

Staff Findings
and Recommendations

Farmland Preservation Program:
RBA Analysis

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Legislative Program Review
& Investigations Committee

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Farmland Preservation Program: RBA Analysis (Program Report Card Summary)

QUALITY OF LIFE RESULT

"Connecticut has viable farms that support Connecticut-grown agriculture and benefit the health, economic and social/cultural interests of the state's citizens."

Main Contribution: Provides Connecticut with a sustainable land base for food and fiber production through the purchase of farms' development rights. By doing so, the program is able to protect agricultural lands with prime and important soils from non-agricultural use for the benefit of current and future generations.

Primary Partners: Farmers; state and federal agencies; municipalities; land trusts; community-based, non-profit agencies; advisory and advocacy groups; associations for farmland preservation; and the real estate industry.

HOW MUCH DID WE DO?

- Program purchases the development rights (PDR) to farms preserving prime and important farmland in perpetuity
- 38,546 acres preserved on 296 farms since 1978; annual average of 1,100 acres
- 30% of program's informal goal of 130,000 acres met
- Five staff administer the program; funding for FY was just over \$15 million from state, federal, local, and other sources

HOW WELL ARE WE DOING IT?

<i>Key Measures</i>	<i>Progress</i>	<i>Most Current Data</i>
Acquisition Timeliness	↔	• Trend in overall average time to complete the PDR process since 2009 was mixed; ranging from 719 days (FY 11) to 1,046 days (FY10).
Farmland Quality (to serve program purpose)	+	• Program exceeded its target of attaining development rights to farms with at least 65% prime/important soils for acquisitions two of the past three years.
Land Stewardship	-	• No proactive effort exists to determine if preserved farms are in compliance with the PDR requirements specified in deeds.
Program Operations/Data Collection and Mgt.	↔	• Program maintains an electronic database of its acquisitions, as well as hardcopy records, used for program management purposes; database does not capture data for all phases of the PDR process; pertinent information on current land owners not up to date.

IS ANYONE BETTER OFF?

Public Interest Served	+	<ul style="list-style-type: none"> State law declares farmland preservation is in the public interest; the Farmland Preservation Program continues to preserve farmland in perpetuity.
Acquisition Value	+	<ul style="list-style-type: none"> Since 2007, there has been an upward trend in the difference between farms' appraised values and the prices paid by the state for PDRs, indicating a better purchase price value for taxpayers.
Improved Economic, Health, Social/ Cultural	+?	<ul style="list-style-type: none"> Research suggests people desire farmland preservation programs; evidence has been found that farmland preservation programs can benefit the economy; farmland preservation: offers the state increased access to locally-grown, nutritious food; is extricably linked to a cleaner environment; and protects the state's rural heritage and scenic beauty.

STORY BEHIND PROGRAM PERFORMANCE

- The Farmland Preservation Program's progress in preserving farmland to secure a land base for food and fiber production has been mixed since the program's inception in 1980. ***The program has slowed overall farmland loss to development, although only 30% of its overall goal of preserving 130,000 acres has been achieved over the past three decades.*** It is difficult to determine the full context of whether the rate of farmland preservation is adequate. If compared with the open space acquisition program of the Department of Energy and Environmental Protection
- There will undoubtedly be some point in time when not enough farmland containing prime and important soils will be available for the state to preserve and meet its (informal) farmland preservation goal. As such, proper planning must occur to ensure a strategic effort is made to identify the most appropriate farms that meet program standards from which to acquire development rights. The Farmland Preservation Program has a firm knowledge of such lands, although ***no written strategic plan exists to achieve the state's farmland preservation goal.*** Committee staff believes such a plan would provide the program, along with the Farmland Preservation Advisory Board, with a comprehensive approach to fully identify ways to achieve the farmland preservation goal.
- A criticism of the Farmland Preservation Program has been the time it takes to complete the process to acquire a farm's development rights. Committee staff's ***analysis of acquisition data shows a mixed trend for the timeliness of the full PDR acquisition process since 2009. At the same time, several of the individual phases of the process showed improved timeliness trends.*** Two recent legislative actions impacted the farmland preservation process: an influx of funding from the state's Community Investment Act (CIA) beginning in 2006; and lump-sum bonding as of 2008. Although it is difficult to quantify the extent these two actions improved the overall efficiency of the PDR process, the program benefitted from the CIA funding with the addition of three program staff positions, and lump-sum bonding has allowed more timely administrative functions to occur (e.g., hiring appraisers and surveyors).
- The underlying premise of the Farmland Preservation Program is to protect the prime and important soil resources of farms for future food/fiber production. The higher the percentage of prime and important soils included in each acquisition, the greater the overall impact of the program. ***FPP acquisitions made since 2010 have included an average of 68 percent prime and important soils, which exceeds the program's target of 65 percent.*** Analysis also shows ***95 percent of preserved land is actively farmed (i.e., not fallow), which meets the program's informal goal of 95 percent.***

- A critical component of the overall PDR process is stewardship of the properties following PDR acquisitions to ensure responsible resource management and oversight. ***There is no specific statutory or regulatory requirement obligating the Farmland Preservation Program to conduct any type of stewardship compliance effort for preserved lands. Moreover, the Farmland Preservation Program does not have a formal, proactive stewardship effort in place, nor has the Farmland Preservation Advisory Board fully focused on a sustained effort in this area to date.***
- Efficient and effective program management relies on complete and accurate data. FPP maintains an electronic database for its acquisitions, yet ***there needs to be greater attention paid to ensuring the overall thoroughness of the program data tracked.*** This includes maintaining current land owner information and a complete recording of all pertinent dates corresponding to the individual phases of the process. Such data would allow for more precise accounting and monitoring of program performance.
- A key measure of the public benefit derived from the Farmland Preservation Program, is whether the purchase prices for PDR acquisitions are of relative value to the state. Although this measure also could be an indication of "how well" the program is performing, operating efficient public programs is of high priority to many in the general public, and the overall public benefit of such programs is viewed in large part by their value (i.e., are they cost effective). Committee staff examined the Farmland Preservation Program's acquisition value in two ways: 1) how successful the program has been with negotiating purchase prices for PDR acquisitions in comparison with the highest appraised values (market value); and 2) the trend in cost per acre paid. ***Beginning in 2007, there has been an upward trend in the spread between the prices paid for PDRs and the highest appraisal amounts. In other words, the state is saving taxpayers more money. The program realized its greatest savings for PDR acquisitions made in calendar years 2006 and 2012.***

ACTIONS TO TURN THE CURVE PRI STAFF PROPOSED RECOMMENDATIONS (SUMMARY)

Committee staff's examination of the Farmland Preservation Program resulted in proposed recommendations. The intent of the recommendations is to:

- **Ensure the program goal is still attainable through periodic review.**
- **Develop a strategic plan to guide the acquisition process and achievement of a program goal(s).**
- **Establish a formal stewardship effort to guarantee the state's investment remains viable and adheres to the program's mission.**
- **Increase overall efficiency and effectiveness of program operations and administration.**

Acronyms Used in This Report

CLEAR	Center for Land Use Education and Research (University of Connecticut)
CIA	Community Investment Act
DEEP	Department of Energy and Environmental Protection
FPP	Farmland Preservation Program (state)
FRPP	Farm and Ranch Lands Protection Program (federal)
NRCS	Natural Resources Conservation Service
NRI	National Resource Inventory
PDR	Purchase of Development Rights
RBA	Results-Based Accountability
SPRB	State Properties Review Board
USDA	United States Department of Agriculture

Introduction

In June 2012, the Legislative Program Review and Investigations Committee voted to undertake a study of the Connecticut Department of Agriculture's Farmland Preservation Program (FPP). Using Results-Based Accountability (RBA) principles, the study assesses how well the program has done in meeting its statutory obligation of preserving prime farmland and securing an agricultural land base for future food and fiber production.¹

Farmland preservation is a topic that has gained significant public interest, particularly over the last decade, as public attention to locally-grown agricultural products has increased. In addition to state-operated programs, several initiatives have been established at the local level - whether through individual towns or local land trusts - to secure farmlands and preserve the local agricultural heritage for the benefit of residents and the agricultural industry in perpetuity.

Agriculture is an integral part of Connecticut's economy. The agricultural sector generates an estimated \$565 million in cash receipts, with an overall impact on the state's economy of up to \$3.5 billion, while supporting approximately 20,000 jobs.^{2,3} The state further benefits from the agri-tourism enterprises many of its farms operate. In addition to the economic and health benefits, agriculture also provides numerous social/cultural benefits through scenic routes, historical facilities, and vistas.

About 13 percent (405,600 acres) of Connecticut's area is devoted to farmland, according to the United States Department of Agriculture's 2007 Census of Agriculture. The average farm in Connecticut is approximately 82 acres, and the average age of the principal farm operator is 58 years old.

Methodology

PRI staff relied on a number of information sources and research methods to complete this study. Specifically, staff reviewed governmental sources as well as academic and professional literature to gain an understanding of the current preservation efforts in Connecticut and adjoining states, Connecticut's selection process to acquire lands to preserve, and relevant statistical data.

In addition, interviews were conducted with representatives from the Department of Agriculture, Farmland Preservation Program, Farmland Preservation Advisory Board, American Farmland Trust, Connecticut Farm Bureau, Working Lands Alliance, Council on Environmental Quality, and the Department of Energy and Environmental Protection's Open Space Acquisition

¹ Examples of vegetable fibers include cotton, hemp, jute, flax, ramie, sisal, and bagasse. Wood may be harvested for fiber production, including pulp wood for paper production. Fiber uses are varied; plant fibers may be used alone or as part of composite products. They may be woven into strands; compressed or "felted" into mats, papers or films; or incorporated into composite materials with organic fillers, metallic materials or plastics.

² New England Agricultural Statistics Service, August 2012.

³ *Economic Impacts of Connecticut's Agricultural Industry*, Department of Agricultural and Resource Economics, University of Connecticut, September 2010.

Program. Farmers who have participated in the program also were interviewed, as was the former state soil scientist with the Natural Resources Conservation Service located in Connecticut. Committee staff also communicated with the Connecticut Business and Industry Association, the Connecticut Realtors Association, and the Home Builders & Remodelers Association of Connecticut, Inc. The key data source specific to farmland preservation, and Connecticut agriculture in general, was the Farmland Preservation Program; information from several national databases also was used.

Committee staff surveyed current owners of preserved farmland to obtain information about their farm operations, the state's stewardship efforts, and client satisfaction with the Farmland Preservation Program (see Appendix B for full survey results.) Staff also visited nine farms with land preserved through the Farmland Preservation Program, and met with the Town of Lebanon First Selectwoman and town planner.

Report Organization

This report consists of four sections and two appendices. Section I presents the RBA framework and report card developed by committee staff in answering the RBA questions of *How Much Did We Do? How Well Did We Do It?* and *Is Anyone Better Off?* Section II examines the current state of agricultural lands in Connecticut and provides an overview of the FPP, including the program's organizational structure and resources. Section III reviews the overall efficiency and effectiveness of the program. Finally, Section IV looks at various measures to determine if the program is in the public interest and if the program benefits the state's citizens. Appendix A provides additional background information about FPP. Appendix B shows the results of committee staff's survey, and Appendix C provides information about preservation efforts in other states. Staff findings and recommendations are interspersed throughout the report.

Relevant Programs Excluded From Scope

Although the Farmland Preservation Program is the state's primary program for preserving farmland, two other programs have been recently established, and a third has been administered by the energy and environment department for multiple years, as a way to contribute to the state's desire to preserve farmland for future generations and food production. These programs serve as additional tools to promote land preservation but are not the focus of this study. It should be noted that the Farmland Preservation Program staff are additionally responsible for the implementation of the first two programs listed.

Community Farms Preservation Program. The Community Farms Preservation Program was established by PA 08-174 for the preservation of farmland that does not meet the criteria of the Farmland Preservation Program for reasons including size, soil quality, or location. The farms may, however, contribute to local economic activity through agricultural production, and thus are important for preservation. As of September 2012, the program had completed 23 cooperative agreements with municipalities for joint development rights purchases between the state and the municipalities. Twenty-one of those municipalities were ultimately eligible to participate in the program. Of the 21 towns, 11 submitted applications to the program.

Farmland Restoration Program. A recent addition to the Department of Agriculture, the Farmland Restoration Program was created by PA 11-1, and permits the commissioner to reimburse farmers for part of the cost associated with developing a "farm resources management plan" intended to restore farmland, not to exceed the cost of such plan or \$20,000. The main objective of this voluntary program is to help increase the state's resource base for food and fiber production, focusing primarily on prime and important farmland soils, in accordance with a Farmland Restoration Program Plan.⁴ The program was allocated \$5 million in bond funds.

Open Space and Watershed Acquisition Program. The Department of Energy and Environmental Protection's (DEEP) Open Space and Watershed Acquisition Program may, at times, purchase farms for open space preservation.

⁴ Department of Agriculture, *Connecticut Department of Agriculture Farmland Restoration Program (FLRP)*, 2012, p. 1.

RBA Framework

Results-Based Accountability is a way of evaluating the efficiency and effectiveness of state programs, agencies, or systems within a larger context of the broad "quality of life" goals they are intended to help achieve. It is program review committee practice for studies using the RBA approach to develop a one-page framework to guide data collection and analysis concerning both program and higher level population accountability. When completed, the RBA accountability framework for a program review study outlines:

- desired *quality of life results*, in the form of a positive statement about statewide population-level outcomes, to which the program, agency, or system under review is intended to make a major contribution;
- key population-level *indicators* for tracking statewide progress toward those results;
- the main public *strategies* for achieving high-level results and the *partners*, public and private, with significant roles in implementing those strategies;
- the *major state programs* and activities undertaken to carry out those roles and strategies; and
- core *performance measures* evidenced by assessing outcomes the clients/customers directly served by the program(s).

The Results-Based Accountability framework and key indicator and performance measure information developed for the committee's study of farmland preservation are described later in this section.

Population results. As part of the committee's RBA approach, program review staff compile (and at times assess) key indicator data related to the broad, population-level results of the selected topic area. The extent of committee staff's analysis of population-level indicators depends on the study timeframe and available resources (this study does not include analysis of population-level indicators). It is important to keep in mind that responsibility for the population-level results is shared by the all major partners involved.

Program results. Performance information about the state's Farmland Preservation Program is provided throughout this report, while a PRI report card-style summary showing the overall results of the committee staff's analysis is presented below. The data collected and analyzed to assess program-level performance under the Results-Based Accountability approach are related to three main performance questions:

- *How much did we do?* (outputs on quantity of effort);
- *How well did we do it?* (outcomes about quality of effort or process results); and

- *Is anyone better off?* (outcomes about results for clients/those served by the program)

Accountability for program results, in contrast to population-level outcomes, rests primarily with managers in the administering agency, including agency leadership.

The information compiled to answer the RBA program accountability questions is used to determine trends in performance, understand the reasons for identified trends and current conditions, and find ways to improve program performance, especially in terms of better end results for those served.

Accountability Framework

The RBA framework prepared by program review staff for farmland preservation in Connecticut is provided in Figure I-1. Each of the main elements of the framework is described briefly below.

Quality of life results statement. In applying the RBA method, staff developed the following statement about desired quality of life results for this study: *"Connecticut has viable farms that support Connecticut-grown agriculture and benefit the health, economic, and social/cultural interests of the state's citizens."* The statement, shown at the top of the framework in the figure, is primarily based on statutory policy statements, elements contained in the state's Plan of Conservation and Development, factors discussed in the Governor's Council on Agricultural Development, and committee staff's work with various stakeholders regarding farmland preservation.

Key indicators of progress. Under the RBA approach, indicators that capture critical, measurable aspects of population-level outcomes are developed to track progress toward the desired results. Ideally, three to five key indicators (sometimes called "headline" indicators) are used to monitor and report on areas of primary importance. Depending on the complexity of the results statement, additional primary indicators may be needed. Any number of secondary indicators also may be selected to capture additional aspects of how the state is doing in achieving a results statement. The population-level indicators may or may not be the same as the program measures used for the program under review. As shown in Figure I-1, PRI staff identified four broad areas for primary indicators related to agriculture in Connecticut, and among these areas are 14 key indicators of state progress on agricultural results:

- viability: agriculture acres available, number of farms, preserved farmland acres, number of farms going out of business due to financial reasons;
- economic contribution: consumer spending on "CT-Grown" products, jobs created, spending on agricultural supplies;
- public health: consumption volume of local products, level of food insecurity, amount/types of pesticides/fertilizers used, pollution avoided by consuming products grown in-state; and

FIGURE I-1. RBA FRAMEWORK: FARMLAND PRESERVATION PROGRAM

QUALITY OF LIFE RESULTS STATEMENT:

"Connecticut has viable farms that support Connecticut-grown agriculture and benefit the health, economic, and social/cultural interests of the state's residents."

**POPULATION INDICATORS
of Progress Toward Population-Level Results**

Viability	Economic Contribution	Public Health	Social/Cultural
<ul style="list-style-type: none"> • Acres available for agriculture • Number of farms • Acres of preserved farmland • Number of farms out of business for financial reasons 	<ul style="list-style-type: none"> • Percent of consumer dollars spent on "CT-Grown" • Number of jobs supported/created • Dollars spent on agricultural supplies 	<ul style="list-style-type: none"> • Volume of "CT-Grown" products consumed • Level of food insecurity • Pounds/types of commercial fertilizers/pesticides used • Pollution avoided by consuming products grown in-state 	<ul style="list-style-type: none"> • Level of consumer willingness to pay for sustainable agricultural products • Rate of agri-tourism • Maintaining population in rural towns

**MAJOR STATE STRATEGIES
For Achieving Results Statement**

<i>Implement fiscal and programmatic policies that support agriculture</i>	<i>Coordinate and integrate efforts supporting farmland and open space preservation</i>	<i>Preserve prime land available</i>	<i>Enhance data collection, research, information-sharing, accountability</i>	<i>Governor's Council on Agricultural Development</i>
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**MAIN PARTNERS
Sharing Responsibility for Achieving Results Statement**

State Agencies	Advisory Boards/Councils	Federal Agencies	Non-Profit/Private/Other
Department of Agriculture Dept. of Energy and Environmental Prot. Dept. of Economic and Community Dev. Office of Policy and Management Office of the Attorney General State Properties Review Board State Bond Commission University of Connecticut	Governor's Council for Agricultural Dev. Connecticut Food Policy Council Connecticut Agricultural Business Cluster Open Space Advisory Board Farmland Preservation Advisory Board	Department of Agriculture Natural Resources Conservation Services Natural Resources Inventory Farm Services Agency Farm and Ranch Land Pres. Program Environmental Protection Agency	Farmers (various commodities industry-wide) CT Farm Bureau; CT Farmland Trust; American Farmland Trust Municipalities; Municipal Associations CT Land Conservation Council Land Trusts (e.g., Joshua Trust) Working Lands Alliance Nature Conservancy State-licensed surveyors, appraisers Real Estate (appraisers, surveyors, attorneys)

PROGRAM LEVEL ACCOUNTABILITY

CORE PROGRAM PERFORMANCE MEASURES

Farmland Preserved	Land Utilization	Economic Viability	Customer Satisfaction
<ol style="list-style-type: none"> 1. Total Acreage Available 2. Useable Acreage Available 3. Prime Farmland Preserved 4. Goal Completion Rate 	<ol style="list-style-type: none"> 5. Acreage in Production 6. Fallow Acreage 7. Acreage Lost to Development 8. Diversity of Products Produced 	<ol style="list-style-type: none"> 9. State Investment 10. Agricultural Sales 11. Value of Land After Resale 	<ol style="list-style-type: none"> 12. Efficient/Effective Process for Purchasees 13. General Public (health, economic, environmental, social/cultural)

- social/cultural: consumers' willingness to pay for sustainable agricultural products, rate of agri-tourism, maintaining population in rural towns.

Strategies. The committee staff's RBA framework outlines four major strategies employed by the state to achieve desired agricultural results. Responsibility for implementing some or all of the strategies is shared, to varying degrees, by the many public and private partners shown in the middle of the framework.

Partners. Entities in Connecticut with significant responsibilities for ensuring progress toward the state's desired agricultural results and farmland preservation include: state, federal, and municipal agencies; various state-level boards and councils; nonprofit groups; and private entities, including professionals associated with real estate transactions.

Main state agency programs. Programs to assist and support the state's agricultural system are primarily implemented through the Department of Agriculture. Lands owned by other state agencies - including the departments of energy and environmental protection, mental health and addiction, correction, developmental services, and transportation - either support, or could support, agriculture and the preservation of farmland in the state. The committee's study focused on one aspect of agriculture - the Farmland Preservation Program - thus, other programs or activities supporting agriculture were excluded from this framework.

Focus program core performance measures. The report's performance evaluation focused on one critical aspect of agriculture: farmland preservation via the Farmland Preservation Program. As noted above, the RBA study approach measures program performance with information about outputs (how much was done?), process outcomes (how well was it done?) and customer outcomes (is anyone better off?). Within RBA, three to five core measures generally are selected to monitor the most critical program results for the clients served. Four areas of core measures related to the performance of the Farmland Preservation Program are highlighted at the bottom of the RBA framework: farmland preserved; land utilization; economic viability; and customer satisfaction with program operations and results.

