Farm to early care and education (ECE) promotes child health and well-being and increases access to healthy foods through a collection of strategies that are centered in experiential learning and family and community engagement. Farm to ECE brings three core elements — gardening, food and agriculture education, and local food purchasing — into every type of ECE setting. This includes family child care homes, child care centers, Head Start, and preschools in K-12 districts.

In 2021, National Farm to School Network (NFSN) partnered with Michigan State University Center for Regional Food Systems (CRFS) to launch a fourth iteration of the National Farm to ECE Survey, intended to add knowledge to the three previous surveys. The survey series completed by NFSN and CRFS in 2012\(^1\), 2015\(^2\), 2018\(^3\), and now 2021 is the only national farm to ECE–specific assessment of activity reach and participation. In this document, we share the purpose, methods used, and considerations from the 2021 National Farm to ECE Survey.

**Survey Objectives**

Similar to previous versions, the primary goals of the 2021 survey were to estimate national reach of farm to ECE and to learn about farm to ECE activities, including:

- **Implementation of activities**, including the where and what of activities;
- **Motivations** for implementing farm to ECE activities;
- **Existing barriers** to implementation of farm to ECE activities; and
- **Program and Policy** supports needed for growth of farm to ECE.

In the context of the pandemic, COVID-19 specific questions were added to this survey iteration to gain a better understanding of its effect on farm to ECE.

**Survey Sampling**

While the 2012 and 2015 surveys used the snowball sampling method, the 2018 and 2021 surveys used purposive sampling in order to obtain a representative sample of diverse ECE settings and reduce response bias. Using the seven USDA regions\(^4\) as a guide, 28 states were chosen, with four from each region. States were chosen based on:

**Farm to ECE Infrastructure**

The state had established external farm to ECE funding, a farm to ECE network, and/or a paid positions at state agencies, extension, or state level non-profit in support of farm to ECE. Farm to ECE infrastructure was selected as a key indicator for consideration to potentially examine the impact of state investments on farm to ECE participation.
Proportion of Racialized Peoples

Proportion of individuals who identify as Black/African American, American Indian/Alaska Native, Asian, Native Hawaiian/Pacific Islander, two or more races, or Hispanic/Latinx. Proportion of racialized peoples was selected to ensure representation from historically marginalized communities to examine potential inequities in reach, participation, and resources related to farm to ECE. Within each region, one state was chosen that was considered to be:

- High in farm to ECE infrastructure and high proportion of racialized peoples
- High in farm to ECE infrastructure and low proportion of racialized peoples
- Low in farm to ECE infrastructure and high proportion of racialized peoples
- Low in farm to ECE infrastructure and low proportion of racialized peoples

Alternate states were identified if participants could not be reached.

Survey Development

Priority topics were chosen for the survey questions based on the previously stated goals. A total of 53 questions were incorporated, including:

- 10 questions addressing demographics;
- Seven questions addressing farm to ECE activity engagement and practices;
- Four questions addressing motivations, barriers, and community responses;
- 17 questions addressing food practices and funding, including local food purchasing;
- Five questions addressing COVID-19’s impact on ECE practices and funding; and
- Three questions addressing additional funding opportunities and use.

Table 1. State Configurations

<table>
<thead>
<tr>
<th>Configuration</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Farm to ECE Infrastructure/High Proportion of Racialized Peoples</td>
<td>Connecticut, Arizona, Georgia, Washington D.C., Michigan, Colorado, California</td>
</tr>
<tr>
<td>High Farm to ECE Infrastructure/Low Proportion of Racialized Peoples</td>
<td>Vermont, Arkansas, North Carolina, Pennsylvania, Wisconsin, Missouri, Washington</td>
</tr>
<tr>
<td>Low Farm to ECE Infrastructure/High Proportion of Racialized Peoples</td>
<td>New York, New Mexico, Florida, Maryland, Kansas, Hawaii</td>
</tr>
<tr>
<td>Low Farm to ECE Infrastructure/Low Proportion of Racialized Peoples</td>
<td>Maine, Utah, South Carolina, West Virginia, Indiana, South Dakota</td>
</tr>
</tbody>
</table>
Of the questions included, four were open ended and 49 were multiple choice. The survey was designed to take 20 minutes to complete. A presurvey worksheet was also provided to assist participants in gathering necessary information to complete the survey.

