Slide 1: Good afternoon everyone and welcome to our webinar, Farm Income and Financial Forecasts for 2019. My name is Nancy McNiff and I will be your host. This webinar is being recorded and will be posted on the ERS website next week. At any time during this webinar, you may enter a question into the chat feature at the bottom left-hand corner of your screen and our speaker will answer questions at the end of the presentation. Our speaker today is Carrie Litkowski. Carrie is a senior economist and farm income team leader at USDA's Economic Research Service. She is responsible for developing sector-wide measures of farm income, value-added, and the aggregate farm sector balance sheet. Previously, Carrie served as an economist at the Bureau of Economic Analysis where she was responsible for the production of farm income and employment statistics nationwide. I think we're ready to start, so Carrie you may begin your presentation.

Thank you. Well, good afternoon and thank you for joining me today. I'm pleased to discuss with you the latest U.S. farm sector income and wealth statistics data from the USDA Economic Research Service. The ERS farm income and finance program measures forecasts and explains indicators of economic performance for the U.S. farm sector. We release forecasts three times a year. With today's release, we are releasing our first U.S. level forecast for 2019. We're also updating our 2018 forecast. Usually we release our first forecast for the current year in February, but due to the lapse in funding, the release had to be postponed until today. So, what does this forecast cover?

Slide 2: First we'll start by looking at the farm sector as a whole, which is comprised of a little over two million farms who operate over 900 million acres of land. Next, I'll discuss income and finances of the approximately 990,000 farm businesses that account for about ninety percent of the total value of agricultural sector production in the United States. Lastly, we'll look at the far at the well-being of the over six million people who live in households attached to a farm.

Slide 3: Overall farm sector profits are forecast to increase in 2019, but continue to trend at below average farm income since 2016. Note in this summary page and in some other charts in the presentation, I'll be talking about the forecast in nominal dollars, so the values are not adjusted for inflation. Later, I will note where growth from certain components of income or the balance sheet is not keeping up with inflation. So this is just a brief outline of what I'll discuss today and in the order in which I'll discuss it. Net cash farm income is forecast to increase almost five percent in 2019 and net farm income is forecast to increase ten percent. Most of this increase is due to the value of agricultural sector production, which is forecast to increase 2.6 percent following expected increases and cash receipts from both crop and livestock commodity receipts or farm sales. After decreasing in 2018, direct government payments are forecast to increase 2.3 billion dollars in 2019. Total production expenses are forecast to increase 2.2 billion, although not all expense items are forecast to increase. Farm sector assets debt and equity is shown on the balance sheet are all forecast to rise slightly, about one percent. Average net cash farm income for farm businesses is forecast to increase to about $75,000 in 2019. Median farm household income is also forecast to increase 3.6 percent in 2019.

Slide 4: We have two primary measures of farm sector income. Net cash farm income is shown on the top line, the orange line, and net farm income is shown on the blue line. Net cash farm income includes cash receipts from farming, or the sale farm commodities, as well as cash farm
related income and government farm program payments minus cash expenses, which are the expenses farmers incur to produce agricultural commodities. Now when we say cash, we just mean there's a market transaction. Net farm income is a broader measure that incorporates non-cash items including accounting for changes in inventories and non-cash expense items like economic depreciation. After declining in 2018, both measures are forecast to increase in 2019. Now, this chart is in inflation adjusted dollars, meaning that we're adjusting prior years to be consistent with the inflation in 2019. So, in inflation adjusted dollars, net farm income is forecast to increase 8 percent and net cash farm income nearly 3 percent. Although both measures are up or expected to be up in 2019, they are below the modest uptick that we saw in 2017. So, the increase in 2019 is not enough to offset the forecast decline that we had through 2018. Additionally both income measures remain below their average for 2000 through 2017, and in 2019 net cash farm income is forecast to be at its second lowest level since 2009.