Core and supplemental performance measure data compiled and developed by program review committee staff are summarized within the Farmland Preservation Program Report card presented below. Moreover, interspersed throughout the report is background information - or in RBA language, *story behind the data*, and committee staff's recommendations to improve the overall efficiency and effectiveness of the program (again, in RBA terms, *actions to turn the curve*.)

Farmland Preservation Program: RBA Report Card

Information on Connecticut's Farmland Preservation Program performance is highlighted below in a program review committee RBA program report card format. Some brief background information about the program is provided first, followed by a summary of key performance measure data related to each of the three main RBA program accountability questions – *How Much Did We Do? How Well Did We Do It? Is Anyone Better Off?*

Farmland Preservation Program: Report Card

Contributes to the Quality of Life Results Statement:

“Connecticut has viable farms that support Connecticut-grown agriculture and benefit the health, economic, and social/cultural interests of the state's residents.”

Main Contribution: Provides Connecticut with a sustainable land base for food and fiber production through the purchase of farms' development rights. By doing so, the program is able to protect agricultural lands with prime and important soils from non-agricultural use for the benefit of current and future generations.

Primary Partners: Farmers; state and federal agencies; municipalities; land trusts; community-based, non-profit agencies; advisory and advocacy groups; associations for farmland preservation; and the real estate industry.

BACKGROUND

- The Farmland Preservation Program serves the state's objective of maintaining and preserving agricultural lands for farming and food/fiber production that otherwise might be lost.
- The program was originally established in statute as a pilot program in 1978. The program was begun due to rising concerns surrounding the quantity of food produced in the state and pressures to convert undeveloped land.
- The program is administered by five Department of Agriculture staff, who also are responsible for administering two new programs: Community Farms Preservation Program and the Farmland Restoration Program.
- Program funding is derived from several sources: state bonds, the state Community Investment Act, the General Fund, federal grants through the Farm and Ranch Lands Protection Program, municipalities, local land trusts, and private contributions; farmers also may donate their land for preservation.
- In addition to the primary Farmland Preservation Program, several entities within the state preserve agricultural lands, including:
 - Department of Energy and Environmental Protection (open space acquisition program);
 - Department of Agriculture's Community Farms Preservation Program;
 - Municipalities; and
 - Local land trusts.
- The program's advisory board, created in 2007, assists and advises the agriculture commissioner in carrying out the program's statutory and administrative responsibilities.

Farmland Preservation Program Performance Summary

Symbols Used to Denote Progress (on Measures of How Well and Better Off):

+ Positive trend
 - Negative trend
 ↔ Little/no change or mixed
 ? Cannot be determined

I. How *Much* Did We Do?

Farmland Preservation Program

- To date, the program had preserved 38,546 acres on 296 farms.
 - This represents 30 percent of the program's informal goal of preserving 130,000 acres.
- The program has annually preserved an average of 1,100 acres among 8 farms.
- The program has preserved land on four farms for calendar year 2012, and expects to do so on 8-10 additional farms before the end of the year.

Resources

- The program's total funding was just over \$15 million for FY 12. The funding came from the following sources:
 - Bonds: \$10 million
 - State Community Investment Act funds: \$2,407,485
 - Federal Farm and Ranch Lands Protection Program: \$ 2,002,789
 - Municipalities: \$600,000
 - State General Fund: \$169,559
- Since its inception, the program has operated with as few as 1 staff member and as many as 5; currently there are 5 program staff.

II. How *Well* Did We Do It?

KEY MEASURES	PROGRESS	CURRENT DATA
Acquisition Timeliness	↔	<ul style="list-style-type: none"> • A review of all 50 Purchase of Development Rights (PDR) acquisitions made during FYs 2009-2012 shows no consistent trend in the overall time necessary to complete the deals. • The average time to complete the PDR process ranged from 719 days (FY 11) to 1,046 days (FY10). • Trends in timeliness for certain phases of the PDR process were mostly positive: the time necessary to determine the <i>configuration</i> of the land to preserve generally remained steady at roughly a month. The average time needed to complete <i>appraisals</i> decreased by almost half, from 259 days in 2009, to 136 days in 2012. This also held true for the offer <i>price negotiation</i> phase (209 days down to 107 days). Reviews by the <i>State Properties Review Board</i> were timely in relation to the overall process, averaging between 3-5 weeks - although, there was a slight upward trend in time to complete the reviews in the last two fiscal years. • The bulk of the time for the completion of the PDR

		acquisition process occurs after surveys are completed to when final payment is made and the appropriate documents are filed with the town. The trend for this phase over the period examined was mixed, averaging 481 days.
Farmland Quality to Serve Program Purpose	+	<ul style="list-style-type: none"> The trend in average scores for PDR applications was mixed over the four-year period analyzed. Prime and important soils, as a percent of the land acquired, averaged almost 68 percent, exceeding the program target of 65 percent. This is significant because the higher the percentage of land containing prime and important soils, the greater the overall quality of the acquisition and value to the state. 95 percent of land preserved under FPP is actively farmed (i.e., not laying fallow), which the program indicates meets the target it tries to achieve. The program makes preserving contiguous lands a priority in PDR acquisitions, allowing for large tracts of preserved land rather than widely dispersed parcels across the state.
Land Stewardship	-	<p>There is no proactive effort to determine if preserved farms are in compliance with the PDR requirements specified in deeds, possibly attributable to a lack of staff resources. Thus, FPP does not have full knowledge of farmers' compliance with program requirements.</p> <p>The Farmland Preservation Advisory Board has not required a sustained stewardship effort to date.</p>
Program Operations/ Data Collection and Mgt.	↔	<ul style="list-style-type: none"> The program maintains an electronic database of its acquisitions, as well as hardcopy records. Both sources are used for program management purposes. The database does not have complete and current information for all acquisitions, or capture data for all phases of the PDR process. Information about owners of all farms preserved through the program is not current in some cases.
III. Is Anyone Better Off?		
KEY MEASURES	PROGRESS	CURRENT DATA
Public Interest Served	+	<ul style="list-style-type: none"> Connecticut statutes expressly say it is the policy of the state to preserve farmland and such preservation is in the public interest of the state's residents. This also was a key finding of a 1980 program review committee study on the preservation of agricultural lands. The state's plan of conservation and development also specifically says the state's policy is to protect prime agricultural land in sufficient quantity to ensure long-range food production capability.
Acquisition Value	+	<p>Since 2007, there has been an upward trend in the difference between farms' appraised values and the prices paid by the state for PDRs, indicating a better purchase price value for taxpayers.</p> <p>The average savings to the state below full market value, since 2001, is 18 percent, and ranged between less than 1 percent to 41 percent.</p>

		The average cost per-acre has steadily increased since 2009 (not adjusted for inflation). Since 2001, the average per-acre cost for all PDR acquisitions is just over \$5,500.
Improved Economic, Health, Social/Cultural Outcomes	+?	<ul style="list-style-type: none"> • It is difficult to quantify the extent to which preserved farmland improves the health, economic, or social/cultural outcomes of Connecticut's residents. • A recent UConn report shows the <i>overall impact</i> of the agricultural industry on Connecticut's economy for 2007 is an estimated \$3.5 billion and 20,000 jobs. • USDA data show a steady increase in cash receipts for crops/livestock in Connecticut over the last three years. • Preserved farms help ensure the availability of agricultural land and a supply of fresh, locally-grown products. • Agricultural land and the environment are inextricably linked, with associated health benefits resulting from a cleaner, more robust environment. • Farmland, including preserved farmland, serves as an important component of agri-tourism, educational programs, and overall protection of the state's rural heritage and aesthetic beauty.

RBA Question I

How Much Did We Do?

Agriculture is a key component of the state's economy, history and social fabric. Land in the state is comprised of the following:

- Nearly all (95 percent at 3,051,000 acres) of Connecticut's total surface area is non-federal land, consisting of developed land (1,051,000 acres) and rural land (2,000,000 acres).
- The 2 million acres of rural, non-federal land in the state are represented by the following land-cover categories:
 - Forestland: 1,620,400 acres (81 percent)
 - Cropland: 172,000 acres (9 percent)
 - Pastureland: 105,200 acres (5 percent)
 - Other land: 102,400 acres (5 percent)
- There are approximately 4,900 farms on 405,600 acres in Connecticut.
 - The average farm size is 82 acres.
 - The average farmer is 58 years old.
 - The average farm real estate value per acre is \$11,100 (value of farmland and buildings)

To date, the Farmland Preservation program has preserved 38,546 acres on 296 farms.

- This represents 30 percent of the program's informal 130,000 acre goal.
- The program currently operates with 5 staff members.
- In FY 12 the program received \$15,010,274 from various funding sources.

Agricultural Land in Connecticut

Agriculture is an integral part of Connecticut's state and local economies, environment, social fabric, and quality of life of its citizens. Connecticut agriculture continues to evolve from family farms with an emphasis on dairy, tobacco and poultry, or what was once considered "traditional agriculture," to smaller and more diverse operations.⁵ Today, farms represent a range of commodities, including orchards, vegetables, vineyards, tobacco, livestock, nurseries, greenhouses, shellfish, poultry, eggs, and cheeses. To function and remain viable, the agricultural industry requires land conducive to support farm operations. Obtaining such land, however, proves difficult as the availability of farmland in Connecticut continues to decrease, while the cost to purchase land increases.

Over the past decade there has been a resurgence of support for Connecticut farms through policy, new programs aimed at enhancing the viability and restoration of existing farms,

⁵ Connecticut Farm Bureau, *Public Act 490: A Practical Guide and Overview*. 2010

and an increase in the demand for locally grown products.⁶ This resurgence is met, however, with challenge as land dedicated to agriculture is lost to development or is unavailable due to fragmentation, speculation, and ownership changes. Specifically, this challenge lies in the fact that the qualities making some land most productive for agricultural crops also make it most suitable for residential and/or commercial development.⁷ Moreover, this trend is not unique to Connecticut as population expansion and sprawl development patterns have contributed to the conversion of prime farmland across the United States.

In addition to development pressures, the farm real estate value averaged \$11,100 per acre in 2012, a 3.5 percent decrease from 2011, however, these values are still high for farmers trying to acquire additional lands to expand or begin new operations.⁸ Overcoming challenges to agriculture plays an important role in the state's efforts to preserve agricultural lands.

Land Types and Trends

There are several key sources that capture information related to land coverage in Connecticut that should be considered when analyzing the current land base. Committee staff chose these sources because, while they have different methodologies and definitions for certain land categories, they represent the most comprehensive and current information available regarding the agricultural landscape specific to Connecticut. At the same time, however, the data from these sources lag by several years. Additionally, the two sources have similar trend data for the prime acres of farmland soil lost over their respective time periods, which is significant given the numbers vary between the studies due to the methods of data collection.

National Resources Inventory and Census of Agriculture

Land cover. Land in Connecticut consists of many different types, including cropland, pastureland, woodland, and other rural land. The National Resources Inventory (NRI) developed by the USDA Natural Resources Conservation Service (NRCS), is the most comprehensive natural resource database tracking the conditions on non-federal land from 1982-2007, with new reports completed every five years. This database provides information on land cover changes, soil erosion, wetlands, and conservation practices, among other things.

Figure II-1 below shows the 2007 land cover of Connecticut based on total surface area, including water. The figure does not include, however, the acreage of the whole farm which accounts for farm structures, wetlands, watercourses, and woodlands that are part of the total farm area. The NRI data show:

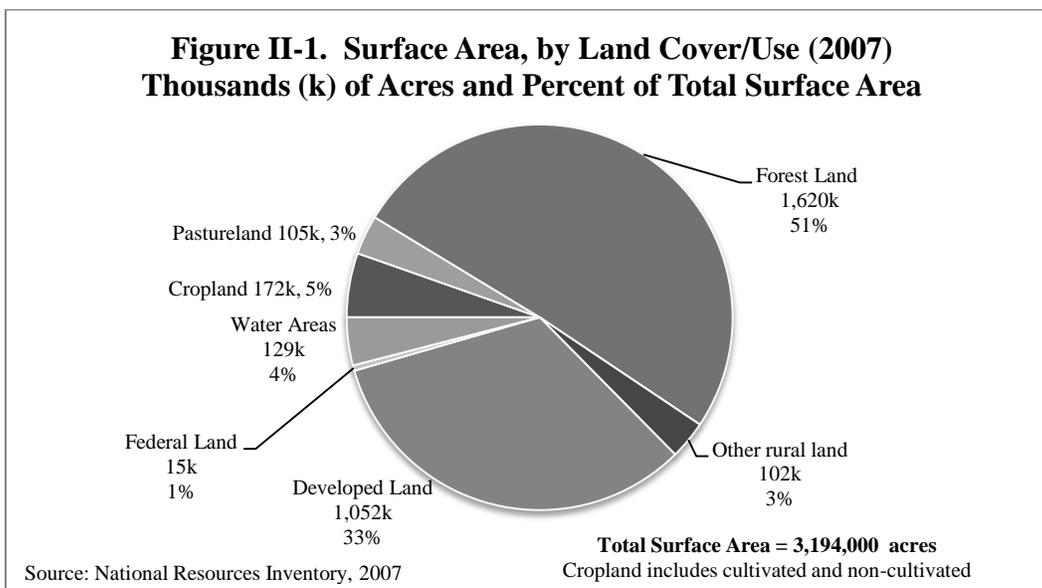
- Connecticut's total surface area consists of just under 3.2 million acres;
- forest land represents approximately 51 percent (1,620,000 acres) of the total surface area;

⁶ American Farmland Trust, *Farmland ConneCTions*. 2011.

⁷ Solomon, B., *Farmland Protection: A Case of Quality Not Quantity*, Land Use Policy. 1984.

⁸ USDA, National Agricultural Statistics Service, *Land Values 2012 Summary*, August 2012

- developed land accounts for 33 percent (1,052,000 acres) of the total surface area; and
- cropland and pastureland combined equal 8 percent (277,000 acres) of the total surface area.

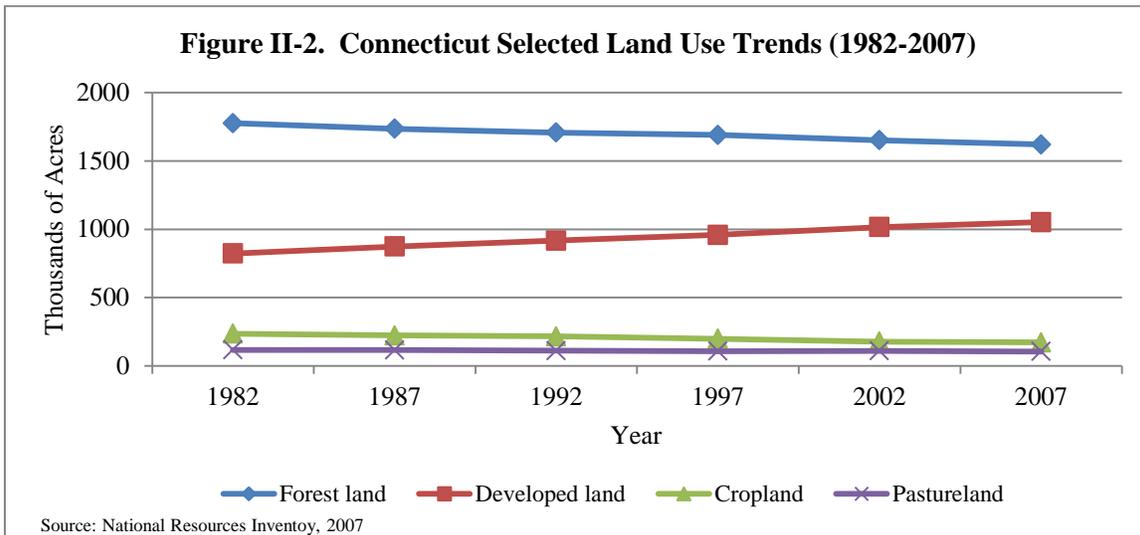


Farms. The U.S. Census of Agriculture is an additional resource for understanding Connecticut's land coverage. The census is conducted every five years, and provides a detailed picture of agriculture in the country. Required by federal law, it is conducted by the U.S. Department of Agriculture. Table II-1 shows the state's land coverage in terms of farms for 2007, the most recent data available. As the table shows, there were 4,916 farms covering 405,616 acres (13 percent) of Connecticut's total land area. The table, unlike the previous figure, includes the whole farm in the acreage total of both owned and rented land.⁹

Table II-1. Farms in Connecticut 2007	
Farms	4,916
Land in farms (acres)	405,616*
Total land area (acres)	3,100,721
Average age of farm operator	58
* 13 percent of total land area Source: Census of Agriculture, 2007	

Trend over time. The information presented in Figure II-2 is taken from the 2007 National Resources Inventory for the time period of 1982 to 2007. The figure provides a high-level picture of landscape changes in Connecticut for selected land types for the period. Over time, forestland, cropland, and pastureland have decreased 9 percent, 27 percent, and 10 percent respectively, while the developed land has increased 28 percent.

⁹ Rented land is an important component of most farm operation because almost 40 percent of most land farmed, is rented from other landowners. This total acreage figure also includes land in shellfish beds under Long Island Sound.



Prime and important farmland soils. There are specific soils most conducive for farming. These soils have been designated as being *prime and important*, which are classified by the USDA's Natural Resources Conservation Service. The classification of these soils is based on physical and chemical properties.¹⁰

Additionally, the USDA defines *prime farmland* soils as land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and that is available for these uses.¹¹ Soils considered *important* are recognized by the USDA as those that are not prime farmland, but of statewide importance for production of food, feed, fiber, forage, and oil seed crops. Criteria for defining and delineating these important farmland soils are determined by each state.¹² Additionally, NRCS works with Connecticut communities to determine soils of local importance.

NRI collects information on prime and important soils by land cover. Figure II-3 shows the prime farmland in the state by land cover category. Forest land accounts for the largest share of prime land, 47 percent (132,900 acres) of the state's total rural area, while cropland represents 31 percent (89,000 acres). Additionally, prime farmland on pastureland and other rural lands is 13 percent (37,200 acres) and 9 percent (25,000 acres) of the total rural land, respectively.

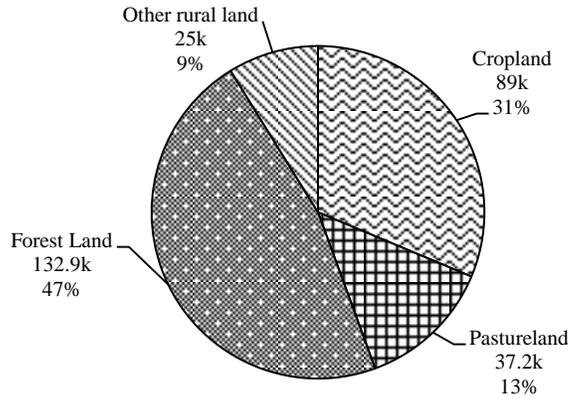
¹⁰ Other characteristics include quality, (moisture holding capacity, acidity, or alkalinity); acceptable salt and sodium content; pore size and water and air flow; erodibility; slope and saturation capacity; content of sand, clay, and loam; and the amount of stones, rock, and gravel.

¹¹ USDA Natural Resources Conservation Service. Accessed November, 2012:

<http://soils.usda.gov/technical/handbook/contents/part622.html>

¹² Id.

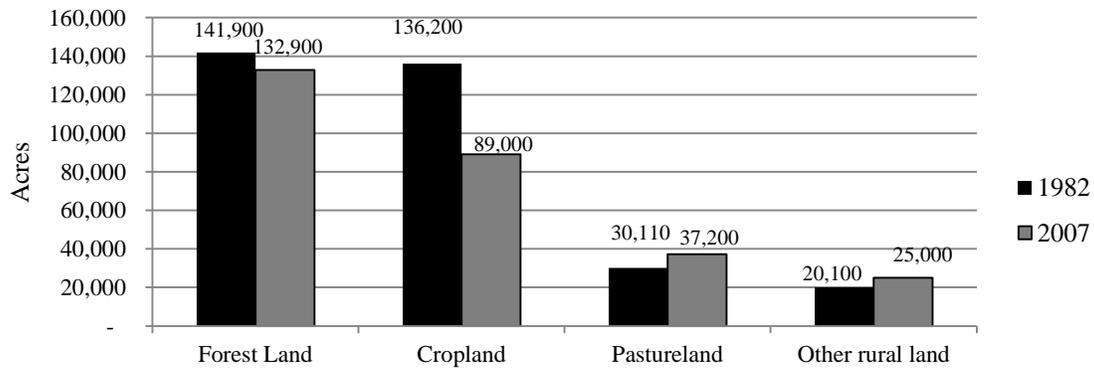
Figure II-3. Prime Farmland by Land Cover/Use in Connecticut (2007)
Thousands of acres and Percent of Total Rural Area



Source: National Resources Inventory, 2007

Figure II-4 below shows the landcover change on prime farmland soils in Connecticut from NRI data for 1982-2007. Based on the data, the total prime cropland and forest decreased 35 percent (47,000 acres) and 6 percent (9,000 acres) respectively. Also, within in this timeframe the acres of pastureland increased 24 percent (7,090 acres).

