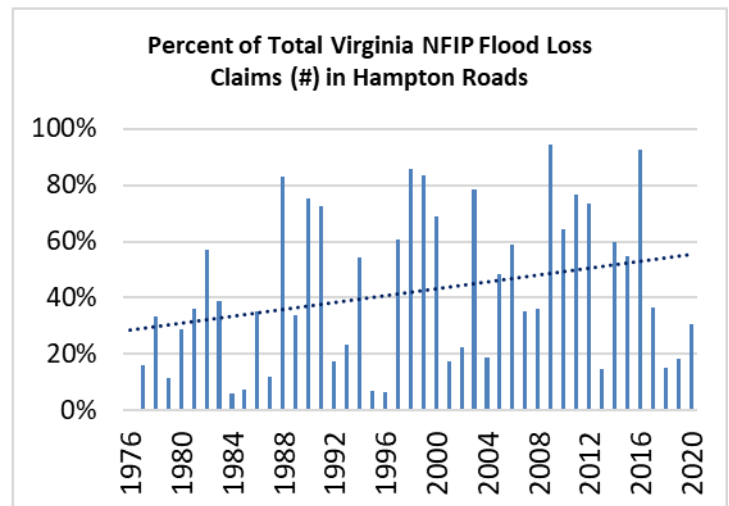
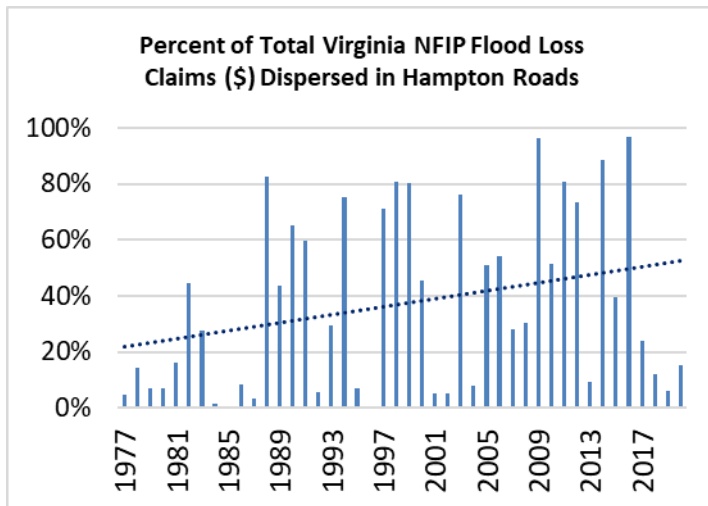


## National Flood Insurance Program: Claims in Hampton Roads & VA

2021's Atlantic hurricane season came to an official close at the end of November as the third-most active season on record, producing 21 named storms. While Hampton Roads wasn't directly hit by any 2021 hurricanes, it has been in the past and likely will be again in the future. As sea levels continue to rise, sunny-day flooding becomes more frequent, and rainfall events become more severe, the economic impacts of water ending up where it's not wanted will become more apparent.

HRPDC's Coastal Resilience Program has created a [new online dashboard](#) that summarizes NOAA storm events data and FEMA National Flood Insurance Program (NFIP) claims at the locality scale throughout Virginia. This dashboard depicts daily and annual summaries of flooding events and total number of claims submitted to FEMA in Virginia, with the ability to filter by locality or planning district, and a mapping feature alongside. As economists, we were quite interested in this data, asking ourselves both how much total money was distributed as a result of the FEMA flood insurance program claims, and how did the events and claims in Hampton Roads compare to the rest of Virginia?

Between 1976 and 2020, Hampton Roads saw a total of 31,611 claims submitted to FEMA for reimbursement due to flooding damage for a total of over \$480 million. Out of all the flood loss claims in Virginia, roughly 63% of the total dollar amount and total number of claims occurred in Hampton Roads. This FEMA data likely underestimates the actual flood damage costs for two reasons: 1) it includes information for thousands of claims with no dollar amount, and 2) this analysis only includes claims from property owners with flood insurance. There is an unknown number of structures that may have flooded in the past 45 years without being insured, and those losses would have to be fully realized by the property owner and therefore not included in these calculations.



Figures 1 and 2: Percent of total Virginia NFIP flood loss claims (both total dollar amounts and number of claims) in Hampton Roads. Source: FEMA, HRPDC. Note: These charts only include claims where dollar amounts paid were reported.

