



Bureau of Economic Analysis
2020 Strategic Plan



Letter from the Director



The Bureau of Economic Analysis (BEA) is the world's trusted source for accurate and objective data about the U.S. economy. BEA's statistics have the power to move markets and shape political and business decisions. To uphold our reputation as a global leader in economic measurement and to meet the public's high expectations, BEA must confront one of the biggest challenges facing statistical agencies today. That is, how to keep our statistics relevant, timely, and accurate, given the constantly changing economy and the evolving needs of our customers.

It is essential that BEA finds creative ways to deliver the most relevant products that deepen the public's understanding of emerging economic issues. The COVID-19 pandemic brings the need for reliable economic information into even sharper focus. BEA's strategic plan—based on input from our customers, stakeholders, and employees—is built around four main goals:

1. Accuracy and reliability. To make informed decisions, government officials and other policymakers need accurate data that are not subject to large revisions, especially in the face of uncertain circumstances, like those brought about by the coronavirus crisis. BEA will employ pioneering approaches to improve the accuracy of our statistics, including leveraging cutting-edge data science tools, modernizing data collection, and pooling resources with other U.S. statistical agencies and partners around the globe.

2. Relevance. There is no doubt that the dynamics of the modern economy are shifting quicker than ever before. BEA will strive to stay in sync with the realities of the world around us. We will provide more detailed and consistent information on regions and industries, expand our statistics beyond the traditional gross domestic product accounts by featuring measures of economic well-being, and publish new data products that highlight emerging and growing economic sectors, such as outdoor recreation and the digital economy.

3. Customer service. A hidden statistic is a useless statistic. BEA will leverage a variety of mechanisms to market our products to diverse customer bases, ensuring that the public understands our data offerings and knows how to use them. We will ramp up our efforts to connect with and educate both existing and potential data users, utilize the latest technologies to get our data into the hands of more users—faster, and gather input through many channels so that BEA's statistics are meeting users' needs.

4. Operational excellence. BEA's staff is its most important asset. BEA will cultivate a world-class, diverse, and engaged workforce. And we will give our employees the best environment possible for success: access to the latest technologies, secure information technology systems, and practical solutions that ensure our operations will go on in the case of an emergency.

With this plan as our roadmap, BEA will make investments to continue accomplishing our mission to promote a better understanding of the U.S. economy in an objective and cost-effective manner.

A handwritten signature in blue ink that reads "Mary Bohman". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Mary Bohman

Acting Director, Bureau of Economic Analysis

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About BEA



Our Mission

The Bureau of Economic Analysis (BEA) promotes a better understanding of the U.S. economy by providing the most timely, relevant, and accurate economic accounts data in an objective and cost-effective manner.



Our Vision

To be the world's most respected producer of economic accounts.



BEA's Role as a Federal Statistical Agency

BEA is the world's trusted, impartial source of comprehensive data about the U.S. economy. BEA's statistics, free and accessible to all, support economic growth and well-being by informing the decisions of businesses, entrepreneurs, households, and governments.

The roots of BEA's statistics can be traced to the major events of the first half of the 20th century. The lack of information to drive the recovery process for the Great Depression and to plot the course for the wartime economy in the early 1940s highlighted the need for comprehensive economic measures. As a result, today, BEA's national, regional, industry, and international statistics present valuable information on national economic growth, regional economic development, interindustry relationships, and the nation's position in the world economy. The cornerstone of BEA's statistics, gross domestic product (GDP), was recognized by the Department of Commerce as its greatest achievement of the 20th century and has been ranked as one of the three most influential measures affecting U.S. financial markets.

BEA's commitment to excellence and innovative thinking enables the Bureau to provide a detailed and timely picture of the \$21 trillion U.S. economy, the world's largest economy. BEA continuously explores new ways to ensure that its economic measures capture the dynamic nature of the globally interconnected U.S. economy.

In the last few years, BEA has produced new data products that deepen the public's understanding of key parts of the economy. From statistics that break out the digital economy's contribution to U.S. GDP to datasets that highlight the economic impacts of health care and outdoor recreation, BEA data provide rich, new detail on different segments of the U.S. economy.