Figure II-4. Land Cover Change on Prime Farmland Soils in Connecticut (1982-2007)



Source: National Resources Inventory, 2007

Center for Land Use Education & Research

Another key source of information on Connecticut agricultural land is the University of Connecticut's Center for Land Use Education and Research (CLEAR). CLEAR has established an ongoing project, "Connecticut's Changing Landscape," that uses remote sensing technology to chart changes in the state's major land categories spanning a 21-year time period (1985 to

2006).¹³ Again, the methodologies used to identify land, and the definitions differ from the NRI data types.

CLEAR data differs from the NRCS National Resources Inventory data in that it covers a slightly shorter time period. The CLEAR datasets consist of 12 land cover categories, which is important because land cover shows the covering of the landscape. This is to be distinguished from land use, which is what is permitted, practiced, or intended for a given area.¹⁴ Additionally, CLEAR has an "agricultural field" category which includes areas under agricultural use and abandoned agriculture areas that have not undergone conversion.

On the other hand, the NRI data is a scientifically-based survey designed to assess conditions and trends of soil, water, and related resources of U.S. non-federal lands at the national, regional, and state levels. NRCS also uses Landsat imagery which is analyzed by specialists as part of a statistical plot-based inventory.

Neither is the CLEAR dataset comparable to the Agriculture Census information which is collected through a survey of farmers. Additionally, the Agriculture Census, as mentioned before, captures whole farm acreage while, NRI and CLEAR only capture active agricultural fields. This is important, as indicated by the former state soil scientist, because the average Connecticut farm is only 40-60 percent agricultural field and the rest is buildings, wetlands, and forest.

Current land cover. In 2006, approximately 7 percent of the state's total area, or 233,000 acres, was in agricultural use. Further, during the study timeframe (1985 through 2006) the state lost roughly 1.2 percent (39,552 acres) of agricultural field.¹⁵

Prime and important soils. CLEAR's *Agricultural Fields and Soils in Connecticut* study is another source describing the status of prime and important farmland soils in the state. According to the study, these soils covered approximately 27 percent (862,822 acres) of Connecticut in 2006.¹⁶

Figure II-5 below shows the distribution of the major land cover categories over prime soils for 2006. The data show:

- the largest area of prime/important soils is covered by forest, 38 percent;
- about 20 percent of these soils are classified as *agricultural field*;¹⁷ and
- the categories of developed land plus turf and grass accounted for 36.3 percent of prime/important soils.

¹³ Major land categories are: developed land, turf and grass, forest and agricultural fields.

¹⁴ CLEAR, <http://clear.uconn.edu/projects/landscape/project.htm>

¹⁵ CLEAR

¹⁶ CLEAR has not completed its analyses for 2010 on prime and important soils.

¹⁷ As defined by CLEAR, *agricultural fields* are "areas that are under agricultural uses, such as crop production and/or active pasture. These fields are likely to include some abandoned agricultural areas that have not undergone conversion to woody vegetation."

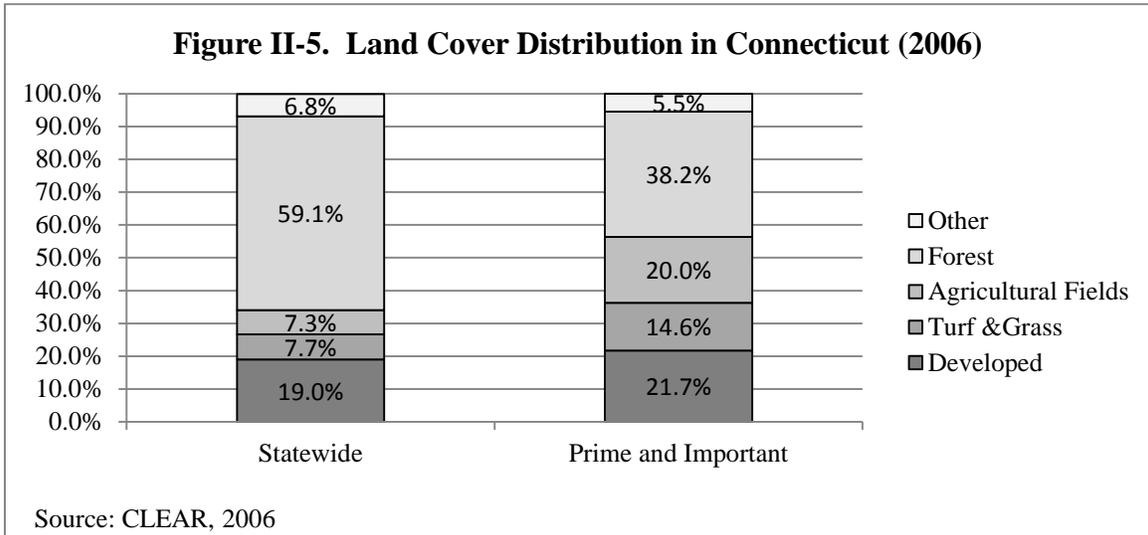
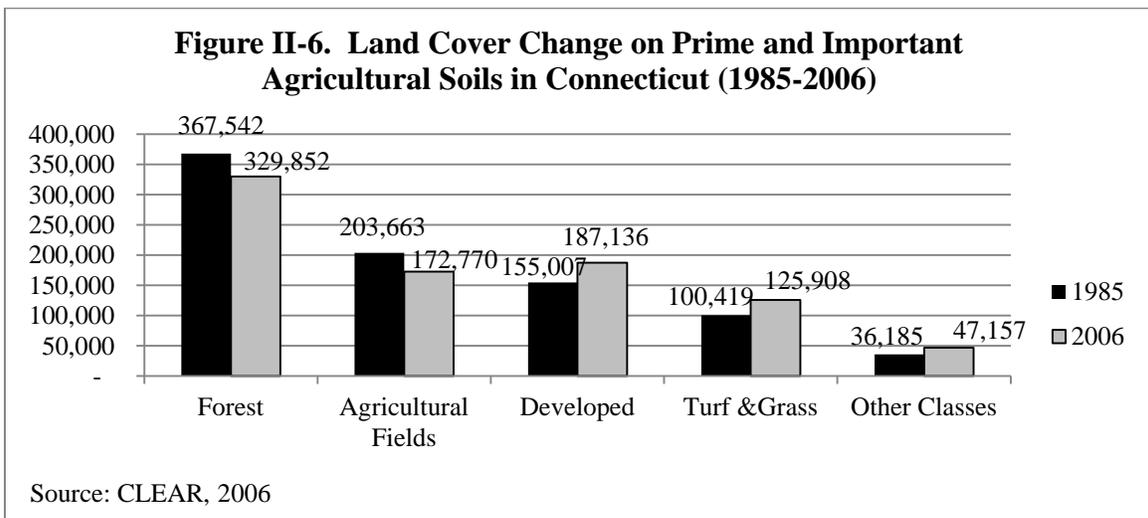


Figure II-5 also provides a comparison of prime and important soils data to the statewide land cover distribution for 2006. Of note is the difference in agricultural fields, which shows the percentage of agricultural fields is greater on high quality agricultural soils statewide, 20 percent versus 7.3 percent. Also, the percentage of developed high quality soils, 21.7 percent, is slightly greater than when compared to the total developed land overall in the state, at 19 percent. The CLEAR report indicates this may be due to the conduciveness of lands with prime soils to development, which are typically flat, well-drained areas.

Trend over time. Figure II-6 uses CLEAR data to show the change over time of land cover on prime and important soils from 1985 through 2006. During this period, forest covering prime and important soils declined 10 percent (37,690 acres), while agricultural fields decreased 15 percent (30,893 acres). Taken together, these losses approximately balance the changes in developed land and turf&grass categories. Specifically, developed land increased approximately 21 percent (32,129 acres), while turf and grass increased 25 percent (25,489 acres). This shows that nearly all agricultural land with prime soils lost was due to development.



Farmland Preservation Program Background and Administration

As discussed below and in the remaining sections of the report, due to the loss of agricultural land across the state, several measures have been implemented at the state and local levels to prevent farmland conversion or loss, including the purchase of development rights programs (PDR). The state has recognized the benefits related to the preservation of land for slowing sprawl, providing a productive land base for the agricultural economy, amenity values of open space and rural character, and protection of wildlife habitat.¹⁸ Specifically, Connecticut created its Farmland Preservation Program to work with farmers to protect the limited prime and important soils of the state and preserve farms in perpetuity.

Origin and Purpose. The state of Connecticut has determined:

...the growing population and expanding economy of the state have had a profound effect on the ability of public and private sectors of the state to maintain and preserve agricultural land for farming and food production purposes; that unless there is a sound, state-wide program for its preservation, remaining agricultural land will be lost to succeeding generations and that the conservation of certain arable agricultural land and adjacent pastures, woods, natural drainage areas and open space areas is vital for the well-being of the people of Connecticut.¹⁹

Recognizing agricultural land is one of the Connecticut's greatest natural resources, a program to safeguard the state's agricultural land base has been in existence at the state level for over 30 years. Known as the Farmland Preservation Program, it serves the state's objective of maintaining and preserving agricultural lands for farming and food and fiber production that otherwise might be lost for succeeding generations.

The concept of a program that could be used to preserve agricultural land in the state resulted from a series of legislative actions and stakeholder interest as concern surrounding the quantity of food produced locally and pressures to convert undeveloped land increased.²⁰ The key precursors to the current Farmland Preservation Program are summarized below.

- P.A. 490 was passed and enables farm owners to pay taxes on PA 490 land at its current use value rather than highest value. This component of the act prevents the forced conversion of farm, forest, and open space lands to more intensive uses as a result of property taxation that is incompatible with current land uses.
- The *Governor's Task Force for the Preservation of Agricultural Land* conducted a study which concluded that to produce one third of its food, the state should preserve 325,000 acres of land.
- The farmland preservation pilot program was established under P.A. 78-232. This act also required the agriculture commissioner to develop a food plan for the state.

¹⁸ Lynch L., & Duke, D. M., *Economic Benefits of Farmland Preservation: Evidence from the United States*, 2007.

¹⁹ C.G.S. Sec. 22-26aa.

²⁰ Fellows, I. F., & Cody, P. H. (1980). *A Food Production Plan for Connecticut, 1980-2000 A Guide To The Purchase Of Development Rights on Farmland*. University of Connecticut Storrs Agricultural Experiment Station.

- The Program Review and Investigations Committee completed a sunset report on the pilot program and recommended a permanent program be established for the preservation of agricultural land.
 - The state food plan is released and proposes 83,500 acres of cropland are needed for the production of certain food items by the year 2000.

Current Program

The Farmland Preservation Program (FPP) transitioned from a pilot program to a permanent program in 1980. The program's main purpose continues to be securing food and fiber producing lands, consisting of prime and important soils, for the benefit of future generations through the purchase of development rights.

The program's reliance on the PDR process allows a farm to remain under private ownership while a permanent restriction is placed on the nonagricultural uses of the property. Although the purchase of the development rights does not mandate a specific land use, it prohibits development of the land that would make it unavailable or unsuitable for future agricultural use. Once the state acquires these rights, this agreement follows the land and is binding on subsequent landowners. Additionally, the program is voluntary on the part of the applicant. A description of the full PDR process discussed later in this section.

Farmland Preservation Advisory Board. The Farmland Preservation Advisory Board oversees the program.²¹ The board consists of 12 members comprised of various stakeholder groups, with appointments made by legislative leaders and the governor. The board, established in 2007, is required to meet quarterly. According to statute, the board must:

- review the ongoing activities of the Farmland Preservation Program;
- evaluate and provide comments and recommendations on the purchase of development rights for agricultural land transaction process, including:
 - methods for streamlining the process and appropriate levels of staffing and funding,
 - methods for increased participation by municipalities and farmers,
 - methods of planning for future acquisitions and identifying prime land for agricultural preservation, and
 - outreach strategies (to be conducted by program staff) to the state-wide farming community, targeted towards attracting a greater number of quality applications;
- evaluate and provide comments on the efficacy of the method of bond funding established in accordance with statute; and
- recommend any other changes, to the program the board deems appropriate, including recommendations for future legislative action.

²¹ C.G.S. Sec.22-26ll.

In addition to its capacity with the FPP, the board was recently tasked with developing the criteria for the Department of Agriculture's new Community Farmland Preservation Program.²²

Program Goal

An informal state goal has been established over time to preserve a certain number of acres of prime and important farmland soils. The program goal finds its roots in the 1974 *Report of the Governor's Task Force for the Preservation of Agricultural Land*, directly stemming from the recommendation of 325,000 acres of agricultural land needed to provide a third of the state's food supply, as mentioned above. This was the first time an acreage amount was specified as necessary to maintain agriculture through the purchase of development rights.

Goal revision. Adjustment to the farmland preservation goal was made a few years after the program's inception. In addition to needing time to secure lands to preserve, the program needed to determine annually how much land it was preserving as well as the composition of the lands coming under the program. FPP determined the lands it was preserving were comprised of approximately 65 percent viable cropland of prime and important soils. This is different than the 30 percent of the average farm identified as cropland in the 1974 task force report. The report also did not distinguish if the 30 percent cropland consisted of prime and important soils.

The 65 percent cropland is a value that, on average, still holds true today on the parcels the program preserves, as discussed later. Additionally, the program used the 83,500 cropland acre value recommended by the food Plan as a base to determine how many acres it should preserve. As shown below, this 83,500 value was divided by the 65 percent prime and important soils being preserved, equaling approximately 130,000, which has been the unofficial goal of the program for the past several decades.

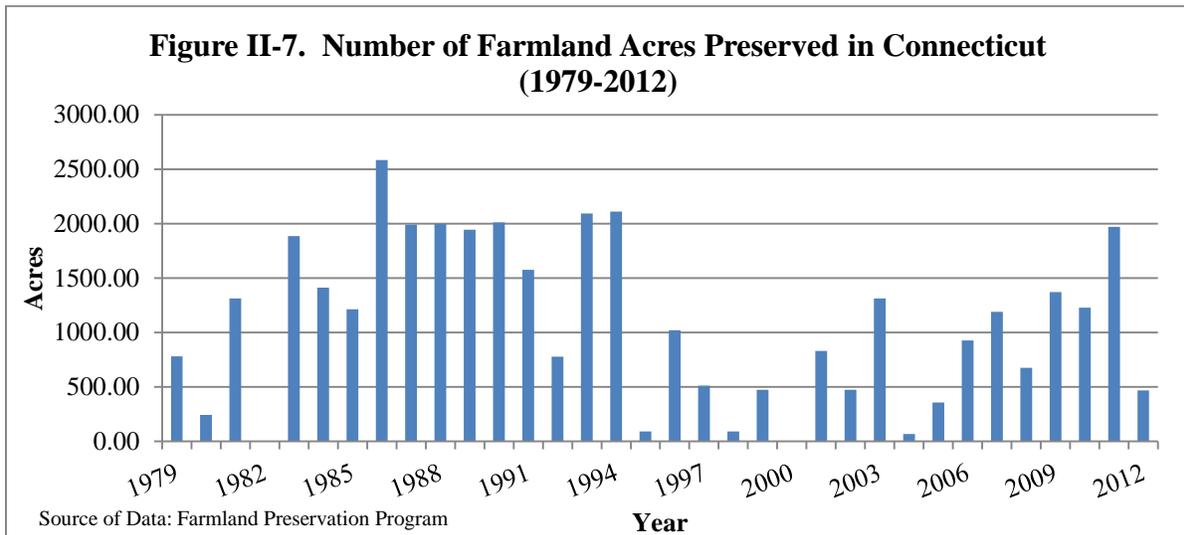
Program Goal Calculation

$130,000 \text{ acres} \approx (83,500 \text{ cropland acres (Food Plan)} \div .65 \text{ cropland (prime soils preserved by FPP on avg)})$

Additionally, the program has determined that if the desired land base goal is acquired, then Connecticut would be able to fulfill at least 50 percent of its fluid milk need and 70 percent of its in-season fresh fruit and vegetable need. This is not a goal of the program; it describes what is possible if the land base of 130,000 acres were obtained.

Progress toward goal. The acres preserved by year since the program inception is shown in Figure II-7. *To date, the Farmland Preservation Program has preserved 38,546 acres, or just under 30 percent of its goal.* This equates to an annual average of 1,100 acres preserved.

²² C.G.S. Sec. 22-26nn (b).



The number of farms preserved by FPP each year since 1979 is shown in Figure II-8. The program had momentum in its early years and experienced slower growth in the mid-1990s and picked up in the early 00s. As of December 1, 2012, the program had preserved 296 farms.

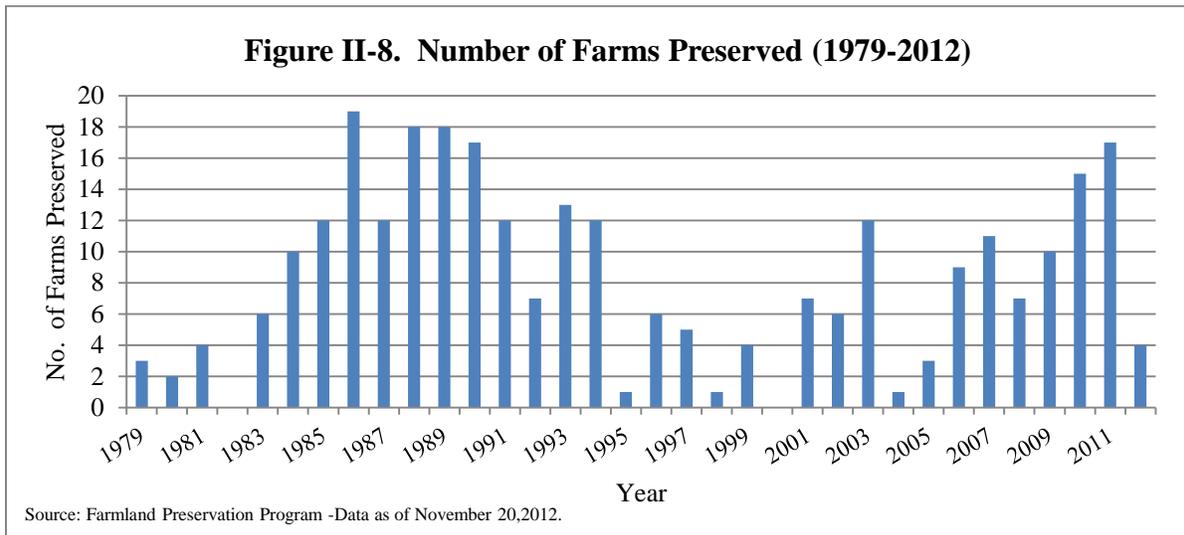
As discussed in detail later in this section, the program received lump-sum bond funding in 2008, discontinuing the need to approach the state Bond Commission for each parcel the program was trying to preserve. The increase in farms preserved since 2008, largely could be attributed to this change. Moreover, the program was able to hire additional staff under the state’s 2005 Community Investment Act,²³ which also could be associated with the trend increase in the number of farms preserved since 2005.

Statutory preservation goal. The Department of Energy and Environmental Protection (DEEP), has a statutory open space preservation goal. In 1997, the General Assembly set a goal of preserving 21 percent (673,210 acres) of the land area of Connecticut for open space for public recreation and natural resource conservation and preservation.²⁴ In addition to the acreage preservation needed to achieve the goal, the statute sets acquisition targets for both the state (to acquire 10 percent) and its partners (to acquire 11 percent). Also established was a time line with an end date of 2023, so that preservation activities were pursued while there was still appropriate land available for open space.²⁵

²³ PA 05-228. The act increased bonding levels for FPP and established a General Fund account where monies are equally distributed across several agencies, with the Department of Agriculture receiving 25 percent. Of the funds received by the department, the monies are distributed to specific programs and the remainder goes to FPP. Under the act, the department cannot use more than 10 percent for administration of the program for which funds are provided. Additionally, the act initiated a \$30 fee for the recording of land records (increased to \$40 under PA 11-48).

²⁴ C.G.S. Sec 23-8.

²⁵ Connecticut Department of Environmental Protection, *The Green Plan: Guiding Land Acquisition and Protection in Connecticut 2007-2012*, 2007.



The Farmland Preservation Program has never had its goal in statute and PRI staff is not recommending the goal be put into statute. At the same time, committee staff concludes having a goal in place gives added legitimacy to the program and provides a baseline from which to measure the program. With proper state oversight of the program's progress towards meeting the goal, it is not necessary at this time to codify the goal.

Several strategies have been implemented to help achieve the goal of preserving 130,000 acres of farmland. Specifically, the program has enacted a relatively large-parcel minimum of 30 acres. This minimum has enabled the program to make progress in protecting larger tracts of agricultural land in the state. The size minimum also helps ensure preserved parcels will remain large enough to allow commercial agriculture in the future, prevent residential development of the land, and assist in keeping land values affordable for future farmers. Additionally, because there is benefit in preserving parcels less than the 30-acre FPP requirement, the recently established Community Farms Preservation Program helps achieve that goal.

