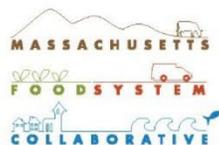




MASSACHUSETTS FARMLAND ACTION PLAN 2023–2050

UMassAmherst
Donahue Institute



Massachusetts Farmland Action Plan, 2023-2050

December 2023

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The mission of the **Massachusetts Department of Agricultural Resources** is to cultivate a robust and equitable agricultural economy, promote a safe and resilient food system, and preserve a healthy environment for Massachusetts farmers, animals, and consumers. The Department supports, regulates, and enhances the rich diversity of the Commonwealth's agricultural community to promote economically and environmentally sound food safety and animal health measures, and fulfill agriculture's role in energy conservation and production. Learn more at <https://www.mass.gov/agr>

THE COMMONWEALTH OF MASSACHUSETTS

EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS



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The hundreds of thousands of acres of farmland in Massachusetts are among our greatest resources. Under the stewardship of thousands of farmers, this land feeds us, contributes to our local economy, protects vital natural resources, and plays an essential role in our work to address climate change and mitigate its impacts. We must protect this resource with thoughtful investments, wise policy, and collaborative efforts that engage public and private sector partners.

It is with great enthusiasm that I introduce the *Massachusetts Farmland Action Plan*. The Plan provides a roadmap to accelerate the pace of farmland protection, address issues of inequity in farmland access, and help farms with funding, technical assistance, and business planning to enhance their viability. The Plan is comprehensive and forward-looking and outlines the challenges that our agricultural sector faces while showing the immense potential that it holds.

There are many persistent challenges that require greater consideration of farmland needs. While we have enjoyed many successes through the work of the Agricultural Preservation Restriction (APR) program and the land trust community, we are still losing agricultural land at an alarming rate. There continue to be barriers to land access for new farmers, particularly farmers of color. The fragile global food supply chain makes local food production even more important for food security. And we are confronting a changing climate which requires support for farmers as they adapt to more unpredictable weather.

I recognize the importance of preserving and revitalizing our farmland, ensuring access in a way that is equitable and fair, and helping our farms stay viable. Agriculture is the bedrock of many of our communities and plays a vital role in protecting our food system, maintaining the rural character and heritage of our towns, and providing economic opportunities at the local level. Farmers are resilient and resourceful, but they need our support to help them deal with these challenges so they can continue to play these roles.

The *Massachusetts Farmland Action Plan* is a result of the collaborative work of more than 600 stakeholders who care deeply about the future of agriculture in the state and who dedicated many hours to visioning workgroups, listening sessions and public meetings. The *Plan* represents a shared vision for the future of our farmland. Ongoing collaboration with these groups will be essential to the successful implementation of the *Plan*.

This plan clearly describes the actions that we need to take to ensure that we have a stable, viable, and profitable agricultural economy where our food system is secure, our farms are resilient and thriving, and our agricultural land is protected for generations to come. I urge all residents and stakeholders to review this plan and to participate in making its goals a reality.

A handwritten signature in blue ink that reads 'Ashley E. Randle'.

Ashley Randle, Commissioner

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Acknowledgments

The Massachusetts Farmland Action Plan is the culmination of an eight-month process of research, community engagement, visioning, and action planning involving multiple organizations, community partners, subject matter experts, policymakers, farmers, and countless others across the Commonwealth. Ultimately, more than 600 individuals contributed to the creation of this plan. From filling out surveys, to participating in listening and action planning sessions, to drafting, reading, and reflecting on countless suggestions and ideas, each piece of input we received was invaluable.

We are grateful for the support of the following individuals, whose input and participation has been essential to the creation of this plan.

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Executive Summary

Agriculture has an important place in Massachusetts' economy, culture, and environment. Farms provide a range of foods, jobs, and environmental services and they protect natural resources, store carbon, and can help adapt to a changing climate. Today, there are 7,241 farms stewarding 491,653 acres in the Commonwealth. These farms employ roughly 26,000 people and produce an annual market value of over \$475 million in goods, for a total economic impact of \$10 billion annually ([MDAR, 2018/2019](#)). Only 15% of Massachusetts farmland is permanently protected, and farmland is being lost at a rapid pace. Between 1997 and 2017, almost 60,000 acres of farmland were converted to another land use ([MA Agricultural Data, 2017](#)). This farmland is some of the most expensive in the United States, averaging \$13,700 per acre, with a 21% increase in price between 2020 and 2021 alone ([USDA, 2022](#)). Without increasing public funding and the pace of protection, improving land-use planning, and ensuring smart development, it is estimated that up to 78,000 additional acres of farmland will be lost by 2040 ([FIC, 2020](#)).

The Massachusetts Farmland Action Plan was developed through a collaboration between the University of Massachusetts Donahue Institute, Massachusetts Food System Collaborative, American Farmland Trust, and the Massachusetts Department of Agricultural Resources, which initiated and funded the effort. Subject-matter experts advised on each stage of the planning process, which also engaged more than 600 stakeholders, including farmers, policymakers, nonprofits, community leaders, and other members of diverse communities from across the Commonwealth.

The Farmland Action Plan sets forth, for the first time, goals, priorities, and recommended actions for farmland protection and access in Massachusetts. It recommends strategies to address urgent challenges experienced by existing, new, and historically underserved farmers. The recommendations in this plan seek to reduce farmland conversion; increase access to healthy, fresh food; maintain and increase the economic viability of farms; and recognize the importance of farmland for ecosystem health through implementation of environmental, conservation, and healthy soil practices.

Further, the plan includes specific recommendations for increasing farmland access, participation in decision making, and funding to address racial inequity in farmland ownership, acknowledging inequities brought on by years of systemic racial discrimination and dispossession. It emphasizes the need to ensure a commitment to equity, particularly for Black, Indigenous, and People of Color (BIPOC), immigrant, and aspiring farmers, in all programs, policies, investments, and actions.

The Farmland Action Plan is organized around three primary goals:

- I. **Protection: Increase efforts to permanently protect farmland.** This is important because once farmland has been developed, it will never return to agriculture. Protection of farmland soils, a finite resource, preserves the rural character of an area, supports domestic food security, acts as a carbon sink stabilizing future greenhouse gas emissions, sustains habitat, provides flood control and contributes to local rural economies. To facilitate this protection, this plan calls for the

creation of a new program for local nonprofits and municipalities to purchase, hold, and steward agricultural restrictions. In addition, it prioritizes protection of whole farms.

- II. **Access: Increase access to farmland.** Enabling farmland accessibility requires equitable, affordable, and identifiable opportunities and options. The plan’s actions and activities will support making more land available for farming, outlining steps for ensuring more equitable and affordable access to that land. The plan also calls for more support for smaller farms, better access to succession and farm and farmland transfer planning, and a more diverse and accessible network of farm and farmland service providers.
- III. **Viability: Support and enhance the viability of farms and farmland.** Protected and productive farmland is the foundation of a viable and strong farm economic system. Thus, protecting farmland, supporting the business of farming, and supporting the farmers themselves must be considered concurrently. The plan’s actions and activities will accomplish this by highlighting the need for an enhanced business environment, increased resources for organizations that are experts in accomplishing this, and the value of paying farmers for ecosystem and other non-market services. It also recognizes that sustaining farms and protecting farmland requires an educated public that supports agriculture with their purchases and through their civic engagement.

Each of these elements—farmland protection, access, and viability—is highly dependent on the others, and successful strategies must address the needs of and strengthen linkages among all three. To do so, participants in this process envision a population that understands the role that agriculture plays in food security, in natural resource and climate protection, and in the economy. In turn, that population’s support for Massachusetts agriculture will generate the momentum to invest significantly in ensuring that farmland is protected from further loss, that regulations and policies foster access to farmland for those who wish to farm, and that farmland is kept viable through supportive measures that adapt to address threats and opportunities for farms.

The Plan

This first Farmland Action Plan for Massachusetts is intended to inform and guide needed investments and policy and programmatic actions to ensure that farmland and farming are available and viable for current and future generations. The planning process identified many challenges facing farmland and farmers. The plan sets goals for land protection and access and farm viability, and suggests strategies to obtain the resources needed to reach those goals. Implementation and renewal of this plan will be a significant step toward preserving and expanding farmland—a nonrenewable resource—and securing a sustainable agricultural sector for future generations.

The Farmland Action Plan is organized around three primary goals:

- I. **Protection: Accelerate the permanent protection and stewardship of farmland.** Farmland is a threatened and critical infrastructure that supports food security, natural systems and climate resilience, and Massachusetts' economy, public health, and quality of life.
- II. **Access: Increase access to farmland.** Doing so requires affordable opportunities and options for new farmers and support for established farms to be passed on to successors.
- III. **Viability: Support and enhance the viability of farm businesses and farmland protection concurrently.** Protected and productive farmland and farm businesses are the foundation of a sustainable and strong farm economic system.

Incorporated into each goal is a commitment to equity, particularly for BIPOC and aspiring farmers.

Purpose of the Massachusetts Farmland Action Plan

Farming is part of the fabric of Massachusetts' history, culture, economy, and future—and farmland is the foundation. The 7,241 farms on approximately 500,000 acres in the Commonwealth employ roughly 26,000 people, produce an annual market value of over \$475 million in goods, (MDAR, 2023) and have a total economic impact of \$7 billion annually (Farm Credit East, 2021). In addition to food and fiber, well managed local farms provide a myriad of ecosystem services – they support wildlife and pollinators, buffer against flooding and recharge groundwater supplies, store carbon, and improve soil health (USDA, 2012). Their green infrastructure helps us respond to natural and anthropogenic disasters and are critical to adapting to a changing climate (American Agriculturist, 2010). They can dampen the impacts of global food supply chain disruptions by providing local foods (FAO, 2020), and their social benefits are significant, including providing familiar foods for immigrant communities (UMass, 2016). Many farms also operate composting and anaerobic digestion facilities, which reduce organic waste's negative impact on the environment, instead turning it into valuable soil amendments and a clean source of electricity (MassDEP, 2020).

However, farmland is being lost at a significant rate in Massachusetts, and this loss threatens the long-term viability of farming in the Commonwealth – and all of the benefits that farms bring. Between 1997 and 2017, almost 60,000 acres of farmland were converted to other land uses and average farm size declined from 130 to 79 acres (MA Agricultural Data, 2017). State investments in farmland protection have not kept pace as land becomes increasingly expensive. Farmland price per acre increased 21% between 2020 and 2021 alone and is now averaging \$13,700 per acre (USDA, 2022).

Although Massachusetts has been an innovative leader in farmland protection policy, the Commonwealth has not developed a comprehensive statewide plan to guide land protection and access efforts. Just under 500,000 acres—or about 10% of the Commonwealth—are currently designated as farmland as defined by USDA. And just under 75,000 acres of farmland, or 15%, are permanently protected by state-held agricultural preservation restrictions (APRs) (MDAR)

As a result, implementation of this comprehensive, proactive statewide Farmland Action Plan to guide federal, state, municipal, and private-sector land protection is critical to ensure the long-term viability of this sector. The Commonwealth, municipalities, federal government, regional planning agencies, land trusts, and private landowners all play a role in farmland protection.

- Massachusetts has 5 million acres of land, and a little over 27% (1.4m acres) is permanently protected through ownership or restriction for drinking water, wildlife and endangered species habitat, outdoor recreation, and agriculture.¹ A little less than half of these 1.4 million acres are owned by the state, municipalities own almost a quarter, and about a quarter is owned by private

¹ Protected and Recreational OpenSpace Datalayer is available at <https://www.mass.gov/info-details/massgis-dataprotected-and-recreational-openspace>. The U.S. Environmental Protection Agency defines *open space* as any open piece of land that is undeveloped (i.e., has no buildings or other built structures) and is accessible to the public, including land that is partly or completely covered with grass, trees, shrubs, or other vegetation; schoolyards; playgrounds; public seating areas; public plazas; and vacant lots.

individuals, land trusts, conservation organizations or other nonprofits, federal agencies, and counties ([2025/2030 CECP](#)).

- Twenty-one percent of the Commonwealth is developed, and about 52% is neither developed nor protected ([Mass Audubon, 2020](#)).

FARMER and FARMING SNAPSHOT

Statistics from the 2017 USDA Census of Agriculture show who is farming in Massachusetts. A subsequent Census was held in 2022, with data to be released beginning in 2024.

- *7,241 farms on close to 500,000 acres of farmland.*
 - *Over half of all farms are under 50 acres.*
- *Employs close to 26,000 people and produces an annual market value of over \$475 million in goods.*
 - *Economic impact of \$10 billion annually.*
 - *Average farm produces \$65,624 worth of agricultural products on 68 acres.*
- *12,778 Total Producers.*
 - *43.6% Female.*
 - *97.1% White (of the 12,778 total 29 identify as American Indian/Alaskan, 95 as Asian, and 166 as Black).*
 - *33.8% are 65+.*
 - *1,082 farmers are under 35; 7,381 are between 35 and 64; and 4,315 are 65+.*

Overview of the Massachusetts Farmland Action Plan

Goal 1. Increase efforts to permanently protect farmland.

A. Permanently protect farmland through purchases of agricultural restrictions.

1. Purchase agricultural restrictions to permanently protect farmland, help increase affordability, and keep it in production.
2. Seek development of creative financing mechanisms or strategies that would significantly increase funding to support protection.
3. Leverage the maximum amount of federal funding available.
4. Identify and secure additional resources to purchase farmland in fee and via restrictions and to steward protected properties.
5. Ensure that interventions to prevent conversion are readily and quickly available.
6. Build capacity of state agencies, land trusts, municipalities, and other entities to protect land.
7. Increase the number of applications to APR, ALE, and non-ALE protection programs.
8. Increase acreage of farmland protected under short-term covenants.
9. Build capacity to manage APR stewardship effectively and efficiently.
10. Explore establishment of state-funded grant program to provide resources to land trusts, municipalities, and other entities to purchase, hold, and steward agricultural restrictions and conservation restrictions (CRs) that allow agriculture.

B. Further develop and implement additional tools to avoid farmland loss and retain farmland.

1. Explore potential to pursue no-net-loss policy for all privately and publicly held agricultural land.
2. Enroll more agricultural land in Chapter 61A.
3. Identify opportunities to increase CPA funding and its application to protect farmland and affordable on- and off-farm housing.
4. Explore the establishment of an entity that can buy, sell, and lease land and restrictions, with the goal of permanently protecting farmland and prioritizing access for historically underserved farmer populations.
5. Identify and permanently protect state-held farmland where appropriate and when not in conflict with the original intent of protection (e.g., wildlife habitat, certain types of outdoor recreation, forestry).
6. Explore solar development policies that do not inadvertently displace agriculture.
7. Advance zoning reform and smart-growth policies that encourage density and development that do not result in the loss of farmland.

C. Prioritize protection of whole farms.

1. Create policies that protect whole farms.
2. Ensure that protection programs are compatible with all tenure models, supporting leased land, co-operative ownership, and other novel tenure options.
3. Consider Commonwealth goals, including environmental justice and natural resource protection, when prioritizing farmland for protection.

4. Explore how additional federal programs such as the Wetland Reserve Easement aspect of the Agricultural Conservation Easement Program (ACEP-WRE) might be further utilized to aid in funding whole farm protection.

D. Formalize and integrate decision-making processes regarding farmland protection.

1. Enhance interagency coordination on land acquisition and stewardship projects such as protecting a property through a combination of CRs and APR.
2. Create a state-level prioritization of farmland for protection similar to Biomap, TNC's resilient lands, Mass Audubon's MAPPR (Mapping and Prioritizing Parcels for Resilience), etc.

Goal II. Increase access to farmland.

A. Make more land available for agriculture.

1. Assess all existing, publicly held land for its suitability for agriculture and make more of it available for agriculture.
2. Strengthen the state land licensing program.
3. Create preferential zoning and ordinances to support urban agriculture.
4. Increase the amount of privately leased farmland, coupled with agreements designed to meet the needs of farmers.
5. Explore opportunities to assist state and federally recognized Tribal governments of the Commonwealth in obtaining land.
6. Establish a farmland restoration program to provide assistance to farmers for bringing fallow or marginal farmland into food production, which may include cost-sharing provisions.
7. Ensure that CRs support the growth of agriculture where consistent with the overall purpose of the restriction.
8. Support farm incubators, potentially via funding.

B. Support farm transfer and succession in ways that enhance access to farmland.

1. Support and expand farmland transfer and farmland succession education and one-to-one technical assistance (TA).
2. Ensure that transfers of protected land enhance farmland access for farmers.
3. Enhance existing registries and establish new registries of lands that allow agriculture, including owners' names, contact information, property information, and types of agriculture.

C. Prioritize increased access for BIPOC and historically underserved farmers in all farmland access programs and policies.

1. Ensure that investments, programs, and policies promote equity for farmers from historically underserved communities.
2. Explore options to expand and strengthen equity and diversity criteria for applications for agricultural use of public land, and prioritize access for historically underserved, new, aspiring, and low-income farmers.

D. Support and expand service-provider networks to meet the needs of all farmers and potential farmers.

1. Support diversification of the agricultural service-provider workforce through job training and expanded consideration for historically underserved individuals when hiring.
2. Develop and implement training programs focused on diversity, equity, and inclusion to agricultural lenders and other service providers and agencies.
3. Contract with NGOs, consultants, and others with the capacity to provide business technical assistance services, including succession planning, to farmer clients.
4. Develop capacity of service providers like financial institutions, real-estate professionals, and attorneys to better support farms.
5. Create a comprehensive toolbox of resources for farm business, succession, transfer planning, and implementation that is maintained and kept up to date, and provide these resources to farmers, which may require additional staff resources.

Goal III. Support and enhance the viability of farms and farmland.

A. Ensure that laws, regulations, programs, and investments support farm viability.

1. Explore increasing APR Program flexibility to support farm viability.
2. Explore implementation of mechanisms that would increase the number of municipalities instituting Right to Farm bylaws and agricultural commissions.
3. Make it easier for farmers to seek and obtain grants and financing.
4. Explore opportunities to support farm financing.
5. Include farmers and representatives of the full range of the industry in planning and policy-setting processes that impact land-use, environmental, and other public policy.
6. Prompt further development of industries supportive of agriculture to ensure they serve farm and farmland issues fully.
7. Support urban agriculture.
8. Support farm infrastructure needs.
9. Develop capacity of service providers like financial institutions, real-estate professionals, and attorneys to better support farms.
10. Establish a financial facilitation support function, potentially requiring new staff resources.
11. Identify opportunities to support farmers for their non-market service contributions, which might include funding mechanisms.

B. Grow resilience and sustainability practices on farms.

1. Increase TA to farmers around crop- and livestock-specific climate change adaptation strategies.
2. Improve soils on publicly held land being used for agriculture.
3. Support ecological enhancements and services provided by management practices, potentially via allocation of new funding.
4. Build UMass Extension's capacity to meet the needs of farmers.

C. Increase use of services, programs, and other resources by farmers.

1. Develop and implement a communications plan to promote public and private resources available to farmers.

2. Expand opportunities for one-to-one assistance for farmers, prioritizing beginning and historically underserved farmers and aspiring farmers.
 3. Support MDAR's Farm Viability Enhancement Program (FVEP), APR Improvement Program (AIP), Matching Enterprise Grants for Agricultural (MEGA) Program, and Agricultural Business Training Program, which provide one-on-one business technical assistance.
 4. Support formal education for farmers and aspiring farmers.
- D. Build public support for agriculture and for farmland protection, access, and viability.**
1. Develop programming to educate all Massachusetts residents and elected officials about the importance of local agriculture.
 2. Develop a comprehensive plan to support and sustain the state's agricultural sector, including urban agriculture, integrating both public and private resources.

Process Summary

In July 2021, the Massachusetts Department of Agricultural Resources (MDAR) issued a Request for Quote (RFQ) from contractors qualified to develop the Massachusetts Farmland Action Plan (MDAR, 2021). MDAR stipulated that the contractor would be “responsible for ensuring planning process design, stakeholder facilitation and project management, and completing a well laid-out vision and plan to address the farmland needs and goals of the Commonwealth,” with a focus on farmland protection, farmland access (including urban farmland), and the long-term economic and environmental viability of farms across the Commonwealth. In addition, MDAR required that the plan be guided by a unified vision for the future, while prioritizing “immediate and on-going actions and initiatives” in response to identified challenges and opportunities.

MDAR also identified several key priorities for the planning process, including that the plan responds to historic trends in MA agriculture, as well as “analyze, learn from, and build upon past planning efforts... focused on food systems, land use resiliency, soil health, and environmental justice.” A strong directive, woven throughout the RFQ, called for the plan to be “guided by broad stakeholder involvement/ engagement,” specifically “a wide range of sectors and groups in the Commonwealth, including among those within the agriculture sector or related sectors.” MDAR’s list of stakeholder constituencies included “practitioners—i.e., farmers and food producers— as well as advocates, investors, landowners, land trusts, agricultural technical assistance providers, scientists, public officials, policy makers, and others positioned to lead farmland protection changes.”

Noting the disproportionate challenges faced by historically underserved and beginning farmers, MDAR signaled the importance of engaging BIPOC, immigrant, and other underserved stakeholders in the creation of an actionable, detailed, measurable, and socially just plan:

The plan will set measurable goals related to farmland protection, farmland viability, and social justice for historically underserved or disenfranchised populations in the agricultural sector, and recommend State spending levels to meet those goals.

- MDAR, Request for Quote, AGR-FarmlandPlan-FY22, 7/8/2022

The RFQ was posted to PRF61, the Commonwealth’s pre-vetted vendor list of “Management Consultants, Program Coordinators and Planners.” MDAR set June 30, 2022 as the date for completing the Action Plan to align with the end of the fiscal year and the project funding period. An optional one-year extension was allowed for additional work beyond completion of the action plan itself.

MDAR ultimately selected a partnership of three entities to develop the Farmland Action Plan in collaboration with MDAR. The three partners included:

- **University of Massachusetts Amherst Donahue Institute (UMDI):** Served as lead applicant, with responsibility for project management, fiscal oversight, and completion of deliverables. This work included organizing/facilitating meetings; managing communications with and between MDAR, the Subject Matter Expert Advisory Group (SME Group), and Steering Committee; and coordinating community engagement activities and planning sessions. With input from the SME Group and the other partners, UMDI also engaged BIPOC stakeholders to lead additional BIPOC-directed engagement activities. Finally, UMDI coordinated consultant research and engagement

activities, compiled findings from the community engagement activities, and drafted portions of the final report and action plan.

- **Massachusetts Food System Collaborative (MFSC):** In partnership with UMDI, MFSC played a major role in developing the original response to the RFQ; supporting implementation of the project activities; drafting the action plan based on input from the planning sessions; and synthesizing research findings for the final report. As a lead research partner, MFSC also developed the current conditions reports (in part based on AFT's analysis) and the summary and overview of farmland support and protection programs and policies. As part of this work, MFSC compiled a review of previous statewide plans, including relevant farmland recommendations and synthesis of previous goals and recommendations, as well as an analysis of existing state programs, policies, and investments related to farmland.
- **American Farmland Trust (AFT):** AFT conducted data analysis of historic trends in MA Farmland, including protected and unprotected status by county; conversion and loss of agricultural land (1985-2016); and protected status by parcel size and age of farmer/producers in Massachusetts.

Together, MDAR and the three partners functioned as the project's Steering Committee. The Steering Committee's first meeting, on September 30, 2021, focused on the primary task of establishing the Subject Matter Expert Advisory Group (SME Group). An essential feature of the planning process, the SME Group was convened to guide the planning process, provide content expertise, advise on the community engagement process, participate in community engagement activities, and review the draft report/plan. Most importantly, the SME Group led development of the action plan through the vision and action planning sessions. SMEs were offered an honorarium for the considerable time they gave to this work.

The 16-member SME Group, which first met in December, was comprised of representatives of non-profit organizations (including urban agriculture, advocacy organizations, land trusts); federal agencies; technical assistance/education providers; policy experts and advocates; and farmers. Representation and equity were primary considerations, and the SME Group also included several members from BIPOC agricultural organizations and groups, including Urban Farming Institute, Agric Organics Urban Farm, and Nipmuc Nation. The second SME meeting in January focused on racial equity and inclusion in the planning process. Feedback from this meeting and other conversations with BIPOC leaders and advocates, as well as from subsequent listening sessions, drove the decision to add additional engagement activities focused specifically on BIPOC, immigrant, and Spanish-speaking stakeholders.

The action planning process was divided into four distinct and often overlapping phases: situation assessment; community engagement activities; planning sessions; and preparation of the report and plan. The situation assessment, included as Part I of this report, involved research on current conditions, reviewing recent and current policies/programs, and providing an overview of previous statewide plans. The community engagement activities included listening sessions, a public survey, and activities specifically focused on gathering input from additional BIPOC and other historically underserved stakeholders. The planning sessions included one vision planning session and six action planning sessions. Table 1, below, provides an overview of the different ways groups and individuals participated in the planning process.

From the beginning, the timeline for completing the planning process was extremely ambitious due to a number of primarily external factors – the timeline set by the project's enabling legislation, budget

constraints, and the urgent need for a plan to protect farmland. As a result, the core elements of the process—the community engagement, research, and planning sessions—took place over a seven-month period. Key dates in the process included:

• October 28, 2021	Contract between MDAR and UMDI finalized
• November 9	Initial invitations sent to potential SME Group members
• December 20	First SME Group meeting
• November-May	Research compiled and completed (current conditions report, overview of policies/programs, and review of previous statewide plans)
• January 28, 2022	Second SME Group meeting
• February 15	Listening Session in English
• February 16	Listening Session in English
• February 17	Third SME Group meeting
• March 16	Vision Planning Session held
• March 21-31	Six Action Planning Sessions held
• March 22	Online survey opens for responses (closes in early April)
• April 14	BIPOC/Immigrant organizations invited to host focus groups to augment feedback on challenges and recommendations
• May 2	Fourth SME Group meeting
• May 3	Listening Session in Spanish
• May-June	Additional feedback from BIPOC stakeholders gathered through BIPOC-led community engagement activities, including focus groups/discussions, survey, and one-on-one feedback
• May-July	Action Plan developed from vision and action planning sessions and additional input from BIPOC stakeholders
• August 2	Draft Report/Plan presented to SMEs for review

As this timeline shows, the research, community engagement, and vision/planning sessions were, at times, happening concurrently rather than sequentially. Thus, for example, the action planning sessions took place before all the stakeholder feedback had been gathered, including feedback from the additional BIPOC stakeholder engagement activities that took place in May, June, and early July.

While synchronizing community engagement with action planning presented several challenges, a significant benefit was that all of the feedback received was reflected in the plan. In this process, the MFSC and UMDI staff repeatedly returned to the stakeholder recommendations, striving to ensure that priorities for each specific group of stakeholders were addressed. As a result, important context and nuance was provided through the later engagement activities, and the inclusion of diverse stakeholders in the SME Group and community engagement activities ensured that key priorities, including for BIPOC and other historically underserved groups, were articulated throughout the process.

While reflecting the priority recommendations of stakeholders, the actions and tasks in the action plan are not simply a recitation or reorganization of stakeholder recommendations. In the action planning sessions, the SME Group, with some additional stakeholders, developed the broad goals and strategies for the Farmland Action Plan. In subsequently crafting action steps from these goals and strategies, the individuals writing the plan took into consideration a wide variety of other factors, including current

state programs, policies, incremental steps that might be needed to implement an action, resources needed, logical sequence of activities, and other related issues. In some cases, for example, stakeholders recommended the creation of a program for farmers that already existed. In that case, the planners considered the issue underlying recommendations like this, such as whether more outreach might be needed to inform farmers about an existing program or whether the program might be inaccessible to certain groups of farmers, and if so, why. In this example, resulting actions incorporated into the plan included steps to increase communication and accessibility or undertake additional research to understand what barriers might be preventing farmers from accessing the program.

A number of important lessons were learned during the process, maybe none more important than this: it takes time to build an engaged, diverse community that is invested and supportive of a complex planning process and the eventual plan that emerges from that process. At the second SME Group meeting focused on racial equity and inclusion, the group identified lack of a common language and understanding about the extent of racial injustice, the history of land ownership and dispossession in Massachusetts, and the exclusionary, systemic practices that have barred BIPOC, and immigrant farmers and communities from equitably accessing farmland. Education and meaningful dialogue take time. We strongly encourage future planning efforts, including the implementation phase of the Farmland Action Plan to “move at the speed of trust,” as one SME called for in the second SME meeting. That means seeking to meaningfully partner with BIPOC stakeholders and organizations at the outset of these efforts and allowing more time for engagement of stakeholders in order to develop trust among participants and the capacity for all to fully participate.

We also learned about the importance of being mindful and respectful of our stakeholders’ time. BIPOC and other underserved stakeholders in this sector are often repeatedly called upon to provide input, support a wide variety of planning efforts, and represent their communities to outsiders. While some key stakeholders represent entities that pay them for their time in processes such as these (and for whom this sort of project is part of their regular course of business), others are farmers and other community members for whom the time commitment is significantly burdensome and may mean a loss of income. In order to ensure that lived experience was valued as much as professional training in completion of this report, stipends were offered to compensate these groups and individuals for contributing their time. Although we had not originally planned for this expense, MDAR approved a budget amendment which enabled us to offer an honorarium to each group or facilitator hosting a BIPOC engagement activity. In almost all cases, groups directed these funds to be used as gift cards for participants. Understanding that more time was needed to maximize the BIPOC-specific engagement, which overlapped with the planning and growing season, we extended the participation deadlines, and ultimately the project completion deadline as well.

The Action Plan (see Part III) is a working document that will serve as the foundation for developing a highly detailed Implementation Plan/Matrix through FY 2023 and beyond. Using that plan as a guide, and working in partnership with MDAR, numerous groups across the Commonwealth will be involved in implementing this plan over the next decade, taking on assigned tasks, working within clear timelines, and being continuously accountable to the plan’s benchmarks and outcome measures. Beyond merely serving as an inspiring call to action, the Massachusetts Farmland Action Plan is already poised to enter its next, critical implementation phase, eventually positioning Massachusetts as a national leader in socially just farmland protection, access, and viability.

TABLE 1: Groups/Individuals involved in Action Planning Process

Groups/ Participants	Description
Lead Planners	
Steering Committee	Comprised of staff with the four implementation partners (UMDI, MFSC, AFT, and MDAR)
Subject Matter Expert Advisory Group (SME Group)	<p>This 16-member SME Group provided content expertise; advised on the community engagement process; participated in community engagement activities, including the vision and action planning sessions; and reviewed the draft report/plan. SME Group participants and their affiliations:</p> <ul style="list-style-type: none"> • Clem Clay, UMass Extension • Cris Coffin, American Farmland Trust/National Agricultural Land Network • Dan Wright, Natural Resources Conservation Service • Hameed Bello, Agric Organics Urban Farm • Jennifer Hashley, New Entry Sustainable Farming Project • Jim Habana Hafner, Land for Good • Jim Lattanzi, Massachusetts Farm Bureau and Hollis Hills Farm • Karen Schwalbe, Southeastern MA Agricultural Partnership • Kathy Orlando, Sheffield Land Trust • Kristen Wyman, Nipmuc Nation • Kurt Gaertner, Executive Office of Energy and Environmental Affairs • Mark Parlee, Parlee Farm • Mark Wamsley, Kestrel Land Trust • Marty Dagoberto, Northeast Organic Farming Association • Patricia Spence, Urban Farming Institute • Tim Wilcox, The Kitchen Garden

Facilitators/Hosts for BIPOC, Immigrant, and Spanish Language Engagement Activities	
Joy Gary and Karen Spiller	Hosted two discussions with Farmers of Color and representatives of organizations that are led by and work with farmers of color. Discussions focused on farmland and issues of equity. Joy Gary is Executive Director of Boston Farms Community Land Trust, and Karen Spiller is Chair of Southern New England Farmers of Color Collaborative.
Henrietta Isaboke	Hosted three discussions with immigrant and refugee farmers. Two were held with farmers engaged in World Farmers’ Flats Mentor Farm program. One was held in partnership with Multicultural BRIDGE. Henrietta Isaboke is Executive Director of World Farmers.
Kristen Wyman	Used a combination of interviews and a survey to gather input from Tribal communities in Massachusetts. Kristen Wyman is a Nipmuc Tribal citizen and a subject matter specialist and food producer.
Community Consulting Initiative	Facilitated Spanish Language Listening session. Facilitators were Dalila Hyry-Dermith & Julie Rapoport.
Research & Community Engagement Consultants	
rBouvier Consulting	Assisted in developing summaries of themes from the Listening Sessions and from the Survey.

Melanie Goodman, Youth Catalytics	Designed and facilitated the Action Planning sessions in collaboration with UMDI and MFSC.
Community Engagement Activities	
Listening Sessions	Two sessions in English and one in Spanish were attended by a total of 218 individuals.
MA Farmland Action Online Survey	430 unduplicated respondents—including 215 farmers and 48 aspiring farmers—completed the survey.
BIPOC and Immigrant Farmer Engagement	A total of 42 individuals participated in seven engagement activities, including five discussions/focus groups (three with immigrant and refugee farmers and two with farmers of color), and a survey and interviews with Nipmuc and other Tribal citizens.
Planning Sessions	
Vision Planning Session	The vision planning session was attended by 15 SMEs and other stakeholders in addition to MDAR staff.
Action Planning Sessions	The six action planning sessions (two each on protection, access, and viability) were conducted with 14 SMEs, as well as 20 additional stakeholders, for a total of 34 unique participants. Between 8-14 participants were at each session, with several individuals attending multiple sessions.

Methodology: Research and Stakeholder Engagement

An essential component of the Farmland Action planning process involved gathering quality information and research data to inform planning decisions, including the identification of needs and critical issues related to farmland protection, access, and viability. Conducted from December 2021–June 2022, this information-gathering process comprised two distinct approaches: research and cross-sector stakeholder engagement.

Research

Researchers with the Massachusetts Food System Collaborative (MFSC), American Farmland Trust (AFT), and rBouvier Consulting used third-party resources, recommendations related to farmland from previous statewide planning efforts, and other quantitative data to describe current conditions and trends in farmland, current programs, and relevant policies. Specific research approaches included:

- *Analysis of available data on current conditions and trends.* Data compilation and analysis focused on the age of Massachusetts farmers, county-level rates of protected farmland, and conversion of agricultural lands to developed or non-farm, non-developed land uses from 1985 to 2016.
- *Review and summary of current agricultural programs and policies.* This research included a comprehensive review of websites and reports on current laws, public investments, programs, and policies relative to farmland protection.
- *Review and synthesis of goals and recommendations of previous statewide plans.* Researchers prepared brief summaries of many recent plans and reports related to farmland and agriculture in Massachusetts. Each summary included an overview of the plan or study, key goals and

objectives, and findings related to farmland. The research team also identified significant themes and recommendations across all the plans.

Cross-Sector Stakeholder Engagement

UMDI, with support from rBouvier Consulting, gathered qualitative information from individuals across the state representing a wide range of interests related to farmland protection, viability, and access. These stakeholders included farmers, policy advocates, representatives of targeted groups and communities, legislators, other subject matter experts, and staff with the Massachusetts Department of Agricultural Resources (MDAR).

Although BIPOC and immigrant stakeholders participated in all the engagement opportunities offered to the general stakeholder population, they typically comprised a small percentage of participants in these settings. Thus, understanding that BIPOC people have been systemically discriminated against in agriculture for generations—and are often excluded from processes like this one—the planning process included engagement opportunities focused on the experiences, challenges, and recommendations of BIPOC, immigrant, and Spanish-speaking stakeholders.

In addition to engagement activities for the general stakeholder population, seven additional activities were hosted, specifically to reach Indigenous, People of Color, immigrants, and Spanish-speaking farmers and stakeholders. These activities were led by:

- Henrietta Isaboke, Executive Director of World Farmers (led three discussions/focus groups)
- Joy Gary, Executive Director of Boston Farms Community Land Trust and Karen Spiller, Chair of Southern New England Farmers of Color Collaborative (led two discussions/focus groups)
- Kristen Wyman, a Nipmuc Tribal citizen and food producer (conducted a survey and individual interviews with Tribal members)
- Julie Rapoport and Dalila Hyry-Dermith of the Community Consulting Initiative (facilitated the Spanish language listening session)

The community and stakeholder engagement process centered on identifying the challenges faced by farmers and other stakeholders and gathering their recommendations on ways to increase the protection of farmland, increase farmer access to farmland, and support the long-term economic and environmental viability of farms and farmland. The survey and listening sessions were widely publicized to thousands of farmers and stakeholders through contact lists and newsletters distributed by MDAR, MFSC, the Massachusetts Farm Bureau, and others. More than 600 stakeholders engaged in this process through one or more of the following activities:

- *Public listening sessions.* Three virtual public listening sessions took place; two were held in English on February 15 and 16, and a third was held in Spanish on May 3. A total of 218 individuals attended the listening sessions. Discussions focused on challenges to protecting and accessing farmland; how to increase protection of and access to farmland for all farmers, including new, beginning, and BIPOC or immigrant farmers; and how to best support farm businesses and farmland viability.
- *Survey.* From March 11–April 4, UMDI invited the public to complete an online survey. Altogether, 430 respondents, including 215 farmers, completed the survey. Results from the survey have

been integrated into the overall findings and presented as a stand-alone finding in Section III, Part 3.

- *BIPOC and immigrant farmer engagement.* BIPOC facilitators hosted five formal discussions/focus groups and interviewed community leaders representing the following communities:
 - o Indigenous farmers
 - o Farmers of color
 - o Immigrant or refugee farmers

UMDI also collected and reviewed written input and suggestions from other BIPOC organizations and leaders involved with farming.

- *Vision and action planning process.* The goal of the Vision and Action Planning sessions was to engage planning participants in developing a unified vision for the future of Massachusetts farmland through 2050 and prioritizing goals and actions designed to advance that vision over the next 5–10 years. All 15 SMEs and 20 additional stakeholders participated in vision and action planning. The core planning engagement activities included the following:
 - o The 16-member *Subject Matter Expert Advisory Group (SME Group)* was convened early in the process to provide content expertise, offer guidance around community engagement, and participate in the Vision and Action Planning sessions. The SME Group comprised representatives of nonprofit organizations (e.g., urban agriculture, advocacy organizations, land trusts); federal agencies; technical assistance/education providers; policy experts and advocates; BIPOC agricultural organizations; and farmers.
 - o A *Steering Committee* comprised of staff from the four implementation partners (UMDI, MFSC, AFT, and MDAR) collaborated on the design and execution of the overall planning process, including determining the focus of the research and community engagement efforts. Together, the Steering Committee also identified stakeholders from multiple sectors and regions of the state to join the SME Group. Three of the Steering Committee partners—MFSC, AFT, and MDAR—also participated during the Vision and Action Planning sessions, which were facilitated by UMDI.
 - o Twenty *additional stakeholders* joined the planning process at different points, electing to attend the Vision and/or one or more of the Action Planning sessions.

The *Vision Planning session* was held on March 16, 2022. Twenty-five people attended, including 15 SMEs and stakeholders. Six virtual *Action Planning* sessions were held from March 21–31. Two sessions were held on each of the three focus areas for the Farmland Action Plan: protection of farmland, access to farmland, and viability of farms and farmland. Stakeholders opted to participate in the sessions that most interested them; between eight and 14 stakeholders, including all the subject-matter experts and 20 additional stakeholders attended each session. In total, 36 unique participants engaged in the Action Planning sessions, with some SMEs and stakeholders attending multiple sessions. Through a mix of individual activities, small-group breakouts, and large-group exercises, Action Planning participants prioritized overarching strategic directions, goal statements, and potential actions to address identified challenges. Their decisions were informed by research, community engagement findings, and their own understanding of the issues. Ultimately, the

strategic directions, goals, and actions that emerged from the Action Planning sessions provided the foundation for the entire Massachusetts Farmland Action Plan included in this document.

The research findings, which are summarized in Part I, and the community engagement findings, included in Part II, address a variety of issues that are central to farmland protection, access, and viability in the Commonwealth. Thus, they provided critical context for the subsequent development of the Massachusetts Farmland Action Plan.

Acronyms and Definitions

Acronyms and Abbreviations

- **BIPOC** Black, Indigenous, and People of Color
- **NWL** Natural and Working Lands

State Programs and Agencies

- **APR** Agricultural Preservation Restriction
- **CLTC** Conservation Land Tax Credit
- **CR** Conservation Restriction
- **CPA** Community Preservation Act
- **EEA** Executive Office of Energy and Environmental Affairs
- **MDAR** Massachusetts Department of Agricultural Resources

Federal Programs and Agencies

- **ACEP** Agricultural Conservation Easement Program
- **ALE** Agricultural Land Easements
- **NRCS** Natural Resources Conservation Service
- **USDA** United States Department of Agriculture

Definitions

- **Farm** or **land in agricultural use** has multiple definitions depending on the program:
 - According to **Chapter 128 Section 1A of Massachusetts General Laws**,
"farming" or "agriculture" shall include farming in all of its branches and the cultivation and tillage of the soil, dairying, the production, cultivation, growing and harvesting of any agricultural, aquacultural, floricultural or horticultural commodities, the growing and harvesting of forest products upon forest land, the raising of livestock including horses, the keeping of horses as a commercial enterprise, the keeping and raising of poultry, swine, cattle and other domesticated animals used for food purposes, bees, fur-bearing animals, and any forestry or lumbering operations, performed by a farmer, who is hereby defined as one engaged in agriculture or farming as herein defined, or on a farm as an incident to or in conjunction with such farming operations, including

preparations for market, delivery to storage or to market or to carriers for transportation to market.

Massachusetts General Law, Part I, Title XIX, Chapter 128, Section 1A

- o According to the **Massachusetts Model Farm Bylaw**, “any parcel or contiguous parcels of land, or water bodies used for the primary purpose of commercial agriculture, or accessory thereto” (MA Model Right to Farm By-Law).
- o According to the **USDA**, “any place from which \$1,000 or more of agricultural products were produced and sold, or normally would have been sold, during the year” (USDA ERS Glossary).
- o To be eligible for property tax reductions under the **Chapter 61A** program,
land shall be deemed to be in agricultural use when primarily and directly used in raising animals, including, but not limited to, dairy cattle, beef cattle, poultry, sheep, swine, horses, ponies, mules, goats, bees and fur-bearing animals, for the purpose of selling such animals or a product derived from such animals in the regular course of business; or when primarily and directly used in a related manner which is incidental thereto and represents a customary and necessary use in raising such animals and preparing them or the products derived therefrom for market OR land shall be considered to be in horticultural use when primarily and directly used in raising fruits, vegetables, berries, nuts and other foods for human consumption, feed for animals, tobacco, flower, sod, trees, nursery or greenhouse products, and ornamental plants and shrubs for the purpose of selling these products in the regular course of business; or when primarily and directly used in raising forest products under a certified forest management plan, approved by and subject to procedures established by the state forester, designed to improve the quantity and quality of a continuous crop for the purpose of selling these products in the regular course of business; or when primarily and directly used in a related manner which is incidental to those uses and represents a customary and necessary use in raising these products and preparing them for market.

Massachusetts General Law, Part I, Title IX, Chapter 61A, Sections 1 and 2

- o To be eligible to apply for the **APR** program, “at least five acres, having been in production for the previous two years, and producing at least \$500 in gross sales for the first five years” (MA APR Program Details).
- o To be protected using **Community Preservation Act** funds,
“Open space” shall include, but not be limited to, land to protect existing and future well fields, aquifers and recharge areas, watershed land, agricultural land, grasslands, fields, forest land, fresh and salt water marshes and other wetlands, ocean, river, stream, lake and pond frontage, beaches, dunes and other coastal lands, lands to protect scenic vistas, land for wildlife or nature preserve and land for recreational use. CPA requires that municipalities have ownership (or co-ownership) of any real property interests acquired with CPA funds. If CPA funds are used towards the purchase of an APR, and the state of Massachusetts will be the holder of that APR, the town should be listed as a co-holder.

Is Our Project Allowable? Community Preservation Coalition

- o To be protected using the **Conservation Land Tax Credit**, “land in agricultural production that is permanently protected through the **Credit** and determined to be in the public interest.” ([CLTC, Ma.gov](#)).

Historically underserved is a term used by the NRCS-USDA in regard to producers, defined as “a person, joint operation, legal entity, or Indian Tribe who is a beginning farmer or rancher, socially disadvantaged farmer or rancher, limited resource farmer or rancher, or veteran farmer or rancher.” (7 C.F.R. 1466.3). Federally, socially disadvantaged is defined as “a group whose members have been subjected to racial or ethnic prejudice because of their identity as members of a group without regard to their individual qualities” (7 U.S.C. 2279). Socially disadvantaged groups include African Americans, Cape Verdeans, Hispanics, Asian Americans, Pacific Islanders, Caribbean Islanders, Alaskan Natives, and Native Americans. Understanding that “underserved” denotes a wide variety of groups with differing perspectives, experiences, and needs, throughout this report we have attempted to refer to more specific demographic groups or communities when appropriate.

Natural and working lands are lands within the Commonwealth that:

(i) are actively used by an agricultural owner or operator for an agricultural operation that includes, but is not limited to, active engagement in farming or ranching; (ii) produce forest products; (iii) consist of forests, grasslands, freshwater and riparian systems, wetlands, coastal and estuarine areas, watersheds, wildlands or wildlife habitats; or (iv) are used for recreational purposes, including parks, urban and community forests, trails or other similar open space land.

[Session Law, Acts of 2021 Chapter 8 \(malegislature.gov\)](#)

Whole farm planning and protection is the inclusion of forestland, housing, infrastructure, and other resources that support long-term viability of farming operations.

Part I: Background on Current State of Massachusetts Farmland

Historical and Present-Day Context

Indigenous History

Massachusetts landscape tells the story of people farming and foraging, from the archaeological sites of the First Peoples and current restoration efforts by the Nipmuc and Aquinnah Wampanoag, to the thousands of miles of stone walls built in the first half of the 1800s, a time when most residents farmed ([Thurlow, 2022](#); [Zuckoff, 2022](#); and [Smith, 2016](#)). The land that is now the Commonwealth of Massachusetts has been settled, actively managed, and cultivated for more than 12,000 years, and the First Peoples—including what came to be the Nauset, Massachusetts, Wampanoag, Nipmuc, and others—hunted and fished, gathered berries, foraged medicines and herbs, and grew corn, beans, and other crops in the rich soil. Some of these soils are still among the most productive in the United States, contrary to the old tale borne of New England’s stone walls, that the rocky soils only grow stones. Some soils are indeed rocky but can still support farm operations and have regional importance.

Mid 1800s to Present Day

By the mid-1800s, up to 80% of the state’s landscape had been cleared of forests for farms, much of that for grazing. This began to change as farming shifted to the midwestern United States, and by the 1940s much of Massachusetts’ open fields and farmland were returning to forest or being converted to other uses ([Hall, 2002](#)).

Today, about 10% of Massachusetts land is farmed. While forested lands are important for a variety of reasons—as wildlife habitat, as a recreational resource, for the value of wood products, and for their watershed protection and carbon-capture value—agricultural lands support the production of food, fiber, and resource-based livelihoods. Farms are an important part of the state’s economy and, when well-managed, are a critical component of a healthy environment. Massachusetts farms tend to be under 50 acres and family-owned, and about one third are under 10 acres. The state’s top market value crops are vegetables, melons, potatoes and sweet potatoes, and fruits, as well as hay, nursery stock and sod, and tobacco. Dairy represents a top agricultural land use, and, poultry, eggs, and other livestock are important as well ([USDA, 2017](#)).

Food Security

Food security, health benefits, food quality, local economy, and concerns over climate change have prompted a resurgence in awareness of Massachusetts’ agricultural economy. The global COVID-19 pandemic, which began in 2020, brought food shortages and revealed significant vulnerabilities in supply chains, highlighting the importance of regional and local food sources.

Adaptation to COVID-19 Crisis

Local farms responded nimbly to the crisis brought on by the pandemic. For example, local [food delivery services](#) ([MassLive, 2020](#)) increased their routes and offerings, including local dairy and other products. Lilac Hedge Farm in Rutland grew, with online orders increasing from 10–15 per week to more than 1,000, and offerings expanding beyond their meat to include products from other farms ([LeRoux, 2022](#)).

Mass Food Delivery, which delivers a variety of products as well as free produce to families through the USDA Farmers to Families Program, started in March 2020 and now serves more than 4,000 families ([MA Food Delivery, 2023](#)). Many other farms innovated similarly to meet community demand.

Before 2020, interest in growing and purchasing local foods was already increasing, including interest in foods that are culturally important and familiar to immigrants. The COVID-19 pandemic only magnified this trend. Fresh food has also been shown to benefit public health and to help people avoid medical costs ([NIH, 2019](#)). The federal Supplemental Nutritional Assistance Program (SNAP), which allows benefits to be used at farmers markets, supports public health by supporting a healthy diet. Since 2013, the number of Massachusetts SNAP-authorized farmers markets increased from 153 to 384, and the use of benefits at markets increased 1,542% ([USDA, 2021](#)). The state’s innovative Healthy Incentives Program, which matches SNAP recipients’ purchases of fresh, healthy, local food when they buy it directly from farmers, incentivizes the purchase of more than \$10 million of local produce each year, supporting both public health and local agriculture ([DTA](#)).

Direct Marketing

Including sales through SNAP, overall direct-market sales account for 21.1% of the state’s total sales of agricultural products—the highest proportion in the United States. Massachusetts ranks fifth in the nation for direct-market sales and third in the nation for direct-market sales per farm ([MDAR website](#)). Although farmland is threatened in the state, the number of small farms is growing, as are efforts to support the direct-to-consumer economy through community-supported agriculture (CSA) shares, farmers markets, farmstand sales, delivery services, and other direct retail sales models.

