FARMS UNDER THREAT:
THE STATE OF THE STATES
Executive Summary

Farms Under Threat: The State of the States **paints a striking picture of America's agricultural landscape—and the threats facing working farms and ranches in every state.**

Between 2001 and 2016, 11 million acres of farmland and ranchland were converted to urban and highly developed land use (4.1 million acres) or low-density residential land use (nearly 7 million acres). That's equal to all the U.S. farmland devoted to fruit, nut, and vegetable production in 2017—or 2,000 acres a day paved over, built up, and converted to uses that threaten the future of agriculture.

This assault on our working farms and ranches occurred despite the Great Recession, plummeting housing starts, and declining population growth. While every state has taken steps to protect their agricultural land base, they all could—and must—do more.

For 40 years, American Farmland Trust (AFT) has used high-quality research to demonstrate the need to protect farmland and ranchland—and to provide solutions. From our game-changing *Farming on the Edge* reports to our seminal book, *Saving American Farmland: What Works*, we have informed and inspired farmers and ranchers, legislators and planners, land trusts and conservationists across the United States.

In 2016, AFT launched the *Farms Under Threat* initiative to update our research for the 21st century. Working in partnership with Conservation Science Partners (CSP), we are harnessing the latest technological advancements to accurately document the extent, diversity, location, and quality of agricultural land in the continental United States—as well as the threats to this land from expanding commercial, industrial, and residential development. At the same time, we are conducting extensive policy research to assess states' policy solutions to respond to the threats.

Our first report, *Farms Under Threat: The State of America's Farmland*, was released in May 2018. It provided the most scientific, detailed, and up-to-date spatial analysis of agricultural lands and development patterns available for the continental United States. AFT has now dug deeper with *The State of the States*. Our new spatial analyses incorporate updated datasets and refined methods, allowing us to map agricultural land at the state, county, and even sub-county levels. At the same time, we conducted an extensive analysis of six state policy responses to the forces that lead to agricultural land conversion: development pressure, weakened farm viability, and the challenges of transferring land to a new generation. Linking our spatial findings to policy solutions will help advocates and decision-makers plan for and protect their valued agricultural resources for future generations.

American Farmland Trust

PHOTO: Rebecca Drobis

Every State Converted High-Quality Farmland

Our findings provide unprecedented insights into the status and fate of American farmland. From 2001 to 2016, 11 million acres of agricultural land were paved over, fragmented, or converted to uses that jeopardize agriculture, curtailing sustainable food production, economic opportunities, and the environmental benefits afforded by well-managed farmland and ranchland.

Our pioneering analysis of low-density residential (LDR) land use is the first nationwide attempt to spatially identify the impacts of large-lot housing development on the agricultural land base. Filling a critical knowledge gap left by previous spatial assessments, it finds that LDR paves the way to urban and highly developed (UHD) land use: between 2001 and 2016, agricultural land in LDR areas was 23 times more likely to be urbanized than other agricultural land. Whereas UHD development is closely tied to population growth, LDR expansion is not: only five out of the top 12 states for LDR are in the top 12 for population growth, thus likely due to weak land use regulations.

Compounding these impacts, 4.4 million acres of Nationally Significant land were converted to UHD and LDR land uses—an area nearly the size of New Jersey. AFT developed the Nationally Significant farmland designation to identify the most productive, versatile, and resilient (PVR) land for sustainable food and crop production. The United States is home to 10 percent of the planet's arable soils—the most of any country on Earth. Yet even here, in what appears to be a vast agricultural landscape, only 18 percent of the continental U.S. is Nationally Significant land. As we face growing demand for high-quality food and environmental protection along with increasingly complex challenges from epidemics, extreme weather, and market disruptions, it is especially important to protect the land best suited to intensive food and crop production, including fruits, nuts, vegetables, and staple grains.

