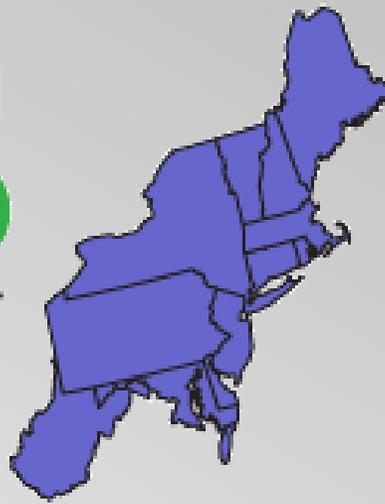


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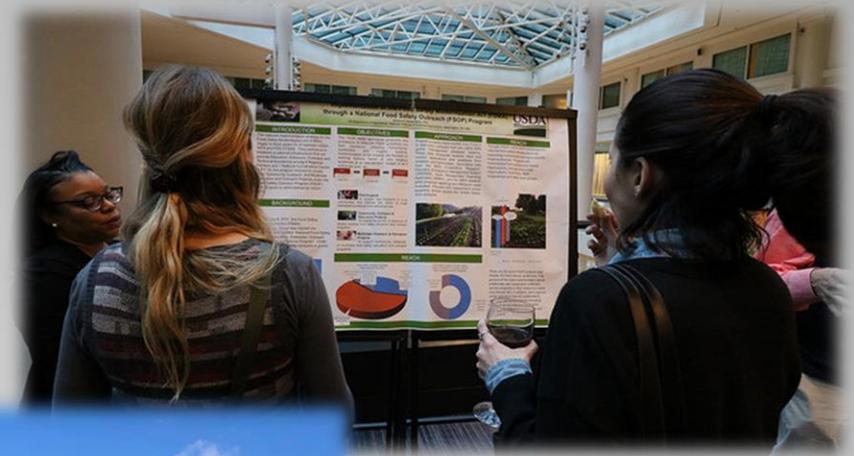
NECAFS Highlights and Conference Expectations

Philadelphia, PA

February 11, 2020

Chris Callahan

Elizabeth Newbold



Enhance produce safety and preventive controls

Enhance produce safety and
preventive controls **training,**
education, and outreach

Enhance produce safety and preventive controls training, education, and outreach **among small and medium sized farms and small processors**

Enhance produce safety and preventive controls training, education, and outreach among small and medium sized farms and small processors **in the Northeast.**

Enhance produce safety and preventive controls training, education, and outreach among small and medium sized farms and small processors in the Northeast.

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Who:

- University researchers, educators and extension specialists
- State regulatory and enforcement agency partners
- Local food and farming organizations, NFP's
- Consultants & Industry associations
- Small and medium sized producers, small processors, buyers
- Other regional centers and initiatives, national center, USDA/FDA

Goal:

Enhance produce safety and preventive controls training, education, and outreach among small and medium sized farms and small processors in the Northeast.

Objectives:

1. Establish Foundational Network Structure

2. Build Capacity, Competency, and Collaboration

3. Develop and Deliver Educational Programs

4. Evaluate and Assess Progress and Impact

5. Sustain Good Work

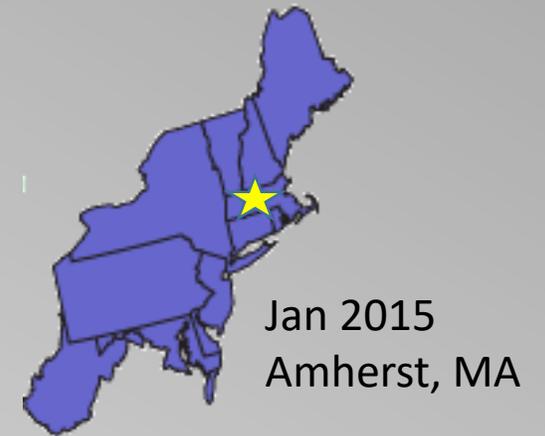


Funding for NECAFS was made possible, in part, by the Food and Drug Administration through grant 1R01FD005686, views expressed in written materials or publications and by speakers and moderators do not necessarily reflect the official policies of the Department of Health and Human Services; nor does any mention of trade names, commercial practices, or organization imply endorsement by the United States Government.

(Northeast Center to Advance Food Safety)

NECAFS started with NE-PHRESH

(Northeast Postharvest Research and Extension Service Hub)