Urban Agriculture

Urban agriculture is also growing in Massachusetts. Urban farms provide local, fresh, affordable food and increase food sovereignty; provide jobs and educational opportunities; and provide access to green spaces and a connection to the land. MDAR supports the Urban Agriculture Program ([MDAR website](#)), and Community Land Trusts, discussed later in the plan, are important partners. The City of Boston’s Office of Food Justice supports farming in Boston ([Boston.gov, 2016](#)).

Farmland Loss

Massachusetts has seen a steady loss of farmland over the last 120 years. The food system has shifted to centralized production, and population has increased – and with it the need for more housing and other infrastructure. As a result, there are several factors that currently threaten the prevalence of farmland in Massachusetts. The following section outlines the major pressures that currently threaten the prevalence and quality of farmland in Massachusetts, and why farmland loss is a concern for our Commonwealth.

American Farmland Trust (AFT) recently released a series of analyses and tools called “Farms Under Threat” to “safeguard local farms and ranches, bolster the global food system, and improve people’s daily lives.” AFT found that between 2001 and 2016, 27,200 acres of available Massachusetts farmland was lost (AFT, 2022). Under the AFT scenario modeling, depending on pace of protection and improvement of land-use planning, Massachusetts stands to lose between 50,000 and 90,000 acres of farmland by 2040. “Farms Under Threat: State of the States” ranked Massachusetts third among all states in percent of its agricultural land base converted between 2001–2016. AFT’s latest research,

“Farms Under Threat: Choosing An Abundant Future” projects that Massachusetts will convert nearly 15% of its agricultural land base by 2040. This ranks it third among states in its percent of agricultural land threatened by conversion ([AFT, 2022](#)).

Expanding development of housing and commercial infrastructure, reforestation, lack of comprehensive statewide land-use planning and clear goals for farmland protection, rising land prices, an aging farmer population, and environmental impacts, such as soil degradation, are all factors related to loss of farmland in Massachusetts. Farmland is not the state’s only land-use priority, of course. The need for more affordable housing, expansion of solar energy-generating capacity to reduce mandated greenhouse gas emissions, conservation of land for recreation and natural resource protection, and other public interests, can and does at times pose a threat to farmland, as the land resources that farmers hold often offer appealing opportunities for each of these other needs. Farmland is cleared and often flat, making it an attractive development site.

Housing construction is a particularly complex issue, as lack of affordable housing in a state with high housing costs is also a challenge for farmers, particularly new or next generation farmers. Conversion of farmland to conventional low-to-the-ground-mounted solar panel installations is also of concern, although dual-use projects may offer opportunities to provide income for farmers from energy production while keeping fields in some agricultural uses. Mass Audubon’s *Losing Ground: VI* (2020) identified that roughly one quarter of total new development between 2012 and 2017 was large-scale ground-mounted solar arrays, highlighting the need for smart planning to protect resources like farmland and ensure that necessary energy infrastructure, including solar arrays, are sited in ways that work in harmony with agriculture ([Mass Audubon, 2020](#)).

Changes in how and where people live, including the beneficial expansion of broadband internet access into rural communities make working remotely feasible and thus increase demand for housing in agricultural areas. This has helped drive land prices further upward. Massachusetts farmland is some of the most expensive per acre in the United States, at \$13,700 per acre in 2021. Only Rhode Island and New Jersey are more expensive in the Northeast. Massachusetts farmland increased 21% in value between 2020 and 2021, which is two to three times greater than any other Northeastern state ([USDA/ESMIS, 2022](#)).

The majority of farmers are over 35 years old, with close to half over 65 - 1,082 farmers are under 35; 7,381 are between 35 and 64; and 4,315 are 65+ (for more, see Appendix B) ([USDA, Census of Agriculture, 2017](#)). While succession planning assistance is offered by nonprofits, such as Land for Good, more is clearly needed, as many farms still do not have succession plans in place. This leaves valuable land vulnerable to sale for conversion out of agricultural use.

Climate change and its impact on farmland, as well as on political and supply-chain stability, is a threat that must be addressed at all levels. Protecting farmland and supporting distributed food production systems is part of the solution. The 2022 Intergovernmental Panel on Climate Change report illustrates that current efforts are not enough to stop the catastrophic impacts of global warming and finds that the biggest impacts will be on agricultural systems ([IPCC, 2022](#)).

Broader challenges to the farming industry—high production costs, risks of extreme weather events due to climate change, and a competitive market and pricing that favor larger scale production than Massachusetts has capacity for—threaten farm viability in general, often leading to the sale of portions of farmland to sustain operations or even of entire farms that are then lost forever. New England has

lost much of its dairy industry, including over two thirds of Massachusetts dairy farms, since 1997 ([Farragher, 2020](#)). Cheaper milk from other parts of the United States, coupled with high land prices and development pressure here, is in large part the cause. Cranberry, one of Massachusetts's top crops, faces competition from other states and Canada, increasing labor costs, climate change, and development pressures. The 2016 Cranberry Revitalization Task Force Report details these issues ([MDAR, 2016](#)).

In addition, many programs and laws were developed to address specific needs of farmers at particular times, but changes in agriculture have evolved and have outpaced some of these efforts, making them no longer adequate to address current pressing issues. For example, advances in technology and farming practices, coupled with the steady loss of large pieces of land, have resulted in farmers in rural and urban areas producing more food on smaller parcels. However, eligibility for some of the state's farmland programs requires that farmers steward parcels of five acres or more. As a result, not all farmers can benefit from these programs, in particular BIPOC and young farmers, for whom the cost of larger parcels keeps them out of reach, thereby further exacerbating existing inequities in farmland access.

Active, productive farmland will continue to decline without proactive efforts, and with that, the state's ability to produce food will weaken during a time when local food security, especially in the face of global climate change impacts on food production, is of growing importance. While Massachusetts cannot grow or harvest all of the food its residents need, the state can certainly better protect, steward, and increase its production capacity and be part of a more diverse, distributed, and resilient food supply system—a need recognized by the USDA ([USDA, 2022](#)).

Impact of Farmland Loss

The most obvious and immediate impact of the loss of farmland is the shuttering of farms. The agricultural industry represents \$10 billion in economic impact each year in Massachusetts and provides jobs to 25,920 farm employees and an additional 45,000 people in ancillary jobs ([MDAR 2018/2019](#)). As farms close, related jobs are lost, and the money spent previously on agricultural products goes out of state instead of recirculating through the local economy. AFT analysis projects that without intervention, 60% of farmland loss will occur on Massachusetts' best farmland; and 1,200 farms, \$91 million in farm output, and 4,900 jobs will be lost. Hardest hit counties will be Worcester, Plymouth, and Bristol ([American Farmland Trust, 2022](#)). That loss of production capacity is also expected to diminish food security for Massachusetts residents. As evidenced by the COVID-19 pandemic, drought and fires in the country's largest food-producing states, and recent ransomware attacks on the meat-processing industry, larger, consolidated food supply chains are exceptionally fragile ([Hern & Villarreal, 2021](#)). Producing food in Massachusetts is essential to ensuring that the state has some protection against those vulnerabilities.

Farmland also provides critical green infrastructure, sequestering carbon through conservation practices and regenerative agriculture practices which include cover crops, crop rotations, reduced tillage, various livestock grazing strategies, and more. These practices rebuild soil health by increasing organic matter, supporting microbial life, boosting water holding capacity and reducing erosion. AFT's research shows that adoption of just two regenerative practices — cover crops and no-till — on 70 percent of America's cropland is equivalent to removing 53 million cars from the road. ([American Farmland Trust, Accessed 7/12/23](#)). Also, according to AFT's Farms Under Threat study, keeping land in agriculture and limiting development can curb emissions due to transportation.

Farmland also supports recharging of groundwater aquifers and surface waters, as well as improved water quality, and provides pollinator and wildlife habitat. In a growing number of cases farms also provide outdoor recreation opportunities, including recreational trails, hunting, and farm visit experiences. Farmland is also important for the Massachusetts tourism economy and is often cited as an important part of community character, history, and quality of life in Massachusetts towns and cities.

Recent efforts have identified farmland protection and food security needs in Massachusetts, including the 2015 Massachusetts Local Food Action Plan ([MA Food Policy Council, 2015](#)) and the New England Food Vision ([Food Solutions New England, 2014](#)), the latter of which outlines how to grow a regional food system that is supported by 15% of the region, or 6 million acres, producing food. That is a three-fold increase from the current amount of land in production, requiring significant investments in both rural and urban farming. Another project, Wildlands and Woodlands, Farmlands, and Communities ([Wildlands and Woodlands, 2017](#)), presents a vision for New England that offers clear pathways to conserve the land that provides a healthy, more livable planet for all. Wildlands and Woodlands calls for 80% of New England to be protected as forests and farmlands by 2060. In the Commonwealth, the Massachusetts Local Food Action Plan calls for this Farmland Action Plan, as well as for increased investments in farmland protection, equitable access to farmland, and better supports for new farmers.

Why would a landowner want to protect their farmland?

- *Preserve the farm for future generations.*
- *Raise funds to invest in farm operations and farmland.*
- *Provide for family needs, such as retirement.*
- *Reduce operating costs.*

Tools and funding to protect farmland

Farmland can be permanently protected through a combination of outright purchase, donation, and the purchasing or donation of development rights. Also, reduced property tax rates, while they don't achieve permanent conservation, can serve to keep land in agricultural use for a period of time. This combination of tools can be of much-needed benefit to the landowner including the infusion of capital through the extinguishing (i.e., selling) of development rights to land-protection entities, eligibility for grants, and long-term financial benefit through a reduced property tax rate. Land protection is a public interest, and the Executive Office of Energy and Environmental Affairs (EEA) oversees state land-protection programs.² In addition to protection tools, there are programs that support farm businesses, nonprofit programs to connect farmers to farming opportunities, and business and succession planning.

Tools and criteria for protecting farmland are discussed below, with more detail provided in Appendix C.

Permanent Protection Tools

- **Agricultural Preservation Restrictions.** The most widely used tool to permanently protect farmland is the Agricultural Preservation Restriction (APR) Program, which can be used for commercially active farms five acres or larger. The majority of APRs are state-held, although some are private and both are important protection tools. In the late 1970s, Massachusetts was the first state to develop a program that purchases agricultural restrictions on farmland, also called

² Information on these programs can be found at <https://www.mass.gov/service-details/how-is-land-protected>. Descriptions of land protection grant programs that EEA administers can be found at <https://www.mass.gov/land-and-recreation-grants-loans>, and specific agricultural grants and programs can be found at <https://www.mass.gov/agricultural-grants-and-funding-programs>.

agricultural conservation easements in other states, paying farmers the difference between the fair market value and the fair market agricultural land value of their farms in exchange for a permanent restriction that runs with the deed that preserves the land for future agricultural use. The APR Program served as a national model, with several states following and adopting similar programs (MDAR APR Webpage). The first Massachusetts APR, signed in 1980, protected part of one of the oldest farms in the United States, in operation since 1675. Since then, more than 977 state-held APRs have protected a little under 75,000 acres in 172 municipalities in the Commonwealth (MDAR, 2020).

Many APRs were protected with the help of federal funding, as well as support from municipalities and land trusts, and more than 480 APRs are co-held by municipalities. Some APRs can be subdivided into smaller separate farm properties if certain conditions are met, and to date there have been 20 subdivisions. To meet changing on-farm needs, there is a special permit process whereby some non-farm activities can be reviewed and permitted on APRs, under certain conditions. To date, 31 special permits have been approved and two denied.

State-held APRs receive state funding, and the state holds the restrictions. The Agricultural Lands Preservation Committee (ALPC) evaluates and accepts or rejects state-held APR applications and has the authority to approve co-holding with a municipality ([MDAR ALPC Webpage](#); [MDAR APR Regulation](#)). APRs can also be held by private entities such as a land trust, or other public entities such as a municipality. MDAR evaluates and accepts or rejects those APRs. By law, MDAR cannot provide funding to acquire APRs on which it does not hold the restriction.

For all APRs, both state-held and otherwise, the Commissioner of MDAR approves and signs the APR itself. For conservation restrictions, detailed below, the Secretary of EEA approves and signs the document.

The APR Program has faced a number of process challenges that were identified in a 2018 state audit, and the Commonwealth has been working to address these issues ([Office of State Auditor, 2018](#)). Some of these challenges were raised in the stakeholder engagement for this Plan, including education and communication—and MDAR is in the process of developing tools to address them. For example, additional resources are needed to develop current and potential APR landowner training. The principal finding of the audit on Option to Purchase at Agricultural Value (OPAV) and Right of First Refusal (ROFR) has been addressed through a regulatory update, and landowners can now withdraw their request to sell their APR-protected land or appeal a decision by MDAR to exercise its OPAV and/or ROFR to the ALPC. Other audit findings indicated that MDAR should annually monitor all of its 977 APRs, which is a land protection best practice, and while MDAR has increased staff, it still lacks sufficient stewardship personnel.

- **Conservation Restrictions.** Farmland can also be permanently protected by conservation restrictions (CRs), a statute parallel to APRs, with the significant difference being the lack of a requirement to continue to farm. Conservation restrictions are used more broadly, protecting natural resources such as wildlife and rare species habitat, watershed lands, and outdoor recreational lands. The Commonwealth’s 2022 model conservation restriction helps encourage landowners to consider protecting farmland using this tool by providing sample language that can be used to ensure the continuation of farms, providing model requirements regarding agritourism and best agricultural practices, including a farmland conservation plan ([EEA CR Review Program](#),

2022). All CRs held by entities other than the state must be approved as having a public interest by the Secretary of EEA.

- **State Land.** The Commonwealth itself protects land through direct acquisition by land holding agencies, or by holding APRs, CRs, or watershed protection restrictions. Unlike other state environmental agencies, MDAR is not authorized to own land. Sister agencies—the Department of Fish and Game and the Department of Conservation and Recreation—own and manage over 200,000 and 450,000 acres, respectively. The Commonwealth has benefited from significant land protection planning efforts for the natural resources under both of their mandates. It’s notable that these agencies have many acres of farmland under their protection, although farmland protection and management do not explicitly fall within agency missions. MDAR runs a small but important program that makes some parcels of state-owned land available to farmers for production (MDAR, 2022). MDAR has memorandums of agreement (MOAs) with the State Police to license their fields in New Braintree; the Department of Public Health for the Westfield State Hospital grounds; and the Division of Capital Asset Management and Maintenance for the Templeton Developmental Center.

The Department of Correction (DOC) is a large landowner, and conversions of DOC land in the 1970s led to efforts to protect state-interest farmland under Executive Order 193. Signed in 1981, this order seeks to mitigate the conversion of state-owned agricultural land and limit the use of state resources in conversion, stating that “state funds and federal grants administered by the state shall not be used to encourage the conversion of agricultural land to other uses when feasible alternatives are available” (MA Exec. Order, 1981). This requires that state agencies that hold agricultural land shall mitigate for any conversion of the land to non-agricultural uses.

MDAR’s State Farmland Licensing Program makes publicly-owned agricultural land available to farmers and others through agricultural licenses. Land licenses are bid out through an RFR process and are for up to 5 years with an option to renew for a maximum of up to another 5 years. As of 2022 the Department holds “Care and Control” of nine properties, mostly former state hospital lands, totaling 725 acres. Three new properties will be transferred to MDAR’s care and control in 2022 and 2023.

- **Article 97 of the Amendments to the Massachusetts Constitution.** This Amendment confers constitutional protection on land subject to Article 97 held by political subdivisions of the Commonwealth – most commonly municipal or state protected (either through acquisition or restriction) open space - including farmland. It requires that municipal or state-owned land subject to Article 97 that is being disposed or converted to another use be approved by a two-thirds vote of the legislature. The Article 97 Policy of the Executive Office of Energy and Environmental Affairs, which governs the agency’s approach to Article 97 legislation, requires a no-net-loss of protected land when a disposition or change in use occurs (MA EOE, 1998).

Limited Duration Protection Tools

- **Farm Viability Enhancement Program (FVEP).** FVEP protects farms through Agricultural Covenants that require that the farmland stay in agricultural use for the duration of a term of either 10 or 15 years. Participants receive business planning and technical assistance and are eligible for grants to support capital improvements. The covenants are signed by the landowner, attached to the deed, and are held and stewarded by MDAR.

- **Chapter 61A.** Chapter 61A reduces the property tax burden for farmers on the land they own that is being farmed based on annual valuations set by the state. Land must be 5 acres or more, be in agricultural use for at least two years prior, and stay in use for at least 10 years ([UMass Amherst, MassWoods](#)). There are also production and management requirements. This is not a permanent tool, as farmers can take their land out of Chapter 61A. If there is a change of use, the land may be subject to roll-back taxes and penalties, and the town will have the right of first refusal if the land is being sold or converted out of agricultural use.

Funding

- **Bond measures.** The majority of funding for land protection in the Commonwealth comes from state bond measures that support a variety of land protection programs, including APR and state and municipal grants. Municipalities also bond for land protection.
- **Federal government.** The federal government, through the U.S. Department of Agriculture Natural Resources Conservation Service (NRCS), plays an important role in providing funding to help support the APR Program through the Agricultural Land Easements (ALE) program. In Massachusetts, ALE is used as match for state APRs. Criteria include protection of historical resources; or pursuant to state or local policy; require that 50% of the parcel must be prime, unique, or productive soils, Soils of State Importance, or Soils of Local Importance. NRCS may provide a maximum of 50% of the fair market value of the easement ([FIC website](#)).
- **Community Preservation Act.** The Community Preservation Act (CPA) provides state matching funding to municipalities that adopt the Act, which creates a fund supported by a property tax surcharge. CPA funds can be used to permanently protect open space, including farmland, as well as build and support affordable housing, fund outdoor recreation projects, and restore historic assets ([CPC website](#)). CPA open-space projects must be protected by a permanent restriction that meets the requirements of M.G.L. Chapter 184 sections 31-33. One hundred eighty-nine communities, or 54% of Commonwealth cities and towns, have adopted CPA as of spring 2022. CPA funds can be used by municipalities for planning purposes to protect CPA-eligible assets. Interest continues to grow in this program, which has protected over 33,000 acres of open space, including several farms ([CPC, CPA State Map, 2022](#)).
- **Conservation Land Tax Credit.** The Commonwealth's Conservation Land Tax Credit (CLTC) incentivizes donations of important natural resource land that fits CLTC criteria, including farmland, to be permanently protected. The donor(s) are provided a tax credit of 50% of the donation value, up to the \$75,000 maximum, with a current program cap of \$2 million per year ([EEA, CLTC website](#)). Donations can include the ownership of the land itself or CRs or APRs.

Connecting Farmers to Available Farmland for Purchase, Lease, or License

- An important component of farmland protection is connecting farmers to land. New England Farmland Finder connects farmers to available land ([NE Farmland Finder website](#)). Land for Good provides a toolbox for farm seekers ([Land for Good website](#)). New England Farm Link Collaborative also helps connect farmers to land ([Luciani, 2017](#)). New Entry Sustainable Farming Project's Incubator Farm Program runs three-year programs on training farms in eastern Massachusetts ([Tufts, New Entry Sustainable Farming Webpage](#)). World Farmers operates Flats Mentor Farm Program in central Massachusetts where immigrant and refugee farmers hold long-term leases for their operations ([World Farmers Webpage](#)). MDAR runs a state licensing

program to connect farmers to available state land to rent for five-year periods. A license is a non-exclusive right to use the property for a particular purpose, while a lease is an exclusive right to use the property for all purposes except what is excluded by the agreement ([MA Letter Ruling 84-56, 1984](#)). Leases can run longer than licenses, allowing for additional capital investment. Land trusts and other nonprofits also lease agricultural land.

Succession Planning

- Timely farm succession planning, including but not limited to estate planning, is an important step for ensuring that farmland stays in active farming. Farmland protection efforts can be an important part of this process. Land for Good offers a farm transfer planning toolkit and runs trainings, information sessions, and provides one-on-one support for farm families and farm seekers in collaboration with American Farmland Trust, MDAR, Farm Credit East, and others. ([Land for Good Toolbox](#)).

Farmer Support

- In addition to the organizations listed earlier, the [UMass Center for Agriculture, Food, and the Environment](#) runs a range of programs to support and educate farmers and houses UMass Extension, which runs education and outreach programs; the [Northeast Organic Farming Association \(NOFA\)](#) provides advocacy, education, and other supports for organic farmers; a network of regional buy-local organizations covers all parts of the state and helps connect farmers with consumers ([MA.gov, Buy Local](#)); and the [Massachusetts Farm Bureau Federation](#) is a member-based general farming organization that focuses on advocacy, policy, and education and outreach.

Additional farming and farmland organizations are listed in Appendix C.

Support for Smaller Farms

- Although APR and Chapter 61A are limited to serving farms of five or more acres, various other protection and support tools exist for smaller farms. Smaller and beginning farm operations are supported through the [MDAR Urban Agriculture program](#), [Matching Enterprise Grants for Agriculture \(MEGA\)](#), and the [Food Ventures Program](#). The [MDAR Energy, Climate Smart, and Water Quality programs](#) do not have a size threshold but do require that the farm be actively farmed for commercial intent (i.e., that they are a business). MDAR also has several competitive grant programs that provide resources for farmers to employ stewardship practices that keep farmland in production ([MDAR, Agricultural Grants and Financial Assistance Programs](#)).

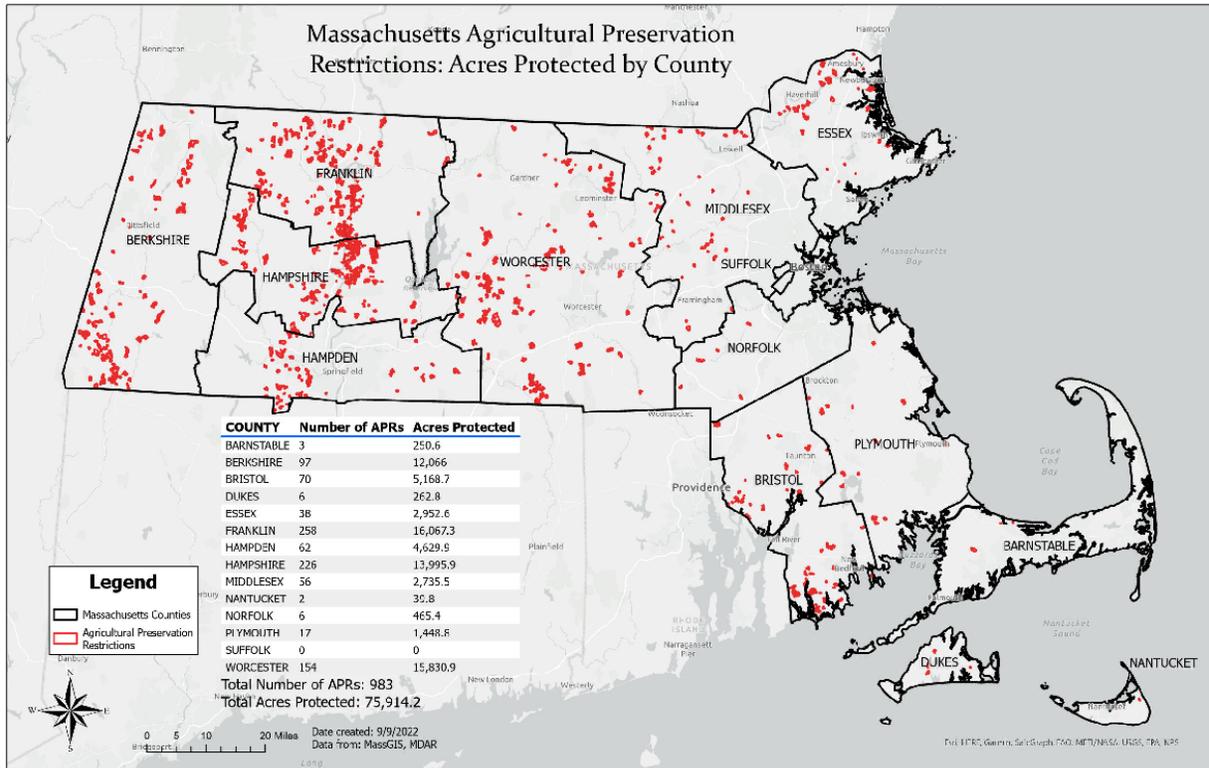
Criteria for Protecting Farmland

Acreage, soil type, natural resource value, and farm viability are all criteria used to determine eligibility for farmland protection programs. By statute, APR requires that the land be at least five acres, that the land be devoted to agriculture for two preceding tax years, and that farms produce at least \$500 in gross sales per year for the first five acres plus \$5 for each additional acre, or 50 cents per each additional acre of woodland and/or wetland. CLTC looks at a range of criteria, including whether the parcel is included in state natural resource protection planning efforts, and for agriculture includes prime or state agriculturally important soils ([CLTC, 2012](#)). Chapter 61A also requires that land be five acres or more, and to have been in production for two or more years ([UMass Amherst, MassWoods](#)). Other non-statutory criteria relate to soil types, geography, threat, and viability as a farm ([MDAR, APR Webpage](#)).

Soil surveys and support services are provided by the USDA NRCS ([USDA, 2020](#)). The USDA designates prime farmland based on soil quality standards last updated in 2020 ([USDA/NRCS MA](#)). The Commonwealth is in the process of starting a Healthy Soils Program, as called for in “An Act Enabling Partnerships for Growth” (Chapter 358 of the Acts of 2020) ([MA Legislature, 2020](#)) and has released the Healthy Soils Action Plan, which provides more detail on Massachusetts soils and soil management for long-term health and carbon sequestration, and will be an important resource for guiding farmland protection and management ([Regenerative Design Group, 2019](#)). Communities in Massachusetts work with NRCS to identify locally important soils in order to have them recognized in program criteria and thus be able to protect them.

Larger parcels are often prioritized for a range of reasons, including having more attributes that result in a higher ranking when being considered for eligibility for protection programs. A policy focus on parcels five acres or more can be seen in analysis of parcel size and protected farmland conducted by American Farmland Trust and found in Appendix B. Not surprisingly, there is a much higher percentage of protected parcels that are larger in size. Public investment of protection in larger farms does often follow a rationale of “bang for your buck,” but this analysis also points out a lack of investment in smaller farms, including urban and suburban farms.

The Commonwealth’s farmland protection programs and investments have tended to focus on larger parcels and certain geographies. The geographic breakdown reflects this, such that more land is protected in the Western half of the state. Of the four counties with an above-average amount of protected farmland, three are in the western portion of the state. Franklin, Worcester, Hampshire, and Berkshire Counties have the most farmland protected by state APRs (see Map). Hampshire County is home to several towns with very active and longstanding farmland protection efforts, significant local investment in farmland protection, and significant agricultural technical service-provider capacity, and it has protected 17% of its total farmland, per AFT analysis (Appendix B).



Map credit: MDAR, 2022

Eastern portions of the state where farmland is more expensive, on average, have lower rates of protection. While protecting farmland in this region may be more expensive per acre and the development pressures are much stronger, the potential to maintain viable farms is high, especially when such protection includes the infrastructure needed to operate a farm. The disparity between regions in the amount of land protected is likely due to protection programs being driven by soil types. However, the dairy and livestock industries are critical to Massachusetts agriculture, and pastureland is a crucial element of those sectors. Climate and terrain make significant amounts of the state’s farmland unsuitable for crop production, but that land remains quite suitable for livestock. Yet, without protection, that land stands a greater risk of being lost to non-agricultural uses.

Protected Farmland Data

Farmland data are available through [MassGIS](#). Non-permanent protections, mainly under Chapter 61A, are not tracked statewide since this program is administered by municipalities. However, because this is a popular program, the acreage it helps keep in farming is significant.

More detailed explanations of these and other state farmland programs and policies can be found in Appendix C, and recommendations for protection tools, funding, and data collection are found in the “Recommendations” section.

Partners in Farmland Protection

In addition to increased state funding and programming to connect new and existing farmers to the land, expanded suburban and urban farming opportunities, and assistance for older farmers planning for the future, each of the key partners listed below will need to play an increased role in farmland protection if the Commonwealth is to meet the goals of the plan:

- **Private Landowners.** The majority of farmland is privately owned, and the Commonwealth cannot accomplish its goals without the participation of private landowners – both non-farmers willing to conserve their land for farming and farmers willing to protect their land for future generations. Peer-to-peer communication about farmland protection and viability programs is key, as farmers – like everyone – learn from each other. All protection programs are voluntary, and strong outreach and communication with private landowners is critical to their success.
- **Land Trusts.** The Commonwealth often partners with the state’s land trust community to identify and protect land and to educate landowners on protection and management tools. A land trust is a nonprofit organization that, as all or part of its mission, actively works to conserve land by acquiring land or conservation restrictions (or assisting with their acquisition) and stewarding and managing land and conservation restrictions ([Land Trust Alliance website](#)). Massachusetts is home to the nation’s first land trusts, beginning with The Trustees of Reservations in 1891, which was an important partner in starting the APR Program. Now, there are more than 140 land trusts in the Commonwealth. Massachusetts has more regional land trusts per capita than any other state in the United States, and in part because of this long history there is no single land trust that focuses solely on statewide agricultural land protection ([EEA, 2015](#)). Several other states have such an entity, which are effective long-term partners for state and local governments. In Massachusetts, a number of regional and local land trusts do focus on farmland protection by holding restrictions, facilitating APR and CRs, and through purchase of land. Some are significant land holders.

Land trusts are important partners for the state on protection, education, management, and stewardship. Land trusts contributed to the development of this plan, and they will play an important role in implementing and updating the plan in the future. Most land trusts belong to the Massachusetts Land Trust Coalition, which works to advance land conservation across Massachusetts by providing education, tools, networking, and advocacy for land trusts and their partners ([MassLand website](#)).

- **Community Land Trusts.** Community land trusts are nonprofit, community-based organizations designed to ensure community stewardship of land. They own land and provide very long-term leases to individuals, families or businesses who own the structures on the land. Community land trusts can be used for many types of development but are primarily used to ensure long-term housing affordability. Increasingly, they are also used in Massachusetts and elsewhere to support whole farming communities, including housing and urban farms and community gardens, supporting both affordable housing and food security. Community land trusts are building models to support urban farms (e.g., Boston Farms CLT) ([Boston Farms Community Land Trust website](#)).
- **Municipalities and Regional Planning Agencies.** Municipalities can include farmland in their Master Plans, Open Space and Recreation Plans (OSRPs), Comprehensive Plans, and Municipal Vulnerability Preparedness Plans (MVPs). They also can adopt a number of tools to protect farmland, from zoning changes that encourage denser development and more open space

protection, to adopting the CPA and using those funds to protect farmland, to passage of a right-to-farm law that “protects the activities of farming from nuisance suits over matters that impact abutting property, such as noise or pollution.” OSRPs call for farmland to be included in the inventory of lands of conservation and recreation interest, and adoption of an OSRP makes a community eligible for several EEA land-protection grants. OSRPs include public input and are reviewed and approved by the Commonwealth ([MA EEA, 2008](#)). The Municipal Vulnerability Preparedness Planning Grant Program offers funding to municipalities that wish to assess their vulnerability to complete a plan to prepare for climate change impacts and build community resilience. MVP Plans can include farmland and open space protection, and adoption of an MVP Plan makes a community eligible for an MVP Action Grant to advance priority MVP actions. Adoption of municipal right-to-farm bylaws and establishment of agricultural commissions also support local farms. As noted previously, more than half of all APRs have a municipal co-holder.

As of 2017, there were 172 communities with agricultural commissions, and 140 communities had local right-to-farm bylaws ([MA AgComs website](#)).

- **Agricultural commission (AgCom)** “is a standing committee of town government, created through a vote of Town Meeting and appointed by the Board of Selectmen or governing body of the town. AgComs represent the farming community, encourage the pursuit of agriculture, promote agricultural economic development, and protect farmlands and farm businesses, and preserve, revitalize and sustain agricultural businesses and land. In some communities they focus on farmland preservation efforts, while in others they review regulatory proposals developed by other town boards (planning board, board of health, conservation commission, etc.), or provide marketing coordination to assist all farms in town.” ([MA AgComs website](#)). AgComs can hold land.

Access and Equity

Equitable access to farmland is a critical component in addressing historical barriers to agriculture for BIPOC farmers. In addition, efforts to address environmental justice center on ensuring that historically marginalized communities benefit from the environmental, health, and economic benefits of preserved open space.

Across the United States and especially in Massachusetts, the number of BIPOC farmers is not representative of the diversity of the population itself. This is a product of historical and longstanding systemic discriminatory practices, land seizures, and inability to access capital or other forms of financial support. Nationally, 40.7% of the population is of color and 59.3% of the population is white. ([US Census Bureau, 2023](#)) However, of the 3.4 million farmers in the United States, only 1.3% are Black and 95% are White ([USDA Census, 2017](#)).

In Massachusetts, 29% of the population is of color and 71% of the population is white. Similarly though, of the 12,778 Massachusetts farmers, BIPOC farmers are represented on only 3% of the Commonwealth’s farms ([USDA Census of Agriculture, 2017](#)). Not limited to lack of representation, while 3% of total farms are represented by BIPOC farmers, these farms only steward 0.3% of the land in farming and sell just 0.4% of the market value of agricultural goods in the Massachusetts. These figures demonstrate the urgency of intentional, focused restorative effort to support access to land and resilient communities.

On a related note, immigrants also make up about 17% of Massachusetts residents, with Asian, Latin American, and European immigrants comprising the majority of the immigrant population. The

percentage of immigrants in Massachusetts has grown from 12% of the total population in 2000 to 17% in 2019 (MPI, 2019). With immigrant communities come new foods, agricultural practices, and a vibrancy to the culture and workforce.

According to the Commonwealth Environmental Justice Program, environmental justice (EJ), “is based on the principle that all people have a right to be protected from environmental hazards and to live in and enjoy a clean and healthful environment. EJ is the equal protection and meaningful involvement of all people with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies and the equitable distribution of environmental benefits. *As such*, farmers and communities, regardless of background or characteristics, must have access to farmland, and its associated benefits.

The Commonwealth has recently identified and mapped environmental justice neighborhoods, or populations, as those meeting one or more of the following criteria (EEA EJ Policy, 2020):

1. The annual median household income is not more than 65% of the statewide annual median household income.
2. Minorities comprise 40% or more of the population.
3. 25% or more of households lack English language proficiency.
4. Minorities comprise 25% or more of the population and the annual median household income of the municipality in which the neighborhood is located does not exceed 150% of the statewide annual median household income.

The environmental justice policy is being integrated into EEA grants and programs, including those offered by MDAR. Food insecurity is frequently a problem for EJ communities which include historically underserved populations and immigrant communities. Community gardens and urban agriculture present opportunities for food insecure communities to grow food and build businesses around food production. Immigrant communities frequently come from agrarian backgrounds. Access to land to farm is a barrier that the plan recognizes as an issue to address. For example, preference is given to historically underserved populations in the state land licensing program (MDAR, FY 2023).

MDAR, and related organizations and agencies, are making efforts to integrate environmental justice into policy and programming. As outlined in the following section, engagement is a key component of environmental justice, as a means of understanding the barriers and opportunities presented to affected stakeholders and communities.

Part II: Synthesis of Findings/Summary of Community Engagement

Overview of Methodology

The following section outlines the findings of a cross-sector stakeholder engagement process. UMDI, with support from rBouvier Consulting, gathered qualitative information from individuals across the state representing a wide range of interests related to farmland protection, viability, and access. These stakeholders included farmers, including Indigenous, People of Color, immigrants and Spanish-speaking farmers, policy advocates, representatives of targeted groups and communities, legislators, other subject matter experts, and staff with the Massachusetts Department of Agricultural Resources (MDAR). The team gathered input via three public listening sessions, an online survey, and focus groups centering on BIPOC and immigrant farmer engagement.

The original framework guiding development of the Farmland Action Plan emphasized **community engagement**—the process of gathering information from and collaborating with individuals and groups with special interests, expertise, or experiences related to farmland protection, access, and viability. Through this process, more than 600 stakeholders representing various perspectives, communities, and interests, participated in at least one of 14 distinct community engagement opportunities, with many individuals participating in multiple activities. Their stories, experiences, and recommendations provided an essential foundation for developing the Farmland Action Plan contained in this report. The conversations with stakeholders focused on challenges they face and potential solutions. In some settings, participants also reflected on what their roles might be in implementing activities in the Plan.

This section provides a detailed discussion of the recommendations provided by stakeholders in each of the engagement activities. To honor the various stakeholder perspectives and make sure key ideas have been recorded for future purposes, as much information as possible has been included as originally presented in draft form, without comment or explanation. Remaining information was consolidated as needed for the purposes of organization. In short, all recommendations provided by stakeholders served to inform development of the eventual action plan, even if some recommendations were not ultimately adopted in their initial form.

Findings from Community Engagement Process

Certain themes and challenges surfaced consistently across the community engagement activities.

Themes included:

- **Resources** including significant long-term public investment;
- **Timing/Pace**, such as a clear sense of urgency for farmland protection planning through more streamlined processes and increased flexibility in some land protection programs;
- **Equity** and a need to evolve farmland protection and access programs to serve historically underserved populations, including urban, immigrant, and BIPOC farmers and other stakeholders;
- **Communication**, such as the importance of educating local governments, non-farmers, and others about local agriculture and farming as a career;

- **Adaptability**, such as considering the whole farm when planning for protection, meaning inclusion of forestland, housing, and infrastructure that supports farming operations, and the need for support for farms smaller than five acres; and
- **Public Support**, such as a need for public policies and investments to keep pace with the needs of current farmers and the business of farming.

In addition, stakeholders noted that the needs of current farmers and the business of farming have changed, while public policies and investments have not kept pace.

Across the research and engagement process, a range of issues were identified as challenges and perceived challenges to farms and farmers. Topline themes included the following.

Resources

Stakeholders have identified a clear need to significantly increase farmland protection, which requires an increase in public funding. Although the state does make investments in farmland protection and has policies supporting it, funding has not kept pace with demand. For instance, funding for the APR Program (the Commonwealth’s main tool for protecting farmland) was \$3.5 million in 2023, an amount insufficient to purchase land at the desired pace. This is especially true recognizing that average farm real estate values increased by more than 46% from \$10,400 per acre in 2017 ([USDA, 2017](#)) to \$15,200 per acre in 2022 ([USDA, 2022](#)). A focus on farmland protection, retention, and funding is also a needed from land trusts, municipalities, and other partners, in addition to clear data on funding and project specifics in order to assess programs for their effectiveness and equitability. Research and engagement for this Plan identified a number of key issues:

- Land prices have increased steadily and dramatically, making protection more expensive. According to USDA the average cost per acre of farm real estate in Massachusetts increased by 21% from 2017 to 2021. ([USDA, 2021](#))
- Many stakeholders note that as there has not been a proactive effort from the state to identify land for protection or purchase to make available for agriculture, and therefore no overall identified funding or policy needs.
- Perception that investments in protection and other land programs have not increased to keep pace with demand.
- Identification of a failure to leverage all available federal funds and thus a decline in federal commitments in recent years, as money left on the table results in a reduction in allocation in subsequent years.
- Identification that APR Program staffing levels have not grown to match the growth of properties that require stewardship. This manifests such that each steward holds a a portfolio of more than 200 properties to manage, while a reasonable portfolio load is generally considered to be less than 75.
- There is an identified need to expand the capacity of the Commonwealth and partners to protect more farmland through new programs and policies.

- Incentivizing protection and disincentivizing farmland conversion, beyond state-owned lands, through pursuit of a no-net-loss policy and mitigation investments could be an important tool for stemming farmland loss.
- Industries such as life sciences and clean energy have received significant state funding and support, which has resulted in industry growth. Stakeholders recommend emulating these significant and targeted investment efforts into the agricultural sector.
 - For context, the clean energy sector in Massachusetts employs roughly 101,000 workers — up 68% from 2010. Clean energy is a \$13.7 billion industry in Massachusetts, or 3% of the overall state economy ([MA CEC website](#)). Life sciences, provides 100,000 jobs in Massachusetts, nearly double from 15 years ago ([MassBio, 2022](#)). These important sectors have benefited from significant support from the Commonwealth, including workforce training, partnerships, and investment through tax incentives and grant programs. Growth in these sectors shows the effectiveness of public investments and suggests ways the Commonwealth could support the agricultural sector.

Timing/Pace

Many stakeholders identified challenges to planning, negotiating, and closing on APR projects as driven by the lack of supporting professionals, including appraisers, attorneys, tax professionals, and realtors that are knowledgeable about farmland, APRs, and tax incentives, and by the combined processes of the state and federal governments. Numerous participants noted a need for improved guidance around program applications and updates to timing and application cycles for growers.

Engagement for this Plan identified a number of key issues:

- The process of putting land into APR through the sale of an APR, including meeting eligibility criteria, accepting an offer in place, and closing can take 18–36 months, which may deter potential participants. Private APRs and donated APRs, which are less common, may have shorter overall times but do not have the same support including state oversight and funding.
- Farmers and farmland owners often do not consider succession, estate, or conservation planning early enough, which pushes project applications directly to the deadline in a way that often limits options available to them.
- Interventions to prevent farmland conversion are not readily and quickly available at the moment, and there is an opportunity to increase training on land protection tools, develop new tools, and improve communications to facilitate, in order to help move projects more quickly.

Equity

Generations of discrimination and dispossession have led to dramatic underrepresentation of BIPOC farmers across the United States. “If the state is serious about land protection there needs to be an aggressive investment into land purchasing and protection with outreach efforts which specifically benefit BIPOC and low-income farmers,” said one survey respondent. Research and engagement for this Plan identified a number of key issues:

- Stakeholders felt that there is less public investment in low-income and small farms from MDAR and federal programs than there is in larger farms.
- Systemic racism has led to drastically fewer farmers of color in the United States, and to farmers of color being denied access to land and capital. This pattern is one contributing factor which has led to further disinvestment in BIPOC farms over time.
- Stakeholders indicated that targeted financial and technical support for small-scale, urban, BIPOC, and beginning farmers is insufficient and must be increased, particularly for those operations which focus on addressing food security needs in underserved areas.
- Tribal stakeholders pointed to the lack of targeted programs to support agriculture for members of state acknowledged and federal recognized Tribes whose land was stolen from them by European settlers through erroneous deeds, transactions, medical liens, and debts.
- Spanish-speaking farmers shared that translation services for non-English speakers are limited, reducing immigrants' ability to benefit from programs.
- Participation in ad hoc policy-setting discussions, including the development of this plan, is an ongoing challenge for many historically underserved farmers, particularly BIPOC farmers and aspiring farmers.

Communication

One of the themes that emerged from the community engagement sessions was the lack of awareness, especially from new and historically underserved farmers, about the existence of beneficial state programs to protect farms and support farmers. This disconnect points to the urgent need for improved, more effective information sharing and communication by the state at every level, particularly directed to underserved groups. Fundamentally, the lack of a clear understanding among farmers of both the issues and the state's programs remains a barrier to success. "When I started the journey to protect my farm, there was no roadmap anyone could provide," wrote one survey respondent. Research and engagement for this Plan identified a number of key issues:

- Stakeholders asked for more and clearer communications about farmland protection efforts and opportunities in the state, including at the municipal level, through the private and nonprofit sectors such as land trusts and foundations, and through state agencies such as MDAR, the Department of Conservation and Recreation, and the Department of Fish and Game. The current lack of clarity leads to confusion among farmers about how these programs can be used and how they work.
- Application processes are viewed as time-consuming and complicated.
- APR accepts applications year-round, with a June 30 deadline for that year's available funds. The federal side of the program, ALE, historically has been due in February or March, though have recently added application deadlines of January and November. Although applications are accepted year-round, the perception persists that applications are due during the height of the growing season, when farmers have less time to complete paperwork. Having decision-making tied to one deadline also creates less flexibility to respond to landowner timing limits and to funding opportunities.

- Perspective that a distinct subset of farms tends to apply for and also receive support repeatedly, from multiple programs and/or from programs that allow participants to apply more than once. Participants indicated a need for the state to either broaden awareness of opportunities or revisit eligibility criteria that may prevent some individuals or even segments of the farming community from applying.
- Stakeholders indicated that resources across the land-protection sector in Massachusetts limit staff capacity for one-to-one outreach about programs and available resources and indicated that technical assistance and additional state support are needed to address this barrier.
- Perspective that there is little state public-facing messaging about the success and impact of farmland protection efforts.
- Indication that there is no one nonprofit partner that is a go-to for farmland protection and access information and technical assistance, although several nonprofits, including land trusts, work on these issues.
- Data to inform policy recommendations are sometimes limited. For example, the Commonwealth's data are limited for land enrolled in Chapter 61A or acres of farmland protected by Conservation Restrictions, or through support provided by the Community Preservation Act, or the Conservation Land Tax Credit.

Adaptability

Many of the state's policies and programs were developed many years ago and have not been updated to reflect changes in agriculture, markets, and other external forces. Research and engagement for this Plan identified a number of key issues:

- 33% of Massachusetts farms are smaller than 10 acres ([USDA, 2017](#)), and the current five-acre threshold for the lower tax rate of Chapter 61-enrolled lands and the APR Program means that smaller farms, and often urban or suburban farms closer to markets, are not eligible for state funded land-protection programs.
- While APR is an important program, there are challenges around increasing land prices, the timeframe for completing projects, lack of advance planning by landowners, and housing.
 - According to MDAR, since 1994, APRs do not protect residential housing for farmers along with the land. However, approval may be sought to construct labor housing, and some APR documents up to 2003 contain language which allows the landowner to petition MDAR for the right to construct a dwelling. Excluding existing housing allows it to be separated and protected land conveyed without a house. The APR Program was designed to protect soils, so in exchange for purchasing the development rights of those soils, the APR Program provides capital for farm investment as well as a reduced farmland tax rate going forward. However, as housing has gotten more expensive and limited in Massachusetts, and agriculture as a business has changed, there is a need to continue to review this issue.
 - Until recently, the per-acre price cap for APR was \$10,000 or \$20,000 per acre and was raised to \$17,000 per acre (with exceptions up to \$34,000 per acre, per the APR Over the Cap Policy). It remains to be seen if the new cap will impact purchases as land prices increase. Caps must be evaluated every three years per the APR regulations ([MDAR, APR Program Policy, 2021](#)). It's

important to note that land protection projects often pull from a variety of sources, and municipalities, land trusts, and other funding sources can make up any difference beyond the cap. Private landowners can also apply for state or federal land protection tax incentive programs.

- o MDAR has generally chosen to only support ALE-eligible properties, meaning only those that meet federal guidelines. This limits who is served and the amount of land protected. Massachusetts' smaller farms with a mix of soils are increasingly failing to meet federal guidelines.
- Stakeholders indicated that older CRs may have unclear or overly restrictive language regarding farming, which could be revised to allow farming, if consistent with the intent of the document.
- Farms indicated that they have had to get creative to be sustainable. Special permits for non-farm uses under APR are rarely denied, but they are required. Of the 31 special-permit applications received by MDAR, all have been approved except two ([MDAR, APR Guidelines, 2014](#)).
- The APR Improvement Program (AIP) helps with technical assistance, business planning, and grants for farm infrastructure improvements, but has only worked with approximately 15% of APRs since inception of the program in 2009 ([MDAR, AIP website](#)).
- There is widespread understanding that climate change has introduced new challenges for farmers, reducing farm viability and threatening greater loss of productive land, but investments to counter these impacts have been limited.

Public Support

Though Massachusetts is a leader in direct-to-consumer sales and there is general support for local agriculture, that support has not translated into the policy or financial commitments desired by stakeholders. Stakeholders indicated a need to build support for significant necessary investments and innovative policy changes; increase awareness of the value of farmland as critical infrastructure; and advance a culture that values and understands the benefits of agriculture and its foundation of agricultural land. Research and engagement for this Plan identified a number of key issues:

- This process revealed that stakeholders believe that much of the public is largely unaware of connections between local agriculture, public health, climate change and other environmental issues, racial equity, culture, or even food security.
- Many stakeholders indicated that there is a broad lack of understanding about the costs of food production, both financial and external.
- Stakeholders felt that there is perception that consumers tend to favor affordability and convenience, even at the expense of local farms.
- Some stakeholders indicated that, in their view, municipal open space and recreation plans, municipal vulnerability plans, and other plans often lack inclusion of agriculture as a priority.

- Some stakeholders felt that agricultural commissions are not always effective and often do not reflect the diversity of farmers in the represented municipality, and not all municipalities have one.
- Stakeholders indicated that many communities still have not adopted local tools for protecting and promoting farming and farmland, including the CPA, Right to Farm Bylaws, agricultural commissions, or farm-friendly zoning.
- Some stakeholders believe that there is no coordinated effort to educate children in food or agricultural literacy.
- Some stakeholders identified a need to develop and implement a comprehensive statewide education and public engagement program, engaging advocates, schools and communities, statewide agencies and policymakers, and other key stakeholders to build support for investment in farmland protection, access, and viability.

Complementary State Planning Efforts

Although this is the Commonwealth’s first Farmland Action Plan, the importance of farmland and impact of farmland loss has long been recognized by state policymakers. Several recent statewide planning efforts recognize the importance of increased support for farmland protection, viability, and access – and the success of the Farmland Action Plan is critical to all their successes. Many of the suggestions in the following plans informed and support the Farmland Action Plan. Other state plans reference the need for more funding for farmland protection, suggest a no-net loss approach to farmland, recognize the importance of farmland to climate change mitigation and adaptation, and stress the importance of supporting farms as businesses.

Below are summaries of some of these plans, and further details about these and other recent plans and reports are available in Appendix D.