How States Have Responded to Threats to Their Agricultural Land Base

AFT created an Agricultural Land Protection Scorecard to show how states have—or have not—responded to the threats of agricultural land conversion. We assessed six policy tools commonly used to protect farmland, support agricultural viability, and provide access to land:

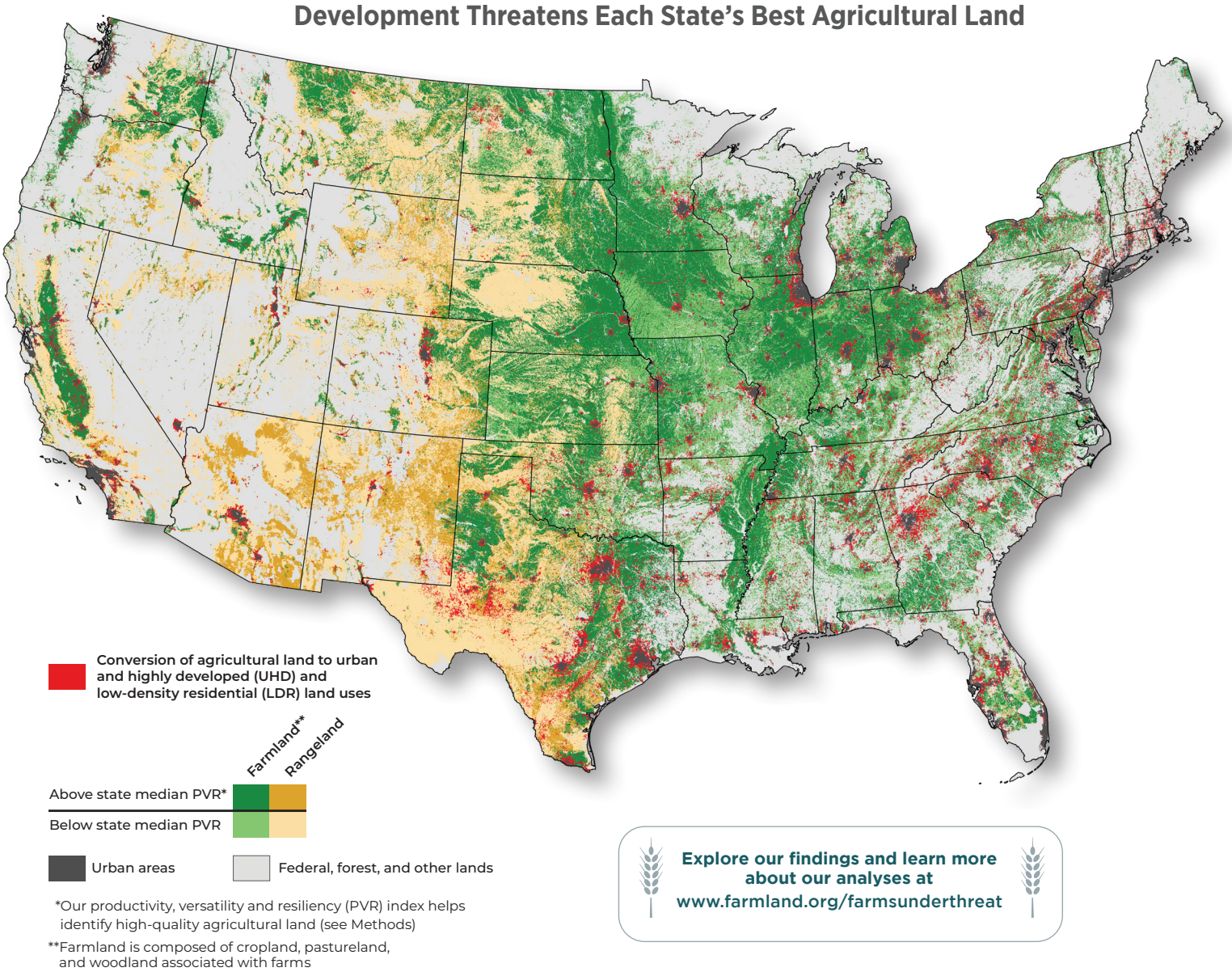
- Purchase of agricultural conservation easements (PACE) programs (aka Purchase of Development Rights) that permanently protect working farmland and ranchland,
- Land use planning policies that manage growth and stabilize the land base,
- Property tax relief for agricultural land that improves farm and ranch profitability,
- Agricultural district programs that encourage landowners to form areas to protect farmland,
- Farm Link programs that connect land seekers with landowners who want their land to stay in agriculture, and
- State leasing programs that make state-owned land available to farmers and ranchers.