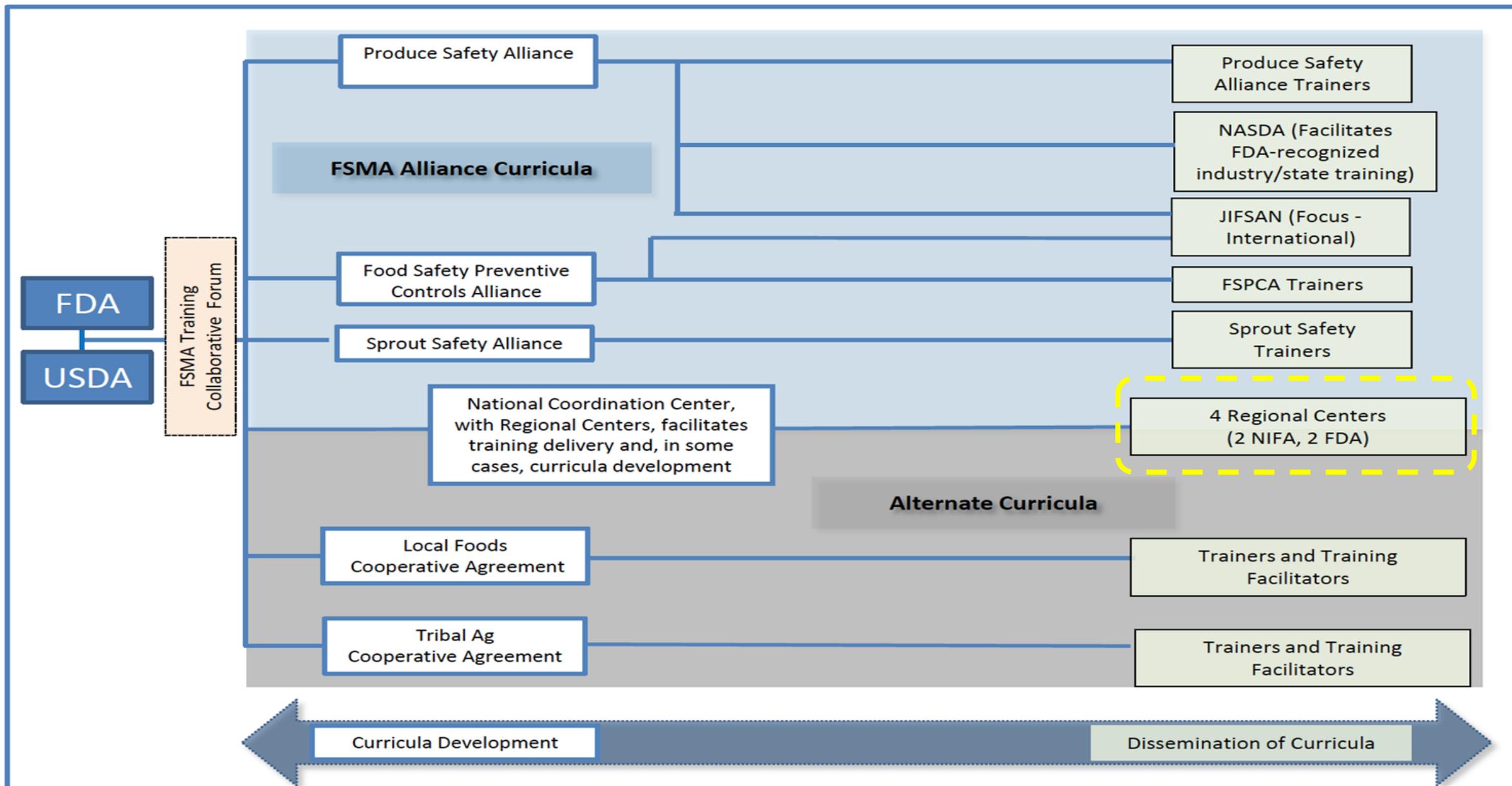


- Disparate opinion, accuracy and location of knowledge. Overlapping and non-coordinated effort in region.
- Based field experiences. Shared by peers.
- Lacking regional relevance and research base.
- NEED/NERA* Planning Grant (\$4k) to focus on postharvest research and educational needs. Together.

* Northeast Extension Directors / Northeastern Regional Association of State Agricultural Experiment Station Directors

FSMA Framework for Industry Curriculum Development and Dissemination

October 2015



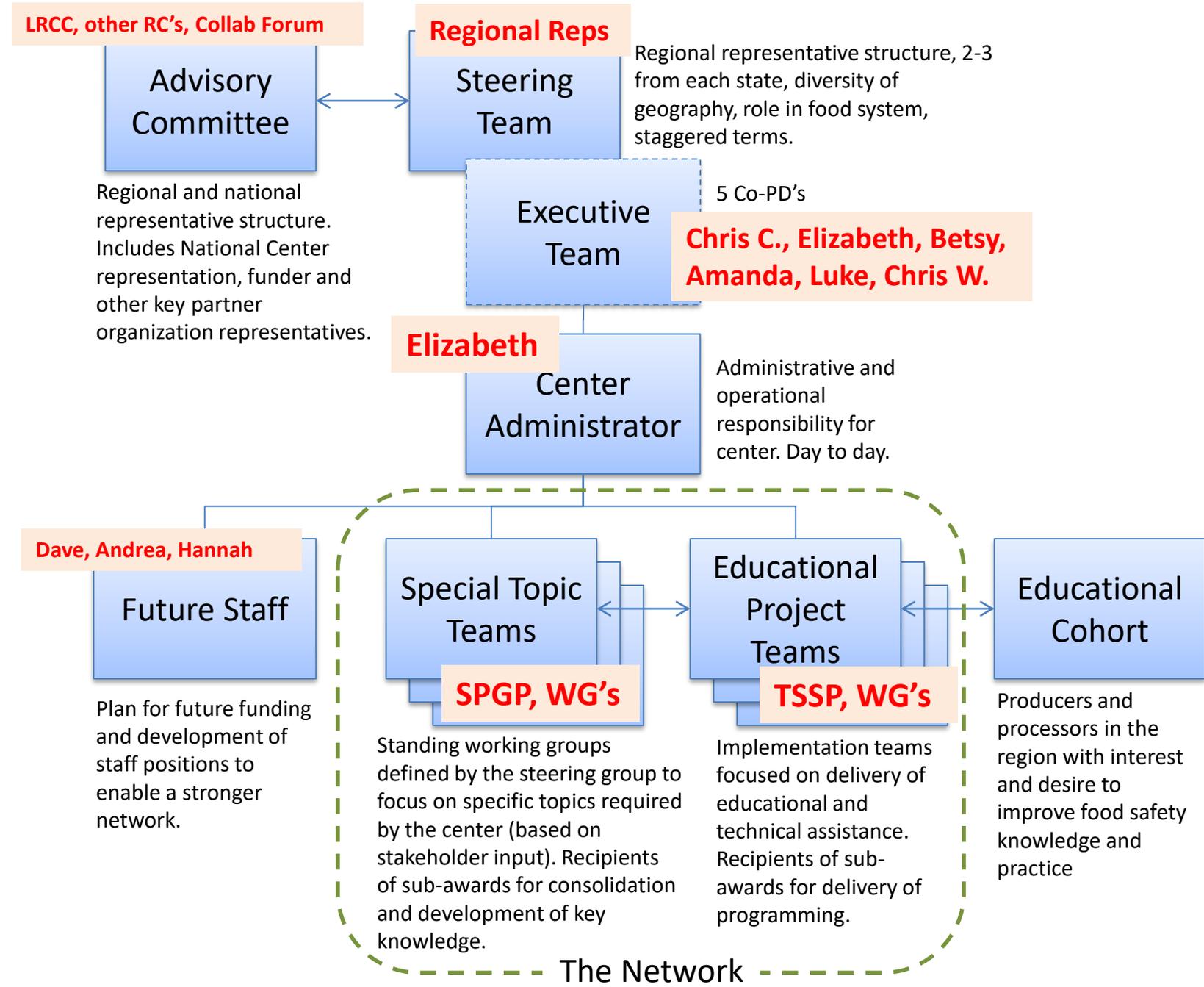
This is not an all-inclusive list of entities that will be developing training curricula and delivery for domestic and foreign food businesses.

2015 Proposal to RFP For Feb 2016 – Feb 2019

Objectives

1. Establish Foundational Network Structure
2. Build Capacity, Competency, and Collaboration
3. Develop and Deliver Educational Programs
4. Evaluate and Assess Progress and Impact
5. Sustain Good Work

Northeast Center to Advance Food Safety (NECAFS)



2017 & 2018 Annual Meeting Summary

- 2016 – Boston, MA – 75 attendees
 - First meeting, organizing and networking (establishing foundational structure)
- 2017 – Baltimore, MD – 100 attendees
 - Initial working group definition (PSR/PCHF).
 - Identified a need for Needs Assessment and Buyer working groups
- 2018 – Albany, NY – 115 attendees
 - Broadened tracks / working groups
 - Focused conversation on traction, tangible next steps, and specific outputs
- 2019 – Philadelphia, PA – 140+ attendees

2019 Annual Meeting Summary

- **Produce Safety**

- Educational
- Regulatory
- Buyer

- **Preventive Controls HF**

- Awareness
- Evaluation
- Resources

2019 Annual Meeting Summary

- Produce Safety

- Educational

- Create water testing lab map
 - Develop risk assessment tools for different commodities
 - Encourage growers to start water testing
 - Develop guidelines for washing and sanitizing bins
 - Explore the potential for states to define “dropped produce” consistently across region.