Slide 5: We derive net farm income by measuring its component parts or from the bottom up and then summing to net farm income. This allows us to further analyze the forecast changes from 2018. Now this chart is in nominal dollars, so not adjusted for inflation. The forecast increase for 2019 is largely due to higher cash receipts. In this chart, we have on the far left net farm income in 2018, the forecast, and on far right net farm income forecast for 2019. The bars in blue indicate which components of income are expected to contribute to growth while the bars in red show which components would take away or lower income growth. So, starting from the left, crop cash receipts or crop sales are forecast to increase four billion dollars. Additionally, farmers are expected to sell about 2.2 billion less from crop inventories compared to 2018, thus reducing the inventory adjustment, which raises income relative to 2018. So, just to clarify a little bit, net farm income is intended to represent income from current production only. So, we make an adjustment to account for changes in inventories because they represent sales from the prior year production. So, both in 2018 and 2019, we have a negative inventory adjustment indicating farmers would be selling from inventories, but in 2019 we expect them to be selling less than they did in the prior year. Livestock and animal, or animal and animal products, are also forecast to increase. Here there's 4.6 billion dollars. Partially offsetting these increases in income, production expenses. They're forecast to increase 2.2 billion. Now they're shown as a negative here and shown in red because expenses are subtracted out in the calculation of net income, so higher expenses are drawing down income. Government payments are expected to decrease 2.3 billion dollars. The all other changes here largely reflects growth in insurance indemnities. So in total, net farm income is forecast to increase 6.3 billion dollars from 2018 to 2019.

Slide 6: So, we saw on the previous chart that both crop and livestock cash receipts are forecast to increase in 2019. In this chart, we show why cash receipts are forecast to increase. Through a simulation, we can deconstruct the change in cash receipts into a price effect and a quantity effect. In other words, we can identify whether prices or quantity sold are driving the change in cash receipts. Prices are expected to rise in 2019 for both crops and livestock commodities. For crops, the increase in prices is expected to be greater than the decline in quantity sold, resulting in higher crop cash receipts in 2019. For livestock, higher quantities sold are driving most of the increase in livestock cash receipts. Total cash receipts are expected to increase 8.6 billion dollars in 2019.
Slide 7: We can look at cash receipts by commodity as well. Note that these are calendar year forecasts, not crop marketing year or production years, they're calendar year and the data in this particular chart is in nominal dollars. After being relatively flat in 2018, total crop cash receipts are forecast to increase 2 percent from 2018. Receipts for most crop commodities are forecast to increase in 2019, but some are expected to decline. Cash receipts for corn, cotton, fruits and nuts, and wheat are all forecast to increase. Receipts for both corn and wheat are forecast to continue to increase in 2019, due to expected higher prices, and for wheat, we also expect quantities sold to increase. Soybean cash receipts are forecast to decline reflecting anticipated drops in both prices and quantities sold. Fruit and nut receipts are expected to increase in part due to oranges. Production quantities are expected to rebound in 2019 after declining notably in 2018.

Slide 8: Total animal and animal product cash receipts, which I've already been calling livestock cash receipts, are forecast to increase almost 3 percent in 2019 after declining slightly in 2018. Receipts for cattle and calves and dairy, or otherwise milk, are forecast to increase in 2019 due to both higher prices and higher quantities sold. Both cash to commodities are forecast to decline in 18, so this would be a bit of a recovery. Receipts for hogs and chicken eggs are expected to fall following expected lower prices in 2019.