The results of the Scorecard show that every state has taken steps to retain land for agriculture, but all could do more. All 50 have enacted property tax relief and laws enabling local governments to plan and adopt land use policies to offset development pressure on agricultural land. Nearly every state has a program to lease state-owned land for farming and ranching and more than half have PACE programs. Some have gone further with innovative programs to address agricultural viability and facilitate land transfer. Yet only New Jersey and Virginia have adopted the full suite of the programs we examined. And while Oregon stood out for its high score in planning, no state earned a perfect score for a single policy, much less a full suite of policies.

We found coordination is key—especially between state and local governments. The leading states for high-policy response linked multiple programs and created frameworks to harness local efforts. They enacted complementary efforts, using PACE programs to permanently save a supply of land for future generations and land use planning to curb conversion. But because it often is not visible, states have not yet recognized or responded to the impacts of LDR on agriculture. Addressing the threat and potential opportunities of LDR is a critical challenge for the coming decades.

Visualizing the Threats: Findings from the Spatial Analyses

Development Threatens Each State's Best Agricultural Land

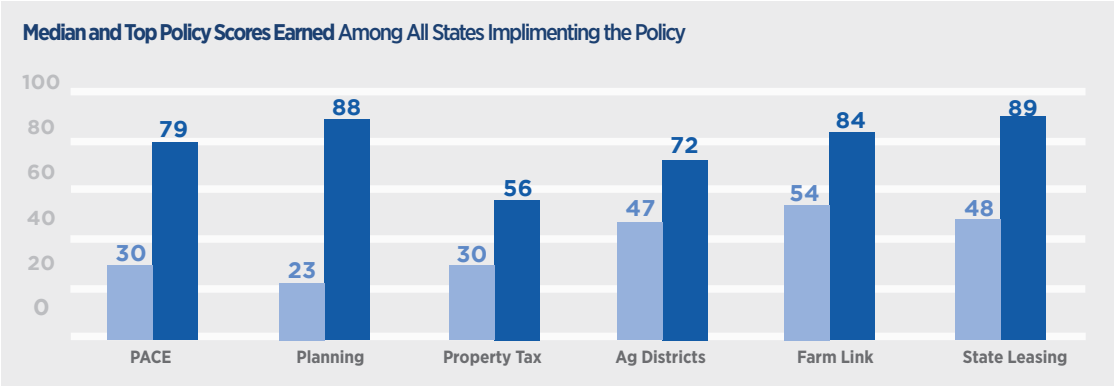


Explore our findings and learn more about our analyses at
www.farmland.org/farmsunderthreat

Our analysis is designed to anticipate future challenges and opportunities. As the population grows, development spreads, demand for healthy food increases, and the changing climate makes farming and ranching riskier, it will be vital to secure a critical mass of productive, versatile, and resilient (PVR) land. Toward these ends, states need to identify the agricultural land resources that are most important for their own food systems and landscapes.

