Agriculture not only gives riches to a nation, but the only riches she can call her own.
Samuel Johnson, 1709-1784

Farming looks mighty easy when your plow is a pencil and you’re a thousand miles from the corn field.
President Dwight D. Eisenhower, 1890-1969

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Report written by Linda Piotrowicz, Connecticut Department of Agriculture, in collaboration with the Governor’s Council for Agricultural Development
Technical editing by Sara Putnam, University of Connecticut
Graphic design by Sue Schadt, University of Connecticut
Photos by Connecticut Department of Agriculture
Foreword

When the Governor’s Council for Agricultural Development convened on January 5, 2012, for the first time in its new, streamlined form, no one imagined the enormity of the work it would undertake or accomplish in the ensuing months.

This report represents the culmination of the council’s first year of labor. It presents some preliminary findings and recommendations, with the promise of much more to come in the months and years ahead.

Agriculture is older than Connecticut itself, yet the industry is experiencing something of a renaissance, with more and more of the state’s residents interested in both the practice of farming and in the outcomes of that vocation.

Consumer interest in and demand for Connecticut Grown products are on the rise, creating opportunities for Connecticut agriculture to grow and expand, in turn fueling the state’s economy and improving the quality of life for its residents. Making the most of these opportunities, however, requires a holistic, strategic plan that considers all sectors of the state’s already diverse agricultural industry.

The council has embarked on the development of that plan, Grow Connecticut Farms.

Over the past year, the council has collected an extraordinary amount of information and perspective from the industry’s stakeholders—farmers, producer associations, processors, distributors, retailers, equipment dealers, educators, regulators, and more—and has organized itself into a structure that focuses on the myriad topics that affect all of those stakeholders and the sectors they represent.

The council will use that structure to dive deeper into the priorities and recommendations presented in this report, as well as others that emerge along the way, and continue to develop and refine the Grow Connecticut Farms plan.

Connecticut is not the first state to develop an agricultural plan. However, unlike many of its peers that received significant funding for such an undertaking, Connecticut has delved into this project with no such endowment, instead employing plenty of Yankee ingenuity and a bootstrap approach. It has accomplished a tremendous amount of work in a short period of time, relying on the dedication and superlative effort of council members and staff, in addition to noteworthy contributions of time and knowledge by numerous participants throughout the planning process, which are characteristic of Connecticut agriculture.

The council’s first year of work is presented here in a results-based format so success can be measured as the project continues. Future reports will be issued annually, with interim updates provided when warranted.

This document is the first installment in a plan that creates a roadmap to a richer, more vibrant, and more viable future—not only for Connecticut agriculture, but for the entire state and all its residents. As agriculture grows and prospers in Connecticut, it will nourish the state’s economy, environment, and inhabitants.

Steven K. Reviczky
Commissioner, Connecticut Department of Agriculture
**Executive Summary**

**Connecticut Agriculture: Overview**

Connecticut agriculture contributes between $2.72 billion and $4.6 billion annually in economic activity—$1,000 to $1,300 per resident—and employs as many as 28,000 people, according to two recent economic impact studies. It is a diverse industry that produces a wide array of products and enhances the quality of life for all who live in or visit our state.

**The Governor’s Council for Agricultural Development**

The Governor’s Council for Agricultural Development was reorganized through Public Act 11-189, which streamlined the council and tasked it with two specific charges:

1. Make recommendations to the Department of Agriculture on ways to increase the percentage of consumer dollars spent on Connecticut Grown fresh produce and farm products . . . by 2020, to not less than five per cent of all money spent by such residents on food.

2. Make recommendations concerning the development, diversification, and promotion of agricultural products, programs, and enterprises . . . and . . . provide for an interchange of ideas from the various commodity groups and organizations represented.

The newly structured council was filled through appointments by Governor Dannel P. Malloy and legislative leaders, and met for the first time in January 2012. It immediately embarked on its statutory mission by deciding to develop a statewide plan for Connecticut agriculture. The council then organized itself into two subcommittees and 12 working groups, each focusing on a set of related topics and issues, to enable it to effectively address the myriad components of the industry.

**The Strategic Planning Process**

Consumer interest in Connecticut Grown products has been on the rise in recent years, presenting robust opportunities for Connecticut agriculture. Because of the industry’s diverse nature and numerous sectors, a holistic, strategic approach to growing agriculture is needed. The council has undertaken such an approach in its planning effort, Grow Connecticut Farms.

During 2012, the council sought input from hundreds of industry stakeholders through in-depth interviews, an online survey, and regional listening sessions. It analyzed and distilled the information gathered, then focused on what emerged as priorities. These included farm-to-institution channels, infrastructure, marketing and consumer education/training, labor, planning and coordination, and the regulatory environment.

Additional stakeholders and experts on these issues were invited to a full day of topic-focused meetings to develop the first set of proposed recommendations. These were evaluated by the council, refined, and submitted to the Department of Agriculture for consideration and potential implementation in the coming year.
2012 Recommendations to the Connecticut Department of Agriculture

The council's 2012 recommendations to the Department of Agriculture are as follows:

1. Study infrastructure gaps and opportunities for the aggregation, light processing, and distribution of Connecticut Grown products.

2. Develop and invest in a comprehensive marketing strategy for Connecticut agriculture.

3. Create an agriculture-friendly energy policy that includes agricultural net metering for power production and transmission, and qualification of agricultural anaerobic digestion projects for zero-emissions renewable energy credits (ZRECs).

4. Strengthen the state Department of Agriculture and improve coordination among all agencies regulating agricultural businesses.

5. Perform a comprehensive review of agricultural labor issues and develop initiatives that provide an adequate workforce for Connecticut farm businesses.

6. Increase weight limits on truck loads to be consistent with surrounding states.

7. Establish a bridge between the state departments of Agriculture and Education through a dedicated agricultural education coordinator, and develop ways to integrate agriculture into Connecticut's K-12 curriculum.

Each recommendation is presented in greater detail in Section 4.

Next Steps

The council will conduct a second set of topic-focused meetings in early 2013 to examine additional priorities identified over the past year, including farmland resources, producer education/training, food security, and urban agriculture. Participants will develop proposed recommendations in these areas, and the council will consider and refine them as appropriate.

The council's working groups will begin meeting in the spring of 2013. They will start to hammer out the details of obstacles and opportunities identified by stakeholders, as well as the necessary steps associated with implementation of recommendations adopted by the Department of Agriculture.

A second annual report on the council's work and its Grow Connecticut Farms plan will be issued in December 2013.
1. Connecticut Agriculture: Overview

Economic Stimulus

According to a study published in 2010 by the University of Connecticut, Connecticut agriculture contributes between $2.72 and $3.51 billion per year to the state’s economic activity—amounting to an output of approximately $1,000 per Connecticut resident.

Farm Credit East, the largest lender to agricultural businesses in Connecticut, estimated in 2012 that the output of Connecticut farming, fishing, and forestry is $4.6 billion—amounting to approximately $1,300 per state resident.

The UConn study *Economic Impacts of Connecticut's Agricultural Industry* was published in September 2010 by the university’s College of Agriculture and Natural Resources and was based in part on data from the US Department of Agriculture (USDA) 2007 Census of Agriculture. Twenty-one agencies, councils, organizations, and enterprises within Connecticut’s agricultural industry partnered on the study.

Farm Credit East, which analyzes the industry regularly as part of its own business planning and as a means to help guide its customers, published *Northeast Agriculture: The Overlooked Economic Engine* in July 2012.

**UConn’s study divided the output into three main categories:**

- agricultural and forest production;
- primary agricultural processing;
- special sub-sectors.

Table 1 from that report shows the breakdown within these main categories, based on the three methodologies used in the study (RIMS II, IMPLAN, and REMI).
Table 1 Statewide Output Impact of Sectors in the Agricultural Industry

