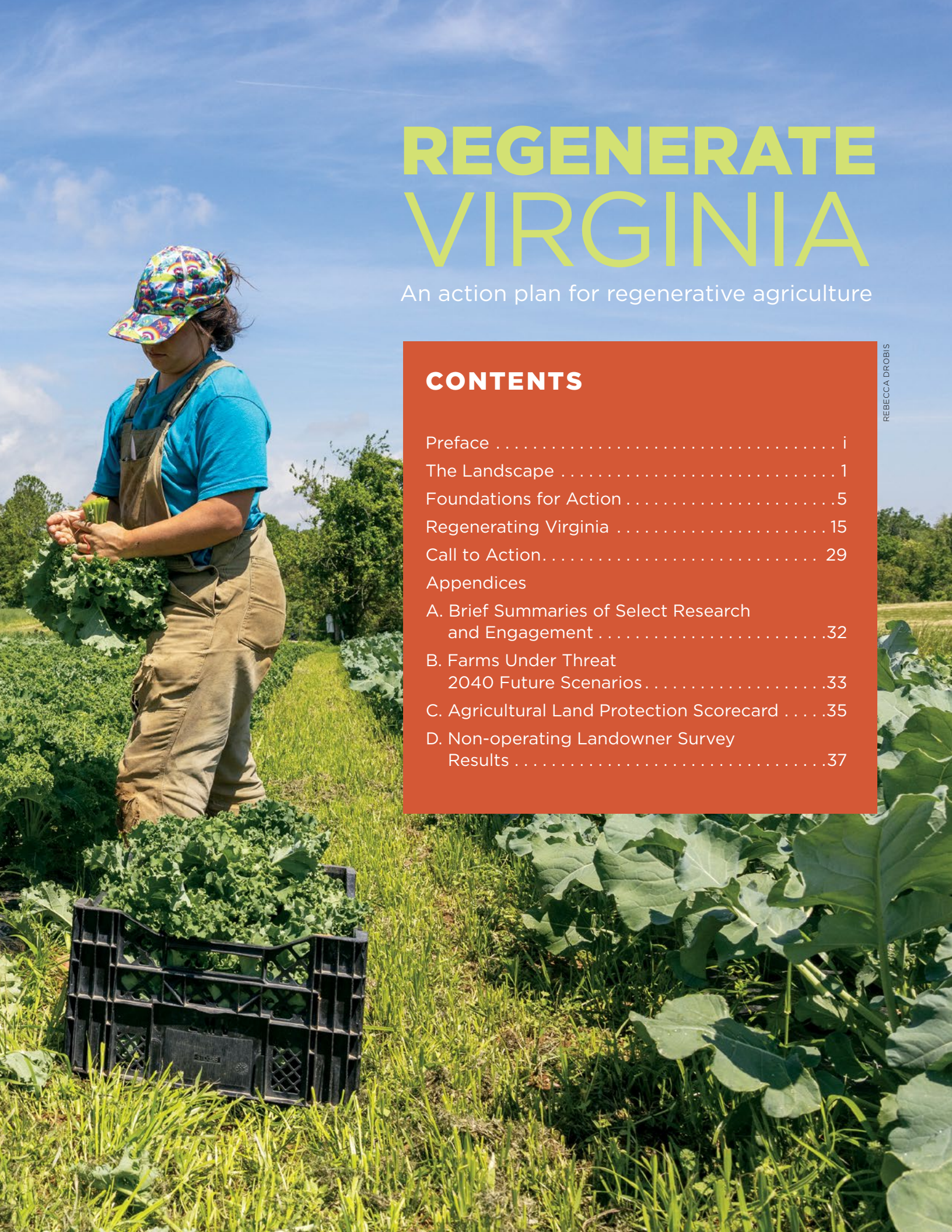
The most forward-looking agricultural practices—as essential as they are—will never realize their full potential unless there is sufficient farmland. That's the only way we can grow all the food we need at the same time that we manage the land to provide all the environmental services we also need. Beyond this, the climate and carbon benefits of regenerative practices will prove short-lived if the land on which those practices are employed does not remain in agriculture—thus elevating the critical role of permanently protecting farmland. And finally, none of this holds together unless we have farmers who can make a living following the best practices, and unless we can cultivate a new and more diverse generation of farmers who can afford to acquire land and are equipped to be successful.

Simply put, we can only advance regenerative agriculture through a comprehensive systems approach. Thus, the action plan articulated in this report is multifaceted, covering a wide range of agricultural, environmental, and economic needs. It recognizes and builds on the importance of state government programs; supports and expands the work of existing organizations; and fills crucial gaps with new initiatives.

We invite you to read this report, reflect on its findings and recommendations, and then roll up your sleeves. Join us in our shared effort to Regenerate Virginia.

REGENERATE VIRGINIA

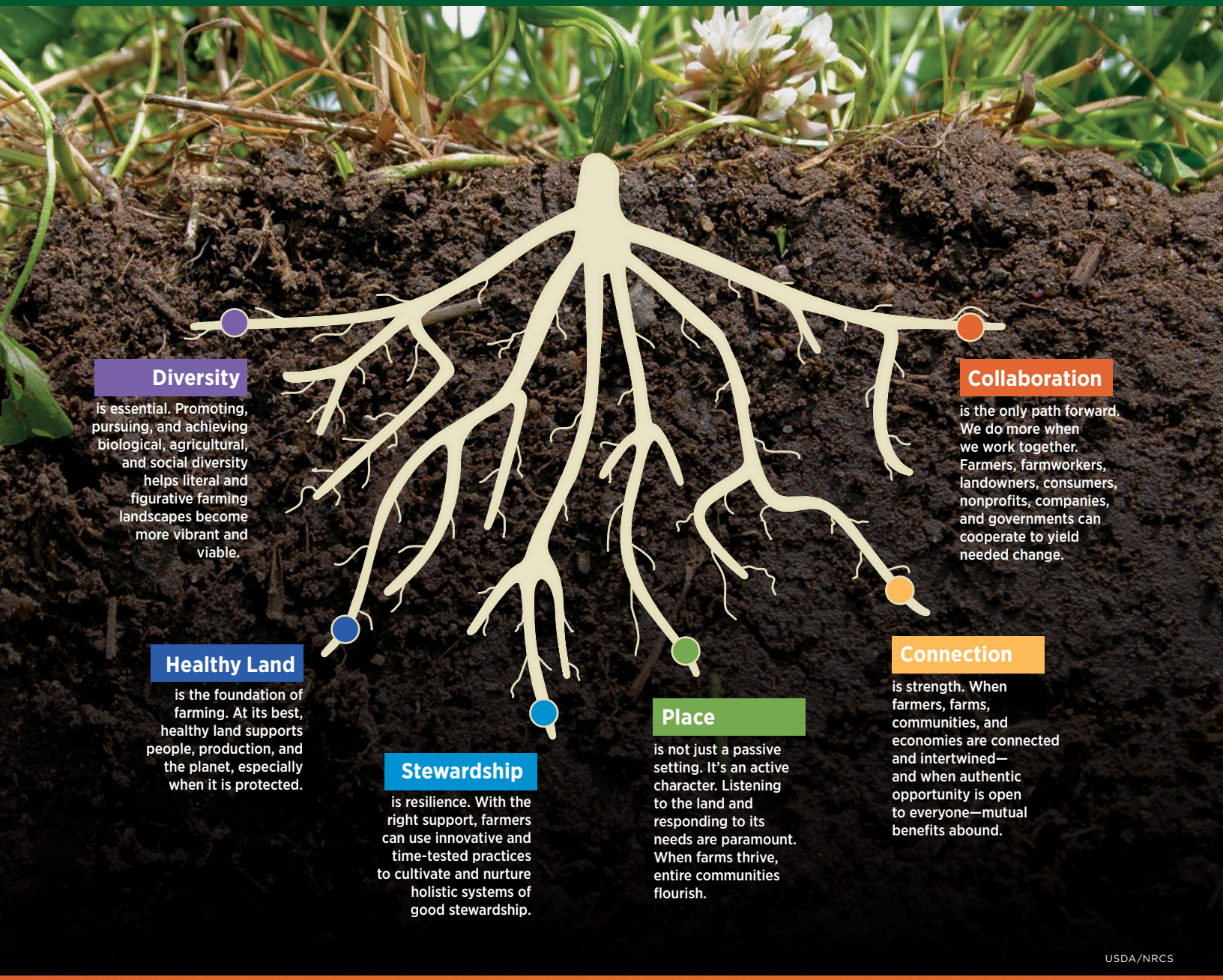
An action plan for regenerative agriculture



REBECCA DROBIS

CONTENTS

The Roots of Regenerative Agriculture



USDA/NRCS

Regenerative agriculture combines practices in the field with a holistic approach to farmland protection, farm business viability, and farm communities.

The Landscape

BLEND IMAGES/ALAMY

From the Atlantic coast and Chesapeake Bay to the Blue Ridge and beyond, the landscape of Virginia is unmistakably agricultural. Beef and dairy cattle dot the hillside pastures of the Shenandoah Valley. Urban agriculture takes root in Richmond. Acres of corn and soybeans flourish on sandy coastal soils. Diversified vegetable operations, orchards, and wineries thrive near population centers thanks to growing consumer demand for locally grown farm products.

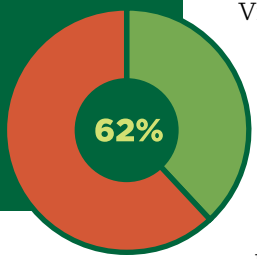
Virginia boasts more than 40,000 farms on almost 8 million acres across its varied geography. Agriculture is by far the state's largest private industry, providing over 330,000 jobs and yielding an annual economic impact of $70 billion.

Virginia is a state of small farms. The average size of farms in the Commonwealth is 180 acres, compared to the U.S. average of 444 acres. And a full three-quarters of Virginia's farms are smaller than this 180-acre average. Other statistics stand out, too. More than 90% of farms in the Commonwealth are owned by families or individuals. Nearly 40% of Virginia farmers are women.

> **"[Farming] is about stewardship. It's about treading lightly and leaving places better than we found them. We want to have topsoil. We want to have biodiversity. We want to have polycultures instead of monocultures. And we really want to build . . . a place where we can grow and learn from the land in addition to having a profit."**
>
> **— FARMER AT AFT LISTENING SESSION**

Stewardship is second nature to Virginia's farmers. Caring for the land is a deeply rooted ethic for farmers across the state—whether their goal is improving the health of the Chesapeake Bay, leaving a legacy to pass down to the next generation, or simply making production more efficient and increasing profits. According to the 2017 Census of Agriculture, the farmers of the Commonwealth planted cover crops on more than 37% of grain and oilseed farms and used no-till or reduced-till practices on 79% of harvested cropland in Virginia. These rates of adoption are among the highest in the nation. Of the farms that reported raising livestock, 29% said they practiced rotational or management-intensive grazing. Careful management of fertilizers and pesticide application, conservation crop rotation,

62% of Virginia farmers work a job off the farm to make ends meet.



riparian buffers, and other critical whole-farm practices also contribute to Virginia's admirable conservation record. As other parts of the U.S. experience production challenges due to extreme weather conditions, Virginia's ability to raise a broad range of farm products with continued attention to conservation becomes more significant every day.

The Commonwealth has a strong agricultural foundation. Yet Virginia's farms and farmers face serious challenges, as do their counterparts nationwide. Economic stresses—including rising input costs, volatile markets, and struggles with debt and loan payments—contributed to the USDA's pre-pandemic forecast of negative median farm income. Current challenges make it even more difficult for farmers to sustain cash flow, pay down debts, invest in better infrastructure, or just support their families.

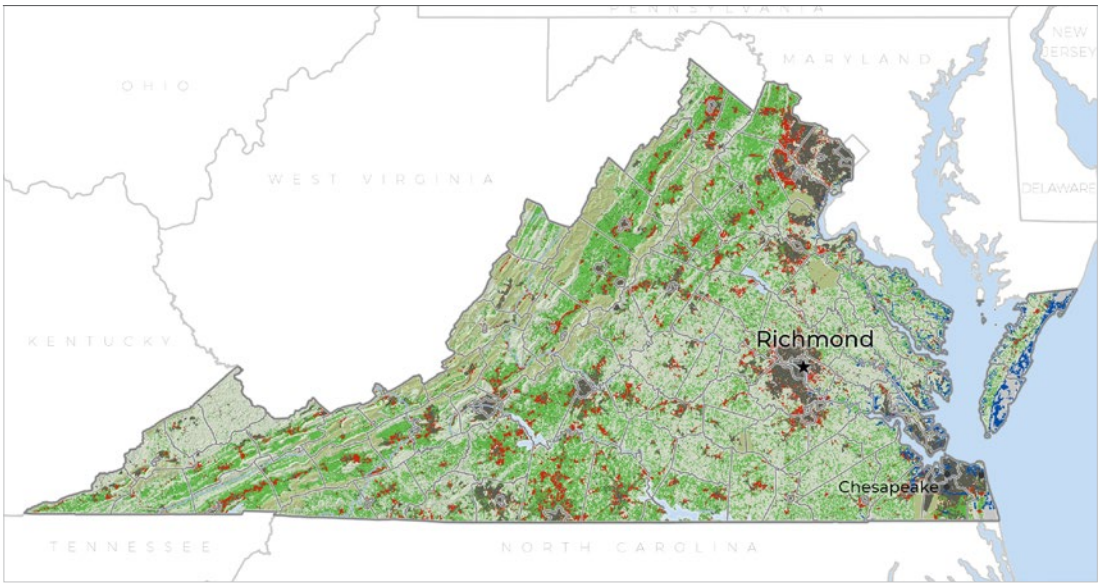


Figure 1. Projected Agricultural Land Conversion from 2016 to 2040

The land itself is impacted, too. Virginia ranks thirteenth in the nation in AFT's Farmland Threat Score. This high score indicates that an excessive amount of farmland is being lost each year to other land uses, notably residential and commercial development. The threat to farmland is fueled by the fact that Virginia's population has increased more in the last decade than any other state in the Mid-Atlantic, a trend likely to continue.