[Massachusetts Local Food Action Plan](#) (2015) addresses the opportunities and challenges facing the state’s local food system. The planning team was charged with developing “a general framework for goals and objectives that will improve Massachusetts’ agricultural economy, enhance the resiliency of the Commonwealth’s food system, and improve the nutritional health of the State’s population,” with “a heavy, but not exclusive emphasis, on food production in the Commonwealth and the economic viability of the agricultural sector.” The Plan’s recommendations focused largely on policy solutions that would represent steps toward a more sustainable and equitable local food system. Issues addressed included farmland protection and access, educational resources for farmers and fishermen, regulations through all food-system sectors, food access, and environmental considerations. The development of this Farmland Action Plan was one of these recommendations. Recommendations in the Food Plan that are also reflected in this Farmland Action Plan include:

- Increase the pace of farmland protection through the APR Program
- Encourage use of suitable publicly-owned land for farming.
- Strengthen state farmland loss mitigation and land disposition policies.

- Help and incentivize farmers and farmland owners to keep their land in farming as it transfers out of their ownership.
- Reduce the Chapter 61A minimum land requirement to encourage farming on smaller parcels in all communities—urban, suburban, and rural.

Rural Policy Plan for the Commonwealth of Massachusetts (2019) illustrates the unique attributes and challenges faced by rural communities, informs policymakers of existing best practices, and identifies a series of recommendations to be explored and implemented under the new Office of Rural Policy, recently created by the Healey-Driscoll Administration. Many of the recommendations in this plan mirror those of the Farmland Action Plan, including the importance of supporting smaller farms, the need for housing, increased need for technical assistance, and need for better land-use planning. Recommendations in the Rural Policy Plan that are also reflected in this Farmland Action Plan include:

- Maintain working lands and recognize their value.
- Significantly expand UMass technical assistance services for farms.
- Prioritize policies that address farmland adaptation to climate change.

The Clean Energy and Climate Plans (CECP) for 2025/2030 and 2050 (both 2022), are the Commonwealth’s detailed decarbonization plans which were informed by the Massachusetts 2050 Decarbonization Roadmap (2020), which provides direction to achieve required 85% greenhouse gas emission reductions, and net-zero greenhouse gas emissions, by 2050. Land protection, carbon sequestration, and soil management are critical components of the CECPs. The CECPs include important recommendations for natural and working lands that are also in this Farmland Action Plan, such as increased funding for APR and pursuing no net loss of forests and farmland. Recommendations in the CECP that are also reflected in this Farmland Action Plan include:

- Permanently conserve at least 30% of undeveloped land and water by 2030 and 40% by 2050, respectively.
- Consider expanding the APR Program beyond its current model to protect farms that currently do not qualify for APR due to soils, acreage, land values, ownership, forest, and other criteria.
- Develop and seek to advance new legislation to support the goal of No Net Loss of Forest and Farmland, including amendments to the Chapter 61 and 61A current-use program to allow parcels of two acres or more to qualify.
- Increase the annual budget of land protection grants and programs through state and federal funding sources.
- Raise the state Conservation Land Tax Credit cap.
- Provide additional financial incentives to farmers for implementing healthy soils practices that increase carbon storage in agricultural soils.

Healthy Soils Action Plan, integrates with the state’s climate resilience goals and serve as a roadmap for policy makers and land managers for building economic and ecological resilience through exceptional

soil stewardship on all land types, including farmland. The Healthy Soils Action Plan will inform the development of Massachusetts Healthy Soils Program (established by the legislature in 2021) and this Farmland Action Plan. Recommendations in the Healthy Soils Plan that are also reflected in this Farmland Action Plan include:

- Seek to permanently protect 30% of undeveloped Prime farmland soils and soils of statewide importance by 2030.
- Limit the conversion of forests, wetlands, and farmlands.
- Seek to expand annual funding for the Agricultural Protection Restriction program and to raise the cap on the Commonwealth Conservation Land Tax Credit.
- Expand technical, financial, educational, and material support for land managers of all types to employ soil-smart practices.
- Incentivize zoning & development strategies that increase density.
- Accelerate efforts to increase the viability of farm livelihoods.

Resilient Lands Initiative, is an EEA initiative that focuses on improving the quality of life for residents of every Massachusetts community through land conservation initiatives that conserve and enhance the health of the forests, farms, and soils that protect human and natural communities, protect drinking water and food supplies, provide healthy outdoor recreation, power a green economy, support municipal fiscal stability, protect wildlife habitat, store more carbon, and reduce vulnerability to climate impacts such as urban heat islands, flooding, sea-level rise, drought, and air and water pollution. The economy of Massachusetts, along with the health and welfare of its residents, depend on these “goods and services” that natural systems provide. RLI recommendations include increased investments in farmland protection and a focus on whole farm protection, and a no net loss of farms and forests program implemented through incentives and investments.

- Pursue “No Net Loss” of farms and forests through smart-growth incentives and investments.
- Expand the capacity and funding of the Agricultural Preservation Restriction Program to protect “whole farms” (farm and forest land, infrastructure, and housing) and make them affordable (with rolling admissions and funding for non-federal projects).
- Expand MDAR’s Urban Farming Program.
- Create a small-grant program for community farms and gardens.

Part III: Massachusetts Farmland Action Plan

Introduction

The actions proposed by the Massachusetts Farmland Action Plan are all in service of three primary goals:

- I. **Increase efforts to permanently protect farmland.** Farmland is a threatened and critical infrastructure supporting food security, natural systems and climate resilience, and the Massachusetts economy. Permanent protection of farmland should be prioritized.
- II. **Increase access to farmland.** Farmland must be an accessible resource. Enabling this requires equitable, affordable opportunities and options.
- III. **Support and enhance the viability of farms and farmland.** Protected and productive farmland is the foundation of a viable and strong farm economic system. Protecting farmland and supporting farmers who steward that land must be considered concurrently.

An essential component to all actions taken in support of these goals is ensuring that policies are developed to actively reduce the existing inequities brought about by generations of systemic and structural racism. This means supporting people who have long been systemically discriminated against socially and economically by directing targeted funding to support BIPOC and other underserved farmers, supporting policies that expressly assist these communities, and ensuring that these communities are represented on decision-making bodies. Some of these values are reflected explicitly in the plan's actions and activities, but every step of implementation must be viewed through an equity lens to ensure that the diversity of farmland owners and farmers in time reflects the diversity of the Commonwealth's population.

To stem the loss of farmland, the state has enacted policies and developed programs to permanently **protect** farmland, and municipalities and non-governmental entities have done so as well. By many measures, these efforts have had a positive impact but have been unable to fully counter the threats to farmland. Additional funding, updated regulations that address changes in agriculture, and comprehensive goal setting and planning are needed to achieve greater success.

This plan proposes to afford purchase of restrictions that permanently protect a substantial amount of currently active farmland, preventing it from being converted to other uses and requiring that it remain in production. Recommendations further point to the need to make funding and regulations more responsive to the current realities of agriculture, and to consider the value of farmland in planning efforts related to other sectors. Actions and activities in this section include the following:

- Significantly expand protection of the Commonwealth's remaining farmland
- Increase funding for land protection programs, technical assistance grants, and farmland support programs.
- Ensure that equity criteria are applied in all land protection and technical assistance grants and programs.

- Pursue a combination of state and local policies, regulations, and incentives focused on realizing no net loss of farmland to protect farmland and mitigate unavoidable loss.
- Expand the APR Program and create new programs or modify the current APR statute to fund and empower nonprofits and municipalities to purchase, hold, and steward agricultural restrictions.
- Explore increase of the Conservation Land Tax Credit and ensure it is used to protect farmland.
- Encourage all municipalities to adopt the CPA and identify and support farmland protection projects that would raise participation from 54% to 100%.
- Enable MDAR to purchase and accept ownership of land.
- Expand and enhance technical assistance by both the Commonwealth and partners.
- Include farmland protection priorities in local and regional planning efforts.
- Prioritize protection of whole farms.

To keep land in agriculture, farmland needs to be **accessible** to the farmers who want to tend it. Barriers such as cost—not just of land, but of other inputs such as energy, labor, and infrastructure—proximity to markets, soil fertility, size of parcels, and other issues make farming challenging for all and functionally impossible for many. An aging population of farmers means an ongoing wave of ownership transitions, which make farmland particularly vulnerable to permanent loss.

This plan proposes a range of interventions to grow access to farmland, particularly for historically underserved farmers who have been systemically discriminated against economically and socially for centuries. Envisioning a farming sector that reflects the diversity of the Commonwealth, recommendations call for investments in transition and business planning services, regulations that support farming at all scales, and the protection of farmland that is near a range of markets and of communities of people who wish to farm. Actions and activities in this section include the following:

- Make more public land available for farming.
- Enact zoning measures that support farmland.
- Increase the amount of farmland by returning marginal and abandoned land to production.
- Expand and strengthen equity and diversity criteria in all land access programs and investments.
- Explore opportunities to provide state and federally recognized Tribal governments of the Commonwealth with publicly available land, potentially via right of first refusal.
- Expand and enhance technical assistance around farmland access, business, and succession provided by the Commonwealth and partners.
- Increase funding and technical assistance for urban agricultural projects.
- Develop and implement policies that support farms on parcels less than five acres.
- Support and expand service provider networks to meet the needs of all farmers and potential farmers.

- Provide affordable housing on protected farmland.

For farmland to remain in production, the farming operations themselves must be financially and environmentally **viable**. However, the educational resources and technical assistance available to support farmers have diminished as they work to keep pace with modern and environmentally beneficial management practices in changing conditions. Financial resources and business supports are also limited.

Actions included herein point to the need for a comprehensive, coordinated system of educational and technical assistance resources to help keep farmers in business and stewarding their land for long-term agricultural use. This plan proposes the establishment of mechanisms through which farmers can be compensated for the services they provide in carefully stewarding natural resources for public benefit. The plan also proposes flexible and adaptable business assistance and financing to support all farms. Potential actions and activities in this section include the following:

- Ensure that laws, regulations, programs, and investments support farm viability.
- Increase technical assistance to farmers around crop- and livestock-specific climate change adaptation strategies.
- Provide payments to farmers for ecological enhancements and services provided by management practices.
- Build UMass Extension's capacity to meet the needs of farmers.
- Develop and implement a communications plan to promote public and private resources available to farmers.
- Build public support for agriculture and for farmland protection and access.

It is important to note that the scope of this project was narrowly focused on farmland. Since participants in the process identified viable farms as one of the best ways to protect farmland, many actions and activities in this section relate more broadly to needed interventions to keep farms themselves financially sustainable. Since this project's charge did not include developing an agricultural sustainability plan, these items should not be taken as a comprehensive set of actions needed to ensure viability of the industry, but rather a focused set of recommendations related to helping keep protected farms viable and viable farms protected.

Each of these elements—farmland protection, access, and viability—is dependent on the others, and successful strategies must address the needs of all three. To do so, participants in this process envision a population that understands the role that agriculture plays in food security, in natural resource and climate protection, and in the economy. In turn, that population's support for Massachusetts agriculture will generate the political will to invest significantly in ensuring that farmland is protected from further loss, that regulations and policies foster access to farmland for those who wish to farm, and that farmland and the farm businesses that this land supports are kept viable through supportive measures that adapt to address threats and opportunities for farms. Ultimately, it will be the continued engagement of community stakeholders that will turn the Plan into action. They will help mobilize resources and influence systems, build relationships among key state, regional, and local partners, play vital roles in operationalizing many of the Plan's action steps, and catalyze the introduction and strengthening of the essential policies, programs, and practices that comprise the Plan.

Vision

Acting boldly on the strategies laid out in this plan will lead to farmland protection, an economically and environmentally viable farming sector, increased food security and agricultural productivity, resilience in the face of climate change, healthier and more vibrant rural and urban farm communities, and numerous other social and environmental benefits provided by Massachusetts farms and farmland. The plan's focus on social justice, reducing longstanding disparities in who has access to farmland, and engaging diverse and historically underserved partners will help ensure that these benefits are shared by all Commonwealth residents.

At the heart of the Massachusetts Farmland Action Plan is a collective vision for 2050:

- The Plan is supported through a substantial public initiative and investment in agriculture.
- Protection of existing farmland is prioritized and less land is lost to development, abandonment, or other types of conversion.
- There is more land in active agricultural use.
- Farms and farmland are accessible to farmers and aspiring farmers across Massachusetts.
- Farmland access and protection efforts support whole farm approaches, including housing, infrastructure, and protection of woodland and non-productive land protection that supports climate goals and ecosystem services.
- Urban agriculture is valued, and urban and rural agriculture are interconnected parts of a vibrant continuum of farms and farmland across Massachusetts.
- Agricultural practices successfully respond to climate change.
- Farming is a viable, profitable career path.
- Farmers of color, immigrant farmers, and historically underserved individuals and communities are actively supported in farming and are engaged in the policy-setting processes that shape state regulations, programs, and investments.
- Tribal values are considered in implementing the Farmland Action Plan and, more broadly, in supporting a sustainable food system that is relational, diverse, and ecologically nourishing to peoples, land, and cultures.
- Local food is accessible to all residents and supply chains are kept short to maximize farms' economic viability.
- The public and elected officials value and hold in high esteem the practice and act of agriculture and the importance of the many public benefits it provides.

Components of the Plan

The Massachusetts Farmland Action Plan has been organized into the following five interrelated components:

- **Goals** represent the three areas that will be the focus of the Farmland Action Plan through 2050. These are designed to be broad statements of what the plan hopes to achieve. This plan identifies three primary Goals:
 - I. Increase efforts to permanently protect farmland.
 - II. Increase access to farmland.
 - III. Support and enhance the viability of farms and farmland.
- **Strategies** are the action-oriented statements, lettered starting with “A,” that follow each Goal and which clarify what aspects of each Goal will be addressed in the next decade. Strategies serve to focus the general approaches or methods to be taken in response to the three Goals.
- **Actions** are the numbered statements that follow each Strategy. The Actions direct how each Strategy will be advanced.
- **Implementation Objectives** further define how each action will be achieved. These numbered statements are specific, measurable, and time bound. The Implementation Objectives will serve as the foundation for the Implementation phase of the plan. Ideally, demonstrated progress will have been made on Implementation Objectives within 3-5 years.
- **Tasks** are the *italicized* items that follow the Objectives; Tasks are specific activities that are proposed to advance the Objectives. Although some tasks were generated in the course of the Action Planning process (as shown in this Action Plan), more will be added in the coming months, as the Implementation Matrix is further developed and completed. Thus, the Tasks included in the Farmland Action Plan should be seen as preliminary and in process, evidence of the start of the next implementation phase of the Farmland Action Plan. Tasks are typically achievable within 1-3 years.

Together, the Goals, Strategies, and Actions form the core of the Massachusetts Farmland Action Plan. While the Implementation Objectives and Tasks, and the Implementation Matrix to be derived from them, are likely to evolve and change in response to new information and emerging needs, the Goals, Strategies, and Actions will remain essentially constant – serving as a “North Star,” a fixed guide around which interrelated programs and policies will be developed through 2050 and beyond.

Massachusetts Farmland Action Plan, 2023–2050

Goal 1: Increase efforts to permanently protect farmland.

Accelerate the permanent protection and stewardship of farmland. Farmland is a threatened and critical infrastructure that supports food security, natural systems, and climate resilience, and Massachusetts' economy, public health, and quality of life.

A. Permanently protect farmland through purchases of agricultural restrictions.

1. Purchase agricultural restrictions to permanently protect farmland, help increase affordability, and keep it in production.
 - a. Significantly expand protection of the Commonwealth's remaining farmland.
2. Seek development of creative financing mechanisms or strategies that would significantly increase funding to support protection.
 - a. Increase funding for land protection programs, technical assistance grants, and farmland support programs.
 - b. Update appropriations and expenditures tracking processes to ensure that limited bond cap authorization does not pose risk to progress.
 - c. Ensure that agency budgets are planned across multiple years and in advance to enable longer-range planning. Explore options for additional dedicated public funding.
 - d. Explore increase of the Conservation Land Tax Credit and ensure it is used to protect farmland.
3. Leverage the maximum amount of federal funding available.
 - a. Improve efforts to meet NRCS criteria, which will increase available federal resources from ACEP-ALE.
 - b. Work with NRCS to define state and local goals consistent with ACEP, that would enable use of funding for projects that do not otherwise meet ALE eligibility.
 - c. Educate land trusts and municipalities about the availability of the NRCS ACEP-ALE program for private APRs and to strategize how to best use ACEP funds.
 - d. Improve planning methodology to ensure that entities involved in land protection maximize the use of NRCS federal funding.
 - e. Increase ALE-eligible lands.
 - a. *Work with ACEP-ALE to enable the use of state, local, and regional plans and policies as alternative pathways for eligibility.*
 - b. *Incentivize municipalities and regional planning agencies (RPAs) to develop local farmland protection plans reflecting local farming opportunities and priorities.*
 - c. *Continue to implement and support the AFTs program to help municipalities identify locally important soils and encourage towns to petition NRCS for classification of farm soils of local importance.*
 - d. *Educate municipalities about the ability to and then develop mechanisms to incentivize municipalities to classify farmland of local importance without completing*

an extensive farmland plan, which can be accomplished by identifying land that is locally important for crop production.

- e. Explore measures to ensure that local plans are consistent with state farmland protection goals as eligibility for state support.*
 - f. Work with NRCS to better align existing non-federal program funding and schedules with ACEP-ALE to increase the number of applications to ALE.
 - g. Communicate more regularly and earlier in project processes with NRCS staff to maximize available federal funds.
 - h. Educate land trusts, municipalities, and state agencies about the NRCS Regional Conservation Partnership Program (RCPP) to ensure it is fully utilized.
 - i. Promote and highlight the value of using 309C, the federal tax credit for donations and bargain sales of farmland restrictions which enables farmers to deduct up to 100% of their AGI for as many as 16 years.
4. Identify and secure additional resources to purchase farmland in fee and via restrictions and to steward protected properties.
- a. Leverage private-sector support through public-private partnerships, private philanthropy, corporations, direct-giving programs, community groups, and others.
 - b. Identify funding options that are flexible in terms of eligibility requirements and specific deed terms that can more closely meet local and state priorities and landowner needs or preferences. Seek to establish a dedicated fund for APR Program stewardship, potentially in the capital budget, support growing stewardship needs. Establish a funding pool for buy/protect/sell transactions.
 - c. Explore potential to fund a Community Development Financial Institution (CDFI) to provide loans for farmland purchase.
 - d. Explore increase of funding for the CPA and its application to protect farmland and affordable on- and off-farm housing.
 - e. Explore mechanisms to increase use of the Conservation Land Tax Credit to protect farmland by exploring an overall increase in the cap on credits, mechanisms for the newly increased cap to keep pace with rising costs, and strategies for more use of credits in conjunction with the APR Program.
 - f. Continue and expand incentivizing municipal farmland protection through state grants such as EEA conservation grants, APR, etc.
5. Ensure that interventions to prevent conversion are readily and quickly available.
- a. Enable MDAR to purchase and hold land.
 - b. Establish an MDAR buy/protect/sell program.
 - c. Allow pre-acquisition of restrictions, whereby third-party partners purchase restrictions and assign them to MDAR.
 - d. Increase capacity of partner entities to conduct sound and efficient pre-acquisitions.
6. Build capacity of state agencies, land trusts, municipalities, and other entities to protect land.

- a. Explore modifying the APR law to enable land trusts and municipalities to be the primary holder of APRs and MDAR to hold a right of enforcement. Include stewardship endowment as part of the funds provided by APR.
 - b. Explore modifications to Chapter 20 Section 23 to enable land trusts to co-hold APRs and enable co-holder agreements to allocate primary responsibility of stewardship to the land trust or municipality.
 - c. Educate land trusts and municipalities about the availability of the NRCS ACEP-ALE program for private APRs.
 - d. Renew the APR Program use of 301 CMR 51 to reimburse nonprofits for acquisition and stewardship expenses, including staff time.
 - e. Enhance interagency coordination on land acquisition and stewardship projects such as protecting a property through a combination of CRs and APRs.
 - f. Develop standard training for onboarding new Agricultural Lands Preservation Committee (ALPC) members, regular professional development opportunities for members to ensure effective participation, and written materials to guide members' work.
 - g. Ensure that the ALPC has adequate diversity to support all farmers and potential farmers, including BIPOC and historically underserved communities.
 - h. Create and maintain a clearinghouse and directory of documents and the organizations that have templates and model programs. Provide support to organizations to share and provide TA on using those resources.
 - i. Assign a portion of MDAR-held APRs to land trusts and other entities in order to distribute the task of monitoring properties and keep relationships with landowners at the local level. Include stewardship endowment in the assignment.
 - j. Ensure that, municipalities, and nonprofits are aware of the Option to Purchase Land at Agriculture Value as an example of a tool that could be incorporated into public and private CRs and APRs, and that language in state APRs may serve as a model.
 - k. Promote enhanced use of EEA's Planning Assistance Grants to address farmland protection and access.
 - l. Educate land trusts and municipalities about ability to utilize installment or annuitized payments for acquisitions of private APRs.
 - m. Create watchlists of important farmland properties that are not yet protected, and support municipalities and land trusts in doing the same.
7. Increase the number of applications to APR, ALE, and non-ALE protection programs.
- a. Develop and implement a communications plan to promote farmland protection and programs. Target municipalities, financial institutions, development entities, farmers, real-estate professionals, appraisers, and others. Prioritize communications aimed at BIPOC communities and others that have been historically underserved by state programs.
 - a. *Create guidance documents, websites, webinars, and other materials targeted at specific audiences on programs such as Chapter 61A, APR, and others.*

- b. *Develop and implement a program to train municipalities on the economic, food security, and other benefits of farmland to help them understand the details of Chapter 61A ROFR, and to encourage them to exercise their rights or assign them to nonprofits.*
 - c. *Better educate partners about the APR Program’s policy on approving private APRs—restrictions acquired without use of APR funding and held by a non-state entity such as a land trust or municipality.*
 - b. Explore the establishment of policies and set-asides in state land protection programs to ensure that programs serve BIPOC farmers equitably.
 - c. Actively identify properties at risk of turnover or conversion and educate their owners about APR opportunities.
 - d. Expand APR eligibility for MDAR-funded parcels.
 - a. *Explore decoupling of APR from Chapter 61A to allow for the protection of smaller parcels.*
 - e. Expand and enhance the non-ACEP-ALE pathway for APR’s acquired by the Commonwealth.
 - a. *Create a track within the APR Program that is not tied to NRCS funding or requirements.*
 - f. Continue to regularly review and adjust the APR per-acre purchase price cap, which could include elimination if evidence suggests it poses a significant hinderance to participation.
 - g. Discuss the potential to increase funding and hire additional APR Program acquisition and stewardship staff and dedicated communications staff.
 - a. Establish staff support to serve as a liaison to the farming community and provide education and outreach about the APR program, state land leasing opportunities, and other farmland programs, and to direct questions to appropriate staff.
 - h. Develop a fast-track application process for Farm Viability Enhancement Program (FVEP) short-term covenants to transition to permanent APRs for interested landowners.
 - i. Make available installment or annuitized purchases of APRs. Streamline and accelerate APR application and closing processes.
 - a. *Identify a way to expedite procurement of appraisers, surveyors, and other contractors.*
 - b. *Create a fast-track for APR pre-approvals on 61A ROFR properties.*
 - c. *Return to rolling votes throughout the year along with the rolling applications rather than any one deadline for either.*
 - j. Support peer-to-peer farmer engagement.
 - a. *Incentivize farmers and landowners who have conserved their land to act as ambassadors to their peers to educate and encourage them to do the same.*
8. Increase acreage of farmland protected under short-term covenants.

- a. Increase general awareness of short-term covenants as a land protection option through MDAR's Farm Viability Enhancement Program (FVEP) through focused outreach.
 - b. Increase funding for covenants through FVEP to meet statewide demand.
 - c. Ensure staff capacity for program coordination and stewardship of farmland protected through the FVEP.
 - d. Provide proactive outreach about land use protection options to farm families.
 - e. Develop process to help streamline the transition from short-term protection to permanent protection of farms for interested farmers.
 - f. Increase stewardship and engagement with landowners of protected lands that include short-term covenants.
9. Build capacity to manage APR stewardship effectively and efficiently.
- a. Ensure adequate funding for stewardship of state held and funded easements.
 - b. Ensure adequate staffing to limit individual APR stewards' management portfolios.
 - c. Explore development of a grant program to support nonprofit conservation entities to acquire and steward properties.
 - d. Support land trusts, conservation districts, other NGOs, and municipalities to take on stewardship roles, which may require funding or staff resources.
 - e. Review legal documents and processes and identify opportunities for simplification.
 - f. Explore allowing stewardship endowments for private APRs to become eligible expenses via EEA grant programs and other conservation-oriented funding sources, including the APR program.
 - g. Build the capacity of restriction-holding entities to effectively identify, review, acquire, hold, and steward restrictions that allow agriculture.
10. Explore establishment of a state-funded grant program to provide resources to land trusts, municipalities, and other entities to purchase, hold, and steward agricultural restrictions and conservation restrictions (CRs) that allow agriculture.

B. Further develop and implement additional tools to avoid farmland loss and retain farmland.

- 1. Explore potential to pursue no-net-loss policy for all privately and publicly held agricultural land.
 - a. Discuss with Administration and Legislative leadership and key stakeholders potential for mechanisms to replace any public farmland with an equivalent amount of permanently protected farmland, similar to Executive Order 193, with provisions for enforcement and penalties to be collected for a mitigation fund.
- 2. Enroll more agricultural land in Chapter 61A.
 - a. Protect and support farmland parcels smaller than five acres via updates to Chapter 61A, through constitutional change, tax abatement, or other means.
 - b. Consider elimination of the requirement that land be in active commercial agricultural use for 2 years to be eligible.

- c. Create a central registry and publicly available map for all properties enrolled in 61A, including a metric tracking the percentage of all agricultural land enrolled.
 - d. Explore mechanisms that would require towns with municipal agricultural commissions have those bodies review and provide a recommendation on ROFRs under Chapter 61A. Provide commissions with education to enable them to do so effectively.
 - e. Identify options that would make no- and low-interest bridge financing available to be used by municipalities or land trusts to move quickly to exercise ROFRs.
 - f. Authorize and seek funding that would enable MDAR to exercise Chapter 61A ROFRs if the municipality or nonprofit waives that option.
 - g. Prompt the Farmland Valuation Advisory Commission (FVAC) to guide and limit municipalities setting their own farmland values under 61A to ensure that values are based on use value, not sales value.
 - a. *Assist the FVAC in evaluating and updating farmland values via support from UMass Department of Resource Economics, which may require increase resources or expertise.*
3. Identify opportunities to increase CPA funding and its application to protect farmland and affordable on- and off-farm housing.
- a. Encourage all municipalities to adopt the CPA, create conservation commission funds, and fund them for agricultural land protection projects as consistent with the CPA statute.
 - b. Explore with relevant officials and stakeholders potential revisions to the CPA that would provide additional funding to the Trust and that will allow it to keep up with increasing land costs over time.
 - c. Encourage land trusts and the Community Preservation Coalition to provide support to municipalities on CPA adoption and its use to protect farmland.
 - d. Provide TA to town community preservation committees, agricultural commissions, and land trusts about how CPA funds can be used to support farmland protection as well as affordable housing associated with farmland.
 - a. *Develop a process for communities to quickly use CPA funds for purchase of agricultural land and/or CRs and APRs, such as borrowing and bonding against future CPA income to create a fund that can be accessed without further need for authorization.*
4. Explore the establishment of an entity that can buy, sell, and lease land and restrictions, with the goal of permanently protecting farmland and prioritizing access for historically underserved farmer populations.
5. Identify and permanently protect state-held farmland where appropriate and when not in conflict with the original intent of protection (e.g., wildlife habitat, certain types of outdoor recreation, forestry).
6. Explore solar development policies that do not inadvertently displace agriculture.
- a. Create permitting and financial policies and practices that incentivize installing solar on built infrastructure and brownfields or, where that is not viable, on marginal land. Policies

and practices should disincentivize installation and prevent displacement onto prime, state, or locally important farmland.

- b. Develop clear policies as to how agricultural production potential (e.g., prime soils), energy production potential, and carbon sequestration potential should be weighted when these uses compete with one another, especially when state policy creates incentives for behavior change.
 - c. Develop a consistent approval process for expected increase in applications for dual use solar arrays.
 - d. Educate farmers about working with solar developers and the unique nature of farming within a solar array.
7. Advance zoning reform and smart-growth policies that encourage density and development that do not result in the loss of farmland.
- a. Enable and incentivize communities to take actions to retain farmland and promote infill and compact development without adversely impacting farmers' equity and asset value in their land.
 - b. Encourage communities to adopt zoning regulations for Transfer of Development Rights (TDR) as a farmland protection tool.
 - c. Educate municipalities about the use of conservation subdivision/natural resources protection zoning and accessory apartment bylaws as tools to promote compact development and provide technical support to communities seeking to adopt and use these zoning tools.

C. Prioritize protection of whole farms.

1. Create policies that protect whole farms.
 - a. Explore revision to the APR Program's approach to include whole farm conservation, including but not limited to farm family and farm worker housing, infrastructure, and the full range of farm entities and operations, including woodland.
 - b. Explore policy updates that would allow public funds to be used to support farm-related housing, with requirements for that home to remain connected to that or another farm.
 - c. Explore revision to the APR Program's approach to include affordable farm family and farm worker housing within the APR restriction via a building envelope and/or including the right or potential to request residential housing.
 - d. Explore revision to the APR dwelling policy to make approvals for dwellings more attainable while limiting resale values to affordable prices.
 - e. Identify mechanisms to link housing to farms via deed restrictions that extend their effective period to the maximum possible.
 - f. Develop a program for linking off-farm houses to farms, by purchase and/or lease, for both farmers and farmworkers.
 - g. Develop policies and practices that recognize the importance of associated land (in forest, wetlands, water bodies, etc.) and uses (cord wood, irrigation, housing, buffering from

surrounding residential or commercial uses, etc.) to a farm's crop and pastureland and include those in protection and support of farms and farmland.

- h. Provide additional tools to support farmers in dealing with climate change impacts, including land buyouts along coastal areas, high-velocity streams, and riverbanks.
2. Ensure that protection programs are compatible with all tenure models, supporting leased land, co-operative ownership, and other novel tenure options.
3. Consider Commonwealth goals, including environmental justice and natural resource protection, when prioritizing farmland for protection.
 - a. Include the value of ecosystem services when valuing land for protection.
 - a. *Explore revision to MDAR APR regulations to include additional priority consideration criteria for ecosystem services.*
 - b. *Include encouragement of this consideration within MDAR's private APR guidance and policy.*
 - c. *Work with the Mass Land Trust Coalition and regional planning agencies to develop model considerations that value ecosystem services for land trusts and municipalities purchasing restrictions.*
4. Explore how additional federal programs such as the Wetland Reserve Easement aspect of the Agricultural Conservation Easement Program (ACEP-WRE) might be further utilized to aid in funding whole farm protection.

D. Formalize and integrate decision-making processes regarding farmland protection.

1. Enhance interagency coordination on land acquisition and stewardship projects such as protecting a property through a combination of CRs and APRs.
 - a. *Use the Interagency Lands Committee to develop a hierarchy that can be used by state and local governments to guide programs, plans, and investments for prioritizing farmland for protection.*
 - b. *Assess all CR applications for agricultural suitability and direct to the APR program as appropriate.*
2. Create a state-level prioritization of farmland for protection similar to Biomap, TNC's resilient lands, Mass Audubon's MAPPR (Mapping and Prioritizing Parcels for Resilience), etc.
 - a. Establish a working group to develop priorities for land to be protected, such as considerations for geographic equity; soils; crop diversity; forest cover; parcel size; emerging agricultural practices such as silvopasture, nut tree operations, permaculture, etc.; proximity to environmental justice communities, markets, other protected land; etc. The working group should include farmers, MDAR, NRCS, planners, and others.
 - b. Communicate the working group's priorities to NRCS in order to align ACEP-ALE eligibility with state priorities.
 - c. Develop prioritization screen based on the working group's determinations, to be used to evaluate applications.
 - d. Communicate the working group's priorities to land trusts and conservation organizations to encourage NGO work to align with state priorities.

Goal II: Increase access to farmland.

Increase access to farmland. Doing so requires affordable opportunities and options for new farmers and support for established farms to be passed on to successors.

A. Make more land available for agriculture.

1. Assess all existing, publicly held land for its suitability for agriculture and make more of it available for agriculture.
 - a. Explore a requirement for state agencies and departments, counties, and municipalities to identify and publicly list all publicly owned land that is either in current agricultural production or suitable for agricultural production. Consider each parcel for inclusion in the farmland licensing program.
 - b. Provide TA to municipalities to identify all municipally owned land, including parks, schools, and open land, that is suitable for food production.
 - c. Support municipalities in developing their own farmland licensing agreements and plans.
 - d. Establish a process for negotiating agreements for agricultural use on parcels with public landholding agencies and jurisdictions.
 - e. Develop a library of model contracts and leases that municipalities can use to lease municipal-owned land for farming, train municipal land-use managers and planners how to use these tools, and provide technical assistance to do so.
 - f. Expand the options available to farmers using state and municipal land to include leases, including long-term leases.
 - g. Contract with NGOs to manage publicly owned properties and leases.
2. Strengthen the state land licensing program.
 - a. Inventory and license more public farmland through the state land-licensing program, including long-term and rolling terms.
 - b. Develop process to route state-owned land licensed or leased for agriculture through MDAR's program in order to ensure consistency and appropriate agricultural practices.
 - c. Seek funding for the public purchase of land suitable for leasing to farmers for agriculture.
 - d. Enable the state land-licensing program to manage an increased number of properties and responsibilities, potentially via additional staff capacity.
 - e. Establish set-asides in state and municipal farmland leasing programs for BIPOC, beginning, and underserved farmers.
 - f. Update application process to consider existing tenure and improvements, plans to sell into local markets, soil management practices, and other factors.
 - g. Fund infrastructure development to support agriculture on publicly held land (e.g., irrigation, high tunnels, etc.).
 - h. Fund soil health improvements on state licensed farmland.
 - i. Support farm incubators and aspiring and beginning farmers through the state land-licensing program.

- j. Connect lessees with services and support organizations, such as Buy Locals, UMass Extension, business and succession planning TA providers, lenders, and others.
 - k. Better monitor properties under the program for performance and physical condition.
 - l. Allow for 1-year special agricultural use permits in the event that licensees are not able to use land.
 - m. Connect exiting tenants with loans and other assistance in accessing land.
 - n. Pilot 'lease-to-own' opportunities to catalyze the development of permanent urban farming properties in historically underserved communities.
3. Create preferential zoning and ordinances to support urban agriculture.
 - a. Provide TA and model zoning bylaws and ordinances to encourage municipalities to support the use of land, rooftops, and other infrastructure for urban agriculture.
 - b. Explore the possibility of zoning and ordinances to allow for small-scale poultry and other protein-producing livestock in some urban areas.
 4. Increase the amount of privately leased farmland, coupled with agreements designed to meet the needs of farmers.
 - a. Incorporate best practices, resources, and education regarding leasing, land transfer, and use of resources into APR stewardship.
 - b. Increase availability of – and easy access to – good model leases, supported by professional experts to help farmers negotiate with landowners and adapt to special circumstances.
 - c. Incentivize the availability of long-term leases, rolling leases, and/or flexible lease terms
 - d. Explore and establish novel, alternative methods of land tenure to meet the needs of beginning, BIPOC, and other historically underserved communities with limited equity or credit.
 - e. Provide affordable opportunities for liability and other insurance needs for lessees or other users of non-owner-occupied land.
 5. Explore opportunities to assist state and federally recognized Tribal governments of the Commonwealth in obtaining land.
 6. Establish a farmland restoration program to provide assistance to farmers for bringing fallow or marginal farmland into food production, which may include cost-sharing provisions.
 - a. Explore development of a public grant program to support restoration and improvement of farmland, prioritizing land with prime and important farmland soils.
 7. Ensure that CRs support the growth of agriculture where consistent with the overall purpose of the restriction.
 - a. Continue to include sample language in the permitted uses section of the model CR to allow agriculture.
 8. Support farm incubators, potentially via funding.

B. Support farm transfer and succession in ways that enhance access to farmland.

1. Support and expand farmland transfer and farmland succession education and one-to-one technical assistance (TA).
 - a. Disseminate information to farmers on estate/transfer planning models, case studies, and best practices.
 - b. Incentivize owners of land with APR and CRs to engage in business/transfer/estate planning.
 - c. Include outreach to farmer and non-farmer landowners around farmland transfer and succession strategies as part of APR Program stewardship.
 - d. Include farm transfer or transitions planning in farm business planning, training, and outreach at all stages of farm business life cycle.
 - e. Include business and financing training, as well as succession planning, in curriculum requirements for agricultural schools.
 - f. Increase awareness and promotion of farmland linking and listing tools such as New England Farmland Finder.
 - g. Make funding available to support farmers in developing succession and estate plans, with follow-up support.
 - h. Consider review of the state capital gains tax on farmland sold to a farmer, including potential elimination subject to a look-back provision to ensure the land stays in active agriculture.
2. Ensure that transfers of protected land enhance farmland access for farmers.
 - a. Evaluate the effectiveness of Options to Purchase at Agricultural Value (OPAVs) and ROFR in keeping land affordable for farmers and in active production. Develop an ongoing monitoring process to allow for continual evaluation and course-corrections as needed.
 - b. Acquire stand-alone OPAVs on existing APRs that do not have them from willing owners.
 - c. Continue to ensure that all APRs require that owners notify MDAR in advance about any intention to sell the land, and create incentives for existing APR owners to do so voluntarily.
 - d. Encourage protection through the APR Program projects that result in the transfer of farmland to a next-generation producer.
3. Enhance existing registries and establish new registries of lands that allow agriculture, including owners' names, contact information, property information, and types of agriculture.
 - a. Compile and keep current a database and map of privately held CRs that allow agriculture.
 - b. Enhance MDAR's APR registry, including owners' names, contact information, property information, and types of agriculture.

C. Prioritize increased access for BIPOC and historically underserved farmers in all farmland access programs and policies.

1. Ensure that investments, programs, and policies promote equity for farmers from historically underserved communities.
 - a. Work with legislators and state program managers to ensure that proposed legislation, programs, regulations, and investments related to farmland access account for equity considerations.
 - b. Explore the potential creation of a state-funded zero-down-payment program, with equitable and affordable financing to accommodate land purchase for qualified BIPOC, historically underserved, and immigrant farmers.
 - c. Facilitate access to APRs and other protected land for BIPOC, historically underserved, and immigrant farmers.
 - d. Direct MDAR staff to develop resources and programs, and to undertake outreach to BIPOC, historically underserved, and immigrant farmers.
 - e. Establish working group to examine historical and contemporary discrimination in access to farmland and other agricultural resources, and to propose remedies.
 - f. Establish a standing advisory council or network of BIPOC, historically underserved, and immigrant farmers and representative organizations to represent the voices of BIPOC and immigrant farmers in state land and agricultural processes.
 - g. Explore creation of financial incentives for transfers of land to BIPOC and immigrant farmers.
 - h. Explore updates to statute that would allow for uniform partition of heirs in property.
2. Explore options to expand and strengthen equity and diversity criteria for applications for agricultural use of public land, and prioritize access for historically underserved, new, aspiring, and low-income farmers.
 - a. Conduct outreach to historically underserved communities to discuss land access opportunities and measures put in place to remedy past injustice and inequity.
 - b. Work with NGOs focused on equity and diversity to strengthen and amplify outreach.
 - c. Establish clear criteria and a transparent and manageable/equitable application and reporting process.
 - d. Create and make accessible materials that address language barriers and other accessibility issues.
 - e. Provide TA through NGOs to applicants in completing program applications.
 - f. Conduct ample and strategic outreach for all availability notices, coordinating with NGOs serving and based in historically marginalized communities.
 - g. Explore removal of requirements for applicants to have established farms in order to be eligible for program or financial support.
 - h. Engage with local organizations to determine the farmland needs of a community and when conducting outreach and publicizing availability of farmland.

- D. Develop options to make land available to meet the needs of farm seekers, taking into consideration parcel size, affordability, suitability for different types of markets, suitability for different crops, proximity to communities where farmers reside, and other factors. Support and expand service-provider networks to meet the needs of all farmers and potential farmers.**
1. Support diversification of the agricultural service-provider workforce through job training and expanded consideration for historically underserved individuals when hiring.
 2. Develop and implement training programs focused on diversity, equity, and inclusion to agricultural lenders and other service providers and agencies.
 3. Contract with NGOs, consultants, and others with the capacity to provide business technical assistance services, including succession planning, to farmer clients.
 4. Develop capacity of service providers like financial institutions, real-estate professionals, and attorneys to better support farms.
 - a. Educate/train real-estate agents and attorneys on how to appropriately list and develop purchase agreements for CRs and APRs.
 - b. Subsidize appraisals of farmland and other agricultural assets early in the process, on the condition that both seller and prospective buyer are intended users of the appraisal.
 5. Create a comprehensive toolbox of resources for farm business, succession, transfer planning, and implementation that is maintained and kept up to date, and provide these resources to farmers, which may require additional staff resources.

Goal III: Support and enhance the viability of farms and farmland.

Support and enhance the viability of farm businesses and farmland protection concurrently. Protected and productive farmland and farm businesses are the supporting foundation of a sustainable and strong farm economic system.

A. Ensure that laws, regulations, programs, and investments support farm viability.

1. Explore increasing APR Program flexibility to support farm viability.
 - a. Revise MDAR APR policy on granting special permits for non-agricultural activities when appropriate to enhance farm income. Expedite process and allow for more uses while still protecting all underlying resources and not reducing production.
 - b. As part of the triennial reviews of the APR program solicit input on APR program policies including but not limited to, those related to housing, farm infrastructure, the impervious surface limit, special permits, building envelopes, public access, and limits on renewable energy production if sited away from productive agricultural lands.
 - c. Review potential to adjust policy to allow multiple long-term leases to be let on APR land without triggering subdivision actions.
 - d. Continue to periodically review APR restriction terms and modify language as needed for APRs in the future.
 - e. Enhance consideration of viability in the APR ranking process.
2. Explore implementation of mechanisms that would increase the number of municipalities instituting Right to Farm bylaws and agricultural commissions.
 - a. Provide a clearinghouse of all the Right to Farm bylaws municipalities have passed, along with the model the state created.
 - b. Explore opportunities to support adoption of Right to Farm bylaw and local farmland planning.
 - c. Support stakeholders in Right to Farm communities to act as ambassadors to educate and encourage other municipalities to pass Right to Farm bylaws.
 - d. Re-establish state investment and programming by which MDAR helped municipalities craft and pass Right to Farm bylaws and provided guidance to agricultural commissions.
3. Make it easier for farmers to seek and obtain grants and financing.
 - a. Evaluate options to enhance funding for MDAR grantmaking programs and staff.
 - a. *Provide more TA, which may require increased MDAR staff and contractors.*
 - b. *Meet APR Improvement Program and Matching Enterprise Grants for Agriculture Program demand, which may require additional funding.*
 - c. *Meet Farm Viability Enhancement Program demand.*
 - d. *Meet MDAR's Climate Smart Programs demand.*
 - e. *Meet MDAR's Stewardship Assistance and Restoration on APRs Program demand.*
 - b. Affirmatively further racial equity in grant programs by tracking demographic data of applicants and recipients and setting benchmarks and goals for equitable distribution of

- awards, prioritizing previously underserved communities. Publish reports on progress regularly.
- c. Require that state-funded organizations demonstrate a commitment to diversity and equity in operations and programming.
 - d. Make farmer program grant deadlines coincide with less busy times of the growing season for farmers.
 - e. Simplify the grant application process to ensure that RFPs and contracts are understandable to all applicants.
 - f. Set appropriate grant amounts to promote sustainability and utility to the full range of farms in the Commonwealth.
 - g. Change grant program regulations to allow for purchase of used equipment, make funds available upfront, allow for adequate time to complete projects, and make other adjustments to better meet the needs of all farmers, including small and historically underserved farmers.
 - h. Further develop bridge loan opportunities for farmers to use for upfront payments required before grant funds can be released.
 - i. Advise all grantees to discuss the tax implications of received funds with their accountants.
 - j. Promote/facilitate agricultural lender low-interest loan programs for beginning and next-generation farmers, including facilitating USDA loan guarantees.
4. Explore opportunities to support farm financing.
 - a. Explore legislation to exempt new or reconstructed agricultural buildings essential to a farm operation from local property taxes for a period of 10 years, provided that the building remains in agricultural use.
 - b. Explore statutory amendments that would allow towns to vote to waive excise tax on farm animals and equipment to include incorporated farming operations.
 - c. Explore provision of incentives to communities that enact farm-friendly zoning and tax policies.
 - d. Promote local zoning that allows for multi-family housing near farms for farmworkers.
 - e. Encourage communities to enact zoning bylaws that permit ancillary commercial enterprises in areas zoned for agriculture.
 - f. Seek to prohibit local zoning regulations, nuisance bylaws, and other regulations from unnecessarily hampering the expansion of urban agriculture.
 - g. Explore statutory amendment that would enable communities to further reduce property taxes on farmland in exchange for term easements, as well as permanent CRs.
 - h. Work with the Farmland Valuation Advisory Commission to guide municipalities setting their own farmland values under 61A to ensure that values are based on use value, not sales value.
 5. Include farmers and representatives of the full range of the industry in planning and policy-setting processes that impact land-use, environmental, and other public policy.

- a. Develop and implement policies and practices to ensure that other state, local, and regional planning efforts related to transportation, housing, energy, wildlife habitat, etc.—understand the Farmland Action Plan, minimize conflicts with it, and maximize ways to complement it.
 - b. Ensure that BIPOC-led and -representing organizations are meaningfully included in decision-making and planning processes whenever possible from the beginning and that these processes are fully accessible to all.
 - c. Adjust policies to improve the role of nonprofit land trusts and farming organizations and reduce their barriers to contributing toward Farmland Action Plan goals, without resulting in unfair competition with private farm buyers.
 - d. Research the relative greenhouse gas emissions from agriculture and from commercial or residential development to better message how farmland protection advances greenhouse gas emission reduction.
6. Prompt further development of industries supportive of agriculture to ensure they serve farm and farmland issues fully.
- a. Promote agricultural support industries as viable career paths.
 - b. Recruit and train business and other support professionals with practices related to agriculture to better serve farm and farmland issues and to mentor younger individuals to continue in or enter these fields.
 - c. Support trade schools and other academic institutions in fostering career readiness in areas of need (e.g., surveying, appraisals, etc.).
 - d. Work with professional trade associations to develop and implement curricula and training modules. Ensure that materials are accessible in multiple languages.
 - e. Train and connect key professionals—tax advisors, appraisers, surveyors, real-estate agents, lawyers, and others—who work with farmers and farmland owners through a strong referral system, with incentives/infrastructure to work together.
 - f. Support workforce development, networking, and coordination of a next generation of farm succession and farm business advisors.
 - g. Collaborate with other states to fund regional informational hubs where farmers and aspiring farmers can connect with resources and advisors.
 - h. Educate commercial lenders about current values of permanently protected land to encourage lending for farm infrastructure on protected farmland.
 - i. Facilitate the creation of teams of integrated support services to provide TA to farmers in all agricultural sectors.
 - j. Develop program to engage with aspiring/beginning farmers, through NGOs, USDA, Extension MDAR, UMass Student Farm, K-12 programs, and other stakeholders.
7. Support urban agriculture.
- a. Provide more public education on urban food production techniques in community gardens and home gardens, such as growing vegetables, composting, keeping bees, chickens, and other animals.

- b. Support technical training for urban growers regarding soil health and fertility, integrated pest management, and related topics.
 - c. Conduct soil testing and import or remediate soil on land prioritized for growing food in cities.
 - a. *Provide more public education on best management practices for urban gardening in locations with known or suspected soil contamination.*
 - d. Seek development of a separate small-parcel grant and support program at MDAR that recognizes the different benefits and requirements of urban and other small-scale farms, and includes resources beyond protection, including remediation or soil importation, and infrastructure development.
 - e. Ensure that financial and business service providers that serve the agricultural industry serve the particular needs of urban farmers.
8. Support farm infrastructure needs.
- a. Continue the Food Security Infrastructure Grant Program, targeting funds to current needs of farmers, such as climate resilience.
 - b. Ensure that local zoning allows for multi-family housing near farms for farmers and farmworkers.
 - c. Increase and sustain support for MDAR farm viability programs, which provide capital grants, including the APR Improvement Program, the Farm Viability Enhancement Program, and Matching Enterprise Grants for Agriculture.
 - d. Ensure support for agricultural infrastructure on protected farmland to help ensure farm viability.
 - e. Work with NRCS to develop a MA specific consideration of impervious surface limitation on ALE farms to allow greater flexibility above current 2% maximum.
9. Develop capacity of service providers like financial institutions, real-estate professionals, and attorneys to better support farms.
- a. Educate financial institutions about the need for creative approaches to agricultural lending and services, including the need to offer farmer-friendly hours to assist farmers with paperwork and follow-up.
 - b. Support formation of partnerships with progressive banks geared toward farm-specific programs.
10. Establish a financial facilitation support function, potentially requiring new staff resources.
- a. Establish qualifications, characteristics, and responsibilities of the financial facilitator to include racial/ethnic/language diversity; ability to effectively explain financial processes to farmers/farm owners; and a deep understanding of related services provided by banks and state agencies and public- and private-sector funding.
 - b. Ensure support is provided by an expert who understands the complexities of farm/farmland-related financing and is able to answer questions, explain the process, and serve as a liaison between bankers, farmers, and other stakeholders as appropriate, at no cost. The financial facilitator will have no equity stake in the transactions.