<table>
<thead>
<tr>
<th>Sector</th>
<th>RIMS II</th>
<th>IMPLAN</th>
<th>REMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grain farming</td>
<td>2.6</td>
<td>2.1</td>
<td>–</td>
</tr>
<tr>
<td>Vegetable and melon farming</td>
<td>37.8</td>
<td>31.0</td>
<td>–</td>
</tr>
<tr>
<td>Fruit farming</td>
<td>56.9</td>
<td>46.6</td>
<td>–</td>
</tr>
<tr>
<td>Greenhouse, nursery, floriculture, and sod</td>
<td>461.3</td>
<td>373.2</td>
<td>–</td>
</tr>
<tr>
<td>Tobacco farming</td>
<td>106.0</td>
<td>85.3</td>
<td>–</td>
</tr>
<tr>
<td>All other crop farming</td>
<td>59.0</td>
<td>48.5</td>
<td>–</td>
</tr>
<tr>
<td>Cattle ranching and farming</td>
<td>16.1</td>
<td>15.2</td>
<td>–</td>
</tr>
<tr>
<td>Dairy cattle and milk production</td>
<td>114.1</td>
<td>97.3</td>
<td>–</td>
</tr>
<tr>
<td>Poultry and egg production</td>
<td>111.2</td>
<td>121.6</td>
<td>–</td>
</tr>
<tr>
<td>Animal production (except cattle, poultry, and eggs)</td>
<td>58.8</td>
<td>60.0</td>
<td>–</td>
</tr>
<tr>
<td>Forest nurseries, forest products, and timber tracts</td>
<td>30.0</td>
<td>25.3</td>
<td>–</td>
</tr>
<tr>
<td>Commercial logging</td>
<td>83.0</td>
<td>75.8</td>
<td>–</td>
</tr>
<tr>
<td>Sawmills and wood preservation</td>
<td>72.1</td>
<td>77.4</td>
<td>–</td>
</tr>
<tr>
<td>Commercial fishing</td>
<td>58.9</td>
<td>42.6</td>
<td>–</td>
</tr>
<tr>
<td>Hunting and trapping</td>
<td>5.5</td>
<td>4.9</td>
<td>–</td>
</tr>
<tr>
<td>Support activities for agriculture and forestry</td>
<td>45.5</td>
<td>41.9</td>
<td>–</td>
</tr>
<tr>
<td><strong>Total for agricultural and forest production</strong></td>
<td><strong>1,290</strong></td>
<td><strong>1,150</strong></td>
<td><strong>1,820</strong></td>
</tr>
<tr>
<td>Fruit and vegetable canning, pickling, and drying</td>
<td>371.0</td>
<td>327.4</td>
<td>–</td>
</tr>
<tr>
<td>Fluid milk and butter manufacturing</td>
<td>220.0</td>
<td>206.9</td>
<td>–</td>
</tr>
<tr>
<td>Cheese manufacturing</td>
<td>387.2</td>
<td>406.2</td>
<td>–</td>
</tr>
<tr>
<td>Ice cream and frozen dessert manufacturing</td>
<td>274.4</td>
<td>240.3</td>
<td>–</td>
</tr>
<tr>
<td>Animal (except poultry) slaughtering and processing</td>
<td>271.4</td>
<td>261.1</td>
<td>–</td>
</tr>
<tr>
<td>Poultry processing</td>
<td>28.1</td>
<td>27.1</td>
<td>–</td>
</tr>
<tr>
<td>Seafood product preparation and packaging</td>
<td>39.4</td>
<td>36.1</td>
<td>–</td>
</tr>
<tr>
<td>Wineries</td>
<td>69.9</td>
<td>63.2</td>
<td>–</td>
</tr>
<tr>
<td><strong>Total for primary agricultural processing</strong></td>
<td><strong>1,750</strong></td>
<td><strong>1,570</strong></td>
<td><strong>1,930</strong></td>
</tr>
<tr>
<td><strong>Total for the agricultural industry</strong></td>
<td><strong>3,040</strong></td>
<td><strong>2,720</strong></td>
<td><strong>3,510</strong></td>
</tr>
<tr>
<td>Cut Christmas trees</td>
<td>6.6</td>
<td>5.3</td>
<td>–</td>
</tr>
<tr>
<td>Maple syrup production</td>
<td>1.4</td>
<td>1.1</td>
<td>–</td>
</tr>
<tr>
<td>Horses and other equine production</td>
<td>6.8</td>
<td>6.9</td>
<td>–</td>
</tr>
<tr>
<td>Aquaculture</td>
<td>21.3</td>
<td>21.7</td>
<td>–</td>
</tr>
</tbody>
</table>

Note: Sector by sector output impacts were not estimated for the REMI methodology due to time and budget constraints since this task would require a detailed analysis of each sector.
All eight of Connecticut's counties are shown in the report to contribute significantly to the state’s total agricultural output, with Fairfield, New Haven, and Hartford counties providing the greatest output.

**Total Output Impacts at the County Level, 2007 (Based on REMI Results)**

Farm Credit East's report also looked at a six-state region that includes Connecticut, Massachusetts, New Hampshire, New Jersey, New York, and Rhode Island, and estimated that as a whole, this Northeast region produces $70.9 billion per year in economic output.

Among the New England states included in the region, Connecticut was ranked second in output only to Massachusetts ($13.0 billion). Connecticut’s output was more than that of both New Hampshire and Rhode Island ($2.5 and $1.1 billion) combined.

**Job Creation**

Connecticut agriculture also employs tens of thousands of people. UConn’s study determined that the industry creates between 17,000 and 23,000 jobs throughout the state. Follow-up analysis in 2012 by UConn adjusted that estimate to nearly 28,000, while Farm Credit East’s report put the figure at 26,700.

UConn concluded that nearly three-quarters of Connecticut’s agricultural jobs are on farms, with the remainder in farm support services, agricultural processing, forest processing, and wholesale distribution.
**First Annual Report: 2012**

<table>
<thead>
<tr>
<th>Category</th>
<th>Total Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farms</td>
<td>20,787</td>
</tr>
<tr>
<td>Wholesale Distribution</td>
<td>2,629</td>
</tr>
<tr>
<td>Primary Agricultural Processing</td>
<td>1,949</td>
</tr>
<tr>
<td>Primary Forest Processing</td>
<td>1,582</td>
</tr>
<tr>
<td>Farm Support Services</td>
<td>850</td>
</tr>
</tbody>
</table>

Farm Credit East’s analysis by sector showed agricultural production accounting for 14,300—a little more than half—of Connecticut’s agricultural jobs.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Total Jobs</th>
<th>Output (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse/Nursery Production</td>
<td>4,782</td>
<td>$457</td>
</tr>
<tr>
<td>Dairy Processing</td>
<td>3,647</td>
<td>$1,000</td>
</tr>
<tr>
<td>Forest Products Processing</td>
<td>3,500</td>
<td>$1,140</td>
</tr>
<tr>
<td>Off-Farm Support Businesses</td>
<td>2,000</td>
<td>$92</td>
</tr>
<tr>
<td>Dairy Production</td>
<td>1,000</td>
<td>$100</td>
</tr>
</tbody>
</table>

**Connecticut Jobs Created by Agriculture**

Farm Credit East’s report estimated that the six-state Northeast region employs just shy of 378,900 people.

**Other Benefits**

The benefits of Connecticut agriculture do not stop at economic stimulus and job creation. The industry plays a major role in quality of life for the state’s residents. Agriculture contributes to the aesthetic, environmental, ecological, recreational, and nutritional health of Connecticut and its citizens. It is also an integral part of the state's rich history.
**Farm Size**

While Connecticut is small in area at only 3.18 million acres, UConn’s study showed that agriculture accounts for approximately 13 percent of that acreage, compared to development, which consumes 19 percent. Deciduous and coniferous forests cover more than half of the state’s land.

According to USDA’s census, Connecticut is home to 4,916 farms. At an average size of 83 acres, Connecticut’s farms are much smaller than the national average of 413 acres.

**Farm Operators**

Connecticut’s farmers have an average age of 57.6 years—slightly higher than the national average for farmers of 57.1 years—and more than half of them farm on a part-time basis. Forty-six percent list farming as their primary occupation.

**Diversity**

Connecticut agriculture is diverse and produces a wide array of food and non-food products. In terms of acreage in cropland, the majority is in forage, grazing, and pasture for livestock, followed by acreage in shellfish production, for silage/green chop, and for vegetables.

**Acreage in Production by Sector**

![Bar graph showing acreage in production by sector](chart.png)
In terms of sales, UConn’s study showed the following breakdown by product sector:

- Nursery, Greenhouse, Floriculture, Sod: 49%
- Produce (Fruits, Vegetables): 14%
- Milk and Dairy Products: 13%
- Tobacco: 10%
- Poultry and Eggs: 8%
- Aquaculture: 3%
- Cattle and Other Livestock: 3%

**Consumer Interest**

Consumer interest in Connecticut Grown food and farm products has increased steadily over the past several decades and is deemed to be at its highest level in more than a quarter of a century.

One example of this growing interest is the increasing number of farmers’ markets in the state. The Connecticut Department of Agriculture (“The Department of Agriculture,” “the department,” and “the agency” in subsequent sections of this document) listed 130 certified farmers’ markets in 2012, nearly double the 66 it listed only 10 years earlier.

While farmers’ markets represent only one of many markets for Connecticut Grown products, their proliferation hints at the enormous opportunity for the growth of agriculture in the state.

**Summary**

Clearly, Connecticut agriculture is a significant force in the state’s economy and has the potential to be a powerful contributor to Connecticut’s economic recovery and long-term health.

**Connecticut agriculture:**

- $4.6 billion annually in economic output ($1,300 per state resident)
- 28,000 jobs in Connecticut’s communities
- Part of a six-state region producing $70.9 billion per year in agricultural output and 378,800 agricultural jobs
2. The Governor’s Council for Agricultural Development

Recognizing the important role agriculture plays in the state’s overall health, Governor Dannel P. Malloy in 2011 signed into law Public Act 11-189, An Act Concerning the Governor’s Council for Agricultural Development.

(text of P.A. 11-189)

and (10) one member appointed by the minority leader of the Senate, who shall be actively engaged in agricultural education.

(b) The council shall make recommendations to the Department of Agriculture on ways to increase the percentage of consumer dollars spent on Connecticut-grown fresh produce and farm products, including, but not limited to, ways to increase the amount of money spent by residents of the state on locally-grown farm products, by 2020, to not less than five per cent of all money spent by such residents on food. The council shall also make recommendations concerning the development, diversification and promotion of agricultural products, programs and enterprises in this state and shall provide for an interchange of ideas from the various commodity groups and organizations represented.

(c) The council shall meet not less than once per calendar quarter. Any vacancy in the membership of the council shall be filled by the Governor. The members shall serve without compensation or reimbursement for expenses. Any member absent from more than two meetings in a calendar year shall be deemed to have resigned.

Approved July 13, 2011

While the Governor’s Council for Agricultural Development had existed for more than two decades (it was established in 1991 through Public Act 91-307), it had attempted to maintain an unwieldy number of members, some of whom had resigned or died, and it had been inactive for many years.

Public Act 11-189 streamlined the council to 15 members, representing agricultural production, processing, marketing, sales, education, and other industry sectors, and designated the commissioner of the Department of Agriculture as council chair. Also named were the dean of UConn’s College of Agriculture and Natural Resources and the chair of the Connecticut Milk Promotion Board (or chair’s designee).