Prior to contacting participants:

- The **study protocol was approved** by the MSU Institutional Review Board for research on human subjects;
- The **survey was vetted by experts** in farm to early care and education with specific attention to reducing survey questions and overall length, noting the addition of COVID-19 specific questions; and
- The **survey was piloted in a state** known from previous surveys to have a large response rate with data collection occurring over a 2-week period to identify any issues prior to full dissemination.

### Figure 1. Survey Dissemination by State

![Survey Dissemination by State](image)

**Reaching Participants**

For each state identified, a request was made to the state agency for lists of providers’ emails in licensed and licensed-exempt child care, including providers in center-based and family child care, Head Start, Early Head Start, public and private preschools, preschool and child care within K-12 school districts, and tribal child care. Of the states chosen:

- **18 states** provided contact information of all programs for direct dissemination of the survey via Qualtrics;
- **Two states** provided contact information of all licensed centers for direct dissemination of the survey via Qualtrics (omitting family child care);
- **Five states** sent the survey link directly to providers using email addresses through CCR&R and/or other state agency collaboration offices; and
- **Two states** were not reached as the research team was unable to obtain lists or an alternate distribution mechanism and did not have alternate states in those regions.

*Regions are delineated using the USDA Food and Nutrition Services Regional Office Map available at https://www.fns.usda.gov/fns-regional-office*
The survey was sent directly to participants using the email lists provided, as described above. The link was distributed through state distribution channels in the other five states beginning September 8, 2021. Reminders were sent via Qualtrics on September 15 and September 22 with the survey closing on September 29.

Participants indicated consent for participation after reading about the purpose of the survey, with an option to discontinue participation at any time and to complete questions in the survey as desired. Similar to the 2018 version, the 2021 survey offered an incentive to all participants, regardless of survey completion. Incentives were offered to the first five participants to submit a response within the first two days of the survey opening. At the close of the data collection period, all responses were cleaned to eliminate duplicates, remove partial or invalid responses, and analyzed using SPSS Statistics software.

**Considerations**

Though both the 2018 and 2021 surveys employed purposive sampling, the 2021 survey used a different method of purposive sampling. In 2018, the survey was sent directly to provider emails in every state and U.S. territory, while the 2021 survey used stratification sampling based on USDA region, state farm to ECE infrastructure and demographic characteristics.

The 2021 method was employed in an attempt to:

- Obtain a **representative sample** of providers;
- Increase the **return rate;** and
- **Gain a better understanding** of the national landscape of farm to ECE, including activities, motivations for implementation of activities, and barriers to farm to ECE.

However, it is recognized that using this new method created limitations in comparing interpreted survey results with previous years’ results.

The research team delayed the distribution of the survey due to the pandemic, hypothesizing a decreased response rate as early care and education sites closed or experienced reduced staff capacity. Although a direct comparison from 2021 to 2018 cannot be made due to different methodologies in survey dissemination, the reduced response rate may offer confirmation of the decreased response rate.

The ongoing pandemic and associated challenges are an important consideration in interpreting the results. Additionally, the previously discussed stratification, which differs from the 2018 version, makes comparisons with earlier versions difficult. Despite these challenges, findings and discussions of the farm to ECE activities, motivations, challenges and barriers, and opportunities are presented as the most current national perspective on farm to ECE.

**What to Expect**

This is the first in a series of briefs on the methodology, findings from, and discussion of the 2021 Farm to ECE National Survey. Subsequent briefs include information on:

- **Farm to ECE Reach**
  Findings on farm to ECE participation across states and regions.

- **Participation and Practices**
  How providers are engaging in farm to ECE.

- **Why Farm to ECE**
  Motivations and barriers for implementing farm to ECE and community responses.

- **Local Purchasing**
  Frequency and types of local foods served, local food sourcing practices, and relationships between local food purchasing practices and CACFP funding and participation.
• COVID-19 and Farm to ECE
  COVID-19’s impact on farm to ECE practices and funding opportunities.

Explore more farm to ECE resources, learn how to get involved, and connect with partners in your state by exploring the National Farm to School Network site at www.farmtoschool.org/ECE. Visit www.foodsystems.msu.edu to find resources and research on regional food systems from Michigan State University Center for Regional Food Systems.

References


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