11. Identify opportunities to support farmers for their non-market service contributions, which might include funding mechanisms.
 - a. Define Massachusetts-specific economic values for a range of non-market services (ecosystem, cultural, and other amenities provided by farms and valued by the public, but for which farmers are not compensated) and develop and fund payment mechanisms.
 - b. Align ecosystem payments with state climate and renewable energy goals, to recognize farmers' contributions toward these efforts.

B. Grow resilience and sustainability practices on farms.

1. Increase TA to farmers around crop- and livestock-specific climate change adaptation strategies.
 - a. Include climate change adaptation strategies as eligible practices under USDA's Environmental Quality Incentives Program (EQIP).
2. Improve soils on publicly held land being used for agriculture.
 - a. Implement the Massachusetts Healthy Soils Program.
 - b. Prompt healthy soil practices on Chapter 61A and FVEP properties.
3. Support ecological enhancements and services provided by management practices, potentially via allocation of new funding.
 - a. Explore development of a Payment for Ecosystem Services (PES) program to compensate farmers who significantly increase soil health, invest in organic matter, plant cover crops, and provide ecosystem services such as water purification, flood mitigation, aquifer recharge, erosion control, and protecting/increasing biodiversity.
 - b. Identify opportunities for the APR program to account for ecosystem services, potentially via yearly payments.
 - c. Develop monitoring, reporting and verification protocols for ecosystem service payment metrics.
4. Build UMass Extension's capacity to meet the needs of farmers.
 - a. Identify gaps in Extension services and prioritize capacity that meets critical farm needs and delivers education and services to farmers and aspiring farmers who have been historically underserved.
 - b. Expand the range of TA available through UMass Extension to cover all sectors of agriculture in the Commonwealth, including through cooperative agreements or contracts with other educational institutions and resources in nearby states.
 - c. Establish Extension as a referral hub to other public and private services for services and education.
 - d. Build Extension's capacity to meet the changing needs of farmers regarding soil testing and education.

C. Increase use of services, programs, and other resources by farmers.

1. Develop and implement a communications plan to promote public and private resources available to farmers.

- a. Work with the Massachusetts Land Trust Coalition, municipal organizations, regional planning agencies, Buy Local organizations, and state agencies to develop outreach material with uniform messaging that can be utilized by all entities.
 - b. Develop online and print materials for outreach to landowners. Ensure that publications like *Land Conservation Options: A Guide for Massachusetts Landowners* and *Your Land, Your Legacy* are kept up to date and easily available digitally and in hardcopy.
 - c. Educate farm sellers and buyers on CRs and APRs, including resolution of any outstanding violations, restriction terms, approvals needed, eligibility for ROFR and OPAV waivers, and how to put together a complete packet of information to enable a smooth and expedient review.
 - d. Develop and implement a strategic outreach and education plan for the APR Program.
 - e. Educate stakeholders about and promote private APRs.
 - f. Build awareness about availability to subdivide protected lands into separate farms where long-term viability of all parcels is ensured.
 - g. Incorporate best practices, resources, education, TA, etc. on leasing into non-state entity conservation programs (e.g., land trusts, municipalities, etc.).
 - h. Ensure that dissemination of all resources is equitable, through targeting to underserved communities, making resources available in multiple languages, and other practices.
2. Expand opportunities for one-to-one assistance for farmers, prioritizing beginning and historically underserved farmers and aspiring farmers.
 - a. Establish a diverse network of “navigators,” individuals based at trusted local organizations who are well-versed in the range of public and private resources, regulations, and processes, who can work one-on-one with aspiring farmers through the entire process of launching a farming enterprise.
 - b. Explore demand for and development of robust farmer mentorship and peer-to-peer programs, including a referral database.
 - c. Support farmers and landowners who have completed viability, estate, and succession planning to act as ambassadors to their peers to educate and encourage them to do the same.
 - d. Support culturally appropriate outreach by other experienced farmers of color.
 - e. Diversify the service-provider workforce, including public agencies, through job training and expanded consideration for historically underserved individuals when hiring.
 3. Support MDAR’s Farm Viability Enhancement Program (FVEP), APR Improvement Program (AIP), Matching Enterprise Grants for Agricultural (MEGA) Program, and Agricultural Business Training Program, which provide one-on-one business technical assistance.
 - a. Support FVEP to enable farmers to access business planning assistance and capital for business improvements in exchange for farmland protection covenants.
 - b. Increase awareness of MDAR’s Farm Viability programs and Agricultural Business Planning courses among the farming community.

- c. Track and evaluate farm businesses after program participation to determine the program's effectiveness in supporting long-term viability.
- 4. Support formal education for farmers and aspiring farmers.
 - a. Promote farming and agriculture as viable career paths.
 - b. Ensure that Commonwealth workforce development programs include farming and careers in the agricultural industry.
 - c. Support public school, agricultural vocational-technical high school and community college workforce development programs related to agriculture, including business training and succession planning.
 - d. Work to secure state funding to support networks, curricula, and trainings.
 - e. Ensure that all farmer services are available in multiple languages.

D. Build public support for agriculture and for farmland protection, access, and viability.

- 1. Develop programming to educate all Massachusetts residents and elected officials about the importance of local agriculture.
 - a. Through media and other public outreach, educate the public about the value of local agriculture and how they can support it through consumer spending and advocacy. Highlight local agriculture's connections to food security, public health, the economy, the environment, equity, culture, and other sectors. Integrate lessons concerning Indigenous understanding of practices that support biodiversity and framing of sustainable that is not centered on market but on productivity and abundance for food as a human right.
 - b. Recommend agriculture, nutrition, and the local food system curricula in K-12 classrooms.
 - c. Evaluate and strengthen state programs that support purchases of local foods.
 - d. Educate elected officials about the role of state policy, programs, and investment in supporting local farms and farmland.
- 2. Develop a comprehensive plan to support and sustain the state's agricultural sector, including urban agriculture, integrating both public and private resources.
 - a. Build upon the 2015 Massachusetts Local Food Action Plan and other efforts that look more broadly at agriculture to set goals and recommendations for ensuring long-term viability for the state's agricultural sector.

Conclusion

The Farmland Action Plan presents a comprehensive roadmap for the future of agricultural preservation, viability and access in Massachusetts. Through the collective input of a diverse network of farmland stakeholders, the plan has identified key challenges for the agricultural sector while outlining practical strategies to address them.

The Plan is intended to be a living document requiring ongoing review to ensure that it is addressing the evolving and changing needs of the agricultural sector. Its success will rest on strong collaboration among a diverse network of public and private stakeholders including farmers, landowners, policy makers, land trust organizations and the public to monitor, promote, and facilitate its implementation. Specific actions for the implementation phase include:

1. Encourage individuals and entities to participate in plan implementation through their own activities and missions.
2. Support organizing, engagement, and participation in implementation by BIPOC farmers and organizations that represent them and are led by them.
3. Monitor, evaluate, and report on the impact of all farmland programs to demonstrate the success of investments, inform any need for change, and identify the need for additional resources.
4. Develop benchmarks and metrics to measure progress toward plan goals and implement regular tracking of these data.
5. Include metrics that measure progress on promoting racial equity in access to land.
6. Use evaluations to course-correct and otherwise adjust implementation plans and goals.
7. Produce and disseminate public evaluations of progress every few years.
8. Track and make public annual accounting of how much new land has been protected and how much new land has been converted into agricultural production.
9. Map and track farmland, APRs, private APRs, CRs with farmland, land in Chapter 61A, farmland protected with Conservation Land Tax Credit funds, and farmland protected with Community Preservation Act funds.
10. Research and report on agricultural incentive models used in other states and countries, including disincentives to development that converts farmland for other purposes (such as in New York), beginning farmer tax credit programs (such as in Minnesota), and other farm transfer incentives and farm succession support programs. Ensure that any implementation doesn't undermine the ability for farmers to use their land for collateralizing their ongoing agricultural business needs.
11. Create an online dashboard to track funding and spending levels for all state farmland programs. Use data to support advocacy for investments.

The successful implementation for the Massachusetts Farmland Action Plan will help to ensure a resilient, equitable and sustainable agricultural landscape for the state that enriches the lives of its residents, preserves its unique agricultural heritage, and contributes to a healthier and more resilient future.

Appendix A – Details of Community Engagement Process

Challenges and Recommendations

Additional detail on findings from the community engagement process is divided into four sections:

- Challenges and Recommendations Shared Across Engagement Activities
- Challenges and Recommendations That Differed Across Engagement Activities
- Challenges and Recommendations Specific to Farmland Protection, Access, and Viability
- Challenges and Recommendations from BIPOC and Immigrant Stakeholders

Detailed findings from specific engagement activities (e.g., survey, listening sessions) are included in the Appendices.

Challenges and Recommendations Shared Across Engagement Opportunities

- **Challenges:** A number of themes dominated the community engagement opportunities, revealing many shared concerns and challenges. Survey respondents and participants in the listening sessions, BIPOC-led and -focused discussions, and focus groups consistently identified the high cost of farmland as a major challenge. In addition to the lack of affordable farmland, participants in all sessions cited difficulties accessing housing near farmland for themselves or farmworkers. Lack of infrastructure, business skills, and processing facilities were also seen as key barriers to maintaining a profitable farm business. Many participants raised concerns about the increasing costs of supplies and equipment. They also linked farmland protection to the protection of farms and to support for farmers themselves—that is, to protect farmland, farms and their farmers need to be supported to remain viable.

“Our greatest difficulty is that our farmland uses the boilerplate conservation restriction language to protect [agriculture]. This is fantastic BUT there is no house on the land and we cannot build one. A farm without a house is NOT sustainable, affordable farmland.”

– Farmer survey respondent

Another consistent theme was the perception that the public does not understand the full value of farms and does not feel personally connected to farms; therefore, the public does not see the loss of farmland as a concern or the protection of farmland as an urgent need. Many participants felt strongly that public understanding of and support for the critical roles of farms in the current environmental, economic, and cultural landscape are essential to building and sustaining the political will to protect farmland.

- **Recommendations:** The vast majority of participants cited the need for a range of supports for farmers and farm businesses. This included increasing the pace of purchases of agricultural restrictions, expanding tax breaks for farmland, the inclusion of housing on farmland, and creating more flexible financing options (e.g., loans or grants) to purchase land or equipment. Many individuals called for more flexible protection programs that allow more housing and infrastructure,

diverse business activities, and farms smaller than five acres. Farmers and stakeholders across all engagement activities called for business training and technical support for farmers, farmer and farmworker housing, and support for succession planning. Many called for proactive outreach to connect farmers with supportive programs, to help farmers access land, and to help retiring farmers and landowners protect farmland from development.

Many of the BIPOC and immigrant groups' recommendations aligned with those made throughout the community engagement process. In particular, BIPOC and immigrant farmers also called for proactive outreach to help individuals access farmland and to help farmers and farmworkers access housing, long-term leases, and technical assistance, education, and support. BIPOC and immigrant groups also called for recommendations to support access to land and flexible financing options to strengthen the viability of farm businesses.

Another key area of overlap centered on calls for widespread community education regarding farming—both to educate the public about the value of farms and to promote and support farming as a sustainable livelihood. This included calls for school and community programs to promote the value of farming to young people.

Challenges and Recommendations That Differed Across Engagement Activities

Although stakeholders shared many similar challenges, there were also notable differences in the input gathered through different activities and from different groups of stakeholders. These differences, as described in this section and referenced elsewhere in this report, should not be construed as representing areas of fundamental *disagreement* between or among stakeholder groups. For example, it is not surprising that policymakers might focus on statewide regulations, while new farmers might emphasize the need for critical access, assets, and technical assistance. Understanding the specific challenges faced by different groups and their priority recommendations has been essential to creating an Action Plan that synergistically advances multiple interrelated approaches to protect farmland; broaden access to farms and farmland, particularly for BIPOC and immigrant farmers and other historically underserved farmers; and increase farm and farmland viability.

If the state is serious about land protection, there needs to be an aggressive investment into land purchasing and protection with outreach efforts which specifically benefit BIPOC and low-income farmers.”

– Survey respondent

- **Challenges:** Historically underserved farmers in particular noted a variety of challenges in addition to those shared across all engagement opportunities. Many BIPOC-led and -focused groups cited longstanding inequities in land ownership, describing the disadvantages of not having inherited a family farm. Language barriers also pose challenges for some underserved farmers. BIPOC participants described experiencing racism in their efforts to access land, and several reported feeling unsafe or being chased off land. Many said that the current structures and organizations in place to support farmers do not always feel comfortable, welcoming, or approachable.
- **Recommendations:**
 - *Differences in the volume of input on farmland protection programs.* Most suggestions regarding current protection programs were offered in response to the survey or in listening

sessions. While participants in the BIPOC discussions made some recommendations regarding the protection of farmland, they provided minimal feedback on current farmland protection programs for landowners. Given the vast majority of Massachusetts farmland is held by White landowners, it is probable that BIPOC stakeholders are less familiar with state protection programs simply because many have been systematically excluded from such programs since they do not own land or do not own enough land, or for other reasons linked to structurally racist practices and policies that are not being changed quickly enough.³ Across all engagement activities, BIPOC farmers were far more likely to recommend ways to increase access to farmland and strengthen farm viability.

- o *Farmland access and viability.* Underserved farmers and the organizations that support them provided several recommendations for addressing the additional challenges they experience. Recommendations from underserved farmers focused primarily on access to farmland and support for new and beginning farmers and their businesses. Even though support for new and beginning farmers was called for across all community engagement opportunities, BIPOC farmers were largely unique in describing the historic and current disparities in the ownership of land in Massachusetts. To avoid being forced to compete with White farmers on an uneven playing field, BIPOC respondents and discussion group participants emphasized the need for programs designed specifically for farmers of color. BIPOC farmers recommended prioritizing access to land for BIPOC farmers, including the repatriation⁴ of state-owned land to Indigenous groups, and reparations in the form of financial grants or land grants to BIPOC farmers. They emphasized the importance of including BIPOC stakeholders at the start of all future planning processes. Farmers of color also recommended the establishment of a division within MDAR dedicated to supporting and addressing the unique challenges faced by BIPOC, immigrant, low-income, and other underserved farmers.

“Municipalities need a greater understanding of the tools and funding available to them to help with protecting land.”

– Survey respondent

Challenges and Recommendations Specific to Farmland Protection, Access, and Viability

Protection of Farmland

- **General Challenges:** Stakeholders viewed the pace of farmland protection as being too slow. They perceived the high cost of land and increasing pressure to develop or sell land for housing as a key barrier to protecting farmland and to many farmers being able to afford that land. In addition, lack of clear, consistent, and easily accessible information about the range of programs and supports available to farmers and landowners was seen as a significant challenge. Other concerns included

³ According to the U.S. Census Bureau, 79.8% of the Massachusetts population is “White alone” ([Quickfacts: Massachusetts, 2021](#)). Numerous research studies have pointed to racial disparities in land ownership as having “significant social, economic, and cultural, and political consequences for minority communities” ([Gilbert & Wood, 2002](#)).

⁴ “Repatriation,” a term with complex and multi-layered meanings, is an “Indigenous feminist paradigm ... of recovery and return, and a sociopolitical mode of resurgence and refusal” ([Gray, 2022](#)). In practice, repatriation calls for the “return of Indigenous land to Indigenous hands” and “restoring a people to their rightful place in sacred relationship with their ancestral land” ([Sogorea Te’ Land Trust, 2022](#)). Unlike the term “repatriation,” which “means a literal returning to the land of your ancestry, repatriation carries a deeper meaning of returning to a way of life, one that lives with reverence for Nature” ([Summers, 2020](#)).

the general perception that municipalities are not welcoming of farms, namely that municipal officials prefer development over farms to increase a community’s tax base. Stakeholders also perceived municipal officials as lacking knowledge about programs and tools available to protect land. More broadly, the general public was seen as lacking a sense of urgency around farmland protection.

- **General Recommendations:** Recommendations for increasing the pace of farmland protection included the following:
 - Build cross-community and cross-sector partnerships to develop and advance policies to incentivize farmland protection.
 - Support partnerships among land trusts, nonprofits, private businesses, and the state to protect and steward more farmland.
 - Provide municipalities with education and support focused on protection of farmland.
 - Offer incentives and educate town officials on the benefits of farmland.
 - Empower municipalities to intervene and purchase agricultural land or restrictions if that land is in danger of being developed.
 - Encourage zoning for higher density development and share model agreements.
 - Offer training and education programs for farmers, landowners, land trusts, bankers, realtors, and municipal officials so they better understand and can access and support land protection programs.
 - Educate municipalities and the public on the benefits of farms.
 - Conduct a public education campaign, including K–12 education, focused on increasing awareness of the value of farmland to local communities.
 - Provide emergency state funding to support the purchase and protection of farmland at risk for development. Recommendations included giving the state authority to purchase and hold land and to empower municipalities to intervene when farmland is at risk for development.

Stakeholders also offered a range of recommendations to support planning, policies, programs, and organizations focused on protecting farmland. These included supporting succession planning; emphasizing preservation of farmland in municipal planning; creating agricultural zones and reducing the property tax rate for farms; and working with municipalities to identify agricultural land that is threatened and develop plans to protect it.

“Create a public outreach campaign to demonstrate to people how important farms are.”

– Survey respondent

- **Feedback, Challenges, and Recommendations on State Protection Programs:**
 - *Farmers appreciated the benefits of state protection programs:* Of the 215 farmers who responded to the survey, 55% indicated they had participated in a state program to protect farmland. Many respondents found the programs effective in protecting land, expressed appreciation for the support, and affirmed the APR’s important role in keeping land affordable and protecting existing farmland permanently. Several respondents credited state protection programs with making it possible for them to have a viable farm business. Farmers who had participated in the APR program said they would not have been able to afford or purchase farmland without the program. Likewise, farmers who had participated in 61A expressed appreciation for the program and stated that the decreased property taxes helped keep their farms viable. Participants in the Farm Viability Enhancement Program also indicated that the program helped their farms stay in business.

- o *Farmer and stakeholder concerns about state protection programs.* Respondents shared a variety of concerns about a broad range of state programs; it should be noted that many comments were not specific to APR but referenced any MDAR program. Respondents’ concerns spanned a range of issues, including their perception that current programs are oversubscribed, that the pace of overall farmland protection is too slow, and that the application and renewal processes for some state programs is complicated, time-consuming, burdensome, and not conveniently timed to the growing season. Many farmers also indicated that compensation to farmers for participating in these programs is not keeping pace with the increasing cost of land and that, as a consequence, fewer farmers and landowners will participate over time.

Farmers who had participated in state protection programs indicated that some restrictions and requirements compromise the viability of their businesses and may discourage others from participating. They also felt that while agricultural conservation programs protect the land, housing is not receiving the same level of support. The lack of affordable housing was repeatedly cited as a major barrier for farmers and farmworkers. In addition, the lack of protection for smaller parcels of land (i.e., under five acres) made it difficult or impossible for new or beginning farmers to afford to participate or for smaller parcels to be protected. Also of concern were limitations on agritourism and other activities that could support farm businesses.

More generally, stakeholders and farmers felt that many farmers and landowners are not aware of the range of protections and support programs the state offers. Although MDAR maintains a website with related information and disseminates regular statewide updates on how to access such programs, the perception persists among many farmers that learning about or applying to such programs is a difficult, opaque, and often burdensome process. Recommendations included establishing a central location for protection and support programs, designing more navigable online platforms, and making information about current programs more accessible.

- o *Recommendations:*
 - i. *Increase funding, flexibility, and adaptability of protection programs.* Participants recommended a significant increase in funding for farmland protection programs. Subject-matter experts and stakeholders in the action planning process recommended a bond bill to provide a dedicated, ongoing, and reliable source of funding. Stakeholders recommended increased funding to:
 - Increase the amount of farmland protected by state programs.
 - Provide funding to land trusts and municipalities to assist in protecting and stewarding farmland.
 - Increase the compensation paid per acre so that protection programs keep pace with the rising cost of land, which, in turn, will help more landowners participate.
 - Expand the eligibility guidelines for programs to allow smaller farms (under five acres) to qualify for protection or for tax reductions under 61A.

“We have to protect land in a way that is equitable, sustainable and feasible. People will not choose to protect land unless it is financially viable and too often the people who care about land stewardship and good agricultural practices are not the ones in possession of the capital necessary to secure the land.”

– Survey respondent

- Make protection programs more flexible to allow housing.
 - Allow more agritourism or other activities designed to diversify business to support the viability of farms.
 - Increase the number of staff for state protection programs to enable more applications to be processed and thereby increase the pace of protection of farmland.
- ii. *Conduct proactive outreach and provide ongoing support for farmer and landowner participation in protection programs.* This recommendation is designed to:
- Inform farmers and landowners, particularly those with unprotected land, about protection programs available to them.
 - Provide central access to information on protection programs and to other sources of support for farmers.
 - Provide free consultation, training, and ongoing support for farmers and landowners through all stages of the application process.
 - Simplify and streamline applications where possible, reduce the frequency of renewals, and time applications and renewals so they do not conflict with the growing season.
 - Provide legal help to private landowners who want to protect their land.
 - Provide free consultation and training in land protection and provide support through the application process.

“Farmers need more support in navigating what can be a time consuming and complicated process.”

– Farmer survey respondent

Access to Farmland

- **Challenges:** Due to the high cost of land, many farmers who responded to the survey lease their land rather than own it. Farmers on leased private land reported being hesitant to make long-term investments when there is no guarantee their leases will be renewed. Access was a concern for all farmers leasing farmland, but it was a leading concern for BIPOC and immigrant farmers.
- **Recommendations:** The following recommendations were frequently proposed to increase access to farmland:
 - Increase farmer access to state and public land.
 - Support longer term leases so farmers feel more secure about making long-term investments.
 - Work with land trusts and landowners to make land accessible and available for lease.
 - Support new models for shared access to state land, such as incubator farms.
 - Support new models for shared access to and use of land, including dividing larger parcels into smaller parcels. Respondents felt this would enable beginning and new farmers to afford land.
 - Create a database of landowners and land seekers to facilitate connection and communication between these two groups.
 - Support increased access to farmland for all farmers, particularly historically underserved individuals.
 - Change municipal zoning laws in towns that prevent agricultural worker housing or multi-family housing in order to create special allowances for farmland.
 - Explore new models and opportunities to support shared access to and use of land.

BIPOC participants' recommendations on how to increase access to farmland aligned generally with those made by most farmers and stakeholders across all the engagement opportunities. However, given the unique historical challenges faced by BIPOC and immigrant farmers, resulting in these groups being far less likely to own land, BIPOC and immigrant farmers emphasized a series of additional recommendations designed to significantly increase support and assistance for BIPOC and immigrant farmers and the organizations that support them. These included:

- Conduct proactive outreach and education to BIPOC and immigrant farmers and BIPOC-led organizations to increase awareness about and access to supportive programs.
- Develop systems to connect BIPOC and immigrant farmers with farmland they can own or lease.
- Increase support for long-term leases for farmland to support the establishment of farm businesses; prioritize or set a minimum percentage of leases to be directed to BIPOC and immigrant farmers.

Viability of Farms and Farmland

- **Challenges:** Throughout the planning process, questions periodically surfaced about what activities constituted “farmland protection” as opposed to activities more specifically related to “access” and “viability.” Ultimately, the issue may be moot; consistently, farmers and other stakeholders returned to issues of viability and access, even when focused specifically on farmland protection, precisely because these areas are interrelated: Farmland protection depends on many factors, including the ability of farmers to access land and operate viable, sustainable, and successful businesses.

Farmers noted several key challenges to farm and farmland viability in addition to the high cost of land, including the increasing costs of equipment, labor, and supplies. As a result of these cost increases, many farmers find it challenging to maintain their farms and farmland. Farmers also noted that lack of shared local infrastructure, such as slaughterhouses, dairy processing facilities, and distribution centers, forces them to travel longer distances to process their products, which in turn increases their costs. Farmers and stakeholders at every engagement opportunity stressed that many farmers need business training and financial planning support.

- **Recommendations:** Farmers and other stakeholders repeatedly asserted that efforts to protect farmland must include strategies for supporting the long-term viability of farms and farm businesses overall. Many stated that current and new farmers and landowners need support and business training to successfully maintain their farm businesses and to ensure their land stays in farming. The need for support for new and beginning farmers was deemed particularly critical given the state’s aging farmer population. Other suggestions around supporting the viability of farms and farmland included:

“Provide locations where new farmers can get training and resources. Perhaps through the local cooperative extension. Here farmers could learn about the business of running a farm, find accounting services, and information on financial planning.”

– Survey respondent

- o Increase flexible financing options and provide financial support, such as low- or no-interest loans, grants, and micro-grants, to help with land purchases, down payments, and infrastructure costs.
- o Encourage farmers and landowners to plan early for retirement or estate transfers and provide succession planning support.
- o Provide farmers with access to business training, business planning services, and financial planning.
- o Pay farmers for ecosystem services, such as climate stabilization through greenhouse gas mitigation or soil fertility activities that preserve and protect prime soils.
- o Partner with BIPOC and immigrant farmers and the organizations that support them to support the next generation of farmers.

“We need to include farm manager housing in our conservation restrictions. We don’t know if we will be able to continue farming because market rent is so high and farmer salaries are low. We are currently unable to purchase a house near our farm as it is in a very affluent area.”

– Farmer survey respondent

In addition to supporting the preceding recommendations, BIPOC farmers also proposed the following strategies to address specific challenges faced by BIPOC and immigrant farmers:

- Provide advisors and one-on-one support to assist BIPOC and immigrant farmers in navigating farming systems, particularly in registering new businesses.
- Provide technical support and education for BIPOC and immigrant farmers to develop finance and business skills to support the viability of their farm businesses.
- Provide grants or loans with low to no interest and debt forgiveness for farmers of color or low-income farmers.

Challenges and Recommendations from BIPOC and Immigrant Stakeholders

Although BIPOC and immigrant stakeholders participated in all the engagement opportunities offered to the general stakeholder population, they typically comprised a very small percentage of participants in these settings. Thus, to better understand the specific experiences, challenges, and recommendations of BIPOC and immigrant stakeholders, the planning process included engagement opportunities designed specifically to elevate the voices of these stakeholders. As described in the Methodology, several activities, including a listening session, discussions, individual interviews, and focus groups, were held with 42 BIPOC and immigrant farmers.⁵ BIPOC advisors recommended a structure for these conversations, and they also facilitated or co-facilitated discussions and gathered information through one-on-one interviews.

As detailed in earlier sections, many of the BIPOC and immigrant groups' recommendations—related, for instance, to proactive outreach and support in accessing farmland, housing for farmers and farmworkers, long-term leases and flexible funding options, and technical assistance, education, and support—aligned with those made throughout the community engagement process. In addition to these shared recommendations, BIPOC and immigrant stakeholders also proposed the following approaches to address specific challenges and barriers faced by BIPOC and immigrant communities.

“We want to be at the forefront of MDAR’s decision-making process. Approach us in the planning process of Commonwealth-wide plans.”

– BIPOC discussion member

- **BIPOC Representation in Decision-Making, Governance and Planning:** BIPOC and immigrant groups proposed the following strategies to ensure that BIPOC farmers, stakeholders, and other leaders are actively involved with state-level decision making, planning, and governance:
 - Create a division within MDAR led by and dedicated to addressing the needs of BIPOC and immigrant farmers.
 - Ensure that BIPOC and immigrant farmers and organizations are involved in planning efforts from the beginning.
 - Support and require representation of farmers of color and immigrant farmers in the membership and leadership of agricultural organizations.
- **Facilitate Increased Access to Farmland and Farm-Related Assets:**
 - Provide incentives and develop new models and opportunities to support farmers of color and immigrant farmers in purchasing, accessing, sharing, and using land.
 - Establish systems to enable BIPOC and immigrant farmers who are seeking farmland to access farmland. For example, convene and support joint meetings between landowners and BIPOC and immigrant farmers and the organizations that work with them.
 - Establish criteria whereby being BIPOC (or organizations affiliated with BIPOC communities) would be, in part, a requirement for accessing leased land or other funding.
 - To support agricultural worker housing or multi-family housing for farmers or farmworkers, take steps to change municipal zoning laws or create special allowances on farmland.

⁵ This count does not include staff members who helped facilitate these conversations or the approximately 15 additional people who joined an outdoor discussion held in May in Great Barrington.

- Provide farmers of color and low-income farmers with flexible financing options, including grants, low- or no-interest loans, and debt forgiveness.
- Ensure that Request for Proposal (RFP) and other application deadlines are timed in consideration of the farm season to ensure that farmers are not burdened with having to complete applications at the height of planting, harvest, etc.
- Increase support for long-term leases to support the establishment of farm businesses, with priority—or at least a minimum percentage of leases—given to BIPOC and immigrant farmers.
- **Outreach/Education to BIPOC and Immigrant Farmers:**
 - Undertake proactive outreach to BIPOC and immigrant farmers and the organizations that work with them to increase awareness of state, local, and nonprofit programs that support BIPOC and other underserved farmers.
 - Provide BIPOC and immigrant farmers with technical assistance and education, with a focus on finance and business skills to support the viability of their farm businesses.
 - Provide advisors and one-on-one support to assist BIPOC and immigrant farmers in navigating farming systems, including how to register new businesses.
 - Provide more community education generally, including learn-to-farm programs at community gardens or in schools. Educational programs should be affordable and offered in multiple languages, formats, and locations.⁶
- **Social Justice, Equity, and Reparations:** BIPOC and immigrant farmers made the following recommendations as important *initial* steps towards addressing current and historical inequities in farmland ownership and access:
 - Establish a commission to develop policies and guidelines on reparations of land and resources, including financial payments, as a means of correcting longstanding discrimination against Black and Indigenous farmers and more equitably redistributing wealth.
 - Establish pathways to repatriation of land—particularly land held by MDAR and the Massachusetts Division of Capital Asset Management and Maintenance (DCAMM)—at no cost and with limited or no property tax requirements for state acknowledged and federal recognized Tribes, landowners, and farmers.
 - Establish grants specifically for BIPOC farmers to ensure that BIPOC farmers are not competing with other, more established farmers. One group suggested using a model similar to that of the MDAR Urban Agriculture grant.
 - Create a fund for BIPOC farmers to acquire land.
 - Support new and beginning farmers in understanding the steps to individual landownership.
 - Create and support welcoming environments for beginning BIPOC and immigrant farmers and facilitate connections with experienced farmers for education and mentoring.
 - Recognize that a past lack of equity in access to farming and land results in a lack of experience and qualifications for current funding or leases. Adjust criteria for lease and funding awards accordingly.
 - Require anti-bias training for state and municipal government officials involved with farmland grants and programs.

⁶ Stakeholders recommended that informational materials be translated into multiple languages, including Spanish, Khmer and other Southeast Asian languages, Korean, Portuguese, and French (for African dialects).

Listening Sessions

UMDI hosted Listening sessions via Zoom on February 15 and 16, and on May 3, 2022, with over 200 people attending. During the sessions, attendees participated in breakout groups to respond to questions about three subject areas related to farmland:

- I. Protection of farmland
- II. Access to farmland
- III. Viability of farms and farmland

Session notes were reviewed for emergent themes in each subject area. It became clear from the review that several of the themes impacted more than one area, and many touched on all three areas. A summary of common themes and findings across all three areas is provided in the next section, followed by a summary of emergent themes in each area.

Summary of Findings

Four themes emerged across the three subject areas of farmland protection, farmland access, and viability of farms and farmland:

- Funding
- Helping farmers succeed
- Education
- Proactive outreach

Funding

Listening session participants indicated that there was an urgent need to increase funding for farmland protection programs. They recommended that funding be used to assist farmers in purchasing new land and to increase the amount farmers are paid for land development rights to keep pace with rising land costs.

Participants recommended that funding be made available to farmers for more than just land purchase. They noted that farmers need financial support in making farm improvements and upgrading equipment. They also said that funding is needed to support housing for farmers and farm workers.

Participants felt that distributions were not in alignment with farmers' needs and schedules. They reported that application deadlines fall during busy times of the year for farmers, making it difficult to apply. They suggested that there be more than one or two distributions of funds, as farmers need ongoing financial support.

Participants also expressed strong support for making funding for land purchases available for small farms under five acres.

Helping Farmers Succeed

Participants stated repeatedly that farmers need more support than land purchase assistance and farmland protection. Helping farmers succeed keeps them on the land, which in turn helps to protect the land and keep it in farming.

Listening session participants frequently expressed the need for centralized locations for information and support, including:

- Information on state programs as well as assistance with applying for programs
- Creation of support centers where farmers can access financial and business planning resources at low or no cost
- Succession planning services to help farmers pass their business and land to the next generation of farmers
- Creation of a database of available farmland to help those seeking it

They also expressed a need for infrastructure to help farmers with dairy and meat processing, warehousing, and shipping.

Education

Calls for education fell into three main categories:

- Farmer education
- Education for the general public
- Education for municipal officials, land trusts, realtors, and other who may be involved in the farmland protection process

Farmer education

Participants expressed strong support for expanding agricultural programs at high schools and colleges. Another suggestion centered on creating farm apprenticeship and mentoring programs to connect experienced farmers with new and aspiring farmers to provide real-world training. This would also help facilitate land transition for farmers seeking successors.

Education for the general public

There was a perception among participants that the general public does not understand the need to preserve farms or the benefits they provide. Educating the public could increase support for farm preservation and farmer support programs.

Education for those involved in the farmland protection process

Participants shared their perceptions that municipal officials, land trust boards, realtors, and others who may be involved in the farmland protection process do not always have a clear understanding of how existing programs work. Ongoing training is needed in this area.

Proactive Outreach

Many participants recommended that proactive outreach to farmers in Massachusetts should be a regular and ongoing action. They shared that new and aspiring farmers, particularly BIPOC and immigrant farmers, do not have access to established networks and may not be aware of available programs.

Participants recommended regular and ongoing outreach to farmers to help the state better assess farmer needs on a “live” basis, allowing programs to adapt more quickly and to better fit the needs of farmers. They suggested that agricultural programs at the state level should build relationships with BIPOC and immigrant farmers.

Listening Session Summary: Protection of Farmland

There were three main themes that emerged from the listening sessions regarding protection of farmland:

- Protection of land
- Helping farmers succeed
- Information and education

Protection of Land

Discussion around the protection of farms focused primarily on the protection of the land that the farms use. Many farmers have leases that depend upon the lease holder renewing their agreement. If it is a longer-term lease, there is not always a guarantee that the lease will be allowed to be passed on to a successor.

The price of land is also a concern, and farmers often cannot afford to buy land that is available. There was concern among participants that pieces of land that are available are often much larger than a small farm or a new farmer could afford.

Participants shared their perception that development is often seen as a tax generator while farms are not.

Participants offered many solutions, including the following:

- Proactively contact farmers to let them know what programs are available to help protect their land.
- Provide more funding for existing programs.
- Work with land trusts to purchase and preserve land for farming.
- Incentivize towns to protect land locally.
- Conduct a statewide farmland audit to gain a better understanding of what land is being used, what is available, and what is needed.
- Provide legal assistance to private landowners who want to protect their land.
- Support alternative buying agreements such as multiple farms purchasing large pieces of land together.
- Include an agriculture impact assessment as part of the development planning process.
- Provide succession planning support.
- Connect existing farmers with new farmers seeking land.
- Broaden the definition of *farm* to include land that is a part of the property but not being actively farmed.
- Empower towns to intervene if traditionally agricultural land is in danger of being developed.
- Create shared local infrastructure such as slaughterhouses.

Helping Farmers Succeed

Helping farmers succeed in their business will help keep farmers on the land. Though information is available, participants reported it is not centrally located and not always easy to navigate. People without high-speed internet access may not be able to make use of it.

Farming support often seems to come in the form of single distributions of funds, while many farmers need ongoing support. In addition, farmers may or may not have business training or access to business support resources.

Suggested solutions include the following:

- Centralize information about various farm support programs such as state programs like the APR Program, information on how to work with land trusts, business support, and other resources.
- Proactively contact farmers to educate them about available programs.
- Pay farmers for ecosystem services.
- Financially reward farmers for rebuilding soils.
- Ensure that there is support available for a variety of different farm types and sizes.
- Provide support on an annual basis rather than as one-time payments.
- Provide grants and low-cost loans for equipment.
- Provide support to immigrant and BIPOC farmers.
- Increase the speed of fund distribution or develop an emergency funding program.
- Strengthen current buy-local and farm-to-table systems.

Information and Education

Farmers need access to business training and resources, but many farmers are uncertain about where to begin with protecting their own farm. There was also some confusion among listening session participants about existing programs and for whom they are available.

Land trusts and private landowners that want to assist may not know the “ins and outs” of farming and may be unsure how to let farmers know they have land available.

Municipalities need a greater understanding of the tools and funding available to them to help with protecting land. Many participants felt that more could be done.

The general public does not seem to understand how threatened farms actually are. Some participants felt that there is also a perception that farms are a harm to the environment.

Suggested solutions included the following:

- Provide business training classes and business support to farmers.
- Proactively reach out to farmers to share information about what supports are available.
- Provide ongoing training and information for municipalities on the programs available to them for preserving farmland.
- Educate the public on the economic impact of farms and other benefits of farms and farming.
- Create a campaign to educate the public about the threats farms face and why they need emergency protection.
- Educate land trusts and private landowners on what they can do to support farmers.
- Proactively reach out to immigrant and BIPOC farmers to share resources and provide support.

Listening Session Summary: Access to Farmland

There were three main themes that emerged from the listening session discussions on farmland access:

- Succession planning
- The high cost of land
- Support for new farmers

Succession Planning

Many participants pointed out that farming is one of the only industries in which the transition of leadership/ownership is expected to be done through inheritance rather than formal succession planning. Many want their land to continue as farmland but do not have a successor and are unsure how to find one. Participants emphasized that farmers need considerable support for succession planning.

Attendees noted a few ways this could be accomplished:

- Provide financial and planning support for farmers seeking to create and implement a succession plan.
- Create a statewide network or farmland clearinghouse to connect new farmers with farmers seeking to retire.
- Work with existing farms to establish apprenticeship programs that connect new and experienced farmers.
- Find ways for farmers to continue to live on their land while the farm transitions to new ownership.
- Connect new BIPOC farmers with existing farmers who wish to transition their land.

The High Cost of Land

The high cost of land was cited as one of the greatest barriers for new farmers and farmers who wish to grow their operations. Participants noted that the cost can be due to the land's value as developable land or because the land is being sold as a large parcel. Farmers seeking smaller parcels often find them not available.

While attendees expressed frustration about state and local programs, one of the most pressing issues raised was that information on available programs and support was not readily accessible or centralized. Participants said that traditional ways of obtaining funds for purchasing land, such as bank loans, are often out of reach for farmers.

Farmers on leased private land are often hesitant to make long-term investments without being able to depend on the land being available to them long term.

Suggestions for mitigating these issues included the following:

- Provide financial support to new farmers in the form of down payment assistance and low-interest loans.
- Provide grants for BIPOC farmers to support land purchase.
- Educate banks and other lending institutions on the business of farming and how they can support farmers.
- Provide more funding for existing state programs and centralize access to these programs. Provide application support for those programs, particularly for new and BIPOC farmers.

- Allow long-term leases to be inherited or passed on to the succession farmer.
- Ensure that funding includes support for housing for farmers and farm workers.
- Provide financial incentives for municipalities to set aside land for farming.
- Use a land trust model to set aside land for farming that would allow for long-term leases to farmers and preserve the land for future farmers.
- Split larger parcels into smaller pieces to make it more accessible to small farmers and provide more financial support for small and urban farmers.
- Educate landowners about leasing their land to farmers for the long term. Let them know the benefits of this and provide incentives for them to do so.

Support for New Farmers

New farmers face several barriers to land, education, and ongoing support. Many of the issues, and solutions, noted earlier in the sections on succession and the cost of land also apply to new farmers.

Listening session participants shared that farmers with available land often do not know how to connect with those looking for land. New farmers are often in need of business and other ongoing support.

Attendees offered the following suggestions:

- Provide a centralized place to connect new farmers with farmers looking for a successor. Proactively populate these lists by reaching out to current farmers and new farmers.
- Create apprenticeship and mentorship programs to provide training and ongoing support for new farmers.
- Provide financial support for equipment purchasing. Provide a way for farmers with used equipment they are selling to connect with new farmers.
- Land purchase assistance should also include the cost of building housing.
- Expand agricultural programs at colleges and universities.
- Find ways to connect new farmers to smaller parcels, and provide more support for small farms.
- Provide locations (e.g., the local cooperative extension) where new farmers can receive training and resources and can learn about the business of running a farm, find accounting services, and locate information on financial planning.

Other

A few items were mentioned repeatedly but do not fit into one of the previous categories:

- Outreach. Several people mentioned that centralizing information was not enough. Participants felt that outreach must be proactive to let people know where information is and how to access it. Attendees felt this was particularly important for connecting with and supporting BIPOC communities.
- The importance of being inclusive of and supporting BIPOC farmers. Several people mentioned access to public lands for farming as a form of reparations. Grants and low-interest loan financing for BIPOC farmers were also noted.
- Cooperation. Many of the solutions offered were cooperative in nature, with farmers working with private and public institutions to access farmland, such as land trusts partnering with farmers or town zoning land being designated for-agriculture-only.

Listening Session Summary: Viability of Farms and Farmland

There were three predominant themes that emerged from the listening session on viability:

- Supporting farmer success
- Resources and funding
- Public education and outreach

Supporting Farmer Success

Participants noted many challenges to farm and farmland viability. They shared that farming is an industry that operates with tight margins. Land, labor, and equipment costs are all increasing. They expressed concern that farmers do not have access to shared infrastructure locally, such as slaughterhouses, dairy processing facilities, and distribution centers, forcing farmers to travel farther to process their products, thereby driving up costs. They also shared the following:

- Farm jobs are predominantly seasonal, and keeping workers long-term is not always viable.
- Housing for farmers and farm workers is needed.
- Farmers need access to business support and training, financial planning services, and succession planning support.
- Farmers do not always know what support programs are available, how to access them, or who is eligible for them.

Participants provided many recommendations, including the following:

- Provide a centralized place where farmers can access information about state and local farm support programs.
- Provide business resources for farmers, including business training and mentoring, financial planning services, and guidance on employment issues.
- Support farmers in succession planning. Find ways to connect new and experienced farmers.
- Build shared infrastructure, such as slaughterhouses, dairy processing facilities, and warehousing, for farmers to use.
- When designing funding programs, ensure that the application deadlines and funding release dates are practical for farmers.
- Proactively reach out to new, BIPOC, immigrant, and Indigenous farmers to find out their needs and connect them to support services.
- Provide employment support and housing for seasonal workers.
- Provide funding for farmers who want to restore marginal soils.
- Pay farmers for ecosystem services such as carbon sequestration.
- Ensure that programs support a wide variety of farm sizes, types, and locations such as small farms, urban farms, and cooperative farms.

Resources and Funding

Participants noted repeatedly that finding and accessing resources was not always easy. As stated earlier, farmers do not always know what support programs are available or what the guidelines are for applications. There are misconceptions about who is eligible and how programs work.

Participants noted that more funding is needed, particularly for land acquisition, technology and equipment upgrades, and training. Farmers also need funding that is long-term and ongoing. Funding for housing for farmers and farm workers was reported as a key need.

Solutions offered included the following:

- Proactively contact farmers, particularly new, BIPOC, immigrant, and Indigenous farmers, to find out their needs and offer information and support to meet those needs.
- Provide guidance and support around the application process.
- Provide funding for farmers who want to revitalize marginal soils and land.
- Allocate funding specifically for housing for farmers and farm workers.
- Provide funding for equipment upgrades and technology training.
- Provide funding for farmer succession planning support.
- Ensure that application and funding cycles fit within the agricultural cycle so funds will arrive when needed.
- Find ways to provide longer term, ongoing funding, such as paying for ecosystem services, soil restoration, and climate change mitigation.

Public Education and Outreach

Participants noted that there is a perception that farms are not wanted by municipalities and that the public does not understand the need to provide support to farmers. There does not seem to be an understanding of the urgency of the need to protect farmland.

There are individuals and private groups who want to support farms and farmers but do not know how to do so.

Participants recommended the following:

- Outreach to the general public about the urgent need to protect farms.
- Provide education to municipalities on how to protect farmland and the tools, including funding, available to them to do so.
- Support buy-local programs to help educate consumers.
- Educate private landowners about how they can support farms.
- Reach out to land trusts to explore ways they can support farmers and provide access to land.
- Increase funding for farm and agricultural education in schools.
- Create a public outreach program intended to find prospective farmers and connect them with retiring farmers.

BIPOC and Immigrant Engagement Summaries

The Farmland Action Plan was intended to be viewed through a social equity lens. To ensure that the perspectives of historically marginalized voices are fully captured in the plan the following pages present the outcomes of several listening sessions for BIPOC and Immigrant farmers in their own words.

Farmers of Color Farmland Equity Discussions & Recommendations

Prepared by Boston Farms Community Land Trust and Southern New England Farmers of Color Coalition

The Massachusetts Farmland Action Plan Equity Talks were a series of farmer discussions held via Zoom on June 7, 12, and 14, 2022. Discussions were hosted by Boston Farms Community Land Trust and the Southern New England Farmers of Color Coalition. These 1.5-hour discussion sessions were designed to galvanize the voices of farmers of color, provide a better sense of the successes they experience in farming, name the challenges and barriers they face, and give voice to the myriad innovative opportunities they see across the industry.

Over 65 farmers from around Massachusetts were invited. Given that these discussions took place during the beginning of the farming season, attendance was roughly 10% of the total farmers contacted. Despite low attendance, the discussions were robust and informative. Participants' farming experience ranged from 10 to 40 years within the industry. Representing 5 of 14 Massachusetts counties, these produce farmers gave insight into rural, suburban, and urban farm contexts.

Our hope is that we [BIPOC farmers] are prioritized in future outreach in order to have a more accurate understanding of our unique farming challenges, including those presented by different types of farming models.

Key Recommendations

Accountability & Governance

- Establish a division within MDAR dedicated to supporting farmers of color/disadvantaged farmers and our ability to flourish.
- We need to be at the forefront of MDAR's decision-making process. Approach us in the initial stages of planning Commonwealth-wide plans.
- Close language barriers and gaps by employing language justice models.
- Prioritize individual farmer land ownership over land trusts and nonprofits.
- Create more opportunities for BIPOC farmers/leaders to have a seat at the decision-making table
 - Create community-led and collaborative RFP processes. We would like to be engaged in drafting RFPs, review, and distribution of RFPs.

Access to Capital

- We request the creation and funding of a Black & Brown Farmer Land Fund— a pool of money for black and brown farmers to acquire land.

Grants

- BIPOC farmer-specific grants ensure BIPOC farmers are not competing with other more established farmers. The grant model should be similar to the MDAR Urban Agriculture grant except allow for

land acquisition outside of the urban sphere. It would cover capital investments, operations, acquisitions, and startup costs. The fund would be allowable for farmers leasing properties.

- Prioritize supporting BIPOC farmers' eligibility and successful applications to major Commonwealth-wide grants like the Massachusetts Food Insecurity Infrastructure Grant.
- Support equitable access to Mass Wildlife Programs.
- Issue grants in laymen's terms.
- Institute RFP timelines that best fit with the farm season (late fall-winter).
- Fund BIPOC food policy councils.

Land Access

- Retiring farmers are selling farms at prices that are cost-prohibitive for most farmers to access. MDAR to provide partial funding for the full transference of farms to qualified BIPOC farmers.
- The quantity and size of the land base are limited.
- The things that are prohibiting the ability to use the land is primarily land ownership.
 - Couple the funding with capacity-building resources (advisors who help farmers navigate the farming systems AND farming successes).
- As state government land becomes available, priority should be given to black and brown farmers.
- Equal access to state and public-owned land. But recognize that equal access does not do enough to close the gaps. The State's data estimates that Black people are 10% of the population. So the first 10% of available land should go directly to Black farmers.
- Incentivizing farmers/landowners that are making equitable decisions.
- Funding program models that create self-sufficiency in the food system.

Business & Technical Support

- More opportunities for BIPOC-led farmer training programs.
- Crop Insurance assistance for small farmers as crops are not being covered by insurance because of production minimums.

Other Programs

- Healthy Initiatives Program (HIP)/SNAP:
 - Vendor authorization priority given to Black and Brown farmers; earmark 60% authorization for BIPOC farmers.
 - Restrict access and priority enrollment to HIP to Massachusetts farmers.
- Support the infrastructure necessary to create more farm to family programs.
- Make farming festivals, fairs, programs, and conferences more inviting to all farmers.

Indigenous and Tribal Discussions & Recommendations

Compiled by Kristen Wyman

Summary

In early 2022, I was approached by Nipmuc tribal leadership to serve as a subject matter expert (SME) on the MA Farmland Action Planning Advisory Group to the Commonwealth of Massachusetts. This process was facilitated by the Donahue Institute of the University of Massachusetts at Amherst (UMASS) and the Massachusetts Department of Agricultural Resources (MDAR). My specific role as an SME was to:

- Recommend focused topics/groups for focus groups;
- Suggest invitees to listening sessions, focus groups and planning summit;
- Participate in planning summit;
- Review summaries, data analysis and maps;
- Suggest metrics for consideration; and
- Review implementation plan.

My main objectives as an SME in this process was to contribute to policy that supports the revitalization of Nipmuc foodways; to build relationships with potential partners including practitioners, local land trusts, local nonprofits and agencies like the Department of Agricultural Resources (MDAR) for technical support, resourcing and funding opportunities; and to contribute towards development of a farmland action plan that prioritizes life and food as a human right over land and food as a commodity or private and siloed enterprise.

Information-Gathering Process/Methods

The objective was to reach an intertribal group of practitioners from diverse regions and tribal communities throughout the state of Massachusetts; and to be as flexible and accommodating as possible in the ways feedback and information is shared with the Commonwealth.

