USDA food assistance programs aim to provide a safety net for low-income families in times of need. Income volatility challenges the functioning of that safety net. Low-income families are often on a see-saw of income changes that make it difficult for program administrators to accurately target benefits and to define sensible eligibility periods. Which families are low-income and for how long are important issues for program policy, and income volatility directly affects those policy decisions. Also, flexible food assistance that smoothes household food consumption over the ups and downs of labor force participation is important in providing assistance to the working poor.

**What Is the Issue?**
Understanding the implications of income volatility for food assistance program eligibility is particularly important if the programs are to effectively serve the needy. Questions that must be answered include how often does program eligibility for low-income families change within a year? How does income volatility compare across income groups? What are the labor force participation and household changes most associated with short-term income changes? We answer these questions using nationally representative household survey data.

We also looked at how income volatility affected eligibility for free and reduced-price lunches in the National School Lunch Program (NSLP). USDA had been concerned about “overcertification”—where local school food authorities erroneously certify that children are eligible to receive free or reduced-price lunches. New rules in the Child Nutrition and WIC Reauthorization Act of 2004 redefined eligibility so that income volatility has become less relevant as a source of the erroneous certification. However, understanding the past role of income volatility in the NSLP is important because income volatility can affect policy changes for other food assistance programs that aim to support working families in times of need.

**What Did the Project Find?**
Our study found that the lower a household’s income, the more likely it is to face volatile swings in monthly income. Such income volatility meant that, before the recent rule changes, the children in these households moved back and forth across the eligibility threshold for the NSLP. Changes in total household hours worked and in the share of adults working were the primary causes of the changes in monthly income.

**Income Volatility Dynamics**
We measured monthly income changes across the threshold that marks income eligibility for a reduced-price school lunch. That threshold is found by first comparing income to the poverty line that applies to the household’s size. When income is at or below 185 “percent of poverty,” a student is eligible for a reduced-price lunch. We found that, for households with income below 185 percent of poverty in at least 1 month of the year, two-thirds (65 percent) had income above that threshold in at least 1 other month in the same year. Households with average monthly income between 130 and 240 percent of poverty were particularly affected by volatility, crossing the eligibility line five times per year on average.
The most important factors associated with exit from or entry into program eligibility (an increase or decrease in income relative to 185 percent of poverty) were similar. In both cases, changes in total household hours worked and in the share of adults working were the most likely to lead to exit or entry. The results point to the importance of the labor market participation of all household members as a source of short-term income volatility.

Households were grouped into six income-to-poverty categories. Income volatility was found to be successively higher for each lower income-to-poverty group. The monthly income variation for households below 75 percent of annual poverty was double that of households above 300 percent of annual poverty.

**Effects of Income Volatility on NSLP Error Rates**
Month-to-month income changes could feasibly explain a large portion of estimated overcertification rates. In the 3 school years examined, an average of 27 percent of households that were income eligible for either a free or reduced-price lunch in August were no longer income eligible for the same lunch benefit by December of each year. This estimate accounts for much, or all, of previous overcertification estimates, which range from 12 percent to 33 percent. But, because we do not also estimate the extent of the other sources of error, this estimate must be qualified. Other studies have found that misreporting and administrative error also contribute to overcertification. Furthermore, this estimate does not take into account participation behavior of eligible households.

**How Was the Project Conducted?**
We used 1996 panel data from the Survey of Income and Program Participation on households with children and several other methodological approaches to understand income volatility and how it affects eligibility dynamics. We used three complete school years from the panel: 1996-97, 1997-98, and 1998-99. We compared coefficients of variation of monthly income across income groups. We examined changes in income eligibility for NSLP within the school year for different subpopulations.

We used a hazard model to estimate the causes of income changes in eligibility. Our analysis was conducted twice to analyze separately the factors that could lead to decreases or increases in income across the threshold of 185 percent of poverty. A rich set of events that might trigger an increase or decrease in income-to-poverty status was tested while also controlling for unchanging demographic and labor market participation characteristics.

Under the old NSLP rules, by December, a sample of families was asked to provide documentation of their current income to verify their continued eligibility. In the survey data, we traced monthly income changes from the beginning of the school year to December. This exercise provides an estimate of the effect of income volatility on overcertification errors. We also examined the effects of using annual income as a hypothetical eligibility criterion versus the criterion of 1 month of income.