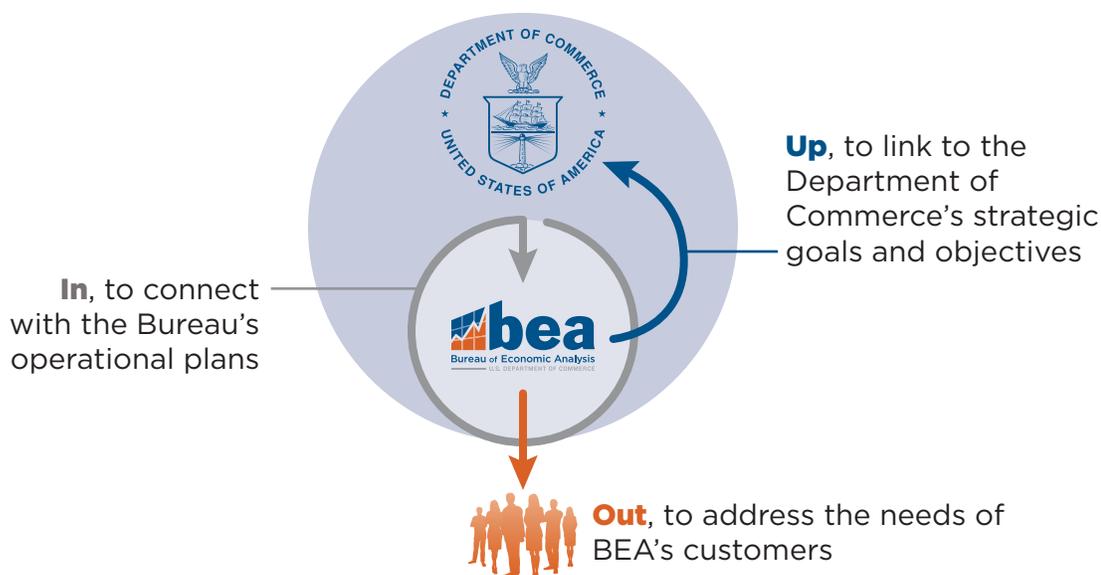
Both new and existing sets of BEA data figure prominently in critical decisions that affect monetary and trade policy, tax and budget projections, and businesses' plans to invest and hire.

BEA works collaboratively with other government agencies and private businesses to vet and collect data that are used to produce its economic measures. BEA also conducts its own surveys that feed its international investment and international trade in services statistics. In addition, BEA engages in research and analysis and develops and implements economic estimation methods.

BEA disseminates its economic statistics free to the public, using numerous communications platforms and harnessing new technologies. Both BEA and the Census Bureau, the source of much of the economic data used by BEA, are organizationally located within the Department of Commerce. Delivering more data and making these data more easily accessible to the public are key components of the Department's strategic plan.

About This Plan

This strategic plan outlines a series of mission goals—built on the themes of accuracy and reliability, relevance, customer service, and operational excellence—and guides the Bureau's progress toward accomplishing its mission by connecting:



Out. BEA's strategic plan is solidified around anticipating and responding to the needs of changing customer bases in a fast-paced, technology-driven society. Customers increasingly expect quicker turnaround in producing statistics, increasing amounts of geographic and industry detail, and easier access to data through multiple channels. This plan includes wide-reaching objectives that are relevant to today's customers and positions the Bureau to readily respond to users' future desires and expectations.

Up. BEA's strategic plan connects directly to the Department of Commerce's goals and objectives. As a statistical agency, the majority of BEA's efforts link to the Department's strategic goal to "fulfill constitutional requirements and support economic activity;" however, the Bureau's objectives are designed to support the Department's other priorities as well.

As noted in the Department’s strategic plan:

World economies are driven by innovation, emerging technologies, intellectual property—and data. Creating a robust economy requires an enormous amount of data, and we are the nation’s preeminent producer of public data.

Connections to the Department’s objectives—referred to as “Commerce links”—are noted throughout this plan. (For more information on the organizational framework of the plan, see “How This Plan is Organized” on page 4.)