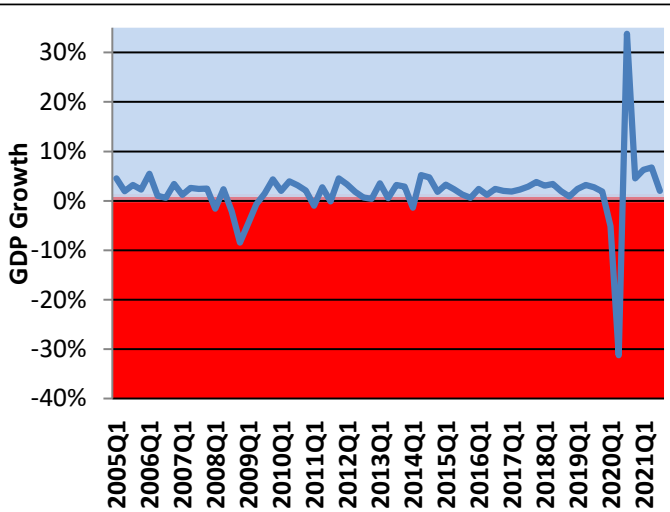
As shown in charts 1 and 2, from 1976 through 2020, the percent of total flood loss claims and dollar amounts dispersed in Virginia that have occurred in Hampton Roads are trending upwards. Additionally, it's important to note that there are wide variations in regions by year – for example in 2019, Hampton Roads had a very low number of total claims relative to the rest of Virginia. During July of 2019, Northern Virginia experienced severe flash floods, leading to thousands of claims in NOVA. Alternatively, in 2009 and 2016, over 90% of the flood claims dispersed in Virginia were done so in Hampton Roads, coinciding with a large Nor'easter in 2009 and Hurricane Matthew and Tropical Storm Hermine in 2016.

The second dataset included in the dashboard is from NOAA, and depicts the total number of storm events occurring in a given locality that led to flooding. The data showed that between 1996 and 2020, the percentage of Virginia flooding events occurring in Hampton Roads has been increasing over time, but while we observed that the total ratio of Virginia's claims in Hampton Roads has averaged out to roughly 63%, according to the NOAA data, only about 17% of those reported flooding events occurred in Hampton Roads. This could potentially indicate that the flooding events in Hampton Roads are more severe than elsewhere in Virginia, and affect many more properties/structures when they do occur.

It is important to note that these claims only make up a small part of the costs of flooding and sea level rise in Hampton Roads. Projects and studies are being initiated and completed throughout the region to address these flooding issues in order to prevent increased losses in the future – just last month Virginia Beach residents voted to authorize over \$550 million to fund the design and construction of 21 projects in the citywide Flood Protection Program, a significant step forward to building a more resilient Hampton Roads.

### GDP, Annualized Growth Rate

United States, 2005Q1 – 2021Q3 Quarterly

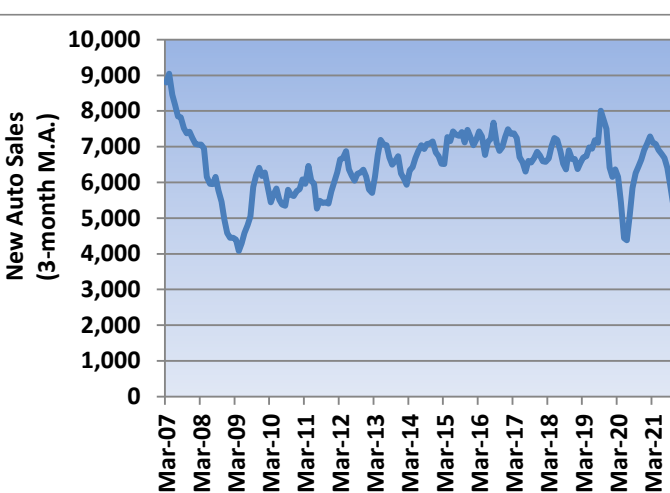


Source: Bureau of Economic Analysis, HRPDC

**GDP:** Gross Domestic Product combines consumption, investment, net exports, and government spending to determine the size and general health of the economy. Real GDP increased 2% in Q3 2021 (annualized), reflecting a stalling economic recovery after two quarters in a row of over 6% annualized growth. Unlike previous quarters in which growth was mainly driven by increases in PCE (only 1.6% increase in Q3), growth was driven by gross private domestic investment and an increase in spending on services, further proof that the pandemic’s grip is easing while supply-chain issues aren’t.