Slide 9: Another component of farm income, or a source of income for farmers, are direct government payments. These are payments from farm programs made directly by the U.S. government to farmers and ranchers without any intermediaries. After increasing 2.2 billion in 2018, government payments are forecast to decrease 2.3 billion in 2019. So, they basically wash each other out. Let's start with all other payments, as represented by the purple bar segment, which are forecast to fall 1.3 billion in 2019. Most of the forecasted decrease is due to payments to farmers under the market facilitation program, which is part of an aid package to assist farmers in response to recent trade disruptions. We're forecasting about 5.2 billion dollars in payments under this program in calendar year 2018 and 3.5 billion in calendar year 2019. Also forecast to decline in 2019 are payments that are a function of crop prices, as represented by the orange bar segment. In recent years, these are primarily payments under USDA's Agricultural Risk Coverage (ARC) and Price Loss Coverage (PLC) programs. Combined, ARC and PLC payments are forecast to decline 1.4 billion dollars in 2019. Also combined, they are expected to account for about 14 percent of total direct government payments, which would be their smallest share since the programs began, the smallest share of government payments. Conservation payments, as shown by the green bar, have remained relatively stable over time. Fixed payments as shown in blue are payments and programs that have largely been phased out with the 2014 farm bill. So, what are the effects of the 2018 farm act on calendar year 2019 payments? Well, the effect is somewhat limited at this point. The changes to ARC and PLC will affect payments made in calendar year 2020, because we're recording payments at the time the farmer receives them. The dairy margin coverage program has replaced the margin protection program for dairy, and expected calendar year 2019 payments under the new program are included in our forecast. The blue line on this chart represents inflation-adjusted total government payments. Since 2007, payments have averaged about 13 billion dollars and haven't fluctuated very much around that average since then.

Slide 10: Direct government payments do not include commodity insurance indemnities, which are payments to farmers for losses covered by insurance. These also contribute to farm income.
This chart looks at federal net insurance and government payments for the ag sector as a whole relative to the rest of net farm income. Note this chart is in inflation-adjusted dollars. The top peach bar shows net indemnities from federal crop insurance, which are indemnity payments to the farmer less premiums paid by the farmer. These are forecast to increase 1.5 billion dollars in 2019, after increasing 1.1 billion dollars in 2018. As incomes have fallen after 2013, net indemnities and government payments as a share of net farm income has increased. Across 2009 and 2017, net indemnities and government payments of a share of net farm income have averaged 19 percent. This share is forecast to increase a little in both 2018 and 2019 to 26 percent in 18 and 22 percent in 19. This chart also shows that the growth in net farm income in 2019 is not coming from government payments or net insurance, rather it's coming more from agricultural production.

**Slide 11:** Up until now, we've been discussing sources of income or revenue to farmers. Now, let's look at the cost of goods and services used to produce agricultural output or production expenses. These include items such as feed, fertilizer, and hired labor. In total, production expenses are forecast to be relatively stable in 2019. This chart shows total expenditures in nominal and in inflation-adjusted dollars. Expenses peaked in 2014 following the peak in net farm income in 2013, then declined for a couple of years, and we're forecasting expenses to rise in 2018, but remain below the peak in 14. For 2019, we're forecasting expenses to be relatively stable. In nominal dollars, the forecast is for an increase of about 0.6 percent or 2.2 billion dollars. But, this is less than the rate of inflation. So, in inflation-adjusted dollars we're forecasting expenses to decrease 1.1 percent or 4.2 billion dollars in 2019.

**Slide 12:** While expenses aren't expected to change much in total, the forecast for individual expense items are mixed. Now, this chart is in nominal dollars. The chart compares 2018 and 2019 expenditures by category. Those items above the dotted lines are where we expect to see increases in spending and those below where we expect to see decreases. Interest expenses are forecast to increase for the sixth consecutive year, but the rate of increase has slowed. In general, the increase in interest expenses is due to expected increases in interest rates and in rising debt levels. Hired labor expenses are also forecast to continue to increase in 2019, as wage rates are expected to continue to rise. After increasing in 2018, spending on fuels and oils is forecast to decrease in 2019, due in part to forecasts of lower prices for diesel fuel. This is based on a forecast from the Energy Information Agency. Spending on seed, pesticide, and fertilizer are each forecast to decline in 2019, in part due to lower expected planted acres for the top 14 crops.