✓ PROGRESS: Map created.

✓ PROGRESS: AFRI DST.

👉 ACTION: PS WG meeting will focus on gaps, needs, and targeted resource development.

👉 ACTION: Coordinate this question with Regulatory WG.

2019 Annual Meeting Summary

- Produce Safety

- Regulatory

- Gather deficiencies seen on farms following OFRR/inspections across the region

- Achieve consistency across region
 - Develop resources and educational programs based on priority and need

✓ **PROGRESS:** NE Collaboration Group - Calls to share experiences. M. Melendez will share common OFRR findings.

👉 **ACTION:** PS WG meeting will focus on gaps, needs, and targeted resource development.

2019 Annual Meeting Summary

- Produce Safety

- Buyers

- Clarify audits vs. inspections
 - Develop a document for buyers that outlines standards for food safety
 - Increase outreach to buyers

✓ NAL VLS/NECAFS – Extension
Legal Services Initiative (ELSI)

✓ FSOP – “Buyer’s Handbook”

 **ACTION: Buyers WG meeting will focus on development of the Buyer’s Handbook.**

2018 & 2019 Annual Meeting Summary

- Preventive Controls for Human Foods
 - Three sub-groups formed
 - Awareness
 - Resources
 - Evaluation
 - Identified a need for regional needs assessment

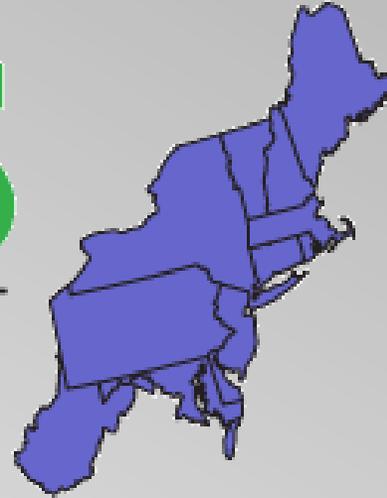
✓ PCHF Regional Needs Assessment Survey in 2019 focused on small and very small processors. First of its kind in the region.

👉 **ACTION:** PCHF WG will be reporting on findings from regional needs assessment.

👉 **ACTION:** ... and will be defining agenda for sub-group work in 2020.

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Summary of NECAFS 2019 Activities

Elizabeth Newbold

National PSA Pre and Post Test Evaluation

The Northeast Center to Advance Food Safety (NECAFS)
Produce Safety Alliance Training Pre and Post Test Evaluation

PSA COURSE INFORMATION

1/1/19 - 12/31/19	Middlebury, Warrensburg, Bronx, Canajoharie, Dover, Binghamton
<i>Course Date</i>	<i>Course Location (City, State) Course #</i>
0	114 participants across 6 courses
<i>Last Name (Lead Trainer)</i>	<i>First Name (Lead Trainer)</i>

SUMMARY OF PRE POST TEST RESULTS

Summary for Class by Question

Question	Pre Test % Correct	Post Test % correct	Delta
1	87%	99%	12%
2	69%	86%	17%
3	73%	72%	-1%
4	71%	92%	21%
5	95%	99%	5%
6	89%	94%	5%
7	65%	75%	10%
8	64%	73%	9%
9	78%	88%	10%
10	47%	76%	28%
11	46%	76%	29%
12	82%	84%	2%
13	36%	52%	16%
14	73%	97%	24%
15	50%	77%	27%
16	77%	88%	11%
17	29%	63%	34%
18	52%	55%	3%
19	50%	96%	46%
20	45%	84%	40%
21	44%	49%	5%
22	5%	55%	51%
23	66%	79%	12%
24	29%	48%	19%
25	53%	65%	13%

Summary for Class by Module

Module	Pre Test % Correct	Post Test % correct	Delta
1	72%	81%	9%
2	92%	97%	5%
3	63%	78%	14%
4	52%	75%	23%
5	52%	76%	24%
6	46%	76%	30%
7	38%	62%	24%

Overall Summary Stats

	Pre	Post	Delta
N	110	107	-3
Min	3	7	4
Mean Score	14.7	19.2	4.5
Overall %	59%	77%	18%
Max	23	25	2
SD	4.2	4.2	0.0

The mean score on the exam increased by 4.5 from 14.7 to 19.2 among those who took both.

Test for Statistical Significance
T-Test 6.663E-18 (p-value)
The difference in mean score is statistically significant at or above the 99% confidence interval (alpha=0.01) with a p-value of 6.66E-18 determined using a paired, two tailed Student T-Test.

Key

>=80%	>=80%	>=10%
<80, >60	<80, >60	<10, >0
<=60	<=60	<=0

- Stated need: National need to understand knowledge gain
 - Funding: NECAFS FSOP Grant
 - Collaborators: NECAFS network and Regional Centers
 - Impact: Documented knowledge gain
- ✓ **PROGRESS:** Used on all NECAFS TSSP supported course. Streamlined analysis template & reports.
- 👉 **ACTION:** Discussion of results in Produce Safety WG.

National PSA Pre and Post Test Evaluation

Summary for Class by Module

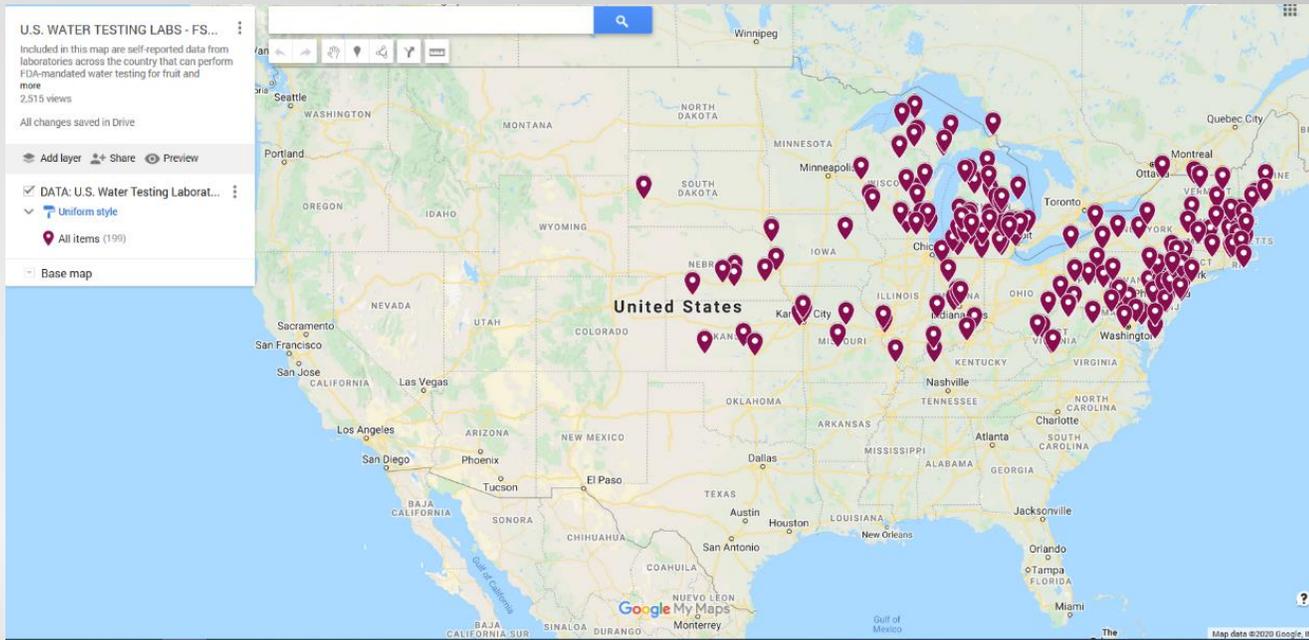
Module	Pre Test % Correct	Post Test % correct	Delta
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- Stated need: National need to understand knowledge gain
- Funding: NECAFS FSOP Grant
- Collaborators: NECAFS network and Regional Centers
- Impact: Documented knowledge gain
- ✓ **PROGRESS:** Used on all NECAFS TSSP supported course. Streamlined analysis template & reports.
- 👉 **ACTION:** Discussion of results in Produce Safety WG.