AFT Smart Solar Principles

1. Prioritize solar siting on rooftops, brownfields, and marginal lands.
2. Minimize conversion of our best agricultural lands to ground mounted solar.
3. Protect/enhance soil health by requiring best practices when siting solar on agricultural land.
4. Maximize adoption of agrivoltaics/dual-use solar on lands "well suited for agriculture."
5. Ensure that solar built on agricultural lands strengthens farm viability.
6. Promote equity in access and benefits.

AFT's latest research (See *Farms Under Threat 2040: Choosing an Abundant Future,* released June 2022) dug deep into Virginia's situation. The report projects that up to an additional 800,000 acres of Virginia farmland could be lost by 2040 if sprawl and low-density residential development are allowed to continue unchecked.

Beyond traditional real estate development, Virginia is facing a flurry of solar energy growth, putting the state among the nation's

leaders in solar expansion. The growth of solar and other forms of renewable energy is key to reducing our country's carbon footprint. If done well, it can also create opportunities for farmers to earn new income. Still, solar energy infrastructure must be carefully balanced with the need to retain irreplaceable farmland.

Finally, agriculture is inherently a high-risk endeavor, with annual uncertainties related to weather, pests, and diseases. In recent years, temperature fluctuations, extreme rainfall and drought events, and the beginning of what will ultimately become significant sea level rise—all of which are related to climate change—have made these uncertainties even more difficult for farmers to navigate. Small-scale, beginning, low-wealth, and historically underserved farmers are impacted more significantly than their peers by these challenges. For these farmers, profit margins tend to be slimmer, development pressure tends to be greater, and resources more difficult to access.

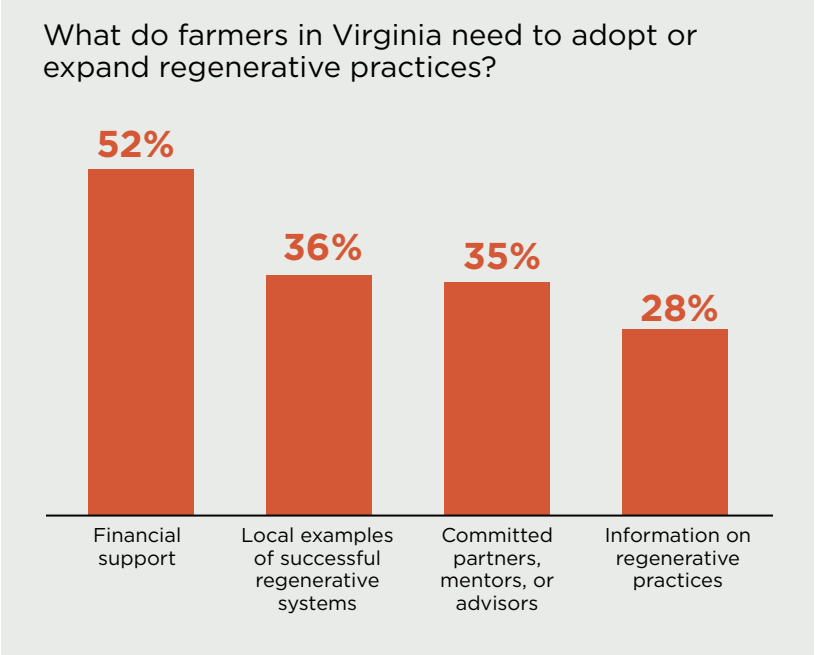


Figure 2. Needs for adoption or expansion, from spring 2022 AFT farmer survey

Regenerative agriculture offers a way forward for all farmers, regardless of scale or background. Though the definition of the term is both nuanced and evolving, a fair summary is that regenerative agriculture involves the strategic adoption of various time-tested and innovative farming practices that build soil health and improve ecosystem function (often in combination, to produce the synergistic benefits of "stacking practices"). These can include in-field practices like cover cropping, mulching, nutrient management, and rotational grazing, but also edge-of-field or whole-farm practices such as hedgerows, enterprise diversification, and integration of livestock and cropping systems. Beyond promoting good practices alone, regenerative agriculture plans for the continuation of farming and good stewardship. Holistic understandings of regenerative agriculture also incorporate cultural and economic elements that support farms and surrounding communities.

In every way, regenerative agriculture represents a pathway to healthy, well-functioning ecosystems and communities that grow robust agrarian economies and support secure, resilient food systems at the national, regional, and local levels. With soil health as its foundation, regenerative agriculture builds systems that may look different on different farms because the chosen strategies must be tailored to place and people. Regardless of where or how particular strategies are implemented, regenerative agriculture works toward common goals that serve people and place.

In Virginia, the promise of regenerative agriculture is profound. Implementing regenerative systems can lead to farms with healthier soils and better business models, making them more viable, resilient, and profitable. Regenerative approaches can also generate off-farm benefits, like improved water quality, enhanced biodiversity, vibrant regional farming economies, and reductions in greenhouse gas emissions.

Regenerative agriculture's potential hinges on the premise that we can protect an ample amount of productive, resilient farmland. If we can do so—as we must—our farmland will offer these tremendous public goods and support vibrant agricultural communities far into the future.

> **"Farmers need more financial assistance to improve upon or adopt regenerative practices. And it's not just that there needs to be more money—it needs to be more easily available to farmers of all economic backgrounds."**
>
> **— FARMER AT AFT LISTENING SESSION**

Virginia farmers currently report significant barriers to adopting regenerative practices—including a lack of access to secure land tenure and financing for practice adoption, along with a

> **“Climate change is…something that I keep in mind every day that I’m outside. [And] that motivates me…to combat climate change [through] carbon sequestering by nature.”**
>
> **— FARMER AT AFT LISTENING SESSION**

need for more successful local examples of regenerative production, mentorship, and networking opportunities. While the total amount of cost-share funding for conservation practices from federal and state sources combined has never been higher for Virginia farmers, our research shows that there is a gap in access to these funds—especially for less wealthy, smaller-scale, and underrepresented farmers. This may be due in part to the uncertainty of the current cost-share model. Without assurances of consistent levels of funding, Soil and Water Conservation Districts and other on-the-ground conservation leaders have not been able to staff up to effectively implement available funding. This understaffing impacts the ability of District staff to do outreach, relationship building, and essential follow up work, and disproportionately impacts farmers who are not already connected with District staff and programs—often those who are already historically underserved. And while the levels of funding are indeed historically high, they may not be high enough. Demand often outpaces the availability of funding for farmers of any size or scale.

The technical assistance needed to implement regenerative systems, whether from experienced farmers, peers, or service providers, is also lacking in many communities. At the same time, there is a marked need to rebuild regional infrastructure and markets for products grown on farms that have adopted these systems. As it stands, the current regional infrastructure—including meat, grain, and oilseed processing facilities, among other core services—is insufficient to meet the needs of increased production and contribute to resilient local food systems.

In addition to threats to farmland, challenges in adopting regenerative practices, and inadequate access to appropriate capital, markets, and farm business planning, Virginia farmers face growing pressure from a changing climate and volatile economic conditions. Though these risks are ever-present—exacerbating mental health challenges like anxiety, stress, and depression that often plague agricultural communities—regenerative agriculture has the potential to mitigate them. Farmers who adopt regenerative management systems report improved yield stability and decreased input costs over time, making them more resilient to climate and economic shocks. Resilient farms contribute to healthy farming communities and economies, building a stable, secure foundation for regional food systems.

With clarity and purpose, AFT can work with partners to address these barriers and engender a more vibrant and sustainable agriculture in the Commonwealth. Together, we can position Virginia as a model of regenerative agriculture that could be replicated across the nation.

REBECCA DROBIS

LANCE CHEUNG/USDA

PRESTON KERES/USDA

Foundations for Action

REBECCA DROBIS

Land. Practices. People.

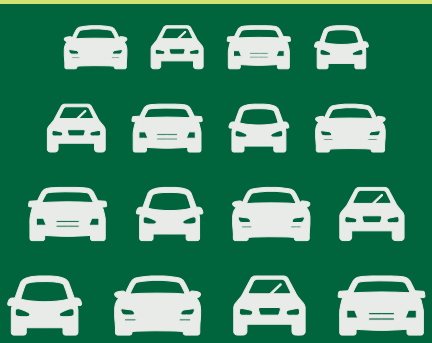
For over 40 years, AFT has been weaving these three elements into its work to serve farms and farmers and help cultivate a thriving, sustainable food system. Holistically and simultaneously supporting land, practices, and people is essential to enhancing and sustaining regenerative agriculture. In our current moment, opportunity abounds to catalyze movement toward regenerative farming in Virginia. In some parts of the state, powerful work has already begun—supporting the land itself, the farming practices employed on the land, and the people who steward that land. AFT's experience integrating these three elements can ensure that this ongoing work, coupled with targeted new efforts, can build a groundswell that is truly transformational.

Regenerative Practices

The first of the three keys to scaling regenerative agriculture is increasing implementation of regionally appropriate regenerative systems on farms. As mentioned above, place-based systems that include carefully selected combinations of in-field and whole-farm regenerative practices have significant benefits for the environment and farmers' bottom lines, including more stable yields and profitability as well as improved water quality and enhanced carbon cycling.

For example, according to the 2017 Census of Agriculture, 29% of Virginia's livestock farms currently practice some level of rotational grazing. That's a good start—but it could be much better. AFT's Carbon

If 50% more Virginia farmers adopted regenerative practices like cover crops, no-till, and rotational grazing...



...that could reduce greenhouse gas emissions equivalent to removing

60,400

passenger cars from the road.

LANCE CHEUNG/USDA

Reduction Potential Evaluation Tool (CaRPE™) estimates that if 50% of the state's remaining pasture acreage were converted to rotational grazing (around 1 million acres) it would reduce greenhouse gas emissions by about 53,000 metric tons of carbon dioxide equivalent (MTCO2e) per *year*. That's equivalent to taking more than 11,500 passenger cars off the road.

Similarly, if 50% of Virginia's corn and soybean farmers who are not currently farming regeneratively adopted a system of practices including sowing multispecies cover crops and reducing tillage, greenhouse gas emissions could be reduced by 225,000 MTCO2e per year over 20 years—the same as taking 48,900 passenger cars off the road.

The climate benefits of regenerative agriculture are potentially significant. The on-farm benefits are significant, too. AFT's Soil Health Economic Case Studies, which created financial and environmental analyses of farmers who had successfully implemented soil health practices, show that adopting these practices can reduce input costs (which is especially helpful as fertilizer and pesticide prices skyrocket) and reduce labor and equipment costs, saving farmers money while they build the health of their soil.

AFT's data and innovative analytical tools prove that regenerative practices can have powerful impacts. But these practices need help to take root. A 2020 national report by Guidelight Strategies identified several key barriers to adoption, including the need for behavioral and cultural change among farmers—often accomplished effectively through peer education and mentorship networks. The report also emphasized that farms need more and better technical assistance from trusted sources. AFT's Virginia-focused research revealed complementary findings: of the 100 Virginia farmers who responded to our in-depth survey, more than 70% identified successful local examples and trusted partners or mentors as among their top two most urgent needs in adopting regenerative systems.

> **"Subsidies go overwhelmingly to massive producers, with the top 10% of commodity payment recipients receiving 78% of commodity payments.... The concentration of federal payments among largely white male large-scale producers reflects long histories of structural racism that increase challenges for non-white farmers in accessing the land, base acreage, labor, and capital necessary to operate a farm."**
>
> — EMILY BURCHFIELD ET AL., "THE STATE OF U.S. FARM OPERATOR LIVELIHOODS," 2022

Some of this work has begun in Virginia. Under the umbrella of the Virginia Soil Health Coalition, organizations currently support farmers in adopting regenerative practices through innovative approaches to bridge funding divides. They also offer mentoring and peer-to-peer programs across a variety of production systems—but more is still needed. For example, the 2017 Census of Agriculture indicates that 37.5% of Virginia's oilseed and grain farmers utilize cover crops on only about 14% of their acreage. This adoption rate reveals a tremendous opportunity to more broadly encourage the use of a practice that, according to a 2022 study by the Economic Research Service of the USDA, often serves as a "gateway" to regenerative systems implementation. That report reveals, "Farmers who planted cover crops . . . are more likely than other farmers to use other conservation practices." With the right supports in place, we can accelerate the adoption of fundamental regenerative practices in a way that will encourage even greater adoption over time, enabling regenerative systems to become the norm rather than the exception.