Governor Malloy and legislative leadership appointed in late 2011 the remaining 12 members as specified in the act. Appointed members volunteer their time and knowledge, serving without pay or other compensation.
THE GOVERNOR’S COUNCIL FOR AGRICULTURAL DEVELOPMENT

CHAIRMAN
Commissioner Steven K. Reviczky
Connecticut Department of Agriculture

VICE CHAIRMEN
Executive Director Henry Talmage
Connecticut Farm Bureau Association
(representing the Connecticut Milk Promotion Board)
Dean Gregory J. Weidemann, Ph.D.
UConn College of Agriculture and Natural Resources

MEMBERS
Allyn L. Brown, III, Maple Lane Farms/Connecticut Currant
(appointed by Governor Malloy; representing agricultural production)

Winter Caplanson, Coventry Regional Farmers’ Market
(appointed by Senate President Pro Tempore Williams; representing agricultural marketing)

James F. Guida, Guida’s Dairy
(appointed by Speaker of the House Donovan; representing agricultural processing)

George Hindinger, Hindinger Farm
(appointed by Governor Malloy; representing agricultural production)

Jason Hoagland, Connecticut Agricultural Education Foundation
(appointed by Senate Minority Leader McKinney; representing agricultural education)

Herb Holden Jr., Double H Acres/Broad Brook Beef
(appointed by Governor Malloy; representing agricultural production)

Jamie Jones, Jones Family Farms
(appointed by Governor Malloy; representing agricultural production)

Michael T. Keilty, Maple Spring Farms
(appointed by Senate Majority Leader Looney; representing an agricultural trade organization)

Shelly Oechsler, Botticello Farms
(appointed by Governor Malloy; representing agricultural production)

Peter Orr, Fort Hill Farms (as of November 13, 2012)*
(appointed by Governor Malloy; representing agricultural production)

Kevin Sullivan Jr., Chestnut Hill Nursery
(appointed by House Minority Leader Larry Cafero; representing the Green Industry)

Greg Veneziano, Bozzuto’s Inc.
(appointed by House Majority Leader J. Brendan Sharkey; representing agricultural sales)

* fills vacancy left by Erica Andrews, Hurricane Farm (resigned September 19, 2012; appointed by Governor Malloy; representing agricultural production)
The legislation also charged the council with two specific tasks:

1. Make recommendations to the Department of Agriculture on ways to increase the percentage of consumer dollars spent on Connecticut Grown fresh produce and farm products, including, but not limited to, ways to increase the amount of money spent by residents of the state on locally-grown farm products, by 2020, to not less than five percent of all money spent by such residents on food.

2. Make recommendations concerning the development, diversification and promotion of agricultural products, programs, and enterprises in this state and shall provide for an interchange of ideas from the various commodity groups and organizations represented.

The council convened in its new form for the first time on January 5, 2012, and resolved to develop the first-ever holistic, strategic plan for Connecticut agriculture as part of its effort toward accomplishing the two charges set forth in Public Act 11-189.

The council also organized itself into two subcommittees and a total of 12 working groups to address specific topic areas within the broad and diverse industry of agriculture.

Each working group is chaired by a different council member and will be populated with experts who have knowledge and experience specific to that group's focus. These groups are expected to begin meeting in early 2013 to establish priorities and strategies.
Chair: S. Oechsler  
Farm to Institution (Multiple Work Groups)

Subgroup A
- Public Schools, K-12
- State Procurement

Subgroup B
- Colleges and Universities
- Private Schools, K-12
- Healthcare Facilities
- Corporate/Other Food Service

Subgroup C
- Restaurants

Chair: J. Hoagland  
Consumer Training and Education

- Nutrition
- Food Preparation
- Seasonality
- Ag in the Classroom
- FarmCity
- Home Garden and Landscape
- Agricultural System (Incl. Food System)
- Partners (K-12 Schools, DoAG, UCONN CANR/Extension, State Univ/Coll, Private Univ/Coll, Reg Ag Sci and Tech Centers, others)

Chair: K. Sullivan  
Research

- Baseline Data (Consumption of CT Grown Products)
- State-Level Food and Ag Planning
- Key Agricultural Products Strategy
- Climate Change Adaptation
- Waste Management (Excl Food)
- CT Agricultural Experiment Station

Chair: TBD  
Food Security

- Urban Agriculture
- Food Deserts/Access/Supply
- Donation/Gleaning
- Food Systems (State, Regional, Local; Independent and Linking/Coordination)
- Emergency Management

Chair: W. Caplanson  
Marketing

- CT Grown Program
- Agritourism
- Farmers’ Markets, CSAs, Farm Stands
- E-commerce, Social Media, Etc.

Chair: A. Brown  
Agricultural Business Environment

- Labor (H2A)
- Energy Costs
- State Laws and Regs
- Local Ordinances and Regs (Zoning, Inland Wetlands, Prop Taxes)
- Good Agricultural Practices (GAP)

Chair: H. Talmage  
Planning and Coordination

- Local Plans of C&D
- State Plan of C&D
- State/Local Procurement
- Coordination among State Agencies DoAG, DCP, DPH, DEEP, DECD

Chair: G. Hindinger  
Agricultural Resources and Investments

- DOAG (FrmInd Pres, Ag Viability Grants, Ag Trans Grants, FmInd Rest, Spec Crop Block Grants, Animal Health)
- UCONN CANR
- CT Ag Experiment Station
- Climate Adaptation
- Lending/Credit
- USDA NRCS/FSA/RMA/Rural Dev
- Conservation Districts/Council on Soil & Water Conservation
- Other State Grant Programs

Chair: H. Holden  
Agriculture/Food Infrastructure

- Regional Market
- Farmers’ Markets
- Distribution (Wholesale/Retail)
- Processing
- Value-Added Products
- Waste Management
- On-Farm Energy Production
- Aggregation

Chair: J. Jones  
Producer Education and Training

- UCONN CANR/Extension
- State Universities and Colleges
- Regional Ag Sci and Tech Centers
- Production (What, Where, How, When, GAP, Food Safety)
Recognizing that the only way to gauge the success of its efforts would be to incrementally measure results, the council began establishing a results-based framework.

It engaged UConn’s Department of Agricultural and Resource Economics to develop methodology to measure consumption of Connecticut Grown products so that a baseline could be identified and progress assessed along the way. The council will build additional framework to ensure that the success of each project it undertakes can be measured.

Both statutory charges—developing recommendations to the Department of Agriculture on ways to increase consumption of Connecticut Grown products and making recommendations concerning the development, diversification, and promotion of agricultural products, programs, and enterprises—are important components to strengthening the industry. Creating new opportunities for the agricultural industry is absolutely essential to its sustainability and future health.

The council and its working groups will engage farmers in examining different models, including cooperatives and similar producer-based structures, and in developing a system that is equitable for both the producer and the consumer.

The Governor’s Council for Agricultural Development is committed to identifying meaningful, practical, and effective measures that will help Connecticut turn the curve on the road to a healthier future for both the state’s economy and its residents.
3. The Strategic Planning Process

When the newly reshaped council met in January 2012, it adopted as its initial project the
development of the first-ever holistic, strategic plan for Connecticut agriculture, Grow Connecticut Farms.

Connecticut is not the first state to undertake such a project. Other states, both within New
England and across the country, have already developed—or are in the process of developing—
statewide plans for agriculture. The council looked to these peers for ideas and methods to help
steer its own efforts.

On February 2, 2012, the council welcomed Ellen Kahler from the Vermont Sustainable Jobs Fund,
lead author of Vermont’s Farm to Plate plan, to a special meeting at the Legislative Office Building
in Hartford to learn more about Vermont’s strategic planning process.

The council also looked at plans developed (or in development) by states such as Rhode Island,
Vermont, North Carolina, Illinois, and Iowa, taking the most helpful ideas and components from
each and adapting them to Connecticut’s unique agricultural industry and economy, keeping in
mind that the council’s charge is to develop, diversity, and promote all sectors of agriculture, not
just those related to food production.
The following project components were identified:

• Stakeholder Input
  • In-Depth Interviews
  • Online Survey
  • Regional Listening Sessions
  • Recommendation Development Process
• Filtering and Analysis of Input
• Research
• Recommendations to Connecticut Department of Agriculture
• Ongoing Refinements and Annual Updates

The council appointed a three-person interview panel representing council leadership:

• Linda Piotrowicz, representing Commissioner Reviczky, chairman
• Henry Talmage, vice chairman
• Jiff Martin, representing Dean Weidemann, vice chairman

Between May 18 and August 31, 2012, the panel conducted two-hour, in-depth informational interviews with 55 industry stakeholders, including those involved in agricultural production, processing, distribution, marketing, education, and financing; producer associations; nonprofit organizations; and government agencies.

Including scheduling and coordination, preparation, and follow-up, these interviews totaled an investment of more than 650 man-hours by the panel.

From August 24 to October 7, 2012, the council posted an online survey to gather additional stakeholder input. Invitations to participate in the survey were published in the Department of Agriculture’s Connecticut Weekly Agricultural Report, on the agency’s website, and in many partner organizations’ newsletters and email blasts.

A total of 232 people completed the survey, adding significantly to the information gathered through the in-depth interviews.