National Water Testing Lab Map



go.uvm.edu/waterlabmap

Form for Adding Labs:
go.uvm.edu/watertestlabform

- Stated need: Stakeholder input at 2019 Annual Meeting
- Funding: NECAFS FSOP Grant
- Collaborators: NECAFS network and Regional Centers
- Impact: Creation of National Water Testing Lab Map in One Location (under construction)

✓ **PROGRESS:** First, a regional map and then... a national map!

👉 **ACTION:** Add your labs!

Preventive Control Workgroup Support



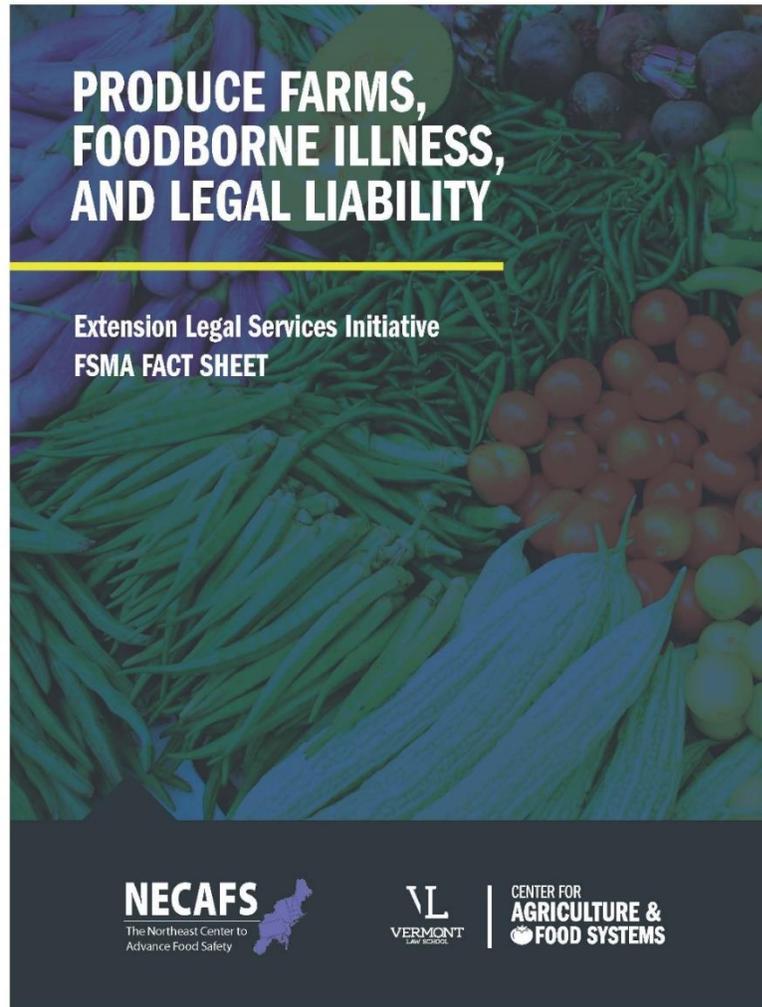
Photo: Dried smoked apple chunks, WV project awarded through NECAFS Special Projects Grant Program

- Stated need: Stakeholder input at 2018 Annual Meeting
- Funding: NECAFS FSOP Grant
- Collaborators: NECAFS Network
- Impact: Support two part-time positions to facilitate workgroup activities