### New Car Sales, Seasonally Adjusted

Hampton Roads, Mar 2007 – Oct 2021, Monthly

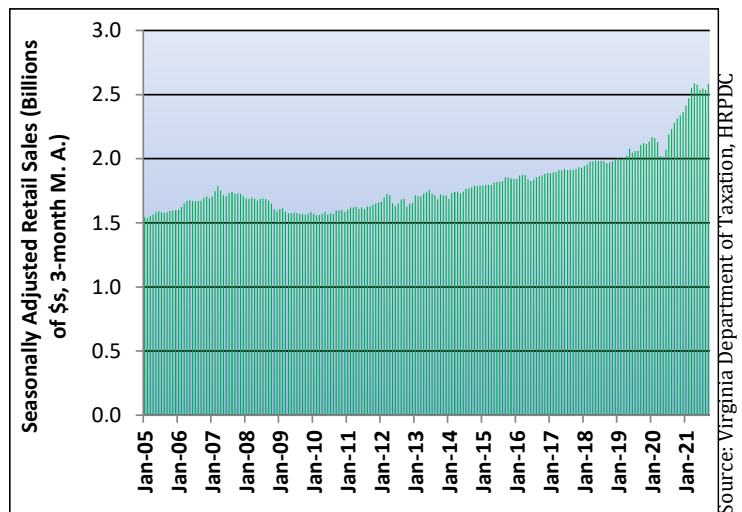


Source: Virginia Automobile Dealers Association, HRPDC

**New Car Sales:** Car sales, as a durable good, may be put off until an individual’s economic prospects improve; thus, the number of new car sales indicates the level of confidence that households in Hampton Roads have in their financial future. Car sales this October continued a downward trend, representing negative YoY growth—Oct 2021 showed a 24% decrease from Oct 2020. For pre-pandemic comparison, Oct 2021 shows a 27% decrease from Oct 2019, the sixth month in a row for declines over 2019. Supply chain issues and chip shortages may be contributing to this decline.

### Hampton Roads Retail Sales, Seasonally Adjusted

Hampton Roads, Jan 2005 – Sep 2021, Monthly

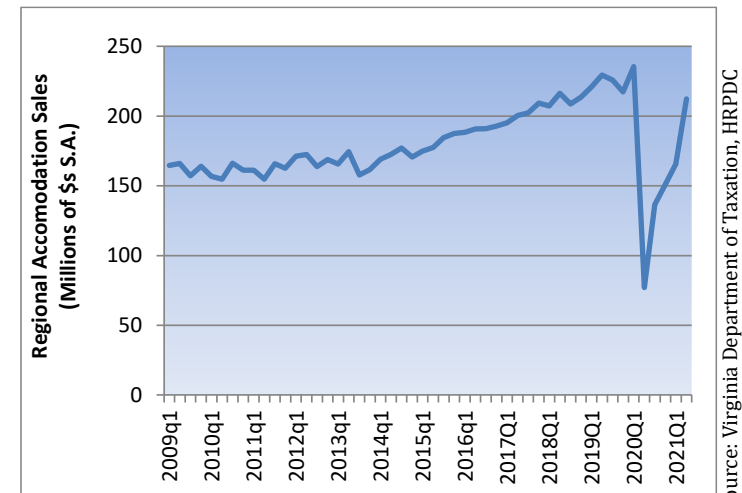


Source: Virginia Department of Taxation, HRPDC

**Retail Sales:** Retail sales in Hampton Roads, as measured by the 1% local option sales tax, serve as an indicator for consumption in the region. When seasonally adjusted and averaged over 3 months, September shows an increase in retail sales after several months of declines. Unadjusted, Sept 2021 posted a 19% increase from September 2020 (when the rise in retail sales was in full swing after the initial shock of the pandemic wore off), and a nearly 30% increase from Sept 2019. In other words, retail sales are continuing to rise long-term as consumers are still spending more on goods than pre-pandemic.