The council also conducted four listening sessions throughout the state (September 19, 2012, in Norwich; September 20, 2012, in Windsor; September 27, 2012, in New Haven; and October 4, 2012, in Torrington), which attracted another 42 stakeholders to weigh in on Connecticut agriculture. Listening sessions were announced through the same channels as the online survey.
At the conclusion of the input-gathering phase of the project, the top five opportunities for the growth of Connecticut agriculture had been identified as follows:

<table>
<thead>
<tr>
<th>Rank</th>
<th>Opportunity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Market Demand</td>
</tr>
<tr>
<td>2</td>
<td>Consumer Knowledge of Connecticut Grown Products</td>
</tr>
<tr>
<td>3</td>
<td>Geography</td>
</tr>
<tr>
<td>4</td>
<td>Market Supply</td>
</tr>
<tr>
<td>5</td>
<td>Access to Credit/Financing</td>
</tr>
<tr>
<td>(tie)</td>
<td>Land Availability</td>
</tr>
</tbody>
</table>

The top five obstacles to the growth of Connecticut agriculture also were determined:

<table>
<thead>
<tr>
<th>Rank</th>
<th>Obstacle</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Input Costs</td>
</tr>
<tr>
<td>2</td>
<td>Regulatory Environment</td>
</tr>
<tr>
<td>3</td>
<td>Land Availability</td>
</tr>
<tr>
<td>(tie)</td>
<td>Infrastructure Gaps</td>
</tr>
<tr>
<td>5</td>
<td>Market Competition</td>
</tr>
</tbody>
</table>

In addition, 10 topics were pinpointed as warranting additional study. These topics dovetailed with the council’s working groups as follows:

<table>
<thead>
<tr>
<th>Topic</th>
<th>Council Working Group(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Farm to Institution</td>
<td>Farm to Institution</td>
</tr>
<tr>
<td>2. Infrastructure</td>
<td>Agriculture/Food Infrastructure</td>
</tr>
<tr>
<td>3. Marketing</td>
<td>Marketing</td>
</tr>
<tr>
<td>4. Consumer Education/Training</td>
<td>Consumer Training/Education</td>
</tr>
<tr>
<td>5. Input Costs</td>
<td>Agricultural Business Environment</td>
</tr>
<tr>
<td>6. Labor</td>
<td>Agricultural Business Environment</td>
</tr>
<tr>
<td>7. Regulatory Environment</td>
<td>Ag Business Environment, Planning/Coordination</td>
</tr>
<tr>
<td>8. Farmland Resources</td>
<td>Agricultural Resources and Investments</td>
</tr>
<tr>
<td>9. Producer Education/Training</td>
<td>Producer Education/Training</td>
</tr>
<tr>
<td>10. Urban Agriculture</td>
<td>Food Security</td>
</tr>
</tbody>
</table>

The first seven of these were the focus of a meeting in Meriden on November 7, 2012, to which 90 stakeholders and content experts were invited to discuss and help draft proposed recommendations.
Topics were combined into three breakout sessions:

**Session A:** Farm to Institution, Infrastructure

**Session B:** Marketing, Consumer Education/Training

**Session C:** Input Costs, Labor, Regulatory Environment

Each session was led by a trained facilitator, who steered participants through brainstorming, idea prioritizing, and proposal development. By the end of the day, each session had produced between five and seven suggested recommendations, which were presented to the council for consideration.

The council met November 13, 2012, and discussed the proposed action steps. After considerable deliberation, the members reached consensus that the following seven recommendations should be submitted to the Department of Agriculture:

**From Session A:**
- Study infrastructure gaps and opportunities for the aggregation, light processing, and distribution of Connecticut Grown products.
- Increase weight limits on truck loads to be consistent with surrounding states.

**From Session B:**
- Develop and invest in a comprehensive marketing strategy for Connecticut agriculture.
- Establish a bridge between the state departments of Agriculture and Education through a dedicated agricultural education coordinator, and develop ways to integrate agriculture into Connecticut’s K-12 curriculum.

**From Session C:**
- Create an agriculture-friendly energy policy that includes agricultural net metering for power production and transmission, and qualification of agricultural anaerobic digestion projects for zero-emissions renewable energy credits (ZRECs).
- Strengthen the state Department of Agriculture and improve coordination among all agencies regulating agricultural businesses.
- Perform a comprehensive review of agricultural labor issues and develop initiatives that provide an adequate workforce for Connecticut farm businesses.
Details of these recommendations will be examined in the next section.

As input was gathered from stakeholders and considered by the council, the team at UConn’s Department of Agricultural and Resource Economics was at work developing a baseline and methodology to measure consumption of Connecticut Grown farm products.

Initial rough estimates of Connecticut Grown farm product consumption were 1 percent or less of consumer food dollars. After a more detailed analysis of data available from USDA’s Census of Agriculture and the Department of Labor, along with the development of methodology better suited to Connecticut’s unique agricultural industry, UConn calculated the portion of food dollars consumers currently spend on Connecticut Grown food and farm products to be 2.5 percent.

The research team estimated that if all Connecticut Grown food were consumed in state—rather than some being exported—the products would account for 3.5 percent of total food expenditures, still significantly shy of the council’s target of not less than 5 percent by 2020. This goal cannot be met by augmenting consumer demand alone. Production of Connecticut Grown food also must be increased.

By contrast, the team determined that production of Connecticut Grown greenhouse and nursery crops currently exceeds the potential demand by Connecticut residents for these types of local products, presenting opportunities for this sector to expand out-of-state sales and/or diversify into production of new crops.

Despite the differences in these figures from original estimates, the council still has an immense task at hand to fulfill its statutory mission. The recommendations presented in the next section are the first step toward that end.
4. The Council’s 2012 Recommendations to the Department of Agriculture

Recommended Action No. 1:

*Study infrastructure gaps and opportunities for the aggregation, light processing, and distribution of Connecticut Grown products.*

**Existing Conditions**

Institutional foodservice operations such as those in Connecticut’s hospitals, colleges and universities, public and private schools, and state facilities present an enormous opportunity to increase sales of Connecticut Grown farm products.

These kitchens serve hundreds of thousands of meals each day, using hundreds of millions of pounds of ingredients annually. Increasing the percentage of those ingredients that are sourced from Connecticut farms by even a few points could translate into tens or even hundreds of millions of additional dollars flowing through the state’s economy each year.

These institutional facilities typically rely in large part on heavily processed industrial foods, which have been associated with obesity, type 2 diabetes, and other serious health risks. Increasing the amount of fresh fruits, vegetables, and other Connecticut Grown farm-fresh foods they serve would improve the nutritional value of meals and contribute to improved health of their diners.

Furthermore, state and local governments and institutions use trees, shrubs, perennials, bedding plants, cut flowers, and sod in their external and internal landscaping. Connecticut needs adequate infrastructure to aggregate and distribute the vast array of Connecticut Grown ornamental plants to take advantage of this opportunity to increase demand for and use of these products.

**Examining the Gaps**

Institutions require ingredients in quantities and forms that present some specific challenges for Connecticut’s small farms.

A university, for example, might require several hundreds of pounds of sliced summer squash for an item on the menu in November. Few farms can provide that much at a time, and none can provide it fresh after the first hard frost of the fall, so freezing or otherwise extending its shelf life is necessary.

Washing and cutting it into uniformly sized slices is another obstacle. Getting it from the farm to the university in a safe, efficient, and convenient manner is still another difficulty.

Connecticut lacks adequate infrastructure to aggregate, process, and distribute many Connecticut Grown farm products to provide the state’s institutional foodservice operations a consistent, year-round supply in a way that provides for a competitive marketplace and a fair and viable price to both the farmers and the end users.

In addition, state institution purchasing and bidding requirements are structured so they are not conducive to dealing with Connecticut’s farm businesses. Some Connecticut Grown products, such as dairy, eggs, and controlled-environment/greenhouse crops, could be supplied immediately if state contracts better supported purchasing these items.
Contracts are so large that it is impossible for most farms and small- to medium-sized aggregators to compete in the bidding process. In addition, contract specs frequently do not include the types of food and landscape plants grown in and/or well adapted to Connecticut.

**Models to Consider**

The Hartford Regional Market is a state-owned, statutorily authorized distribution terminal for agricultural products. It covers 32 acres, houses more than 230,000 square feet of warehouse space, contains 144 farmers’ market stalls, and is centrally and conveniently located near the intersection of Interstates 84 and 91, along a busy freight railroad line.

With some thoughtful investments in facility upgrades and renovations, the market presents tremendous opportunity for the development of a vibrant food and green-goods hub to serve institutional markets statewide.

The City of Bridgeport, located along Interstate 95 and featuring a deep-water port, presents an opportunity for a food and green-goods hub that could serve New Haven and Fairfield counties—as well as New York and beyond, a potential source of countless new customers of Connecticut Grown farm products.

The Western Massachusetts Food Processing Center in Greenfield has an extended-season program that aggregates and processes produce from local farms, including freezing vegetables, for year-round use by institutions. The program is designed to offer a fair price to farmers and a competitive price to purchasers. This model can provide valuable information about ways to develop infrastructure in Connecticut that successfully serves the needs of Connecticut’s farmers and institutional consumers.

Massachusetts and other New England states have revamped state contracting rules so that schools and other institutions can more easily purchase from local farms. In addition, they have added provisions that allow the institutions to pay up to a specified percentage more for local products than for similar products grown and produced out of state.

**How Will This Enhance Connecticut Farm Viability?**

Increasing demand for Connecticut Grown farm products provides growth opportunity for Connecticut farms.

Infrastructure that enables farmers to meet that growing demand by aggregating their products with those from other farms, by having a means to lightly process raw products, and by providing premium, higher-value products will create jobs and improve farm profitability.

Developing systems that provide a fair share to Connecticut farm families and a fair price to the end users will enhance the long-term viability of both the farms as well as the foodservice businesses using the farms’ products.

**Strategy for Implementation**

The Department of Agriculture has been awarded $50,000 in USDA Specialty Crop Block Grant funding to assess Connecticut Grown specialty crop processing needs and capacity for Connecticut institutions. The information gathered through this assessment will be compiled with that from partner organizations’ studies on institutional markets and infrastructure, including those by Wholesome Wave, CitySeed, and Hartford Food System.
John Waite from the Western Massachusetts Food Processing Center participated in the council’s November 7, 2012, meeting and has offered to work with the Department of Agriculture as it assesses infrastructure needs for institutional markets.

The Department of Agriculture is working with the state’s Department of Construction Services in the development of a master plan for the Hartford Regional Market. The master plan will consider infrastructure not only for Connecticut Grown food but also for the state’s vibrant greenhouse/nursery sector of trees, shrubs, annuals, perennials, and other ornamental plants, so that all of these Connecticut Grown products can be distributed efficiently in a manner that provides a fair price to the producer and to the customer.