Another effort implemented to achieve the goal is the preservation of large contiguous zones of agricultural land. The program has identified the value in "clustering farms" so abutting farms are preserved creating, in some cases, several hundred acre zones of agricultural land preserved in perpetuity. This is important because some of the agricultural value of the land could be lost if preserved land is scattered about the state and interspersed with residential zones.

Is the Preservation Goal Still Relevant?

As indicated above, the program goal stems from several sources. Since the 1974 task force report and other studies were completed, the agriculture industry, as well as the Farmland Preservation Program, has undergone changes that could not have been forecasted. *However, since its creation, the farmland preservation goal has not been re-evaluated or adjusted to account for the current condition of agriculture in the state based on the most readily available data.*

Additionally, because the goal has not been re-examined since the 1980s, it would be advantageous to conduct a more in-depth and recent study on the status of land in Connecticut. This would allow for a current picture of the state's land and an update of the goal to reflect the past and future direction of agriculture. Also, if the goal was originally based on providing land for food production, the advisory board and the department should determine if this is the only reason for the goal, or if the goal should be associated with multiple components, such as environmental, economic, health, and social benefits resulting from the program.

It is possible that the current goal is still attainable, but without further study it is not clear if the total number of acres of prime and important soils is enough to achieve the program goal given the current and future rates of development, and erosion.²⁶ **The Committee staff recommends:**

C.G.S. Sec. 22-261l shall be amended to include provisions for the Farmland Preservation Advisory Board to complete a review of the Farmland Preservation Program goal at least once every five years beginning July 1, 2013. The review shall re-evaluate the goal and determine whether it is still attainable based on a set of relevant criteria as determined by the board. Any revision to the goal should be made in collaboration among the program, board and agriculture commissioner. The board also shall prepare an annual report to the agriculture commissioner on the program's progress toward achieving the goal.

Establishing periodic checks to determine how close the program is to achieving its goal and reassessing progress will show where results have met, exceeded, or fallen short of the interim and overall goals. If found deficient, the advisory board will be a source of assistance to determine the appropriate action needed to fulfill the goal.

In order to make the recommended annual review relevant, the first re-evaluation of the goal needs to be conducted soon to ensure the program is moving toward its goal(s). This study could be done by the advisory board itself or in conjunction with the current Governor's Council for Agricultural Development, given that the council has a work group dedicated to evaluating farmland preservation.

Strategic Planning

Areas throughout the state have been identified to contain rich soils consistent with the Farmland Preservation Program's criteria. Soil testing at various locations around the state has been conducted by the federal agriculture department to determine soil classifications, particularly the locations of prime and important soils.²⁷ As noted, it is these soils the state is attempting to preserve for agricultural purposes through the Farmland Preservation Program.

An important component of the program is identifying which farms meet the state's criteria making them eligible for the program, while ensuring the state's investment is

²⁶ See Council of Environmental Quality, *Environmental Quality in Connecticut Annual Report*, June 2012, for pertinent analysis.

²⁷ There are over 100 types of soil in the state.

maximized. Again, the program's purpose is to preserve the farms' soils in perpetuity by purchasing the development rights to the farm, with the overall farm operation a secondary condition. Thus, given Connecticut has a finite number of acres with prime and important soils, proper planning is vital to the program's overall success, namely attaining the right mix of farms to achieve the programmatic goal of preserving 130,000 acres of farmland. Without a structured planning process and acquisition strategy, program goals are more difficult to communicate and fully achieve.

At this point in time, *the Farmland Preservation Program, including the Farmland Preservation Advisory Board, is without a written strategic plan for acquiring the development rights of farms necessary to achieve the program's goal.* Although the program has demonstrated to committee staff knowledge of the location of farms with prime or important soils throughout the state, such knowledge is not formally laid out in any single document, or used to create a plan to help the program meet its goal. At the same time, the program's advisory board has not prioritized ensuring the program has a strategic plan.

Although there is no written strategic plan in place for acquiring development rights, the requirements of both the state and federal farm preservation programs serve as de facto planning for identifying which farms are good candidates for preservation. Rating applications against certain objective criteria, which both the state and federal programs currently do, helps determine if certain farms are more appropriate than others for preservation. In addition, state regulations require the program when reviewing farmers' PDR applications to consider active farmland within a two-mile radius of the farm applying for the program which, in effect, assists with overall planning.²⁸ As discussed above, preserving farms that either are contiguous with other preserved lands or within the vicinity of large tracts of prime and important soils, is a key component of the program. However, to strengthen and formalize the overall planning efforts of the Farmland Preservation Program, additional steps should be taken. **Program review committee staff recommends:**

The Department of Agriculture should develop a written strategic plan for the purchase of farmland development rights. At minimum, the plan should identify farms throughout the state with prime and important soils that best fit with the state's efforts to protect such soils through the acquisition of a farm's development rights. Incorporated within the plan should be short- and long-range strategies for achieving farmland preservation goals. At minimum, the plan should be coordinated with the state's conservation and development plan, applicable environmental/open space plans, and smart growth principles, and based on the most recent, comprehensive land cover information available.

The initial plan should be developed by December 31, 2013, and submitted to the Farmland Preservation Advisory Board for review. Upon completion of its review, any corresponding revisions to the plan by the board should be considered by the department. Final approval of the strategic plan should be made by Department of Agriculture

²⁸ Conn. State Regs. Sec. 22-26gg-4.

commissioner by July 1, 2014, with a full review and revisions as needed by the department and advisory board every five years thereafter.

Committee staff believes the preservation of critical farmland throughout the state will be accomplished through a more comprehensive, proactive, and open process if the goal of preserving farmland is guided by a formal, written strategy. Through assistance, direction, oversight by the Farmland Preservation Advisory Board, and final approval of the plan by the commissioner, committee staff is confident a strategic plan can be developed, implemented, and periodically reviewed and revised, if needed, in an efficient and effective manner.

Instrumental in developing a useful strategic plan is having thorough and timely data of the state's land base, particularly land used for agricultural purposes. As highlighted earlier, there are several data sources available showing individual types of land statewide (e.g., forest, crop, pasture, water). Updated NRI data for 2007-2012 should be forthcoming, which FPP should use in developing its strategic plan.

State-owned lands. An important component to consider within the program's overall planning efforts is the land held by state agencies that could be used for agricultural purposes. An estimated 1,300 acres of prime and important soils potentially available for farming are located on property under the purview of the Departments of Correction, Developmental Services, Transportation, and Mental Health and Addiction Service.²⁹ There are instances where state-owned land is leased to farmers.

A key planning issue for farmland preservation purposes - with respect to state-owned land - is determining which entity should own the land. There are concerns among some stakeholders that if state lands were preserved under the Farmland Preservation Program and held by the state, the idea of owning the lands in "perpetuity" may not hold true. For example, the state could, at some point in the future, decide it wanted to generate revenue and simply sell the preserved land since it is owned by the state. At the same time, preserving state-owned for agricultural purposes could be important in helping the program reach its goal of preserving 130,000 acres of farmland.

Special Act 09-8 required the Farmland Preservation Advisory Board to conduct a review of any state-owned agricultural land, excluding any such land owned by the Department of Environmental Protection (now DEEP), to evaluate methods for permanently preserving each such parcel of land. The board was also required to make recommendations for further action to be taken to preserve state-owned land, including recommendations for a conservation easement or possible transfer of the interest of the property and the identification of potential recipients of any such conservation easement.

The special act noted the board, when conducting its review, may consider methods of preservation that would result in an increase in revenue for the state. In addition, the board must consult with the agency that exercises control over the applicable land. In accordance with the

²⁹ See *A Report to the General Assembly from the Farmland Preservation Advisory Board: Considerations and Recommendations of Special Act 09-8 "An Act Concerning the Preservation of State-Owned Agricultural Land."* Undated.

special act, the board submitted its recommendations to the agriculture commissioner and the legislature's environment committee.³⁰

Since the board's report was submitted, two legislative proposals have been put forth to preserve land at the state-owned Southbury Training School for agricultural purposes. In 2011 and 2012, separate bills essentially would have permitted the agriculture commissioner to grant an easement on land located at Southbury to a nonprofit organization whose mission is to preserve agricultural land. The nonprofit organization would then have the ability to lease the land for agricultural purposes. One of the bills further limited the state's future use of the land, and precluded the potential future revenue gained through the sale of the land. Neither bill became law.

Program Resources

Staff

The program is organized under the Department of Agriculture and currently operates with five employees. This includes a program director, one secretary and three program staff (Property Agents). Over the last ten years, the program has operated with as little as one staff person.

The Community Investment Act permits the Department of Agriculture to use up to 10 percent of funds in the Agriculture Sustainability Account for administrative purposes and program operations. These funds allowed the Department to hire three additional employees in 2007 to achieve its current staffing level. Staff coordinates several of the program's primary operations, including application scoring, property appraisal reviews, and other duties and responsibilities applicable to the PDR acquisition process. As noted earlier, farmland preservation staff simultaneously serves as program staff to the Department of Agriculture's newest preservation and restoration efforts: the Community Farmland Preservation Program and the Farmland Restoration Program.

Funding

The program receives funding from several sources at the local, state, and federal levels as shown in Table II-2. Specifically, the program receives funds from state lump-sum bonds, the General Fund, the Community Investment Act, the Federal Farm and Ranch Land Protection Program, and a variety of other local partners, as described below.

State bonds. With enactment of P.A. 07-162, the Department of Agriculture has received biannual payments lump-sum bond funds over the course of each fiscal year. Prior to receiving lump-sum bonding, the department had to approach the bond commission for approval of every parcel it wanted to preserve under the FPP. Table II-2 shows the receipt of bond funds since 1999 totaled \$82,500,000.

³⁰ Id.

Table II-2. Funds Received by Farmland Preservation Program FY 1999-2012

Fund Source	Bond \$	Community Investment Account	General Fund	Federal FRLPP	Local	Land Trust
1999	\$ 1,000,000			\$ 406,785	\$ 299,902	
2000	-			\$ 399,869		
2001	\$ 5,000,000			\$ 398,424		
2002	-			\$ 1,373,936		
2003	-			\$ 810,431		
2004	\$ 6,000,000		\$ 106,752	\$ 1,189,426	\$ 251,052	
2005	\$ 18,000,000		\$ 167,704	\$ 415,653	-	
2006	-	\$ 2,473,285	\$ 172,666	\$ 812,180	-	
2007	\$ 10,000,000	\$ 421,637	\$ 140,217	\$ 1,787,291	\$ 695,156	
2008	-	\$ 3,321,135	\$ 173,030	\$ 1,358,429	\$ 682,744	
2009	\$ 12,500,000	\$ 1,554,163	\$ 180,078	\$ 2,804,366	\$ 100,000	\$ 50,000
2010*	\$ 10,000,000	No Funds Received	\$ 156,074	\$ 3,589,428	\$ 767,470	
2011*	\$ 10,000,000	No Funds Received	\$ 163,050	\$ 2,748,936	\$ 1,124,430	\$ 155,924
2012	\$ 10,000,000	\$ 2,407,485	\$ 169,560	\$ 2,002,789	\$ 600,000	
Total	\$ 82,500,000	\$ 10,177,705	\$ 1,429,130	\$ 20,097,941	\$ 4,520,754	\$ 205,924
*Per PA 09-229 CIA funds were transferred to dairy farmers for 2 years						
Sources: Natural Resource Conservation Service, Office of Policy and Management, Farmland Preservation Program						

Community Investment Act (CIA). Since FY 2006, FPP has received almost \$10.2 million from the Community Investment Act, as shown in the table above. P.A. 05-228 designated that any funds from the Community Investment Account, remaining after supporting specific programs under the Department of Agriculture, were to be used to support the Farmland Preservation Program. In 2009, the CIA was amended to assist dairy farmers and, as a result, funding from CIA was suspended for the Farmland Preservation Program. Set to expire two years later, the law increased the fee collected by town and city clerks on all documents filed on municipal land records from \$30 to \$40. Public Act 11-48 reestablished CIA funding which supports farmland preservation.³¹

General Fund. General fund expenditures on FPP totaled just over \$1.4 million from fiscal years 2004 through 2012.³²

Federal Farm and Ranch Lands Protection Program (FRPP). Established in 1996, FRPP provides matching federal funds (up to 50 percent) to assist in the purchase of development rights in support of state preservation efforts. The program is administered by the Natural Resources Conservation Service and, as shown in table II-2, Connecticut has received over \$20 million in funding for its Farmland Preservation Program since 1999.³³

³¹ Office of Policy and Management

³² Data could only be retrieved from 2004 because this is when FPP financial data appeared as a separate line item in the budget in CORE-CT. Prior to that, the program had been lumped in the Agricultural Development and Resource Preservation Program section of the budget.

³³ USDA Natural Resources Conservation Service, Connecticut Office

Land trusts. Land trusts are private, nonprofit organizations dedicated to land conservation throughout the state. In Connecticut there are over 100 such trusts protecting natural areas and open space. The preservation program has collaborated with Connecticut Farm Trust on two acquisitions since 2009, and often recommends parcels that do not meet its criteria to these entities for consultation.

RBA Question 2 ***HOW WELL DID WE DO IT?***

- The state preserves prime and important soil resources by purchasing the development rights and placing easements on farms in perpetuity.

Acquisition Timeliness

- The process to acquire a farm's development rights is a negotiation between the farm owner(s) and the state; each acquisition has its own set of administrative and legal challenges, which take time to resolve.
- Trends in the overall timeliness of the purchase of development rights (PDR) process show the annual average number of days to complete the process ranged from 719 days (FY 11) to 1,046 days (FY10).
- Trends in the timeliness for most of the individual phases of the process either improved or were relatively unchanged over the four-year period.
- 52 percent of survey respondents were either satisfied or very satisfied with the overall time it took to complete the PDR process; 29 percent either were dissatisfied or very dissatisfied; 19 percent were neutral.

Quality of Acquisitions

- The quality of the acquisitions made by the program, as measured by application score and percentage of prime and important soil making up the full acquisition, showed acquisitions were of relatively high-quality.
- The FPP exceeded its target of attaining development rights to farms with at least 65 percent prime/important soils for acquisitions in two of the past three years.

Program Operations

- There is no formal state requirement for a proactive stewardship effort for farmland preservation. The current stewardship initiative needs to more fully ensure farmers' compliance with program requirements to protect taxpayers' investments in preserving farmland.
- Oversight of program operations by the Farmland Preservation Advisory Board Program needs to be more focused in some areas; internal program data collection/management needs strengthening.

Story Behind the Data

Purchase of Development Rights

As it relates to food production, a goal of the Connecticut's Plan of Conservation and Development is for the state to maintain and support the agricultural sector to increase its long-term, in-state food producing capacity through various means, including the conservation and

preservation of prime farmland soils.³⁴ The Farmland Preservation Program supports this goal by protecting lands designated as prime or important from development.

The state's process to purchase the development rights (PDR) of farms with prime or important farmland soils is multi-faceted. It also involves review and approval by several different agencies. Although the bulk of the PDR process occurs within the Department of Agriculture, the State Properties Review Board, the State Bond Commission, and the Office of the Attorney General each has review/approval authority. Although the overall time to complete the process varies depending on the complexity of a project, legal requirements, and funding commitments, one thing is clear: the time necessary to purchase farmland development rights is not solely within the Farmland Preservation Program's control.

Acquisition Process

The process to preserve farmland is geared toward purchasing a farm's development rights in perpetuity, rather than buying the farm outright through the more costly "fee simple" approach.³⁵ Participation in the program is voluntary on the part of farm owners, and the purchase of development rights by the state does not relinquish a farmer's ability to use the land as he or she chooses (in accordance with the deed covenant and state statutes and regulations) or the obligation to pay taxes on the land.

Figure III-1 shows the PDR acquisition process, which begins with the preservation program becoming aware a farm owner would like to participate in the program. This mostly occurs by a landowner contacting the department, although the department conducts outreach efforts as feasible. The key concept to keep in mind is the voluntary nature of the program on the part of landowners. The PDR process can be grouped into several key phases, each discussed below.

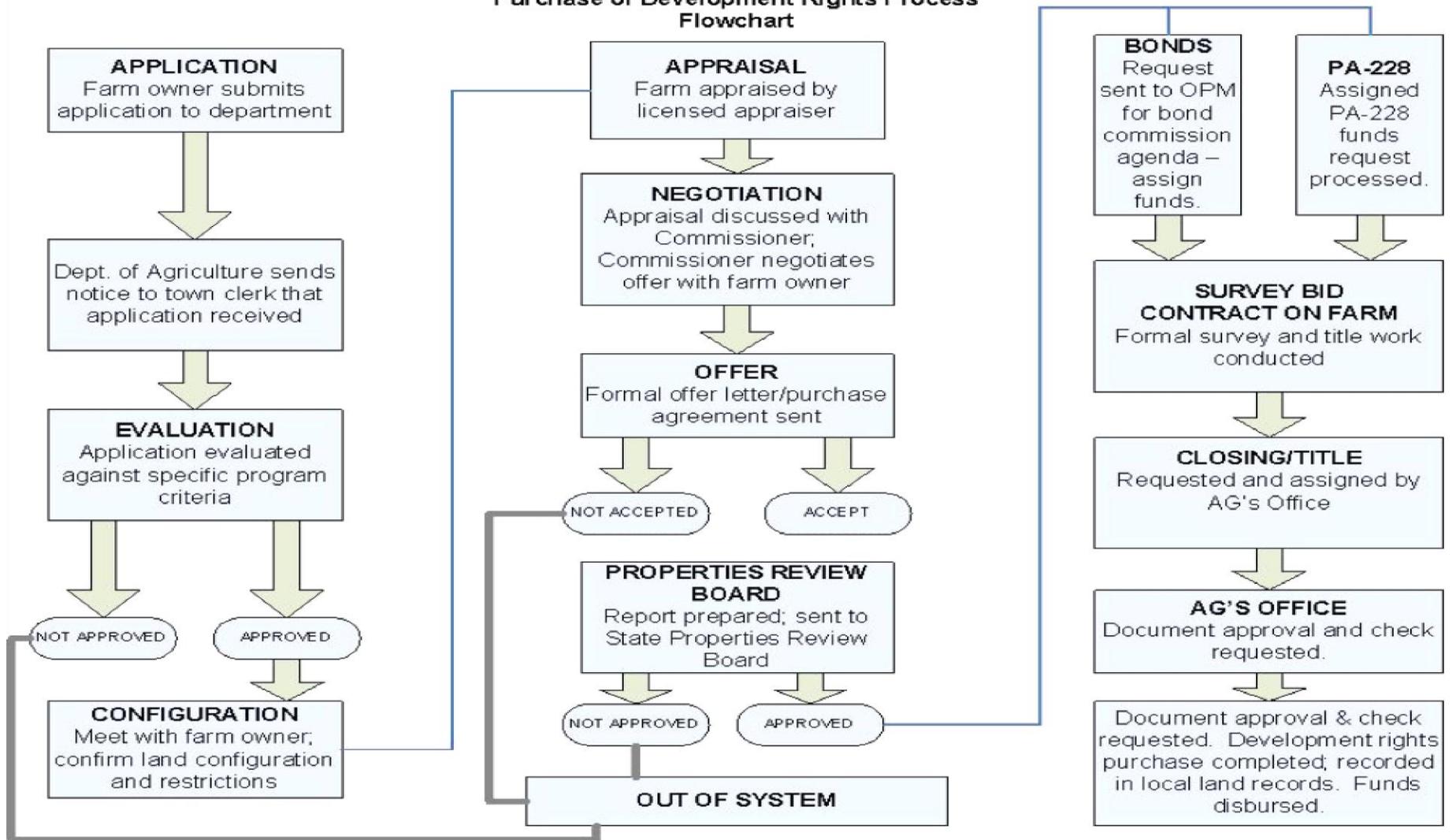
Application/evaluation. A farmer is encouraged to contact the Farmland Preservation Program directly prior to submitting a formal application, allowing the program to initially and informally assess an inquiry. At this point, the program is looking for certain aspects of the farm that best fit key criteria:

- size;
- percent of prime and important farmland soils;
- amount of cropland; and
- if the farm is contiguous to or near other preserved land, including land preserved as open space by the Department of Energy and Environmental Protection

³⁴ Id. p.67

³⁵ "Fee simple" is absolute title to land, free of any other claims against the title, which one can sell or pass to another by will or inheritance. The state owns the fee simple rights to one farm, in Lebanon.

**Farmland Preservation Program
Purchase of Development Rights Process
Flowchart**



If the farm characteristics are pre-determined to meet the program criteria, the farmer is asked to submit an application; if not, the program may offer alternative ways to achieve the land owner's conservation interest (e.g., via a municipality or a land trust). The application to participate in the Farmland Preservation Program includes information about the owner and the property. Specifically, the application requests information on location, acreage available for crops, farm viability (i.e., revenue generated), and probability of non-agricultural development. The department gathers additional information about the site, including soil maps, assessor data, contiguous land, and aerial photos.

Once an application is received, the program is responsible for notifying the town clerk in the municipality where the property is located that an application to the program has been made. Early in the application process, the program may make inquiries to municipalities (in towns where preservation initiatives exist), land trusts, and the federal farm protection program to gauge their interest in working with the department to help finance the acquisition.