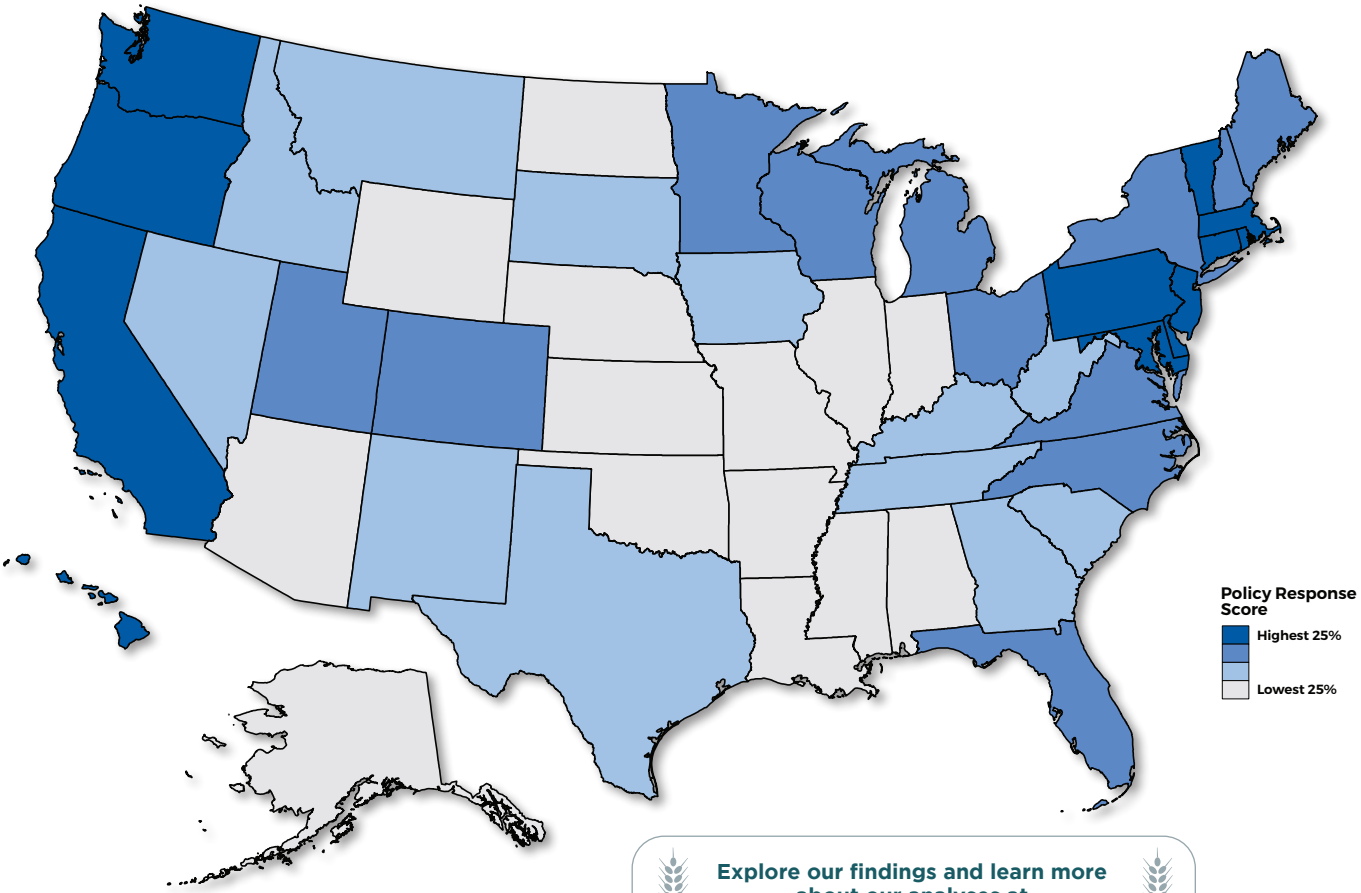
This map shows where non-federal farmland and rangeland were converted to UHD and LDR land uses from 2001-2016. Farmland includes cropland, pastureland, and woodland associated with farms. Farmland and rangeland with PVR values above the state median are shown in dark green and dark yellow, respectively. Lands with PVR values below the state median are shown in lighter shades. Existing urban areas in 2001 are shown in dark gray and federal, forest, and other lands are shown in light gray. Conversion to UHD or LDR has occurred in all areas shown in red, but this does not indicate that every acre in those areas has been converted.

Assessing the Response: Results from the Policy Scorecard



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. 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. This map shows state Policy Response Scores by quartile.

State Policy Responses to the Threat of Conversion



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Farms Under Threat is American Farmland Trust's multi-year initiative to document the status of and threats to U.S. farm and ranch land and to identify policy solutions to ensure the protection and conservation of America's diverse agricultural landscape. For more information about the initiative, visit AFT's website: www.farmland.org. For a copy of the full report and information on methods and analyses, contact AFT's Farmland Information Center: www.farmlandinfo.org or **(800) 370-4879**.