A note of nuance is needed here. While 31% of all farms over 500 acres utilize cover crops, only 7% of farms that are 500 acres or smaller planted them in 2017. Differing production systems may explain part of the gap here, but this discrepancy is in large part an issue of equity. During our extensive conversations with farmers in Virginia, we clearly heard that smaller-scale farmers—especially those from diverse or low-wealth backgrounds—often struggle to access the resources they need to embrace regenerative practices. Research on the national scale by the Environmental Working Group and

REBECCA DROBIS

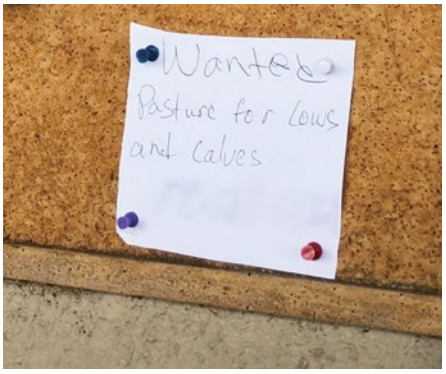
> **"There is no one-size-fits-all formula, but regenerative ag principles can work in a lot of different places. I hope we continue to see more folks try this farming style, and I hope more information will be presented in the future on the ecological and economical outcomes of farming this way."**
>
> **— FARMER AT AFT LISTENING SESSION**

other independent economists show that higher overall and per acre government payments often go to the wealthiest larger-scale farmers. This backs up what AFT has heard from many farmers, suggesting that the appropriate systems aren't in place to help all farmers succeed. That's a problem that must be addressed, especially given the economic, cultural, and environmental importance of small and mid-sized farmers in Virginia. Building capacity and filling key implementation gaps will allow a diverse group of farmers to better take advantage of opportunities to embrace regenerative practices.

AFT has significant experience in encouraging adoption of regenerative practices through farmer networks, information sharing, and technical assistance, both in Virginia and across the country. We have led and learned from similar efforts in New York, the Midwest, and New England. In nearby Pennsylvania, AFT is launching an innovative pilot project combining in-depth soil health learning circles with funding for planning and practice adoption. This project will serve as an important foundation for future work in the Mid-Atlantic region, including Virginia.

Helping a diverse group of farmers across Virginia's varied geography successfully adopt regenerative practices and systems will signal to neighboring farmers that change is not only possible, but beneficial. When farmers can learn from across the fence rather than just in a classroom or exhibit hall, localized and grounded knowledge can take root and flourish.

Farmland Protection and Access



JACOB GILLEY

Innovative efforts to protect farmland, and increase access to it, are the vital second pillar to advancing regenerative agriculture across the state of Virginia. These efforts include using Buy-Protect-Sell transactions, enhancing easements with a requirement for flexible management plans that incorporate regenerative practices, and offering low- or no-interest loans for farmland purchase.

Protecting farmland and helping the next generation profitably farm it is critical for agricultural and food production purposes. Yet protected farmland does so much more than just grow food. It yields environmental, ecological, and economic benefits, too. (AFT's New York *Greener Fields* report found that farmland in that state produces 66 times less greenhouse gas emissions than developed land. That's just one reason why protected farmland is a pivotal tool in the fight against climate change.)

Yet AFT's *Farms Under Threat 2040: Choosing an Abundant Future* report shows that Virginia farmland faces grave threats from low-density residential development, endangering land and the

host of services it provides. Under the "Runaway Sprawl" scenario outlined in that report, where low-density residential development increases far beyond 2016 levels, Virginia could lose the equivalent of *more than 5,000 average sized farms* by 2040. Compared to the report's "Better Built Cities" scenario, in which policymakers and land-use planners promote compact development and reduce sprawl, the "Runaway Sprawl" projection would represent a loss of more than 7,200 on-farm jobs, $202 million in annual production, and—if these farms had adopted regenerative systems—more than 350,000 MTCO2 of annual greenhouse gas emission reduction potential.

AFT's Farmland Information Center (FIC) completed detailed analyses of Virginia's farmland protection efforts, both past and present. The total amount of farmland that has been permanently protected with an agricultural conservation easement in Virginia—74,353 acres—is roughly 1% of the Commonwealth's farmland. This is far below the levels in other Mid-Atlantic states, where Maryland has protected 30% of its farmland, Delaware 25%, and Pennsylvania 9%. *Note: Though USDA and most states use the term "farmland protection" when an agricultural conservation easement is placed on a farm property, some states, including Virginia, use the term "farmland preservation."*

Since every acre of protected farmland matters, Virginia's efforts are not to be discounted. Nonetheless, Virginia is not doing nearly as much as its peers. A prior AFT report (See *Farms Under Threat: State of the States,* released in May 2020) shows that Virginia's policy response to the threats its farmland faces is significantly less robust than what we see in Maryland, Delaware, and Pennsylvania. Not surprisingly, these states have protected far more farmland because they have invested far more in farmland protection. On average, these three states spend almost *40 times as much per capita* on such efforts as Virginia. Numerous studies from around the nation have documented the significant benefits that farmland protection provides, consistently showing that greater levels of support are well worth the investment.

Buy-Protect-Sell

Buy-Protect-Sell (BPS) is an innovative tool that simultaneously protects farmland and makes the land more affordable for an incoming farmer. BPS is utilized by a handful of state and regional land trusts, as well as by AFT. In a BPS project, the land trust buys land from an exiting farmer; protects that land with a well-structured agricultural conservation easement that ensures it will always be available for farming; and then sells the land to a new farmer who otherwise might struggle to access land. Because the land is permanently protected with the easement, it sells at its "farmland value" rather than its prior "development value," often making the property far more affordable.

AFT calls its own Buy-Protect-Sell program "BPS+," because it goes even further than traditional programs. For one thing, we are open not only to selling land, but to leasing it, wherever that is necessary for farmer access. Beyond this, we aim whenever possible to make the land available to historically underserved farmers. And finally, AFT's BPS+ program directly advances regenerative practices in two ways: 1) our easements require development of a robust yet flexible regenerative management plan; and 2) we provide ongoing technical support to help incoming farmers successfully follow that plan.

ANDRIY BLOKHIN/ALAMY

				
PROTECTION MEASURE	**MARYLAND**	**DELAWARE**	**PENNSYLVANIA**	**VIRGINIA**
Percent of farmland protected	30%	25%	9%	1%
Acres of protected farmland	592,478	133,564	649,658	74,353
Acres protected using state funds	442,342	133,564	591,819	23,074
Percent of protected farmland preserved through state funding	75%	100%	91%	31%
Total state investment in farmland protection	$1.3 billion	$543 million	$1.6 billion	$39 million

All figures as of January 2021.

Figure 3. Not Keeping up with the Neighbors

By AFT's estimates, a robust state-funded program to permanently protect 10% of Virginia's farmland would cost at least $1.3 billion. That level of funding may be more than the Commonwealth is ready for, even if the argument could be made that it is both a wise and needed investment. Yet the size of the overall need is no reason to not begin acting now. By devoting only $7.5 million per year to farmland protection in Virginia, the state could double its current farmland protection levels by 2040, leading to almost 150,000 protected agricultural acres.

Permanent farmland protection efforts are essential. But to have the most impact, farmland protection must be *combined* with effective state and local planning efforts. Here again, Virginia's response is far less robust than many other states, some of which provide significant support for comprehensive planning and various farmer-friendly planning tools. Virginia's efforts could be vastly improved by providing financial and technical assistance to help communities plan for agriculture. On the local level, counties could create comprehensive land-use plans that have farmland protection and farm viability as core components. Without planning for the future of agriculture, some Virginia counties may not *have* a future in agriculture.

Like farmland protection, access to farmland is key to advancing regenerative agriculture. According to AFT's Farms for a New Generation team—who prepared detailed analysis specifically for this report—an entering farmer, whether a first-generation farmer or one taking over a long-established family farm, is more likely to farm regeneratively than their predecessors. Ensuring that they can secure stable access to farmland enables this generational transformation. At the same time, protecting land that is regeneratively farmed ensures that the resulting ecological benefits—such as improved water quality, increased biodiversity, and enhanced carbon cycling—will endure.

Despite the critical need to get next generation farmers onto the land, it is not happening at anywhere near the level it must if we hope to sustain good farming. The specific challenge to support beginning farmers often begins with the struggles faced by exiting farmers—folks who have devoted their lives to agriculture but are uncertain of how to leave the vocation. More than 80% of the farmers who responded to AFT's 2022 survey indicated that they had no written succession plan for their farms. Without plans in place, farms are at greater risk of conversion to non-farm uses. When a current owner retires or passes away and there are no clear next steps for the farm, heirs often take the quickest and easiest action: putting the land on the market, where deep-pocketed developers can easily outcompete beginning farmers. AFT estimates that roughly 40% of

> **"In high land cost areas like mine, land access really is the key. Without owning a 'base' of acreage, it's more difficult to make long term investments in infrastructure and regenerative practices. If there was a pool of conserved land that was available only for agriculture to be purchased by farmers willing to practice sustainable ag, that would be a game changer for local production, especially for folks not born into farming families or with more sizeable outside income streams."**
>
> **— FARMER AT AFT LISTENING SESSION**

“When we started our own business last year, we moved to some farmland we were renting for the year. We thought it would manifest itself into a long-term lease . . . . [But] it fell through in the first year . . . . [W]e would really like to own our own farm, [but] unfortunately, we’ve moved to probably the most expensive county in Virginia, where farmland is very quickly being turned into houses . . . . We’re not sure how the economics work out.”

— FARMER AT AFT LISTENING SESSION

ROB CRANDALL/ALAMY

Virginia’s current farmers are expected to retire within the next two decades, leaving the fate of many acres of farmland in the balance.

The future of farming in the Commonwealth depends on how farmland transitions. Will it go to new farmers? Or to sprawling development? We cannot allow the latter to happen.

But secure land tenure and access are not only issues for new farmers. As identified in the listening sessions AFT recently conducted in Virginia and reinforced by AFT’s experience in other states and regions, helping existing farmers create efficient, equitable transfer plans for their land and businesses is also essential to securing a long-term foundation for regenerative agricultural systems.

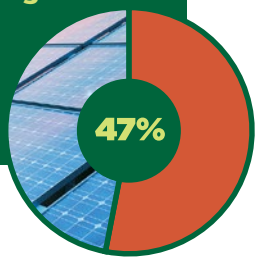
Farm succession planning is paramount—as are a number of related efforts, including addressing heirs’ property (an issue especially affecting Black farmers and low-wealth farming families of all backgrounds), assisting with land access, making farmland more affordable through strategic farmland protection projects, and creating immediate opportunities for incoming farmers through Buy-Protect-Sell projects. Efforts like these could make a game-changing impact in Virginia. As noted above, farmland is often lost to development during generational transitions, and next generation farmers are statistically more likely to adopt regenerative practices and systems. Thus, improving succession planning and facilitating generational transfer could have an immediate and outsized impact advancing regenerative agriculture.

This work is beginning in Virginia.

One example is a new state-based Farm Link program that holds promise for creating connections between farmers seeking land and those transitioning out of farming. Here, AFT can bring its expertise to bear on helping the program thrive. Successful Farm Link programs such as AFT’s Hudson Valley FarmLink Network in New York go beyond a website for farm seekers and farm owners and provide a multi-pronged, multi-partner approach including technical assistance, wraparound services, and program evaluation to determine where they are having success and where adjustments need to be made. Expanding these services for Virginia Farm Link will create an even more robust program for farmers.

Other examples abound. The Alliance for the Shenandoah Valley, Piedmont Environmental Council, and Land Trust of Virginia, along with various local and state leaders, are helping create vibrant, protected agricultural landscapes in their areas. Counties around Washington, DC, are focusing on compact growth strategies to reduce sprawl. The Black Family Land Trust and Virginia State University's Small Farms Outreach Program are working to help farmers with succession challenges, including offering direct and specialized assistance to heirs' property farmers, an approach often cited among both experts and landowners as the most urgent need for these families. And momentum is building in Virginia around smart solar development, including a burgeoning effort to advance "agrivoltaics," sometimes called "dual-use," where farming and solar energy production occur on the same land area.

47% of farmers who responded to AFT's survey are interested in learning more about **growing crops or grazing livestock under solar panels.**



By creating connections and synergies among these efforts, building on and scaling up existing innovation, and exploring opportunities to engage the land conservation community more deeply in promoting regenerative agriculture and next generation land access, we will create powerful and sustained momentum for a new wave of agricultural land protection and regeneration in Virginia.

Farm Viability, Vitality, and Diversity

The third essential pillar of promoting regenerative agriculture in Virginia involves supporting the vitality and vibrancy of farms of all sizes and all types of production by fostering diversified enterprises, markets, and payment streams. AFT's listening sessions and statewide survey showed that Virginia farmers desire to be both strong stewards of their land and significant contributors to their regional economies—as providers, employers, and consumers of regional products and services. Yet business-related challenges, including high equipment and infrastructure costs and difficulty finding and paying for labor, ranked high on a list of core challenges farmers face.

Regenerative practices often require up-front financial investments in equipment, infrastructure, and inputs. Returns on these investments, while they can be significant, can take years to realize. Farmers who adopt regenerative systems must also invest in their own learning, developing new ways of farming that might be different from their neighbors or from the previous generation. Farmers who are stressed by high costs or constrained by debt are less likely to have financial or mental resources to draw on to make changes that will help reduce those costs in the long run. Creating opportunities for them to plan for improved profitability and business viability alongside adopting regenerative systems can be a powerful way to encourage a shift in their outlook and management.