Outreach

In March 2022, an introductory email was sent to approximately 40 intertribal agricultural practitioners, BIPOC food producers and landowners, intertribal leadership, and natural resource managers residing in Massachusetts. A two-page overview of proposed scope was developed by the Donahue Institute and also attached to the introductory email.

Of those 40 individuals who received emails, only several responded. One expressed interest to talk more but never responded to follow up invitations. The remaining individuals were contacted through in-person interviews, phone calls, and/or surveys. These participants represented a diversity of BIPOC lived-experience, geographies throughout the state of Massachusetts, and a range of practitioner expertise.

Interviews

In-person/Field Visits:

Nipmuc Land Project at the Farm School, Athol, MA

In June 2022, while working in the field during the growing season, several Nipmuc tribal members, BIPOC farm school staff, and tribal leaders of the Nipmuc Land Project at the Farm School in Athol, MA participated in a shared dialogue and discussion about the MA Farmland Action survey questions.

- *Deer Run Farm, Millis, MA*
Farm volunteers and members of the Mashpee Wampanoag, Nipmuc and Massachusetts tribal communities were engaged in the field informally throughout the growing season. Discussions, which covered the MA Farmland Action survey questions, provided further insight on the specific needs of tribal practitioners in the process of reclaiming agricultural traditions, as well as the needs of new and aspiring farmers.
- *Phone calls*
Two participants responded to the survey questions via phone call.
- *Messenger -*
One participant responded to the survey questions via text message.

Surveys

A total of 5 surveys were completed using the link.

Key Learnings/Insights

Precolonial foodways and the historical context of agrarianism in the Commonwealth is important for understanding the ways people have stewarded and sustainably sourced from this landscape for thousands of years; how we arrived to this current moment of farmland loss; and where we need to go to reach shared goals of vibrant food economies, sustainable community owned foodways, and healthy ecosystems.

Often hidden in the narrative of food and farming in the Commonwealth is the practice of Native land tenure and longstanding community values of kinship, collectivity, and shared agreements around sustainable land use. The regional sourcing and sharing of local foods with values of environmental sustainability, economic development, and community wellness is deeply rooted in tribal lifeways and well-documented in oral histories, settler accounts, archaeological finds, and public records of the Commonwealth. In John Smith's *A Description of New England (1616)*, first-hand accounts from explorers describe the abundance of fish, fields of corn, productivity of soils, and presence of flora and fauna.

And surely by reason of those sandy cliffes and cliffes of rocks, both which we saw so planted with Gardens and Corne fields, and so well inhabited with a goodly, strong and well proportioned people, besides the greatnesse of the Timber growing on them, the greatnesse of the fish and the moderate temper of the ayre (for of twentie fiue, not any was sicke, but two that were many yeares diseased before they went, notwithstanding our bad lodging and accidentall diet) who can but approue this a most excellent place, both for health & fertility?

English settlement disrupted Indian land tenure and practices of sustainability, eventually creating policies that restricted Indian land tenure, foodways and contributions to the local economy. It is quite evident that these policies, coupled with a booming settler population, also mirror environmental collapse and decline in the Commonwealth. For instance, traditional hunting practices (a key element of indigenous food economy at the time) declined as Indigenous populations were increasingly bounded by colonial private property expansion. Despite some contradiction to Indigenous cosmovision, Indigenous adoption of animal husbandry became a tool to supplement dwindling hunting productivity while at the same time provided some protection to collective territory.

*Colonists limited the Indians' animal husbandry despite professing a missionary zeal to encourage Indian civility. In 1656 and 1666, Massachusetts banned the sale of horses to Indians, correctly anticipating that natives would use them in wartime. Six years later, the colony passed a flurry of restrictions on Indians' selling livestock and meat at the Boston market, purportedly to discourage the theft of colonist-owned animals. Such measures, coupled with English encroachment on praying town pasture, confirmed the natives' suspicion that colonists were cool to the prospect of having civilized Indian neighbors, whether out of fear of economic competition or xenophobia. Then King Philip's War transformed the colonists' antipathy into outright hatred. Massachusetts interned the praying Indians on frigid Deer Island for the duration of the conflict, by which, Gookin wrote, they 'were reduced to great sufferings being hindered from their hunting and looking after their cattle, swine, and getting in their corn, or laboring among the English to get clothes, and many other ways incommoded.'*⁷

The disruption of colonial (private) farming and bounding of the land, coupled with industrialism and the damming of indigenous riverways to accommodate the booming settler population with grain and textile mills effectively blocked anadromous fish populations and ultimately contributed to the starvation of Indian people and forced displacement through the collapse of Indigenous foodways/food economies (Marchand, 2013).

Throughout history, and all over the globe, Indigenous peoples, lifeways and cultural practices have proven to be agents of environmental conservation and stewardship. Indigenous land tenure and traditional agricultural practices must be considered an ecosystem service, sound soil and water management, and a contribution to economies and food security in the Commonwealth. These lifeways are not only aboriginal rights acknowledged by the Commonwealth through a direct government to government relationship, they are critical to the wellbeing of people and the planet. Any policies of the Commonwealth that obstruct Indigenous cultivation practices and perpetuate barriers to the protection of Indigenous foodways will only contradict efforts of this action plan.

Indigenous and other BIPOC and marginalized farmers and practitioners need to know there is a livelihood in small scale farming. Barriers to entry, land ownership and market opportunities need to be addressed through policies, statewide initiatives, nonprofit cooperation and private sector partnerships.

Throughout this engagement process, I have found a general lack of familiarity among the Native community with state policies and programs in place to encourage agriculture and farmland protection.

⁷ Silverman, D. J. (2003). "We Chuse to Be Bounded": Native American Animal Husbandry in Colonial New England. *The William and Mary Quarterly*, 60(3), 511–548. <https://doi.org/10.2307/3491550>

I have also found a general lack of understanding of tribal sovereignty and indigenous rights among state agencies and institutions participating in this process.

Key Recommendations

- Eliminate restrictive and outdated colonial language in policies like APR that limit necessary agrarian transition to ways of being with the land that are more beneficial to its natural systems, sustainability and community health.
- Enact a call for a state-wide moratorium restricting commercial and exploitive development on working farms
- Make it very simple and streamline the process by which local farms supply schools, colleges, universities, community centers, churches, nonprofits, and hospitals with fresh local food. Have a subsidized food system based on food produced here in Massachusetts.
- Secure policies that provide for Indigenous tribal nations (state and federal tribes in Mass) first right of refusal for any farmland or public lands up for sale or lease (for nations to either purchase or be provided some sort of subsidy to transition lands back into indigenous hands)
- Establish ways to move away from subsidies for large farm monocropping to subsidize expansive land costs for marginalized, disenfranchised and poor communities and pathways to create long term care and tenure for folks doing the proper caretaking of land and food systems.
- Provide subsidies for new farmers acquiring land, farm cooperatives to compete with bigger farms.
- State and local sponsored farm assistance programs should have cut outs or reserves in place to buy up local produce food and any other necessities from the land to ensure there is always a market for local farm produce to be distributed to people that need it - state money supporting a system like that.

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World Farmers Focus Groups and Discussions

Compiled by World Farmers

World Farmers Mission and Work

World Farmers was asked in mid-April to host discussions with immigrant and refugee farmers to gather input for the MA Farmland Action Plan. World Farmers advocates for and supports small-scale immigrant, refugee, and historically underserved farmers from farm to market. Started in 1984, World Farmers' Flats Mentor Farm Program provides access to land, farming infrastructure, and the technical assistance in agricultural production and marketing necessary for small-scale diversified farmers to grow and market their produce. World Farmers currently supports more than 350 immigrant and refugee farmers and prioritizes programming that supports farm business creation and development. In a Tufts article from 2021, Flats Mentor Farm Program is identified as a possible reason the number of farm operators of color increased in Worcester County, as shown in the 2017 Census of Agriculture.

Methodology

World Farmers hosted three focus group discussions to gather input and suggestions from immigrant and refugee farmers for this report. World Farmers' Executive Director, Henrietta Isaboke, facilitated all three discussions. Sonia Bouvier, Project Manager with UMass Donahue Institute responded to questions about the MA Farmland Action planning process and took notes on the discussions. Notes were reviewed, and challenges and recommendations were grouped by themes.

- May 5, 2022: Co-hosted by World Farmers and Multicultural BRIDGE (Berkshire Resources for Integration of Diverse Groups and Education), held in-person in Great Barrington, MA. The discussion was held outside prior to the premier showing of the film *Mosaic*, an event hosted by BRIDGE. There were approximately 15 participants, six of whom were farmers of color. The remaining participants were not farmers and were interested in the discussion. Interpretation was provided by a family member.
- May 25, 2022: Hosted by World Farmers via Zoom. There were 11 immigrant farmer participants, and 3 staff. The farming population engaged through outreach included those who own and operate independent vegetable farm business operations. Every participating farmer operate their own business, some on program land accessed through World Farmers and some on independently leased lands. No interpretation services were required.
- May 26, 2022: Hosted by World Farmers via Zoom. There were 16 immigrant farmer participants, and 3 staff. The farming population engaged through outreach included those who farm for family consumption/subsistence farming, as well as those who engage in minor community sales. The majority of participating farmers were subsistence farmers, while some were farmers in the process of developing their own farming businesses. All of the participating farmers operate their farms on program land accessed through World Farmers. Interpretation was provided by World Farmers staff, after need was identified.

Summary of Findings

The farmers who participated in these discussions shared the benefits they had experienced in having access to farmland; for most, that access was facilitated through support provided by nonprofits. Participants also shared the challenges they experience as farmers, as well as the additional challenges they experience as immigrant farmers. The farmers offered several recommendations to support increased access to farmland and their farm businesses. These benefits, challenges, and recommendations are summarized below.

Benefits of Access to Farmland

Many participants had been farming with World Farmers for several years, some noting they had been with World Farmers for nine to ten years. Some said they travel long distances to access their land through the Flats Mentor Farm program. All said they would not be able to access farmland without World Farmers. Participants noted several benefits of this access:

- The land is shared by hundreds of farmers and supports multiple businesses, allowing for natural mentorship between farmers at different stages of farmer development.
- Several farmers said they grow traditional foods they would not have access to otherwise.
- Farmers said they are growing food for themselves, their neighbors, and other immigrant consumers seeking these foods. The farmers stated that they would otherwise need to purchase food if they did not have access to their land at Flats Mentor Farm, and further that most crops they grow cannot be found in supermarkets at all in this region.

We have the privilege of having a place where we can plant corn and beans. Most of this is our traditional food. If we have somewhere we can plant corn and beans and share our meals with our neighbors, you count it as a blessing.

– Participant in World Farmers’ Focus Group, May 26, 2022

Challenges

Beyond the challenges and needs indicated in the MA Farmland Action Plan listening sessions, farmers reported experiencing additional challenges:

- By and large, English is not their first language. For many, this is a significant barrier in its own right, although the challenges they experience extend beyond English proficiency.
- Participants shared experiences of struggle based on differing cultural standards, or lack of knowledge of commonly known societal norms.
- Several shared stories of having difficulty in completing applications to lease land through the state, engage in conversations with landowners, or access resources through USDA or grant programs.
- They also noted they do not have the same support network or base knowledge or understanding of agricultural systems that many farmers have developed over many generations and have learned from their family’s farming operation.

All of us are from other places. We don’t have information. It is easier for farmers who have lived here all their lives. As a foreigner that’s why we ask for the information so we can access, know, and educate ourselves (for our fulfillment).

I didn’t know you could be a small-scale farmer in this country.

– Participants in World Farmers’ Focus Group, May 26, 2022

Challenges: Access to Farmland

Participants described many challenges and barriers to accessing farmland. For most, World Farmers was the only program they were aware of which provided access to farmland. Many shared personal stories of having felt marginalized or unsafe on land they leased or having experienced racism in their efforts to access land on their own. Other challenging experiences were related to a general lack of familiarity of standard systems in this country. World Farmers staff shared an experience of a landowner

conjuring an excuse not to move forward with lease discussions after the landowner found out who would be farming their land. Farmers and Staff were adamant in stating that we cannot turn a blind eye to these experiences because farmers are living these harrowing events every day. Some of the other challenges identified on the call:

- High cost of land as a significant barrier to owning a farm or expanding a farm business.
- Lack of information or knowledge of how to find available land.
- Stipulations to lease agreements that make it difficult or impossible to farm, such as prohibiting equipment from being on the land for more than 24 hours or requiring irrigation lines be dismantled between each use.
- Potential landowners requested the land to stay “pretty” or remain as close to the condition it was given so members of the public could enjoy the idyllic scenery. Examples included restricting the presence of equipment or complaints of appearance of land at different stages.
- Unequal footing in the bidding process for State lands. A story was shared of an immigrant farmer applying each cycle over 35 years, and each time failing to attain the lease.
- Landowner reticence to establish a long-term lease with immigrant or refugee farmers due to familial or personal reservations. Stories included landowners requesting to take the land back to farm for themselves after five years of investments from farmers.
- Lack of information or knowledge of the APR program when purchasing land, including land restrictions and reasonable sale price.
- Lack of smaller tracts of tillable acres for small-scale vegetable farming operations for lease or for sale. Stories were shared of struggles with lease negotiations and discussions when the landowner did not have experience or knowledge of farm operations, it takes substantial time to educate them.
- Lack of education and technical assistance in land searches and lease negotiations by all parties.

There is a long history of folks from our program who have moved to other states to access farmland because it is more affordable. We are constantly striving to figure out how we can attain more land.

– World Farmers Staff Member

You need to have a lot of knowledge to get land from the state. You need to have the right proposal. Those who already know the systems (benefit). For some of us it is hard to get it because we don't know the system.

– Participant in World Farmers’ Focus Group, May 25, 2022

The problem I feel as an immigrant is that we experience stereotyping. In a white community, we are labeled. There is concern that the crime rate will be higher. So it is a challenge. How can we have access to more land in those areas?

– Participant in World Farmers’ Focus Group, May 26, 2022

Challenges: Accessing Viable Farmland and Developing Farm Businesses

Participants cited several challenges they had experienced in building and having a farm business. Stories of prejudice due to their background including difficulty with minor things such as getting a business certificate were shared. Multiple farmers have experienced a difficult time in city and town offices due to staff’s assumptions that the farmer did not have the right information. Only after the staff

spoke with World Farmers did they meet the farmers' request, even though the information shared was exactly the same as what the farmer was communicating. Some of the other challenges identified include:

- Limited knowledge of how to access direct-to-consumer markets outside of immigrant farmers' own communities, such as farmers' markets. After farmers are enrolled in markets, some are scrutinized for any shortcomings, or assumed not to possess the knowledge about their operations.
- Limited access to wholesale market spaces due to size of operation.
- Difficulty in registering their farm business at town and city halls, securing insurance for small operations, and identifying accountants familiar with tax needs of farming operations.
- Shorter-term leases made it difficult for farmers to feel secure investing in on-site improvements, hindering the potential growth of the operation.
- Land often lacks access to water or irrigation infrastructure; installing infrastructure on land which is not secure is a risk.
- Start-up costs for a new farm business, including cold storage, production equipment like tractors, attachments, and implements, and a suitable vehicle to transport crops to market.
- Lack of education and technical assistance in business knowledge and market readiness.
- Affordable housing close to or on farm.

Recommendations

Immigrant and refugee farmers who participated in these discussions joined farmers across the state in asking for more proactive outreach, training, mentorship, and support in accessing land and in developing and maintaining healthy farm businesses. However, participants requested that any entity which attempts to develop these services refrain from offering "help," which often comes with stipulations and limitations and often undervalues the capacity of the recipients. Participants said they want knowledge, education, and programs that support farmers in developing their capacity and skills to own farmland, and to develop and expand their farm businesses.

Outreach, Education, Capacity Building and Support

Participants and World Farmers staff noted the need for support in understanding the range of available state resources and tools. Outreach was noted as critical at all three discussions, as many farmers do not know about support programs that exist, and if they do, "Not everyone is bold enough to ask." Participants noted the need for technical assistance, capacity building, and individual navigator support or mentoring. They recommended the following:

- Expand outreach to immigrant and refugee farmers and farmers of color to increase knowledge, access, and use of available resources and tools, as well as state programs and assistance.
- Increase information and make templates accessible on farmland leases, guides and workshops on how to find farmland, and information and workshops on how to engage in lease and land purchase negotiations.
- Provide opportunities - financial or programmatic - for experienced farmers of color to lead in outreach and technical assistance to new and beginning farmers of color.
- Facilitate funding opportunities for technical assistance led by organizations who have long-standing relationships with the target audience and community.
- Establish a certification process where MDAR can pre-approve service provider organizations to provide technical assistance and services to farmers from diverse backgrounds, funded and formalized through cooperative agreements with the State.

- Encourage and administer infrastructure grant programs for small-scale, diverse, and diversified farmers. Examples include EEA’s Food Security Infrastructure Grant program, offering infrastructure grants to farmers who prioritize reducing food insecurity in their businesses.

People don’t know where to go sometimes. How can we make sure the resources are known and available?

– Participant in World Farmers’ Focus Group, May 25, 2022

Networking and Mentorship

- Encourage and support agricultural opportunities for immigrants and refugees, from urban farming and gardening to rural farm development.
- Provide opportunities - financial or programmatic - for experienced farmers of color to lead in outreach and technical assistance to new and beginning farmers of color.
- Encourage and support networking and mentorship spaces between beginning and legacy farmers and among farmers at similar stages of development.
- Develop support networks and resources for farmers who experience neighborhood disputes.
- Develop support networks for farmers who are seeking knowledge and training on available farming equipment to scale up.
- Develop a resource list of vendors to purchase agricultural equipment and supplies.
- Develop a statewide list or portal of food and farm-based technical assistance and service providers who are available to receive cold calls and questions from farmers for assistance. Along with providing information of areas of support that can be provided to farmers, clarify what the provider specializes in and any associated fee for service. Additionally the portal can include upcoming farmer trainings, courses, and gatherings for broader networking among farmers.

Strategies to Increase Access to Farmland

- Build skills and experience of land-seeking farmers.
- Develop or expand programs to support land transfer between farmers, including facilitating or mediating conversations and agreements during farmland transfer.
- Develop or expand programs that conduct outreach and education to landowners, land trusts and retiring farmers, encouraging them to make land available to farmers and build understanding of different farming operations. Encourage landowners to be realistic and accommodating with land and resource needs of different farms.
- Develop or have on hand model lease agreements and list of recommended allowances that accommodate common farm needs, including recommended term.
- Require every entity managing publicly-owned land in the state to report on usage of arable land under their management. Report should include assessment of agricultural feasibility and/or recommendations to increase usage by agricultural businesses. Entity may request support in implementing agricultural assessment.
- Create a streamlined Land Access Portal administered by the State to ensure transparency of information regarding the State’s agricultural land leases. Included in the portal will be length of lease, renewal year, current leaseholder, history of the lease holders and operations on the land, and range of past rental prices. The portal should also provide access to the bid or application process including submission and deadline.

- Examine bid and application process for attaining lease of state-owned lands. Prioritize applications or bids that have a strong land management plan, including diversified or organic farming, crop rotation, and other key conservation and sustainable farming practices. De-prioritize system of highest bid, which caters to larger farm operations and will soon be too high for even highly mechanized farming operations. Given this may cause an impact on the administering department's finances, a budget can be set-aside to assist departments.
- Explore opportunities for state-supported liability insurance for land-users to address landowners concerns for liability.
- Explore opportunities for new models to support shared access to land and shared uses of land.
- Ensure programs and future efforts accommodate and at times prioritize small-scale farm operations and availability of smaller land parcels.
- Identify solutions to support farmland retention for farm operations of all sizes, scale, and type. Recognize and support farms of all scales.

As immigrants, to get things like land we need someone to help us know how to go about it.

– Participant in World Farmers' Focus Group, May 25, 2022

Strategies to Support Increased Equity

- Provide State incentives to support farmers of color and immigrant farmers in land ownership.
- State to provide support – technical and financial – for farmers of color and immigrant farmers to access or purchase available farmland.
- Acknowledge the role of racism in agriculture in Massachusetts and create space for farmers who experience racism to receive support. Massachusetts agriculture is a very white space; identify who farmers can turn to when they are experiencing these prejudices or issues.
- Equity for all farmers, no matter scale of farm. All farmers need to be recognized and treated as *farmers*, being the same privileges as every large-scale farmer receives. In this way, each farmer can empower themselves.

Recently we were supposed to sign a lease. Later on he said, "I don't want to do the lease anymore." Where can I get help in case I face racism in the process of this?

Participant in World Farmers' Focus Group, May 26, 2022

Representation in Future Planning Efforts

Participants emphasized that farmers of color and immigrant farmers should be included in mainstream dialogue and planning and corresponding decision-making regarding the future of Massachusetts agriculture. Recommendations included:

- Ensure the presence and involvement of farmers and communities of color at the beginning of the planning, development and design stage of any future efforts led and/or funded by the State or government.
- Shift approaches of outreach and engagement to ensure true involvement.

- Require representation from farmers of color, immigrant farmers, and the organizations that support them in current and future committees, commissions, collaborations, and advisory boards pertaining to agricultural initiatives and programs at the state, regional and local levels.
- Develop programs or initiatives which will support and create spaces for leadership development of food and farm-based community leaders of color and farmers of color in Massachusetts.
- Be diligent in identifying subject matter experts for state- and government-funded projects and activities, and find opportunities to prioritize lived experience. People who have been doing the work for decades have ideas on how to handle problems on the ground because they have lived through them and hold creative solutions to these problems.
- Examine who is leading and contributing to statewide or regional research projects or reports. Encourage diversity of thought; when the players are the same, the solutions will be the same.

We need representation in the offices and someone to be guiding minority and small-scale farmers so they can be pointed in the right direction to know who to talk to, which offices to go to when they are in the process of trying to get more land for themselves.

Participant in World Farmers' Focus Group, May 26, 2022

Massachusetts Farmland Action Plan Survey 2022

The Massachusetts Farmland Action Plan survey opened on March 11 and closed on April 4. A link to the survey was distributed through MDAR's, MFSC's, and the Massachusetts Farm Bureau's email distribution lists. Recipients of the survey link were encouraged to share it with others whom they felt might be interested. A total of 430 individuals responded to the survey, including 215 respondents who indicated they are currently farming.

The purpose of the survey was to gather input and suggestions from a wide variety of farmers and stakeholders to inform the development of the Massachusetts Farmland Action Plan. The survey asked respondents to share ideas and recommendations around the topics of farmland protection, farmland access, and farm and farmland viability.

The survey consisted of two parts. Part I included questions for current farmers, and Part II posed questions for all respondents, including farmers. The results presented in this section are organized as follows:

- **Part I: Farmer responses** to questions about the land they farm and their previous participation in farmland protection and support programs.
- **Part II: All respondents' suggestions and recommendations for farmland** protection, farmland access, and farm and farmland viability.

The survey opened with the question, "What is your role in farming?" Respondents were asked to select all item responses that applied.

Table 1 summarizes survey respondents' role in farming. The majority of respondents are farmers (n = 215, or 54.8%). Respondents were asked to select all applicable roles, with an option to specify a role under "other." Respondents who listed a role under other (n = 54, or 13.8%) include those involved in food-related nonprofits, beekeepers, home gardeners, and land planners. Some respondents (n = 17, or 4.3%) who selected the other option indicated they have at least some experience with farming such as retired farmers or farm hands.

Table 1: Role in Farming		
"What is your role in farming? Select all that apply."	Respondents (N = 392)	
	#	%
Farmers	215	54.8%
Aspiring farmers	48	12.2%
Local food supporter	78	19.9%
Work for a support organization	66	16.8%
Work for municipal, state, or other government	44	11.2%
Other*	54	13.8%

Note. Number of unduplicated responses = 392. Percentage totals add up to more than 100% because respondents could select multiple options. Data source: 2022 MA Farmland Action Plan Survey.

** "Other" responses included former or retired farmer, landowner, farmworker, or farm supporter.*

Survey respondents came from across the Commonwealth. Respondents were asked to indicate the city or town in Massachusetts where they live or farm. If an individual indicated they live in one city/town and farm in another, the city/town where they farm is listed.

Part I: Farmer Responses

The 215 respondents who indicated they are farmers were presented with a series of questions about the land they farm and the type of farming they conduct.

Table 2 shows farmer respondents by whether they rent, own, or lease farmland. Most respondents (n = 150, or 75.4%) own some of the land they farm. Some of the “other” responses included farm employees, those farming family land, and those farming college-owned farmland.

Table 2: Farmland Status		
“Do you own, rent, or lease farmland? Select all that apply.”	Respondents (N = 199)	
	#	%
Own	150	75.4%
Rent	51	25.6%
Lease	59	29.7%
Other	22	11.1%

Note. Number of Unduplicated Responses = 199. Percentage totals add up to more than 100% because respondents could select multiple options. Data source: 2022 MA Farmland Action Plan Survey.

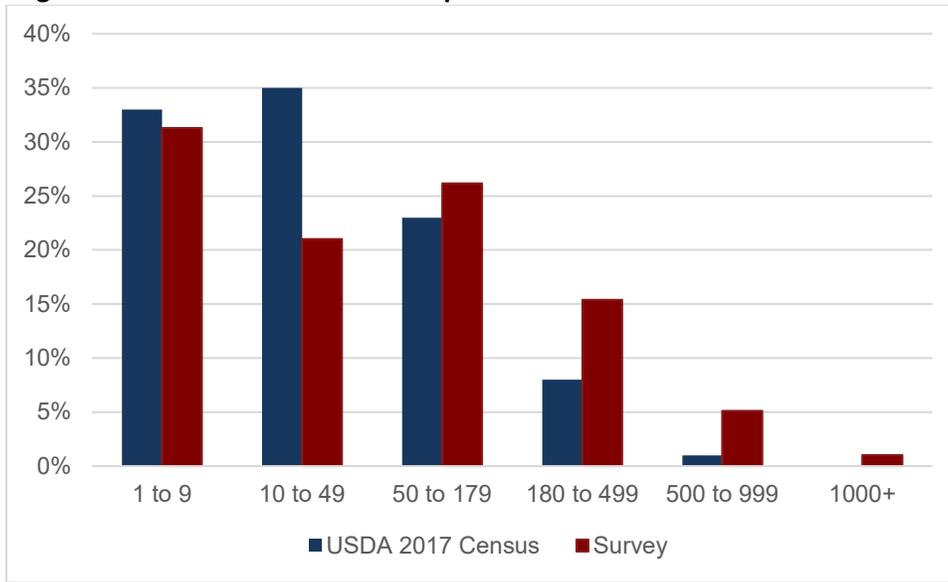
Table 3 shows farmer respondents by the number of acres they reported farming. The number of reported acres farmed ranged from less than an acre to 1,500 acres. Almost one third of respondents (n = 61, or 31.3%) reported farming smaller farms between one and nine acres. Over one quarter (n = 51, or 26.2%) reported farming 50 to 179 acres.

Table 3: Acres Farmed		
“How many acres do you farm?”	Respondents (N = 195)	
	#	%
.25 to 9	61	31.3%
10 to 49	41	21.0%
50 to 179	51	26.2%
180 to 499	30	15.4%
500 to 999	10	5.1%
1000+	2	1.0%
Total Number of Unduplicated Responses	195	100.0%

Note. Data source: 2022 MA Farmland Action Plan Survey.

Figure 1 illustrates the percentage of farmers in each acreage category compared with the results of the Massachusetts 2017 USDA Census of Agriculture. Survey respondents were relatively representative of Massachusetts farmers. Farmers who operate 10 to 49 acres were somewhat underrepresented, while farmers who operate larger farms were somewhat overrepresented.

Figure 1: Acres Farmed: Farmer Respondents vs. USDA 2017 Census



Source: MA Farmland Action Plan Survey, 2022, and USDA Census of Agriculture, 2017

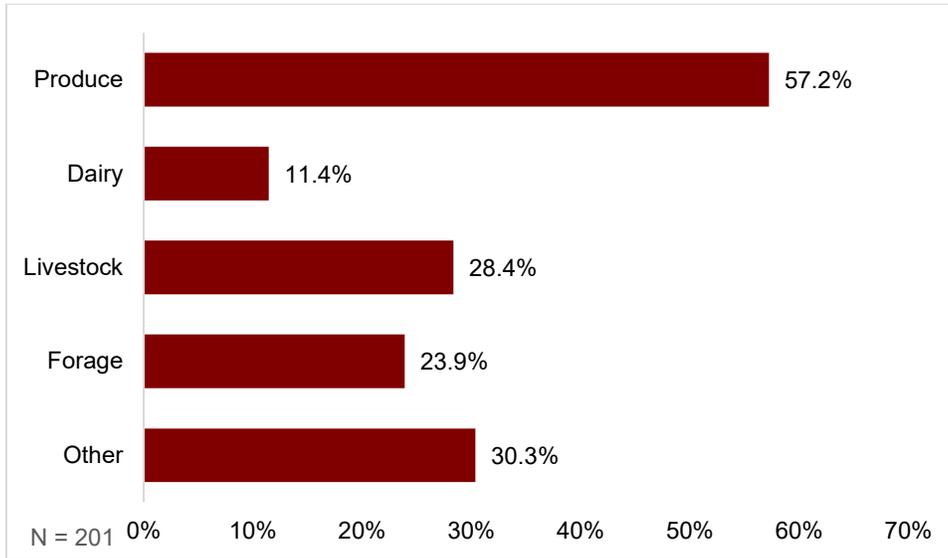
Table 4 and Figure 2 below show farmer respondents’ descriptions of their farm. The greatest number of responses (n = 115, or 57%) came from produce farmers. Respondents were asked to select all applicable responses, including “other,” which gave them an opportunity to provide more detail.

Table 4: Farmer Respondents: Types of Farms		
“Which best describes your farm? Select all that apply.”	Respondents (N = 201)	
	#	%
Produce	115	57.2%
Dairy	23	11.4%
Livestock	57	28.4%
Forage	48	23.9%
Other*	61	30.3%

Note. Total number of unduplicated responses = 201. Percentage totals add up to more than 100% because respondents could select multiple options. Data source: 2022 MA Farmland Action Plan Survey.

*Other responses included those who described their farms as fruit, cranberry, flower, or timber farms.

Figure 2: Farmer Respondents: Types of Farms



Farmer Participation in Farmland Protection, Access, or Support Programs

Table 5 shows the percentage of farmer respondents who reported participating in any of the Massachusetts farmland protection, access, or other programs listed. Over half (n = 120, or 55.8%) of farmer respondents reported that they had participated in one or more farmland protection, access, or support programs. Almost one half of farmer respondents (n = 105, or 48.4%) participated in the Chapter 61A Program. Of those farmers who reported participating in a support program, most (n = 105, or 87.5%) were involved in the 61A Program, and a majority (n = 59, or 49.2%) participated in the APR Program.

Table 5: Farmer Participation in Farmland Protection, Access, and Support Programs			
“If you have participated in any state farmland protection or access programs, please select the ones you have participated in. Select all that apply.”	Number (n = 215)	All Farmer Respondents (n = 215)	Farmer Participants in Programs (n = 120)
APR	59	27.4%	49.2%
Chapter 61A	105	48.4%	87.5%
Farm Viability Enhancement Program	35	16.3%	29.2%
Urban Agriculture Program	4	1.9%	3.3%
Other*	9	4.2%	7.5%
Did not participate in a program	95	44.2%	N/A
Number of Unduplicated Responses	215	215	120

Note. Total number of unduplicated responses = 215. Percentage totals add up to more than 100% because respondents could select multiple options. Data source: 2022 MA Farmland Action Plan Survey.

Farmers who reported participating in a farmland protection, access, or support program were asked what did and did not work well in their experience, and what recommendations they would make to improve the programs.

Comments that were reviewed for the following program summaries were only used if they referred to that program directly or if the respondent indicated participation in only that one program. The remaining responses were reviewed as a whole and are summarized in the “Issues across Programs” section.

Farmer Participants: Themes Across Programs

Several themes emerged from the review of farmers’ responses to the three follow-up questions.

Program Communication, Education, and Application Support

One of the most frequent issues mentioned by respondents centered on communication and education. Respondents stated that they did not feel there was enough communication to inform farmers about available programs. They also maintained that farmers need more support in navigating what can be a time-consuming and complicated process.

“When I started the journey to protect my farm, there was no roadmap anyone could provide.”

– Survey respondent

Suggestions for remedying this issue included proactively reaching out to farmers to let them know what programs are available and providing dedicated, ongoing support to farmers as they move through the application process. This support should also be available to farmers in programs that require recertification.

Education was not limited solely to farmers. Respondents felt that realtors and municipalities did not have a full understanding of how the various programs worked. As one respondent commented,

We need to include farm manager housing in our conservation restrictions. We don’t know if we will be able to continue farming because market rent is so high and farmer salaries are low. We are currently unable to purchase a house near our farm as it is in a very affluent area.

Housing

For many and particularly small farmers, farming is an industry in which the business owner lives where they work. Farm housing needs the same protections and supports that land conservation has. Several farmers mentioned that while agricultural conservation programs protect the land, housing is not receiving the same support.

Suggestions for remedies include expanding current programs or creating new programs to cover housing for farmers and workers. Several also mentioned that if a protected property receives a property tax break, housing should be included in the tax reduction.

Program Flexibility

Across programs, respondents stated that existing programs were too limited. The three most noted limitations were related to funding, frequency of funding, and who could apply.

Respondents stated that programs for protecting agricultural land should be able to adapt more quickly to increases in the cost of land. They recommended support for alternative buying programs such as cooperative purchases and rent-to-own options for farmers on leased land. Farmers asked for ongoing

support but noted that programs limited to one or two distributions do not provide that support. Respondents said programs should be expanded to provide more funding and support for smaller farms.

Land Purchase Support for New Farmers

Respondents stated that current programs work well to preserve existing farms but that more support is needed for those seeking to purchase land to start a new farm. Suggestions included creating programs to help farmers with down payments to buy land, financial support to build housing, and tax breaks.

“APR was not willing to pay enough, causing prime farmland that we previously rented to be sold for ugly suburban housing construction.”

– Survey respondent

Farmer Participants: Themes by Program

This section summarizes farmers’ feedback by program:

- Agricultural Preservation Restriction (APR) Program
- 61A
- Farm Viability Enhancement Program
- Urban Agriculture Program
- Other Programs

Agricultural Preservation Restriction (APR) Program

Forty-three (n = 43) of the 59 farmers who reported participating in the APR programs provided the following feedback and suggestions.

What worked well?

Farmers appreciate that the APR Program keeps land affordable for new farmers and protects existing farmland. Most of those who commented noted that APR helped provide long-term protection to farmland, with seven of the 43 respondents who answered this question stating that they would not have been able to afford to purchase farmland without the program.

What did not work well?

Several of the issues raised relate to the process itself. The time it took to complete the application process was a common issue, with many stating that it felt that it took a long time for their application to be reviewed and processed. Several respondents commented about the process being complicated and burdensome for farmers.

Some respondents mentioned issues that arise with deed restrictions. Farmers expressed concern that those who want to diversify their business may be prohibited from doing so. They also had the perception that farmers have less of a voice in determining to whom the land is passed.

Regarding funding, farmer respondents asserted that if the APR Program is not able to provide enough funds, development may be the only financially viable option for many farmers.

What changes would you recommend?

Twenty-six percent of APR respondents (n = 15) recommended that the application process be more streamlined to reduce the amount of time it takes to process the applications. Respondents also expressed the need to speed up the process for emergency applications.

Increasing funding was the second most recommended improvement, with 18% of those who responded to the question stating that the program needed more funding. Respondents called for more funding overall, to increase the number of farms protected and the amounts paid for land, particularly in regions with rising land prices, and to support land purchase for small farms. They also called for funding to hire more people to assist farmers and process applications.

Additionally, respondents recommending improving outreach and communication, proactively contacting farmers on unprotected land, assisting farmers with the application process, and educating realtors about the “ins and outs” of the APR Program.

61A Program

One hundred and five farmer respondents reported that they had participated in the 61A Program.

What worked well?

As with the APR Program, respondents expressed appreciation for the support provided, with several stating that the resulting decrease in property taxes helped keep their farm viable. Farmers stated that they liked that the program helps protect leased land as well as land that farmers own outright.

What did not work well?

The most frequently mentioned issue with the 61A Program was the minimum farm size of five acres—which excludes small farms that may be in more densely populated areas where land is more costly. Farmers who had participated in the 61A Program also shared the following perceptions and concerns:

- Several respondents reported that the tax break only applies to land, not farm structures and buildings such as farm housing. This is seen as an obstacle to securing affordable housing for farmers and their workers.
- Municipalities do not seem to have a clear understanding of the 61A Program. There is a lack of clarity about determining valuation.
- The renewal process is seen as overly burdensome and too frequent.

What changes would you recommend?

Many respondents suggested allowing 61A tax breaks to be applied to housing for farmers and farm workers, as well as for other farm structures. Farmers also made the following suggestions:

- Decrease the minimum farm size to allow farms smaller than five acres to participate in the program.
- Educate municipalities on how the program works and why protecting farms is important.
- Provide assistance to farmers going through the application and renewal process. Regarding the renewal process, suggestions included extending the time between renewals or not requiring renewal at all unless the business of the farm changes substantially.

Farm Viability Enhancement Program (FVEP)

What worked well?

Of the 29 FVEP participants who answered this question, eight respondents commented that funding from the program helped their farm stay in business.

What did not work well?

Several respondents stated that the application process was difficult or burdensome.

Other noted issues pertained to funding. Several respondents said that having only two distributions was limiting. Since farms may have different needs over time, they should have access to further distributions.

FVEP participants also raised concerns about a one-year deadline for spending the distribution. Farmers noted that some projects may take longer than a year to implement and suggested giving farmers greater flexibility regarding when they spend the funds.

What changes would you recommend?

As with other programs, there was a call to increase funding for the program to help more farmers.

Respondents recommended increasing or removing the limit on the number of times a farm can participate and allowing farms to participate again after a certain amount of time has passed.

According to some farmers, grants can have unexpected tax implications with one respondent reporting that they needed to take out a loan to pay the taxes. Farmer respondents suggested educating and reminding recipients about potential tax implications.

Urban Agriculture Program

Four respondents participated in this program, and three of those answered most of the questions.

What worked well?

One respondent stated that they had great support in navigating the application process.

Another stated that they appreciated that the program helped turn vacant lots into farms.

What did not work well?

Respondents noted that the application process is difficult, and the timeline is not well-timed for farmers.

What changes would you recommend?

Respondents suggested making the application process easier, including deadlines that are more suitable for the farmer work cycle, and providing application support for farmers who are new Americans.

Other Programs

Ten respondents indicated that they had participated in some other farm support program, including:

- 61 Forestry Program (3)
- Conservation Restriction (2)
- 40a Agricultural Zoning (1)
- Dairy Farm Credit (1)
- Unclear (3)

Respondents did not comment directly on these programs. All had participated in other programs, at which their comments were generally directed.

Part II: General Questions on Protection, Access, and Viability

All survey respondents were asked to answer five open-ended questions about agricultural land protection and farm viability:

1. *What is needed to increase the pace of farmland protection in Massachusetts? What changes would you make to state and local policies or programs that protect farmland?*
2. *How can farmers at different stages (starting out, retiring, etc.) and farmers from different communities and backgrounds be supported in protecting the land they're farming?*
3. *Farmland Access: What would help new and aspiring farmers, as well as farmers from different communities and backgrounds, be able to access farmland? Consider financing actions, state and local programs, and other supports.*
4. *Farm and Farmland Viability: What state or local policies or programs could be put in place to both protect farmland and support a viable farm business?*
5. *Do you have any other recommendations regarding the topics of protection, access, and viability?*

For the purposes of summarizing the survey, responses were reviewed and organized into two respondent groups: those who self-selected as farmers and those who did not. This second group is composed primarily of former or retired farmers, aspiring farmers, farm workers, local food supporters, conservationists, those who work to support farmers and farmland protection, and other interested stakeholders.

Shared Themes Among All Respondents

While current farmer and non-farmer responses were summarized separately, there were areas of overlap among the two groups. Key emergent themes among both groups include the following:

- There is a strong sense of urgency to protect existing farmland.
- The call to increase funding for existing programs and setting aside funds for new ones was nearly universal among the two groups.
- Support is needed for farmers in more ways than just land preservation.
- Housing for farmers and farm workers is an issue that needs to be addressed.
- It is critical to find ways to connect new farmers with existing farmers and farmland.
- It is important to educate the public on the need for farms and the benefits they provide.

- Proactively reach out to farmers to assess their needs and to provide them with access to the programs that can help meet those needs.
- Build relationships with BIPOC and immigrant farmers.
- Create a database to connect farmers with land for sale with new and aspiring farmers.

Farmer Responses: Protection, Access, and Viability

Farmers: Emergent Themes Across All Questions

FUNDING AND FINANCIAL ASSISTANCE

- Increase funding to protect land through current programs. Increase the amount paid per acre to make the program competitive in the current market. Speed up the time it takes to get the funds into the hands of farmers.
- Increase funding for infrastructure and other farm improvements.
- Provide financing assistance to new farmers: Create a low- or no-interest loan program for new farmers to be able to buy land.

CONNECTING FARMERS WITH AVAILABLE LAND

- Connect farmers with land to buy and land available for long-term lease and connect retiring farmers with new farmers.
- Connect land trusts with preserved agricultural land to farmers seeking long-term leases of land.
- Open state land to be leased by new farmers.

PROACTIVE OUTREACH TO FARMERS

- Engage in proactive outreach to farmers to connect them with the resources they need.
- Conduct outreach to BIPOC and immigrant farmers. Ensure that information on state resources is provided in a variety of languages (as is other information the state distributes). Cultivate relationships with these communities and have dedicated contacts for them.
- Contact farmers with unprotected land to make them aware of the programs available to them.

HOUSING

- Treat housing for farmers and farm workers as important as the preservation of land.
- Help farms reduce labor costs by providing funds to build housing for farmworkers.
- Reduce the property tax rate on farm housing.

EDUCATION

- Create farm education programs in high schools and expand current agricultural programs at universities.
- Educate the general public on the benefits of farms and the need to protect them.

- Educate municipalities on the benefits of farmland protection and assist them in working to preserve land.
- Create mentoring and apprenticeship programs for new farmers to gain knowledge and experience.

Farmers: Increasing the Pace of Farmland Protection

Survey question:

What is needed to increase the pace of farmland protection in Massachusetts? What changes would you make to state and local policies or programs that protect farmland?

One hundred and eight farmers (N =108) responded to this question. There was an overwhelming call among respondents to increase funding to allow existing programs to keep pace with rising land costs.

Requests included creating a low- or no-interest loan program for farmers to purchase land and to increase the speed at which funding becomes available across programs.

Farmers recommended increased funding support for purchasing land for smaller farms. Purchasing large amounts of land is not possible in some areas of the state, such as more densely populated areas, or areas where land is simply more expensive.

Educate municipalities on the importance of farms and the protection of farmland. Compensate towns to make up for the loss of tax revenue that accompanies conservation restrictions.

Respondents shared their impression that municipalities are not welcoming of farms. They thought that municipalities see farms as noisy, smelly, and disruptive, or that municipalities preferred development over farms as a way to increase the property tax base. Educating municipalities and the public on the benefits of farms is needed, as is funding to compensate municipalities for the decrease in property tax if land is protected.

Educate large property owners about the benefits of leasing land to farmers and how the landowner can protect the land.

Proactively contact farmers with land that is not yet protected and make them aware of resources that are available to do so. Connect farmers with available land to farmers seeking land. There needs to be a centralized place to connect aspiring farmers with available land, and current farmers with land for expansion.

Agricultural conservation programs need to allow for housing for farmers and workers.

“I don't know where one finds this information. Perhaps there needs to be a "dating site" for those with land and aspiring farmers.”

– Survey respondent

“Farmers with different backgrounds, stages, etc. have different needs. A start would be reaching out to them directly and asking each individual what would be helpful for them protecting the land that they themselves each individually are stewarding.”

– Survey respondent

Farmers: Supporting New and Beginning Farmers

Survey question:

How can farmers at different stages (starting out, retiring, etc.), and farmers from different communities and backgrounds be supported in protecting the land they're farming?

Ninety-eight (n = 98) farmers responded to this question. Overall, these farmers recommended the following:

- Consider farm housing to be as important as land preservation.
- Proactively seek out farmers to make them aware of the resources available to them and to assess their needs. Provide free consultation and training in land protection and provide support around the application process.
- Provide farmers with business and succession planning support. Create a centralized place for retiring farmers to connect with new and aspiring farmers.
- Create funding programs that provide ongoing support instead of one or two payments or a sole focus on land acquisition. Examples include paying farmers for ecosystem services/climate mitigation and providing funding for ongoing soil restoration projects.
- Create a public outreach campaign to demonstrate to people the importance of farms. Set up ways for the public to tour farms and connect with farmers. Support and fund buy-local programs.
- Create programs directed specifically toward supporting small farms.
- Allow farmers to diversify their business by including agritourism as a farming activity for existing farms.

Farmers: Farmland Access

Survey question:

What would help new and aspiring farmers, as well as farmers from different communities and backgrounds, be able to access farmland? Consider financing actions, state and local programs, and other supports.

Ninety-seven (n = 97) farmers responded to this question. Overall, they made the following suggestions for new, aspiring, and BIPOC and immigrant farmers:

- Housing for farmers and farm workers needs to be a priority. Labor costs are high and housing workers offsite can be quite costly. Allow the tax benefits that apply to preserved land to apply to the housing on the land as well.
- Current programs should do more outreach to connect to and work with new farmers, particularly BIPOC and immigrant farmers. Ensure that information on state resources is provided in a variety of languages, as is other information the state distributes. Cultivate long-term relationships with these communities and have dedicated contacts for them.

“A lot of it is connecting the availability of land to those seeking it. A database of farmland and what is available, with key information about the type of land (soil types, wet areas, slope, invasive species, woodlands, etc.) and how it has been used would be very helpful.”

– Survey respondent

- Access to affordable land is an ongoing issue. Work with local land trusts to purchase land that can be preserved for recreational use and leased to farmers. Establish a tax-credit program that rewards landowners who have long-term leases with farmers.
- Create mentoring and apprenticeship programs that pay current farmers to mentor new and aspiring farmers. Reward retiring farmers who choose to sell their land to new farmers.
- Provide guidance to land trusts that want to open land to farming.

Farmers: Farm and Farmland Viability

Survey question:

What state or local policies or programs could be put in place to both protect farmland and support a viable farm business?

Ninety farmers (n = 90) responded to this question and made the following recommendations for actions to support viable farm businesses:

- Increase funding for farm improvements and equipment upgrades. Create flexible financing programs for new farmers to purchase equipment. Establish a micro-grant program to support small-scale upgrades and infrastructure improvements.
- Since labor costs are high and farmers have trouble finding workers, provide funding to farms to support paying a living wage to farm workers.
- Provide farmers with access to business planning services, financial planning, and succession planning support. Make these programs low- or no-cost for farmers.
- Provide funding for shared infrastructure such as dairy processing facilities, slaughterhouses, and warehousing.
- Establish an equipment leasing program for equipment that is needed but that farmers may not be able to purchase on their own.
- Encourage towns to support higher density development to free up more land for farming.

“Sometimes I worry that people are too focused on protecting farmland from development and not focused enough on preserving the farms that operate on said farmland.”

– Survey respondent

Farmers: Other Recommendations

Survey question:

Do you have any other recommendations regarding the topics of protection, access, and viability?

Sixty farmers (n = 60) responded to this question. Emergent themes from their responses include the following:

- Provide funding and support for animal agriculture and its associated infrastructure.
- Provide an incentive for existing landowners who are not farmers to lease their land to farmers or sell a portion of a parcel to a farmer.

- There is a sense that the general public does not understand the urgency of issues related to farmland protection, access, and viability. There must be more outreach and education to the general public so that people will welcome farms in their communities.

Non-Farmer Responses: Protection, Access, and Viability

Non-Farmer Respondents: Emergent Themes Across All Questions

It is important to note that non-farmer stakeholders included any respondent who is not currently farming such as former and retired farmers, farmland owners, aspiring farmers, farmworkers, and those who work for local, regional, statewide, and federal programs to protect farmland and support farmers.

FUNDING (BOTH HOW MUCH FUNDING IS NEEDED AND HOW THAT FUNDING SHOULD BE DISTRIBUTED)

- Streamline the application process and shorten the time it takes to get money to farmers.
- Increase funding to provide program assistance on an ongoing basis instead of through one-time payouts.
- Increase funding to existing programs.

SUPPORT FOR FARMERS' NEEDS BEYOND LAND PRESERVATION

- Provide farmers with access to services such as business and financial planning.
- Create a retirement program or fund for farmers so that selling their land is not their only option.
- Make housing for farmers and farm workers a priority.

PROACTIVE ACTION

- Reaching out to farmers to provide them with information on available programs.
- Make greater efforts to contact BIPOC farmers to ensure that they not only have access to current programs, but also are a part of future planning.

SUCCESSION PLANNING

- Provide farmers with succession planning support.
- Create a database of retiring farmers and new farmers in search of land.
- Provide financial support for the legal costs of succession planning.

“We have to protect land in a way that is equitable, sustainable and feasible. People will not choose to protect land unless it is financially viable and too often the people who care about land stewardship and good agricultural practices are not the ones in possession of the capital necessary to secure the land. If the state is serious about land protection there needs to be an aggressive investment into land purchasing and protection with outreach efforts which specifically benefit BIPOC and low income farmers.”

– Survey respondent

EDUCATION

- Fund agricultural programs at state universities.
- Educate the public about the importance of preserving farms.
- Ensure that municipalities have a full understanding of how existing programs work.