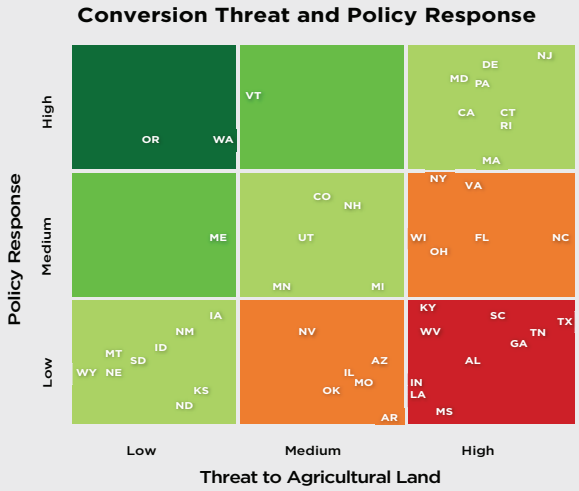
Call to Action

Our research shows that people act when changes to their landscape are visible. In this century, land use changes have been hard to see. As a result, compared to the 1980s and 1990s, states have done little to secure their agricultural land base. This is shortsighted.

While development trends always have peaks and valleys, and real estate bubbles always burst, the force and extent of the last decade's decline were an anomaly—far below the rates from recessions dating back to the 1960s. Yet states still converted 11 million acres of agricultural land. According to the 2017 Census of Agriculture, this is slightly more than all the land used to grow fruits, nuts, and vegetables across the U.S.

Even in uncertain economic times, it is urgent that states—especially states with high rates of conversion—step up to save their farmland and ranchland.

Of most concern are the high-threat states that have taken very little policy action. Led by Texas, most are in the South, but Indiana and West Virginia also fell into this category. States with a high threat and a reciprocally high policy response have worked for decades to address farmland loss (see figure at right). But even in cases of relatively wide policy adoption, they need to do more, better, faster—especially to address the spread of LDR.



Extent of threat to agricultural land and level of state policy response. States where policy actions are proportional to threats are shown in shades of green. States where the threat is higher than the policy response are shown in red and orange. Alaska and Hawaii are not represented because there was insufficient data to include them in the spatial analysis.

What States Can Do

There is no silver bullet. Since conversion is driven by several interrelated factors, states need to use multiple policy approaches to protect their vital agricultural resources. Choices will depend on the nature and extent of the threat, its underlying causes, each state's policy framework, and public support. What follows is a list of five high-level actions states can take to secure their agricultural land base.

Action 1: Analyze and Map Agricultural Land Trends and Conditions

Effective strategies are based on solid data. Toward that end, states should track agricultural land use trends and conditions, map their agricultural land, and conduct both state and local policy audits.

Action 2: Strengthen and/or Adopt a Suite of Coordinated Policies to Protect Farmland

States should address these trends and conditions with clear goals and a suite of coordinated policies. They can start by looking for opportunities within existing programs. While not always politically feasible, programs with regulatory teeth are more effective than those that rely on incentives alone. But if a regulatory approach is not achievable, states must offer strong enough incentives to have meaningful results.

Action 3: Support Farm Viability and Access to Land for a New Generation of Farmers and Ranchers

Competition for land drives up land values and prices, and a tight supply makes it hard for beginners and historically disadvantaged producers to enter the field. When farms and ranches consolidate or go out of business, it becomes harder for the remaining operations to thrive. The vital infrastructure that supports them also goes out of business or consolidates, making it more expensive and time consuming to obtain needed goods and services and to process, market, and distribute farm products. States need policies to support agricultural viability and to facilitate the transfer of land to a new, more diverse generation of farmers and ranchers.

Action 4: Plan for Agriculture, Not Just Around It

"A failure to plan is a plan to fail." State and local governments plan for many things—from transportation and housing to health, safety, and economic wellbeing. Few plan for agriculture. This needs to change. Planning for agriculture establishes a public policy framework to support agricultural economic development as well as to retain and protect farmland for current and future generations. It can occur at state, regional, or local levels and result in a stand-alone plan or be included as part of a comprehensive or other type of plan, including sustainability and emergency management plans.

Action 5: Save the Best, but Don't Forget the Rest

America's agricultural landscape is extensive and diverse. Some is ideally suited to producing food, feed, and other crops; some is better suited to grazing livestock. All of it is important to state and local economies and to our food system. Nevertheless, states should make a special effort to protect their Nationally Significant land, which is critical for long-term food security and environmental quality. States can use the interactive maps available at *www.farmland.org/farmsunderthreat* to identify where their highest threats converge with their best quality agricultural lands. Working with local government partners, they can help ensure that local land use policies address the quality as well the quantity of their agricultural resources.