According to Guidelight Strategies, "Regenerative transition plans are often difficult to implement because producers need additional capital beyond…government funds to help finance the operational, equipment, and/or infrastructure needs that are associated with the adoption of new crops and practices. Traditional lending institutions lack the appetite to finance

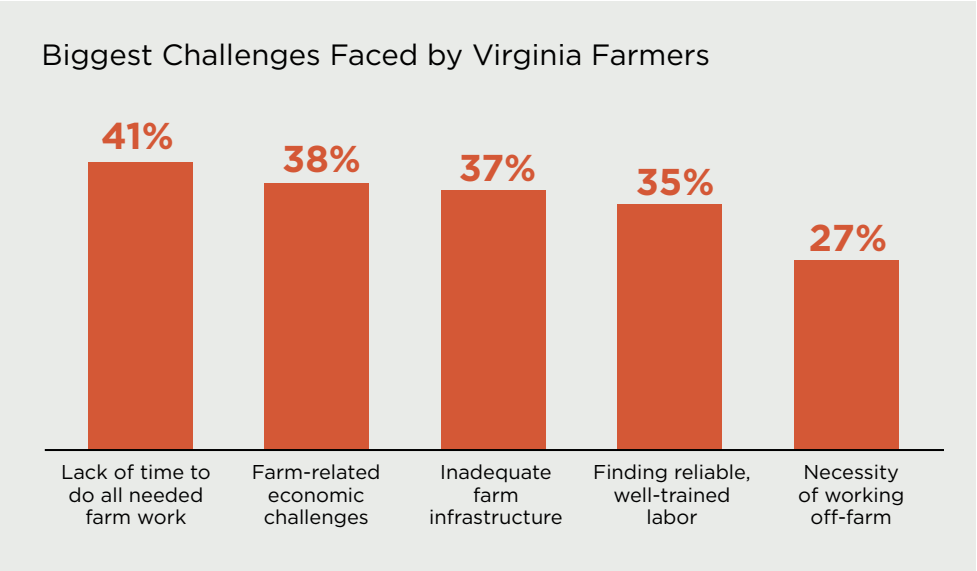


Figure 4. Challenges identified by respondents to AFT's spring 2022 survey of Virginia farmers

PRESTON KERES/USDA

The Case for Improving Infrastructure

Beef markets make a significant contribution to Virginia's thriving agriculture and a large concentration of cattle (127,522 head, according to the 2017 Census of Agriculture) is found in the Rappahannock region. This region is located within a 2-hour drive of 6.2 million people with substantial opportunities for direct retail and other markets. Yet, there is only one USDA-inspected slaughter and processing facility in the region.

the early stages of regenerative agriculture.... Yet, to realize the climate mitigation potential associated with the implementation of regenerative agricultural practices and the restoration of our landscapes, 'more than $700 billion in estimated net capital expenditure over the next 30 years will be needed'." This suggests that, in addition to ensuring that regenerative farmers can access Farm Bill programs, there is a need for alternative models and mechanisms for capital investment, both in individual farms and across agricultural production and supply chains.

Examples of such mechanisms include the Pennsylvania Farm Vitality Planning Grant program, in which farmers receive funding to work with consultants to create conservation and business plans, and the Massachusetts Farm Viability Enhancement Program, in which a farmer receives technical assistance to create a business plan and is then eligible for significant grant funding to implement their plan. Both programs are successful models that have garnered many inquiries from farmers in neighboring states. Combining planning efforts with much-needed funding provides farmers with analytical tools to use funds wisely while ensuring that the plans created can be powered by meaningful investments. When done well, farm viability programs can yield tremendous impact, strengthening the soundness and resilience of diverse farm operations. Future Harvest—a Chesapeake region nonprofit focused on small and mid-scale sustainable farms—has piloted a program with some of these same elements. Through their "Pick Your Own Consultant" program, farmers receive funding to consult with experts on a subject of their choosing. Many elected to pursue business planning and management goals, further demonstrating the critical need for these services in the region. These efforts and others can be replicated and expanded in Virginia.

Another model combining environmental goals with business development efforts is Vermont's pilot program to provide farmers with outcomes-based payments for improving soil health. This voluntary program, which aims to reward long-term soil health practitioners as well as those who adopt new practices, emphasizes the importance of rewarding farm stewardship that produces benefits beyond the farm fence line. This type of program, which builds upon rather than replaces existing payment for practices, can help catalyze and reward innovation among farmers of all sizes and production methods, and could be an important step for Virginia to take to incentivize both practice adoption and business development.

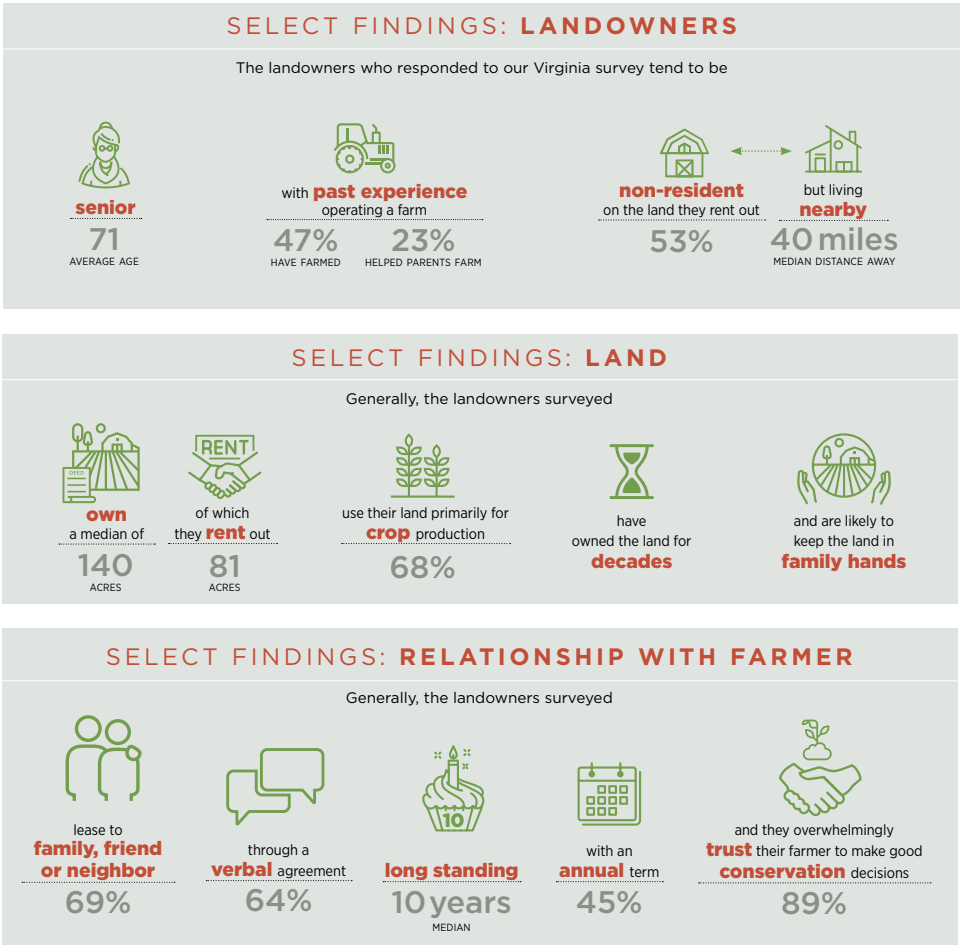
AFT's Soil Health Economic Case Studies provide important evidence that effective implementation of soil health systems can have a positive impact on farmers' bottom lines. In the long term, therefore, farmers who are initially compensated for ecosystem services may find that their profitability is ultimately improved by those systems alone. Alternatively, in some cases policymakers may determine that

the public benefits of these systems are great enough to warrant long-term payments to farmers. In either case, continuing to evaluate the costs and benefits to farmers of adopting regenerative systems on short-, medium-, and long-term time scales is critically important work to determining the best way to incentivize farmers to adopt them.

Linking business vitality and viability planning with farmland protection and access can ensure that protected land is available to incoming farmers who can then rely on secure land tenure to build resilient, profitable operations that focus on excellent stewardship following regenerative practices. AFT recognizes the need for this work in Virginia in part because we do it elsewhere. Our Brighter Futures grants and New England microgrants, for example, direct funding to farmers to expand production, increase land access, and undertake farm succession and business planning. Unfortunately, these actions are often viewed as a luxury on farms. Because of the challenges they face, farmers are often so hyper-focused on surviving in the present that it is difficult to think about the future. AFT's Brighter Futures grants enable farmers to look forward. Similar programming targeting farmers in Virginia can help them take meaningful steps to make their farms more viable.

> **"Implementing practices with long-term benefits (both financial and environmental) is difficult on leased land. We need methods to improve the security of long-term leases or programs to help small-scale farmers be able to afford land in a competitive environment."**
>
> **— FARMER AT AFT LISTENING SESSION**

If the vision is to transform Virginia agriculture, it is not enough to only focus on farmland that is owned by farmers. One-third of Virginia farms are operating on at least some rented land, about 2.7 million acres across the state. We need specific, creative strategies to help these farmers adopt or expand regenerative practices and improve farm viability. Some of these strategies may include connecting with the non-farming owners of rented agricultural land, often called "non-operating landowners," or NOLs. AFT's 2020 survey of NOLs in Virginia showed that these landowners are often former farmers themselves, are committed to keeping their farmland in the family, and are open to long-term, conservation-minded lease arrangements. With interest from both parties in the land lease dynamic, opportunity abounds for progress to help farmer-renters improve both their stewardship and their bottom line while also meeting the conservation and land preservation goals of the non-operating landowner.



Non-Operating Landowners: Key Collaborators for Regenerative Agriculture

At their best, farm viability efforts extend beyond the farm to include the broader food system. Led by groups like the Virginia Soil Health Coalition, Future Harvest, and 4P Foods, efforts are underway in Virginia to increase consumer awareness of the importance of regenerative agriculture and to develop markets and infrastructure for regenerative products in all sectors of the supply chain. AFT can add value and depth here by

> **"[Farming] is about resilience. It's about self-sufficiency. And it's about not only being able to take care of yourself, but taking care of your neighbor when they need a hand."**
>
> **— FARMER AT AFT LISTENING SESSION**

supporting infrastructure and food system improvements that drive and support innovative, diversified regenerative production. These efforts will undoubtedly help farmers. They will help consumers, business, and entire communities, too.

Within a discussion of building viability and vitality on Virginia farms, it is critical to mention that diversity—of farm size, farming enterprises, farm ecosystems, and farmers themselves—is essential to ensuring the strength and resilience of Virginia's agricultural fabric. In every case, farmers who have too often been underrepresented in efforts to advance regenerative agriculture must be engaged. This includes USDA's definition of "historically underserved producers" (namely, socially disadvantaged, veteran, limited resource, and beginning farmers) as well as women and LGBTQIA2+ farmers.

Except for women farmers, underrepresented individuals make up a relatively small percentage of Virginia's farmers and control a small amount of its farmland. For example, only 2% of Virginia's farmers are Black, and roughly 1% are Latino or Hispanic. These numbers do not reflect the state's overall population diversity. Historical and contemporary barriers are significant for these groups. These barriers include, among many others, systemic racial discrimination by USDA programs, wealth gaps that make accessing farmland and capital challenging, and unequal financial support for agricultural extension services for these populations. Many of these barriers manifested in the past, but they do not remain there. The impact is still present. A recent study out of the University of Massachusetts, for example, estimates that Black farmers in the U.S. lost $326 billion in wealth via land loss in the twentieth century alone. Virginia's history of chattel slavery and unequal investment in its Black farmers compounds the added inequities faced by socially disadvantaged producers. In 1920, there were roughly 31,000 Black farmers in Virginia. As of the 2017 Census of Agriculture, there were less than 1,700. That's a decline of nearly 95%. There is a gap—an injustice—that must be reckoned with here in any effort to advance regenerative management.

A group not traditionally considered underserved is small and mid-sized farmers. They may not fall within the usual definitions, but they nonetheless experience unique challenges in Virginia. AFT's Transforming Agriculture for Resilience data shows that while 63% of Virginia farms over 1,000 acres receive federal conservation or wetland aid, only 11% of farms under 500 acres receive this aid, *despite* managing 1.5 times as many total acres. That is a tremendous opportunity that is being missed to promote and equitably fund better stewardship.

Many small and mid-sized farmers engaged through our listening sessions and survey mentioned the specific issues they faced finding time or expertise to navigate the federal cost share system or find relevant technical assistance. Local nonprofit and government leaders offered similar feedback during extended interviews, expressing how farmers operating on this scale are often at a major systemic disadvantage and struggle to get the support they need despite being critical components of local communities and economies.

> **"A lot of the small growers are going through the cracks…"**
>
> **— FARMER AT AFT LISTENING SESSION**

Since AFT's data also indicates that socially disadvantaged farmers, including Black farmers, are highly likely to operate farms under 500 acres in size, these challenges are amplified for them. Land access can also be challenging for small farmers—especially those just starting out. AFT's experiences elsewhere indicate that a suite of solutions—like Buy-Protect-Sell programs, land protection efforts that reduce sale value and thus make land more affordable, streamlined land protection initiatives, robust transition and succession support, and alternative ownership models—could be brought to bear to address this insidious struggle in Virginia agriculture.

Regenerating Virginia
VISION, GOALS, STRATEGIES

REBECCA DROBIS

With decades of proven experience protecting farmland, promoting better farming practices, and supporting farmers, AFT is uniquely positioned to catalyze regenerative agriculture in Virginia. By serving as a unifying thread with multiple partners, AFT can connect disparate endeavors into a united effort to serve people, places, and the planet. And when and where appropriate, we can bring entirely new resources, leadership, and capacity to the state. By thoughtfully and vigorously complementing, collaborating, and contributing, AFT can make a lasting difference in Virginia's agricultural communities.

The integrated action plan outlined here is designed to meaningfully advance regenerative agriculture in Virginia. The proposed vision, goals, and strategies are built upon past experience and proven models, as well as diverse quantitative and qualitative research—including dozens of in-depth partner interviews, thorough literature reviews, statistical analyses of farmer-focused data, geospatial exploration, a farmer survey that collected more than 100 responses from across the state, and several carefully crafted listening sessions.