### Estimated Hotel Revenue, Seasonally Adjusted

Hampton Roads, 2009Q1 – 2021Q2, Quarterly

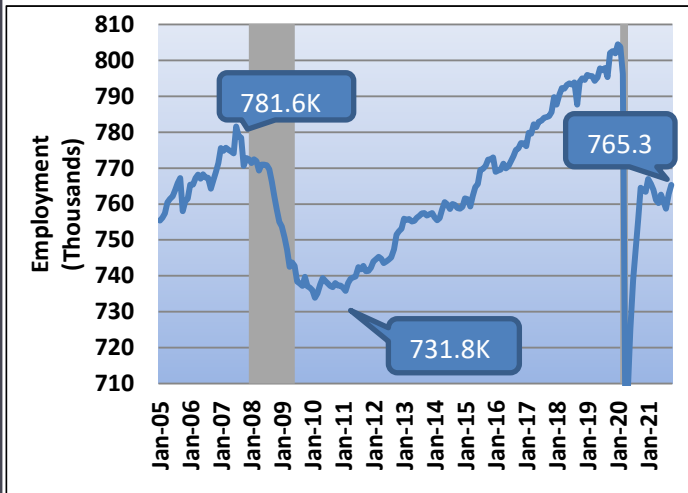


Source: Virginia Department of Taxation, HRPDC

**Estimated Hotel Revenue:** Hotel sales indicate the performance of the region’s tourism sector. When seasonally adjusted, Q2 2021 hotel revenue once again saw improvement from the historic lows realized in Q2 2020 due to pandemic-related closures. With one full year of data available, the recovery led to a 175% increase in year-over-year revenue from Q2 2020 to 2021. As of Q2 2021, hotel revenues in the region are roughly 10% below pre-pandemic levels.

### Civilian Employment, Seasonally Adjusted

Hampton Roads, Jan 2005 – Oct 2021, Monthly

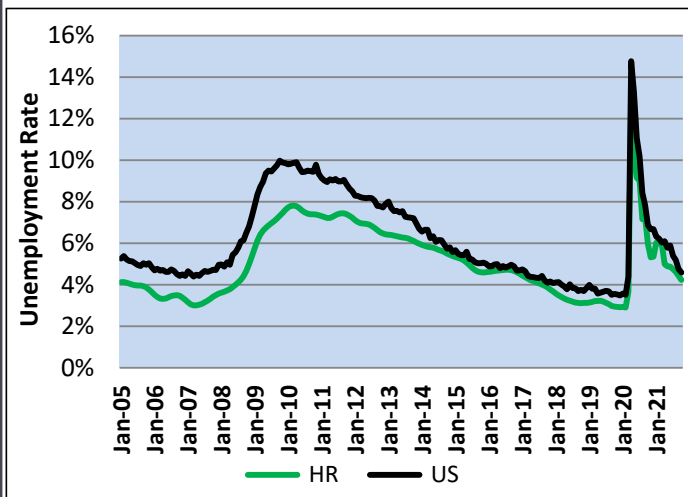


Source: Bureau of Labor Statistics, HRPDC

**Employment:** Non-agricultural civilian employment figures are considered the best estimate of labor market activity by the National Bureau of Economic Research. According to data from the Bureau of Labor Statistics, Hampton Roads employment (seasonally adjusted) increased by 0.31% from Sept to Oct 2021. Unadjusted employment levels increased from the previous month for the first time since June. Total payroll employment remains 4.87% below pre-COVID highs.