The Department of Agriculture and the council’s working groups will work with the departments of Administrative Services, Energy and Environmental Protection, and Transportation to structure state contracts and specs so that they provide improved provisions for Connecticut Grown foods and farm products.

**Measuring Success**

Success will be measured through the consideration of the following questions:

**Who Will Be Better Off?**

Connecticut’s farmers will be better off as a result of increased sales to institutions. The people served by the state’s myriad institutions—including hospitals, colleges and universities, public and private schools, corporate cafeterias, and state facilities—will benefit from fresher, more nutritious meals.

All Connecticut residents ultimately will benefit from the economic stimulus resulting from keeping more of the money spent by these large facilities here in the state.

**What Will Be Measured?**

The amount of Connecticut Grown farm products purchased by institutions will be measured through surveys.

**How Much Can We Do?**

In the short term, the Department of Agriculture can develop smart, strategic plans for food/green goods hubs at the Hartford Regional Market and in Bridgeport, and work with partner organizations in other areas, such as New Haven, New London, and Litchfield, to strengthen local infrastructure and supply chains of Connecticut Grown farm products.

The agency can also work with the departments of Administrative Services, Energy and Environmental Protection, and Transportation to modify state contracting language and specs.

Over the long term, these changes will result in considerably more Connecticut Grown farm products being used by institutions. It is reasonable to expect that that the amount of Connecticut Grown farm products purchased by institutions will increase to at least four times the baseline.
**Recommended Action No. 2:**
Develop and invest in a comprehensive marketing strategy for Connecticut agriculture.

**Existing Conditions**
Section 22-38a of the *Connecticut General Statutes* gives the commissioner of the Department of Agriculture responsibility for establishing and administering “a program to promote the marketing of farm products grown and produced in Connecticut for the purpose of encouraging the development of agriculture in the state.”

**CGS Sec. 22-38a**

**Connecticut General Statutes: Sec. 22-38a. Promotion of Connecticut-Grown farm products.**

**Regulations.** The Commissioner of Agriculture shall establish and administer a program to promote the marketing of farm products grown and produced in Connecticut for the purpose of encouraging the development of agriculture in the state. The commissioner may, within available appropriations, provide a grant-in-aid to any person, firm, partnership or corporation engaged in the promotion and marketing of such farm products, provided the words “CONNECTICUT-GROWN” or “CT-Grown” are clearly incorporated in such promotional and marketing activities. The commissioner shall (1) provide for the design, plan and implementation of a multiyear, state-wide marketing and advertising campaign, including, but not limited to, television and radio advertisements, promoting the availability of, and advantages of purchasing, Connecticut-grown farm products, (2) establish and continuously update a web site connected with such advertising campaign that includes, but is not limited to, a comprehensive listing of Connecticut farmers’ markets, pick-your-own farms, roadside and on-farm markets, farm wineries, garden centers and nurseries selling predominantly Connecticut-grown horticultural products and agri-tourism events and attractions, and (3) conduct efforts to promote interaction and business relationships between farmers and restaurants, grocery stores, institutional cafeterias and other potential institutional purchasers of Connecticut-grown farm products, including, but not limited to, (A) linking farmers and potential purchasers through a separate feature of the web site established pursuant to this section, and (B) organizing state-wide or regional events promoting Connecticut-grown farm products, where farmers and potential institutional customers are invited to participate. The commissioner shall use his best efforts to solicit cooperation and participation from the farm, corporate, retail, wholesale and grocery communities in such advertising, Internet-related and event planning efforts, including, but not limited to, soliciting private sector matching funds. The commissioner shall use all of the funds provided to the Department of Agriculture pursuant to subparagraph (C) of subdivision (4) of section 4-66aa for the purposes of this section. The commissioner shall report annually to the joint standing committee of the General Assembly having cognizance of matters relating to the environment on issues with respect to efforts undertaken pursuant to the requirements of this section, including, but not limited to, the amount of private matching funds received and expended by the department. The commissioner may adopt, in accordance with chapter 54, such regulations as he deems necessary to carry out the purposes of this section.

In 1986, The Department of Agriculture developed the Connecticut Grown Program, which has evolved into an effective, recognizable brand used by many of the state’s agricultural businesses today.

That Connecticut Grown Program has served as the umbrella for a number of Department of Agriculture initiatives based on the charges set forth in the above statute, including a broad assortment of online farm listings, marketing grants, and the Farm-to-Chef Program.
In addition, the agency has developed strong relationships with local media outlets. It has developed and provided those outlets with content focused on Connecticut agriculture, resulting in extensive earned media time during the past decade.

In 2007, The Department of Agriculture contracted a professional advertising firm to run a $250,000 statewide Connecticut Grown and “buy local” advertising campaign. Early the next year, the department hired UConn's Center for Survey Research and Analysis to conduct a study to measure the effectiveness of that campaign and gather additional information about consumer perceptions of Connecticut Grown farm products.

The study consisted of 504 telephone interviews of Connecticut residents, using scientific methodology to generate a representative sample of the state's adult population, and had a margin of sampling error of ±4.4 percentage points at the 95 percent confidence level.

The 75-item questionnaire found that three-quarters of Connecticut residents said they had purchased Connecticut Grown products over the past year, including the following items:

<table>
<thead>
<tr>
<th>Item</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vegetables</td>
<td>81%</td>
</tr>
<tr>
<td>Fruit</td>
<td>69%</td>
</tr>
<tr>
<td>Landscaping Materials</td>
<td>35%</td>
</tr>
<tr>
<td>Milk or Other Dairy Items</td>
<td>27%</td>
</tr>
<tr>
<td>Eggs</td>
<td>23%</td>
</tr>
</tbody>
</table>

Thirty-seven percent of respondents said they had seen the Connecticut Grown logo, vs. 58 percent who said they had not.

When asked about the first thing that comes to mind when thinking of or seeing the logo, the top responses were as follows:

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchasing Connecticut Grown Foods</td>
<td>28%</td>
</tr>
<tr>
<td>Fruits and Vegetables</td>
<td>22%</td>
</tr>
<tr>
<td>Local Farms/Farm Stands</td>
<td>21%</td>
</tr>
</tbody>
</table>

Seventy-two percent of residents said it was very important or somewhat important when purchasing food that the product is grown in Connecticut, while 83 percent said it was very or somewhat important that the purchase supports a local family farm.

Forty-five percent of respondents said they would pay more for locally grown or produced foods compared to the typical price for similar items, with eight percent indicating they would be willing to pay as much as 25 percent more.

These findings clearly demonstrate an interest in and demand for Connecticut Grown farm products. Opportunities exist, however, to continue to strengthen that demand through renewed marketing efforts.

The Department of Agriculture's marketing unit, which has administered the Connecticut Grown branding program for more than 25 years, recently underwent changes in management and staffing. These changes present opportunities for an updated approach to a comprehensive marketing strategy for Connecticut agriculture and local farm products.
In addition, Connecticut invested $22 million this past year in the new “Still Revolutionary” state branding campaign to stimulate business development and tourism. Opportunities exist to better partner with the Offices of Culture and Tourism to ensure that the state’s abundant and rich agricultural destinations are well represented among the attractions marketed to tourists from both within and outside of Connecticut.

**Examining the Gaps**

What worked well 25 years ago may not necessarily work as well now. The growth of the local food movement, changes in media, unfathomable advances in technology, and different methods by which consumers seek out information necessitate a dynamic approach to the promotion of Connecticut’s agricultural products. As conditions continue to shift, so, too, must Connecticut’s marketing efforts.

The Department of Agriculture’s 5-1/2 FTE marketing unit administers several grants and a number of other programs in addition to marketing Connecticut Grown farm products. These programs are important to the state’s agricultural community, but also demand considerable staff time and resources.

**Models to Consider**

Examples of highly successful, agricultural branding programs abound.

In Connecticut, the Farmer’s Cow provides an excellent example of a widely recognized product line with a loyal and growing customer base. Vermont maple syrup and Maine lobster are product-specific brands from nearby states that have widespread appeal. The Proven Winners line of garden plants is well known by gardeners and landscape professionals across the country.

On a broader scale, Connecticut’s own “Still Revolutionary” branding campaign demonstrates a large, comprehensive approach to marketing a wide array of offerings.

**How Will This Enhance Connecticut Farm Viability?**

A comprehensive strategy for marketing Connecticut Grown farm products will increase consumer demand for those products, resulting in greater sales. Greater sales will produce increased cash flow, resulting in more money that can be reinvested into the farms to make them stronger.

**Strategy for Implementation**

The first step in implementation is for the Department of Agriculture to look at how to best use the marketing resources it has available and how to focus those resources on the agency’s statutory responsibilities for the marketing of Connecticut Grown farm products.

The Department of Agriculture and the council’s marketing working group—which includes representation from the Offices of Culture and Tourism—can find ways to showcase more agriculture in the state’s “Still Revolutionary” branding campaign. Agriculture has indeed been practiced in the Connecticut since before the Revolutionary War. In fact, Connecticut earned the nickname “The Provisions State” because it supplied most of the food for the Continental forces during the Revolutionary War. Ongoing advances in agricultural technology continue to make it a revolutionary industry today.
The working group also can take a closer look at and carefully consider all of Connecticut's diverse farm products to identify the target customers for each sector and determine what motivates those customers' purchasing decisions. This will help establish effective messaging for these different products.

Looking at successful branding programs such as those mentioned above can provide many no- and low-cost ideas that can be used immediately. As additional resources become available, consultation with an outside marketing consultant, additional consumer and market research, and investments in advertising and other paid media could augment the efforts already underway.

**Measuring Success**

Success will be measured through the consideration of the following questions:

**Who Will Be Better Off?**
 Connecticut's agricultural businesses will be better off, as will consumers who have better knowledge of Connecticut Grown farm products.

**What Will Be Measured?**
 The percentage of consumer dollars spent on Connecticut Grown farm products will be measured. Other indicators of success will include any available statistics on farm production, labor, and profit, as well as reports on the health of Connecticut residents over time.