✓ **PROGRESS: PCHF Needs Assessment.**

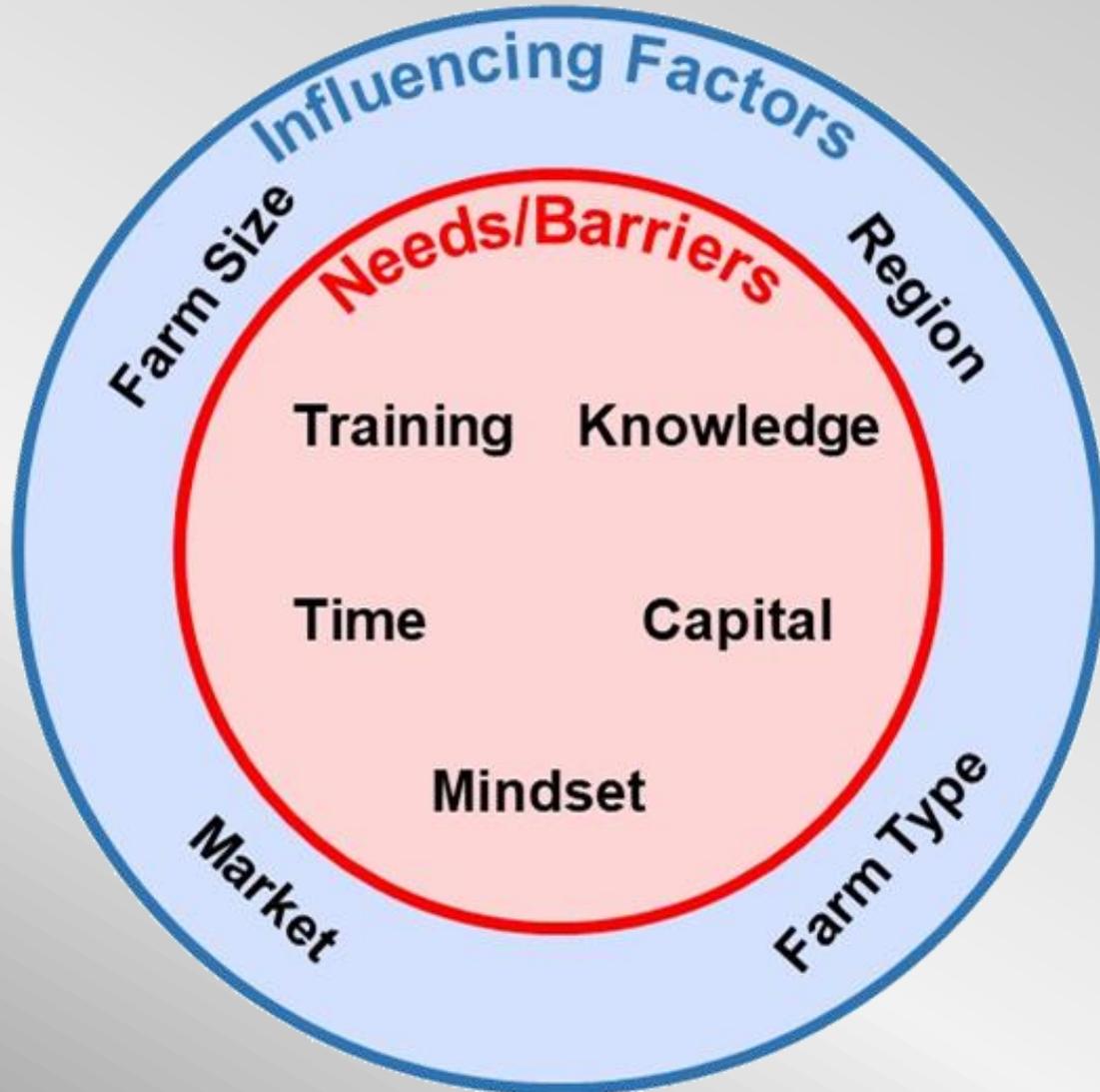
👉 **ACTION: Discussion in PCHF WG.**

Extension Legal Services Initiative (ELSI) Project with Vermont Law School (VLS)



- Stated need: Stakeholder input on legal questions surrounding FSMA PSR
- Funding: VLS subaward, Prime: USDA National Agricultural Library (NAL)
- Collaborators: VLS & National Advisory Board
- Impact: Creation of educational factsheets on prioritized legal questions
- ✓ **PROGRESS**: Draft supplemental educational resources for review and use.
- 👉 **ACTION**: Discussion of results in Buyer WG.

Needs Assessment Systematic Review



- Stated need: Stakeholder input 2017-'19 Annual Meeting
- Funding: NECAFS FSOP Grant
- Collaborators: NECAFS Network
- Impact: Support one part time position conduct research and complete systematic review

✓ PROGRESS: Draft manuscript for review.

👉 ACTION: Discussion of results in Needs Assessment WG.

Decision Support Tool (DST)



Photo Credit: Andy Chamberlin, UVM

- Stated need: Clarity on risk assessment around specific commodities with regional relevance
- Funding: USDA AFRI
- Collaborators: NECAFS (UVM), Cornell, and Rutgers
- ✓ **PROGRESS: AFRI Foundational Project Funded.**

Online Buyer's Handbook

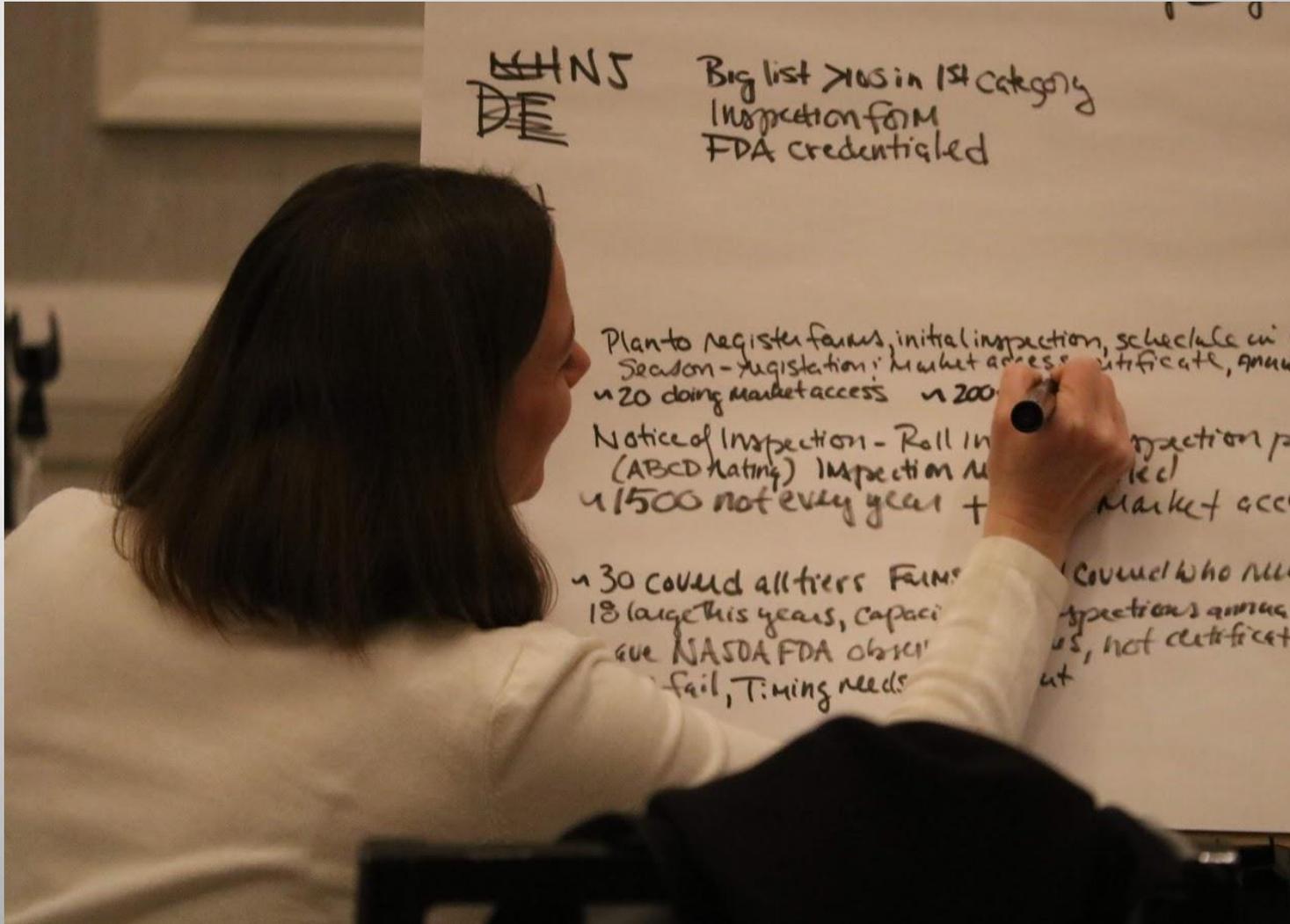
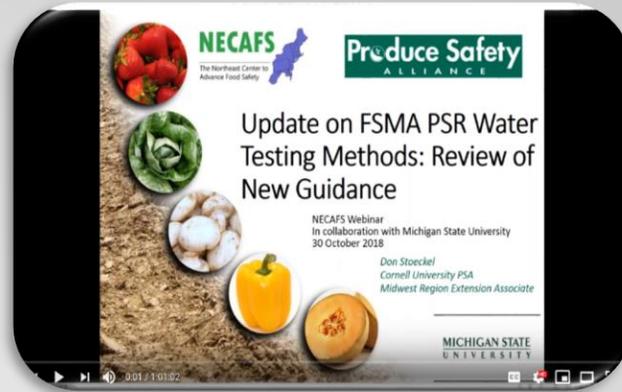