HOUSING

Housing was a topic touched on by respondents on all questions. Recommendations in this area included the following:

- Include funds for housing in land acquisition funding.
- Provide affordable housing for farm workers.
- Reduce property tax on farm structures, as it is for some protected land.

Non-Farmer Respondents: Increasing the Pace of Farmland Protection

Survey question:

What is needed to increase the pace of farmland protection in Massachusetts? What changes would you make to state and local policies or programs that protect farmland?

Sixty-eight (n = 68) non-farmer stakeholders responded to this question. Emergent themes and recommendations included:

- Increase funding to preserve more land, particularly in areas with higher land costs, such as urban areas. Reduce the time between application and the release of funds to the farmer. Purchase land that comes onto the market quickly and then find a farmer to purchase it at lower cost.
- Change local zoning laws to encourage higher density development that requires less land to reduce the development pressure on farms. Include the preservation of farmland in municipal planning. Create agricultural zones and reduce the property tax rate of farms.
- Give farmers access to state land with long-term leases. Give private landowners incentives to provide long-term leases to farmers and to preserve the land as agricultural land, including covering the cost of any legal fees associated with the process.
- Support farmers in ways that keep them on the land they currently farm. Find ways to help farmers succeed by providing low- or no-cost services such as financial planning, succession planning, and other business services. Provide support for affordable housing for farmers and farm workers.
- Create the resources to support farmers in succession planning. Proactively seek out farmers to inquire about succession planning and to offer support. Create a program that helps connect retiring farmers with new farmers in search of land.

Non-Farmer Respondents: Supporting New and Beginning Farmers

Survey question:

How can farmers at different stages (starting out, retiring, etc.), and farmers from different communities and backgrounds be supported in protecting the land they're farming?

- Seventy (n = 70) non-farmer stakeholders responded to this question. Emergent themes and recommendations included the following:
- Proactive reach out to and support farmers going through the application process for the state's various farm preservation programs. Reach out to farmers to find out if they are aware of the options available to them.
- Conduct outreach to BIPOC farmers. Many new BIPOC farmers do not have access to the network that White farmers may have. Extra effort should be made to reach out to these farmers to connect them with existing farm programs and ensure that they are a part of future programs and planning.
- Assist retiring farmers who want to pass their land on to the next generation of farmers with succession planning. Provide a state-sponsored retirement plan for farmers so that selling their farm is not their only option.
- Provide farmers with low- or no-cost access to business support, financial planning, and succession planning services.
- Educate the general public and municipalities on the importance of farms and the services they provide beyond just food production. Encourage buy-local programs.
- Farmers need affordable housing for themselves and for their workers.

Non-Farmer Respondents: Farmland Access

Survey question:

What would help new and aspiring farmers, as well as farmers from different communities and backgrounds, be able to access farmland? Consider financing actions, state and local programs, and other supports.

Seventy-one (n = 71) non-farmer stakeholders responded to this question. Emergent themes and recommendations included the following:

- Provide low- or no-interest loans as well as grants for purchasing farmland. Provide assistance with down payments and legal fees.
- Proactively reach out to farmers and farming communities to keep up to date on farmers' needs and how to connect them to the resources they need. Continue to involve farmers in conversations about future planning.
- Create incentives for retiring farmers to sell their land to new farmers. Support farmers in succession planning and retirement planning.
- Create internship programs that connect aspiring farmers and experienced farmers.

Non-Farmer Respondents: Farm and Farmland Viability

Survey question:

What state or local policies or programs could be put in place to both protect farmland and support a viable farm business?

Sixty-five (n = 65) non-farmer stakeholders responded to this question. Emergent themes and recommendations included the following:

- Expand programs and funding to include infrastructure improvements, expansion of programs, and process upgrades.
- Increase funding and support for agricultural programs at state schools. Create farming apprenticeship programs for new farmers to learn from experienced farmers.
- Support farmer and farm worker housing. Consider providing low-interest loans or grants to support affordable farm housing. Include structures in reduced property tax calculations, not just the land.
- Allow farmers to lease state land on a long-term basis.
- Educate municipalities about the benefits of farms in their communities. Develop programs to encourage municipalities to identify agricultural land at risk, and work with them to preserve it.

Non-Farmer Respondents: Other Recommendations

Survey question:

Do you have any other recommendations regarding the topics of protection, access, and viability?

Sixty-two (n = 62) non-farmer stakeholders responded to this question. Emergent themes and recommendations included the following:

- Create a robust agriculture program at high schools and state universities.
- Increase funding to the cooperative extension.
- Provide funding to create opportunities for aspiring farmers to apprentice with experienced farmers.
- Work with municipalities to identify threatened agricultural land and develop plans to protect it.
- Provide state funding to purchase land and hold it until it can be matched with a farmer seeking to buy land.
- Create more robust buy-local programs and educate the public on the need for farms. Highlight the additional benefits of farms such as the climate change mitigation services they provide and soil building.
- Support farmers in paying a living wage to their employees.

Appendix B: Massachusetts Farmland Data

The following tables and explanations represent examples of the kinds of data that will need to be developed to inform some of the priority-setting recommended for implementation of the Plan. They are being included here in order to demonstrate the urgency of examining the available data and determine what additional collection or analysis might be needed to properly determine how to prioritize land for protection, and to provide examples of what information might be uncovered.

These tables rely on American Farmland Trust’s Farms Under Threat (FUT) datalayers, which are based on the National Land Cover Database and the Natural Resource Inventory’s (NRI) broad land cover/use classes and data ([AFT 2020](#)). This data deviates from the MassGIS data in that it more broadly identifies grasslands to include some non-farmed areas that MassGIS does not, though some of that area is grazed. These differences merit further analysis in order to enable standardization of future tracking of progress in farmland protection. It’s important to note that the AFT analysis of protected farmland and MassGIS analysis are slightly different because the Commonwealth includes the total parcel and does not carve out infrastructure or forestland, and AFT does.

Protection Status of Massachusetts Farmland

County	Farmland*			Cropland				
	Protected**	Unprotected	Total	Protected	Unprotected	Total		
Barnstable	203	6%	3,465	3,668	47	4%	1,253	1300
Berkshire	7,701	11%	62,836	70,537	4,165	21%	15,435	19600
Bristol	2,918	8%	32,625	35,543	1,810	14%	11,290	13100
Dukes	254	4%	6,371	6,625	132	8%	1,568	1700
Essex	2,209	11%	17,610	19,820	1,038	19%	4,462	5500
Franklin	10,801	13%	69,239	80,040	6,206	24%	19,894	26100
Hampden	2,717	7%	36,483	39,201	1,639	11%	13,161	14800
Hampshire	9,605	17%	46,986	56,591	5,896	27%	16,004	21900
Middlesex	1,691	6%	25,396	27,087	756	13%	5,144	5900
Nantucket	13	0%	2,572	2,584				
Norfolk	192	5%	3,818	4,009				
Plymouth	940	2%	47,915	48,856	446	2%	22,154	22600
Suffolk								
Worcester	8,262	8%	97,153	105,416	4,512	13%	29,688	34200
Total	47,507	10%	452,471	499,977	26,648	16%	140,052	166,700

County	Pastureland			Woodland				
	Protected	Unprotected	Total	Protected	Unprotected	Total		
Barnstable	74	6%	1,226	1,300	83	7%	1,117	1,200
Berkshire	1,272	7%	17,128	18,400	2,265	7%	30,235	32,500
Bristol	249	5%	4,651	4,900	858	5%	16,642	17,500
Dukes	52	2%	2,248	2,300	70	3%	2,530	2,600
Essex	468	8%	5,132	5,600	702	8%	8,098	8,800
Franklin	1,106	9%	10,894	12,000	3,488	8%	38,412	41,900
Hampden	119	4%	2,881	3,000	959	4%	20,541	21,500
Hampshire	989	10%	8,811	9,800	2,721	11%	22,179	24,900
Middlesex	372	5%	6,928	7,300	564	4%	13,436	14,000
Nantucket	13	0%	2,587	2,600				
Norfolk								
Plymouth	230	4%	5,570	5,800	264	1%	20,236	20,500
Suffolk								
Worcester	729	4%	15,971	16,700	3,021	6%	51,579	54,600
Total	5,672	6%	84,028	89,700	14,994	6%	225,006	240,000

*Farmland from Farms Under Threat (2016), comprised of cropland, pastureland and woodland classes

**Protected lands defined by the Protected Agricultural Lands (PALD) dataset

Blacked-out portions indicate counties with insufficient farmland for analysis.

Data explanation

This table compares the FUT datalayer with the most complete dataset on farmland protection, AFT's Protected Agricultural Lands Dataset, which incorporates permanent easements that explicitly protect land for include agriculture. This dataset provides an appropriate snapshot of land protection across the region, highlighting significant differences in farmland protection rates across the Commonwealth. (Where data is insufficient to include, it is blacked out.)

It is important to note that this approach has only captured roughly 47,000 of protected lands in Massachusetts, when we know that the APR program alone has protected more than 70,000 acres of land. This is, in part, due to the fact that the APR program protects more than just cropland, pastureland, and woodland -- it also protects buffers, roadways, farm ponds, farmyards, land underlying farm buildings, and more. Additionally, the APR program protects other forested lands associated with farms that may not be captured by the woodland category here.

Data analysis

With roughly 15% of farmland in Massachusetts protected, the geographic breakdown is striking. Hampshire county, home to several towns with very active and longstanding farmland protection efforts, significant local investment in farmland protection, and a community with significant technical service provider capacity, has protected 17% of its total farmland, and 27% of its total cropland. Of the four counties with an above average amount of protected farmland, three are in the western portion of the state, and all counties with above average farmland protection have above average cropland protection.

In the five counties with the greatest amount of farmland overall - Worcester, Franklin, Berkshire, Plymouth, and Hampshire (from highest to lowest) - the rates of farmland protection are inconsistent, ranging from 2% in Plymouth to 17% in Berkshire. Though Plymouth County has roughly 10% of the Commonwealth's farmland only 2% of it is protected, a result of farmland protection efforts that prioritize soils as a primary driver of protection funding.

Eastern portions of the state where farmland is more expensive have lower rates of protection, and while protecting farmland in this region may be more expensive per acre, the development pressures are much stronger, and the potential to maintain viable farms is high, especially when such protection includes the necessary infrastructure to operate a farm.

The numbers show that protection has focused heavily on cropland, protecting a much greater portion of that acreage than the other categories. While 18% of the commonwealth's farmland is pastureland, just 12% of our protected farmlands are pastureland, while fully 32% of our protected farmland is woodland. Everywhere except in Plymouth and Barnstable counties, where the vast majority of cropland is cranberry bogs, the rate of cropland protection is more than twice the rate of pastureland protection.

This disparity is likely due to protection programs being driven by soil types. But the livestock industry is critical to Massachusetts agriculture, and pastureland is a crucial element of this sector. Climate and terrain make significant portions that are unsuitable for crop production quite suitable for livestock. But without protection, that land stands a greater risk of being lost to agricultural production.

Suggestions for future data collection/refinement

- While agriculture includes managed forestland, the vast majority of forestland in the Commonwealth is not actively managed as an agricultural commodity. A better understanding of the extent and location of this important type of farmland would benefit future tracking.
- A state-maintained dataset that includes all permanent easements that are protected for agricultural purposes would make the existing analysis more robust.
- It would be useful to set targets statewide, and then perhaps by county and by farmland type, for rates of farmland protection, and track progress towards those targets. Breaking out that data by the number and percentage of acres of cropland, pastureland and woodland would help to prioritize investment toward those targets.

Conversion of Agricultural Lands to Non-farm, Non-Developed Land Uses

County Name	Land Area Acres	Farmland in 1985 Acres	Converted to 'non-farm' landcover in 2016 (inclusive of "developed" & "non-developed")		Converted to non- developed		Converted to developed	
			Acres	(%)	Acres	(%)	Acres	(%)
Berkshire County	593,212	57,108	11,444	20.0	7,148	12.5	2,388	4.2
Franklin County	447,502	47,320	7,191	15.2	4,214	8.9	1,935	4.1
Suffolk County	37,283	240	233	97.0	148	61.9	70	29.4
Worcester County	966,849	84,213	29,738	35.3	15,990	19.0	9,966	11.8
Essex County	315,219	24,604	9,902	40.2	5,335	21.7	3,427	13.9
Hampshire County	337,435	44,983	8,850	19.7	4,588	10.2	2,997	6.7
Barnstable County	252,306	4,310	1,606	37.3	891	20.7	585	13.6
Dukes County	66,051	2,697	183	6.8	92	3.4	65	2.4
Hampden County	394,889	28,887	9,811	34.0	5,039	17.4	3,559	12.3
Plymouth County	421,449	38,573	10,583	27.4	5,524	14.3	3,999	10.4
Middlesex County	523,437	34,199	15,845	46.3	7,678	22.4	6,466	18.9
Bristol County	353,998	34,554	14,662	42.4	6,665	19.3	6,532	18.9
Norfolk County	253,513	11,302	6,119	54.1	2,747	24.3	2,778	24.6
Nantucket County	29,564	961	250	26.1	67	7.0	158	16.4
Total	4,992,709	413,950	126,417	31%	66,125	16%	44,926	11%

Data explanation

In an attempt to understand conversion of farmland in Massachusetts, American Farmland Trust broke historical conversion down into several categories and analyzed it by county. Starting with MassGIS’s Land Use data layer from 1985, AFT mapped “Farmland” (an aggregation of the 1985 categories: cropland, pastureland, cranberry bog, orchard, and nursery).⁸ AFT then grouped all non-farmland land types within the MassGIS 2016 Land Cover/Land Use dataset, into two categories: “developed” (Impervious and Developed Open Space) and “non-developed” (Grassland, Deciduous Forest, Evergreen Forest, Scrub/Shrub, Palustrine Forested Wetland (C-CAP), Palustrine Scrub/Shrub Wetland (C-CAP), Palustrine Emergent Wetland (C-CAP), Estuarine Forested Wetland (C-CAP), Estuarine Scrub/Shrub Wetland (C-CAP), Estuarine Emergent Wetland (C-CAP), Unconsolidated Shore, and Bare Land) uses. We then mapped each of those as an overlay to the 1985 dataset and removed small areas (<.1 acre) of non-developed uses that were likely due to improvements in mapping accuracy. There still appeared to be significant error in the mapping, due primarily to the differences in accuracy of the 1985 data v the 2016 data. Therefore, we then selected parcels of 1985 farmland where 60% or more of the area had been converted to either of the 2016 non-farmland uses (developed or non-developed) and assigned them to that category. While this approach certainly leaves some farmland conversion undocumented, and uses

⁸ There is a significant range of error in this 1985 number, though it is still valuable for illustrative purposes. The 1985 data includes grassland in the pastureland layer but separates it out as a separate grassland in the 2016 data. Grassland being “areas dominated by graminoid or herbaceous vegetation, generally greater than 80 percent of total vegetation. These areas are not subject to intensive management such as tilling but can be utilized for grazing.” In 1985 this land use was included in the pastureland category. AFT has relatively high confidence in the 2016 FUT farmland numbers despite MassGIS data pointing to roughly 189,000 acres of Cropland and Pastureland combined in 2016 and AFT’s Farms Under Threat Analysis which involves harmonizing National Land Cover Datasets with NRCS’s Natural Resource Inventory identifying 256,000 acres of Cropland and Pastureland. The treatment of grassland may be a factor in this mismatch.

very different starting points than other research, it is the only analysis that has addressed the loss of farmland to all uses, including non-development land covers. It also provides a consistent approach to understanding the ratios of farmland loss due to conversion to non-developed land uses versus traditional development.

Data analysis

The 31% statewide loss of farmland over 31 years hides some vast regional disparities. Virtually all farmland in Suffolk County, more than 50% in Norfolk County, and more than 40% in Bristol, Middlesex, and Essex counties was lost during this time, whereas more rural counties in the Western part of the state saw much lower rates of conversion. When compared with the previous table it makes sense that areas that lost farmland are areas where less land has been protected, but it is less clear if this is because land is being protected well in areas where there is the least development pressure, and therefore the largest most intact farms with prices that make protection affordable, or if there is any causal relationship between the two at all.

This analysis also reveals how much farmland the Commonwealth is losing to non-development land uses. In all but 2 counties, the loss of farmland due to non-development uses exceeds the loss of farmland from development. In half of the counties, the loss from non-development uses was more than 50% greater than developed uses. In 3 counties it was more than 2X the rate of loss due to non-development uses, and in Berkshire County the rate was 3x as high due to non-development uses. While the impacts to the Commonwealth as a whole through this type of conversion is different, the loss of any farmland to other use has negative impacts on the viability of agriculture in Massachusetts.

We cannot understand the reasons for this loss from this level of analysis. While there are anecdotal examples of farms that suffer from viability issues and abandon their land, or instances of state agencies acquiring farmland for habitat or water quality purposes, this data does not isolate such motivation for each parcel lost. We cannot understand if, or to what degree this conversion is due to the abandonment of farming due to lack of viable farming options, the age or priorities of the landowner despite viable farming opportunities, regulatory challenges to farming, or conversion that is driven by other public purposes such as wildlife habitat, open space, active public recreation opportunities, water quality protection, or more. Regardless of the reason, with more than 50% of the total loss of farmland over the last 31 years, the loss is great and its outsized impact deserves more attention.

It points to the need for attention to more than just protecting land from development, but to also address the causes of non-development conversion such as viability, or conservation for other public purposes.

Suggestions for future data collection/refinement

Further analysis to understand the potential drivers of this non-development conversion is warranted. For example: analysis of the quality of the farmland being lost; the percentage within state-owned or permanently protected data layers where other public purposes may impact that conversion; the prevalence of the converted land within the State's APR Program, Farm Viability Program, or current use taxation program; and, where possible, the economic status (profitability) of the farms by either geography or farm type would all be useful to collect and analyze. Tracking this over time would help ensure we are minimizing the loss of any farmland, but especially our most productive land, and would further ensure that when farmland is lost to other conservation or public purposes, the appropriate reviews for compliance with the no net loss policy is being followed.

Protected Status of Agricultural Lands by Size

Farmland Parcel Area	Acreage			Number of parcels	
	Acres Not Protected	Acres Protected	% Protected	Not protected	Protected
<2 acres	4,494	104	2%	4,282	96
2-5 acres	9,215	560	6%	2,871	160
5-10 acres	11,613	1,621	12%	1,636	221
10-20 acres	12,306	3,399	22%	884	235
20-40 acres	11,369	5,137	31%	419	186
>40 acres	12,536	8,180	39%	188	128
Total	61,533	19,001	24%	10,280	1,026

Data explanation

In an attempt to understand the rate of farmland protection amongst different size agricultural parcels, AFT analyzed all tax parcels in the Commonwealth that had more than 50% coverage of combined pastureland and cropland. We then allocated the parcels into categories based on the area of the farmland on a given tax parcel, dividing them into the following categories – less than 2 acres of farmland, 2-5 acres, 5-10 acres, 10-20 acres, 20-40 acres, and more than 40 acres. We examined only tax parcels that are more than 50% farmed because many state policies look to the primary use of the land, or some minimum threshold for the agricultural use of a property in order for it to be eligible for grants and other programs. Thus, this table quantifies the amount of farmland, both protected and non-protected, that exists on parcels that are primarily used for agriculture. Tax parcels as an imperfect proxy for farming units, since in some cases separate farming operations share a parcel, and in many cases multiple parcels are farmed by one operation, but it is the most accurate unit available given the existing datasets.

Data analysis

By narrowing the analysis only at parcels of land that are 50% pastureland or cropland (or a combination of both), this table has reduced the land being analyzed to just 80,534 acres out of the total 256,400 acres of farmland identified in the first table. While this analysis has taken a rather aggressive approach to determining the primary land cover of a parcel, it illustrates that less than 1/3 of the cropland and pastureland in the Commonwealth is on a parcel where the primary land cover is pastureland or cropland. It also shows that of the 32,320 acres of protected cropland and pastureland identified in the first table, 59% of it is on parcels where most of the parcel is pastureland or cropland.

While almost ¼ of all parcels that are a majority pastureland or cropland are protected, as with other analysis, there is a wide disparity within the dataset. As the size of the farmed land on the parcel increases, the rates of protection increases significantly, despite there being a fairly even allocation of farmland across the size classes. It is notable that while less than 10% (23,716 acres) of the Commonwealth's farmland is in areas 40 acres or larger on a parcel where the majority of the parcel is cropland or pastureland, more than 25% of our protected cropland or pastureland is on those parcels.

Conversely, while roughly 11% (27,577 acres) is in areas that are 10 acres or less where the majority is cropland or pastureland, only 7% (2,285 acres) of it is protected. Without better analysis we cannot tell

to what extent subdivision of properties to make them conform to various land protection programs impacts these numbers. What we can tell most clearly is that if we wish to have programs that support the protection and viability of the Commonwealth’s farms, we must be able to adequately address parcels where the predominant land cover is NOT cropland or pastureland.

Suggestions for future data collection/refinement

A more thorough analysis of the size of farm parcels with the state, the extent to which adjoining farm parcels are linked together for eligibility to various programs, and other related information will be critical in setting benchmarks or estimating the efficacy of state investments and programs.

For the data above we intentionally limited the analysis to parcels whose majority land use was cultivated or pasture/hay within the 2016 MassGIS land cover data. For comparative purposes the information on all parcels with any cultivated or pasture/hay land cover is below:

Farmland Area	Acreage			Number of parcels	
	Acres Not Protected	Acres Protected	% Protected	Not protected	Protected
<2 acres	15,175	192	1.3%	35,041	256
2-5 acres	24,987	860	3.3%	7,869	246
5-10 acres	31,916	2,489	7.2%	4,468	338
10-20 acres	32,590	5,708	14.9%	2,355	396
20-40 acres	27,683	8,329	23.1%	1,021	299
>40 acres	28,145	11,131	28.3%	415	177
Total	160,495	28,709	15.2%	51,169	1,712

Looking Forward

Under a long-term partnership with the USDA Natural Resources Conservation Service called Farms Under Threat, AFT has released a series of reports on farmland loss. In late 2020, AFT, in partnership with Conservation Science Partners and the Center for Sustainability and the Global Environment at the University of Wisconsin, Madison, started an ambitious modeling effort to project how development and climate change will affect agricultural land under several different future scenarios. This report summarizes the results of the projection of future development through 2040. A report on climate threats to agriculture will be released later this year.

Business as Usual. If development follows recent trends, the U.S. will convert 18.4 million additional acres of agricultural land to more-developed uses between 2016 and 2040, with 73,800 acres of that conversion happening in Massachusetts. Only six states will convert over 10% of their agricultural land in this scenario, with Massachusetts ranked #3 in the nation for the highest rate of farmland loss, being on tract to convert 15% by 2040. Perhaps most concerning, 60% of the Commonwealth’s conversion will occur on what is considered the nation’s most productive, versatile, and resilient farmland. This is equivalent to 1,200 farms and \$91,000,000 in farm output, based on county averages.

Runaway Sprawl. If more residents choose to live on large lots in rural areas, almost 78,000 acres of agricultural land will be lost or compromised in Massachusetts, with the majority of that loss being our most productive, versatile and resilient farmland.

Better Built Cities. However, if policymakers and land-use planners focus on protecting farmland and reducing sprawl by promoting more compact development, agricultural land conversion could be cut by 39,300 acres compared to Runaway Sprawl—saving an estimated 700 farms, and \$48,000,000 in annual farm output based on county averages.

Across all three scenarios, several factors are consistent. Based on population growth trends, prior conversion patterns, and the significant existing farmland acres within close proximity to that population grown, the hardest hit counties for conversion are anticipated to be Worcester, Plymouth and Bristol, by acreage. Norfolk County is ranked 9th in the nation for the percent share of farmland anticipated to be lost, with 46% expected to be lost under the business-as-usual scenario. These four counties are ALL well below the states average for farmland protection rates.

In addition, with the current pace of rising sea levels, by 2040 roughly 600 acres of farmland is likely to be affected by rising seas due to climate change.

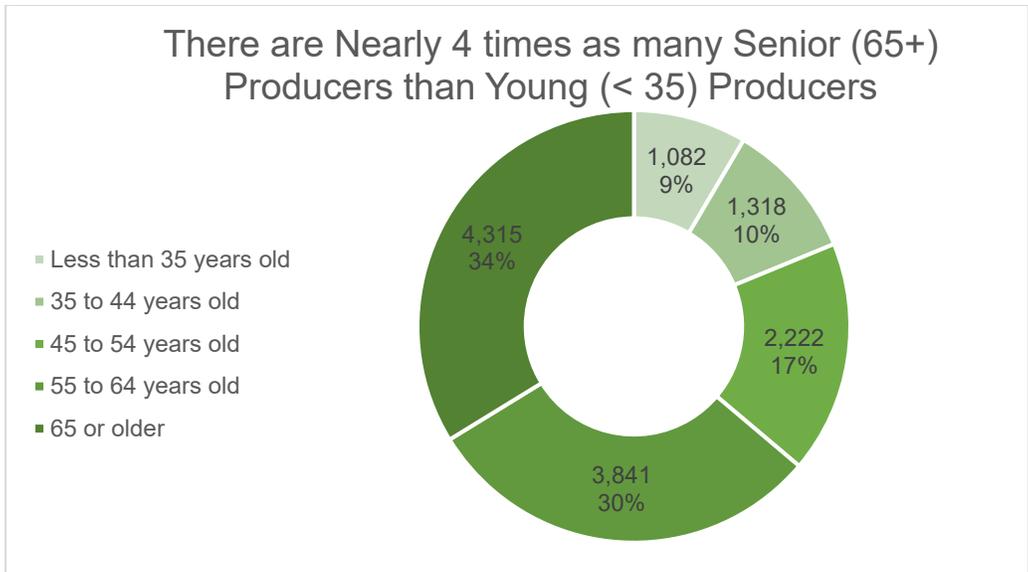
Farmer Age Demographics

Resources for farmland succession planning and education are cited as a need in the Plan. This is, in part, due to the aging demographics of farmers in Massachusetts, many of whom do not have plans in place for how their farms will stay in production after they stop farming. The following data illustrates this issue.

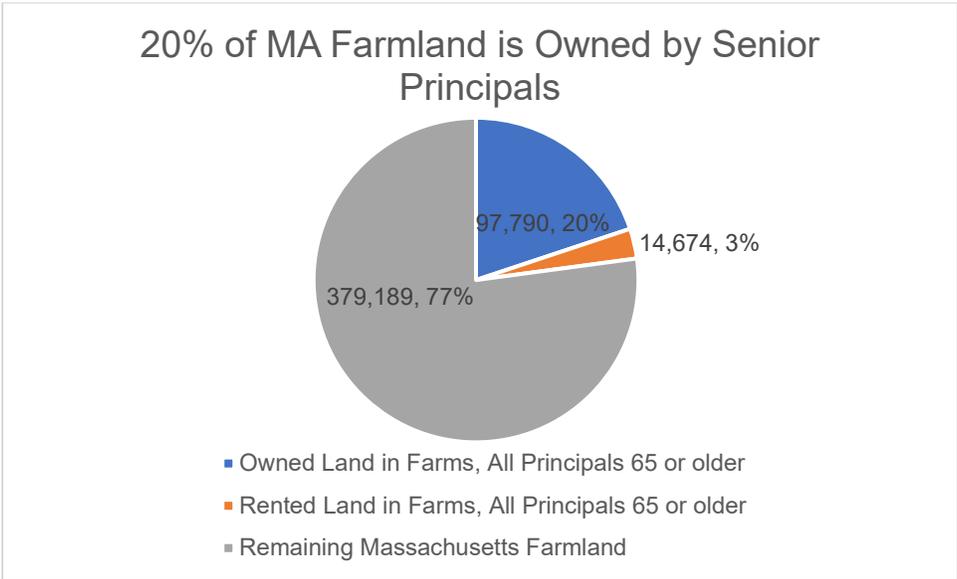
This table shows farm operations, producers, and principal producers by age and whether they are new and beginning producers. New and beginning producers include producers operating on any operation for 10 years or less. Producers include any persons who are involved in making the decisions for a farm operation. A principal producer is a person who has indicated they are a primary operator of a farm. There may be multiple principal producers on one farm.

	Farm Operations with Producers	# Producers	# Principal Producers
Total	7,241	12,778	10,154
New and beginning	2,269	3,538	2,536
35 or Younger	860	1,082	604
35 to 44	1,016	1,318	945
45 to 54	1,757	2,222	1,703
55 to 64	2,977	3,841	3,183
65 and older	3,234	4,315	3,719

This figure shows producers by age. Over one-third of producers (n=4,315, 33.8%) are of retirement age. Only a small percentage of producers (n=1,082, 9%) are considered young (under 35), meaning there are nearly four times as many elderly producers as there are young producers.



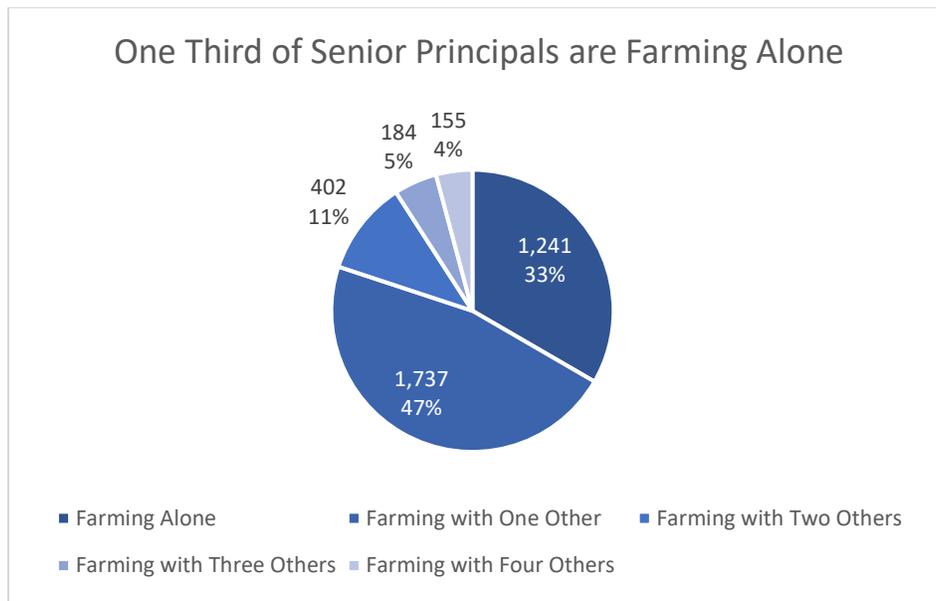
More than one-third of principal producers (n=3,719, 36.6%) are of retirement age. As shown in this figure, the footprint of retiree-aged senior principals is fairly significant: they steward more than one-fifth (112,464 acres) of Massachusetts farmland. The majority of farmland they steward is owned, as opposed to rented.



The next figure shows that over one-third of senior principals are farming alone. A large majority (n=876, 69%) of those farming alongside senior principals are over the age of 55. There are very few young farmers (n=76, 6%) farming alongside senior principals.

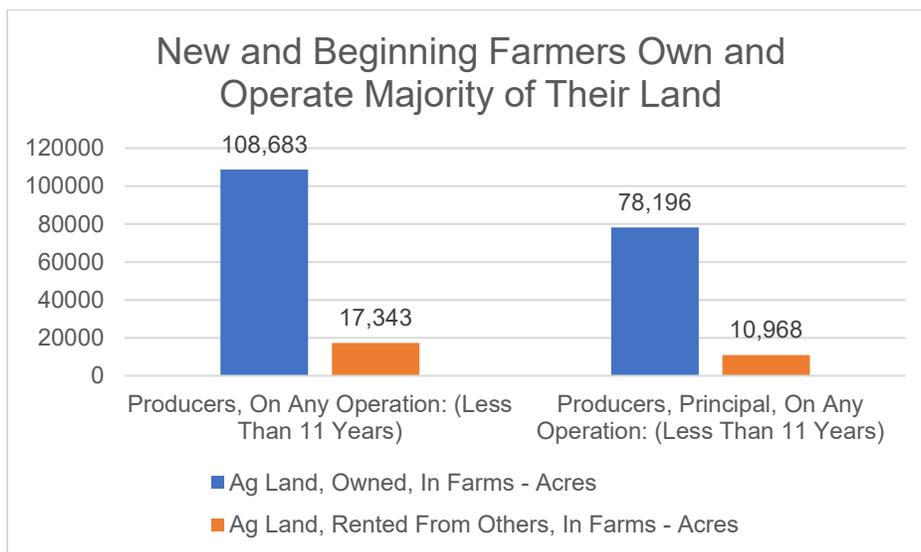
The lack of young operators does not necessarily mean there is no one to succeed a senior principal. In some cases, the farm may not be large enough to have a second operator, but there may be a succession plan. In other cases, there may be someone between 45 and 64—a spouse, child, or hired manager—farming alongside who is poised to buy or inherit the farm. In fact, 82% The lack of young

principals, however, may have potential implications for the future of many farms and indicate opportunities for young farmers are in short supply.



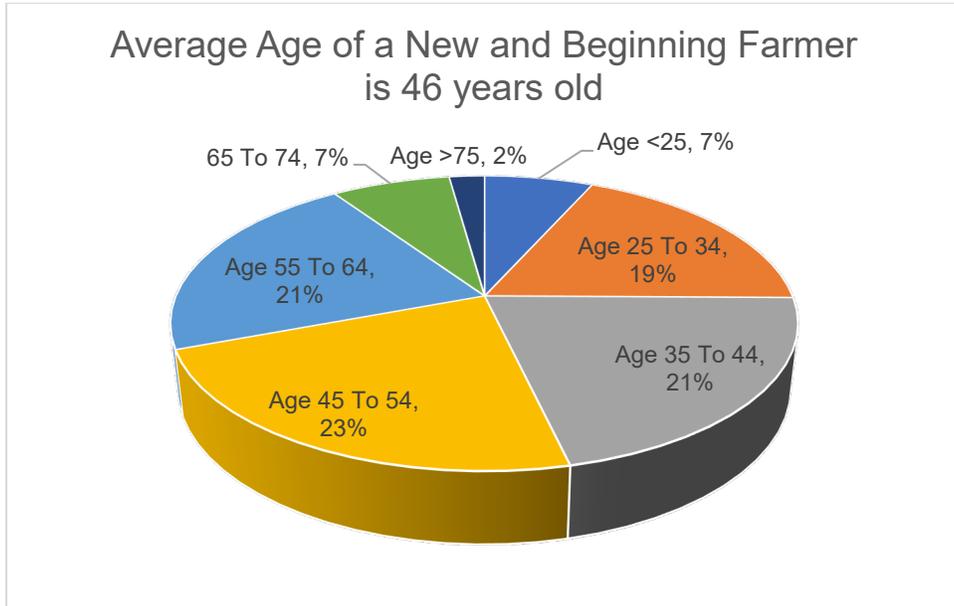
New and Beginning Farmers

Almost one-third of Massachusetts farms (n=2,269, 31%) are operated by beginning farmers, who manage 126,026 acres of land in farms. The following shows acres of farmland that are rented and owned by beginning producers and principal producers. A majority of farmland (87.7%) operated by beginning principals is owned as opposed to rented.



The final figure shows new and beginning farmers by age. A surprising finding is that a majority of beginning farmers are not young: 53% of Massachusetts beginning farmers are 45 or older. Only 26% of beginning farmers are under the age of 35.

These findings have important implications for the services and policies needed for beginning farmers. For young beginners, financing and access to capital are likely to be significant needs. For older beginners, who may have assets from prior careers, production and business support may be more important. In addition, these older beginners will need encouragement to start planning for farm succession, even while many are focused on growing their farm businesses.



Appendix C: Programs, Policies, and Players

Programs

Agricultural Preservation Restriction Program

<https://www.mass.gov/agricultural-preservation-restriction-apr-program>

The Agricultural Preservation Restriction (APR) Program helps preserve agricultural land by protecting productive farmland soil from development for non-agricultural purposes and by limiting resale value to agricultural value. The program pays farmland owners the difference between the fair market value and the agricultural value of their farms in exchange for a permanent deed restriction that prevents any use of the property that will negatively impact its future agricultural viability, limits the resale value to agricultural value, and secures a commitment to keep the land in agricultural production in perpetuity. Launched in 1977, APR was the first program of its kind in the United States.

The APR Program's stated goals are to:

- save the most productive agricultural land available in Massachusetts;
- provide an opportunity for farmers to purchase farmland at affordable prices;
- help farmland owners with estate planning to protect their farms from development;
- provide working capital for farm operations by accessing equity in the land value;
- support farmers, agribusiness, landowners, and urban residents by boosting the local farming economy, food supply, and rural character; and,
- protect scenic open space and environmentally sensitive lands.

The program is voluntary and accepts applications on a rolling basis. To be considered, properties must:

- be at least five acres in size;
- have been devoted to agriculture for the 2 immediately preceding tax years; and,
- have produced at least \$500 in gross sales per year for the first five acres, plus \$5 for each additional acre.

Other criteria considered include:

- suitability and productivity of land for agricultural use based on soil classification, physical land features, and location near other farms;

- the degree of threat to the continuation of agriculture on the land due to circumstances such as the owner’s death, retirement, finances, development pressure, health issues, or rental agreement concerns; and,
- the size or composition of the farm, which determines economic viability for agriculture, and the likelihood that it will remain in agricultural use in the future.

Impact

Since 1980, the Commonwealth has spent \$271,187,256 on 934 easements totaling 74,290 acres.

Funding

Funding for the APR Program is appropriated each year through the Governor’s Capital Spending Plan, based on authority from the land conservation line of the environmental bond bill passed by the legislature roughly every 4 years. This funding is used to leverage funds from the federal Agricultural Land Easements (ALE) Program, which is part of the USDA’s Agricultural Conservation Easement Program (ACEP). ALE matches up to 50% of the value of qualified projects, based on an annual cap set for the state by the USDA. In addition, the APR Program has leveraged matching funds from non-federal sources, including landowner donations, municipal and nonprofit contributions, and grants. To date the APR Program has leveraged \$97,586,902 from matching funds and \$84,163,828 from the USDA for a total of \$181,750,730. Thus, the program has leveraged its funding by more than 67%--that is, for every dollar APR spends, it has secured and spent an additional 67 cents of non-state funding.

Bond Bill Year	APR Funding Available	APR Funding Spent (as of 10/15/2021)
2008	\$67,750,000	\$67,750,000
2014	\$20,000,000	\$ 4,069,643
2018	\$20,000,000	None

Fiscal Year	Annual Spending
FY2009	\$2,456,557
FY2010	\$8,146,697
FY2011	\$9,024,322
FY2012	\$6,927,892
FY2013	\$6,850,000
FY2014	\$6,294,616
FY2015	\$5,389,912
FY2016	\$6,404,500
FY2017	\$4,587,204
FY2018	\$4,334,591
FY2019	\$2,881,748
FY2020	\$2,847,424
FY2021	\$4,866,166

APR Improvement Program

<https://www.mass.gov/service-details/apr-improvement-program-aip>

The APR Improvement Program (AIP) helps sustain active commercial farming on land that has already been protected by MDAR funds through the APR Program. The goal of the program is to help improve the productivity and profitability of participating farms to enhance the significance of APR farm operations and their contribution to the state’s agricultural industry. AIP offers business planning, technical assistance, and infrastructure grants to farmers operating established, privately owned Massachusetts APR farms that have proven success in producing and selling agricultural products. AIP grant awards of up to \$120,000 per farm, with farm-matching contributions of at least 25%, are used for eligible farm infrastructure projects, such as construction, expansion, or repair of barns and other farm buildings, processing facilities, and resource improvements.

Impact

A 2019 survey of AIP grant recipients found that the top-rated impact of participation was improved operational efficiency, followed by the probability that a farm would continue. Other significant impacts included improved labor conditions and product quality. Participating farms reported a 28% increase in gross income on average, higher than Massachusetts’ commercial farms overall, with a 4% average decrease over a similar timeframe as reported by the 2017 Census of Agriculture

Funding

Funding for AIP is appropriated each year through the Governor’s Capital Spending Plan, based on authority from the land conservation line of the environmental bond bill passed by the legislature roughly every 4 years. In state Fiscal Years 2020–2022, the program funded 21 of 39 eligible applicants, totaling \$1,600,000 out of \$2,444,800 requested.

Climate Smart Agriculture Program

<https://www.mass.gov/service-details/agricultural-climate-resiliency-efficiencies-acre-program>

The Climate Smart Agriculture Program (CSAP) links the Agricultural Environmental Enhancement Program (AEEP), the Agricultural Climate Resiliency & Efficiencies (ACRE) Program, and the Agricultural Energy Program (ENER) into one application process.

The overlapping goals of these programs is to reduce environmental impacts while improving the economic resiliency of the Commonwealth’s agricultural sector in the face of a changing climate. This is accomplished by agricultural operations addressing their vulnerabilities to expected impacts from climate change which will result from more frequent and severe storm events, increased precipitation followed by periods of drought, higher overall temperatures, and increased evaporation rates. CSAP provides incentives to agricultural operations for adopting practices that help farmers mitigate their impacts on climate change and adapt to changing climate conditions. By providing financial incentives to Massachusetts growers for practices that work toward improving soil health, ensuring the efficient use of water, preventing impacts on water quality, reducing greenhouse gas (GHG) emissions, sequestering carbon, and reducing energy dependency, Massachusetts farms will increase sustainability while reducing environmental impacts.

CSAP is broken into two sections:

- **Section I: Environmental Projects.** This section offers financial incentives to agricultural operations to proactively address risks and strengthen their economic and environmental resiliency. This includes projects that work toward improving soil health, ensuring the efficient use of water, preventing impacts on water quality, reducing GHG emissions, and sequestering carbon.
- **Section II: Energy Projects.** This section provides financial incentives for projects that improve energy efficiency or facilitate clean energy adoption. These projects will help farms become more sustainable and resilient while also working toward the interim goals of the Massachusetts Clean Energy and Climate Plan (CECP) for 2030.

Applicants can apply to either section or to both sections of this program. Since the sections are reviewed separately, there is an opportunity to be funded under either or both sections.

Impacts

Between state Fiscal Years 2019 and 2021:

AEEP: The AEEP grant funded 21 water quality projects, 35 water conservation projects, and one air quality project, totaling \$1,050,000 in funding.

ACRE: The ACRE grant funded 61 soil health projects, eight water resource projects, seven post-harvest storage projects, and five energy resiliency projects, totaling \$2,000,000 in funding.

ENER: The Ag-Energy Program funded 38 photovoltaic projects totaling \$969,161.00 in awards and 1,025.225kW of installed systems. An additional \$196,000 went to eight other renewable energy projects, including geothermal, solar hot water, solar refrigeration, wood boilers, and battery storage. The program funded 32 energy efficiency projects totaling \$694,035. This included 11 greenhouse projects for shade curtains, high-efficiency heating, insulation, etc. There were nine refrigeration projects, two dairy projects, six maple projects, and five miscellaneous projects such as bare-root storage, climate controls, insulation, electric pump with variable-speed drive, and a dehydrator, totaling 111 projects and \$1,859,196 in awards.

Funding

Funding for CSAP is appropriated each year through the Governor's Capital Spending Plan, based on authority from the land conservation line of the environmental bond bill passed by the legislature roughly every 4 years. Between state Fiscal Years 2019 and 2021, the program funded 219 of 330 eligible applicants, totaling \$3,971,744 out of \$8,440,096 requested.

Conservation Partnership Grant Program

<https://www.mass.gov/how-to/apply-for-a-conservation-partnership-grant>

Nonprofit organizations and conservation districts may apply to the Division of Conservation Services' Conservation Partnership Grant Program for funding to acquire interests in land for conservation or recreation purposes. Potential projects fall into one of two categories:

- Acquisition of the fee interest in land or a conservation restriction.
- Due diligence for land or a conservation restriction that was donated to the organization.

The Conservation Partnership Grant Program can provide funding to land trusts that are working to conserve farmland without the partnership of a municipality. When a municipality is not willing to partner and apply for state grant funding, and when the farm may be viable but does not meet APR eligibility criteria, this source could bridge a gap in funding needed to protect the farm/farmland.

Conservation Restriction Review Program

<https://www.mass.gov/service-details/conservation-restriction-review-program>

The Division of Conservation Services of the Executive Office of Energy and Environmental Affairs (EEA) maintains sample language and facilitates an application and approval process for all conservation restrictions. According to the webpage of the Conservation Restriction Review Program,

A conservation restriction is a legally enforceable agreement whose purpose is to ensure permanent protection of specific conservation values while permitting limited land uses consistent with the protection of said conservation values. Different from term-limited restrictions, conservation restrictions, as defined in Sections 31-33 of Chapter 184 of the Massachusetts General Laws, are permanent restrictions that require the approval “in the public interest” of the Secretary of Energy and Environmental Affairs. DCS manages all reviews for CRs that will be held by charitable corporations/trusts, or municipalities.

Farm Viability Enhancement Program

<https://www.mass.gov/service-details/farm-viability-enhancement-program-fvep>

The goal of the Farm Viability Enhancement Program (FVEP) is to increase the financial viability of farm businesses and to preserve and support stewardship of agricultural resources. The program provides business planning and technical assistance to help participating farms identify and implement strategies for increasing their farm's viability. In return for a grant of up to \$150,000 per farm, the landowner signs an agricultural covenant on their farm property to keep the land in agricultural use for a 10- or 15-year term. Eligible uses of funds include capital projects on the farm, such as building or renovating equipment storage or livestock barns, farmstands, food-processing and storage facilities, or purchasing farm equipment.

Impact

Since FVEP was initiated in 1996, 527 farms have been selected to participate in the program. A total of 455 farms have been protected by covenants and received grant awards. Those farms resulted in

44,713.50 acres being placed in protective covenants, and an additional 42,647 acres leased or used by participant farms being impacted. Funding for these projects totaled \$20,996,472. As of April 1, 2022, there are 9,410 acres under covenant on 78 farms.

Funding

Funding for this program is appropriated each year through the Governor's Capital Spending Plan, based on authority from the land conservation line of the environmental bond bill passed by the legislature roughly every 4 years. In state Fiscal Years 2021–2022, the program funded 16 of 45 eligible applicants, totaling \$1,650,000 out of \$3,103,000 requested.

LAND Grant Program

<https://www.mass.gov/service-details/local-acquisitions-for-natural-diversity-land-grant-program>

The Division of Conservation Services' LAND Grant Program helps cities and towns acquire land for conservation and passive recreation purposes. The grants reimburse cities and towns for the acquisition of land in fee or for a conservation restriction. The grant supports the purchase of forests, fields, wetlands, wildlife habitat, unique natural, cultural, and historic resources, and some farmland. Any ongoing agriculture and forestry activities must be compatible with conservation and public use of the property.

The program can help protect farmland by providing financial assistance to municipalities for the purchase of land or conservation restriction to achieve protection for natural resources and provide public access for passive recreation. Working landscapes, such as farms and woodlands, are eligible for protection. LAND Grant Program can be particularly helpful in protecting land that may not meet the criteria of other farmland-specific programs.

The program provides a reimbursement grant of between 52% and 70% of project cost to municipalities that complete fee-simple purchases of land for public use and conservation purposes. The maximum grant amount is \$400,000.

Landscape Partnership Grant Program

<https://www.mass.gov/service-details/landscape-partnership-grant-program>

The Landscape Partnership Grant Program funds the purchase of land or conservation restrictions by municipalities, nonprofits, and state and federal agencies. Eligible projects must achieve protection of lands that total 500 acres or greater. Farmland is eligible for protection where agricultural use is consistent with the conservation and passive recreational use goals of the program.

Massachusetts Department of Conservation and Recreation

<https://www.mass.gov/orgs/departement-of-conservation-recreation>

The Department of Conservation and Recreation (DCR) holds easements on land to protect drinking water watersheds and, in some cases, licenses land to farmers in watershed areas. DCR can also be a financial partner in farmland protection where adjacent woodland or floodplain or other natural resources are included. When the “whole farm” needs conservation and financial support, a conservation restriction that limits direct agricultural use on just a portion (or portions) of the farm can be a solution. This can lead to joint conservation restrictions, with DCR holding the portion that protects woodland, floodplain, or other natural resources that are adjacent to protected farmland.

Matching Enterprise Grants for Agriculture Program

<https://www.mass.gov/service-details/matching-enterprise-grants-for-agriculture-mega>

The Matching Enterprise Grants for Agriculture (MEGA) Program assists beginning farmers who have been in business between 1 and 6 years and who aspire to develop their farms into commercially viable operations.

The program provides business planning and technical assistance, including mentorship to help support the needs of newer farms to grow their businesses through increased farm production, marketing, and income. Grant funds of up to \$10,000 are available on a 1:1 matching cost-reimbursement basis for participating farms to purchase equipment, infrastructure, or other capital improvements.

Impact

A 2020 survey of farms that received MEGA grants found that 84% had experienced an increase in net farm income since program participation, and 47% had created new jobs on their farms. Eighty-seven percent of respondents reported having expanded production, with 55% increasing the amount of acreage farmed. Survey findings also showed that the program is increasing business skills of beginning farmers to help them operate more efficiently to grow their businesses, resulting in a significant increase in gross income and profitability.

Funding

Funding for MEGA is appropriated each year through the Governor’s Capital Spending Plan, based on authority from the land conservation line of the environmental bond bill passed by the legislature roughly every 4 years. In state Fiscal Years 2020–2022, the program funded 23 of 35 eligible applicants, totaling \$202,071 out of \$306,348.95 requested.

Municipal Vulnerability Preparedness Program

<https://resilientma.org/mvp/>

The Municipal Vulnerability Preparedness (MVP) grant program provides support for cities and towns in Massachusetts to plan for climate change resiliency and implement priority projects. The state awards

communities with funding to complete vulnerability assessments and develop action-oriented resiliency plans.