After the necessary information is received, the application is reviewed by one of three property agents within the program. The agent is responsible for assigning a score to the application using a sheet containing criteria, to ensure the integrity of the process. The following are examples of the provisions contained in state statute and regulations:

- degree to which the acquisition would contribute to the preservation of the state's agricultural potential;
- encumbrances on the land;
- cost of acquiring the rights; and
- degree to which the acquisition would mitigate damage due to flood hazards.

Application scores are then ranked against each other to determine the most appropriate properties to pursue.

One specific part of the application process identified by committee staff as needing greater attention is the criteria used to score applications. The current scoring standards specified in regulation were implemented in 1992. Although the criteria are still relevant, there may be additional standards the program should formally consider when scoring FPP applications. This especially holds true since application scoring criteria were just established for the Community Farms Program administered by FPP. **Thus, committee staff recommends:**

The Farmland Preservation Program, in conjunction with the Farmland Preservation Advisory Board, should re-assess the PDR application scoring criteria to see if additional objective criteria are needed or if modifications to the current criteria are necessary. Applicable regulatory modifications should be pursued.

Land configuration and appraisal. Applications receiving a score of 65 or higher (out of 105) are eligible for the program. Farms with the highest scores are generally considered first;

the program notes it is committed to working with "the best of the best" for preservation purposes, since resources to purchase development rights are limited.

As properties are scored, the program director and commissioner discuss which sites to pursue. Once a farm is identified, a meeting is held with the property owner to negotiate the configuration of the land for which the development rights are being purchased. In other words, inclusions and exclusions of parcels (e.g., land for homestead purposes, non-contiguous lands, or lands not appropriate to the farm) are negotiated between the state and the land owner. Both the owner and the state sign an agreed-to configuration document, which is put into a file maintained by the program.

After the farm configuration is negotiated and agreed to, the farm is appraised. Two independent, state-licensed, general appraisers appraise the land. Each appraisal ascertains the value of the land if used for development purposes (unrestricted/market value) and the agricultural value of the land. The difference between the 'before' and 'after' values of the appraisals is the indicated value of the development rights, and a dollar amount between the two appraised values is where the initial development rights price is established.³⁶ At this stage, FPP is required to notify the Departments of Energy and Environmental Protection, Transportation, and Economic and Community Development, as well as the Office of Policy and Management whenever appraisals are conducted.

The appraisals are reviewed by the FPP to ensure consistency with state, federal, and the uniform standard of professional appraisal practice guidelines, and to begin formulating an offer price and negotiation strategy. Discussions among program staff and the commissioner ultimately derive the negotiated offer amount. Understanding appraisal values may differ for the same property, two key factors considered when determining an offer price are importance of the property to the program and the overall value of the property to the state.

Purchase price negotiation. Once the department establishes its purchase price offer, negotiations are held between the department and landowner to determine a final development rights agreement purchase price. The program indicated it always attempts to negotiate in the best interest of the state.

Once a purchase price is agreed upon, a formal offer/agreement letter is presented to the landowner. As with any negotiation, there are times when owners reject offers, at which point the PDR process ends. There have been instances, however, when farm owners who originally rejected an offer have later contacted the department (in some cases, several years later) to begin the PDR negotiation process anew. The department may determine whether or not to renegotiate with the owner to determine a new PDR value.³⁷

³⁶ Appraisal services are done through Personal Service Agreements between the state and the appraisers, and must go through the formal bidding process established by the Departments of Administrative Services and Agriculture.

³⁷ Any negotiated price per acre below the appraised market value is considered a bargain sale. State statute does not permit the per-acre price paid for PDRs to exceed \$20,000 (C.G.S. Sec. 22-26gg).

State Properties Review Board. Once the offer agreement letter is signed by the owner, the program submits the PDR details via written report to the State Properties Review Board (SPRB) for review and approval. The board, acting as another formal check on the PDR process, reviews the report, including the appraisals, visits the farm, and makes its decision to approve or deny the proposed acquisition.

FPP noted to committee staff that the board has initially denied several acquisitions, although not in the last several years, because it thought the department's offer price was too high. In those cases, the program renegotiated its offers, and resubmitted the projects to the SPRB. There also have been occasions when FPP has rescinded requests in order to address any questions or concerns about the parcel or acquisition raised by the board. Each time, the program resolved the questions and resubmitted the project for approval.

Project funding. Until FY 08, all state funding for PDR projects was made through the bond commission process after acquisition approval by the properties review board. As previously discussed, beginning in FY 08, state law allowed for biannual lump sum bonding for farmland preservation acquisitions. In addition, the Farmland Preservation Program began receiving additional state funding in FY 06 through the Community Investment Act (CIA) for preservation projects, also discussed earlier.

Stakeholders interviewed as part of this study, including FPP staff, all have said lump-sum bonding and CIA funding have allowed the program to streamline the overall efficiency of the PDR process. Rather than having to petition the bond commission for funding each project, the revised process provides funds prospectively, which the program can draw upon when necessary (this process is similar to the one used for DEEP open space acquisitions). Lump-sum bonding also allows the program to better gauge the yearly resources available for projects. Moreover, CIA funds have resulted in increased program staff to augment program administration, as well as a funding source to use to more quickly complete administrative parts of the PDR process, such as hiring appraisers and surveyors.

Joint purchase efforts between the state and municipalities also occur to preserve farmland. A combined farmland preservation program was developed in 1986 as a way of augmenting the main preservation program. The program promotes and encourages towns to establish local preservation programs and limit conversion of their prime farmland to nonagricultural purposes.

Towns participating in the program are required to have a municipal farmland preservation fund. The fund must be established by the local legislative body, and capitalized by: 1) donations made for agricultural land preservation purposes, 2) grants/loans for agricultural land preservation, or 3) any municipal appropriation. Whenever the department purchases agricultural land development rights and a municipality uses its own farmland preservation funds to help in the purchase, development rights may be jointly owned provided the land falls totally within the municipality's borders. Municipalities have contributed or committed to contributing

\$5.8 million toward the purchase of development rights on 33 farms through the Farmland Preservation Program.

The agriculture commissioner may issue a letter of intent seeking financial assistance from nonprofit organizations, namely land trusts, when purchasing farmland development rights. If an outside organization purchases the development rights on its own, such rights may be sold back to the state based on a purchase agreement. FPP staff notes this has occurred only once.

An additional funding source is the Federal Farm and Ranch Lands Protection Program (FRPP), administered by the USDA's Natural Resources Conservation Service. The federal program administers a competitive application process upon which grantees are provided matching funding of up to 50 percent of a project's fair market value.

Property survey. Once the PDR project is approved by the State Properties Review Board, a survey is required on the property. The survey type (A-2) is considered the most comprehensive of the various survey methods available. The surveyor for each potential acquisition is selected through the state's formal bidding and approval process.

Title/Closing. Title searches are conducted by outside law firms selected by the attorney general's office. Following a final review of the development rights deed by the attorney general's office, a closing is held. Once completed, the deed for development rights is recorded in the local land records and with the Office of the Secretary of the State, at which time the proceeds are disbursed and the owner receives payment for the acquisition.

Relinquishment of development rights. The agriculture department may release the development rights restriction if, in consultation with DEEP and any advisory group(s) appointed by the department, it approves: 1) an owner's petition approved by resolution of the town's governing body; or 2) a petition by the town approved in writing by the owner and put to a town referendum. A petition to relinquish development rights outlines any facts the department should consider. The petition must show an overriding necessity in the public interest to relinquish the rights. At least one public hearing must be held, and all expenses are borne by the petitioner.

Committee staff was told this process has occurred only twice in the program history; once for a public safety purpose and once for legal reasons. The overall process to relinquish development rights once purchased by the state is intentionally lengthy and involved to help protect the integrity of the program and the state's interest/investment in perpetuity of the agricultural land resource.

Other. The purchase of development rights is not considered state ownership of the land. As such, the state is not liable for pollution or contamination of the land and nobody can bring a civil suit against the state for damages resulting from pollution/contamination of the land.³⁸ In addition, if the owner of a preserved farm wants to sell the farm, the owner must notify the agriculture department commissioner of the impending sale no more than 90 days prior to the

³⁸ C.G.S. Sec. 22-26cc(f).

land title transfer.³⁹ The name and address of the new owner also must be forwarded. Moreover, if new construction or modifications are made to the original configuration, state law requires such changes are limited to no more than five percent of the total prime farmland.⁴⁰

Actions to Turn the Curve

Data Analysis, Findings, and Recommendations

A key question within the Results Based Accountability study approach regarding program performance is *How Well Did We Do It?* To answer this question, committee staff analyzed the Farmland Preservation Program in several ways:

- 1) a review of individual PDR acquisition data to determine the overall timeliness of the process based on key stages of the process over a period of time;
- 2) an examination of the trend in application scores, and the percent of prime/important soils of total land for PDRs, as measures of the overall "quality" of acquisitions;
- 3) an assessment of stewardship efforts (i.e., property inspection after acquisition to ensure compliance with deed restrictions/program requirements); and
- 4) a review of program operations.

Committee staff's analysis, the resulting findings, and the proposed recommendations, relied largely on its review of PDR acquisitions for the four-year period FY 2009 through FY 2012. Prior to 2009, the program operations differed in two ways: staff resources were more scarce; and the funding mechanism required approval by the State Bond Commission for individual acquisitions. This review revealed the state's purchase of the development rights of farms is an involved real estate negotiation/transaction with multiple components. As a result, the precise process, including its overall timeliness, is unique for each acquisition making comparative analyses across projects challenging.

In total, all 50 farmland preservation PDR acquisitions finalizing in FYs 2009-2012 were reviewed (not including two properties acquired by owners' gifts). The general characteristics of the acquisitions are provided below.

- Average property size: 111 acres, with sizes ranging from 21 acres to 445 acres.
- Average acreage of prime and important soils: 79 acres.
- Total acquisition cost (state share): \$28.2 million.
- Average acquisition price (state share): \$576,000, with prices ranging from \$30,000 to just over \$2.6 million.
- Average cost/acre (state share): \$5,700, with ranges from \$294 to \$13,956.

³⁹ C.G.S. Sec. 22-26cc(b).

⁴⁰ C.G.S. Sec. 22-26bb(d)(3).

- Average federal share: \$2.8 million/year.
- Average town share: \$74,600/year.
- Average land trust share: \$5,600/year.

Acquisition Timeliness

One of the primary criticisms of the Farmland Preservation Program has been the length of time necessary to close deals. Again, this issue is relative because each PDR is a negotiated real estate transaction with its own set of legal and administrative issues that take time to resolve. Nevertheless, committee staff was interested in identifying whether the length of time necessary to complete the phases of the process changed over the four-year period.

Analysis caveats. Committee staff cautions the analysis below is based on varying degrees of completeness for specific data elements within the process, which may affect the results to a certain degree. In addition, given the annual number of acquisitions is relatively low, one or two deals with drastic differences in the number of days certain phases of the process took to complete, may affect the overall timeliness for all projects that year (e.g., one acquisition took eight years to finally complete in 2010). Further, the database examined by committee staff did not include the dates applications were received by the department; including those dates in the analysis would extend the overall time to complete the full process, although it is unclear as to exactly by how long. Keeping in mind these caveats, Table III-1 shows the average number of days each phase of the process took to complete for all PDR acquisitions made during FYs 09-12.

Table III-1. Average Number of Days to Complete PDR Acquisition Process (by Phase) FYs 2009-2012*				
Phase	FY 2009 (n=14)	FY 2010 (n=12)	FY 2011 (n=12)	FY 2012 (n=12)
Application Evaluation/Scoring ⁽¹⁾	N/A	N/A	N/A	N/A
Configuration ⁽²⁾	31	31	21	67
Appraisal	259	122	185	136
Negotiation/Offer	209	104	122	107
State Properties Review Board	22	23	35	34
Survey	208	113	88	113
Final Payment	209	432	385	898
Avg. Total Acquisition Time ⁽³⁾	956	1,046	719	846

* Electronic acquisition data received from the department for the four fiscal years analyzed varies in terms of completeness. As such, the number of acquisitions with data for each stage of the process varies; FY12 data was the most incomplete.
(1) Cannot be determined due to insufficient data.

(2) There was one farm in FY09 where the difference between the configuration letter date sent and date received was 4,949 days, most likely because the owner decided to sell years later. This farm was not included in the configuration phase analysis so as not to completely skew the results).

(3) Total acquisition time is the average number of days between the configuration letter's date of receipt by the program to the closing date (as indicated in the program's database), and not the sum of the average number of days for each phase presented in the above table. Also, one acquisition in 2010 took eight years to finalize, thus dramatically increasing the overall average number of days to complete the PDR process.

Source: PRI staff analysis of Farmland Preservation Program data.

Total acquisition time. As noted above, committee staff was interested in identifying trends in the timeliness of acquisitions as possible indicators of areas where the process could be more efficient. *There was no consistent trend in the length of time needed to complete the entire process.* For FY 09, the average time to complete the PDR process was 956 days. This increased to 1,046 days in FY 10, decreased to 719 days in FY 11, and back up again to 846 days in FY 12.

Responses to committee staff's survey of current owners of farms with preserved land show over half (52 percent) either were "very satisfied" or "satisfied" with the time taken to complete the full acquisition process. Twenty-nine percent of farmers responding either were "dissatisfied" or "very dissatisfied" with the process timeliness (another 19 percent were "neutral").

Length of individual phases. The length of time from when the department sent the configuration letter to a farmer to when it was returned generally remained steady at roughly one month, except when it increased to a little over two months for FY 12. The time necessary to complete appraisals also decreased (although not consistently on an annual basis) over the period analyzed, from an average of 259 days in FY 09, to 136 days in FY 12 - almost a 50 percent drop. The same trend holds true for the offer price negotiation phase (209 days to 107 days). Reasons for the phases' shortening are unclear, but the additional program funding through the Community Investment Act and more efficient access to lump-sum bonding may be directly related.

The reviews conducted by the State Properties Review Board, which include visits to prospective farms by board members, generally averaged three to five weeks. This step is not required for the DEEP open space acquisition program, and there is some thought among stakeholders that the SPRB process is unnecessary and adds only to the overall time it takes to complete the farmland PDR process. Others, however, believe reviews by the board ensure acquisitions are properly vetted and the reviews add a useful layer of oversight to the program. The analysis presented in Table III-1 shows SPRB reviews are not an overly time-consuming part of the PDR process. Based on this and the added oversight the SPRB process provides the program, committee staff makes no recommendation in this area.

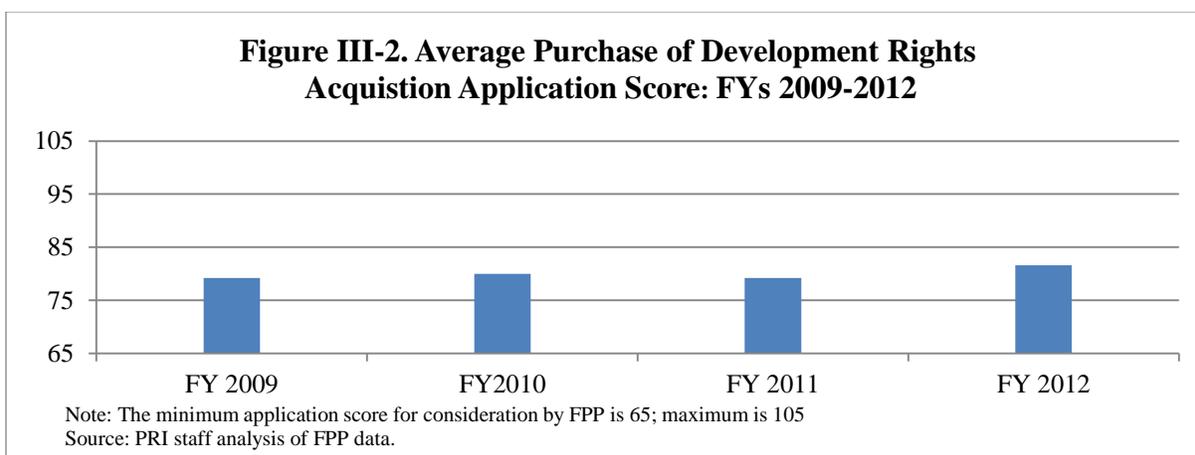
One area committee staff identified where the trend increased for the acquisitions analyzed, is the time it takes once the survey is completed to the final payment phase. This part of the process primarily involves: putting together the final PDR package; legal work by attorneys necessary to close the deal and generate the deed; legal documents filed with the town where the farm is located; and payment provided to the farm owner. It is unclear to committee

staff exactly what changes could be made to make this phase of the process more timely, since it mainly includes work done outside the FPP program. However, the Farmland Preservation Advisory Board and the Governor's Council on Agricultural Development, as part of their overall responsibilities, could examine this part of the PDR process to determine if changes could be made to improve efficiency.

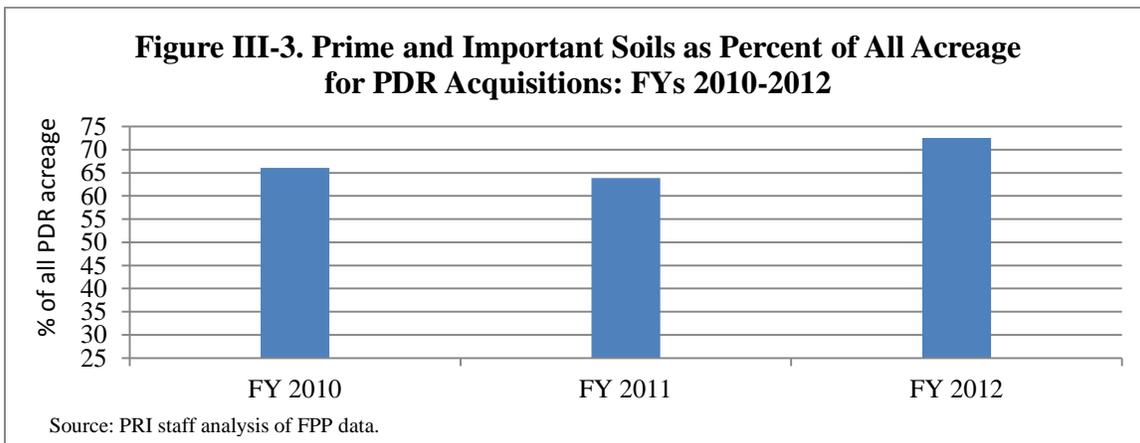
PDR Acquisitions Serve Program Purpose

Another important indicator of the Farmland Preservation Program's performance is the extent to which PDR acquisitions achieve the program's purpose; this can be assessed by evaluating acquisitions' quality. Committee staff defines quality as: 1) how well applications to preserve farmland scored against program standards; 2) the land value of acquisitions based on the percent of prime and important soils to the overall acreage of land/water bought by the state as part of the transaction; and 3) the percent of viable cropland within the entire farm configuration.

Application scores. Figure III-2 below shows *the trend in annual average application scores was mixed over the four-year period analyzed, ranging from a low 79.2 in 2009, to a high of 81.2 in 2012, out of a possible 105* (in addition, there were instances when applications received either the minimum score of 65 or the maximum score of 105). What is missing from the analysis, however, is a comparison of application scores for actual PDR acquisitions to all other applications scored (i.e., those that did not meet the minimum score or did not successfully complete the acquisition process.) The latter information is not included the program's electronic database.



Prime and important soils. The percent of prime/important soils in an acquisition is another measure of the overall quality of the land preserved by the FPP. Figure III-3 highlights the results of committee staff's analysis using acquisition data for FYs 2010 through 2012 (the years data were available from FPP). It should be noted that prime/important soils acreage is for the entire farm configuration, which includes land currently unavailable for farming but still within the farm's footprint.



The figure shows *the percent of prime/important soils averaged just under 68 percent for the three-year period, and ranged from 63.9 percent in 2011, to 72.5 percent in 2012. Given the informal goal of the program is to acquire PDRs with at least 65 percent prime/important soils of the total acreage preserved, the program has, on average, exceeded its target the last three fiscal years.*

Active cropland. The Farmland Preservation Program's purpose is to acquire farmland development rights to establish a land base necessary for food and fiber production. One data component not formally captured by the program, however, is the amount of preserved acreage not used for active agricultural purposes (i.e., fallow land). As such, committee staff used its survey as a proxy for determining the amount of fallow land.

The survey asked farm owners to indicate the total acreage of their preserved land capable of producing food/fiber products, along with the acreage of preserved land currently used to produce such products. The difference should be the amount of land laying fallow. The results show *farms had an average of 90.5 acres of land capable of production, and 85.8 acres of land was currently used for production - or 95 percent of preserved land is actively farmed.* Committee staff could not identify any "best practice" or accepted standard as it relates to the percent of preserved land not actively used for agricultural purposes, thus it is difficult to provide additional context. Although the Farmland Preservation Program does not track specific statistics regarding fallow land, it told committee staff an acceptable level is around five percent. Committee staff's survey results indicate this benchmark is being met.