Photo Credit: Andy Chamberlin, UVM

- Stated need: Development of handbook to articulate regional produce safety voluntary and required standards
- Funding: USDA FSOP
- Collaborators: NECAFS (UVM), UVM and Rutgers
- ✓ **PROGRESS: USDA FSOP Project Funded.**
- 👉 **ACTION: Buyers WG meeting will focus on development of the Buyer's Handbook.**

Webinars



- Stated need: Frequent recurring sharing of knowledge, activity and impact
- Funding: NECAFS FSOP Grant
- Collaborators: National food safety community
- Impact: *“Thanks for taking the time to put that together, I’m always wondering what everybody else is doing! I’ve had a couple of good convos based off of the webinar.”*

- Billy Mitchell, National Farmers Union

Food Safety Resource Clearinghouse

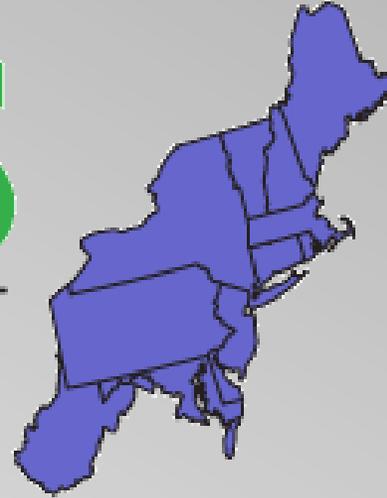


go.uvm.edu/clearinghouse

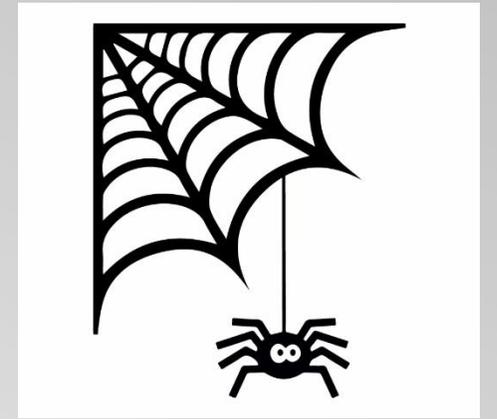
- Stated need: Create on location for hosting PS and PCHF related resources
- Funding: NECAFS FSOP Grant
- Collaborators: NECAFS Network
- Impact: Creation of curated source of PS and PCHF related resources, nationally.

NECAFS

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Advance Food Safety



Evaluation Activities: Card Sort & Spiderweb



Elizabeth Newbold & Chris Callahan

Purpose for Collaboration Exercise

- The long-term goal of NECAFS is to provide a sustainable, comprehensive food safety training, education and technical assistance program that assists small and mid-sized food producers and processors with FSMA compliance. Our overall objective is to **build the regional network infrastructure** necessary to **support a national food safety system that increases the understanding and adoption** of established food safety standards, evidence-based guidance, and protocols for those affected by FSMA rules and other food safety regulations and market requirements.
- Need to ensure our collaboration is effective

<i>Level</i>	<i>Cards 1-5</i> <i>Purpose</i>	<i>Cards 6-10</i> <i>Structure</i>	<i>Cards 11-15</i> <i>Process</i>
Networking 	<ul style="list-style-type: none"> • Dialog and common understanding • Clearinghouse for information • Create base of support 	<ul style="list-style-type: none"> • Non-hierarchical • Loose/flexible link • Roles loosely defined • Community action is primary link among members 	<ul style="list-style-type: none"> • Low key leadership • Minimal decision making • Little conflict • Informal communication
Cooperation or Alliance 	<ul style="list-style-type: none"> • Match needs and provide coordination • Limit duplication of services • Ensure tasks are done 	<ul style="list-style-type: none"> • Central body of people as communication hub • Semi-formal links • Roles somewhat defined • Links are advisory • Group leverages/raises money 	<ul style="list-style-type: none"> • Facilitative leaders • Complex decision making • Some conflict • Formal communications within the central group
Coordination or Partnership 	<ul style="list-style-type: none"> • Share resources to address common issues • Merge resource base to create something new 	<ul style="list-style-type: none"> • Central body of people consists of decision makers • Roles defined • Links formalized • Group develops new resources and joint budget 	<ul style="list-style-type: none"> • Autonomous leadership but focus in on issue • Group decision making in central and subgroups • Communication is frequent and clear
Coalition 	<ul style="list-style-type: none"> • Share ideas and be willing to pull resources from existing systems • Develop commitment for a minimum of three years 	<ul style="list-style-type: none"> • All members involved in decision making • Roles and time defined • Links formal with written agreement • Group develops new resources and joint budget 	<ul style="list-style-type: none"> • Shared leadership • Decision making formal with all members • Communication is common and prioritized
Collaboration 	<ul style="list-style-type: none"> • Accomplish shared vision and impact benchmarks • Build interdependent system to address issues and opportunities 	<ul style="list-style-type: none"> • Consensus used in shared decision making • Roles, time and evaluation formalized • Links are formal and written in work assignments 	<ul style="list-style-type: none"> • Leadership high, trust level high, productivity high • Ideas and decisions equally shared • Highly developed communication

Card Sort Exercise

Each individual select the card that most accurately describes your highest priority for where NECAFS currently is.

1. What is your perception of NECAFS purpose **currently**?
 - Write down the color on your paper
2. What is your perception of NECAFS structure **currently**?
 - Write down the color on your paper
3. What is your perception of NECAFS process **currently**?
 - Write down the color on your paper

What did you learn? (By role)

2019 Themes: “What did you learn?”	Total Attendee (N)	Educator (N)	Regulator (N)
Greater understanding of educational efforts	(30) 48%	(13) 46%	(12) 43%
State variation in implementation of FSMA	(14) 22%	(3) 11%	(10) 36%
Individual needs for growers, buyers and processors	(6) 10%	(5) 18%	(1) 4%
Different avenues to receive financial support	(4) 6%	(2) 7%	(2) 7%
Greater understanding of FSMA and the individual rules	(4) 6%	(2) 7%	(1) 4%
Different views from stakeholder partners	(2) 3%	(2) 7%	-
Share similar challenges with colleagues across the region	(2) 3%	(1) 4%	(1) 4%
Perception of audits versus inspection	(1) 2%	-	(1) 4%

Table 4. Respondent Themes to “What did you learn?” by Role in Produce Safety Community. 2019 NECAFS Annual Conference and Meeting.