The MVP Planning Grant aids municipalities that wish to assess their vulnerability to prepare for climate change impacts, build community resilience, and receive designation as an MVP Community. Communities that complete the planning grant are eligible for MVP Action Grant funding and other opportunities.

The MVP Action Grant program is open to municipalities that have completed the MVP planning process and invests in municipal priorities that build resilience. Projects can range from a vulnerability assessment of a specific sector to an outreach and engagement campaign to constructing green infrastructure that accounts for climate change projections. The program seeks proactive adaptation projects that utilize best available climate data, that are rooted in natural systems as much as possible, and that prioritize environmental justice and equity.

Impact

According to the MVP website,

349 of the state's 351 municipalities have received MVP Planning Grants, and 166 have received Action Grants.

Some municipalities have included an assessment of and planning for local farms and farmland in their MVP projects. Other projects have included purchasing farmland that is not eligible for the APR Program and developing an agricultural climate action plan.

State Land Licensing Program

<https://www.mass.gov/service-details/state-owned-farmland-licensing-program>

The primary purpose of the state-owned farmland licensing program is to make state-owned agricultural land available to farmers and others. It accomplishes this by working with state agencies, cities, and towns to compile a list of vacant land that can be feasibly used for gardening, arbor culture, or farming. The program offers 5-year leases (with an option to extend) to farms to rent them. As defined by M.G.L. c. 128, Sec. 1A, eligible lessees are farms that are principally and substantially engaged in the business of production agriculture or farming for commercial purposes, and that have demonstrated the capacity to implement and administer projects and programs as defined in the posted RFR. Preference in licensing is given to historically underserved farmers, as defined in the 2018 USDA Farm Bill, including beginning farmers, socially disadvantaged farmers, limited resource farmers, and veteran farmers.

As of January 2022, MDAR had nine state-owned farmland parcels to lease on a total of 697 farmland acres. The program has been in operation since the early 1980s. Fees generated by the program are directed to the state's general fund.

Stewardship Assistance and Restoration on APRs

<https://www.mass.gov/service-details/stewardship-assistance-and-restoration-on-aprs-sara>

The Stewardship Assistance and Restoration on APRs (SARA) grant program helps resolve stewardship issues caused by a prior owner to restore active commercial farming on land that has been protected through the APR Program. Funds may be used for materials and contracted labor or equipment rental costs to clear or reclaim inactive fields that are out of production at no fault of the current owner. Examples of eligible projects include clearing vegetation, pulling rocks or stumps, cutting back grown-in field edges, or reseeding or applying soil or crop amendments to inactive cropland or pastureland to bring it back into production. Grant funds of up to \$35,000 are available on a cost-reimbursement basis, with a 15% match of total project costs required by the farm participant.

Impact

SARA served 42 APRs between FY2016-FY2022, expending a total of \$929,301.44 and restoring more than 110 acres during that time.

Funding

Funding for this program is appropriated each year through the Governor's Capital Spending Plan, based on authority from the land conservation line of the environmental bond bill passed by the legislature roughly every 4 years. Between state Fiscal Years 2020 and 2022, the program funded 23 of 32 eligible applicants, totaling \$489,749 out of \$678,515 requested.

Urban Agriculture Program

<https://www.mass.gov/how-to/apply-for-the-urban-agriculture-program>

The purpose of the Urban Agriculture Program is to support commercial projects designed to increase the production, processing, and marketing of produce grown and sold in urban centers across the Commonwealth. Expenditures promote strategies for addressing food insecurity and increasing access to fresh, local produce in urban neighborhoods with a high concentration of low- and moderate-income residents.

Urban agriculture encompasses a wide variety of activities related to growing plants and raising animals for food, including, but not limited to, production techniques such as land-based outdoor and greenhouse cultivation, rooftop open-air and greenhouse production, hydroponics, aquaculture, aquaponics, beekeeping, and egg-producing poultry. Each project proposal must represent long-term capital investments such as infrastructure improvements, building upgrades, purchase of computer software and systems, land procurement, and purchase of farm equipment. Projects also foster youth development, small-business development, and job training related directly to commercial urban farming.

The program seeks proposals that demonstrate strategies for increasing access to affordable, fresh food for urban residents, addressing the challenges of small-scale farming in densely populated centers, and creating direct markets in low- and moderate-income neighborhoods.

Funding

Funding for this program is appropriated each year through the Governor’s Capital Spending Plan, based on authority from the land conservation line of the environmental bond bill passed by the legislature roughly every 4 years. Between state Fiscal Years 2020 and 2022, the program funded 38 of 45 eligible applicants, totaling \$810,224 out of \$1,042,720 requested.

Policies

Agricultural Land Mitigation Policy

Updated in 2008, the state’s Agricultural Land Mitigation Policy explains broadly the actions taken by the Executive Office of Environmental Affairs and the Department of Agricultural Resources in implementing the priorities defined in Article 97 of the state constitution and Executive Order 193, both of which serve to prevent the conversion of publicly held agricultural land.

The policy “requires that one acre of agricultural land of comparable or greater agricultural viability be permanently protected for future agricultural use, for every acre of agricultural land so converted.” It designates that agricultural land is a critical natural resource and that on- and off-site mitigation are the preferred options for mitigation, with the substituted land to be permanently protected through the APR Program. If no mitigation options are available, a financial contribution of \$10,000 for every acre being converted may be made to the APR Program or an appropriate nonprofit or municipal farmland preservation program.

Article 97 of the Massachusetts State Constitution

<https://malegislature.gov/laws/constitution>

Article 97 of the state constitution mandates that Massachusetts residents have a right to the quality of life that clean water and undeveloped open space can provide. This amendment, passed in 1972, gave the state the authority to purchase land and easements, such as those executed through the APR Program, and to pass other laws and regulations protecting these rights.

All land or conservation restrictions on land held by state agencies is protected under Article 97. Transferring these lands or restrictions requires a two-thirds vote of the Legislature and in most cases requires a parcel of equal size to be protected in exchange. EEA’s Article 97 Land Disposition Policy, passed in 1998, stipulates that there should be “no net loss of Article 97 lands under the ownership and control of the Commonwealth.”

Impact

Article 97 transfers occurred 326 times between 2007 and 2020, 27 of which were for agricultural land. Those 27 transfers comprised 179 acres disposed and 195 mitigated, for a net gain in protected land.

Chapter 61A: Assessment and Taxation of Agricultural and Horticultural Land

<https://malegislature.gov/Laws/GeneralLaws/PartI/TitleIX/Chapter61A>

Massachusetts General Laws Chapter 61A is a land classification program designed to encourage the preservation of farmland and to promote active agricultural and horticultural land use. It offers local tax benefits to property owners willing to make a long-term commitment to farming. In exchange for these benefits, the city or town where the land is located is given the right to recover some of the tax benefits afforded the owner and an option to purchase the property should the land be sold or used for any purpose other than to continue raising farm products.

To be classified as agricultural or horticultural land under Chapter 61A, a property must consist of at least five contiguous acres of land under the same ownership and be "actively devoted" to agricultural or horticultural use.

Under Chapter 61A, the landowner still pays an annual property tax to the city or town where the classified land is located. However, the tax is based on the commercial tax rate for the fiscal year applied to the value of the land for agricultural or horticultural purposes, rather than its fair market value, as would be the case if the land were not classified. The value of the land for agricultural or horticultural purposes is determined by the assessors, based on the range of values published annually by the Farmland Valuation Advisory Commission, as well as their own appraisal knowledge, judgment, and experience.

If the owner chooses to sell or convert the land to a non-agricultural use, the city or town has the right to purchase it or assign its option to purchase to a nonprofit conservation organization. The owner must pay one of two alternative penalty taxes whenever any of the land is no longer "actively devoted" to agricultural or horticultural purposes.

Chapter 128 Section 7A-F: Use of public lands

<https://malegislature.gov/Laws/GeneralLaws/PartI/TitleXIX/Chapter128/Section7A>

Enacted through the appropriations bill in 2003, this section of Massachusetts General Law provides MDAR the authority to operate its vacant lands licensing program. The law states that anyone may apply to use available vacant public land for "garden, arbor, or farm purposes," and that priority for access to land for garden and arbor purposes "shall be given to elderly persons of low income, families of low income and children between the ages of 7 and 16."

The law also states that the department shall, with other state agencies and municipalities, "compile a list of all vacant land, that in the opinion of the agencies and cities and towns, can be feasibly used for gardening, arbor culture or farming," and contract with those parties for use of that land. It also allows for private landowners to make land available to the state for use in this program.

Community Preservation Act

<https://malegislature.gov/Laws/GeneralLaws/PartI/TitleVII/Chapter44B>

<https://www.communitypreservation.org/about>

Enacted in 2000, the Community Preservation Act (CPA) is a smart-growth tool that helps communities preserve open space and historic sites, create affordable housing, and develop outdoor recreational facilities. CPA also helps strengthen the state and local economies by expanding housing opportunities and construction jobs for the Commonwealth's workforce and by supporting the tourism industry through preservation of the state's historic and natural resources.

CPA allows communities to create a local Community Preservation Fund for open-space protection, historic preservation, affordable housing, and outdoor recreation. Community preservation monies are raised locally through the imposition of a surcharge of not more than 3% of the tax levy against real property, and municipalities must adopt CPA by ballot referendum.

The CPA statute also creates a statewide Community Preservation Trust Fund, administered by the Department of Revenue, which provides distributions each year to communities that have adopted CPA. These annual disbursements serve as an incentive for communities to pass CPA.

Each CPA community creates a local Community Preservation Committee (CPC) upon adoption of the act, and this five- to nine-member board makes recommendations on CPA projects to the community's legislative body.

Impact

One hundred eighty-seven municipalities in the state have adopted CPA, which has served as an important tool for protecting farmland, including as a source of matching funds for APR projects and as a source of funding to protect community farms.

Conservation Land Tax Credit Program

<https://www.mass.gov/service-details/commonwealth-conservation-land-tax-credit-cltc>

The Conservation Land Tax Credit Program recognizes and rewards landowners who donate a real-property interest either outright or through a conservation restriction. The donation must permanently protect an important natural resource such as forest land that is in the public's interest. The program is funded for up to \$2 million a year.

All donors must apply to and be certified by EEA prior to the donation. The land must have sufficient natural resources in the public interest, and the instrument used must perpetually protect the land.

Donors are provided a tax credit of 50% of the donation value, up to \$75,000. Some APR farmers have used this resource to help cover the costs of their transactions. Land qualifying as certified land may include:

- drinking water supplies;
- wildlife habitats and biological diversity;
- agricultural and forestry production;

- recreational opportunities; or,
- land holding scenic and cultural values.

Conservation Restrictions

<https://www.mass.gov/service-details/conservation-restriction-review-program>

Conservation restrictions (CRs) are legal agreements that allow for continued ownership of a parcel of land but that restrict future development in perpetuity. The agreement, usually made between the landowner and the state or a nonprofit organization, such as a land trust which then holds the CR, is recorded with the deed and passes along to any future owners, enforced by the holder of the restriction.

Conservation restrictions can be tailored to allow or disallow non-development uses such as timber management, wildlife improvements, trail creation, and agricultural use. The value of the restriction is determined between the landowner and the CR holder, and the owner is usually compensated for the difference between the value of the land with unrestricted rights and the value post-CR. Executing a CR usually means that the taxable value of the land decreases, lowering annual property taxes for the owner.

Environmental Justice Policy

<https://www.mass.gov/service-details/environmental-justice-policy>

<https://malegislature.gov/Laws/SessionLaws/Acts/2021/Chapter8>

In June 2021, EEA updated its environmental justice policy. The policy is

based on the principle that all people have a right to be protected from environmental hazards and to live in and enjoy a clean and healthful environment regardless of race, color, national origin, income, or English language proficiency. Environmental justice is the equal protection and meaningful involvement of all people and communities with respect to the development, implementation, and enforcement of energy, climate change, and environmental laws, regulations, and policies and the equitable distribution of energy and environmental benefits and burdens.

The policy commits EEA and its agencies to giving these principles “integral consideration” in making policies and regulations, reviewing projects, and implementing programs, including grant and enforcement efforts.

In March 2021, the legislature passed, and the governor signed, An Act Creating a Next Generation Roadmap for Massachusetts Climate Policy. Among other provisions, this law codifies foundational definitions for environmental justice principles and populations, as well as environmental benefits and burdens. It also establishes an environmental justice council to monitor progress and determine when definitional changes are needed. The law emphasizes the need for resources to benefit environmental

Justice communities—those overburdened by poor air quality and disproportionately high levels of pollution—and to not further overburden those communities with a disproportionate amount of responsibility for alleviating the climate crisis.

Massachusetts Environmental Policy Act

<https://www.mass.gov/service-details/purpose-and-intent-of-mepa>

The Massachusetts Environmental Policy Act (MEPA) requires that state agencies study the environmental consequences of their actions and take all feasible measures to avoid, minimize, and mitigate damage to the environment. It applies to agriculture in cases of projects that result in “conversion of land in active agricultural use to nonagricultural use, provided the land includes soils classified as prime, state-important or unique by the United States Department of Agriculture, unless the project is accessory to active agricultural use or consists solely of one single family dwelling.” Such projects must file an Environmental Notification Form, which includes “a supporting project narrative with a detailed project description, an alternatives analysis, evaluation of potential environmental impacts, and a description of mitigation measures.” Larger projects require a more thorough Environmental Impact Review.

MEPA is not regulatory but rather provides a framework for information gathering and reporting that helps inform the permitting agencies.

When Article 97 land is under consideration for release, it must undergo a MEPA review, as must agricultural projects that require state approvals or funding.

Executive Order No. 193: Seeking to mitigate the conversion of state-owned agricultural land to other use

<https://www.mass.gov/executive-orders/no-193-seeking-to-mitigate-the-conversion-of-state-owned-agricultural-land-to-other-use>

Enacted in 1981, Executive Order 193: *Seeking to mitigate the conversion of state-owned agricultural land to other use*, ordered that state agencies “mitigate against the conversion of state-owned agricultural land” by not using public funds to do so; promoting soil and water conservation practices; identifying and making available state-owned land suitable for agricultural use; and coordinating land management policies among agencies.

Massachusetts Global Warming Solutions Act

<https://www.mass.gov/service-details/global-warming-solutions-act-background>

Passed in 2008, the Massachusetts Global Warming Solutions Act was the state’s first comprehensive regulatory program to address climate change. It established protocols and processes for measuring and

reducing greenhouse gas emissions. It also established committees to study and make recommendations on strategies for adapting to climate change and reducing greenhouse gas emissions.

Municipal Open Space Plan & Recreation Plans

<https://www.mass.gov/service-details/open-space-and-recreation-plans>

An Open Space and Recreation Plan (OSRP) is a tool through which a community plans for the future of its conservation and recreation resources. OSRPs are informed by a thorough public participation process and reflect the needs of their community members. The plans are reviewed and approved by the Commonwealth to ensure that they conform to the OSRP requirements. When a community has an approved OSRP, it becomes eligible for DCS grant programs for up to 7 years.

Right to Farm Ordinances

<https://malegislature.gov/laws/generallaws/parti/titlevii/chapter40a/section3>

State law gives municipalities the authority to pass Right to Farm bylaws that encourage the pursuit of agriculture, promote agriculture-based economic opportunities, and protect farmland within the community by allowing agricultural uses and related activities to function with minimal conflict with abutters and town agencies. The bylaws protect farmers against nuisance complaints and lawsuits by affirming that any impact caused to others through the normal practice of agriculture is offset by the benefits of farming to the neighborhood, community, and society in general.

Transfer of Development Rights

<https://www.mass.gov/service-details/smart-growth-smart-energy-toolkit-modules-transfer-of-development-rights-tdr>

Transfer of Development Rights (TDR) is intended to direct growth away from lands that should be preserved to locations well suited to higher density development. Areas that may be appropriate for additional development include pre-existing village centers or other districts that have adequate infrastructure to service new growth.

The approach begins with planning processes that identify specific preservation areas as “sending areas” and specific development districts as “receiving areas.” Once these areas are identified, zoning bylaw amendments can be adopted which authorize landowners in the sending areas to sell their development rights to landowners in the receiving areas. The amount of money required to purchase these development rights is influenced by the zoning bylaw provisions but is generally negotiated between the landowners. This approach allows market forces to enter into the transaction and requires landowners to negotiate the final value of development rights.

In return for the purchase, landowners in the sending area place a restriction on their property, which is generally recorded as a deed restriction. This restriction can be determined through explicit zoning

provisions or can be negotiated as part of the permitting process, perhaps via a special permit. Restrictions can limit the level of potential development, the type of development, or some combination of both.

Developers who buy development rights are acquiring the capacity to build higher density in a receiving area, which can mean different types of the same use (e.g., apartments in addition to single-family homes), higher densities of the same use (single-family homes on quarter-acre lots instead of one acre), or different higher intensity uses (commercial or industrial use in addition to residential).

Zoning Laws

<https://www.mass.gov/info-details/massachusetts-law-about-zoning>

State zoning laws regulate a range of issues related to farmland, including defining the activities that constitute agriculture, setting parameters on what can be done on land that is zoned as agricultural, and environmental considerations. Issues related to agritourism, farm labor housing, and parcel size are among those covered by zoning laws.

Players

Agricultural Commissions

<http://www.massagcom.org/>

Massachusetts state law allows municipalities to form agricultural commissions to promote and develop the agricultural resources of the municipality. Agricultural commissions are not regulatory but may serve as a local voice advocating for farmers, farm businesses, and farm interests; provide visibility for farms and farm businesses; help resolve farm-related problems or conflicts; and fulfill other related purposes.

Conservation Districts

<https://www.mass.gov/conservation-districts>

Massachusetts is divided into 13 conservation districts, which are independent, nonprofit, semi-governmental entities intended to be mechanisms by which cooperation can take place through landowners, state agencies, federal agencies, programs, grants, and a variety of other partners. Conservation districts provide assistance to landowners and others around resource management, land-use planning, and detailed soils information. Districts set the local priorities, administer grants, facilitate fund leveraging, and provide a variety of outreach services. Through the legal powers granted to them, districts can seek funding from public and private sources.

Each district has an elected board of supervisors who provide the delivery system for the federal technical assistance programs of NRCS as well as provide their own individually focused natural resources programs. They include conservation planning assistance on public and private lands, soil survey reports, conservation tree seedling sales, training workshops, sediment and erosion control technical assistance, and conservation education programs.

Nongovernmental Stakeholder Organizations

There are numerous nonprofit trade, planning, and advocacy organizations that play a role in agriculture, farmland, and policy in Massachusetts. These include the following:

American Farmland Trust New England brings agriculture and the environment together, taking a holistic approach to farmland and ranchland, protecting it from development, promoting environmentally sound farming practices, and keeping farmers on it. <https://farmland.org/about/how-we-work/new-england-regional-office/>

The **Massachusetts Food System Collaborative** supports collective action toward an equitable, sustainable, resilient, and connected local food system in Massachusetts. The collaborative envisions a local food system in which everyone has access to healthy food, to land to grow food, to good jobs, and to the systems in which policy decisions are made. <https://mafoodsystem.org/>

The **Massachusetts Farm Bureau Federation** works to strengthen a diverse agricultural community by supporting and advocating for Massachusetts farm families. <https://mfbf.net/>

The **Trustees of Reservations** works to preserve for public use and enjoyment properties of exceptional scenic, historic, and ecological value in Massachusetts. <https://thetrustees.org/>

The **Massachusetts Land Trust Coalition** is an association of 179 local land trusts throughout Massachusetts that preserve open space, conserve habitat, provide recreational access, protect water quality, promote sustainable agriculture and natural resource management, and engage their communities. <https://massland.org/>

Nine **Buy Local organizations** cover the state, providing critical support to Massachusetts farmers and fishermen, strengthening the local economy, preserving active working lands and waters, and making fresh, local food more available to all members of Commonwealth communities. <https://www.localfoodma.org/>

Administration Agencies

The **Department of Conservation and Recreation** manages state parks and oversees more than 450,000 acres throughout Massachusetts. It protects, promotes, and enhances the state's natural, cultural, and recreational resources. <https://www.mass.gov/orgs/department-of-conservation-recreation>

The **Department of Fish and Game** is responsible for conserving the Commonwealth's natural resources while also providing outdoor recreation opportunities to the public. <https://www.mass.gov/orgs/department-of-fish-and-game>

The **Division of Conservation Services** within the Executive Office of Energy and Environmental Affairs offers funding to cities, towns, and nonprofit groups so they can purchase and develop land for conservation or recreation purposes. DCS also provides technical assistance to people interested in conservation restrictions, the Conservation Land Tax Credit Program, and conservation districts. <https://www.mass.gov/orgs/division-of-conservation-services>

The **Department of Agricultural Resources** supports, regulates, and enhances the rich diversity of the Commonwealth's agricultural community to promote economically and environmentally sound food safety and animal health measures, and fulfill agriculture's role in energy conservation and production. <https://www.mass.gov/orgs/massachusetts-department-of-agricultural-resources>

Legislative Committees

The **Committee on Agriculture** considers all matters related to farms and farming. <https://malegislature.gov/Committees/Detail/J38>

The **Committee on Environment and Natural Resources, Agriculture** considers all matters concerning the Department of Conservation and Recreation, natural resources and the environment, air, water and noise pollution and control thereof, hunting and fishing, conservation, solid waste disposal and sewerage, and other matters. <https://malegislature.gov/Committees/Detail/J21/>

Appendix D: Plan and Report Summaries

Dozens of plans and reports related to agriculture, land use, food systems, and other issues regarding farmland have been published in the last 20 years. They have ranged in scope from focusing on all of New England, on only Massachusetts, or on regions or individual municipalities within the state. Some have presented research findings and others have been developed through engagement processes, offering recommendations compiled from input from stakeholders ranging from farmers to policymakers to technical assistance providers and others. Many of those recommendations have advanced specific ideas for supporting farmland protection and access in Massachusetts. The following summaries of plans and reports represent some of the foundational research upon which the Farmland Action Plan has been developed.

New England Reports

AFT Farms Under Threat: A New England Perspective

<https://farmland.org/project/farms-under-threat-new-england/>

February 19, 2020

Authors: Jamie Pottern and Laura Barley

This report published by American Farmland Trust (AFT) addresses the rapidly increasing loss of farmland in New England and identifies solutions to preserve farmland and create greater opportunities for current and future farmers. The report draws from several other AFT reports as well as *A New England Food Vision* and the *2017 USDA Census of Agriculture*.

Farms Under Threat illustrates that many New England states have rapidly lost farmland, and although they have scored well on the AFT Agricultural Land Protection Scorecard—which measures how states have or have not responded to the threats of agricultural land conversion—these policies do not go far enough to protect farmland in the region from development and climate change impacts. For example, Massachusetts’ Agricultural Preservation Restriction (APR) Program features the Option to Purchase at Agricultural Value, a tool that helps keep farms more affordable and accessible to farmers but does not require for localities to adopt local land-use regulations to protect agricultural resources.

Recommendations for securing a resilient and justice-driven agricultural system in New England follow several themes: more funding, models, and tools to protect farmland and keep it in the hands of farmers; flexibility to adapt land uses to a changing world; farm-based solutions that increase ecological and economic resiliency and viability; and commitments to listening, learning, and centering justice-based solutions that enable bolder collective action to be successful.

Goals/Objectives/Recommendations

- More funding for farmland protection—especially “landscape-scale conservation”—is urgently needed to protect farms and reduce fragmentation.

- New creative approaches to holding and accessing land are needed to secure New England’s farmland forever.
- Significant changes to local and regional planning laws are needed. This will require political will to create both requirements and incentives for agricultural-focused land use planning practices that can accommodate growth while directing development away from agricultural lands.
- State investments in rural water and sewer infrastructure can promote more in-fill and mixed-use development and reduce pressure on rural agricultural areas.
- More research is needed to understand how local land use planning laws relate to the trends in urban and highly-developed (UHD) and low-density residential (LDR) conversion across New England.
- Linking farmland protection eligibility and funding to new productivity, versatility, and resiliency (PVR) soils data could increase the number and type of farms eligible for protection—especially pastureland and woodlands associated with farms, which are often more difficult to protect.
- Consider allowing provisions in conservation easements for appropriate forest clearing on PVR lands, which will enable land uses to shift over time to meet the needs of a changing world.
- Consider allowing provisions in conservation easements that allow for appropriate new technologies, such as dual-use solar, that can help mitigate the climate crisis, enhance farm economic viability, and increase the resiliency of New England’s farms.
- Farms are threatened by climate change and will need increased funding and assistance to withstand impacts to their land and businesses.
- Farming in New England can be done in ways that mitigate the climate crisis. More state incentives and investments are needed in on-farm climate solutions such as dual-use solar and payments for ecosystem services. Farmers should be supported to adopt more regenerative, agroecological practices.
- Tribal communities should be supported in greater land sovereignty, and their traditional land management practices should be recognized as powerful tools to enhance climate resiliency.
- Restoring former farmland that is now wooded to be productive farmland again is important to achieve A New England Food Vision, but these steps need to be taken wisely, utilizing climate-smart techniques and practices, including agroforestry.
- Farms will need the flexibility and support to diversify their operations in order to enhance resiliency in the New England food economy.

- Continued investment in on-farm viability, through business planning, technical assistance, and implementation grants for value-added processing or direct-to-consumer marketing, will help farms stay competitive and viable.
- Protection of farmland in the most vulnerable agricultural sectors will be needed to help secure its future in agriculture, primarily livestock industries.
- Flexible easement language and accessible special permitting can help farms earn revenue from agri-tourism events without compromising the integrity of farmland.
- More support and funding for aging farmers is needed to help them retire and transfer ownership of their farms to the next generation of farmers.
- More support and funding for young and beginning farmers is needed to overcome barriers to access farmland and to farm successfully.
- More support for non-white farmers to gain access and secure tenure on land is needed, as well as more data that accurately quantifies these farmers and their specific needs.
- Dedicated funding for matching programs that forge connections between farmland owners and seekers is critical, particularly when seekers are young and/or non-white farmers.
- More tax incentives are needed to transition farms to all farmers, especially to younger beginning farmers and non-white farmers.
- Learn and learn to listen: Predominantly white organizations and institutions should further their work to learn about history, systems of oppression, and realities and needs of those of other races in New England around land, land access, and economics.
- Center and uplift the needs of those who have the least access to land and resources in policies and programs (e.g., incentivize leases to Indigenous, Black, and farmers of color; prioritize funding).
- Support and practice land repatriation for Indigenous communities.

Recommended Benchmarks/Data Collection

This data-rich report offers data related to the amount of protected land in each state, age and racial characteristics of farmers, and a farmland metric that combines measures of productivity (supports high yields, with few limitations), versatility (supports a wide range of crops), and resiliency (supports production over time in the face of challenging climate conditions).

New England Food Policy: Building a Sustainable Food System

<https://www.clf.org/publication/new-england-food-policy-building-sustainable-food-system/>

March 2014

Authors: Cris Coffin and Ben Bowell, American Farmland Trust; Christophe Courchesne, Ivy Frignoca, Max Greene, Anthony Larrapino, and Jennifer Rushlow, Conservation Law Foundation; Kathryn Ruhf, Northeast Sustainable Agriculture Working Group

This 2-year New England regional food-system policy project analyzed policy barriers and gaps around increasing production and consumption of New England-sourced food, consistent with the New England Food Vision. The report presents analysis of findings as well as policy suggestions based on research conducted and interviews with regional leaders and stakeholders.

The report provides groups and advocates with information, support, and inspiration to promote local, state, regional, and federal policy changes that could have the most significant impact on expanding production, strengthening food supply chains, and enhancing multi-state cooperation toward a more robust and resilient food system.

This report identifies areas for further research or data collection, policy changes needed at the federal and state levels, and best practices in certain New England states that should be adopted by the remaining states. The recommendations on farmland focus on four major areas: reducing farmland conversion, increasing permanent protection of farmland, expanding land access, and increasing available farmland.

The major farmland themes identified in the report include the following:

- Access to affordable farmland is a significant barrier to expanded food production in New England.
- Improving land access will require new policy tools, including tax policy changes to promote the sale or lease of land to farmers.
- Stopping the loss of productive farmland will require additional investments in farmland protection, as well as new protection strategies, strengthened farmland mitigation policies and more aggressive state incentives for urban infill development.
- Less restrictive or ambiguous local zoning ordinances are needed to encourage urban agriculture.

Goals/Objectives/Recommendations

- Allow municipalities to retain recapture penalties and direct them toward municipal farmland protection projects.
- Incorporate a right of first refusal into the program, allowing a town to purchase a farm parcel or assign the purchase to a land trust in the event the parcel is being developed.

- Through current use programs, encourage farming in urban and suburban areas and encourage more secure tenure for farmers leasing land.
- To incentivize conservation stewardship practices, adjust valuation guidelines to provide greater tax relief on land being farmed using key conservation practices or in conformance with a conservation plan.
- Provide towns with additional property tax tools to protect farmland, as Maine’s Voluntary Municipal Farm Support Program does.
- Consider changes to current use statutes to incentivize additional leasing to farmers and longer lease terms.
- Consider special provisions for farms under the state estate tax, including provisions to exempt agricultural assets from estate taxes.
- Require all local and regional plans to incorporate smart growth techniques, and require that local zoning conform to state and local comprehensive plans.
- Use technology such as GIS mapping and extrapolation software to demonstrate the effects on agriculture of current and past planning strategies, and to show the impacts of potential future policies.
- Amend state zoning laws to permit plant agriculture in all zoning districts, in order to encourage better use of agricultural land.
- Incentivize municipalities to designate growth areas that can support increased development density.
- Explore creation of sub-state regional transfer of development rights programs, and needed state-level enabling legislation, or possible incentives to promote such programs.
- States that have not done so should consider implementing a strong farmland mitigation policy that achieves the following:
 - State funds and federal funds administered by state agencies should not be used for the conversion of agricultural land to other uses when feasible alternatives are available.
 - Where farmland must be converted, mitigation should be required.
 - Any project proposed by a municipality, nonprofit or private party that requires state approval, permit or assistance should be reviewed by the state to determine if agricultural land will be converted to nonagricultural use.
 - The conversion of agricultural land to other uses should not be allowed when feasible alternatives are available.
 - If the avoidance of farmland loss is not possible, mitigation should be required.

- Options for mitigating the loss of farmland to nonagricultural uses include:
- The permanent protection of farmland on-site;
- The permanent protection of agricultural land off-site; or
- Financial contributions to a state, municipal or nonprofit farmland protection program.
- Provide additional funding for the long-term monitoring and enforcement of agricultural conservation easements; consider creating a dedicated trust fund for this purpose.
- Consider adopting an option to purchase at agricultural value (OPAV) in Purchase of Agricultural Conservation Easement (PACE) programs to keep farmland affordable for both established and new farmers.
- Encourage greater communication among state land conservation agencies, farmers and land trusts to foster better understanding of easement terms and conditions, as well as how they affect farm viability.
- Examine whether state laws can be amended to prohibit local zoning regulations from unnecessarily hampering the expansion of urban agriculture.
- Update comprehensive plans to explicitly include goals supporting urban agriculture.
- Reduce local regulatory barriers by making zoning ordinances less restrictive or ambiguous toward urban agriculture:
- Reduce special permitting obligations for agricultural land uses.
- Use interim zoning if immediate zoning relief is necessary while a more comprehensive reform effort is underway.
- When comprehensive zoning reform is not possible, more localized or temporary efforts, such as urban agriculture overlay districts, provide an opportunity to carve out large or small areas where urban agriculture is allowed regardless of underlying zoning restrictions.
- Provide frequent opportunity during policy development processes for community input and education around public health concerns related to urban soil contamination.
- Conduct more research on the potential carbon impacts of conversion of forestland to agriculture, and on ways to minimize those impacts.
- Create a regional inventory of land that was once in agriculture and is now inactive or under forest cover.
- Conduct an analysis of the Connecticut Farmland Restoration Program to assess its effectiveness in increasing agricultural production and its impact on the environment.

- Encourage expansion of conservation tillage and no-till agricultural practices to improve soil health and carbon sequestration.
- Encourage federal cost-share assistance for silvopasture practices through the Environmental Quality Incentives Program and Conservation Stewardship Program, and analyze effectiveness of practices for food production.
- At the state level, consider the priorities of current forestland protection programs to see if they might be expanded or modified to focus on the protection of prime and important agricultural soils.
- As urban land may not be enrolled in or be eligible for a state's current use property tax program, states should consider a per-acre and per-credit cap to enable all eligible landowners to participate, regardless of the amount of property tax they pay.
- States that have not yet done so should inventory state-owned lands to determine their suitability for agricultural production.
- Encourage dialogue between state and federal natural resources agencies, state agriculture agencies and farmers to address management concerns around leasing public land for agriculture.
- Analyze the potential for using state-owned forestland for silvopasture and the cultivation of agricultural products.
- Permanently protect productive state-owned farmland.
- Encourage state conservation agencies to incorporate agricultural production into their land management strategies, where feasible and appropriate to do so.
- Consider strategies to improve tenure security, such as longer or rolling lease terms and ground leases.
- Fund state PACE programs to meet demand.
- The Land Access Project has a series of recommendations aimed at making farmland more affordable for new and beginning farmers, including:
 - Include the Option to Purchase at Agricultural Value in all state PACE programs to keep farmland affordable.
 - Lift the restriction on future subdivisions of protected farms to allow appropriate subdivision of large farms into smaller farm parcels in order to provide access to land for new and beginning farmers.
 - Develop entirely new offerings within existing PACE programs and gear them specifically to new and beginning farmers.

- Consider expanding existing state individual development account programs, or establish new programs in those states without one, to specifically include the purchase of farmland as an authorized use; increase the annual cap on participant savings that can be matched.
- Analyze current use enrollment data at the state level to help policymakers evaluate program effectiveness.
- Gather and analyze feedback from landowners, assessors and municipal planning officials to assess the impact of current use programs on development patterns.
- Examine the impact of Massachusetts' right of first refusal policy to determine its effectiveness in helping towns protect farmland.
- Explore current use programs as a potential policy vehicle to expand farmland access.
- Model future land use trends and land use needs for agriculture, especially in light of climate change.
- Analyze how effective the Massachusetts refundable conservation tax credit is in protecting farmland.
- Analyze a state-level beginning farmer tax credit linked to property taxes to understand its potential impact and benefits.

A New England Food Vision

<https://foodsolutionsne.org/a-new-england-food-vision/>

2014

Authors: Brian Donahue, Joanne Burke, Molly Anderson, Amanda Beal, Tom Kelly, Mark Lapping, Hannah Ramer, Russell Libby, and Linda Berlin

A New England Food Vision describes a future in which New England produces at least half of the region's food by 2060, and no one goes hungry. In the report's vision of the future, farming and fishing are important regional economic forces; soils, forests, and waterways are cared for sustainably; healthy diets are a norm; and access to food is valued as a basic human right.

This report calls for a dramatic increase in regional food production and both lays out today's current agricultural footprint and charts two different scenarios for a New England food system in 2060: the omnivore's delight (50% self-reliant; the region grows most of its vegetables, half of its fruits, and some of its grains, beans, and oils; all of its dairy, meat, and animal products come from animals raised in the region), and regional reliance (66% self-reliant; addresses more severe economic and environmental conditions that would demand more food production and greater changes in food consumption). Each scenario covers land requirements for five categories of food production (i.e., vegetables; fruits; grains, beans, and oils; animal products; and coffee, tea, chocolate, wine, sugar, and nuts).

Putting the vision into action will involve changing food policy and using network collaboration for collective impact.

Goals/Objectives/Recommendations

- Protect farmland (and forest) through programs that purchase easements from landowners, allowing them to realize a large part of the market value of their property while it remains in their own hands, free from development. If New England is to become more self-reliant in food, we must start by protecting our remaining farmland, along with the surrounding woodlands that convey large benefits of their own. Many land trusts across New England are vigorously protecting land, and each of the six states has agricultural preservation programs as well. These programs are not lacking for willing owners who wish to protect their land; what they need is dramatically increased funding
- Promote farmland access and training programs for beginning farmers. Many young people want to get into farming and have spent years working on farms to master the skills needed, but land in New England is expensive. Young farmers also need assistance with preparing viable business plans, plus access to credit, insurance, and other support. Many aging farmers have most of their wealth and retirement assets tied up in their land, making passing the farm on to the next generation—even within the same family—very difficult. Again, state agencies and nonprofit organizations such as the American Farmland Trust, Maine Farmland Trust, New Entry Sustainable Farming Project, the Carrot Project, and Land for Good are tackling this challenge of supporting beginning farmers and connecting them to land
- Pass and enforce strong environmental regulations that, for example, protect waterways, rebuild fish stocks, and reduce carbon emissions, but combine these with incentive programs that help farmers and fishermen put these safeguards in place. Examples include payments for sequestering carbon, providing riparian buffers that absorb nutrient runoff, collecting data to help monitor fish populations, providing habitat for open-land species, and making capital improvements such as state-of-the-art manure handling. Such incentives are especially needed to level the playing field where similar measures are not in force in other regions with which New England’s producers must compete
- Support the creation of community gardens, school gardening programs, and community and educational farms. The number of people (particularly young people) who become engaged with farming and learn new attitudes toward food through community programs is even more valuable than the food that is produced.

Wildlands and Woodlands: A Vision for the New England Landscape

<https://www.wildlandsandwoodlands.org/sites/default/files/Wildlands%20and%20Woodlands%20New%20England.pdf>

Published: May 2010

Authors: David R. Foster, Brian M. Donahue, David B. Kittredge, Kathleen F. Lambert, Malcolm L. Hunter, Brian R. Hall, Lloyd C. Irland, Robert J. Lillieholm, David A. Orwig, Anthony W. D’Amato, Elizabeth A.

Colburn, Jonathan R. Thompson, James N. Levitt, Aaron M. Ellison, William S. Keeton, John D. Aber, Charles V. Cogbill, Charles T. Driscoll, Timothy J. Fahey, Clarisse M. Hart

This report advocates for conservation efforts to permanently protect 70% of New England’s forestland from development through easements, acquisitions, and incentives. While focused primarily on forestland, this report also “promotes retention of this local capacity [farmland] for production and engagement in human sustenance; it provides room for sustainably managed farm land to grow to 10% or even 15% of the landscape.”

State-Level Reports

Massachusetts Local Food Action Plan

<https://mafoodsystem.org/plan/>

December 4, 2015

Authors: Winton Pitcoff, Project Manager, Metropolitan Area Planning Council; Heidi Stucker, Food System Planner, Metropolitan Area Planning Council; Eric Hove, Strategic Initiatives Assistant Director, Metropolitan Area Planning Council; Mary Praus, Land Use Planner, Franklin Regional Council on Governments; David Elvin, AICP, Senior Planner, Pioneer Valley Planning Commission; Alex Risley Schroeder, Program Director, Massachusetts Workforce Alliance; Sarah Cluggish, Senior Advisor Project Bread; Catherine Sands, Director, Fertile Ground.

In 2013, the Massachusetts Food Policy Council launched a statewide planning process to address the opportunities and challenges facing the state’s local food system. The council engaged a planning team that facilitated broad statewide participation to develop the plan throughout 2014 and 2015. More than 1,500 people, many of whom represented food-system organizations, businesses, and agencies, participated directly at public forums around the state, in topic-specific working groups, and in a range of other ways. The planning team was charged with developing “a general framework for goals and objectives that will improve Massachusetts’ agricultural economy, enhance the resiliency of the Commonwealth’s food system, and improve the nutritional health of the State’s population,” with “a heavy, but not exclusive emphasis, on food production in the Commonwealth and the economic viability of the agricultural sector.”

The Plan’s recommendations focused largely on policy solutions that would represent steps toward a more sustainable and equitable local food system. Issues addressed included farmland protection and access, educational resources for farmers and fishermen, regulations through all food-system sectors, food access, and environmental considerations, among others.

The plan included a section on implementation, addressing the need to create a network of stakeholder organizations to collaborate with the administration and legislature to facilitate implementation of the plan.

Goals/Objectives/Recommendations

- Increase production, sale, and consumption of Massachusetts-grown foods.

- Create jobs and economic opportunity in food and farming, and improve the wages and skills of food-system workers
- Protect the land and water needed to produce food, maximize environmental benefits from agriculture and fishing, and ensure food safety.
- Reduce hunger and food insecurity, increase the availability of healthy food to all residents, and reduce food waste.

Key Farm or Farmland Recommendations or Strategies

- Reduce the municipal tax burden on farms.
- Ensure that Chapter 61A valuations are based on use value.
- Encourage communities to enact zoning bylaws that permit ancillary commercial enterprises in areas zoned for agriculture.
- Provide sufficient funding through the FVEP to enable farmers to access business planning assistance and capital for business improvements in exchange for farmland protection covenants.
- Ensure that farmers who are farming permanently protected land are able to access capital for infrastructure improvements.
- Ensure that the Agricultural Preservation Restriction (APR) Program adequately considers farm viability and the infrastructure needs of current and future farmers.
- Help farmers to more effectively mitigate damage to their farmland caused by man-made or natural events and disasters.
- Develop a formal state farmland action plan to: (1) determine the resources needed to improve state data collection around farmland trends; (2) establish a statewide baseline of land in active agricultural production, or the process for doing so with improved data collection, and a system for tracking acres of farmland in production over time; (3) set measurable goals and benchmarks related to farmland protection, retention, and access; and (4) recommend state program spending levels to meet those goals and benchmarks.
- Increase the use of TDRs as a farmland protection tool.
- Increase the pace of farmland protection through the APR Program, including small productive farmland parcels, especially in eastern Massachusetts and those on the edges of population centers.
- Evaluate and consider the elimination of state capital gains tax on the sale of APRs.
- Improve dialogue and information sharing between and among farm and conservation organizations, the ALPC, and state and federal agencies about farmland protection issues and challenges.

- Develop a formal state farmland action plan to: (1) determine the resources needed to improve state data collection around farmland trends; (2) establish a statewide baseline of land in active agricultural production, or the process for doing so with improved data collection, and a system for tracking acres of farmland in production over time; (3) set measurable goals and benchmarks related to farmland protection, retention, and access; and (4) recommend state program spending levels to meet those goals and benchmarks.
- Encourage use of suitable publicly-owned land for farming.
- Build on existing models to create preferential zoning and ordinances to support urban agriculture, with guidance from key sector experts such as beekeepers, poultry farmers, and others familiar with the challenges of urban farming.
- Strengthen state farmland loss mitigation and land disposition policies.
- Review state policies and incentives around renewable alternative energy (e.g., solar) development to better harmonize state goals around renewable energy development and natural resource protection, including farmland.
- Keep conserved farmland in active agricultural use.
- Improve understanding among the agriculture and conservation communities of state and federal wetlands laws and regulations and their impact on farmland.
- Help and incentivize farmers and farmland owners to keep their land in farming as it transfers out of their ownership.
- Help farmers and farmland owners restore productive farmland without negative environmental impacts.
- Reduce Chapter 61A minimum requirement to encourage farming on smaller parcels in all communities—urban, suburban, and rural.
- Encourage more land trusts and municipalities to lease land they own to farmers.
- Determine how to support the ability of farmers to live within reasonable proximity to their farm, helping to make their farm tenure more secure.
- Provide improved and streamlined farm-linking systems and matching services so that farmland owners who want to sell or lease land to a farmer are easily able to do so, and farm seekers have a way to easily identify potential land for sale or lease.
- Ensure that commercial agriculture is viable on land protected with state-approved CRs, and allow more landowners to donate APRs.
- Focus the development of urban agriculture on vacant and underutilized land in gateway cities and other cities.

- Develop community land trusts in gateway cities and other municipalities to provide greater access to and long-term community control of land and to give farmers the opportunity to gain equity in their farms. See the Greater Boston Community Land Trust Network or Dudley Street Neighborhood Initiative for examples.
- Provide more education and incentives for developers and municipalities to incorporate food production opportunities into new and redeveloped urban properties.
- Encourage the creation and maintenance of local community gardens within walking distance of low-income neighborhoods.
- Enable farmers and farmland owners to make full use of state and federal conservation programs.
- Expand private and public markets for carbon credits and water quality credits to provide additional revenue sources for farmers while protecting the environment.
- Research the relative greenhouse gas emissions from agriculture and from commercial or residential development to make the case that protecting farmland is a viable strategy for reducing greenhouse gasses.

Recommended Benchmarks/Data Collection

The report recommended numerous farmland-related metrics to track, including:

- land protected by the APR program;
- farmland under permanent protection;
- permanently protected prime farmland soils;
- land in active food production (not land in farms, which include woodlands and wetlands);
- publicly-owned land open to farming;
- eligible farmland in Chapter 61;
- farmland converted to development; and,
- urban land in food production.

The plan did not set benchmarks or include data for these metrics.

Status of Implementation

There was no formal monitoring plan established beyond the recommendations made for metrics, cited earlier. The plan did have a set of recommendations related to implementation, a number of which have been met, including the formation of the Massachusetts Food System Collaborative and the legislative Food System Caucus, and the integration of plan goals into grantmaking processes at MDAR.

Progress has been made on many of the recommendations. Modifications to the estate tax in 2018 followed the plan’s recommendations, for example. In many cases, progress is represented by legislation that has been filed but not yet passed. For instance, a constitutional amendment to address acreage limits in state farmland plans has been proposed.

At the administration level, a number of recommendations have been implemented. Regulatory changes have been made to the APR program which address some of the plan’s recommendations as well. MDAR’s stewardship staff have integrated succession planning into their work. Governor Baker established a Transfer of Development Rights Revolving Fund, though it has not yet been funded. The development of this document, a farmland action plan, was first recommended in the Food Plan.

The legislative Food System Caucus, the Food Policy Council, and the Massachusetts Food System Collaborative all work to implement elements of the plan based on their capacities. The caucus endorses bills that support the plan’s recommendations. The collaborative facilitates advocacy campaigns in support of the plan’s goals. The council convenes representatives from many public and private stakeholders to discuss and amplify key issues raised in the plan.

Challenges to Implementation and Lessons Learned

The plan offered a very ambitious set of recommendations, many of which require substantial public investment. Conditions have changed significantly in the more than 6 years since the plan was released, and some advocates feel it should be revised to bring it up to date with the current political landscape.

Policies and Legislation

A number of the policies and legislation that have resulted from the plan are referenced earlier in the Status section. The Massachusetts Food System Collaborative published a report in 2018 that detailed those actions as well as many others (<https://mafoodsystem.org/projects/pubsecprogress2018/>). The Food System Caucus tracks pending legislation at <https://www.mafoodsystemcaucus.com/mentor-team>.

Preparing for the Future of Work in the Commonwealth of Massachusetts

<https://www.mass.gov/doc/future-of-work-in-massachusetts-report/download>

July 2021

This report was commissioned by the Baker Administration to evaluate the ways that the COVID-19 pandemic has changed work habits in Massachusetts as the Commonwealth emerges from the pandemic. The report draws heavily from McKinsey & Co. reports and the work of an advisory council made up of representatives from universities, high-tech companies, real estate, and health-care institutions.

The report provides a fact base and assessment of current and future trends to inform any workforce and economic interventions that might be needed to address recent challenges and to prepare the state and its citizens for a successful future. It concludes that changing ways of working—such as hybrid and remote work—may shift the “center of gravity” away from the urban core. At the same time, changes in the economic landscape will mean that expansive workforce training will be needed to connect workers with the skills they need for the future economy, with potentially 300,000–400,000 people needing to

transition to different occupations or occupational categories over the next decade. Meanwhile, the report finds that the high cost of housing will remain a challenge—as will the need to ensure that all communities can share equitably in the Commonwealth’s growth. The report estimates that the Commonwealth will need to produce 125,000–200,000 housing units by 2030.

Recommendations for implementation include funding allocations from the American Rescue Plan Act (ARPA) to the state, particularly toward housing, workforce training, downtown development and economic growth, and substance-use/behavioral health programming.

Goals/Objectives/Recommendations

This work aims to provide a fact base and assessment of current and future trends to inform any workforce and economic interventions that might be needed to address recent challenges and to prepare the state and its citizens for a successful future.

Key Recommendations or Strategies Relative to Farmland

- More time will be spent in residential areas, which will impact where housing is needed and the types of housing available.
- Public transit usage, especially commuter rail, will decrease.
- Reduced business travel is expected to impact the food sector.
- There is a need to anticipate and prepare for lower population growth due to lower international immigration and people moving to lower cost locations in the United States.

Potential Implications for Farmland Planning Efforts

While this report does not refer to farmland explicitly, there are significant implications for farmland based upon its findings. Population dispersal away from urban centers and the need for more housing will translate to significant pressure on farmland, leading to potential conversion and higher prices.

Recommended Benchmarks/Data Collection

- Capacity-constrained housing options:
- Monthly building permits
- Monthly housing reports from trusted partners
- Yearly ACS indicators, including total stock and occupied stock by type and vacancy rates

Status of Implementation

The report recommends quarterly tracking of the previously mentioned metrics to measure progress.

No new bodies were established to implement the report’s recommendations.

Policies and Legislation

Both the Baker Administration and the legislature used this report to guide spending of ARPA and other emergency-relief funds.

Massachusetts 2050 Decarbonization Roadmap

<https://www.mass.gov/info-details/ma-decarbonization-roadmap>

December 2020

This report was produced by the Executive Office of Energy and Environmental Affairs (EEA) and The Cadmus Group. In addition, members of the Global Warming Solutions Act Implementation Advisory Committee (IAC) and IAC Work Groups, technical experts from various universities, and state agency staff contributed to the report.