The action items we present are aimed at supporting farms of all sizes

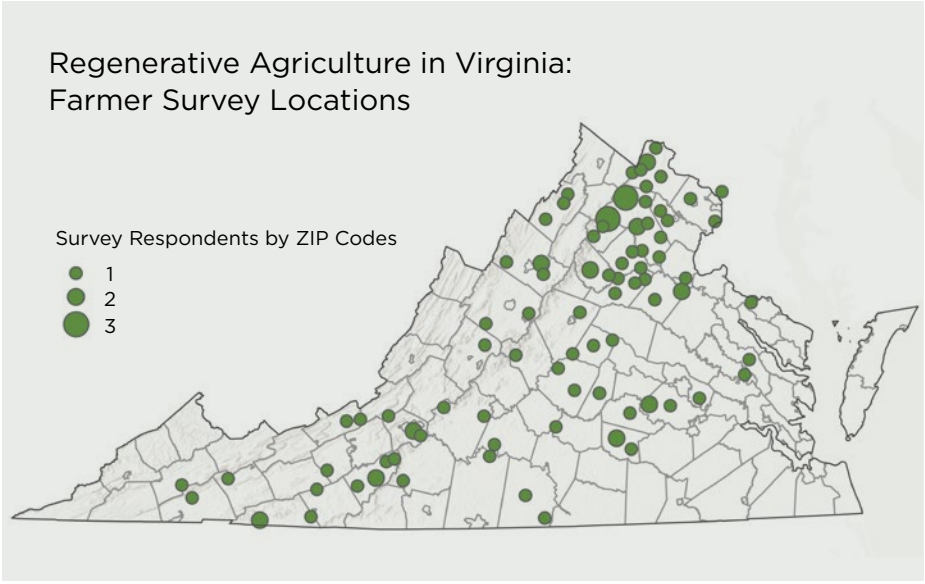


Figure 5. Zip code distribution of respondents to AFT's farmer survey, Spring 2022

and types—from large row crop farms and small and mid-sized livestock operations to diversified specialty crop systems, urban farms, and more—that represent the breadth of Virginia's agricultural heritage, the potential of its present, and the promise of its future.

The Vision

We envision a farming and food system in Virginia that produces abundant, healthy food; enhances soil health; supports functioning ecosystems where wildlife thrives; sustains thriving agricultural communities; addresses climate change; and creates opportunities for people of all backgrounds.

Providing resources and services for small- and mid-size farmers directly supports more diverse farmers. AFT's Virginia TARp data shows that in counties reporting Black farmers, average farm size for Black owned farms is 126 acres, nearly half the size of the average white-run farm in these counties at 215 acres.

This approach to farming prioritizes connection with and affection for place. These virtues in turn help yield commitment to land and people—and by extension, to the planet.

The goals and strategies that serve this vision are designed to provide a comprehensive road map to regenerative agriculture for Virginia. AFT could lead many of these strategies. In other cases, we would prefer to play a supporting role to other leaders in the region. Whether we bring our national programs to bear in a regionally appropriate way or engage in local, place-based collaborations, we look forward to playing a variety of roles that complement—rather than compete with—the good work already happening in the region.

The recommended goals and strategies are grounded in experience, data, and engagement. We listened closely to stakeholders, learned from farmers, and analyzed quantitative and geospatial data. We conducted literature reviews and engaged expert AFT staff. We also drew from our own farming experiences, applying lessons learned in our own fields, barns, and pastures to this effort. In every way, the strategic recommendations flow from our diverse research, engagement, and experiential efforts.

Three key themes apply to each of the goals and strategies:

- **Partnership is key to successful implementation.** Whether through shared staffing, public-private partnerships, collaborative projects, or other models, developing genuine relationships with and among farmers, other non-profit organizations, research institutions, supply chain partners, and governmental entities is essential to realizing a regenerative food system at scale.
- **Transformational change at scale needs to be viewed through two different but complementary lenses.** One is broad acreage transformation, engaging farmers who can implement regenerative systems on a large scale. The other is broad-based engagement of small and mid-sized farmers, who are likely to implement complex, differentiated, place-based regenerative systems that, while they may impact fewer acres per farm, yield outcomes equally as profound as those of large-scale farmers, as their combined acreage is more than equivalent. Setting a specific intention to engage with small and mid-sized farmers includes using the business vitality goals of regenerative agriculture to help reverse the decades-long trend of loss and marginalization of farms of this size. This focus also helps catalyze connections with historically underrepresented farmers, who are most likely to fall into these smaller farm size categories.
- **Ensuring that the on-farm and off-farm benefits of regenerative agriculture are maintained for the long term requires keeping land in farms and farmers on the land.** A holistic and integrated approach to farmland protection and access, farm transition and succession, and farm business viability, in which programs promoting these components are connected and complementary, is a fundamental objective of this action plan.

GOALS

Goal 1. Promote the widespread adoption of regenerative farm systems.

Expand technical and financial support to farmers for their transition to regenerative production and to grow support for vibrant peer-to-peer communities of farmers engaged in regenerative agriculture.

Goal 2. Catalyze a new wave of agricultural land protection, access, and transfer.

Create innovative opportunities to protect farmland and support a new generation of farmers, by (a) advancing regenerative practices and systems on protected land, (b) protecting more land that is farmed regeneratively, and (c) helping exiting farmers and non-operating landowners successfully transfer their farms to the next generation.

Goal 3. Strengthen farm viability and enhance community support for regenerative farming.

Support robust business management strategies to help farms adopt regenerative practices and systems, bolster local and regional markets for regeneratively-farmed products, and increase farm profitability through innovative production and distribution systems, and where practical and appropriate, through smart solar siting, including dual-use solar.

BROOKS LAMB

Strategy 1. Develop business management capacity to ensure financial viability for regenerative farms.

Create a Farm Vitality Planning Grant Program based on successful models in other states to support farmers in the creation of plans for long-term financial viability and successful succession. Provide grants to farmers for advanced management and succession training and consulting to create and implement regenerative farm plans, ensuring that underrepresented farmers have equitable access to these opportunities and support for plan implementation.

CASE STUDY

Farm Vitality Planning Grants

LANCE CHEUNG/USDA

Farm business viability is essential to keeping land in farms and keeping farmers on the land. Success with regenerative farming requires not only the knowledge of new practices, but also new management systems to incorporate those practices into the farm business in the best manner possible. In short, the successful adoption of regenerative practices relies upon sound business planning.

Massachusetts and Pennsylvania both provide funding for business planning and technical assistance for established farms via a competitive process. In Massachusetts, farms that enroll in the Farm Viability Enhancement Program receive one-on-one technical assistance to improve the viability of their farm business. If the business plan identifies a need for a capital project to help support that business plan, the farm may be eligible for a grant of up to $150,000 in exchange for signing a covenant to keep the land in agricultural use for up to fifteen years. Farms must be commercial enterprises generating a minimum of $15,000 per year and operating on at least 5 acres of owned land.

Massachusetts's program is funded through bond authorizations and is generally significantly oversubscribed. Massachusetts also provides funds for infrastructure improvements to support new and expanding farm enterprises on land that has been permanently protected through its APR Improvement Program and for assistance and matching grants to new and expanding farmers who aspire to develop their farms into commercially viable operations through the Matching Enterprise Grants for Agriculture Program.

Pennsylvania's program provides funds for planning only, with grants up to $7,500 per farm to create plans for long-term economic viability, transition and succession planning, diversification, or seeking financing for expansion or growth. Pennsylvania's program is funded by the Pennsylvania Farm Bill, which was passed in 2019, and received $1,000,000 in funding in FY20–21; it is reimbursement based and provides up to 75% of project costs per farm. Farmers can choose from a broad assortment of consultants to provide exactly the type of services their farm needs.

Virginia's farms would benefit from a program funding business vitality and succession planning, particularly one prioritizing regenerative practices in its ranking process. Capital, equipment, and infrastructure projects are also a key funding need for farmers in general, and especially those who are transitioning to regenerative production and may require new or upgraded equipment, processing or storage facilities, or marketing infrastructure.

Strategy 2. Build effective peer-to-peer education among farmers working to adopt regenerative practices and systems.

Foster farmer learning and social networks to increase knowledge, skills, and access to resources to implement regenerative practices and business management. Hire, train, and coordinate farmers across Virginia to serve as mentors focused on adopting and sustaining regenerative systems and supporting business plans. Where appropriate, have these farmers train and mentor service providers, host on-farm demonstrations and research trials, and speak at events. Prioritize support and networks for farmers of all production types and facilitate peer-to-peer guidance for innovative production systems.

CASE STUDY

Women for the Land Learning Circles

AFT hosts Women for the Land Learning Circles across the country. These non-hierarchical, participant-driven learning opportunities allow women farmers and farmland owners—a critical and growing demographic in agriculture—to connect with one another and access resources, knowledge, and networks to enable their success. Thanks to funding from the Farm Service Agency, AFT partnered with the Black Family Land Trust to offer learning circles aimed at helping Black women farmers in North Carolina and Virginia navigate the complex web of federal, state, and local financial and technical resources available to support their farm enterprises.

In partnership with the Black Family Land Trust, Virginia State University's Small Farms Outreach Program, and Africulture, AFT coordinated two virtual coffee hours and two in-person learning circles in North Carolina and Virginia in 2021–2022. Resource providers from USDA-NRCS, Rural Development, Soil and Water Conservation Districts, Virginia Cooperative Extension, and the Virginia State Small Farms Outreach Program attended the Learning Circle and educated the women about the variety of technical and financial assistance programs available to them. Participants also toured Carter Family Farm and Sweet Vines Winery, two successful Black-owned agricultural businesses.

Participants in these Learning Circles expressed considerable interest in continuing to meet and support one another around specific issues including business plan development, obtaining a farm number, applying for specific USDA and state funding opportunities, and navigating necessary business licensing and permitting.

The Learning Circle model is one example of the power of peer-to-peer learning and mentorship among farmers, particularly when these networks are created with intention and structure to help facilitate the co-creation and transfer of regionally appropriate knowledge, and to help participants access resources. Strengthening these networks across Virginia will build farmer capacity to adopt more regenerative practices statewide.

REBECCA DROBIS

CASE STUDY

Sustainable Grazing Project

Mentorship and peer-to-peer learning are key strategies to increase adoption of regenerative systems. AFT's Sustainable Grazing Project is a powerful example of how these strategies have been used here in Virginia to develop and disseminate regionally specific best management practices for regenerative production, while also contributing to market development and farm business viability.

Launched in 2019, the Sustainable Grazing Project is focused on demonstrating and promoting the adoption of regenerative livestock production practices through its network of 18 pilot operations across six counties in the Rappahannock region that enhance soil, water, and wildlife conservation while sequestering carbon and increasing productivity. Additional project priorities include:

- Promoting livestock production practices for increased efficiency, profitability, and animal welfare
- Supporting land access and protection
- Increasing food systems infrastructure
- Supporting agricultural product marketing and market access
- Assisting with economic development, land use planning, and policy development
- Supporting business planning and record keeping to capture the economics of sustainable grazing systems

Farmers engage with the Sustainable Grazing Project in several ways. The project's original pilot producers implement innovative rotational grazing and conservation practices and document these through digital record-keeping software, tracking their production expenses and outcomes and sharing this information with one another and with others. Some are connected through research that helps highlight impacts of various grazing and haying practices on grassland birds in partnership with the Smithsonian's Virginia Working Lands program, while others receive one-on-one mentorship in collaboration with the Virginia Forage and Grassland Council's successful mentoring program.

A new effort within the project focuses on assessing the economic and environmental impacts of integrating animals into annual crop production through cover crop grazing. Project partners are helping develop a range of markets for regeneratively produced beef that enables producers to be nimble and maximize profits on their operations. The project also operates an equipment-share rental program that makes key labor-saving infrastructure available to more farmers. Producers gather quarterly on one another's farms for a tour, dinner, and socializing that often lasts into the night.

The Sustainable Grazing Project showcases the tremendous and diverse outcomes that can arise from the creation of peer networks and mentoring opportunities, and its methods and findings are being disseminated to a much larger audience through written articles, producer workshops that are open to the public, and both in-person and virtual conference presentations.

REBECCA DROBIS

Strategy 3. Improve quality and availability of technical assistance for regenerative production and management.

Strengthen professional development programs to ensure that technical assistance for regenerative systems planning and implementation and business development is robust and capable of reaching multiple audiences. Where appropriate, provide specialized training to audiences not served by existing programs (e.g., non-operating landowners, land protection professionals, farm service providers, underrepresented farmers).

JACOB GILLEY

Strategy 4. Coordinate and create creative, equitable opportunities for financing transitions to regenerative production and management.

Supplement and coordinate ongoing efforts to ensure that financial assistance for regenerative systems planning and implementation is available and accessible. Explore innovative models that combine training with funding for transitions to regenerative production, including incentives, creative lease agreements, subsidized crop insurance, loan rebates, partial credit, patient or philanthropic capital, or take-off agreements. Analyze and work to overcome barriers to funding identified by underrepresented farmers.

CASE STUDY

Innovative Financing

The Mid-Atlantic region is fortunate to have several examples of innovative public and private programs to enable farmland transfer and business development. Maryland Agricultural and Resource-Based Industry Development Corporation (MARBIDCO), a quasi-public economic development organization chartered by the state of Maryland, has several grant and loan programs aimed at helping finance farmland purchase and business development for next generation and veteran farmers, including a program specifically geared toward small-acreage farmland purchase.