Key

1st ranking	1st ranking
2nd ranking	2nd ranking
3rd ranking	3rd ranking

How has NECAFS helped you improve your food safety outreach, training and education? (By role)

Themes: “How has NECAFS helped you improve your food safety outreach, training and education?”	Total Attendee	Educator Role	Gov/Reg Role
Sharing of resources	(15) 27%	(7) 26%	(5) 22%
Networking that led to training delivery, grant proposals, and other collaborative work	(14) 25%	(10) 37%	(4) 17%
Networking and communication with other stakeholders	(12) 21%	(5) 29%	(6) 26%
Information sharing that provided insight and led to more new and informed decision making	(12) 21%	(4) 15%	(6) 26%
Funding to become trainers and to deliver trainings	(2) 4%	(1) 4%	(1) 4%
Made training possible that provided networking opportunity with stakeholder	(1) 2%	-	(1) 4%

Table 5. Respondent themes to “How has NECAFS helped you improve your food safety outreach, training and education?” by role in produce safety community.

Key	1st ranking	1st ranking
	2nd ranking	2nd ranking
	3rd ranking	3rd ranking

A Review of NECAFS Collaboration Framework

- What are the success factors of NECAFS?
 - So that we can intentionally build on those to inform and improve our work moving forward.
- Must have the right criteria:
 - *Stakeholder group must be comprised of the right mix of individuals which is determined by the aims and goals of the collaboration*
 - *Stakeholders work interdependently to identify common needs and develop shared solutions that draw from their individual competency domains while maintaining autonomy*
 - *Acknowledge and consider the salient local features*
 - *Fosters new, reformed and/or transformed roles and policy in support of institutional development and change*

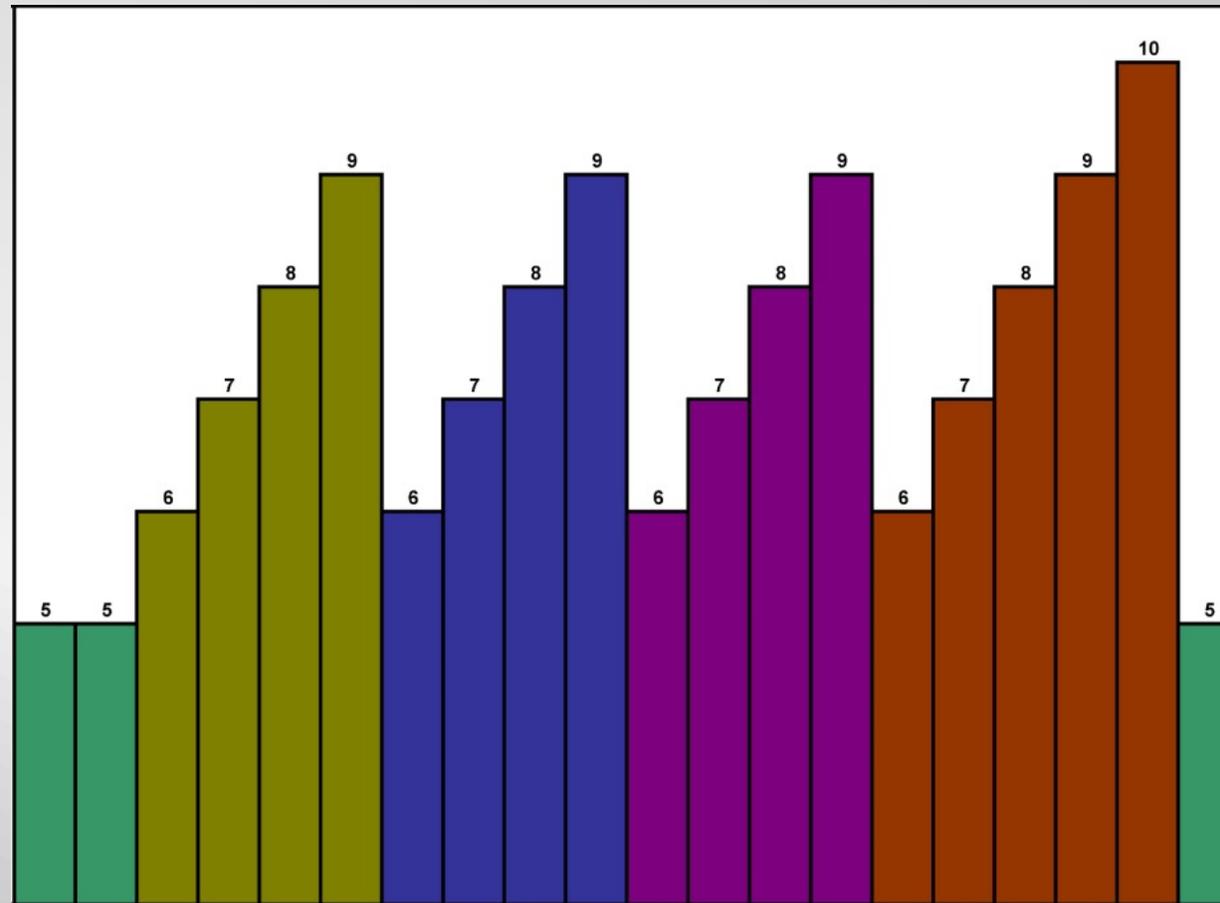
A Review of NECAFS Collaboration Framework

To start...

- NECAFS built a foundational structure of communicating, connecting, cooperation, consulting, coordinating, co-locating, community building, and contracting.
 - “c-words” (Claiborne and Lawson 2005; Lawson 2004; Keast, Brown, and Mandell 2007)
- This progression provided the time to establish necessary foundational structure built on common purpose and trust that would facilitate longer-term sharing and co-development