What the Federal Government Can Do

Federal policies and programs play a major role in directing development. Yet while we have strong protections in place for wetlands, endangered species, and other natural resources, protecting agricultural land has largely been left to state and local governments. It is time for stronger and more coordinated federal action. What follows are five actions the federal government can take to stop the loss of the nation's valuable agricultural resources.

Action 1: Double Funding for ACEP

The Agricultural Land Easement (ALE) program is the federal government's only program focused specifically on agricultural land protection. Providing matching funds to qualified entities to purchase agricultural conservation easements, ALE receives funding as part of the broader Agricultural Conservation Easement Program (ACEP). At just $450 million of annual funding, ACEP currently meets only a small fraction of its demand. Doubling funding for this popular program would increase ALE's capacity to protect farmland and ranchland.

Action 2: Strengthen the Farmland Protection Policy Act to Stop Agricultural Land Loss

Congress should strengthen the FPPA by adding mitigation requirements and penalties for conversion by federally funded projects and should provide higher levels of protection for high-quality agricultural land. Further, USDA should devote more resources to NRCS to conduct the National Resources Inventory to deliver reliable state and county-level estimates and spatial data on the status, condition, and trends of land and related resources.

Action 3: Develop Federal Policies that Facilitate Farm Transfer to a New Generation

Congress and USDA must step up efforts to support succession planning, land transfer, and access to land. Actions include tax policy changes such as a capital gains exclusion to incentivize the sale of land to a new generation; a beginning farmer tax credit; an increase of the cap on the estate tax's 2032A Special Use Valuation; and expansion of the Conservation Reserve Program-Transition Incentives Program. To inform these policies, NASS should update the 2014 Tenure, Ownership, and Transition of Agricultural Land (TOTAL) survey.

Action 4: Increase Support for Agricultural Viability

A greater share of USDA funding is needed for programs and research to help producers add value to their products, develop new markets, diversify their operations, and otherwise improve economic viability. Programs like the Beginning Farmer and Rancher Development Program and Outreach and Assistance for Socially Disadvantaged and Veteran Farmers and Ranchers Program should be expanded, and greater support should be provided for Farm Service Agency beginning farmer loan programs. Congress also should consider enacting a "Debt for Working Lands" program. Modeled on FSA's Conservation Contract Program, it could offer lowered or restructured debt on FSA loans in exchange for a permanent agricultural easement. Finally, funding should be increased for the Agricultural Research Service and National Institute of Food and Agriculture (NIFA).

Action 5: Provide Federal Funding to Plan for Agriculture

The federal government can do more to incentivize regional, state, and local planning to support agriculture, from preventing agricultural land loss and improving the siting of agricultural infrastructure to improving economic opportunities for farmers, ranchers, and agribusinesses. This could be done through federal block grant funding to state and local governments to develop comprehensive plans for agriculture or to provide planning expertise and technical assistance. Funding also should be expanded for the Local Foods, Local Places (LFLP) program to provide technical assistance to municipalities to reinvest in neighborhoods as they develop local food systems.

PHOTO: Rebecca Drobis

We Must Act Now!

American farmland is threatened by development, consolidation and weakening farm viability, and by barriers to transferring land to a new generation of farmers and ranchers. At the same time, global demands on food production are colliding with the environmental impacts of eroding soils, declining aquifers, and extreme weather events. We need farmers and ranchers to grow food and provide for other human needs, and we need them to provide essential environmental services—from clean drinking water and wildlife habitat to carbon sequestration to cool the planet.

Especially in tandem with smart growth strategies, protecting agricultural land and adopting regenerative farming practices are powerful solutions to climate change. With the world population projected to reach 10 billion by 2050, and climate change posing an existential threat, we must act now to secure the agricultural land base for future generations.

American Farmland Trust (AFT) works to save the land that sustains us by protecting farmland, promoting sound farming practices, and keeping farmers on the land.

For more information about our findings and analyses, contact AFT's Farmland Information Center staff at (800) 370-4879, www.farmlandinfo.org

For more information about AFT visit us at: www.farmland.org

American Farmland Trust
SAVING THE LAND THAT SUSTAINS US

To explore our interactive maps, policy scorecard, and background data visit: www.farmland.org/farmsunderthreat