Land Stewardship

Although not presented in the analysis above, a critical component of the overall PDR process is stewardship of the properties following PDR acquisitions (i.e., responsible resource management and oversight). The Connecticut Plan of Conservation and Development notes

stewardship of prime farmland soil is fundamental to a sustainable agriculture.⁴¹ Proper stewardship also protects taxpayers' investment in state-preserved farmland by ensuring current and future owners care for the land in accordance with the stipulations agreed to as part of the PDR deed covenant.

State law allows the commissioner (i.e., department) to enter upon any restricted agricultural land for the purposes of determining compliance with the statutes governing the Farmland Preservation Program.⁴² A review of state statutes and regulations, coupled with information obtained through interviews with stakeholders, including FPP staff, confirmed *there is no specific statutory or regulatory requirement obligating the Farmland Preservation Program to conduct any type of stewardship compliance effort for preserved lands. Moreover, the Farmland Preservation Program does not have a formal, proactive stewardship effort in place, nor has the Farmland Preservation Advisory Board fully focused on a sustained effort in this area to date.*

This is not to say stewardship efforts are not taking place, but they are not done proactively. For example, FPP maintains stewardship files for properties it becomes aware of whereby individual farmers inform the program of intended farm changes/modifications or, in some cases, information from outside sources of possible violations on a farm (e.g., building unsuitable structures on preserved land or using the land in ways that improperly deplete the farm's prime and important soils). The program's advisory board has given some attention to stewardship, and established a Stewardship Committee several years ago. The committee developed a "Do's and Don'ts" brochure to inform owners of their responsibilities; the brochure is on the department's website.⁴³

Nevertheless, it is imperative the state more fully protect the investments made to preserve farmland via a structured, proactive stewardship effort. Although the program's current efforts and the advisory board's initiative to approach stewardship are important, more attention should be given to this critical component of the process. Given the board and the program have responsibilities to oversee and govern the entire PDR process, and make recommendations to the commissioner for its improvement, the two must develop a more comprehensive approach for stewarding preserved lands. **Committee staff recommends:**

C.G.S. Sec. 22-26ii should be amended to require the Department of Agriculture to establish a formal stewardship effort to ensure agricultural lands preserved under the Farmland Preservation Program are maintained in full compliance with the requirements stipulated in PDR deed covenants. As part of the stewardship effort, the department must visit each preserved farm at least once every three years for stewardship purposes. The program must report its findings quarterly to the Farmland Preservation Advisory Board.

⁴¹ Conservation and Development Policies Plan for Connecticut: 2005-2010, Office of Policy and Management, p.65.

⁴² C.G.S. Sec. 22-26ii.

⁴³ http://www.ct.gov/doag/lib/doag/farmland_preservation_/fpp_dos__donts_brochure.pdf

The board shall periodically inform and advise the agriculture commissioner on the status of the farmland preservation stewardship effort.

At present, the state is required to contact farms for stewardship purposes at least once a year for all PDR acquisitions funded through the federal Farm and Ranch Lands Protection Program. This equates to roughly 80 farms a year. Committee staff's recommended stewardship effort consisting of visiting each farm at least once every three years equals roughly 100 visits per year, inclusive of the federal requirements, or about two visits per week. In addition, the program is considering using a Personal Service Agreement to hire someone to help augment current stewardship efforts.

Although it seems likely additional resources to administer a more rigorous stewardship effort may be needed, especially since the Farmland Preservation Program recently assumed additional responsibilities administering the Community Farms and Farm Restoration programs, it is not fully clear this is the case. As such, committee staff recommends:

In conjunction with the Farmland Preservation Advisory Board, the Farmland Preservation Program should conduct an internal analysis of staff resources to determine whether, and at what level, additional resources may be necessary to implement the recommended stewardship effort. If FPP finds additional staff resources are necessary, it should inform the advisory board and make a formal request of the department for such resources. The board should advise the commissioner on the appropriate staffing level for the program, particularly to implement a more robust stewardship initiative.

Stewardship issue. Over the course of the study, committee staff found that two key benefits of preserved land are the lower per-acre cost to purchase and/or lease land, and availability of prime and important soils. As a result, staff also became aware of an issue that challenges the premise of the Farmland Preservation Program. Nursery growers, and in particular operations involving "ball and burlap,"⁴⁴ have been advocating for the use of state-preserved farmland to support their businesses.

As viable agricultural enterprises, nursery farming on preserved land is not wholly precluded under the Farmland Preservation Program. The products produced, however, must not permanently remove the soil resources from the farmland. As discussed below, it is unclear to committee staff exactly what the program's requirements are for acceptable soil loss.

The Department of Agriculture maintains some nursery practices, specifically the "ball and burlap" process, dramatically deplete the prime and important soil resources the state has made investments in to protect. Stakeholders within the nursery and turf industries agree with the premise that farming practices on preserved farmland should not deplete soil resources but, if

⁴⁴ "Ball and burlap," or sometimes referred to as B and B, is a method of removing nursery stock (e.g., trees) from the ground. Through a mechanical process, the plant and its accompanying roots are dug from the ground. The root ball and soil are then wrapped with a burlap material to ensure the soil and roots remain with the plant.

they do, there are methods of replenishing the lost resources (e.g., replacing diminished soils with organic matter).

The Farmland Preservation Program has said there are alternative methods permissible for growing trees on preserved farmland that do not involve ball and burlap operations. An example includes "pot-in-pot," whereby a hole is dug, filled with a pot, and the plant is grown in the pot using soil from a source other than the preserved land. Once the pot is removed, the hole is refilled using the native prime and important soil originally removed for the hole. Other farming methods available for nursery products are permitted on protected farmland pending the program's approval through the application process.

Some stakeholders within the nursery industry are advocating for additional academic research to fully determine the exact amount of soil loss associated with various nursery practices not permitted on preserved land in comparison with allowable practices. One study on the subject was completed in Connecticut in 2007.⁴⁵ The study, conducted by a professor in the UConn Department of Plant Science and commissioned by the Department of Agriculture, concluded "...the production of woody ornamental nursery crops via the ball and burlap method results in an annual rate of soil loss that is not compatible with sustainable agriculture. The same was found to be true for turf production. This was not found to be the case for the production of forage crops on nearly level land." While the study made this key finding, some stakeholders dispute both the study's methodology and its findings. In turn, they are seeking an independent study, academic in nature and peer-reviewed, on the topic of soil loss by ball and burlap nursery operations.

Committee staff is not in the position to determine the validity of the 2007 study, including its methodology or its findings. As part of its research, PRI staff interviewed the former state soil scientist of the USDA Natural Resources Conservation Service located in Connecticut. Key topics of discussion in the interview were the ball and burlap issue and the 2007 study. The state soil scientist said he was directly involved with the design/methodology of the 2007, and unequivocally stated ball and burlap nursery operations deplete soil resources (prime and important) beyond acceptable standards developed by NRCS for such soils.⁴⁶

It is unclear exactly how many nursery growers using the ball and burlap farming method actually seek preserved land to operate their businesses. This issue, however, could be a discussion topic for the Governor's Council on Agricultural Development, which is examining many facets of agriculture in the state.

What is clear to committee staff, however, is there are no standards in place within the Farmland Preservation Program regarding the quantity of soil loss permissible on preserved farms. As noted above, the NRCS has such standards. **Committee staff therefore recommends:**

⁴⁵ *Soil Loss Under Different Cropping Systems*, Harvey Luce, January 26, 2007, p.1.

⁴⁶ *Id.*

The Farmland Preservation Program should adopt specific standards associated with the permissible level(s) of soil-loss on state-preserved farmland. The standards should conform with any prevailing best practices for such soil loss developed by the federal government (e.g., USDA Natural Resources Conservation Service) or through peer-reviewed academic research. Any resulting soil-loss standards should first be reviewed by the Farmland Preservation Advisory Board. The board should then advise the Department of Agriculture commissioner regarding such standards, with final approval of any standards by the commissioner. As best as possible, farmers' compliance with soil-loss standards should be part of the Farmland Preservation Program's stewardship efforts.

The program's advisory board dedicated time at a recent board meeting to discuss the ball and burlap issue. Through a formal motion, the board reiterated the program's mission and departmental policy of not permitting any farming methods on state-preserved farmland that would deplete the prime and important soil resources from the land, which would pertain to ball and burlap operations. The board also discussed the fact that soil erosion/depletion is a natural outgrowth of farming, even on preserved lands, although there was no discussion as to exactly how much soil loss should be permissible under the program. It became clear to committee staff that soil loss standards are an important component for overall stewardship of the prime and important soil resources protected by the state.

Data Collection and Management

Proper data collection and management are critical to efficient and effective program operations. Program information that is current and maintained in an electronic format allows managers to continuously track their programs, measure program performance, and identify possible areas for improvement.

The Farmland Preservation Program maintains an electronic database containing acquisition information. The database allows the program to track key dates within the PDR acquisition process, although it has some limitations that impact full oversight of the program. For example, the database does not contain information about the number of applications received, when the applications were received, and their disposition. Although FPP personnel indicated to committee staff once all application materials are received, it takes a relatively short time to score them, this information is not formally tracked. In addition, the database was missing essential information for certain acquisitions.

As a result of committee staff's survey of current owners with preserved farms (see Appendix B), and specifically the number of surveys returned due to FPP's incomplete or inaccurate owner information, it became clear the program needs to update its owner registry. One problem with maintaining a current database, however, is not all owners who sell their restricted farms inform the program of such sales (nor do the relevant towns). The program estimates this occurs roughly in half of the sales annually, and approximately ten sales occur a year.

State law requires farm owners with land preserved under the Farmland Preservation Program to provide the agriculture commissioner with written notification no more than 90 days prior to an impending sale and transfer of title to the farm, and with the name and address of the new owner.⁴⁷ If this requirement is not fully complied with, the program has no recourse and its records cannot be kept current, as evidenced by committee staff's survey findings. Moreover, although towns are not required to provide any such notice to the department, they, too, could be more diligent in notifying the program, albeit after the sale. To help ensure the Farmland Preservation Program collects and maintains current, accurate program data and uses the information for program management purposes, committee staff makes the following recommendations:

The Department of Agriculture should notify towns on a yearly basis via email of the farms preserved in their towns under the Farmland Preservation Program. Included in the notification should be a reminder that towns should contact FPP if modifications to preserved farms are sought either through an application for a building permit or other source.

The Department of Agriculture should notify all pertinent associations in the state affiliated with the potential sale of restricted farms, including realtors and real estate attorneys, reminding them of the special conditions placed on preserved farms and prospective owners, as well as the statutory requirement for current farm owners to notify the department of any impending sales of such farms.

The Farmland Preservation Program should ensure all relevant program data are current, maintained in an electronic format, and frequently analyzed to measure program performance. The Farmland Preservation Advisory Board should periodically request the program to provide the board with information for answering the three key Results-Based Accountability questions: *How Much Did We Do? How Well Did We Do It? and Is Anyone Better Off?* as a way for the board to gauge the program's overall performance.

⁴⁷ C.G.S. Sec. 22-26ii

RBA Question 3 IS ANYONE BETTER OFF?

- Since the 1960s, public policy statements contained in state statute and the state's plan of conservation and development clearly call for the preservation of farmland, and that farm preservation is in the public interest.
- Connecticut's program to purchase development rights for farmland is a cost-effective way to ensure prime and important soil resources are available for current and future agricultural purposes. The overall value of acquisitions (i.e., money "saved" by the state based on purchase cost versus appraisal value) showed positive trends for the acquisitions examined.
- National and state literature, state public policy, and the vast majority of stakeholders associated with agriculture and farmland preservation in Connecticut and contacted during this study, believe the economic, health, and social/cultural well-being of the state's citizens are improved because of farmland preservation.

Committee staff approached the RBA question *Is Anyone Better Off?* from several perspectives. Principally, staff tried to determine: 1) the level to which the preservation of farmland is still a useful public policy (i.e., remains in the public interest); 2) acquisition value to the state; and 3) whether the public benefits from the program economically, health-wise, and socially/culturally.

The primary sources used to collect information to help answer this RBA question were policy statements contained in statute, responses to a committee staff survey of all owners of farms currently with land preserved under the Farmland Preservation Program, state and national sources with Connecticut-specific data, and interviews with various stakeholders.

Based on the information presented below, coupled with an analysis and findings made throughout this report, committee staff finds *the Farmland Preservation Program is achieving the public policy intent set forth in statute given the program has, and continues to, preserve farmland in perpetuity. Further, the program benefits the state's citizens and its continuation, as enhanced through the recommendations presented in this report, is in the public interest.*

Public Interest

Statutory references. For nearly the past 50 years, it has been Connecticut's policy that preserving farmland is in the public interest and benefits the state's residents. The Declaration of Policy contained in C.G.S. Sec. 12-107a (established in 1963) says:

1) It is in the public interest to encourage the preservation of farm land, forest land, open space land and maritime heritage land in order to maintain a readily available source of food and farm products close to the metropolitan areas of the state, to conserve the state's natural resources and to provide for the welfare and happiness of the inhabitants of the state, and

2) It is in the public interest to prevent the forced conversion of farm land, forest land, open space land and maritime heritage land to more intensive uses as the result of economic pressures caused by the assessment thereof for purposes of property taxation at values incompatible with their preservation as such farm land.

As noted earlier, C.G.S. Sec. 22-26aa, implemented in the late-1970s, is another statutory reference confirming public policy in support of farmland preservation. The statute reads:

The General Assembly finds the growing population and expanding economy of the state have had a profound impact on the ability of public and private sectors of the state to maintain and preserve agricultural land for farming and food production purposes, and unless there is a sound, state-wide program for its preservation, remaining agricultural land will be lost to succeeding generations and that the conservation of certain arable agricultural land and adjacent pastures, woods, natural drainage areas and open space areas is vital for the well-being of the people of Connecticut.

Plan of conservation and development. The state's plan of conservation and development specifically says the policy of the state is to protect prime agricultural land in sufficient quantity to ensure a long-range food production capability within the state, and all active agricultural lands should be protected unless and until the land is no longer viable for agricultural uses.⁴⁸ The plan further says it is state policy to enhance the economic and environmental viability of farms.⁴⁹

Recent legislation requires the principles of smart growth be incorporated within the conservation and development plan.⁵⁰ The current draft version of the plan for 2013-18 identifies the principles of smart growth for use within the plan. Included within those principles are the standards and criteria for "...the conservation and protection of natural resources by preserving open space, water resources, farmland, environmentally sensitive areas and historic properties, and furthering energy efficiency."⁵¹

⁴⁸ Conservation and Development: Policies Plan for Connecticut, 2005-2010, p.67.

⁴⁹ Id., p.67.

⁵⁰ Public Act 09-230 requires the Continuing Committee of the Legislature to determine how the Office of Policy and Management incorporates smart growth principles in the plan of conservation and development and how state agencies apply them. The act bases the principles on its definition of "smart growth," which is economic, social, and environmental development that: simultaneously promotes economic competitiveness and preserves natural resources; and allows state, regional, and municipal officials and the communities and constituents they serve to collaboratively plan, make decisions, and evaluate policies.

⁵¹ *Draft: Conservation and Development Policies: A Plan for Connecticut*, Public Draft, 2013-2018, p.33.

PRI sunset report. A 1980 report by the Program Review Committee evaluated the Farmland Preservation Pilot Program as part of the state's Sunset process.⁵² The report examined the substantive aspects of the pilot program according to the relevant criteria established under the Sunset process, including: 1) whether termination of the program would endanger the public health, safety, and welfare; and 2) whether the program produces any direct or indirect increase in the costs of goods and services and, if it does, whether the public benefits...outweigh the public burden.⁵³

The committee's findings showed the farmland preservation pilot program and associated policies established to protect prime agricultural land were in the public interest. The committee, for purposes of the Sunset mandate, reaffirmed legislative findings that the public interest was served by the preservation of agricultural lands. The termination of the pilot program, therefore, would endanger the public health, safety, and welfare unless more appropriate programs were forthcoming.⁵⁴

Acquisition Value

A key measure of the public benefit derived from the Farmland Preservation Program, is whether the purchase prices for PDR acquisitions are of relative value to the state. Although this measure also could be an indication of "how well" the program is performing, operating efficient public programs is of high priority to many in the general public, and the overall public benefit of such programs is viewed in large part by their value (i.e., are they cost effective). Committee staff examined the Farmland Preservation Program's acquisition value in two ways: 1) how successful the program has been with negotiating purchase prices for PDR acquisitions in comparison with the highest appraised values (i.e., market value); and 2) the trend in cost per acre paid.

PDR purchase prices vs. appraised amounts. As discussed above, the Farmland Preservation Program requires at least two appraisals of potential PDR acquisitions. One appraisal establishes the farm's "agricultural" value, while the other establishes the farm's "development" value, or full market value. Prices offered for PDR acquisitions frequently are within the range of the two appraisals.

Committee staff examined PDR appraisal and purchase price data for acquisitions from calendar years 2001 through 2012, with the resulting analysis shown in Figure IV-1. It should be noted, the data used in the figure are averages, and each transaction has its own unique circumstances that drive the PDR purchase price.

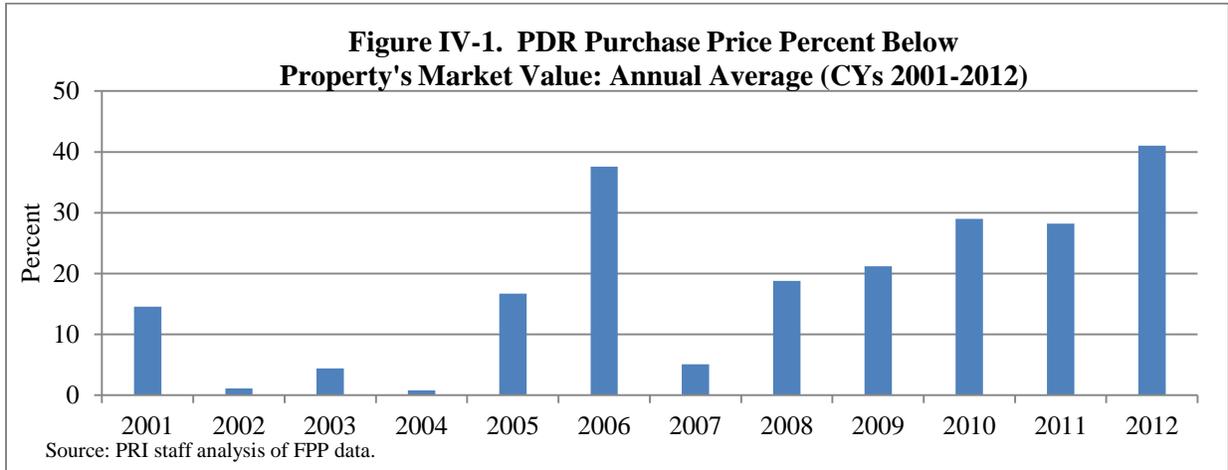
Beginning 2007, there has been an upward trend in the spread between the prices paid for PDRs and the highest appraisal amounts. In other words, the state is saving taxpayers more

⁵² *Sunset Review: Agricultural Lands Preservation Pilot Program*, Legislative Program Review and Investigations Committee, Vol. I-21, January 1, 1980.

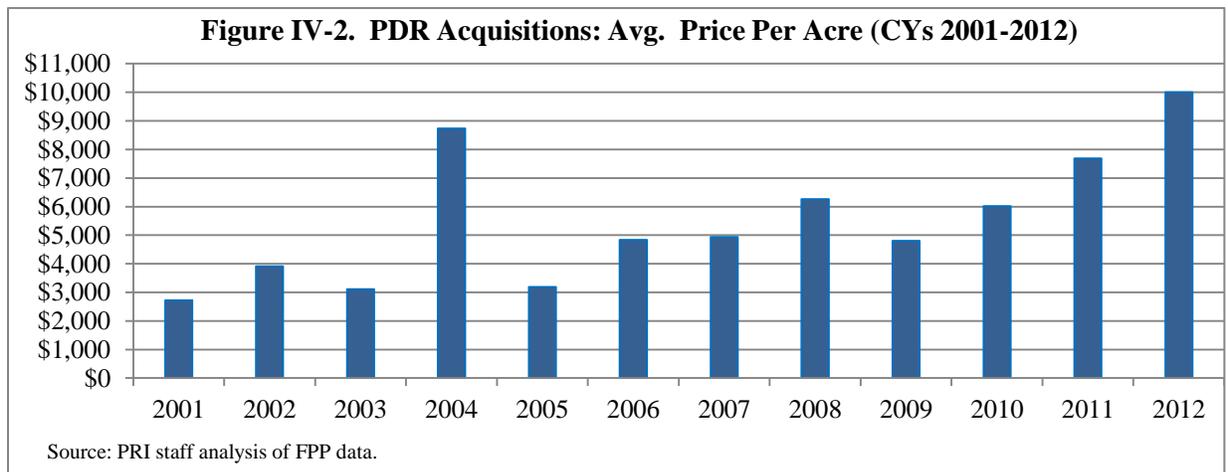
⁵³ *Id.*, p.v.