In. BEA’s strategic plan frames the life of the Bureau. BEA’s goals and objectives flow to the operational plans of the program areas and to the performance plans of individual employees. By directly linking employees’ responsibilities to the plan and by weaving language from the plan into regular reports and internal documents, every staff member is personally connected to the Bureau’s goals and is an integral participant in the Bureau’s success.

Achieving BEA’s mission goals and objectives requires ongoing input and collaboration from work groups throughout the Bureau. To support these efforts, BEA has instituted “OneBEA” as the foundational approach for integrating the processes and products of its national, regional, industry, and international programs. (For more information, see “What Is OneBEA?” below.)

What Is OneBEA?

“OneBEA” is a proactive, holistic approach to managing the Bureau’s operations. OneBEA mirrors the interconnectedness of today’s economy—as economic activities become increasingly entwined, so does the work of BEA’s program areas. Under this approach, employees from different work areas coordinate through each stage of the research, production, and publication processes.



OneBEA is a defining quality of the Bureau’s culture—shaping the way BEA improves its existing products and develops new ones. For example, over the last few years, BEA has worked to accelerate the publication of the quarterly GDP by industry and GDP by state statistics so that they are developed and released around the same time as the national GDP statistics. Reaching this goal has required the cooperation of the whole BEA team to establish new communication channels, restructure operations, and integrate processing and review systems. Beginning in September 2020, the three quarterly GDP datasets will be issued nearly simultaneously, providing users with a timelier tool for analyzing the underpinnings of the U.S. economy. In addition, the organizational changes put in place to achieve these results offer BEA a unique opportunity to evaluate and improve its operational procedures and estimation methods.

Moving forward, BEA will build on successes like this to release groundbreaking datasets and to further transform the Bureau’s processes. While all the strategies outlined in this plan fall under the OneBEA banner, specific projects that highlight this approach—that is, “OneBEA key strategies”—are noted throughout the plan.

How This Plan is Organized

This strategic plan is organized around BEA’s four mission goals—accuracy and reliability, relevance, customer service, and operational excellence. The first two goals focus on enriching BEA’s data products. Next, customer service describes the Bureau’s plans to enhance the ways in which those products are delivered to and used by BEA’s customers. Finally, operational excellence outlines improvements to BEA’s processes and procedures to ensure the ongoing fulfillment of the Bureau’s mission.

For each of BEA’s mission goals, the plan outlines several outcome-driven objectives, key strategies for accomplishing these objectives, and performance indicators for gauging progress. This framework closely mirrors that of the Department of Commerce’s strategic plan and is in line with guidance from the Office of Management and Budget. Key terms for this plan, and related definitions, are provided below.

Key Terms

Mission goal	Broad, long-term outcome that BEA strives to achieve by executing its mission.
Strategic objective	Specific approach that BEA implements to forward its mission goals.
Key strategy	Specific projects or programs the Bureau undertakes to accomplish its strategic objectives.
OneBEA key strategy	Project or program that exemplifies the OneBEA operational approach (see box on page 3).
Strategy in focus	Strategy for which additional detail is given to promote a better understanding of that strategy.
Commerce link	Quotation from the Department’s strategic plan that highlights connections to BEA’s plan.

Legend

Symbols are used throughout the plan to denote the following:

	Commerce link
	OneBEA key strategy
*	Key strategy with corresponding “strategy in focus” box

The colors of the symbols will vary depending on the sections in which they appear.

Mission Goals and Objectives

Mission Goal

1.

Accuracy and Reliability: Improve the accuracy and reliability of existing statistics through enhanced data, increased collaboration with data partners, and better methods.

Objectives

- 1.1. Leverage “big data” and alternative data sources to produce more timely, relevant, and comprehensive statistics.
- 1.2. Modernize survey data collection and processing to ensure high-quality statistics, while minimizing respondent burden.
- 1.3. Improve methodologies and presentation of data consistent with international guidelines.
- 1.4. Harmonize BEA’s statistics to improve the accuracy and overall quality of the national, international, industry, and regional accounts.

Mission Goal

2.