Delaware's Young Farmers Program, a program of the state Department of Agriculture that was established in 2011, offers a 30-year, no interest loan to help young farmers purchase a minimum of 15 acres of farmland, one of the chief obstacles to starting out in business. Loans can be for up to 70% of the appraised value of the farm's development rights, not to exceed $500,000. Farms in the program are placed into a permanent preservation easement. To date, 36 young farmers have received $8 million in loans to purchase over 2,800 acres of land.

REBECCA DROBIS

In Virginia, FoodShed Capital offers low- and no-interest operating and capital loans and business development technical assistance to local, regenerative farms and food businesses. To date, over 80% of their financial assistance has gone to farms and businesses owned at least in part by women or people of color. According to their website, their Black Farmer Equity Fund works to "demonstrate FoodCap's commitment toward systemic change through a reparative lending model. The fund helps ensure the continuance and availability of 0% patient, unsecured loan capital for Black farmers." They also support two emerging Agrarian Commons initiatives that are working to demonstrate resilient food systems based on community ownership of farmland in Richmond and Roanoke, Virginia. In 2022, FoodShed Capital engaged in its first loan for purchase of farmland.

LANCE CHEUNG/USDA

Strategy 5. Increase capacity of land protection organizations and local governments to support regenerative production and management.

Increase capacity for land trusts and state and local farmland protection entities to create, execute, and steward innovative agricultural conservation easements, use farmland protection as a tool for farmland transition, and share best practices and fundraising opportunities. Support local and county governments in prioritizing and documenting farmland protection. Provide technical assistance to land trusts and Purchase of Agricultural Conservation Easement programs in their easement drafting and stewardship efforts to encourage regenerative practices, enhance flexibility for farmers, and consider tools and mechanisms to lower the appraised value of protected land so that it is more affordable for the next generation of farmers. Where possible and appropriate, couple easements with stacked, adjustable regenerative management plans to ensure environmentally sound practices on protected land. Build upon existing AFT programs to offer farmland access training to land protection professionals and non-operating landowners.

Strategy 6. Facilitate access to land for a new generation of farmers prepared to advance regenerative practices and systems.

Add capacity and services to the existing Farm Link program, including technical assistance, wraparound services, and program evaluation. Expand AFT's Buy-Protect-Sell plus (BPS+) program to Virginia to facilitate farmland access opportunities by making land more affordable for emerging and next-generation farmers, prioritizing underserved farmers. Identify transitioning farmers and potential farm buyers; create a revolving funding pool to purchase farms; protect them with an agricultural conservation easement that includes a flexible regenerative management plan wherever appropriate; and sell to new owners at a reduced cost. Explore opportunities to work with alternative land ownership models to further facilitate farmland access. Consider working with county governments to establish or increase funding sources for purchasing agricultural conservation easements.

CASE STUDY

Singing Hills Farm: A BPS+ Success Story

Singing Hills Farm sits on 25 acres of rolling pasture outside of the Twin Cities in Minnesota. The farm has long been producing healthy food for the community and hosting an array of wildlife. Lynne Reeck poured herself into stewardship for decades, helping make the farm a special place.

But Lynne couldn't farm forever. Ready to retire, she made the difficult decision to sell the land. Yet because of the development pressure closing in, she was afraid that new owners may pave over the farm. Lynne wanted to find a committed caretaker to carry forward the land's regenerative legacy.

That's where AFT stepped in. Through its BPS+ program, AFT purchased the farm from Lynne, making sure she saw a fair price for the property. Our land protection team then helped craft a suitable agricultural conservation easement for the farm, ensuring it could remain productive in perpetuity. AFT worked to identify a farmer who was interested in purchasing and caring for the land.

Working with trusted regional partner Renewing the Countryside, AFT found the Lor family. For the past 20 years, they've farmed on rented, noncontiguous land. With the explosive growth in their area over the last several years, it could take an hour to travel between their various leased parcels. Often, during the growing season, they would work late into the night and sometimes camp next to their fields to save time harvesting and driving to the farmers markets where they sell produce.

Renting farmland was a constant source of stress for the Lors. Land had been sold out from under them more times than they could count. They had lost thousands of plants over the years when land they were farming was

sold without warning. Year after year, they worried about whether leases would be renewed. They were hesitant to make investments in the property, or diversify with more perennial crops or livestock, for fear of losing access to that land base.

AFT's BPS+ program was a perfect fit for them. Because AFT could be patient with the selling process, the Lors had time to get their financing in order. They also benefitted from a well-crafted agricultural conservation easement on the property, which both aligned with their environmental ethic and made the farm more affordable. The project was, and is, a win-win all around—helping a farming family secure land while enabling a devoted farmer to retire without worry.

AFT can expand this model to Virginia. With support, we can protect vulnerable land, ease the arduous farm transition process, and bring more regenerative farmers onto the land.

Strategy 7. Promote secure land tenure and succession planning for farmers who adopt regenerative management.

Increase support for farmers around land access, secure land tenure, heirs' property, and succession planning. Provide estate and succession planning workshops and legal assistance in targeted counties to help landowners avoid heirs' property issues. Offer financial support to heirs' property farmers to help them reconcile title issues and secure land ownership. Work with lenders and others, including public entities, to create appropriate, equitable and flexible financing options for land purchase, farm viability, and assistance with business succession.

Strategy 8. Expand ecosystem services payments to support regenerative production.

Engage with regional thought leaders around the meaningful potential of ecosystem service markets to support regenerative production on all scales through verified outcomes payments. Assess how best to capture the variety of ecosystem services provided by small and mid-sized farms. Create recommendations for how those farms can be equitably compensated for those outcomes. Evaluate the effectiveness of ecosystem services payment efforts to provide opportunities for farms of all sizes to transition to regenerative production, with particular attention to opportunities for underrepresented farmers.

Strategy 9. Advance smart solar to support farmers and rural communities.

Support incentives to encourage smart solar to minimize displacement of agriculture on the state's best farmland and ensure common sense protections and mitigation measures for the most productive farmland. Survey farmers to identify desired dual use systems and potential policy recommendations and communicate results with key partners. Develop a statewide smart solar siting report and guidebook for farmers to help navigate a broad and diverse range of solar questions and scenarios. Where possible and appropriate, encourage the wider adoption of thoughtful, farmer-first, right-sized agrivoltaics systems for various production systems.

AGRISOLAR CLEARINGHOUSE

RENE CARRANZA/USDA

Strategy 10. Build markets, supply chains, and infrastructure for products from farms that embrace regenerative practices and systems.

Engage with all levels of the supply chain to encourage the purchase, processing, and distribution of products from farms that adopt regenerative practices and systems, by working with local food hubs, commodity purchasers, institutional buying programs, or other marketing efforts designed to support market opportunities for small and mid-sized farms. Support public and private investment in regional and local infrastructure for such products. Create and support innovative alliances among supply chain partners and local and regional nonprofits to provide needed technical and financial support to farmers, wherever practical and efficient. Support and promote consumer education programs that enable farmers to capitalize on their commitment to regenerative productions. Showcase such farmers to increase awareness among processors, commodity purchasers, and consumers about the benefits of regenerative agriculture.

Every farm's pathway to regenerative management looks different. The process can evolve over years or even decades and is specific the farm as it adopts regenerative systems.

to the farm's context and goals. The illustration here includes many potential shifts in the ecology, economy, and community of

“Why do farmers farm, given their economic adversities on top of the many frustrations and difficulties normal to farming? And always the answer is: ‘Love. They must do it for love.’ Farmers farm for the love of farming. They love to watch and nurture the growth of plants. They love to live in the presence of animals. They love to work outdoors. They love the weather, maybe even when it is making them miserable. They love to live where they work and to work where they live. If the scale of their farming is small enough, they like to work in the company of their children and with the help of their children. They love the measure of independence that farm life can still provide.”

—**WENDELL BERRY**, FROM “CONSERVATIONIST AND AGRARIAN”

LANCE CHEUNG/USDA

Call to Action

REBECCA DROBIS

If we don't act with courage, conviction, and urgency, the Commonwealth will face a challenging future. Close to 1 million acres of the state's irreplaceable agricultural land could be lost to development in the next two decades. Proven regenerative practices that benefit people, places, and the planet will not take root. Because of economic challenges, the fate of family farms—especially those led by underserved, lower-wealth, and smaller-scale farmers—will be uncertain at best. More likely, many farms will be pushed so far to the margins that their very survival will be threatened.

The holistic adoption of regenerative agriculture could prevent this unwanted prospect. But the embrace of regenerative systems will do more than protect against negative outcomes. It will generate a bright and hopeful future for farms and farmers across Virginia.

The strategic efforts identified in *Regenerate Virginia* will ensure we have a sustainable land base to grow food, support ecosystems, and strengthen communities. These efforts will help a new and more diverse generation of farmers access land while enabling exiting farmers to retire with confidence. They will generate value, economic and otherwise, for farmers who pursue better days through better ways, who use regenerative practices to become ever better stewards of their land. And they will help make Virginia agriculture a solution to the climate and environmental crises we all face, keeping care and commitment front and center in the minds of farmers, leaders, and consumers alike.

USDA

Regenerating Virginia means that:

- Virginia's crop and livestock farms will become healthier, more resilient ecosystems that provide a slate of environmental benefits, including clean water, above- and below-ground biodiversity, and greenhouse gas emissions reductions. Regenerative landscapes—including diverse crop rotations, rotationally grazed pastures and other perennial systems, agroforestry and silvopasture, and renewable energy generation where it makes sense for the farm and ecosystem—will support robust, financially viable regional food and fiber production while providing significant ecosystem services.

By embracing rotational grazing, reduced tillage, cover cropping, and silvopasture, Virginia can reduce its emissions by 960,000 metric tons of carbon dioxide equivalent annually as measured by AFT's CaRPE™ tool, offsetting about 15% of Virginia agriculture's emissions.

- Virginia's landscape will be filled with permanently protected farms that form the foundation of agricultural communities and the backbone of local, state, and regional food systems. Beyond permanent protection, planning, regulatory, and programmatic strategies at state and local levels—along with potential ecosystem services credits—will contribute to a tapestry of productive farmland, enabling the state to envision and engender a sustainable future.

By 2050, Virginia could permanently protect 750,000 acres of farmland—or about 10% of its current agricultural acreage—securing an estimated $320 million in annual farm output and over 11,800 jobs.

- A diverse group of beginning and next generation farmers will be able to access secure land, sufficient capital, and solid business technical assistance. Supported by loyal, informed consumers and

REBECCA DROBIS

REBECCA DROBIS

LANCE CHEUNG/USDA

supportive supply chain partners, Virginia farms of all scales will be financially successful, enhancing the vibrancy of rural and urban agrarian economies.

These visions are bold. And compared to the status quo, they are ambitious. Yet they're achievable—if we work hard and work together.

Regenerate Virginia reveals a way forward, one blazed by research, experience, and engagement. Now, it's on us—all of us—to follow that path.

Virginia could address generational turnover head-on, adding at least 26,000 new farmers by 2050. Given trends over the last few decades, this outcome signals a much-needed redirection for Virginia agriculture.

JACOB GILLEY

Appendices

REBECCA DROBIS

APPENDIX A

Brief Summary of Select Research and Engagement

Regenerative Agriculture in Virginia—Spring 2022 Farmer Survey

Through our survey, we collected responses from just over 100 farmers in Virginia. Intentional in our outreach, we engaged farmers from across the entire state, aiming for broad geographic representation. Our responses were diverse in terms of demographics, too, even representing an over-sampling of underserved groups.

We designed the survey to better understand the needs of farmers in Virginia, especially as these needs relate to adopting or enhancing regenerative systems. While largely a multiple-choice format—as most surveys are—we also allowed interested farmers to share their thoughts via custom, freeform responses. The survey yielded a wealth of information that informed *Regenerate Virginia* and will continue to inform other efforts in Virginia, the Mid-Atlantic, and beyond.

Farmer Listening Sessions

Wanting insights that go deeper than survey responses, we hosted listening sessions where farmers could share their thoughts, feelings, hopes, and concerns through conversation. To ensure that we engaged in the most informative, useful, and respectful ways, we hired an outside consultant to help facilitate these sessions.

Through four different listening sessions and five one-on-one interviews, we connected with and learned from 16 farmers from 15 different farms representing a diversity of backgrounds, farm sizes, and production systems. These connected individual and group conversations allowed us to dive further into important issues and better understand how we can serve farmers and advance regenerative agriculture across the state.

Stakeholder Engagement Interviews

Recognizing the deep and broad expertise of state and local experts—and knowing that any true progress in the realm of regenerative agriculture must embrace partnerships and collaboration—we interviewed more than three dozen people to better understand what they feel is needed to help better serve farms and farmers in Virginia. These people represented a diversity of entities (from nonprofits, state agencies, and universities to industry associations, advocacy groups, and individuals) from varying backgrounds and perspectives (agriculture, environment, ecology, energy, policy, equity, education, business, industry, and more). Most of our initial conversations lasted about an hour.