**Slide 13:** In addition to farm income, the balance sheet is another tool we can use to measure or gauge the health of the farm sector. It provides information on the value of physical and financial assets and level of debt in the U.S. agricultural sector over time. Looking historically, the balance sheet remains strong or at least stable, with farm equity or wealth near the record high in 2014. Farm sector debt is expected to continue to rise in 2019 and forecast to increase 2 percent in inflation-adjusted dollars. That would put debt at a highest level since 1982. The increases since 2015 are being driven by increases in real estate debt, which account for about 60 percent of total debt. These are farm mortgages, largely. Farm real estate assets, which are the value of land and buildings, account for about 80 percent of farm sector assets. When inflation-adjusted, real estate assets are expected to be relatively unchanged from 2018. But, we are
forecasting a decline in crop inventories in 2019, resulting in a very slight decline in farm assets. So, following this increase in farm debt and the slight decline in farm assets, farm equity is forecast to decline 0.6 percent.

**Slide 14:** Another way to evaluate the farm sector balance sheet is by looking at solvency ratios, which compare the amount of debt relative to equity or assets invested in the farm sector. The ratios provide a measure of the sector's ability to repay financial liabilities – debts and loans – through the sale of assets. This chart shows both the debt-to-asset ratio and the debt-to-equity ratio, along with their ten-year moving averages. Both ratios are gradually increasing since 2012 and are expected to continue to increase in 2018 and in 2019. The ratios are above the average for the prior 10 years and have been since 2015, meaning that the sector's risk of insolvency is now at a high level since 2009. However, the solvency ratios for the sector still remain historically low. They are below levels seen in the 1980s farm crisis and below the uptick in 2002. 2018 and 2019 levels are also near the uptick that we saw in 2009. So, the forecast value is really not that outside of the norm in more recent years. We have additional financial ratios including liquidity measures available on our website if you're interested.

**Slide 15:** Up to this point, I've been discussing forecasts for the farm sector as a whole. Now let's look at farm businesses, an important subset of all farms. A farm business is defined as all farms where the primary occupation of the operator is farming, plus those farms that had 350,000 dollars or more in gross cash farm income before expenses. There are roughly 990,000 farms that meet this definition, and they are represented by the blue and red segments for commercial and intermediate farms on this chart. Residence farms, as shown in the gray, account for the majority of all farms, but commercial and intermediate farms account for the largest share of farm production at about 90 percent, as well as hold most of the sectors assets and debt. Using data from the 2017 Agricultural Resource Management Survey (ARMS), we are able to estimate how the sector level forecasts can be expected to affect farm businesses. And, we can break down the forecast for farm business income by commodity specialization and geographic region. So, we're doing the simulation using the ARMS data and the sector level forecasts. Looking only at farm businesses, average cash net cash farm income for farm businesses in total is expected to increase in 2019 after declining in each of the previous four years.

**Slide 16:** Now using ARMS data, we can categorize farms by commodity specialization, which means that at least 50 percent of the value of production is coming from a particular commodity. Average net cash farm income for most categories of crop businesses is expected to increase in 2019. Note these are in inflation-adjusted values. Farm businesses specializing in corn, cotton, and specialty crops, which are largely fruits, nuts, and vegetables, are expected to see net cash farm increases on average in 2019, following the expected increase in cash receipts for those commodities, which we looked at earlier. Farm businesses specializing in wheat are expected to see net cash farm income decline on average following forecast declines in government payments. Average net cash farm income for most types of businesses specializing in livestock are forecast to increase in 2019. We forecast farm businesses specializing in dairy to see the largest increase in net cash farm income and on average rebounding from a low in 2018. This increase reflects expectations of improved prices for milk. Farm businesses specializing in hogs are expected to see average net cash farm income continue to decline in 2019, following a drop in hog cash receipts, which is due to expected lower prices for hogs.
**Slide 17:** By looking at how agricultural production is distributed geographically, we can forecast how net cash farm income for farm businesses is expected to change in 2019 by resource region. Regional performance of farm businesses can vary considerably due to strong geographic concentration of certain production specialties, but all online resource regions are expected to see average net cash farm income increase in 2019 by 5 percent or more. Farm businesses in the Fruitful Rim are forecast to see the largest dollar increase in average net cash farm income, due largely to higher crop cash receipts, particularly for fruits and nuts. Higher livestock receipts for 2019 are expected to contribute to the almost 18 percent increase in average net cash farm income for the Eastern Uplands. Higher dairy receipts are expected to affect many regions and contribute to a forecast 15 percent increase in average net cash farm income for the Northern Crescent. The Northern Great Plains is expected to see the smallest increase in average net cash farm income, due in part to forecast lower government payments and only slight increases in cash receipts.