The EEA hosted a series of public meetings to gather feedback on some of the main components of the report. The IAC is made up of representatives from many sectors, including commercial, industrial, and manufacturing; transportation; low-income consumers and EJ communities; energy generation, distribution, and efficiency; environmental protection and conservation; and local government and academic institutions.

The report notes that while emissions from the agricultural sector are a small contributor to the Commonwealth's overall emissions (0.5%), they are highly uncertain due to variability in agricultural activity and limited availability of data. Dense development is encouraged instead of encroaching onto forested and farm land. Protecting vulnerable soil carbon stocks and deploying soil health best practices on agricultural land and in-built environments could increase total net sequestration ability in 2050. Regenerative farming practices that increase soil carbon stocks on managed farm and pasture lands is also one possible policy solution that has low-cost but low-bulk potential in Massachusetts.

Key Findings Related to Farms or Farmland

- Regenerative farming practices that increase soil carbon stocks on managed farm and pasture lands are well-established and easily applicable, but a better understanding of soil carbon storage as well as improved measurement techniques are needed.
- It is important to gain a more complete accounting of land-use impacts on human and natural systems to understand the long-term systemic effects and the balance of ecosystem benefits.
- Exploring the treatment of atmospheric carbon removals outside of Massachusetts' borders is also critical.

The Massachusetts Healthy Soils Action Plan

Released January 2023 - [download \(mass.gov\)](#)

The Healthy Soils Action Plan assesses and makes recommendations for five major land covers of the Commonwealth: Natural and Working Lands includes Forests, Wetlands, and Agriculture, while Developed Landscapes include Recreational/Ornamental and Impervious/Urbanized Lands. The project team sought to understand threats and opportunities to soil health through the three lenses of Land Conversion, Climate Change and Natural Hazards, and Soil Management, and make recommendations consistent with those findings. Additionally, because carbon content is one of the few universally agreed-upon indicators of soil health and can be assessed at a coarse scale, there are findings and recommendations that speak specifically to protecting and enhancing soil organic carbon within the five land covers.

Goals/Objectives/Recommendations

- Seek to permanently protect undeveloped Prime farmland soils and soils of statewide importance .
- Limit the conversion of forests, wetlands, and farmlands.
- Seek to expand annual funding for the Agricultural Protection Restriction program and to raise the cap on the Commonwealth Conservation Land Tax Credit.
- Expand technical, financial, educational, and material support for land managers of all types to employ soil-smart practices.
- Incentivize zoning & development strategies that increase density.
- Accelerate efforts to increase the viability of farm livelihoods.

Massachusetts Rural Policy Plan

<https://www.mass.gov/service-details/rural-policy-advisory-commission-rpac>

October 2019

Author: Rural Policy Advisory Commission

This report identifies best practices in Massachusetts and across the United States regarding issues relating to rural communities, identifies current policies and programs in place, and makes recommendations around policy and funding. Recommendations include expanding UMass technical assistance to farmers, prioritizing policies that address farmland adaptation to climate change, increasing engagement of farmers in policymaking, and strengthening the economy by focusing on the economic development potential of the agricultural sector.

Listening sessions were held at 10 locations across the Commonwealth in late 2018 and into 2019, with more than 20 stakeholder meetings held to refine the information and develop the recommendations in this first-of-its-kind rural policy plan for Massachusetts.

The drafting Rural Policy Advisory Commission is made up of the following: one member from the House of Representatives and one member from the Senate (or a designee); the Secretary of the Executive Office of Housing and Economic Development (EOHED) or their designee; eight gubernatorial appointees from regional planning agencies (RPAs) serving rural communities (i.e., Berkshires, Cape Cod, Central Massachusetts, Franklin County, Martha's Vineyard, Montachusett, Nantucket, and the Pioneer Valley); and four at-large members.

Key Findings Related to Farms or Farmland

- Full participation in the movement toward small-scale farming and locally made food and beverage products is an asset to rural areas in Massachusetts.
- A lack of workers to meet the needs of businesses, including farming businesses, poses a key challenge.

Goals/Objectives/Recommendations

- Empower rural areas with policies and programs to make proactive land-use decisions that support resilient development.
- Maintain working lands and recognize their value.
- Manage the interconnectedness of rural, urban, and suburban lands.
- Increase funding to assist farmers with aggregation, marketing, and delivery of products by setting aside small-business funds exclusively for the agriculture/aquaculture industry.
- Create the Massachusetts Office of Rural Policy by enacting An Act Relative to the Rural Policy Advisory Commission. The creation of commission has given greater focus to the challenges faced by rural communities, businesses, and residents, but the commission's work is limited as an unstaffed, unfunded, appointed commission. An Office of Rural Policy will provide consistent, productive focus on rural issues in the Commonwealth.
- Significantly expand UMass technical assistance services for farms and forests by supporting county conservation districts, or by modeling another approach such as the Vermont Working Lands Enterprise Initiative. Robust technical assistance for farmers and foresters is essential for communicating the research being conducted at UMass and Harvard Forests, for continuing critical services such as soils testing, and for propagating more climate-resilient crops and tree species.
- Prioritize policies that address farmland and fishery adaptation to climate change and new market conditions such as the use of cranberry operations for wild rice, blueberries, or other crops.
- Increase the engagement of farmers and foresters in Municipal Vulnerability Program (MVP) work, open-space, and other planning projects. These groups are rural land stewards but are

not always well represented in MVP core teams. When these voices are left out, opportunities are missed for incorporating farming and forestry as companion land management practices in open-space planning.

- Strengthen the working lands economy by focusing on the economic development potential of the agricultural and woodlot processing sector. Explore the possibility of using industrial revenue bonds to set up a cross-laminated timber (CLT) manufacturing facility, and meat and poultry processing plants. Without these, growing the working lands economy is impeded. Model the Vermont Working Lands Enterprise Initiative by directing grants and loans to small and local forestry and farming operations.
- Remove rollback taxes when moving land into permanent protection as part of cluster development projects. Correct an oversight in the Chapter 61 program that makes large landowners pay rollback taxes on an entire land tract when seeking to move a portion of it into permanent protection in the context of a cluster development project. Rollbacks for the entire development area are a disincentive to utilizing a cluster development option that is often the best development outcome.

The Resilient Lands Initiative: Expanding Nature's Benefits Across the Commonwealth

mass.gov/doc/the-resilient-lands-initiative-2023/download

January 2023

Author: Resilient Lands Initiative, Massachusetts Executive Office of Energy and the Environment

The Resilient Lands Initiative (RLI) vision is to protect and improve the quality of life for residents of every Massachusetts community through land conservation initiatives that conserve and enhance the health of forests, farms, and soils. These critical resources protect human and natural communities, protect drinking water and food supplies, provide healthy outdoor recreation, power a green economy, support municipal fiscal stability, protect wildlife habitat, store more carbon, and reduce vulnerability to climate impacts such as urban heat islands, flooding, sea-level rise, drought, and air and water pollution. The economy of Massachusetts, along with the health and welfare of its residents, depends on these “goods and services” that natural systems provide. Striving for an overall expansion of nature across the Commonwealth, namely in areas with environmental justice populations and especially as climate impacts increase, is critical to the future quality of life for all Massachusetts residents.

This initiative is distinct because its vision and action plan were approached through two lenses: (1) justice, equity, diversity, and inclusion, and (2) climate change. The initiative seeks to be more inclusive of the needs of residents who are often at the margins of land conservation and restoration plans, especially in environmental justice neighborhoods.

The recommendations focus on conserving natural landscapes most critical to nature and human well-being and improving the quality of life in cities and towns through a range of greening initiatives. The “No Net Loss of Farms and Forests” strategy (the first in the nation) reduces land conversion to sprawl

development in rural and suburban areas via smart-growth incentives and focuses farm and forest expansion projects on green environmental justice and other underserved neighborhoods. In this way, the RLI conserves natural landscapes, expands rural natural resource jobs and community stability, and expands the range of values that conserved landscapes bring to people as the climate changes while focusing equally on making densely populated areas cooler, greener, and more livable. These benefits are critical to reducing vulnerability to climate change and adapting to its impacts, including extreme heat and precipitation, drought, and air pollution.

Goals/Objectives/Recommendations

- **No Net Loss of Farms and Forests:** Pursue “No Net Loss” of farms and forests through smart-growth incentives and investments in new urban and riverine green space:
- Programs to achieve this strategy will focus on efficient land use that supports natural resource-based economic development in rural communities, strong tax bases in all communities, sustainable production of additional housing in Gateway Cities and other suitable locations, vibrant cities and village and town centers, and expanded green spaces so all residents have the benefits of close-by green space and the health, economic, and climate resilience benefits it provides. In addition, policies and programs that enable the mitigation of farm and forest land development will be explored.
- **Focus on Food Systems:** Expand the amount, quality, and accessibility of locally grown food, especially in food deserts, and ready local food production and delivery systems (farms, fisheries and aquaculture) for future stress from droughts, floods, storms, sea-level rise, and other climate-change impacts:
 - Create a “Vacant Lots to Farms” program in city “food deserts” to turn these liabilities into solutions to food insecurity.
 - Expand the capacity and funding of the Agricultural Preservation Restriction Program to protect “whole farms” (farm and forest land, infrastructure, and housing) and make them affordable (with rolling admissions and funding for non-federal projects).
 - Expand MDAR’s Urban Farming Program.
 - Create a small-grant program for community farms and gardens.
- **Focus on Natural Carbon Storage and Climate Resilience:** Achieve a significant increase in carbon storage and climate resilience in forests, farms, parks, and urban green space and wetlands (coastal and inland) and soils:
 - Adopt the recommendation of the Healthy Soils Action Plan, including incentives for soil best practices and further reduction of wetland conversions.

Implementation

Attainment of the Resilient Lands Vision will be supported by state programs, agencies, and grants over the next 10 years. It will encourage a whole landscape and watershed approach to climate resilience projects where projects are best done at a multi-municipal level.

The implementation of the Resilient Lands Vision will be led by steering committee and focus group members who represent the government, nonprofit, educational, private, and voluntary sectors. The plan itself contains an implementation guide with models for implementation sourced from within and outside Massachusetts.

Massachusetts Clean Energy and Climate Plan for 2025 and 2030

<https://www.mass.gov/doc/clean-energy-and-climate-plan-for-2025-and-2030/download>

June 30, 2022

In 2021, Governor Charlie Baker signed into law An Act Creating a Next-Generation Roadmap for Massachusetts Climate Policy, which amends the Global Warming Solutions Act of 2008 and requires the Secretary of Energy and Environmental Affairs to set limits on greenhouse gas (GHG) emissions for 2025 and 2030, including both economy-wide emissions reduction requirements and specific limits on major sources of global warming pollution. These statutory limits must be accompanied by a comprehensive plan to achieve the required emissions reductions. As part of a letter issued contemporaneously with the Clean Energy and Climate Plan for 2025 and 2030 (2025/2030 CECP), the Secretary of the Executive Office of Energy and Environmental Affairs has determined that the Commonwealth's economy-wide emissions limit will be a 33% reduction from 1990 level in 2025, and a 50% reduction in 2030.

This 2025/2030 CECP represents the Baker-Polito Administration's comprehensive plan to achieve the Commonwealth's emissions reduction requirements. It builds on the Administration's progress setting nation-leading goals for energy efficiency and clean energy and making game changing investments in new technologies such as offshore wind. The Plan expresses the state's collective vision for a 2050 future in which there is minimal reliance on fossil fuels for heating homes, powering vehicles, and operating the electric grid. This Plan reflects confidence that Massachusetts can help lead the clean energy transition and that doing so will mean more well-paying jobs, improved public health, reduced consumer costs, and better quality of life for all residents.

This 2025/2030 CECP includes a portfolio of strategies and policies designed to achieve sector-specific GHG emissions sublimits, including for transportation, buildings, electricity generation, industrial emissions, and non-energy emission sources such as leaks of natural gas and refrigerants. Recognizing the important role that carbon sequestration will play in achieving net-zero emissions, the Plan also includes goals and actions to reduce GHG emissions and increase carbon sequestration on natural and working lands (NWL).

Goals/Objectives/Recommendations

- "Natural and working lands' (NWL) ability to sequester emissions will be a critical component of achieving net-zero GHG emissions in Massachusetts." The CECP seeks to permanently

conserve at least 28% and 30% of undeveloped land and water by 2025 and 2030, respectively.

- Consider expanding the APR Program beyond its current model to protect farms that currently do not qualify for APR due to soils, acreage, land values, ownership, forest, and other criteria.
- By the end of 2024, EEA will develop and seek to advance new legislation to support the goal of No Net Loss of Forest and Farmland. This will include amendments to the Chapter 61 and 61A current-use program to allow parcels of two acres or more to qualify (current tax incentives are for conserving forest land of 10+ acres and farmland of 5+ acres). This will also include a state payment in lieu of taxes (PILOT) bonus to facilitate land protection in rural communities with a low tax base and high percentage of state conservation land.
- Increase the annual budget of land protection grants and programs through state and federal funding sources.
- Raise the state Conservation Land Tax Credit cap.
- Through the Massachusetts Coordinated Soil Health Program beginning in 2024, MDAR will seek to provide additional financial incentives to farmers for implementing healthy soils practices that increase carbon storage in agricultural soils.

Final Informational Report about New England PACE Programs and Recommendations for the Massachusetts APR Program

August 19, 2021

The American Farmland Trust, developed a memo based upon informational interviews with executive directors of state Purchase of Agricultural Conservation Easement (PACE) programs. The purpose of this document is to provide a summary of the information gathered about how other state PACE programs function, as well as to provide recommendations for best practices.

Overall, four main ways to enhance the APR program were identified:

- Become a certified entity with NRCS or seek alternative funds to decrease time-to-close and bureaucracy challenges.
- Create a grant program to fund easement purchases by land trusts, municipalities, etc. to decrease acquisition and stewardship burden.
- Employ a greater number of building envelopes to decrease violations, increase affordability, and augment non-agricultural usage flexibility.
- Ease stewardship responsibilities by decreasing the internal monitoring requirement, pursuing remote monitoring, hiring more stewardship staff, or reimbursing partner staff time.

Goals/Objectives/Recommendations

- Perhaps the most impactful way to improve the Massachusetts APR program would be to increase the amount of reliable funding available. One way to accomplish this would be to pursue bringing fund dedication to the ballot, as New Jersey did in 2014. Increased funding could decrease Massachusetts' reliance on NRCS. This could have beneficial impacts on Massachusetts' time-to-close and on stewardship regulations. If increasing funding through improved fund dedication is not feasible, becoming a certified entity with NRCS is recommended. This status allows states to close on an easement without the need for NRCS to review due diligence and bypasses the Internal Controls Review process.
- Massachusetts could benefit from creating a grant program to fund easement purchase by land trusts, municipalities, or other organizations. Grantees could be required to use the Massachusetts APR template and other best practices. Grantees could also be responsible for the stewardship of the easement. If grantees provide 50% of the project funding, such a grant program could serve as a state-only funding option. This would decrease the time-to-close and bureaucracy-related consequences of partnering with NRCS. Additionally, it would decrease stewardship responsibilities for new easements.
- Although Massachusetts does not have a functioning county system, it could be beneficial to learn from other states about partnerships concerning the application process and eligibility. Potential organizations to partner with could include land trusts and municipalities. In other states, the organization (county, land trust, etc.), rather than the landowner, applies for an easement. Using something akin to the county system could decrease hurdles to eligibility as well as allow for more nuanced priorities specific to the region in which the farm is located.
- The use of envelopes on easement properties appears to be very advantageous. They permit farmers to have a non-agricultural revenue source, could allow for commercial solar, and generally decrease violations on easement properties. They also have important applications for affordability. Many states recognize the importance of having a home located on the farm property. Envelopes that restrict house size and location can prevent large easement value increases while retaining a home with the farm. There is no perfect solution for maintaining affordable easements for purchase by future farmers, but one model that is beginning to be used is that of a lifetime lease. In this model, the state or other organization owns the land, while the farmers own all the buildings. The land is then leased to the farmers on a lifetime basis, and new farmers only need to purchase the buildings, not the land.
- Many states are grappling with the question of allowing commercial solar on easement properties. Currently, it is not clear how commercial solar would affect agricultural uses and if the two purposes could coexist. Because of this, placing solar farms on preserved farmland is not recommended. Agritourism is also becoming a larger concern for many programs. A potential solution to this problem could be increased envelope usage. Constructing easements with site-approved envelopes could allow for agritourism as well as special-occasion events without violating the easement terms.
- As easement terms are difficult and costly to enforce, Massachusetts could explore the possibility of stewardship payments to landowners. With financial incentives for easement owners to avoid violations, it is possible that the need for enforcement would decrease.

Programs could also help with correcting violations rather than resorting to punishment. Additionally, more funding could be allotted to attorneys to pursue enforcement.

- Issues pertaining to stewardship were the most common concern for the contacted states. Four of the six states said they have insufficient stewardship staff. There are a few possibilities for easing stewardship strain. Increased stewardship positions could be created. Site visit requirements could be decreased by discontinuing new partnerships with NRCS. Remote, rather than in-person, monitoring could be investigated. Massachusetts could also exercise its ability to reimburse partner staff time, allowing the state to shift stewardship responsibilities to land trusts or municipalities.

Massachusetts Farm Bureau APR Owners Survey

<https://mfbf.net/apr-survey-information-and-results>

In early 2017, the Massachusetts Farm Bureau Federation (MFBF) conducted a survey of agricultural preservation restriction (APR) owners. A hardcopy of the survey was mailed to all APR owners as identified by the Department of Agricultural Resources (DAR), obtained via public records request. MFBF also posted a copy of the survey online and promoted its availability via social media, at meetings, and through their newsletter. One hundred ninety-seven responses were received, representing 27% of known APR farms as identified by MDAR.

The survey was designed to gather basic background information about respondents relative to their ownership and use of APR land, their perceptions of the APR, and their positive and negative experiences with the administration of the program.

Key Findings Related to Farms or Farmland

Survey question: “Do you feel that the restrictions the state is enforcing or attempting to enforce on your property exceed those to which you agreed?”

- Yes: 60, or 31%
- No: 125, or 63%
- Other: 12, or 6%

Of those who reported that they felt the restrictions were greater than what they had agreed to, many described changing restrictions. Some claimed that the Department added restrictions that did not exist when they entered/bought an APR. In some cases, they felt they were being denied the ability to do something they believed they had the right to do in the contract—for instance, building a home on a house lot. The second largest category of complaints fell under what could be best described as “restrictions on diversification.” These responses criticized restrictions or prohibitions on retail sales, agritourism, nursery production, etc.

Several respondents expressed concern about the “right-of-first-refusal/option to purchase at ag value.” This is a relatively new inclusion in APR contracts which allows DAR to disqualify potential APR buyers and substitute new buyers who they feel are better suited to own the farm. Some respondents

complained about this provision, feeling they should be able to choose their buyer. Others complained that once DAR rejected their buyer, they did not have the ability to take the property off the market.

Survey question: “Has anyone at the state ever approached you to amend an existing APR contract?”

- Yes: 26, or 13%
- No: 165, or 84%
- No response: 6, or 3%

The Farm Bureau has received a fair number of reports that DAR staff have approached APR landowners to amend older contracts with newer ones, either when they had purchased an existing APR or in relation to a special permit request. This is significant, as new contracts typically have more restrictions than older contracts. Many who reported such interactions said they felt the attempts were coercive or underhanded, especially since the implications of signing a new contract were not explained.

Survey question: “Has someone from the state ever told you to stop an activity on your APR land or farm, or prevented you from doing something on your land/farm that you wanted to do?”

- Yes: 48, or 24%
- No: 144, or 73%

The largest category of such conflicts arose around what can be described as “maintenance or improvements” to the land. The descriptions provided often centered on the movement of soil on the property and the construction of buildings.

The second largest category of responses was in the area of agritourism, with reports of conflicts with DAR over events such as farm-to-table dinners, foot races, corn mazes, cross-country skiing, etc. Such events would typically require a special permit. It is worth noting that a change in legislation in 2014 allows farms that are denied a special permit by DAR to appeal the decision to the Agricultural Lands Preservation Committee (ALPC). Some of these reports might pre-date this legislation. The Farm Bureau has heard anecdotal reports of APR owners being told by DAR staff that an event “would not be approved,” without informing the owner that they could file a special permit application.

A number of respondents reported conflicts around proposed solar/wind operations on APR farms.

Survey question: “As a farmer, what are the main drawbacks of the APR program you have experienced?”

- The largest number of reported drawbacks fell into the category of program restrictiveness, with complaints about barriers to farmer and worker housing, composting, commercial horse operations, agritourism, renewable energy, etc.
- Ranking closely behind general restrictions, respondents complained about bureaucracy in dealing with MDAR. Complaints covered a gamut of issues, including processes being too complicated, lengthy approval timeframes, uncertainty with changing rules, difficulty in

getting MDAR to make a decision or determination on requests, and time/complexity of periodic inspections.

- A fair number of people complained about a lack of understanding of agriculture by MDAR staff and the general public.
- Respondents commented on the decreased value of land once it had been put under restriction.

Survey question: “As a farmer, what are the main benefits of the APR program you have experienced?”

- The highest number of respondents reported that the greatest benefit was the ability to keep the land in agriculture and out of development.
- The second largest group of respondents reported no benefit to the APR program.
- The third largest group of respondents listed lower taxes as a benefit. This is a questionable benefit, as APR land that is in agriculture is eligible for Chapter 61a rates. In no situation that we are aware of would APR tax rates be lower than those listed in Chapter 61a. If APR land were not in production, it would likely be taxed at a lower rate than land not enrolled in Chapter 61a.
- A significant number of respondents listed the ability to have money to invest in the land as a benefit.

Survey question: “Do you think your operation would be more profitable if there were not a restriction on the land?”

- More: 53, or 27%
- Less: 19, or 10%
- Same: 112, or 57%
- Other: 13, or 6%

Those who responded that they would be more profitable if their land were not in APR fell into three general categories:

- The vast majority of respondents stated that the rules about what could and could not take place on the farm, and the time and expense of obtaining permission, were barriers to profitability. The inability or difficulty of holding agritourism events, erecting housing and farm buildings, and getting permission for such activities were listed. The inability to put in solar facilities that were compatible with agricultural activities or on unproductive land was relayed as well.
- Several lamented the inability to develop the land for housing. The basic premise of the program is to keep the land from being developed in such a manner. Others stated they would be more profitable if they were allowed to develop solar on the property. The

comments suggest that the intent was to put solar arrays on productive APR land, which, similarly, is in conflict with the basic premise of the program.

- Several people mentioned the lack of capital as a hindrance.

Those who responded that they would be less profitable if the land were not in APR felt:

- they would be more burdened by debt if the land were in APR; or
- they profited from the investments they had been able to make with the infusion of APR Funds.

Potential for Conservation Practices to Reduce Greenhouse Gas Emissions on Croplands—Massachusetts

July 27, 2020

Authors: J. Moore-Kucera, D.K. Manter, T. Brown, E. Cole

The report authors developed an interactive Carbon Reduction Potential Evaluation (CaRPE) tool to quantify and visualize county-level greenhouse gas (GHG) emission reductions resulting from the implementation of a suite of cropland and grazing land management practices. This report focuses exclusively on cropland practices, with an emphasis on tillage and cover crop adoption given that those adoption rates are specifically provided in the 2017 Agricultural Census data.

Goals/Objectives/Recommendations

The intent of this report is to provide county-level GHG emission estimates for cropland which states can use to evaluate potential GHG reductions, assess the impact of existing and new programs, and inform current and future conservation programs to provide greater GHG offset benefits, as appropriate. Implementation of agricultural conservation practices on croplands has the potential to provide short- and long-term GHG mitigation opportunities through reductions in GHG emissions and sequestration of carbon in soils. How these practices differ in their mitigation potential and how these scale over the landscape are not easily estimated at the state and county levels. The overarching goal of this report is to provide a framework for estimating county-level GHG mitigation potential of various *NRCS cropland conservation practices* based on current adoption levels and scenarios of additional practice adoption. All cropland values and climate benefits in this report are estimated values and should be used for general planning purposes only.

Key Findings Related to Farms or Farmland

- In Massachusetts, cropland accounted for about 171,000 acres, and pastureland comprised 46,341 acres. A majority of cropland in Massachusetts was non-irrigated; in 2017, there was approximately 23,000 acres of irrigated cropland and 147,000 acres of non-irrigated cropland. A majority of the pastureland was also non-irrigated. Cover cropping was practiced on 17,332 acres, or 10.1% of total cropland or 18.7% of cropland minus hayland acres.

- Higher adoption rates of cover crops tended to be located in western Massachusetts. However, when the counties were sorted by cover crop acres instead of percent cover-crop adoption, the top 10 counties or county order was slightly different. Sorted by cover crop acres, the 10 counties with the greatest cover crop acres had a combined 17,159 acres with cover crops.
- The top 10 counties for percent no-tillage adoption had a range of 15% to 36% adoption. The adoption rate ranged from 13% to 58% for the 10 counties with the highest reduced tillage adoption rates. In the 10 counties with the highest adoption rates, there were 6,827 acres in no-tillage and 9,946 acres in reduced tillage. However, when the data were sorted by acres under no-tillage or reduced tillage, rather than by percent adoption, the location of the top 10 counties differed. While southeastern Massachusetts had some of the highest no-tillage adoption rates in 2017, when sorted by acres, they had some of the lowest reported acreage.
- Based on adoption percentage, reduced tillage acreage appeared to be more concentrated in the eastern portion of the state. However, there was a greater amount of no-tillage acreage practiced in central and western Massachusetts
- From a GHG reduction perspective, current adoption of cover crops and conservation tillage in Massachusetts has resulted in a potential reduction of 7,000–10,000 tonnes CO₂e yr⁻¹. If all the remaining cropland had a legume cover crop planted and the land currently in conventional tillage or reduced tillage went to no-tillage, the state could reduce GHG emissions by an additional 34,000 tonnes CO₂e yr⁻¹ of agricultural emissions for the state, leading to an overall GHG reduction potential of up to approximately 44,000 tonnes CO₂e yr⁻¹ for just these two USDA-NRCS supported conservation practices.
- States should work with AFT as well as local experts/knowledge to develop opportunities that may be more practical/feasible for state-specific agricultural conditions.

Massachusetts' Local Food System: Perspectives on Resilience and Recovery

<https://mafoodsystem.org/news/massachusetts-local-food-system-perspectives-on-resilience-and-recovery/>

October 2020

Authors: Winton Pitcoff, Brittany Peats, Becca Miller, and Jeff Cole

This report is based on 35 listening sessions held with more than 300 participants, representing over 250 organizations and institutions that support farms, food producers, businesses, and communities across Massachusetts. Each listening session participant was asked to respond to the same set of questions and to consider using a racial equity lens, recognizing that current food system policies and practices have contributed to systemic inequities in communities of color. The input received was organized into a set of problem statements and recommendations, sorted thematically, and shared with all the networks that the Massachusetts Food System Collaborative invited to participate, regardless of their attendance at listening sessions. Recommendations relating to farmland focused on state programs, greater

collaboration between and among state agencies, businesses, and other private sector actors, and changes to current policies.

Goals/Objectives/Recommendations

- As proposed in the Massachusetts Local Food Action Plan, the state should develop a formal farmland action plan to: (1) determine the resources needed to improve state data collection around farmland trends; (2) establish a statewide baseline of land in active agricultural production, with improved data collection, and a system for tracking acres of farmland in production over time; (3) set measurable goals and benchmarks related to farmland protection, retention, and access; and (4) recommend state program spending levels to meet those goals and benchmarks.
- The state should incentivize bylaws that preserve more farmland while maintaining property values such as open-space development bylaws with cluster zoning that limits the percentage of wet and other undevelopable land that can be placed in the preservation portion.
- The state should establish a healthy soils program and promote healthy soils practices.
- State agencies, farmland access, and farming organizations should develop a plan to provide for equitable land access for BIPOC farmers. This plan should include consideration for set-asides in state land protection programs, state and municipal farmland leasing, and financial incentives for transfers of land to BIPOC farmers from White farmers.
- Small parcels of farmland should be able to benefit from state land preservation programs and from reduced taxes.
- Funding for grant and purchase programs protecting agricultural land and fisheries water resources should be increased significantly.
- More state and municipally owned land and water resources, including submerged land, should be made available for creating viable agriculture and fishing and aquaculture businesses by:
 - enforcing existing laws for identifying and making available public land suitable for farming;
 - making lease terms favorable for long-term investment and retail sales; and,
 - changing public housing regulations that prevent or restrict small farmers living in them from selling their products onsite.
- The state should enforce Chapter 128 Section 7D, which requires a state inventory of vacant land and active steps to contract that land for agriculture, particularly for low-income households.
- More open land should be made usable for food production through soil remediation, particularly in urban areas.

- Agricultural preservation restrictions, agricultural conservation restrictions, and all state land protection mechanisms protecting land suitable for farming should include an affirmative covenant to farm.
- The option to purchase at agricultural value should be part of conservation restrictions for state-protected land that is suitable for agriculture.
- The state should invest in more research and support for the types of agriculture that can be channeled into intensive use such as container, hydroponic, vertical, and rooftop growing systems.

Massachusetts Food System Collaborative Small Parcel Agriculture White Paper

<https://secureservercdn.net/45.40.145.201/ghl.292.myftpupload.com/wp-content/uploads/2021/10/smallparcelpolicy.pdf>

March 22, 2021

Author: Jeff Cole

Targeted to legislators, this white paper focused on policies to protect small-parcel agriculture, defined as under five acres. The paper covers the history and context of the current state of agriculture in Massachusetts, current relevant state farmland protection laws and programs, including Chapter 61A, the APR Program, the Community Preservation Act, transfer of development rights, and more, as well as legislation in front of the 2021–2022 Legislature that would impact how small-parcel agriculture is treated for taxation.

Since the 1940s, farmland in Massachusetts has been steadily converted to other uses, with much of it permanently lost to commercial and residential development. This has resulted in a patchwork of noncontiguous farmland and former farmland parcels that are less than five acres in size. At the same time, farming in Massachusetts has changed dramatically, underscoring a significant shift in the nature of farming in the Commonwealth, sources of local food, and in the food system overall.

Between 1964 and 2017, the number of farms in the Commonwealth that were less than 10 acres grew by 57%, and the number of farmers who rent farmland grew from 7.1% to 25%. Massachusetts now has significantly more food production on parcels smaller than five acres than when agricultural land protection laws, regulations, and policies were put in place, and the state’s farmland protection system no longer supports farming as intended, or as necessary to benefit the environment, sustain the breadth and resilience of the local food system, confront the impact of climate change, or to support equity and social justice.

In addition, though the patchwork of parcels of farmland and former farmland that are less than five acres in size occurs throughout the state, farming smaller parcels frequently takes place in communities of color, low-income areas, and urban areas. As a result, policies that exclude smaller parcels from benefits afforded larger parcels of farmland are inherently inequitable, and communities and individuals that do not have access to large parcels, typically provided through inheritance and generational wealth, remain systemically disadvantaged.

MDAR APR Listening Sessions, 2018

<https://www.mass.gov/doc/apr-listening-sessions-summary-of-public-comments/download>

MDAR held four listening sessions throughout the Commonwealth to better understand the attitudes, needs, and issues affecting the APR Program. More than 165 people attended the listening sessions, and there were 70 comments—60 in person and the remaining online. Of these comments, 12 were from nonprofits, three from government entities, and the remainder were from individuals. Of the individual comments, 25 were from respondents who either owned or leased land with an APR, seven were from farmers not in APR, and 19 were from others.

Key Findings Related to Farms or Farmland

Listening session comments included the following:

- Confusion about option to purchase at agricultural value and right of first refusal.
- Confusion about APR with option and who a farmer can and can't sell to.
- Do unique soils qualify for APR?
- More listening sessions, more communication needed between farmers and MDAR.
- Amend ROFR so farmers who currently lease APR land can buy it at an affordable price.
- Implement a policy to allow APR owners to withdraw from option and ROFR.
- MDAR needs to improve communications, consistency, and transparency.
- Reform the acquisition process so partners understand deadlines.
- MDAR should encourage infrastructure on APR land.
- Allow non-agricultural activities that are complementary to the farm, to allow the farm to diversify its operations (e.g., educational programs, bed and breakfasts).
- More funding is needed to sign up more land for the APR program.
- Acquisitions take too long; they need to be more consistent and faster.
- Adopt procedures to make pre-acquisitions possible.
- Make land owned by horse farmers eligible.
- Allow solar and wind on APR land in a way that does not interfere with farming.
- Landowners should be able to withdraw from OPAV.
- Farm viability programs need more support.

- APR should allow for protection of farmhouse and infrastructure, specifically allowing sale of buildings to a land trust with a 99-year lease; loosen restrictions on structures.
- APR should have a rolling application process.
- APR should allow the sale of excess soil (in bogs) and gravel.
- Allow limited easements for electrical use.
- Make APR easier for young and beginning farmers; allow them to qualify.
- Allow APR to cover hydroponics.
- Clarify what transferring to a partner means in old APR agreements.
- Allow composting on APR land.
- APR should have an advisor for farmers considering joining the program.
- COAs need clear deadlines to get paperwork done.
- COAs for minor structure improvements must go through the full process; should be easier.
- More staff for APR program is needed, with consistency of policy interpretation across staff.

MDAR APR Listening Sessions, 2020

<https://www.mass.gov/doc/2020-apr-listening-session-written-public-comments/download>

MDAR held five listening sessions across the Commonwealth in 2020. The first 30 minutes of each session included a presentation on policies, procedures, regulations, guidance, and efforts to improve and modernize the APR program after input from the 2018–2019 listening sessions, and the following 90 minutes were reserved for feedback from farmers and other attendees on all aspects of the program.

MDAR was also interested in hearing about other topics like planning for climate resiliency; soil management, no-till agriculture, soil health, carbon sequestration; and weather-related issues like storms, flooding, and increased frost/thaw frequency.

Goals/Objectives/Recommendations

Listening session comments included the following:

- Need a smoother permitting process for non-agricultural uses of APR land (e.g., for events like weddings, agritourism) to keep farms viable.
- Standards for municipalities should be the same as private landowners.
- Allow APR on farms less than 5 acres.

- Allow carbon sequestration payments.
- Allow hemp on APR farms.
- Allow more solar than the farm can use on marginal APR land or for dual-use.
- Resolve underutilization and productivity of APR farms.
- Allow pre-acquisition; shorten the process to protect farmland; decrease the timeframe from application to closing to a maximum of 18 months; allow land trusts to do pre-acquisitions of APRs again.
- Allow housing to be built on APR land for owners and workers and flexibility in the restriction.
- Allow nonprofit and municipal farms to be eligible for APR-related grant programs like AIP.
- More outreach is needed to APR farmers from the Department and more transparency.
- More funding for APR acquisitions—used to be as much as \$12 million annually.
- More parcels in the eastern part of the state should be protected; hire more APR staff for the Pioneer Valley.
- Include aquaculture in APR.
- Change acquisition guidelines to protect fallow farmland and younger farmers.
- Allow the APR to cover the whole farm, not just the statewide and prime soils.
- Set a strategic goal with the land trust community and agricultural groups to protect most of the remaining farms in Massachusetts by adopting the Wildlands-Woodlands Farmland-Communities Vision for New England.

AFT Cost of Community Services Studies

<https://farmlandinfo.org/publications/cost-of-community-services-studies/>

September 30, 2016

This cost of community services (COCS) study was published by American Farmland Trust. COCSs are a case study approach to determining the fiscal contribution of existing local land uses, and they involve three basic steps:

- Collect data on local revenues and expenditures.
- Group revenues and expenditures and allocate them to the community's major land-use categories.

- Analyze the data and calculate revenue-to-expenditure ratios for each land-use category.

This process is straightforward, but ensuring reliable figures requires local oversight. The most complicated task is interpreting existing records to reflect COCS land-use categories. COCS studies help address misperceptions commonly made in rural or suburban communities facing growth pressures, such as:

- Open lands—including productive farms and forests—are an interim land use that should be developed to their “highest and best use.”
- Agricultural land gets an unfair tax break when it is assessed at its current use value for farming or ranching instead of at its potential use value for residential or commercial development.
- Residential development will lower property taxes by increasing the tax base. COCS studies are not meant to judge the overall public good or long-term merits of any land-use or taxing structure; rather, they are a tool for communities to make decisions about their future.

Goals/Objectives/Recommendations

The purpose of the studies was to evaluate working and open lands on equal ground with residential, commercial, and industrial land uses.

Key Findings Related to Farms or Farmland

- In Massachusetts, the median cost to provide public services for each dollar of revenue raised was much lower for working and open (agricultural) land than residential across all towns represented in this COCS.

State Audit of APR Program

<https://www.mass.gov/audit/audit-of-the-massachusetts-department-of-agricultural-resources>

August 22, 2018

The Office of the State Auditor conducted a performance audit of the Massachusetts Department of Agricultural Resources (MDAR) APR program for the period July 1, 2015, through June 30, 2017. The auditor’s office gained an understanding of MDAR’s internal control environment related to the administration of the APR Program and reviewed applicable laws, regulations, and agency policies and procedures, as well as MDAR’s 2016 internal control plan (the most recent version available at the time). They tested a sample of baseline monitoring reports and verified that they were signed by property owners and monitoring agents. They also reviewed the frequency of MDAR inspections of APR Program farmland after initial BMRs were produced, and reviewed APR Program contracts to identify the procedures farmers must follow to obtain approval from MDAR before constructing buildings or other structures or holding non-agricultural events on APR Program farmland. The state auditor’s office also met with legislative leaders, Board of Agriculture members, former MDAR senior managers, Massachusetts Farm Bureau Federation officers, farmers, representatives from land conservation

organizations, and an attorney who represents many farmers on APR Program issues to gain an understanding of their experiences with the APR Program.

Goals/Objectives/Recommendations

The report concluded that aspects of the APR program, in particular those related to property monitoring, landowner education and the transfer of APR properties should be examined further and addressed by the program. Specific comments were:

- MDAR is not effectively monitoring the use of APR Program farmland.
- MDAR should develop policies and procedures that require the annual monitoring of APR Program parcels. Depending on MDAR's available resources, this could include such practices as a combination of farm visits, telephone calls, email inquiries, and satellite tracking of farmland use.
- MDAR lacks an effective education component for current and potential APR Program participants. Transactions related to the sale of APR Program farmland lack sufficient farmer input and transparency.
- MDAR should seek the funding and other resources necessary to establish a formal training component that covers all aspects of the APR Program for both potential and current APR Program farmland owners. It should also review, and update as necessary, all APR Program information and documents to ensure that they are current and understandable and detail all aspects of the program, including different scenarios that could occur in the sale of property.
- MDAR should amend its guidelines to include when and under what conditions it will exercise its option to use the "Option to Purchase at Agricultural Value" provision and to allow losing bidders to obtain information about why their bids were not accepted.
- The Agricultural Lands Preservation Committee should consider taking the measures necessary to allow APR Program farmland owners to appeal sales of their property that have been denied by MDAR.
- MDAR should take whatever measures it deems appropriate to address the issue of allowing a farmer to withdraw from the sale of an APR Program farmland parcel if MDAR assigns the option to purchase to someone other than the farmer's preferred purchaser.

Regional and Local Reports

RPA Planning Project Reports

CMRPC Rural-11 Prioritization Project:

<http://www.cmrpc.org/rural11pp>

CMRPC Land Use Priority Plan:

<http://cmrpc.org/cmrpc-regional-land-use-planning-prioritization-projects>

Franklin County Farm & Food System Project:

<https://frcog.org/wp-content/uploads/2015/11/FRCOG-FC-Farm-and-Food-System-Project-Final-Report-093015.pdf>

Sustainable Berkshires, Long-Range Plan for Berkshire County:

<https://berkshireplanning.org/initiatives/sustainable-berkshire-regional-plan-adopted/>

Valley Vision 4: The Regional Land Use Plan for the Pioneer Valley:

<http://www.pvpc.org/plans/valley-vision-4-land-use>

Minutemen Advisory Group for Interlocal Coordination (MAGIC) Comprehensive Agricultural Planning Program:

<https://www.mapc.org/resource-library/magic-comprehensive-agricultural-planning-program/>

These local and regional reports and plans were published between 2013 and 2015 and were initiated for a variety of reasons including: identifying regionally important priority development areas (PDAs), priority preservation areas (PPAs), and priority infrastructure investment (PIIs) projects; creating an inventory of working landscapes; setting priorities for the future of a region; long-term planning for a region; laying out a collective vision for land use or food and agriculture and strategies for achieving the vision; updating a regional land-use plan; and initiating agricultural planning for the first time, including robust stakeholder engagement processes.

There are 12 Regional Planning Agencies in Massachusetts, each of which is a public organization that encompasses a multi-jurisdictional regional community. They are founded on, sustained by, and directly tied to local and/or state government laws, agreements, or other actions. A regional council serves the local governments and citizens in the region by dealing with issues and needs that cross city, town, and county boundaries through communication, planning, policymaking, coordination, advocacy, and technical assistance.

Goals/Objectives/Recommendations

Goals vary among the reports:

- Establish community-based priorities and strategies to integrate into regional development and preservation strategies and provide a direction for public investments. (CMRPC, 2014)
- Improve current and new farmers' access to farmland, permanently protect more farmland and land with prime farmland soils, and keep more land in farming. (FRCOG)
- Develop a land-use vision and strategy for the region. (BRPC)
- Update and expand the strategies for managing the region's growth and development to include innovative new approaches such as transit-oriented development. (PVPC)
- Promote integration and consistency between the region's land-use and transportation plans. (PVPC)
- Identify specific actions that will advance equity and address environmental justice. (PVPC)

- Working farms and important agricultural lands are preserved and sustained. (PVPC)
- Begin educating the farming and ranching community about the importance of planning and what municipalities can do to ensure their economic viability. (MAGIC)
- Receive feedback from municipal officials regarding the suggested methods for including agriculture into land-use planning without being too intrusive upon private property rights. (MAGIC)
- Improve infrastructure. increasing electricity capacity and addressing existing farmland regulations. Farmers should be able to use their unproductive farm and pasture land for renewable energy. Windmills or solar panels would help farmers generate supplemental income; however, this would require the installation of 3-phase power as well as the reshaping of by-laws to allow farmers to do so. Farm parcels with APRs are limited in their utility for alternative power generation. (CMRPC, 2014)
- Understand farmer needs and challenges. Partner with UMass Amherst and conduct an in-depth farmer's needs survey. A partnership with UMass Amherst would also help support students in their need for work experience and provide information about the following: farmer's needs; how farmers feel about incentives for ensuring the preservation of their land; and how farmers feel about teaching in agricultural programs. Partnering with nearby universities could also help with marketing efforts. Students in nearby marketing classes could use this next step as a capstone project or internship, helping farmers market their goods, services, and the farm region in general. (CMRPC, 2014)
- Facilitate local agricultural education. What would it take to have farmers teach in these programs? The consensus at meetings was that farmers themselves are the most knowledgeable persons in their field; asking them to teach would produce the next, most capable generation of farmers. This initiative would also help create supplemental income for farmers. Farmers could certainly be called on to provide useful and exciting information on agricultural topics, such as biology, business, and land management, at a variety of levels, including elementary, middle, and senior high school. (CMRPC, 2014)
- Prioritize the inventory of working landscapes. Identify regionally significant working landscapes. This process would start by identifying a clear definition of what it means to be a "regionally significant working landscape." Attributes that define this term might consider a farm's size; amount of income generated; ability to support other related businesses; ability to contribute to tourism or recreation; history; ability to conserve or protect natural resources; number of employees; and/or the amount of community support it has. (CMRPC, 2014)
- Work with towns to identify vacant or open lands, particularly those with prime farmland soils, that could be leased to farmers. (FRCOG, 2015)
- Prepare maps to identify prime agricultural soils, open land, parcel data, and other relevant information. Identify parcels that may have the potential to be farmed. (FRCOG, 2015)

- Inventory and map available public and private land, conserved or not; include smaller parcels. (MAPC)
- Foster and engage in partnerships with land trusts, funders, farm organizations, conservation buyers, and investors. (MAPC)
- Work with local and regional land trusts to protect farmland and keep it in active farming. (MAPC)
- Work with groups and advisors that recruit and place farmers on public or private land. (MAPC)
- Leverage the growing interest in farming to attract local and regional investors to help purchase farmland or easements. (MAPC)
- Explore transfer of development rights at the municipal and regional/sub-regional levels. (BRPC, 2014)
- Host town/state/landowner and farmer matching sessions to help link interested parties. (FRCOG, 2015)
- Provide technical assistance to landowners and farmers interested in creating lease agreements. (FRCOG, 2015)
- Draft model lease agreements that municipalities could use with interested farmers; agreements would be favorable to both parties and could offer reliable tenure to farmers and a revenue stream for municipalities. (FRCOG, 2015)
- Within the limitations of law, encourage more secure tenure on public land. Where possible, implement longer terms and rolling lease terms. (A rolling lease term is one in which there is always, for example, a 3-year term. At the end of the first year of a 3-year lease, the tenant still has 3 years.) Advocate for regulatory changes, if needed. Allow for the placement of improvements on town property and, where possible, for the farmer to remove or be compensated for them at the end of the lease. (MAPC)
- Work with state agencies to determine viability of farming on particular parcels. (FRCOG, 2015)
- Utilize zoning tools: (MAGIC)
- Agricultural Zoning Exemption
- Review bylaws and ordinances and amend if necessary to ensure compliance with the MGL Chapter 40A, Section 3, zoning exemption and applicable case law, including the two-acre provision added in 2010.
- Adopt a Right to Farm Bylaw
- Agricultural Overlay Districts

- Cluster Development Bylaw
- Accessory Uses
- Amend bylaws and ordinances to provide zoning relief for accessory land uses that provide diversified revenue for farms. Make sure that any new regulation of accessory uses does not overstep the MGL c. 40A, §3, agricultural zoning exemption. Consider permitting accessory uses as of right instead of by special permit, or if some measure of review is needed, create and utilize a modified site plan review process that is tailored to agricultural land uses.
- Prioritize making land available for farming; encourage a “farm-friendly” environment to attract new farmers; build public awareness; post available public properties; promote affordable housing. (MAPC)
- Exempt property taxes on land and/or farm buildings on land leased to new and beginning farmers. (MAPC)

The Impact of Climate Change on Agriculture: Harvard, Massachusetts

<https://www.mass.gov/files/documents/2019/07/25/harvard-agriculture-supplemental-report.pdf>

Published: June 2019

Authors: Harriman, and Daniel Cooley, Professor of Plant Pathology at the Stockbridge School of Agriculture at the University of Massachusetts-Amherst

This report was funded through an MVP grant to the Town of Harvard. A core group of municipal committee members contributed to the planning process, including many members of the Harvard agricultural community. The process included the development and circulation of a survey to assess the town’s agricultural industry and how climate change has already impacted or is expected to impact it. This questionnaire was distributed to farmers as well as others interested in agriculture.

The report was designed to focus on the impacts of climate change on municipal-level agriculture, but after a survey, one-on-one interviews, and two workshops, the scope was widened to include other issues facing agricultural producers in Harvard. The recommendations around farmland focus on tax relief for farmers, reducing the threat of development pressure to farmland, and reforming the way agriculture is structured as a land-use category. The key takeaway from this report is that climate change is not the only pressure on agriculture in Harvard and, by extension, the Commonwealth, and is not the current immediate pressure.

Key Findings Related to Farms or Farmland

- There is no single solution to climate stresses. Addressing climate change, food security, and sustainability requires a partnership among state agencies, municipalities, and the farming community, and this is critical to the success of agriculture at all scales in the Commonwealth.
- The majority of respondents to the survey did not have sufficient acreage to qualify for the tax benefits under Chapter 61A of the Massachusetts General Laws. 38.57% of the

respondents had farms of less than one acre (27 respondents); 20% had farms of 10 to just under 30 acres (14 respondents); and 11.43% had 30 acres or more (eight respondents).

- Members of the MVP core group noted that the survey was not representative of the commercial agricultural operations and that the list of Chapter 61A land would be a better representation of agricultural land in Harvard.
- Tax relief is needed for farms of all sizes (the most responses). This would require both local and state changes.
- There is a need for increased availability of conservation land for farming and firewood harvesting. This would require policy changes by the Town or other bodies that hold conservation land in trust.
- Education is needed around systems (e.g., the link between deer, mice, bird feeders, and ticks) and comprehensive regional strategies for collective land stewardship.
- Participants identified land-use and settlement patterns (particularly those that allow greenfield development) as a threat to the continuity of agriculture in the state and recommended that the state coordinate strategies for small New England towns to address the pressures of development on agricultural land.
- Local property taxes contribute to financial stress for farms with small profit margins. In some cases, land is assessed at agricultural rates but buildings are assessed at commercial rates. Participants suggested several strategies, including land banks, preservation, and evaluating the property tax structure as it relates to agricultural lands to determine if modifications or updates are needed based on best practices in the state. MGL Chapter 61A, Section 3 provides tax relief for agricultural and horticultural operations but applies only to the valuation of land of five acres or more actively devoted to agricultural or horticultural use. To address the need for additional relief, Bill S.1792 An Act Relative to Exemptions from Taxation of Structures and Buildings Essential to the Operation of Agricultural and Horticultural Lands seeks to reduce the tax on buildings and structures.

Goals/Objectives/Recommendations

- Reconsider the regulatory structure around agriculture as a land use.
- Consider flexibility for multiple income streams (defining and allowing agritourism) and creative thinking around the tax structure.
- Statewide data that evaluate the impact of agriculture on the culture, economy, and physical characteristics of a community are critical to creating a property tax that is consistent across municipalities and is fair to both farmers and the municipal budget.
- Regulatory structures, such as zoning, health codes, and building codes, require a balance between state standards and local control and between farming needs and community safety and comfort.

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