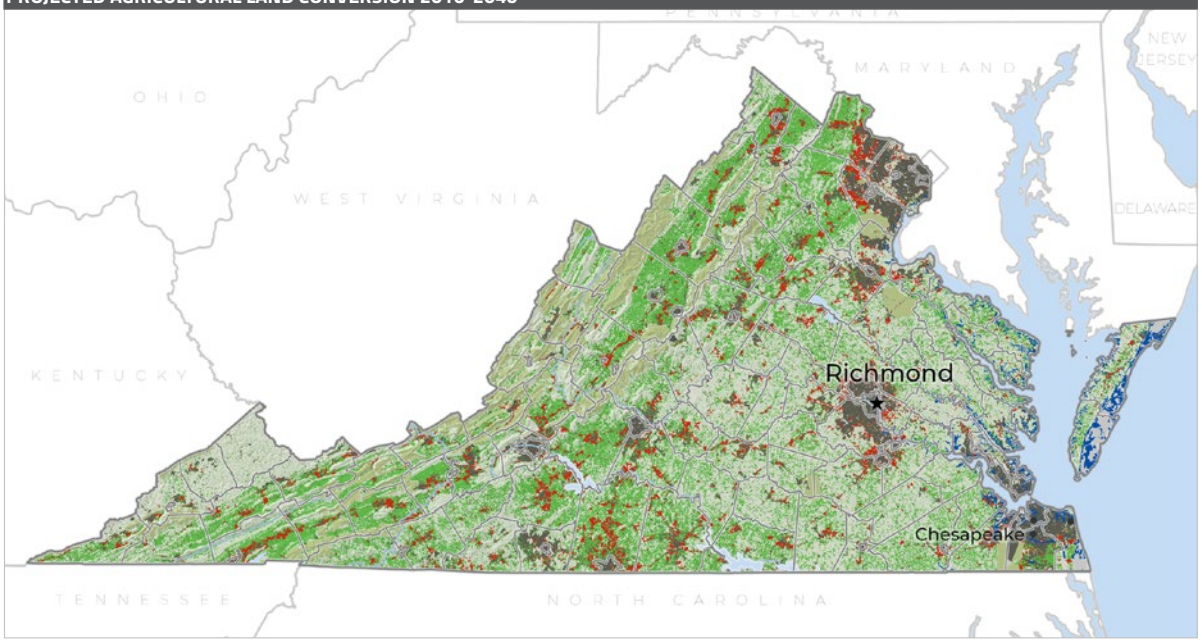
In some cases, we followed up with stakeholders two or three times, continuing to learn from their grounded expertise. A handful of stakeholders reviewed our strategies and offered crucial guidance. The engagement process was a foundational element to *Regenerate Virginia,* and it's a process we hope to replicate in the future in other states.

FARMS UNDER THREAT

2040 Future Scenarios
Virginia

Farms Under Threat 2040: Choosing an Abundant Future mapped three scenarios of development between 2016 and 2040. If recent trends continue, **594,100 acres** of Virginia's farmland will be paved over, fragmented, or converted to uses that jeopardize agriculture. **That's 7%.** Virginians can slash conversion, save farmland, and safeguard the future of agriculture and the environment by choosing compact development.

PROJECTED AGRICULTURAL LAND CONVERSION 2016-2040



Projected agricultural land conversion from 2016-2040 in the *Business as Usual* scenario.

Projected Conversion and Flooding (2040)

- Urban and highly developed (UHD) and low-density residential (LDR)
- Coastal flooding

Land Cover (2016)

- Farmland*
- Forestland
- Federal (no grazing)
- Other lands
- Urban areas
- Water

**Farmland is composed of cropland, pastureland, and woodland associated with farms.*

On recent trends, from 2016 to 2040:

Virginians will pave over, fragment, or compromise

594,100 acres

of farmland.

56% of the conversion will occur on Virginia's best land.[1]

That's the equivalent of losing

3,800 farms,

$254 million

in farm output, and

9,400 jobs

based on county averages.[2]

Hardest-hit counties:

- **Pittsylvania**
- **Loudoun**
- **Franklin**

[1] *Freedgood et al. 2020*
[2] *Census of Agriculture 2017*

American Farmland Trust

WHICH FUTURE WILL WE CHOOSE?

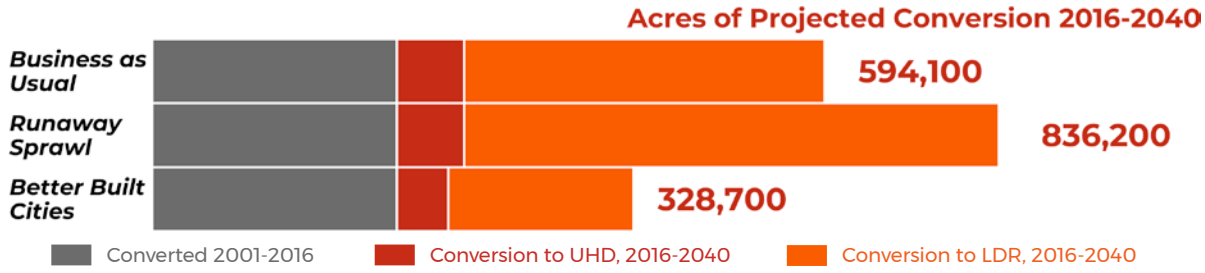
How Virginians choose to develop will shape the future of farming. The scenarios in **Farms Under Threat 2040** show the impacts:

***Business as Usual*:** Development follows recent patterns. Poorly planned development and low-density residential sprawl continue to rapidly convert farmland.

***Runaway Sprawl*:** Development becomes even less efficient than in *Business as Usual*. Low-density housing sweeps across the countryside, displacing farmers.

***Better Built Cities*:** Policymakers and land-use planners promote compact development and reduce sprawl, saving irreplaceable farmland from conversion.

COMPACT GROWTH CAN SAVE FARMS



Virginia's farmland will be converted to:

Urban and highly developed (UHD) land use includes commercial, industrial, and moderate-to-high density residential areas.

Low-density residential (LDR) land use includes scattered subdivisions and large-lot housing, which fragment the agricultural land base and limit production, marketing, and management options for the working farms that remain.

LDR PAVES THE WAY FOR FURTHER DEVELOPMENT

Agricultural land that was in LDR areas in 2016 is

4 TIMES MORE LIKELY

to be converted to UHD by 2040, compared to other agricultural land.

DEVELOPMENT CHOICES MATTER

By choosing the *Better Built Cities* scenario instead of *Runaway Sprawl*, Virginians can save

507,500 acres

of farmland.

That's the equivalent of saving

3,200 farms,

$202 million

in farm output, and

7,200 jobs

based on county averages.[1]

[1] *Census of Agriculture 2017*

COASTAL FLOODING

By 2040, 1,600 acres of agricultural land may be affected by rising seas due to climate change.

WHAT POLICYMAKERS CAN DO

- **Encourage compact development** to minimize sprawl.
- **Permanently protect our best farmland** with voluntary conservation easements.
- **Forge a path to success** for a new generation of farmers.

Explore our interactive maps and read the full report at www.farmland.org/farmsunderthreat

Farms Under Threat is American Farmland Trust's multi-year initiative to document the status of and threats to U.S. farmland and ranchland and to identify policy solutions to protect and conserve America's diverse agricultural landscape. For questions and to access the data, please contact AFT's Farmland Information Center: www.farmlandinfo.org or (800) 370-4879.

FARMS UNDER THREAT

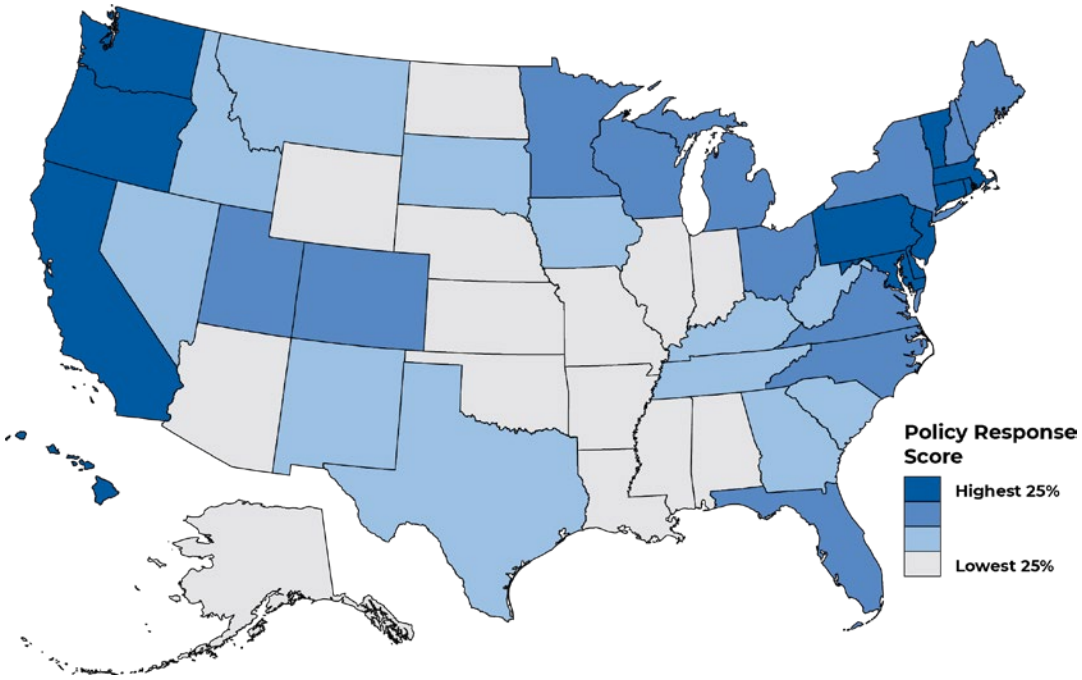
THE STATE OF THE STATES

Agricultural Land Protection Scorecard Highlight Summary

Virginia

Farms Under Threat: The State of the States mapped agricultural land conversion and evaluated state policy responses. The Agricultural Land Protection (ALP) Scorecard evaluated six policies and programs that protect agricultural land from development, promote farm viability, and facilitate the transfer of agricultural land. American Farmland Trust (AFT) conducted research between 2016 and 2019 and used quantitative and qualitative factors to compare approaches that are tied to the land in all 50 states. Results for each policy are summarized in *policy scoresheets*; scores from the scoresheets are combined into Policy Response Scores in the *ALP Scorecard*. The map shows state Policy Response Scores by quartile.

EXTENT OF STATE POLICY RESPONSES TO THE THREAT OF CONVERSION



RELATIVE CONVERSION THREAT

HIGH

Virginia scored among the top states for the conversion of agricultural land to urban and highly developed (UHD) and low-density residential (LDR) uses.

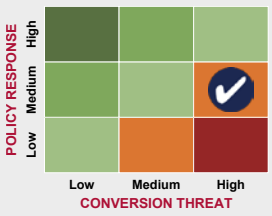
RELATIVE POLICY RESPONSE

MEDIUM

Virginia scored in the middle of all states for policies and programs that address the threat of conversion.

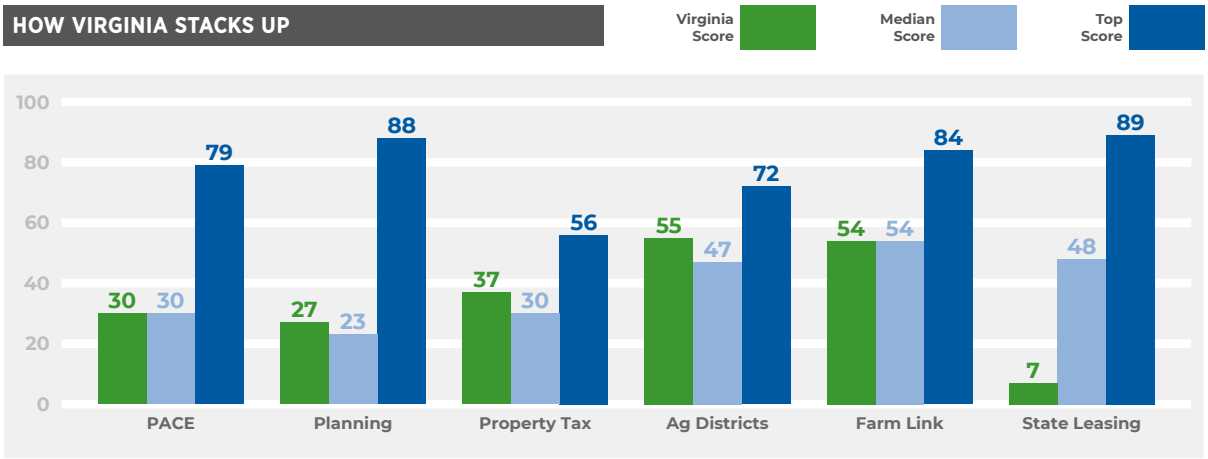
HOW IS THIS STATE DOING?

Virginia is in an orange box because its conversion threat is higher than its policy response, relative to other states. Learn more at www.farmland.org/farmsunderthreat



American Farmland Trust

HOW VIRGINIA STACKS UP



Policy scoresheet scores: Final policy scores compared to the median and the highest scores achieved by all states that have implemented each policy. Even among high-response states, no state received a perfect score for any individual policy; every state has the potential to do more.

ABOUT THE POLICIES AND PROGRAMS

PURCHASE OF AGRICULTURAL CONSERVATION EASEMENTS

Purchase of agricultural conservation easement (PACE) programs permanently protect farmland and ranchland from non-farm development. They compensate landowners who voluntarily place an agricultural conservation easement on their property. Virginia's Department of Agriculture and Consumer Services administers the Farmland Preservation Program, which provides funds for certified local governments to purchase easements. The Department of Conservation and Recreation administers the Virginia Land Conservation Foundation, which provides funds to entities for the purchase of easements.