**Slide 18:** Using ARMS data, we can also forecast debt and assets for farm businesses. As discussed earlier, debt-to-asset ratio for the farm sector is at 13.86 in 2019, that's the forecast, which suggests a low risk of default for the sector as a whole. But there are some farm businesses that hold a higher share of debt relative to assets, or are highly leveraged, indicating that they may be at higher risk of default or more vulnerable. This chart looks at highly leveraged farms, which are farms with a debt-to-asset ratio of 41 to 70 percent, and very highly leveraged farms, those that have a debt-to-asset ratio of 71 percent or greater. Note over 90 percent of all farms are not highly leveraged. A lower share of livestock farm businesses are highly or very highly leveraged compared to crop farm businesses. For both and crop and livestock farm businesses the share of farms highly or very highly leveraged is forecast to increase slightly in 2019, maintaining the upward trend in recent years. Although increasing, the shares of highly and very highly leveraged farms remain below the peak we saw in 2002.

**Slide 19:** Up to this point we've been discussing the financial performance of the farm sector as a whole and farm businesses, but this often may not give an accurate or complete picture of the well-being of households associated with farms. Farm profits are often shared with other stakeholders such as landlords and contractors, and the well-being of farm operator households is determined by a combination of on-farm and off-farm activities. So, now we're going to look at all 2 million farms, not just the farm businesses, and the farm operator households, and the over six million people who live in households attached to a farm.

**Slide 20:** This chart illustrates that the majority of farm household income is coming from off-farm sources, such as off farm jobs. 2019 median household income from farm income was negative and expected to increase slightly in 2019. Now, recall that most farms are residential farms, which are usually small farms. This results in a low median farm income. But, for most farmers whose primary occupation is farming their income is not negative, their farm income, that is. Median off-farm income is also forecast to increase slightly in 2019. Off-farm income sources include wage income, non-farm business earnings, dividends and transfers. In total, median farm household income is forecast to increase 3.6 percent to almost 79,000 dollars in 2019. Note that these are medians, so if you try to sum them up across the off-farm and on-farm, they will not add up to the total that's shown in the third section.
Slide 21: Now let's look a little deeper at farm household income by looking at income by type of farm. For all residential and intermediate farms, median household income has been rather steady across 2012 and 2018 and accounts for essentially all of the households’ income at the median. For commercial farms, on farm income is more important, and is driving the trend in median household income. Following the sector level forecasts for farm income, on-farm income for commercial farms is expected to increase in 2019 and drive the increase in total household income for commercial farms. So, at the median, commercial farms are the only type of farms that are forecast to benefit from the increase in net farm income that's being forecast for 2019.

Slide 22: Now, all of the information I presented today is available on our website along with estimates for prior years. We also have a number of data visualizations, where you can take a more graphical look at our estimates and forecasts. You can also download tables and reports that you can tailor to whatever to your groups that you're interested in, and whether you want nominal or real dollars. Our next release is scheduled for August 30th, so I hope you'll join us then. And, now I think I'm ready to open it up to questions.

Slide 23: Thank you Carrie. At this time, please enter any questions that you may have into the chat feature at the bottom left-hand corner of your screen. We also have some questions already ready for you Carrie. The first one is, last fall USDA's forecast for 2018 net farm income was 66.3 billion and the long-term baseline projected 2018 net farm income of 77.6 billion. Why is the 2018 income now slightly lower and more important, why is 2019 so much lower?