**How Much Can We Do?**
 Connecticut can expect to double the baseline of 2.5 percent to 5 percent by 2020.
Recommended Action No. 3:

Create an agriculture-friendly energy policy that includes agricultural net metering for power production and transmission, and qualification of agricultural anaerobic digestion projects for zero-emissions renewable energy credits (ZRECs).

Existing Conditions

While consumer demand for Connecticut Grown products is high year round, Connecticut’s natural growing season is short, which limits supply in late fall, winter, and spring.

Connecticut already has the infrastructure of a large, established greenhouse sector that could potentially produce much more food year round through controlled-environment cultivation. However, Connecticut’s high energy costs limit this opportunity to compete with other states, Canada, and Europe, whose farmers pay less for energy and currently supply much of our fresh, greenhouse-grown produce during the off-season.

While providing input to the council, stakeholders frequently spoke of the high energy costs in Connecticut when discussing what they cited as the top obstacle to the growth of Connecticut agriculture, input costs.

According to the US Energy Information Administration (EIA), Connecticut’s residential, commercial, and industrial electricity rates are much higher than the national average. Connecticut’s average rates across all sectors ranked fourth highest among all United States in September 2012.

During that same month, Connecticut’s commercial rates were 14.54 cents per kwh, compared to the national average of 10.55 cents per kwh. Only Hawaii, New York, and California had higher commercial rates.

Connecticut’s residential rate was 17.26 cents per kwh, compared to the national average of 12.33 cents per kwh, behind only Hawaii and New York.

<table>
<thead>
<tr>
<th>Electricity</th>
<th>Connecticut</th>
<th>U.S. Average</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>17.26 cents/kWh</td>
<td>12.33 cents/kWh</td>
<td>September 2012</td>
</tr>
<tr>
<td>Commercial</td>
<td>14.54 cents/kWh</td>
<td>10.55 cents/kWh</td>
<td>September 2012</td>
</tr>
<tr>
<td>Industrial</td>
<td>12.97 cents/kWh</td>
<td>7.01 cents/kWh</td>
<td>September 2012</td>
</tr>
</tbody>
</table>

From EIA website
http://www.eia.gov/electricity/monthly/epm_table_grapher.cfm?t=epmt_5_6_a
The EIA estimates that a large portion of Connecticut's energy consumption is from fossil fuels and electricity, while very little comes from renewable energy sources.

Connecticut Energy Consumption Estimates, 2010

According to the Connecticut Department of Energy and Environmental Protection, Connecticut's energy consumption has increased nearly 80 percent since 1960 and is projected to continue to increase at an accelerated rate. Connecticut's reliance on fossil-based fuels poses serious environmental and public health risks.

Energy consumption for the state of Connecticut, measured in BTUs (British Thermal Units), has increased by almost 80 percent since 1960 and the 2006 Connecticut Siting Council Report estimates that the annual compounded growth rate will be 1.26 percent into the future years.

2004 Energy Consumption Distributed by Sector

From DEEP's website
http://www.deep.state.ct.us/energy/electric/energyuse/2004 энергопотребление
http://www.eia.gov/beta/state/print.cfm?sid=CT
Among Connecticut’s agricultural businesses, the dairy and greenhouse sectors have been identified by the Connecticut Farm Energy Program as those with the highest energy use.

Meanwhile, Connecticut’s dairy sector also provides an abundant supply of nutrient-rich manure that could be used for energy generation through biomass projects such as anaerobic digestion and other technologies—in addition to fertilizer for crops—if Connecticut implemented farm energy policies that allowed the entire state to take advantage of this rich source of renewable energy.

In addition, more than half of Connecticut’s land cover is in forest, according to UConn’s 2010 study, providing another plentiful and renewable source of fuel for use in high-efficiency, clean-burning systems. However the utilization of byproducts from Connecticut’s forestry sector for fuel/heating is low.

**Examining the Gaps**

Connecticut lacks agriculture-friendly energy programs and policies. While enormous potential exists for projects that would supply renewable energy to not only agricultural businesses but other residents of the state, there is a lack of critical elements necessary to make these projects feasible.

Virtual net metering does not exist for agricultural operations, which means the credit for energy returned to the grid can now only be applied to the same meter. Agricultural businesses typically have multiple meters in different areas of their operations. They need to be able to apply credits to these other parts of their business.

The wholesale price received for energy returned to the grid during non-peak times currently is far below the price for energy pulled from the grid during peak-use periods. This steep price differential is another gap that must be filled in order for Connecticut to implement on-farm energy generation projects that could help produce crops at a competitive price and produce fresh, nutritious food for its residents year round in an economically feasible manner.

**Models to Consider**

Europe successfully uses on-farm energy production to reduce costs and supplement farm income through sale back of surplus power. This would require net metering as part of a complete farm energy policy to implement in Connecticut.

The neighboring states of Massachusetts and Vermont are way ahead of Connecticut in this realm. Both have already developed viable farm energy programs that allow for agricultural net metering for both power purchase and transmission.
The Massachusetts Department of Agricultural Resources' Energy Program includes a full-time energy expert. The program works in conjunction with the Massachusetts Farm Energy Program, a cooperative effort of the USDA Natural Resource Conservation Service and Berkshire Pioneer Resource Conservation and Development.

The Connecticut Farm Energy Program has been a good baby step in looking at farm energy in Connecticut. A pilot launched in 2009 as a partnership between the USDA Rural Development and the Eastern Connecticut Resource Conservation & Development Area, Inc., the program provides agricultural businesses in New London and Windham counties with information about existing farm energy programs and offers assistance with writing grant applications to apply for USDA Rural Development Rural Energy for America Program (REAP) Grants.

It also has applied for an Agricultural Viability Grant to conduct a farm survey to establish some baseline information on current energy use and costs. However, this small pilot cannot tackle Connecticut’s large, complex, and critical statewide farm energy needs on its own.

**How Will This Enhance Connecticut Farm Viability?**

An energy policy that is friendly to agriculture would result in lower production costs. It also would allow for an extended growing season that could provide a year-round supply of Connecticut Grown food and farm products, as well as additional revenue sources for Connecticut farms that generate power and sell back the surplus energy produced.

**Strategy for Implementation**

This issue is so large and complex that it warrants a task force. Implementation will require cooperation and coordination among several agencies, most notably the Department of Agriculture and the Department of Energy and Environmental Protection.

Connecticut needs a viable farm energy policy. The state should establish a pilot program to focus on agricultural energy generation opportunities. The pilot must include a virtual net metering component that would enable farms to buy and sell energy at an equitable price.

Anaerobic digestion and other on-farm biomass projects offer enormous potential for Connecticut’s farms to use waste products such as manure and food waste and turn them into clean energy for all of Connecticut’s residents and businesses. As a participant in the Regional Greenhouse Gas Initiative (RGGI), the market-based cap-and-trade program established to reduce carbon dioxide (CO₂) emissions from the power sector, Connecticut should be encouraging the use of this technology.

Under the RGGI program, anaerobic digesters are recognized as offset projects that capture and destroy methane emissions and the avoided methane emissions are assigned a CO₂ equivalent for the purposes of calculating reductions in CO₂ emissions. To encourage use of this technology, anaerobic digestion should be established as a source of zero-emissions renewable energy credits, or ZRECs.
PURA Approves Renewable Energy Program That Will Drive Economic Activity in the State

The Public Utilities Regulatory Authority (PURA) today issued final approval for the state’s ZREC (zero-emissions) and LREC (low-emissions) renewable energy program, which will be administered by the state’s two largest electric utilities—Connecticut Light & Power (CL&P) and United Illuminating (UI).

“The ZREC/LREC program will help jumpstart Connecticut’s clean energy industry,” said Daniel C. Esty, Commissioner of Connecticut’s Department of Energy and Environmental Protection.

“The program will deploy hundreds of projects across the state at the lowest possible cost to ratepayers,” Esty said. “This will support efforts to move us in the direction of the Governor’s vision of cheaper, cleaner, and more reliable energy in Connecticut. We look forward to the results of the bidding process—that will show which competitors are able to produce zero and low emissions renewable power the most economically.”

Under the ZREC/LREC program, CL&P and UI will accept bids from renewable energy project developers. The projects that require the least amount of subsidy from the program will be selected for funding. The criteria for selection of projects will also ensure the quality of the projects submitted to the program. Winning bidders will receive 15-year contracts for the payment of a set price per megawatt hour (MWh) of output in the form of renewable energy credits (RECs). By selecting quality projects that have lower costs, the ZREC/LREC program will maximize the amount of in-state economic activity generated by the program and procure the lowest priced renewable electricity possible.

The ZREC/LREC program is the result of last year’s landmark energy reform legislation (Public Act 11-80). The program design is the result of the vision provided by Governor Malloy, the General Assembly and a collaborative process between the state, Connecticut Light & Power, and United Illuminating. Bids will be accepted into the program soon, and the results of the first year of the process will be made public this summer.

The PURA decision is attached and will also be posted at ct.gov/pura under Docket Number 11-12-06.