### Unemployment Rate, Seasonally Adjusted

U.S. & Hampton Roads, Jan 2005 – Oct 2021, Monthly

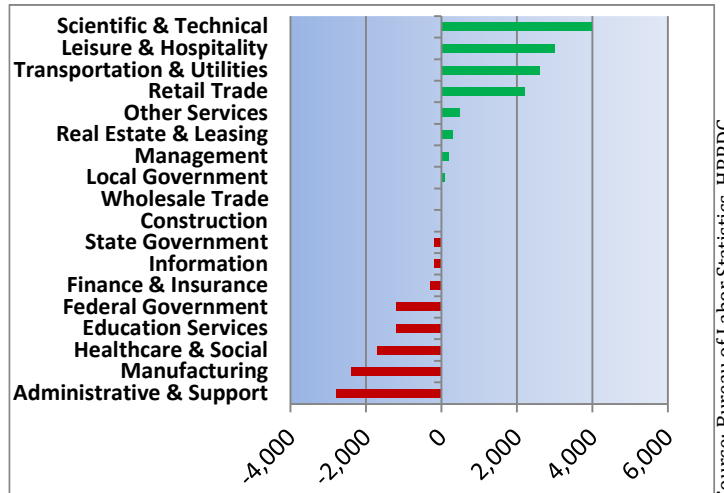


Source: Bureau of Labor Statistics, HRPDC

**Unemployment Rate:** The unemployment rate is the percentage of the population actively seeking work but unable to obtain a position. Hampton Roads' unemployment rate decreased again to 4.24% in October 2021, reflected by an increase in the labor force, increase in employment, and a decrease in the number of unemployed persons (all seasonally adjusted). The unemployment rate in Hampton Roads continues to sit below the US rate, roughly 0.36 points lower.

### Employment Growth by Industry

Hampton Roads, Oct-20 to Oct-21, Year-over-Year

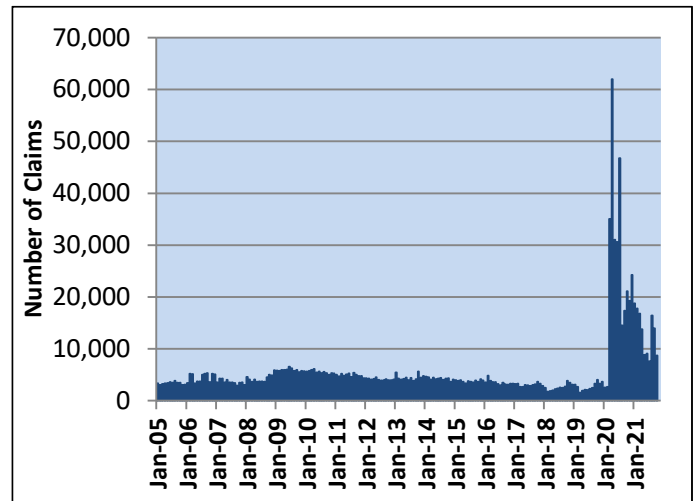


Source: Bureau of Labor Statistics, HRPDC

**Employment Growth by Industry:** As the job market grows or declines, there will be some industries whose experience does not resemble the regional trend. In Oct, roughly half of Hampton Roads industries experienced an increase in year-over-year employment compared to Oct 2020, when the economy was well into its rebound. Most significant was Scientific and Technical, which added 4,000 jobs compared to Oct 2020, followed by Leisure and Hospitality and Transportation. Administrative and Manufacturing realized the highest losses compared to 2020.

### Initial Unemployment Claims, Seasonally Adjusted

Hampton Roads, Jan 2005 – Oct 2021, Monthly

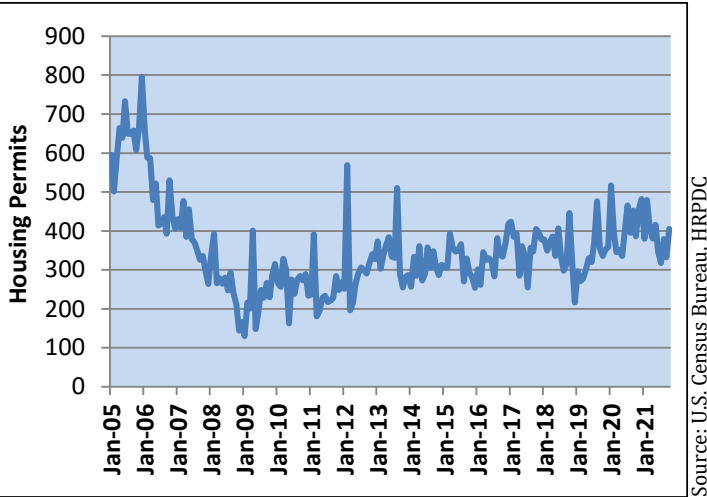


Source: Virginia Department of Labor, HRPDC

**Initial Unemployment Claims:** The number of initial unemployment claims is a leading economic indicator reflecting those who are forced to leave work unexpectedly, thus revealing the strength of the job market with little lag time. In October 2021, initial unemployment claims decreased significantly from the previous month. When seasonally adjusted, claims in Oct were still elevated at roughly 8,700, but represents a 38% decline from the previous month, about twice as high as Oct 2019.