⁵⁴ *Id.*, p.13.

money. The figure also shows *the program realized its greatest savings for PDR acquisitions made in calendar years 2006 and 2012*. Prices paid for PDR acquisitions in 2012 averaged almost 41 percent below the full market value, and 38 percent in 2006. Over the full 12-year period, purchase prices for PDR acquisitions averaged just over 18 percent below market value.



Per-acre cost. Figure IV-2 shows the trend in the per-acre cost for PDR acquisitions made during calendar years 2001-2012. The drop between 2008 and 2009 most likely corresponds with the economic downturn experienced throughout the country. There has been an upward trend since 2009, from an average per-acre cost of \$4,809 to \$10,000 in 2012 (although the 2012 cost is for only one acquisition). The per-acre cost for the period averaged \$5,517.



Improved Economic, Health, and Social/Cultural Outcomes

As provided in Appendix B, committee staff surveyed owners of farms preserved through the Farmland Preservation Program. Specifically, staff was interested in obtaining farmers' feedback to help determine whether the state's residents benefitted (i.e., were "better off") from the state's Farmland Preservation Program in the following areas: 1) economic; 2) health; and 3) social/cultural. According to the survey: 86 percent of farm owners agreed the preservation of farmland benefitted residents' economic interests; 86 percent agreed residents' health interests benefitted; and 89 percent agreed residents' social/cultural interests benefitted.

Committee staff also referred to national literature on the benefits of preserving farmland. One study, in particular, noted:

"Research suggests that people clearly desire farmland preservation programs and express a willingness to pay for the environmental and rural amenities provided. Some evidence has been found that farmland preservation programs can benefit the local economy and/or have no negative impacts relative to other economic development opportunities. The programs appear to slow farmland loss and thus may be having an impact on local government expenditures and orderly development, but the evidence here is limited due to methodological issues."⁵⁵

The same study also concluded farmland preservation can benefit local communities in many ways resulting in food security, economic viability, better quality of life (amenities), and orderly development.⁵⁶

Economic. The full economic benefit of preserved farmland to the public is difficult to ascertain due to the lack of research and data on part of the program in this area. At the same time, however, owners of preserved farms undoubtedly contribute to the state's economy by providing jobs, paying taxes, and supporting other businesses in the state, such as those providing agricultural equipment and supplies.

Information highlighting the Connecticut agriculture industry (beyond just preserved farms) is available from state and national sources. For example, a recent study by the University of Connecticut estimates the *total impact* of agriculture on the state's economy for 2007 was \$3.5 billion of the state's \$212 billion Gross State Product.⁵⁷ The study also found the agricultural industry contributes another \$1.7 billion in value added - the difference between the value of output and the cost of raw materials (i.e., the money left in the hands of residents and generated through business taxes, both of which stay in Connecticut). Moreover, the agriculture

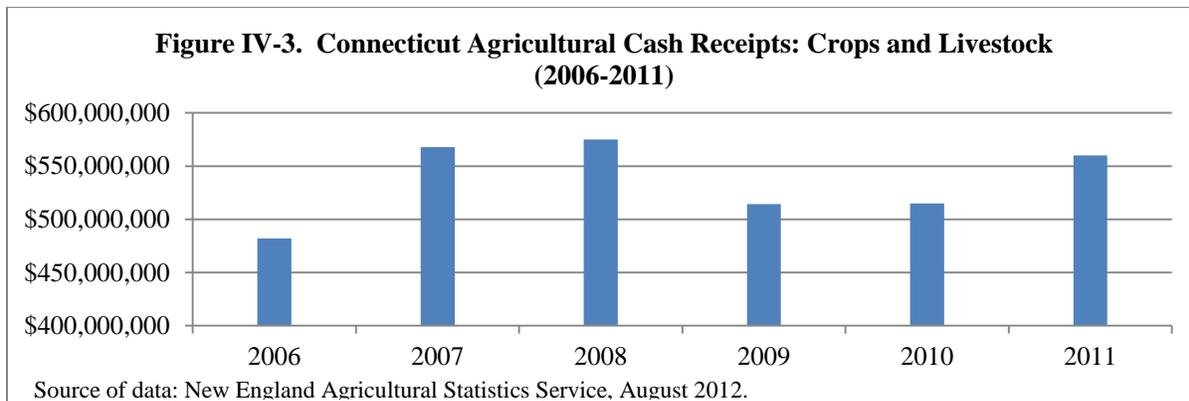
⁵⁵ *Economic Benefits of Farmland Preservation: Evidence from the United States*, Lori Lynch and Joshua M. Duke, Department of Agricultural and Resource Economics, The University of Maryland, College Park, WP-07-04.

⁵⁶ *Id.*, p.13.

⁵⁷ *Economic Impacts of Connecticut's Agricultural Industry*, Department of Agricultural and Resource Economics, University of Connecticut, September 2010. The study measures the value of agricultural output as statewide sales generated directly from the industry and through spillover effects on other industries impacted. Three economic models employed as part of the study's methodology use as input the direct sales from a sector or the agricultural industry and calculate economy-wide impact through three multipliers.

industry supports approximately 20,000 jobs in the state. Additional benefits to residents occur from the ecological, social, recreational, wildlife, and quality of life effects of agriculture.

Another source of information specific to Connecticut is the USDA's New England Agricultural Statistics Service. Figure IV-3 shows the level of cash receipts for crops and livestock in Connecticut for the six-year period 2006-2011. The figure shows after steady increases for 2006 through 2008 to just over \$575 million, there was a sharp decline the following two years, to a low of just over \$514 million. For 2011, cash receipts increased again, to just over \$560 million, or by nine percent.



Health. The primary health benefit associated with preserved farms is the guaranteed land base for long-term food security. This, of course, assumes the land remains active for agricultural purposes. Preserved farms also help ensure the availability of locally-grown agricultural products.

Since agriculture and the environment are inextricably linked, preserved farms, and farms in general, offer additional health benefits. Namely, farmland has been found to: 1) serve as a natural system for water purification making it potable; 2) offer protection against flooding; 3) provide a natural habitat for many wildlife species; and 4) help sequester carbon dioxide.⁵⁸

Social/Cultural. It is difficult to quantify the social/cultural benefits of preserving farmland from development. The qualitative aspects of preserving farmland go beyond protecting the prime and important soils, and include educational opportunities, agri-tourism, and aesthetic beauty. As noted landscape architect Frederick Law Olmsted once said, "The enjoyment of scenery employs the mind without fatigue and yet exercises it, tranquilizes it, and yet enlivens it; and thus, through the influence of the mind over the body, gives the effect of refreshing rest and reinvigoration to the whole system."⁵⁹

Farm preservation also helps maintain the rural character that defines many parts of Connecticut. Although protecting the state's rural heritage is not the primary purpose of the

⁵⁸ <http://www.workinglandsalliance.org/pages/facts.html#preserve>

⁵⁹ Olmsted, Frederick Law, "The Yosemite Valley and the Mariposa Big Tree Grove," *Landscape Architecture*, 43 (1952), p.20.

Farmland Preservation Program, it cannot be ignored as a significant public benefit resulting from the program. Many preserved farms also serve as important and interesting destinations for different reasons, including educational classes and demonstrations. Farms offer scenic vistas and open space, vital components to the state's agri-tourism industry. In combination, these outcomes of farmland preservation serve to enhance the social and cultural interests of Connecticut's residents.

APPENDICES

Program Background

1960s. Public Act 490, passed in 1963, is considered by many the most important land use legislation codified in state statute.⁶⁰ The public act, unlike many tax statutes, includes a Declaration of Policy which states: "...it is in the public interest to encourage the preservation of farm land, forest land, open space land, and maritime heritage land in order to maintain a readily available source of food and farm products close to the metropolitan areas of the state, to conserve the state's natural resources and to provide for the welfare and happiness of the inhabitants of the state..."⁶¹

1970s. In 1974, the governor appointed a task force to study and make policy recommendations to maintain the state's supply of agricultural lands for food production. The task force recommended that, to provide roughly a third of its food, the state should preserve "at least 325,000 of its remaining 500,000 acres of agricultural land."⁶² The report approximated the average farm would represent 30 percent cropland and 70 percent in other land. The task force also recommended the land preservation goal be achieved through the purchase of development rights (PDR). PDR is a process whereby a landowner voluntarily sells the development rights on a parcel of land to a public agency or qualified conservation organization.⁶³ (The PDR process is discussed in detail later.)

In mid-1975, the General Assembly responded to the Governor's task force report by directing the Connecticut Board of Agriculture to inventory the cropland suitable for preservation. The board sampled farmers in Connecticut to estimate, among other things, the level of interest in sale of development rights.⁶⁴ It also gathered data around the quantity of farmland and in 1977, the results of the land inventory were presented to the legislature.

In 1978, a farmland preservation pilot program was established in statute with the intent of purchasing development rights to agricultural lands throughout the state.⁶⁵ The public act also required the commissioner of agriculture to prepare a food plan for the state and report on the results of the pilot program.

The program was given a July 1, 1980 termination date, unless reestablished by the legislature. The program was authorized \$5 million in bonding and \$50,000 for land maps relating to agriculture, prepared by the Office of Policy and Management, and the development of the state food plan.

⁶⁰ Connecticut's Land Use Value Assessment Law Public Act 490: A Practical Guide and Overview for Landowners, Assessors and Government Officials.

⁶¹ C.G.S. Sec. 12-107(a).

⁶² Governor's Task Force for the Preservation of Agricultural Lands, *Final Report*, 1974, p. 1

⁶³ American Farmland Trust, *Conservation Options for Connecticut Farmland: A Guide for Landowners, Land Trusts, and Municipalities*, 2010.

⁶⁴ Waggoner, P.E., Tuttle, D.A., & Hill, D.E., *Land for Growing Food in Connecticut: A Report to the General Assembly*, 1977.

⁶⁵ P.A. 78-232.

1980. In 1980, the University of Connecticut Department of Agricultural Economics and Rural Sociology issued the food plan. The plan determined the prospective food requirements of the population, the necessary quantities of specific food that might be produced locally, and important to the farmland preservation pilot program, the acreage and types of land required to maintain production-consumption ratio for certain output categories.⁶⁶

The UConn report highlights the acreage determined by the study could be used as a target level to provide a "critical quantity" of nutritious food items and environmental benefits.⁶⁷ The study focuses on a few items produced within the state, including fluid milk, eggs, potatoes, and fresh fruit and vegetables, recognized as being most significant to the productivity of cropland.

Ultimately, the report developed three food production plans for the 20-year time period, 1980-2000. Under the report's recommended plan, the estimated requirements of prime agricultural land needed for increased food production of the selected products by 2000 equaled 83,500 acres, as shown Table A-1. The table highlights the number of cropland acres that would later be used for the calculation of the Farmland Preservation Program's goal discussed below.⁶⁸

Table A-1. Estimated acreage in 1980 of prime agricultural cropland required to achieve feasible increased production-consumption ratios of locally grown food products in Connecticut.			
Product	1980	1990	2000
Milk (fluid, whole and low fat)	92,700	80,500	69,200
Vegetable (fresh)	10,500	9,100	8,000
Fruit (fresh)	6,400	5,700	4,800
Potato (white fresh)	2,400	1,800	1,500
Total	112,000	97,100	83,500
The data excludes land requirements for poultry farms, tobacco farms, sod farms, nurseries and green houses, and general livestock farms (beef, hogs, sheep, horse)			
Source: A Food Production Plan for Connecticut, 1980-2000 A Guide To The Purchase Of Development Rights on Farmland			

The Program Review and Investigations Committee completed a sunset review of the pilot program in January 1980.⁶⁹ The major findings of the report determined the pilot program "serves public interest" and "no other single program is both acceptable and capable of guaranteeing farmland preservation as economically as the program." The report acknowledges that, due to the high cost of the program, the implementation of a full-scale program would be necessary. In addition to the recommendation of establishing a long-term PDR program, the committee recommended an advisory board be established to guarantee the diversity of interests and to act as a decision-making body to the program.

⁶⁶ Fellows, I. F., & Cody, P. H (1980)

⁶⁷ Id. p. 6

⁶⁸ Fellows, I. F., & Cody, P. H, (1980).

⁶⁹ Legislative Program Review and Investigations Committee, *Sunset Review Agricultural Lands Preservation Program*, Vol. I-21, 1980.

Survey of Farmland Preservation Program Participants

Methodology

To obtain information from as many owners of preserved farms as possible about the farm owner, current farm operations, and satisfaction with the program, committee staff sent surveys to all owners on record with the Farmland Preservation Program. A copy of the survey and cover letter, along with a tabulation of responses, are provided below.

The survey was mailed to 265 farmers on October 19, 2012, based on addresses made available by the program. One additional mailing of 37 surveys on October 24, 2012, was necessary because:

- Committee staff received information from the program identifying farms with deceased owners; surveys were resent to "current owner."
- Farms with duplicate and/or multiple mailing addresses under the same owner name were withheld from the original mailing for verification. These farms were sent one survey.
- Farms identified by the program as having incorrect information, after the original mailing date, were sent an additional survey under the corrected information.

Results

A total of 86 responses were received, for a response rate of 28 percent. Full survey results are presented later in this appendix, with the major results highlighted below:

- 53% of responding farms' primary owners were over the age 65;
- On average 90.5 acres preserved under the program *are capable* of producing food/fiber products for respondents' farms;
 - 85.8 acres (95%) on average *are used* to produce food and fiber
- 36% of respondents indicated they had *never* been visited by the program for stewardship purposes, and another 25% said less than once every five years; and
- 72% of respondents were satisfied overall, with the program.

Other. During the survey process, 56 surveys (18%) were returned for reasons presented in Table B-1 below. This is a result of incomplete record keeping in the program's database housing pertinent farm information, including farm name, current owner(s), and mailing address.

Information from the returned surveys has been recorded and will be made available to the program so appropriate action can be taken to update these records.

Table B-1. Reasons Surveys Were Returned Due to Insufficient Information	
<i>Reason</i>	<i>Number</i>
Not deliverable as addressed	21
Insufficient address	14
No mail receptacle	6
No such street	2
Attempted -not known	6
No such number	4
Return to sender-vacant	2
Forward time expired	1
Total - Reasons Returned	56

American Farmland Trust Survey. In 2006, American Farmland Trust (AFT) and the Department of Agriculture, with support from stakeholders, surveyed farm owners with land preserved under the Farmland Preservation Program. A 79-question survey was mailed to 217 farmers, of which 78 were returned for a 36% response rate. The survey included questions concerning the current owner, farm operations, and program perceptions. Selections of the AFT survey results are listed below:

- 65% of respondents were the original sellers of the PDRs; 29% purchased the farm after it had been protected under the program;
- On average 57% of protected acreage was actively farmed;
- 51% indicated that less than 10% of their total family income was derived from farming;
- 46% of respondents reported that they were satisfied with the program; and
 - 37% found frustration with the easement restrictions, and 24% indicated the length of time to complete the process was a challenge of the program;
- In terms of planning for the future, 35% indicated that long-term economic viability is an issue facing farm owners;
 - 25% responded low prices for commodities/farm products was an issue facing farmers; and
 - 19% indicated there would be no successor for their farm operation

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General Assembly



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DIRECTOR

**LEGISLATIVE PROGRAM REVIEW AND
INVESTIGATIONS COMMITTEE**

October 17, 2012

Dear Farm Owner:

The Legislative Program Review and Investigations Committee (PRI), which is a committee of the Connecticut General Assembly charged with legislative oversight duties, is currently reviewing the state's Farmland Preservation Program. The study's purpose is to see how the program is working, whether changes should be made, and, if so, in what way(s). Please note: this study is not affiliated with the Department of Agriculture, but rather a state legislative committee.

A key way the PRI committee staff is collecting feedback from current owners of farms with land preserved through the Farmland Preservation Program is via the enclosed survey. As such, your input is very important.

Please complete the brief survey so we can better understand the Farmland Preservation Program. Survey answers are anonymous; we do not ask for names or any other personal identifying information on the survey, so your name cannot be connected to your response. In addition, all information received from this survey effort will be presented as aggregate data. Finally, we obtained your address from the Farmland Preservation Program under the committee's authority, and it will not be used for any other purpose than this survey.

Your input matters. Please fill out both sides of the survey, and then return it using the enclosed postage-paid envelope. The survey should only take a few minutes to complete.

Please return your completed survey no later than October 30, 2012.

Thank you very much for your help. Please feel free to contact either Brian Beisel or Lauren Allard, the committee staff working on the study, if you have any questions about the survey or the study in general. For more information about the study, please visit our website: <http://www.cga.ct.gov/pri/index.asp>

Sincerely,

Carrie E. Vibert
Director

State Capitol*Room 506*Hartford, CT 06106*(860) 240-0300*Fax (860) 240-0327*pri@cga.ct.gov

**Legislative Program Review & Investigations Committee
Connecticut Farmland Preservation Program Survey**

General Information

1. What best describes your current relationship with the farmland preserved under the Department of Agriculture's purchase of development rights process (known as the Farmland Preservation Program)? (Circle all that apply) (N= 86)
- a. I farm the preserved land I own (53.5%)
 - b. I rent/lease the preserved land I own to another farmer (40.7%)
 - c. I hire a farm manager for the preserved land I own (1.2%)
 - d. I am the owner who preserved the farmland (46.5%)
 - e. I am a family member of the farm owner who preserved the farmland (14%)
 - f. I purchased the farmland after it was preserved, but am not related to the original owner/family (18%)
 - g. Other (e.g., donation): (6%) _____
2. If you are not the farm owner/family who preserved the land under the Farmland Preservation Program, how many years ago did you acquire the land? (N=24) Average: 14.25 years, Range: 1-30 years
3. How many times have you used the Farmland Preservation Program to preserve land on this farm? (N=72) Average: 1 time, Range: 0-4 times
4. Please provide the year(s) the Farmland Preservation Program purchased development rights to this farm: (N=65)
1970s: 2 farms 1980s: 16 farms 1990s: 18 farms 2000s: 16 farms 2010+: 13 farms
5. What is the age range of the farm's primary owner: (N=86)
- | | | | | | |
|----------------|----------|----------|----------|----------|------------|
| a. 25 or under | b. 26-35 | c. 36-45 | d. 46-55 | e. 56-65 | f. Over 65 |
| (0%) | (2%) | (6%) | (13%) | (26%) | (53%) |
6. If you owned the farm in 2011, what percentage of your gross annual income was derived from: (Leave blank if not owned)
- a. Farm operations on land **preserved** under the Farmland Preservation Program (N=72)
Average: 35.4%
 - b. Farm operations on land **not preserved** the Farmland Preservation Program (N=40)
Average: 13.9%
 - c. Other sources (N=35)
Average: 69.1%

Current Farm Operations

7. What is the total acreage of your farm for the following two categories?
- a. Preserved under Farmland Preservation Program: (N=81) Average: 154.1 acres
 - b. Not preserved: (N=61) Average: 79 acres
8. Of the land preserved under the Farmland Preservation Program for this farm, how many acres do you currently:
- a. Rent to others? (N=69) Average: 30.7 acres
 - b. Lease to others? (N=47) Average: 19 acres
9. How many acres of land on the farm preserved under the Farmland Preservation Program *are capable* of producing food/fiber products? (N=82) Average: 90.5 acres

18. Rate your satisfaction level with the Farmland Preservation Program for each of the following areas:

<i>Area</i>	<i>Very Satisfied</i>	<i>Satisfied</i>	<i>Neutral</i>	<i>Dissatisfied</i>	<i>Very Dissatisfied</i>
a. Ease of application process (N=63)	(25%)	(49%)	(16%)	(8%)	(2%)
b. Time taken to complete full process (N=64)	(14%)	(38%)	(19%)	(20%)	(9%)
c. Communication between State and farmers (N=69)	(28%)	(33%)	(20%)	(17%)	(1%)
d. Level of program funding to preserve land (N=67)	(19%)	(36%)	(19%)	(24%)	(1%)
e. Level of program staff resources (N=66)	(18%)	(48%)	(20%)	(11%)	(3%)
f. Other: (N=6)	(33%)	(17%)	(17%)	(33%)	(0%)

19. **Important:** Do you believe *Connecticut's citizens* are “better off” because of the state’s Farmland Preservation Program in the following areas – and, if “yes,” how?

	<i>Yes</i>	<i>No</i>	<i>If yes, how? (please use separate page, if necessary)</i>
Their <i>Economic</i> Interests	(86%)	(14%)	
Their <i>Health</i> Interests	(86%)	(14%)	
Their <i>Social/Cultural</i> Interests	(89%)	(11%)	

Appendix C

Other States

The desire to preserve agricultural land for future generations is not unique to Connecticut. Other states have formed programs similar to Connecticut's Farmland Preservation Program. For this study, committee staff compared Connecticut to the other New England states. A more in-depth assessment among Connecticut, Massachusetts, and Vermont was also made.

New England. The number of farms across New England totaled 33,070 in 2011, and the total land in farms in the six-state region was 4.03 million acres with the average farm size at 122 acres.⁷⁰

Table C-1 below provides general information on the farmland preservation programs in the New England states, using information provided by the Farmland Information Center's report *Status of State PACE Programs*. There are several differences shown among the programs, including inception date, funds spent and sources of funding, and land in farms. Specifically, Massachusetts and Connecticut have the longest running preservation programs of the six New England states and have protected the most acres to date, while spending the most funds to do so.