Ok. Interesting question…yes, we’ll start with the first question I think which is about how much the revisions that we had to our 2018 forecast within the farm income wealth and wealth statistics, so not looking at the baseline. Yeah, we did have a downward revision to our forecast for 2018, it was not all that big, but most of the downward revision was coming from a revision a downward revision to crop production for cash receipts and the inventory adjustment. And, this revision reflects new input data that has become available since November for these crops in particular. We got new data from NASS at USDA on the monthly marketing patterns as well as some updates to some other measures like prices for certain crops. The second part was asking I think about the baseline. And, that the baseline number was higher. USDA came out with the baseline with the data earlier in February and about mid-February, and those baseline projections were based on the farm income forecasts and wealth statistics from the August release, so they did not incorporate any of the revisions that we had made in the November release. And, they were also based on data from the October WASDE report, that's the World Agricultural Supply and Demand report. For this release, we are using data from the February WASDE report and we are using the latest forecasts that we could get from our commodity experts here at ERS. So, that's the timing of the data partially reflects the, well largely reflects, why those two forecasts for 18 are so different, the baseline and the farm income. The methods are also different. You know the projections they're trying to go out, you know, 10 years and that requires certain methods that may be a lot of econometric models. For the farm income and wealth statistics, we're able to use a lot more indicator series, so we you know use like short-term forecasts from other sources or internally to get our projections for the current year. I hope that answers the question, but feel free to contact me if you need more information.
Ok. Carrie we have another question. Do you have a revenue chart that can be overlaid on the expense chart that you have to see how revenues go along with expenses?

Yeah, that's interesting. I don't, we don't, have a chart handy. I'm trying to recall in my head. So, I don't think we have anything that currently exists. But I do think there's something in Charting the Essentials, which is an ERS data product, where we chart some of our most popular charts or useful charts. I think there is one that does have may have expenses related to cash receipts, but I'm not 100 percent sure. Certainly that's a chart you could make yourself with the data we have in our interactive table, so you could get exactly what you want make your own chart if you like.

Ok. We have another question, kind of a basic question. Do broilers, the broilers you're talking about, does that include turkey or is that just chicken?

Right, it's just chickens. We do have a separate line item for broilers if you're talking about cash receipts, I'm sorry, for turkeys, but we have two separate line items – we have broilers and we have turkeys – but broilers are shown in these charts today are just chicken.

Thank you Carrie. And, we have another question. If the 2019 forecast proves accurate, this would be the second year of net farm income in the low to mid 60 billion dollar range. What does that portend for the near term?

Yeah. I'll bring up the farm income chart quickly. I think what we're seeing is, you know, if we have this slight uptick that we're forecasting for 19 or we're starting to see, you know, kind of a new average come out here. Especially if you take out the really unusually high years around 2013 and 2014, then the value we’re forecasting for 19 really isn't that far off from what we've seen in previous years. So, what that means for the future? It may, you know, once we can get away from discussing what happened in those peak years of farm income, I think we can start, well, our focus is going to be shifting away from that and start looking at income more relative to the years after the large uptick in net farm income. But, farm income is largely cyclical, you know, maybe not on a real predictable pattern, but you know it is always changing.

Thank you Carrie. Someone is asking if you could please review the definition of a commercial farm that's on the last slide.

Sure, this is where we have the definition for a commercial farm. And, a commercial farm is where we have gross cash farm income of 350,000 dollars or more. That's before expenses, so that would be their income from cash receipts and other farm related income and government payments. So, if that's more than 350,000 dollars, then they're considered a commercial farm.

Ok. We have another question on fruits and nuts. Are there any other crops besides oranges that are expected to improve in 2019?

I'm pretty sure there are but unfortunately I don't have that information in front of me right now. I just recall that oranges stood out for driving a lot of the increase in our forecast. Sorry.
We can probably get back to that person through email.