According to a 2010 study commissioned by the Department of Energy and Environmental Protection, Connecticut disposes of more food waste than any other category of waste product. This waste provides an additional source of fuel for on-farm biomass projects and an additional source of farm revenue through tipping fees.
Connecticut State-wide Solid Waste Composition and Characterization Study, Final Report

**Ten Most Common Materials, by Weight–Overall Statewide Disposed Waste**

<table>
<thead>
<tr>
<th>Material</th>
<th>Est. %</th>
<th>Cum. %</th>
<th>Est. Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Waste</td>
<td>13.5%</td>
<td>13.5%</td>
<td>321,481</td>
</tr>
<tr>
<td>Compostable Paper</td>
<td>8.2%</td>
<td>21.7%</td>
<td>195,185</td>
</tr>
<tr>
<td>Leaves &amp; Grass</td>
<td>7.2%</td>
<td>29.0%</td>
<td>172,408</td>
</tr>
<tr>
<td>OCC/Kraft Paper</td>
<td>5.8%</td>
<td>34.8%</td>
<td>138,240</td>
</tr>
<tr>
<td>Wood–Treated</td>
<td>4.7%</td>
<td>39.4%</td>
<td>111,404</td>
</tr>
<tr>
<td>Durable Plastic Items</td>
<td>3.6%</td>
<td>43.1%</td>
<td>86,325</td>
</tr>
<tr>
<td>Other Recyclable Paper</td>
<td>3.6%</td>
<td>46.7%</td>
<td>85,517</td>
</tr>
<tr>
<td>Other Film</td>
<td>3.5%</td>
<td>50.2%</td>
<td>83,478</td>
</tr>
<tr>
<td>Carpet</td>
<td>3.5%</td>
<td>53.7%</td>
<td>83,125</td>
</tr>
<tr>
<td>R/C Organic</td>
<td>3.2%</td>
<td>56.8%</td>
<td>75,195</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>56.8%</strong></td>
<td><strong>56.8%</strong></td>
<td><strong>1,352,359</strong></td>
</tr>
</tbody>
</table>


High-efficiency, clean, wood-burning technology exists that could use Connecticut Grown wood-based biofuels. Use of this technology could not only produce more affordable power for agricultural operations, but also provide an enhanced market for Connecticut Grown forest industry byproducts, as well as provide a new source of Connecticut Grown energy.

Governor Malloy’s Comprehensive Energy Strategy for Connecticut, unveiled in October 2012, provides expansion of natural gas infrastructure in rural areas and has potential to lower heating costs in some agricultural operations.

Combined heat and power units can provide electricity and heat at lower costs. Combined with net metering, surplus energy could be sold back into the grid or used elsewhere.
Measuring Success

Success will be measured through the consideration of the following questions:

Who Will Be Better Off?

Connecticut’s farmers will be better off as a result of lowered input costs and additional revenue generated through these projects. They will also be better off as a result of an extended growing season that produces additional income.

Connecticut’s residents will benefit from the extended growing season as well, with access to fresh, locally grown produce during colder months of the year.

Connecticut’s communities will be better off as a result of the jobs created.

Connecticut’s residents and the state’s environment will be better off as a result of the environmental and public health benefits realized through reduced methane gas emissions and other concerns.

Connecticut’s energy users will be better off as a result of reduced dependency on centralized distribution and development of microgrids. The state as a whole will be better off as a result of increased energy independency.

What Will Be Measured?

The number of Connecticut farms that participate in farm energy programs will be measured, as will the participants’ cost savings and revenue generated. Environmental quality benefits in air and nutrient management will be measured on a project-by-project basis.

How Much Can We Do?

Connecticut, like neighboring states, can implement an agriculture-friendly energy policy that enables farms to take advantage of many opportunities to reduce dependency on centralized distribution and lower production costs and thus be more competitive in the marketplace, use byproducts and waste to produce energy, and provide a renewable source of surplus energy back to the grid.
Recommended Action No. 4:

Strengthen the state Department of Agriculture and improve coordination among all agencies regulating agricultural businesses.

Existing Conditions

Stakeholder input gathered by the council revealed satisfaction among the state’s farmers when dealing with the Department of Agriculture, but significant frustration when dealing with other agencies.

Overlapping jurisdictions often lead to decisions by other entities that have adverse consequences on farming and agricultural businesses. Planning and coordination between the Department of Agriculture and other state agencies, and with municipalities, must be improved. The Department of Agriculture should be established as the lead in administration and reconciliation of statutes and regulations pertaining to agriculture.

Established in 1925, the Department of Agriculture has a rich history of meeting the needs of Connecticut’s evolving agricultural industry and administering its parks, forests, fish, and wildlife programs as the Department of Agriculture and Natural Resources.

Connecticut has been a leader in the protection of critical farm and forest lands through its first-in-the-nation, current-use property tax program, Public Act 490. It also has been the envy of many other states with its second-in-the-nation program to protect farmland in perpetuity through the purchase of development rights.

The department has statutory responsibility for a wide range of programs involving animal health, aquaculture, milk safety, agricultural commodities, licensing, and more. In addition, the agency has significant responsibilities for agricultural development and resource preservation, including the promotion of Connecticut Grown farm products, management of the Hartford Regional Market, and management of numerous grant programs crafted to enhance farm viability and resource stewardship.

The agency strives to meet its obligations by coordinating with other agencies and institutions, including but not limited to the following:

- The Connecticut Department of Administrative Services
- The Connecticut Department of Construction Services
- The Connecticut Department of Consumer Protection
- The Connecticut Department of Correction
- The Connecticut Department of Economic and Community Development
- The Connecticut Department of Energy and Environmental Protection
- The Connecticut Department of Public Health
- The Connecticut Agricultural Experiment Station
- The United States Department of Agriculture
- The University of Connecticut
**Examining the Gaps**

Effectively planning, coordinating, and brokering critical, accurate, and timely information regarding agriculture requires adequate staffing. Sufficient human and other resources are necessary to communicate and work with federal, state, and local partners to ensure that information is consistent and that everyone involved is focused on achieving the same quality-of-life goals for all Connecticut residents, including farm families.

Over time, as a result of state reorganizations and attrition, the Department of Agriculture has experienced a continued, significant reduction in authorized and actual strength. This has occurred in spite of increased demands as the state, region, and nation have come to better understand the important role agriculture plays in the health of our citizens, communities, and economies.

Connecticut has experienced tremendous growth in consumer interest in and demand for Connecticut Grown farm products over the past several decades, fueled by an over-arching focus on reducing miles traveled between farm and plate and an increasing awareness of food safety. During the same period, the number of farms in Connecticut has been on the rise, according to USDA’s *Census of Agriculture*.

Consumer interest in and demand for Connecticut Grown have swelled. The number of farms in production has grown. Threats of disease have proliferated. Farms have expanded, diversified, and transitioned. New farmers have entered the field of agriculture. And the nation has sharpened its focus on public health and food safety.

As demands on the agency have accelerated, the Department of Agriculture has, over time, experienced significant reductions in staffing levels through attrition.

Like other state and local government entities, the Department of Agriculture has found ways to do more with less, streamline operations, and increase efficiencies in recent years. Examples include partnerships with not-for-profit entities, personal service agreements, and the use of private contractors.

In order to properly serve the citizens of Connecticut and meet its statutory responsibilities, however, the department must have the critical mass and redundancies necessary to meet growing demands and complexities.

The loss of the department’s internal office for budget, business, and human resource functions has had unintended adverse consequences to the agency’s ability to fulfill its mission. Additional staff reductions at the agency would inevitably result in interruptions to Connecticut’s agricultural production and/or an inability to remain in compliance with state and federal mandates.

There is a direct correlation between the viability of Connecticut’s farms and that of its Department of Agriculture.
Models to Consider
Other states in the Northeast have departments of agriculture that are structured differently. Some include all agricultural production and food safety. Connecticut should consider strengthening the Department of Agriculture by consolidating like functions within the agency and establishing it as the primary department with which all other agencies having programs and policies affecting agriculture coordinate.

How Will This Enhance Connecticut Farm Viability?
A strong Department of Agriculture that communicates and interacts effectively and efficiently with other agencies and stakeholders will enable farms and related businesses to get the attention and services they need, enabling them to operate in a timely and effective manner and to focus their own resources on the productivity and growth of their businesses, in turn enhancing their long-term health and ability to contribute significantly to Connecticut's economy.

Strategy for Implementation
The council's planning and coordination working group will look at ways to improve coordination among the Department of Agriculture and all state, federal, and local agencies involved in the regulation and development of Connecticut's agricultural businesses. The agency should examine the statutory missions of all boards and councils that exist under the department in an effort to improve planning and coordination.

Measuring Success
Success will be measured through the consideration of the following questions:

- **Who Will Be Better Off?**
  Connecticut farm families will be better off, as will all consumers of Connecticut Grown food and other farm products.

- **What Will Be Measured?**
  The number of farms served by the Department of Agriculture will be measured. In addition, surveys will be used to measure agricultural business operators' satisfaction with the service provided by all agencies with which they interact.

- **How Much Can We Do?**
  Connecticut can build a strong, efficient environment in which the state's agricultural businesses operate and, in turn, serve the residents of Connecticut and contribute to the overall health and well-being of the state.
Recommended Action No. 5:

Perform a comprehensive review of agricultural labor issues and develop initiatives that provide an adequate workforce for Connecticut farm businesses.

Existing Conditions

Connecticut farm businesses require a wide range of labor. Skilled, reliable employees are needed not only for production, but also for processing, distribution, marketing, administration, and management.

Farm support businesses, such as milk and other processors, distributors, veterinarians, equipment dealers, and others, create a multitude of additional jobs.

Examining the Gaps

Despite Connecticut’s high unemployment rate, many of the state’s agricultural businesses have difficulty finding qualified employees, leaving critical positions unfilled and holding back growth of individual businesses and the industry as a whole.

Some rely on the federal H2A guest-worker program for seasonal labor, but often find that the expense and administrative burden imposed by the program’s cumbersome requirements limit their ability to adequately fill staffing needs.

According to Farm Credit East’s 2011 report Northeast Agriculture and Farm Labor: The Case for an Effective Agricultural Guest Worker Program, Northeast farms are more vulnerable to labor shortages than those in other states because the diverse crops grown and foods produced in the Northeast are particularly labor intensive compared to grains and livestock that dominate agriculture in other parts of the country.

Because agriculture involves the cultivation of living things and perishable products, it is subject to acute, intense labor demands at critical stages of production, including planting, harvesting, processing, packing, sales, and distribution. A sub-par workforce during one or more of these stages could result in loss of an entire crop, putting the business at risk of failure.