Table C-1. Status of New England State Programs January 2012

<i>State</i>	<i>Program Inception</i>	<i>Land in Farms**</i>	<i>Acres Protected*</i>	<i>Funds spent to date***</i>	<i>Funding sources</i>
Connecticut	1978	405,616	38,025	\$ 126,000,000	Bonds, local government contributions private contributions, recording fees, FRPP
Massachusetts	1977	517,879	67,143	\$ 203,834,324	Appropriations, Bonds, local government contributions, mitigation fees, private contributions, transportation funding, FRPP
Maine	1999	1,347,566	8,104	\$ 7,500,000	Appropriations, bonds, credit card royalties, local government contributions, private contributions, FRPP
New Hampshire	1979	471,911	13,590	\$ 16,233,738	Appropriations, local government contributions, FRPP, Bonds, recording fees
Rhode Island	1981	67,819	6,645	\$ 30,325,862	Appropriations, Bonds, local government contributions, private contributions, transportation funding, FRPP
Vermont	1987	1,233,313	139,000	\$ 62,840,000	Appropriations, Bonds, local government contributions, mitigation fees, private contributions, real estate transfer tax, Farms for the Future pilot program, transportation funding, FRPP
*Acres Protected is reported by program					
**Land in Farms is reported as of 2007 Census of Agriculture					
***Funds spent to date includes land and/or personnel costs					
Source: Farmland Information Center (2012)					

⁷⁰ USDA National Agricultural Statistics Service, New England Agricultural Statistics 2011

Comparison of Selected States

Massachusetts and Vermont were chosen from the six New England states for further analysis. Massachusetts was chosen because of its proximity to Connecticut and, in part, because the two programs were established within a few years of each other. This allows for a comparison of programs with similar maturity. Vermont was chosen because of its agriculture initiatives and success. In addition, Connecticut, Massachusetts, and Vermont are three of the four states nationwide where the state holds the PDR deed covenant.⁷¹

Land in farms. Table C-2. below shows the number of farms and corresponding land amounts for the selected comparison states. As shown, each state experienced a decline in the number of farms from 1997 to 2002 and an increase over the next five years. Additionally, Massachusetts and Vermont experienced a decrease in the acres of land in farms over the time period while Connecticut increased its acres in farmland from 2002 to 2007 (48,462 acres). The table also shows the total cropland acres for all three states decreased over the time period: Connecticut by 36,900 acres (18 percent), Massachusetts by 59,861 acres (24 percent) and Vermont by 115,415 acres (18 percent).

		1997	2002	2007
Connecticut	Number of farms	4,905	4,191	4,916
	Land in Farms (acres)	406,222	357,154	405,616
	Average size of farms (acres)	83	85	83
	Total Cropland (acres)	200,586	170,673	163,686
	Harvested cropland (acres)	153,446	131,248	136,833
	Average age of principal operator	55	55.4	57.6
Massachusetts	Number of farms	7,307	6,075	7,691
	Land in Farms (acres)	577,637	518,570	517,879
	Average size of farms (acres)	79	85	67
	Total Cropland (acres)	247,267	207,734	187,406
	Harvested cropland (acres)	184,480	159,253	153,993
	Average age of principal operator	54.2	54.9	56.3
Vermont	Number of farms	7,063	6,571	6,984
	Land in Farms (acres)	1,315,315	1,244,909	1,233,313
	Average size of farms (acres)	186	189	177
	Total Cropland (acres)	632,339	567,509	516,924
	Harvested cropland (acres)	473,026	454,699	433,074
	Average age of principal operator	52.7	53.9	56.5

Source: USDA 2007 Census of Agriculture

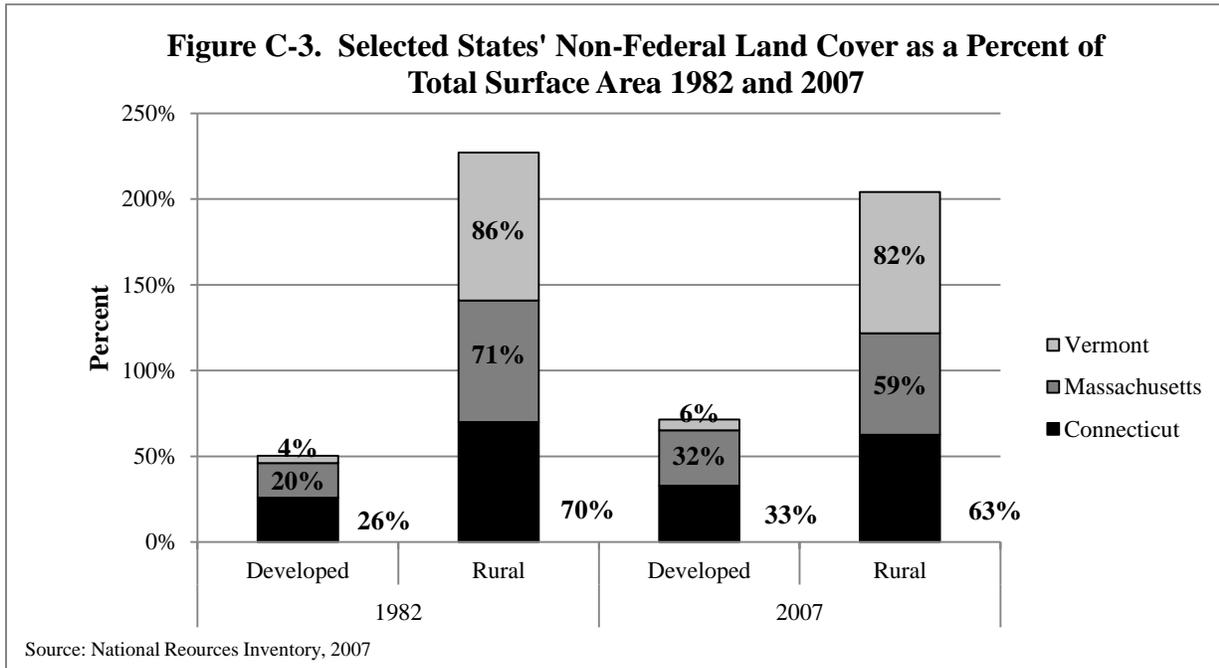
Land cover over time. Figure C-3. below shows the non-federal developed and rural land cover for years 1982 and 2007. In 1982, non-federal land, which consists of developed and rural lands, represented:

- 96 percent of Connecticut;
- 91 percent of Massachusetts and;

⁷¹ Delaware is the fourth state.

- 91 percent of Vermont's total surface areas.

Also in 1982, developed land represented 26 percent of Connecticut's total surface area, which was higher than both Massachusetts (20 percent) and Vermont (4 percent). Additionally, Connecticut had a lower percentage of rural land (70 percent) in that same year, when compared to Massachusetts (71 percent) and Vermont (86 percent).



By 2007, for all three states:

- Developed land increased;
- Rural land declined; and
- Federal land remained the same.

Based on the information above, Connecticut developed 7 percent of its total surface over the 25 year period. Comparatively, Massachusetts developed 12 percent of its total surface area and Vermont, developing the least amount of land, had a 2 percent increase in developed land over the time period.

Other. Table C-3. below provides additional information on the selected states compared to Connecticut. For example, each state's program has a per-acre cap (amount it is willing to spend per acre on a parcel) of which, Connecticut has the highest. Connecticut also has the lowest percent of its land in farms protected.⁷² Additionally, Connecticut, on average, preserves

⁷² This was calculated using Farmland Information Center data by dividing the total acres protected by the total land in farms.

the fewest number of acres per year. This number could fluctuate across all three states depending on the year, funding, and other factors.⁷³

Table C-3. Other Information on Selected State's PDR Programs, January 2012					
	<i>Average per acre easement value*</i>	<i>Per acre and project caps</i>	<i>Local match and bargain sales</i>	<i>Average acres preserved each year</i>	<i>Percent of land in farms protected</i>
Connecticut	\$4,600	\$20,000 per acre	Not a requirement	1,118	9.37%
Massachusetts	\$6,000*	\$10,000 per acre; can be raised to \$20,000 in certain circumstances	Requires a local match by town or land trust, or bargain sale	2,100	12.96%
Vermont	\$1,023	\$3,500 per acre; \$500,000 per project	Not a requirement; a match can increase rank in application priority	5,560	11.27%

*Massachusetts APR Program estimate over last four years
Sources: Farmland Information Center, 2012; Vermont Housing & Conservation Board

Selected State Profiles

PRI staff reviewed and collected more in-depth information on two of the six New England states to provide a further comparison to Connecticut's PDR program.

Massachusetts

Table C-4. Overview of Massachusetts PDR Program	
Year of program inception	1977
Acres Preserved	67,143 acres (800+ farms)
Preservation Method	Purchase of development rights
Funding Sources	Appropriations, Bonds, local government contributions, mitigation fees, transportation funding, FRPP
Time Frame	1-2 years
Other types of programs	APR Improvement Program (AIP), APR Municipal Grant Program

Source: Farmland Information Center

Program Overview

Program goal. The goal of the Agricultural Preservation Restriction (APR) Program is similar to Connecticut's because it protects active farmland in the state, which is predominately prime and state important soils, on a voluntary basis in order to strengthen farms as an economically viable business and maintain an inventory of farmland for future generations. Massachusetts does not have a numerical goal set in statute, nor is there an informal goal.

Organization. The APR is Massachusetts's primary program for protecting farmland. The program is authorized under Massachusetts law and housed in the Division of Conservation and Technical Assistance under the Department of Agricultural Resources (MDAR). Since the

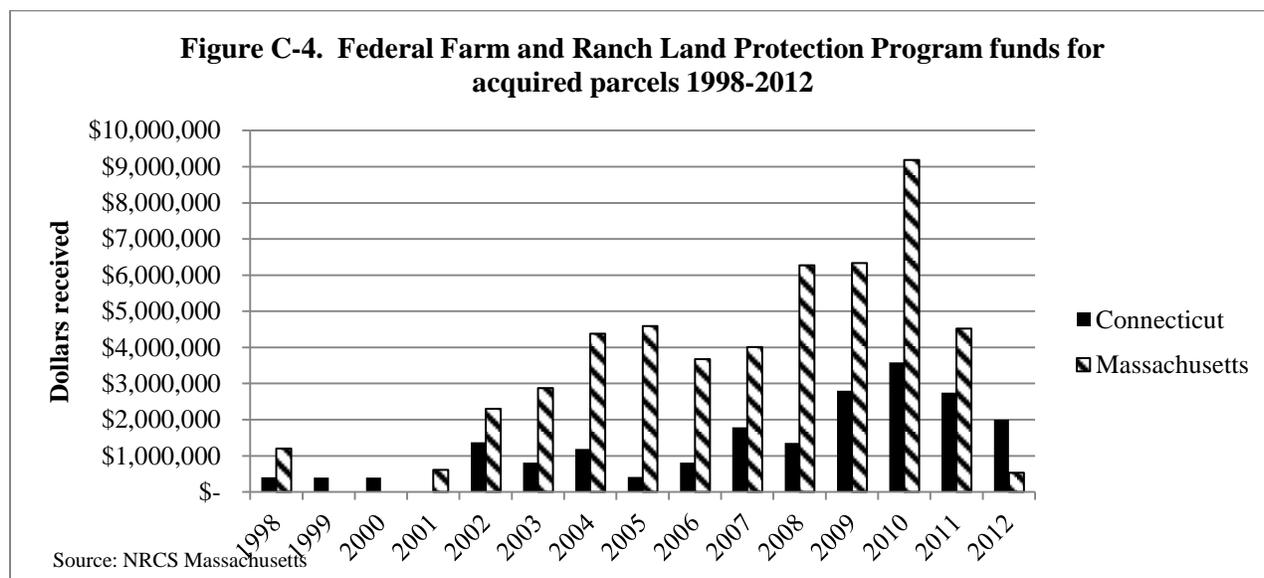
⁷³ To calculate this, the number of acres protected was divided by the number of years since the program's inception.

program's inception it has protected an average of 1,200 to 1,800 acres a year, and the 67,143 acres protected⁷⁴ represents 13 percent of the state's land in farms.

Resources. The APR program has four field agents, each overseeing one district, who work on acquisition and stewardship. Field agents are overseen by a program coordinator and supported by two staff, one focused solely on stewardship and another who provides general support, accounting, and analysis.

Funding. Program funding comes from 30-year bonds issued every five years. The bonds support all conservation acquisitions, including those of sister agencies with other areas of focus. Normally APR spends between \$12 and 14 million annually, which includes about \$8.5 million in bond money and \$4 million from the Federal Farm and Ranch Lands Protection Program (FRPP) reimbursements from previous acquisitions.⁷⁵

FRPP funds provide up to 50 percent of the value of the qualifying parcels under the program. In order to take full advantage of the FRPP program benefits, the state typically requires all APR applications qualify for the federal program as well. Historically, the reimbursed funds that the APR program receives have been used to fund other projects, including farm viability initiatives. Figure C-4 shows the amount of FRPP funds received, since 1996, by the program, compared to Connecticut's receipts. As shown in the figure, in most cases, Massachusetts was able to leverage double or more in federal funds than Connecticut over the time period.



The APR program leverages several types of local funding sources, including municipal contributions. The request for municipal contributions has been a resource of the APR program for years and the process was formalized under the APR Municipal Grant Program. The Municipal Grant Program requires a local contribution of 20 percent of the cost of a project.

⁷⁴Total as of January 2012, Farmland Information Center.

⁷⁵ APR Program Information

Private contributions serve as another source of local funding. Additionally, the program commonly deals with 'bargain sales' or a donation made by the landowner. The program also works with local land trusts and estimated that 20-30 percent of its applications involved land trusts.

Review process. The Agricultural Preservation Restriction Program has several criteria by which it considers parcels for the program including: the farm must be at least five acres in size; the land has to have been actively devoted to agriculture for the two years immediately preceding tax years; and the farm must produce at least \$500 in gross sales per acre for the first five acres plus \$5 for each additional acre or 50 cents per each additional acre of woodland and or wetland. Other criteria that each application is scored against are based on suitability and productivity of the land, development pressure, and likelihood it would remain in agriculture in the future. Within 120 days of receipt of a completed application the department completes its evaluation.

In addition to the receiving information received from the landowners' application, the review involves a project eligibility and parcel worksheet. This worksheet, completed by APR staff, evaluates the project's eligibility for the state and federal programs. It also ranks:

- the farmland for its capacity of soil quality, agricultural use and the size/use of the land (e.g. is the land intensively cropped vs. growing hay);
- farm's operation;
- commercial significance;
- related agricultural infrastructure; and
- the degree of threat to development.

Once the evaluation is complete, the department will take one of two steps: place the project on the agenda of the next Agricultural Lands Preservation Committee (APLC) meeting for consideration, or notify the applicant in writing within 21 days of the determination that the project fails to meet the program requirements. Applications voted on by the APLC as a project of interest will continue through the process (property description, prepare a survey plan, preparation of all legal instruments) until the final agreements have been made.

APR generally pays up to 80-95 percent of the difference between the fair market and agricultural value of the land. This amount is not to exceed \$10,000 per acre, which can be raised to \$20,000 per acre of open, active agricultural land that is prime or state important soils and scores high enough against certain criteria. The program requires a local match paid by the town, land trust or owner bargain sale. This match ranges between 5 and 20 percent depending on historical participation and local efforts to support agriculture, such as Right to Farm Bylaws and local Agriculture Commissions.

Stewardship

Since 2010, the program has had an APR Stewardship Planner who is responsible for setting the procedures so all 830 projects and all future projects have a documented baseline and implement a monitoring process, dependent on the project's restriction document. The

stewardship planner also assists with department approval and processing of Certificate of Approvals (COA) and Certificate of Completions (COC), special permits and assistance with compliance matters. The COAs are applications from landowners to conduct new agricultural related construction and improvement projects on the restricted land. The COC, on the other hand, is the Department's follow-up inspection of the work performed under the COA. The landowner is responsible for contacting the Department for the COA and permits; however, APR monitoring efforts occur to ensure compliance.

Of the 830 farm properties preserved under the program, just over 200 projects have a contingent right with the USDA through the Farm Land Protection Program or Federal Farm and Ranch Lands Protection Program. These projects are monitored annually to meet federal requirement. For the remaining 600 properties, the Department completes a baseline document report and the parcel is monitored rotationally, every few years.

Vermont

Table C-5. Overview of Vermont PDR Program	
Year of program inception:	1987
Acres Preserved:	139,000 acres (567+ farms)
Primary Preservation Method:	Purchase of development rights
Funding Sources:	Appropriations, bonds, local government contributions, mitigation fees, FRPP, real estate transfer tax, transportation funding
Time Frame:	1-2 before landowner receives payment
Other types of programs:	Farm Viability Enhancement Program
Source: Farmland Information Center	

Program Overview

Program goal. The primary purpose of the grant, which established the program, is:

"to conserve productive agricultural and forestry lands and to promote the sustainable management of soil resources in order to facilitate active and economically viable farm use of the protected property now and in the future. A secondary objective is to conserve scenic and natural resources associated with the protected property to improve the quality of life for Vermonters, and to maintain for the benefit of future generations the essential characteristics of the Vermont countryside."

Organization. The Vermont Housing and Conservation Board (VHCB) was established as a result of concern affordable housing, conservation and historic preservation advocates about the future of the Vermont landscape. This coalition of parties approached the legislature with a plan for the establishment of a board to review and fund projects addressing the community's needs. The legislature responded in 1987 by passing the Vermont Housing and Conservation Trust Fund Act, which included the establishment of the board.

The board has multiple missions of providing affordable housing and community development, as well as ensuring land conservation and historic preservation within the state. Specifically, the board's conservation programs include: Farmland Preservation, Natural Areas,

Recreational Lands, and Historic Properties. The board also oversees two additional programs that contribute to its conservation efforts: the Vermont Farm Viability Enhancement program, and the Vermont Agriculture Development Program.

The VHCB Farmland Preservation Program is dedicated to preserving the state's quality agricultural land base in strong farming regions of the state. This is done primarily through the purchase of development rights so the state's most productive farmland will remain undeveloped and available for future generations. Under the Board is the Agricultural Advisory Committee. This Committee assists the Board in choosing farms for conservation during the pre-application phase. The committee is comprised of six members, each of which is appointed by the Secretary of Agriculture with VHCB Board approval.

Funding. The VHCB has received over \$60 million in state funds and the program has leveraged \$130 million from other sources. The program has been able to secure \$28 million of federal funding for farm protection in the state. The Board is also unique among the states selected for this analysis, because it makes grants to nonprofits and state agencies for the purchase of development rights making it the sole recipient in Vermont for FRPP funding.

Review process. To begin the PDR process, a landowner is directed to a nonprofit conservation organization or eligible state agency to complete a pre-application for the purchase of development rights on the agricultural land. The pre-application must be sponsored by an eligible applicant, such as a municipality, qualified department of state government, or nonprofit conservation organization. The pre-application is then submitted to the Vermont Housing and Conservation Board by the applicant organization on behalf of the landowner. Applications are considered by the Board's Agricultural Advisory Committee twice a year. Each farm is evaluated based on a number of criteria, including soils, infrastructure, location, and management. The selection criteria have been organized so that they are evaluated in order of importance and can help the advisory committee prioritize the applications for funding.

A pre-application that is approved by the advisory committee as being a recommended project will be eligible for full review by the Board. Once the formal application is approved by the Agricultural Advisory Committee, the farmland is appraised in order to determine its agricultural use and the value of the development rights. In Vermont, the cost of the appraisal is split between the landowner and the board. Once the appraisal is complete, negotiations take place and a price that is acceptable to the landowner will be determined; however, the board's contribution will not exceed the appraised value or the cap.

Cap. The VHCB will not pay more than \$500,000 for the development rights on farmland unless the farm has been met the criteria for being an Outstanding Statewide Agricultural Resource. Additionally, the board will not pay more than \$3,500 per acre for the development rights on farmland unless the project again, qualifies as an exceptional resource by the criteria the board has set forth.

Stewardship. For those projects funded by the board, the board is able to make a one-time grant to the appropriate state agency or municipality not to exceed ten percent of the

appraised value of that property interest and used to support its proper management or maintenance or both.⁷⁶

The board will only co-hold easements with specific agencies, such as the Vermont Land Trust, due to the complicated and demanding nature of stewardship on the acquired easements. If entering into an agreement with VHCB, the primary steward must first meet a set of criteria that are evaluated during the review process. If the board approves of the steward, then the organization must enter in to a Stewardship Memorandum of Understanding (MOU) with VHCB.

As the primary steward of the co-held easement, the agency is typically assigned the tasks of annual monitoring, Baseline Documentation Report creation, first-contact for landowner inquiries, and serves as the day-to-liaison for the easement. The MOU sets forth the role of all holders with respect to land owner requests, amendments, violations, and enforcement. Additionally, it is only the organizations with a signed MOU that can apply to receive a stewardship endowment from the board.

⁷⁶ Vermont Conservation Easement Holding and Stewardship Policy 3/11/05