### Single Family Housing Permits, Seasonally Adjusted

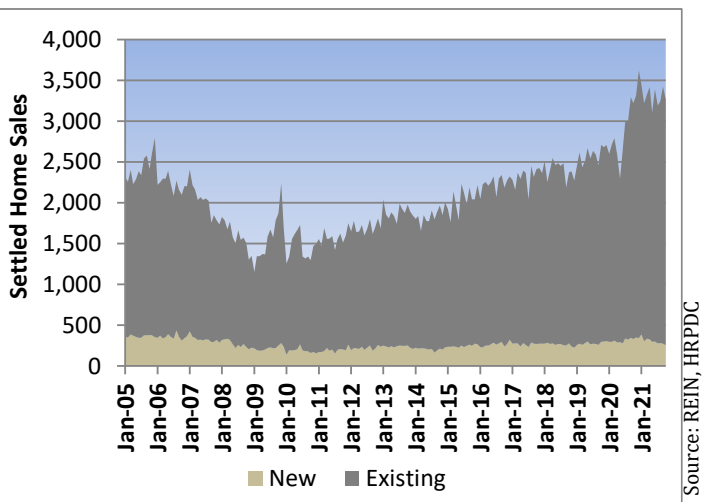
Hampton Roads, Jan 2005 – Oct 2021, Monthly



**Single Family Housing Permits:** Permit data signals the level of construction employment and confidence regarding the future trajectory of the local economy. There were 373 new construction permits issued for single family homes in October 2021. When seasonally adjusted, the data continues to show small variances month to month over the past year, but a clear downward trend is beginning to appear. As the market continues to respond to labor and materials shortages, the slow downward trend may continue until the industry can increase capacity in response to increased demand.

### Number of Homes Sold, Seasonally Adjusted

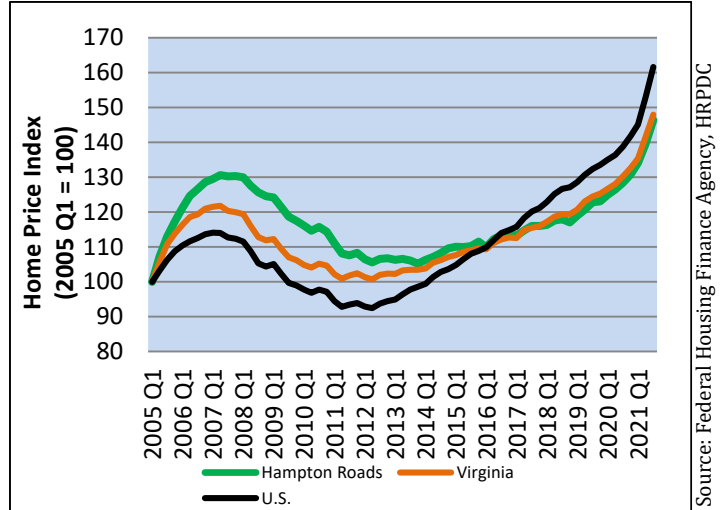
Hampton Roads, Jan 2005 – Oct 2021, Monthly



**Home Sales:** Settled home sales measure the level of transactions on the real estate market over time, and a healthy real estate market should have a consistent level of activity. Seasonally adjusted, existing home and total settled sales in October decreased slightly, remaining elevated with over 3,200 homes sold. Unadjusted, total home sales have been declining for a few months in a row, but are still elevated compared to 2019. The sales market appears to be reaching a plateau.

### Home Price Index, All Transactions

Hampton Roads, 2005Q1 – 2021Q3 Quarterly



**Home Price Index:** The home price index measures the value of homes by evaluating changing price levels through repeated sales of properties. The index provides the highest quality data available on the trends in the real estate market. Hampton Roads' home prices increased, yet again, by 14% over the previous year in Q3 2021, slightly higher rate than the state and about 2 points lower than the nation—still a record high. Regional housing values are now 12.2% higher than the peak of the housing boom—five points higher than the previous quarter, showing just how rapidly home prices are increasing.

**Note:** The format of this monthly economic report will be getting an update in the coming months. We welcome any input about what you find useful in this report. Please email Katherine Rainone at [krainone@hrpdca.gov](mailto:krainone@hrpdca.gov) with any suggested changes or improvements for future economic monthly updates.