A Review of NECAFS Collaboration Framework

Flexibility and Recalibration

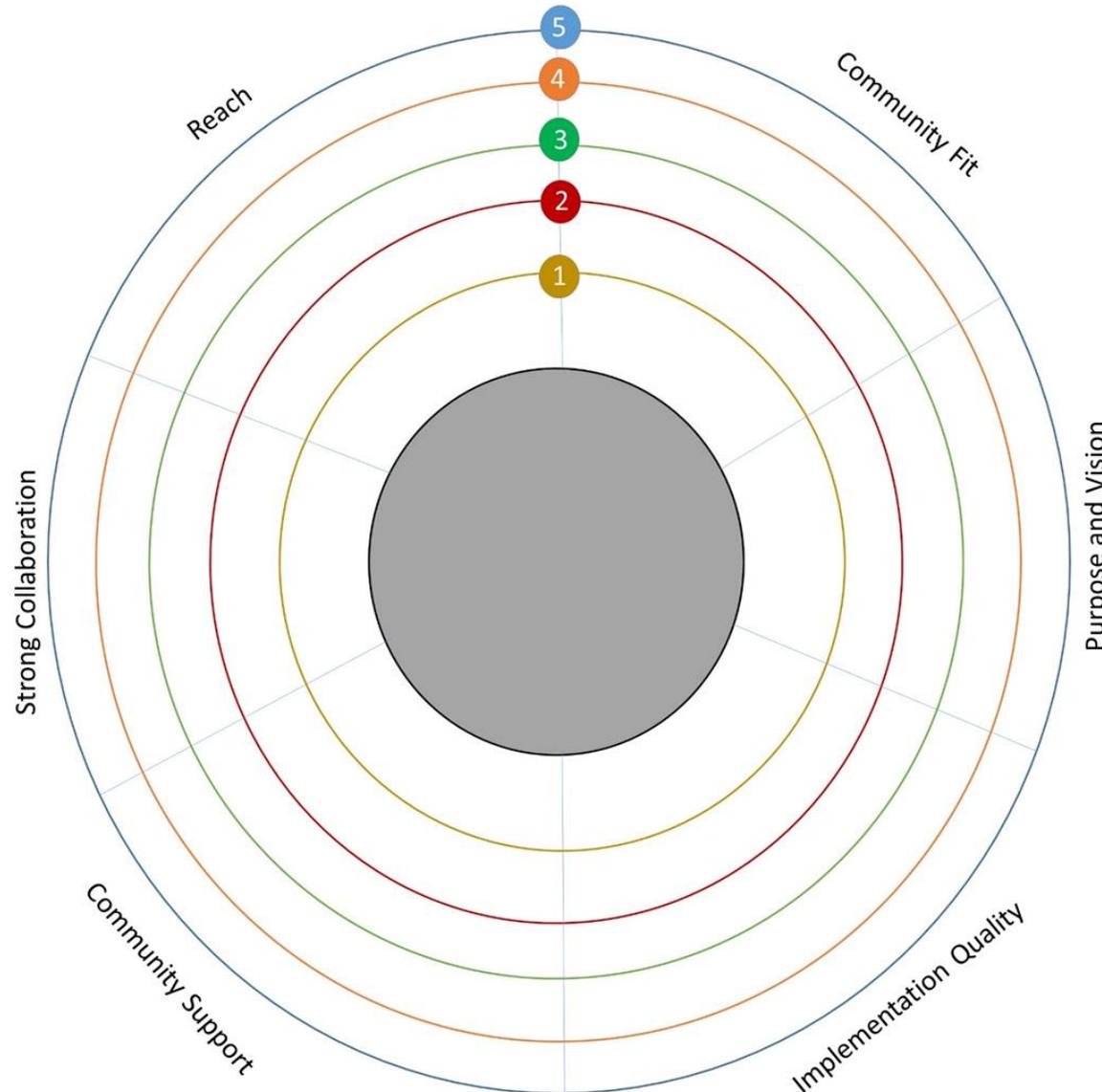


Spider Web for Sustainability Exercise

These four objectives are the primary focus for sustainability:

- Continuation of project activities within an organization;
- Sustaining stakeholder benefits;
- Maintaining the capacity of a collaborative structure; and
- Maintaining attention to the targeted needs the project addresses

Use this scale to place a dot for each element:
 1 = Poor Functioning; 2 = Adequate Functioning; 3 = Average Functioning (Neutral); 4 = Functioning Well; and 5 = Functioning Very Well



Reach – Successfully reaching the intended population.

Strong Collaboration – NECAFS has forged strong partnerships.

Community Support - The project has generated enthusiasm and commitment by the community.

Community Fit – The project is being implemented in ways that impact the needs and culture of the community.

Purpose and Vision – The purpose and vision are articulated and as the project evolves, the purpose becomes more defined.

Implementation Quality – The project is being implemented with a commitment to quality coordination and delivery.

Spider Web for Sustainability

- Place a dot, after table discussion, on the numbered line of the Spider Web that best reflects your opinion of the extent that NECAFS is functioning in that area. (6 dots total)
- Place a dot, on the numbered line of the Spider Web that best reflects your priority for where NECAFS should focus. (2 dots total, prioritize 2 elements)

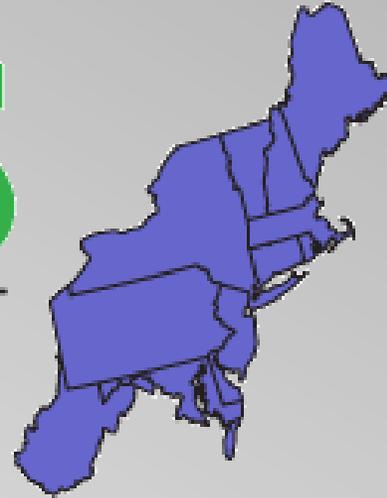
Card Sort Exercise

Each individual select the card that most accurately describes your highest priority for where NECAFS should be.

1. What is your perception of what NECAFS purpose **should be**?
 - Write down the color on your paper
2. What is your perception of what NECAFS structure **should be**?
 - Write down the color on your paper
3. What is your perception of what NECAFS process **should be**?
 - Write down the color on your paper

NECAFS

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Framing the 2020 Annual Meeting

Chris Callahan

The Annual Meeting

- Agenda Review
- Expectations
- Feedback



Agenda Review

8:00 Welcome & Plenary

10:30 Break

11:00 Project Updates

12:00 Lunch

1:00 Workgroup Meetings

5:00 Poster Session

6:30 Dinner

8:00 Breakfast & Fed Updates

9:30 Workgroup Meetings

12:30 Lunch

1:30 Workgroup Report Out

Next Steps

3:00 Adjourn

Expectations

- Connect with partners.
- Meet new collaborators and peers.
- Ask questions.
- Share resources and experiences.
- Engage in discussion.
- Workgroup approach is intended to provide time in-person to move topics along through dialog.
... and to promote co-discovery.
... and to hatch new plans and projects

Workgroups:

- Encourage engagement
- “Rule of 3”
- Facilitators focused on facilitating
 - Need helpers for time keeping
 - Need helpers for note taking
- Report out to the larger group on day 2.

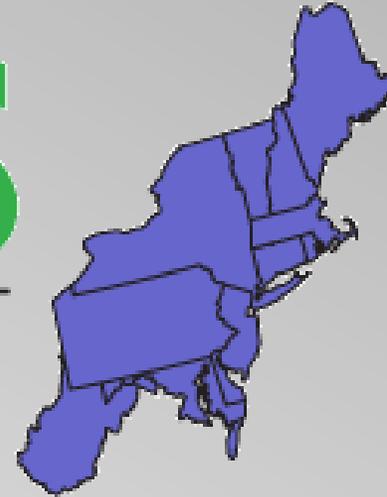
Provide Feedback

- We have changed over the years based on feedback.
- Please complete an evaluation before you leave.
- This event is for the entire network.



NECAFS

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Annual Meeting

Philadelphia, PA

February 11, 2020

Chris Callahan

Elizabeth Newbold