LAND-USE PLANNING

Land-use planning policies manage growth and stabilize the land base. Most states delegate planning authority to local governments, but some play a more active role, requiring localities to develop comprehensive plans, identify agricultural resources, and adopt policies to protect them. Virginia requires local comprehensive planning.

PROPERTY TAX RELIEF

Property tax relief (PTR) programs reduce property taxes paid on agricultural land. The most common approach is use-value assessment (UVA), which assesses farmland and ranchland at its current use value. Virginia administers the Land Use Assessment Program, which uses covenants to restrict enrolled lands to agricultural use.

AGRICULTURAL DISTRICTS

Agricultural district programs encourage landowners to form special areas to support agriculture. Farmers receive protections and incentives including: limits on annexation, limits on eminent domain, protection from the siting of public facilities and infrastructure, and tax incentives. Less common is requiring district enrollment to participate in state-administered PACE programs. Virginia's Agricultural Districts require local planning authorities to review and approve districts.

FARM LINK

Farm Link programs connect land seekers with landowners who want their land to stay in agriculture. Administered by public or private entities, they offer a range of services and resources, from online real estate postings to technical assistance, trainings, and educational resources. AFT only included publicly supported programs. Virginia's publicly supported program is Virginia Farm Link.

STATE LEASING

State leasing programs make state-owned land available to farmers and ranchers for agriculture. Sometimes their primary purpose is to make land available for agriculture. More often, agricultural use is secondary to generating income for a public purpose or protecting wildlife habitat.

VIRGINIA: KEY FACTS

$0.10

AMOUNT INVESTED PER CAPITA IN PERMANENTLY PROTECTING FARMLAND THROUGH 2017

Among states with PACE
Smallest (TX): < $0.01
Largest (DE): $6.03

0.18

ACRES DEVELOPED PER NEW PERSON ADDED TO THE STATE'S POPULATION BETWEEN 1982 AND 2012

Fewest (CT/MA): 0.11
Most (ND): 4.07

✔ YES

PENALTY IMPOSED WHEN LAND IS WITHDRAWN FROM PTR PROGRAM

States w/ penalty: 29
States w/o penalty: 21

FARMS UNDER THREAT

Farms Under Threat is American Farmland Trust's multi-year initiative to document the status of and threats to U.S. farmland and ranchland and to identify policy solutions to ensure the protection and conservation of America's diverse agricultural landscape. For more information about AFT, visit www.farmland.org. If you have any questions about the analysis methods or would like access to data, please contact AFT's Farmland Information Center: www.farmlandinfo.org or (800) 370-4879.

Explore our scorecard and scoresheets at www.farmland.org/farmsunderthreat

American Farmland Trust

Non-Operator Landowner Survey

VIRGINIA RESULTS

Little data exists on the millions of Americans who own and lease agricultural land but do not farm it themselves—people we call "non-operator landowners" or NOLs. American Farmland Trust's mission is to protect farmland, promote sound farming practices, and keep farmers on the land. We cannot meet our mission without engaging this critical group of agricultural landowners. We have also found that NOLs are keenly interested in stewarding their land well, even if they aren't farming it themselves.

In 2018, AFT began surveying NOLs across the country to increase our knowledge and understanding of how to serve this audience better. This fact sheet presents select survey findings for Virginia. For more information on the survey and our methodology go to farmland.org/nolssurvey. This survey is a project of AFT's Women for the Land Initiative. For more information about the WFL program, check out our website farmland.org/women.

SELECT FINDINGS: **LANDOWNERS**

The landowners who responded to our Virginia survey tend to be

senior

71
AVERAGE AGE

with **past experience**
operating a farm

47%
HAVE FARMED

23%
HELPED PARENTS FARM

non-resident
on the land they rent out

53%

but living
nearby

40 miles
MEDIAN DISTANCE AWAY

NO FARMS NO FOOD®

SELECT FINDINGS: **LAND**

Generally, the landowners surveyed

own a median of **140** ACRES

of which they **rent** out **81** ACRES

use their land primarily for **crop** production **68%**

have owned the land for **decades**

and are likely to keep the land in **family hands**

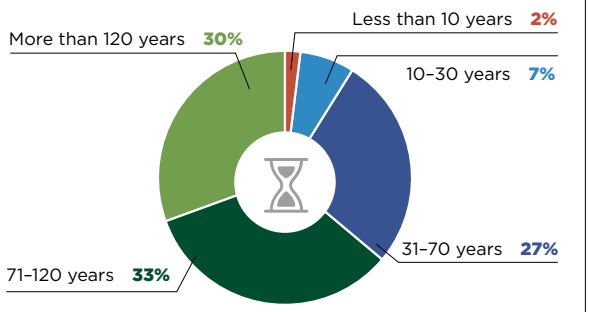
Table 1. Key Landowner Stats

FINANCIAL IMPORTANCE OF FARMLAND TO HOUSEHOLD*	
Immediate income and a primary source of household income	10%
Immediate income but not a primary source of household income	63%
Long-term real estate investment	31%
Estate-planning tool	14%

* Could select multiple categories, thus results will not equal 100%

Table 2. Key Land Tenure Stats

NUMBER OF YEARS LAND HAS BEEN IN THE FAMILY



NEXT OWNER OF THE LAND*	
A relative who will rent it out	52%
A relative who will farm it	21%
Trust	10%
Someone unrelated	15%
Don't know/other	11%

* Could select multiple categories, thus results will not equal 100%

In Virginia, we surveyed 138 non-operator landowners. We aimed to survey both men and women who own 25 acres of farmland or more. A primary goal of our research is to understand better the differences in the needs of male and female landowners, so we sampled men and women equally. We also eliminated trusts from our sample because of the difficulty of identifying the primary decision-maker to survey, and the inability to differentiate trusts by gender. This undoubtedly affected the results of our survey—one cannot determine the actual gender split in landownership from our data, and readers should keep in mind that we only surveyed individually- or partnership-owned lands, not institutions or trusts.

Landowners most often (48%) rent their land to neighbors or friends of the family, while 31% rent to someone who is neither related nor a friend of the family, and the rest (21%) rent to a relative or family member. Interestingly, the majority (64%) of lease agreements are verbal and most are a cash rent agreement (67%). Additionally, landlords have typically been renting their land to the same operator for a long time, with the median length of time being 10 years, representing long-lasting relationships between landowners and renters.

When evaluating their renter (current or potential), respondents were asked to consider a series of attributes that are somewhat or very important to them. Within the survey, a large number of attributes associated with their renter, including their trustworthiness to their reputation and their conservation philosophy and priorities were included. Six qualities that were most frequently cited as "somewhat" or "very" important appear in Table 3. (See the full list at farmland.org/nolssurvey.)

For information sources, those responding to our survey trust their farmer first and foremost for information. They are primarily interested in receiving information and/or technical assistance on soil fertility improvement and soil erosion control. (Table 4)

SELECT FINDINGS: **RELATIONSHIP WITH FARMER**

Generally, the landowners surveyed

lease to **family, friend or neighbor** — 69%

through a **verbal** agreement — 64%

long standing — 10 years (MEDIAN)

with an **annual** term — 45%

and they overwhelmingly **trust** their farmer to make good **conservation** decisions — 89%

Table 3. Qualities Most Frequently Cited as "Somewhat Important" or "Very Important" when Evaluating Current or Potential Farm Operators

MOST IMPORTANT OPERATOR CHARACTERISTICS	
They are financially responsible	98%
Trustworthiness	97%
They care about my land	96%
Reputation as a good farmer	94%
Ability to maintain soil productivity	92%
That they are a good communicator	92%

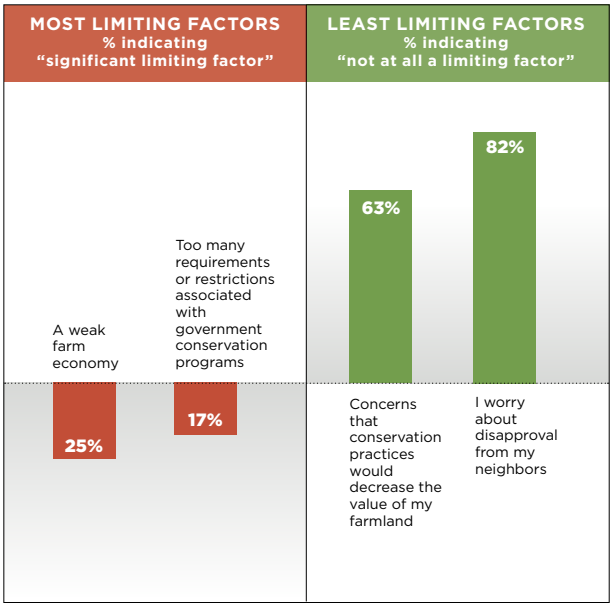
Table 4. Sources & Needs for Information on Conservation

MOST IMPORTANT SOURCES OF CONSERVATION INFORMATION	
My farm operator/lessee	76%
USDA Natural Resource Conservation Service (NRCS)	63%
Local County Soil & Water Conservation District (SWCD)	62%
Farm or ranch manager	58%
% INDICATING INTEREST IN RECEIVING INFORMATION AND/OR TECHNICAL ASSISTANCE	
Soil fertility improvement	46%
Soil erosion control	46%
Water quality improvement	43%
Government conservation programs	40%
% INDICATING INTEREST IN INTERVENTIONS (TOP 3 CHOICES)	
Having access to educational materials developed expressly for non-operating landowners like you.	36%
Having access to leasing tools that better account for costs, benefits and timeliness of implementing conservation practices.	32%
Working with a government agency in providing conservation services targeted to non-operating landowners	31%

Virginia NOLs were asked about 21 potential barriers to conservation that focused on economic (e.g. farm economy, profitability of farm, cost of practice); social (e.g. neighbors, no one else doing it); and knowledge factors (e.g. availability of information, lack of knowledge on my part, lack of knowledge on my farmer's part). (Table 5)

While Virginia NOLs in our survey saw a weak farm economy and too many requirements or restrictions associated with government conservation programs as their biggest barriers, very few have concerns that conservation practices would decrease the value of their farmland or worry about disapproval from their neighbors.

Table 5. Barriers to Conservation on Their Rented Land



SELECT FINDINGS: **RELATIONSHIP WITH FARMER**

Generally, the landowners surveyed

lease to **family, friend or neighbor** — 69%

through a **verbal** agreement — 64%

long standing — 10 years (MEDIAN)

with an **annual** term — 45%

and they overwhelmingly **trust** their farmer to make good **conservation** decisions — 89%

Table 3. Qualities Most Frequently Cited as "Somewhat Important" or "Very Important" when Evaluating Current or Potential Farm Operators

MOST IMPORTANT OPERATOR CHARACTERISTICS	
They are financially responsible	98%
Trustworthiness	97%
They care about my land	96%
Reputation as a good farmer	94%
Ability to maintain soil productivity	92%
That they are a good communicator	92%

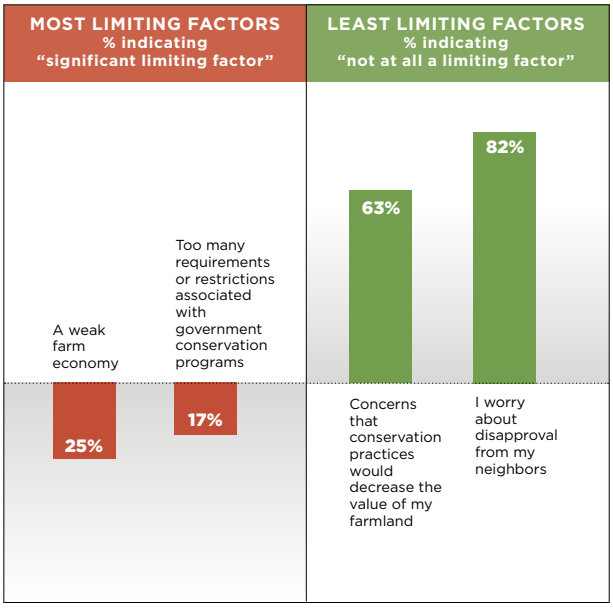
Table 4. Sources & Needs for Information on Conservation

MOST IMPORTANT SOURCES OF CONSERVATION INFORMATION	
My farm operator/lessee	76%
USDA Natural Resource Conservation Service (NRCS)	63%
Local County Soil & Water Conservation District (SWCD)	62%
Farm or ranch manager	58%
% INDICATING INTEREST IN RECEIVING INFORMATION AND/OR TECHNICAL ASSISTANCE	
Soil fertility improvement	46%
Soil erosion control	46%
Water quality improvement	43%
Government conservation programs	40%
% INDICATING INTEREST IN INTERVENTIONS (TOP 3 CHOICES)	
Having access to educational materials developed expressly for non-operating landowners like you.	36%
Having access to leasing tools that better account for costs, benefits and timeliness of implementing conservation practices.	32%
Working with a government agency in providing conservation services targeted to non-operating landowners	31%

Virginia NOLs were asked about 21 potential barriers to conservation that focused on economic (e.g. farm economy, profitability of farm, cost of practice); social (e.g. neighbors, no one else doing it); and knowledge factors (e.g. availability of information, lack of knowledge on my part, lack of knowledge on my farmer's part). (Table 5)

While Virginia NOLs in our survey saw a weak farm economy and too many requirements or restrictions associated with government conservation programs as their biggest barriers, very few have concerns that conservation practices would decrease the value of their farmland or worry about disapproval from their neighbors.

Table 5. Barriers to Conservation on Their Rented Land



REBECCA DROBIS

CHESAPEAKE BAY PROGRAM

American Farmland Trust
SAVING THE LAND THAT SUSTAINS US