Farm Credit East’s analysis showed that Connecticut has the third-highest farm labor cost per $100 of farm sales, and the highest in all of New England and the Northeast. In fact, Connecticut’s farm labor cost of $27 per $100 of sales is three times the national average of $9, and more than twice that in nearby Vermont ($12).

The report estimates that a lack of needed federal guest workers alone would put one-third of the agricultural production in Connecticut, Massachusetts, New Hampshire, New York, and New Jersey at risk, with the greatest threat to dairy farms, fruit and vegetable farms, and greenhouse/nursery production.

Combined with inadequate agricultural workforce development programs in Connecticut’s schools, colleges, and universities, these gaps in labor put the state’s agriculture in serious danger.

If farms go out of business, not only are the food and other products they supply lost, so are the farmland and the multitude of other health, environmental, and economic benefits they provide to residents. Furthermore, the entire sector of farm support businesses could be lost.
Models to Consider

Connecticut's manufacturing workforce development programs could be expanded to include agriculture, as the two industries' labor needs are quite similar.

Several European countries provide specialized agricultural training that begins after elementary school and produces skilled and qualified employees for their countries' agricultural businesses.

Enhancements to the federal guest-worker programs that would allow for a consistent, affordable, and reliable seasonal production force have been proposed.

How Will This Enhance Connecticut Farm Viability?

Connecticut farms will be stronger, more efficient, productive, and profitable if they have a reliable, consistent, skilled workforce, leaving them better positioned to expand to take advantage of growing consumer demand for Connecticut Grown farm products.

Strategy for Implementation

The council will seek opportunities in Governor Malloy's manufacturing workforce development initiatives to include training for agricultural labor. Agricultural employment pathways can be developed in Connecticut at multiple levels of the educational system, including high schools, community colleges, and four-year colleges and universities.

The council will encourage Connecticut's Congressional delegation to support enhancements to federal guest-worker programs that would better serve agriculture as well as other industries in the state.

Measuring Success

Success will be measured through the consideration of the following questions:

Who Will Be Better Off?

Connecticut farm businesses will be better off with a reliable, skilled, workforce.
Connecticut's labor pool will be better off with training that provides employment opportunities.
Connecticut's economy will be better off with lower unemployment rates.

What Will Be Measured?

Agricultural employment statistics provided by the Connecticut Department of Labor will be the measurement tool.

How Much Can We Do?

Connecticut can integrate agriculture into its manufacturing workforce development programs and can work with its Congressional delegation to improve federal guest worker programs.
Connecticut can also increase its number of agricultural jobs, resulting in higher employment.
Recommended Action No. 6:
Increase weight limits on truck loads to be consistent with surrounding states.

Existing Conditions
The maximum gross vehicle weight (that of the vehicle itself combined with that of the load it carries) permitted on Connecticut highways is 80,000 lbs. Neighboring states permit up to 100,000 lbs.

Examining the Gaps
The difference between Connecticut’s limit and those of surrounding states puts Connecticut farms (and other businesses) at a competitive disadvantage.

It takes more trucks to carry inputs—such as fertilizer and livestock feed—into the state, and more trucks to carry outputs—such as plants and milk—out of the state.

Every extra truckload adds to the price of doing business in Connecticut, and adds to the price of every product produced in the state. Because dairy farmers are required to pay for the transportation of their milk, and because the wholesale price they receive is set through federal milk marketing orders, this additional cost comes directly out of the farmer’s bottom line.

In addition, because tanker trucks are designed to carry 100,000 lbs., the tankers can be filled only part way to travel in Connecticut. This causes the contents—such as milk—to slosh around and make the truck unstable, posing a safety risk to the driver of the truck as well as to everyone else using the road.

Models to Consider
The 100,000 lb. limit in surrounding states.

How Will This Enhance Connecticut Farm Viability?
Putting Connecticut farms on an even playing field with those in neighboring states will make them more competitive in the regional, national, and global marketplace. Connecticut Grown products such as greenhouse plants, trees and shrubs, and milk are frequently exported out of Connecticut and compete with products from other states. Even farms that sell their products exclusively within the state will benefit by reducing the cost of inputs from elsewhere.

Strategy for Implementation
The truck weight limits are part of federal transportation policy and must be changed through an act of Congress. Connecticut must work with its Congressional delegation to ensure that this issue remains a priority.
How Will Success Be Measured?
Success will be measured through the consideration of the following questions:

Who Will Be Better Off?
Connecticut farmers, other Connecticut businesses, and consumers will be better off as a result of this change.

What Will Be Measured?
Connecticut’s weight limit will be the measurement used to evaluate success.

How Much Can We Do?
Connecticut can convince Congress to change the weight limit here to the same 100,000 lbs. that exists in neighboring states.
**Recommended Action No. 7:**

*Establish a bridge between the state departments of Agriculture and Education through a dedicated agricultural education coordinator, and develop ways to integrate agriculture into Connecticut's K-12 curriculum.*

**Existing Conditions**

Curriculum that teaches K-12 students about agriculture is extremely limited. Connecticut's current agricultural education system is fragmented and implemented from myriad resources with no single overseeing authority.

**Examining the Gaps**

Before the industrialization of the nation's food system, a large percentage of children grew up on farms or helped in their families' gardens. As processed food became more readily available and convenient, the need to farm and garden at home decreased, creating a disconnect between children and the sources of their food and the plants in their landscapes.

Integrating information about agriculture into curriculum for core subjects such as math, science, history, reading, and writing will teach young people about where food and plants come from, help them make healthy dietary choices, and will encourage them to consider farming or related occupations as potential career choices.

**Models to Consider**

California has integrated agricultural education into its state K-12 curriculum. According to the education department's website, “The California Department of Education, the Superintendent of Public Instruction, and the State Board of Education have strongly supported a comprehensive program of instruction in agriculture that integrates technical agriculture with strong academic foundations in core subjects.”

In addition, the California Department of Food and Agriculture has created a new Farm to Fork Office in partnership with the state's departments of Education and Public Health. This new office will work with the state's Farm-to-School Taskforce.

**How Will This Enhance Connecticut Farm Viability?**

Educating children about farms and farm products will lead to educated consumers who choose to purchase Connecticut Grown goods, creating higher demand and strengthening the farms that produce those products.

It will also lead some to enter into agriculture as a profession, thus helping to build the workforce for tomorrow's farms.

**Strategy for Implementation**

The Department of Agriculture and the council's consumer education working group should work with the Department of Education to develop specs for such a position and then pursue options to fill it. Possibilities include reassignment of duties and/or alteration of assignment as well as hiring a new staff member if resources permit.
In addition, the agencies can work together to weave agricultural education into curriculum for core subjects such as reading, writing, math, science, history, social studies, and home economics. The new three-year pilot program that adds at least 300 hours of additional learning time in some Connecticut schools provides an excellent and timely opportunity to integrate more agriculture into learning activities.

**Measuring Success**

Success will be measured through the consideration of the following questions:

**Who Will Be Better Off?**

Children will be better educated.

Farms will benefit from increased demand for their products and the development of a stronger workforce.

**What Will Be Measured?**

The existence of an agricultural education coordinator and the amount of agricultural education integrated into the state’s K-12 curriculum will be the performance measurements.

**How Much Can We Do?**

Connecticut can establish an agricultural educational coordinator, who would be a valuable resource for farmers, educators, and others in the state. That coordinator would develop curriculum that uses agricultural topics as learning tools in many core subjects.
5. Next Steps

The council plans to conduct another full day of meetings in March 2013 with experts invited to focus on the remaining three areas identified through stakeholder input:

- Farmland Resources
- Producer Education/Training
- Food Security and Urban Agriculture

As occurred at the November 7, 2012, meetings, trained facilitators will lead participants through brainstorming, prioritizing, and proposal development. The council will discuss and analyze the suggested recommendations and decide which to carry forward to the Department of Agriculture in 2013.

The 12 working groups of the council will begin to convene in early 2013 and start to focus on the recommended action steps and other associated work required to fulfill the council’s statutory charges.

The full council will meet at least once each quarter for working group updates and for discussion and coordination of over-arching and overlapping issues. The 2013 quarterly meeting schedule has tentatively been set as follows:

- February 19, 2013, 1:00 to 4:00 p.m., at Connecticut Department of Agriculture
- May 21, 2013, 1:00 to 4:00 p.m., location TBD
- August 20, 2013, 1:00 to 4:00 p.m., location TBD
- November 12, 2013, 1:00 to 4:00 p.m., location TBD

*Agendas, minutes, and other information are posted at www.CTGrown.gov/GovernorsCouncil

Throughout 2013, the council will continue to study areas identified as priorities and to develop and refine recommendations to the Department of Agriculture.

The Grow Connecticut Farms plan will be updated by December 31, 2013, and presented to Governor Malloy in January 2014.
Appendices/Resources
(Available online at www.CTGrown.gov/GovernorsCouncil)

1. USDA 2007 Census of Agriculture Connecticut State Profile
2. UConn's 2010 Economic Impacts of Connecticut's Agricultural Industry
3. UConn Zwick Center for Food and Resource Policy's 2013 CT Agricultural System Establishments and Jobs
4. Farm Credit East's 2012 Northeast Agriculture: The Overlooked Economic Engine
5. UConn Center for Survey Research and Analysis's 2008 Connecticut Grown Marketing Campaign Survey
6. Farm Credit East's 2011 Knowledge Exchange Report, Northeast Agriculture and Farm Labor: The Case for an Effective Agricultural Guest Worker Program
8. Interview Invitee List/Schedule
9. Interview Summaries
10. Survey Results Summary
11. Listening Session Schedule
12. Listening Session Notes
13. Topic-Focused Meeting Invitee List
14. Draft Recommendations for Consideration
GROW CONNECTICUT FARMS Developing, Diversifying, and Promoting Agriculture