Oh, yeah, certainly yeah right.

Would you explain the debt-to-equity ratio? The slide that you have showed more equity than debt but the ratio was somewhere like 16 if debt is less than equity, should the ratio be less than one?

Ok. Yeah it's a simple just, your debt to equity is simply debt divided by equity, so if you go back to this chart, unfortunately I don't have this well goodness I can't read that that's too small for me from where I'm sitting, but you know that debt level is the top of the blue line and the equity is the top of the green line. So, the debt number is smaller, so you taking that smaller debt number and dividing it by larger equity number. So you get a number that is below one. Hopefully, that clears it up.

Ok. There's another question on net cash farm income for corn farms. They're asking if they heard correctly that net cash farm income for corn farms will be higher in 2019 over 2018. Did they hear that correctly, I guess?

Yes, that's correct. That's shown on this chart it's slide 16 where we're showing, let's see, this shows about a 5 percent increase in average net cash farm income for corn farm businesses. And, as we talked about earlier in the presentation, we are forecasting an increase in corn cash receipts, so that's largely while we're forecasting this increase for corn businesses.

Ok. There's another question about why is net farm income increasing less than net cash farm income?

Ok. I'll bring back that slide back up. Well this has to do with the definition and what's included in that cash farm income versus what's included in net farm income. So, yes you correctly noted, we have net farm income going up 4.3 billion and net cash farm income going up 6.3 billion. The reason for, I got that backwards, didn’t I? I did get that backwards. We have a larger increase in net farm income, because it includes non-money income which is forecast to increase about a billion dollars and also due to the inventory adjustment that I talked about earlier as well. So, those combined our boosting net farm income more than net cash income, because net cash income would not get these non-money income sources and it doesn't care when recording cash receipts whether their sales were from inventories or from current production.

Ok. Can you explain how soybean cash receipts are expected to decline 6.6 percent?

Sure. That is coming from, now keep in mind, especially with soybeans this is really important, that we're measuring cash receipts in a calendar year, not in a crop year. So, when we ask if we're forecasting calendar year receipts for soybeans it's actually a combination of the forecast for crop year 2018 and crop year 2019. So, when we take that data and look at monthly marketing patterns for soybeans or when they sell, when they generally sell their soybeans across the year, we can get calendar year number. So, for soybeans we are expecting cash receipts to
fall because of lower prices across calendar year 2019 and lower quantities sold. With that lower quantity sold, I think that's largely what we're seeing because a lot of the trade issues and disputes that's surrounded soybeans. Where you know the forecast for soybean production is for a decline in 2019 the 2019-20 crop year, as it's expected that some farmers will switch from soybeans to corn, expecting corn to be more profitable in the year ahead.

And, I guess the second part to that question is but soybean net cash farm income is projected to be up 4.9 percent, what's the reasoning behind that?

Oh, yes, good attention to detail. The reason that soybean farm income is not projected to decline, unlike cash receipts because usually as you heard usually the farm business is following the cash receipts, is because we are forecasting soybeans to benefit from the sector forecast of lower production expenses. So, that would boost income. And, we're also expecting for soybean farms, the model projects that cash receipts will be higher for soybean farms. Now, the important thing to know here though, is that most soybean farms don't just grow soybeans. They maybe the grow combination of corn and soybeans, so when I say higher cash receipts, that doesn't necessarily mean higher cash receipts from soybeans for these farms, but they may be benefiting from anticipated higher cash receipts for corn as well. But, even though they're just defined as a soybean farm, that just means 50 percent or more has to come from soybeans, but the rest of it can be other commodities, though. So, for soybean farms were expecting them to benefit from lower expenses and higher cash receipts in general.

Ok. Great, Carrie. That is all the questions that we have, and I wanted to thank you Carrie for your presentation and thank you all for joining us today for this webinar and I wanted to wish you all a wonderful rest of your day. Thank you!