Relevance: Develop new and expanded products to measure a dynamic economy.

Objectives

- 2.1. Implement the principles and practices of the Federal Data Strategy.
- 2.2. Build new and expanded datasets to more accurately portray regional and industry trends.
- 2.3. Develop tools and techniques to better value the digital economy and to further capture technology’s role in economic growth.
- 2.4. Explore new ways of understanding and describing the impact of globalization on the U.S. economy.
- 2.5. Launch new and improved data products to better measure economic well-being and growth.
- 2.6. Expand the use of satellite accounts to highlight and provide more information on specific activities or sectors of the economy.

Mission Goal

3.

Customer Service: Improve customer understanding, access, and use of BEA’s products.

Objectives

- 3.1. Improve and enhance the dissemination of BEA’s statistics to respond to expanding communication channels and customer bases.
- 3.2. Increase outreach to educate new and existing customers about BEA’s statistics, to promote the Bureau’s data to a diverse audience, and to solicit user feedback.

Mission Goal

4.

Operational Excellence: Strive for operational excellence to meet mission-critical goals in a cost-effective and efficient manner.

Objectives

- 4.1. Recruit, retain, and engage a high-caliber workforce.
- 4.2. Manage and modernize BEA’s information technology infrastructure and security protocols to maximize efficiency in the production of the Bureau’s statistics and to protect the integrity of BEA’s datasets.
- 4.3. Ensure the continuation of mission-essential functions in an emergency.

BEA's statistics are widely accepted as the world's gold standard in economic measurement and are essential for business executives, government officials, academic researchers, and consumers to make informed economic decisions. BEA's data have the potential to fuel improvements in how the economy works and increases in economic and social well-being. To maintain this high level of integrity, BEA must continuously improve its statistical products. This includes exploring new data sources, modernizing data collection and processing, bringing BEA's accounts into greater alignment with international standards, and harmonizing statistics across BEA's accounts.

Mission Goal

1. Accuracy and Reliability

Improve the accuracy and reliability of existing statistics through enhanced data, increased collaboration with data partners, and better methods.

Objectives

- 1.1. Leverage “big data” and alternative data sources to produce more timely, relevant, and comprehensive statistics.
- 1.2. Modernize survey data collection and processing to ensure high-quality statistics, while minimizing respondent burden.
- 1.3. Improve methodologies and presentation of data consistent with international guidelines.
- 1.4. Harmonize BEA's statistics to improve the accuracy and overall quality of the national, international, industry, and regional accounts.

1.1. Big Data

Objective: Leverage “big data” and alternative data sources to produce more timely, relevant, and comprehensive statistics.

BEA will continue to explore applications for big data, in light of increasing demands for timelier and more detailed data and declining response rates on traditional government surveys. Big data promise to impact fundamentally how BEA collects, compiles, reviews, and analyzes data across its products. Potential big data applications include:

- **Extend.** Provide more timely statistics, fill real-time data gaps, and expand geographic detail.
- **Enhance.** Construct detailed indicators, provide information on product quality, and improve survey design.
- **Verify.** Confirm trends and validate findings from direct survey collection.

Key strategies

- * Leverage advanced analytical techniques to improve BEA’s statistics.
- * Research the use of debit and credit card transactions data to improve and extend consumer spending statistics.
- * Use data from the Department of Transportation and the Airlines Reporting Corporation to improve estimates of international trade in air passenger transport services.



Commerce link

We will leverage big data and data from non-traditional sources to take full advantage of these new resources.

* Strategy in Focus: **Use Data Science Tools to Improve BEA’s Statistics**

In recent years, the sophisticated techniques needed to harness big data have become readily available and widely accepted. Advanced data tools—like machine learning and artificial intelligence—present many possibilities for improving BEA’s data products, especially those statistics for which traditional source data are not timely or detailed enough to meet users’ needs.

BEA is exploring ways to use advanced data approaches to extend, enhance, and supplement official economic statistics. For example, in April 2020, BEA researchers evaluated the economic effects of the COVID-19 pandemic using daily credit card transactions data, providing critical insights into the state of the U.S. economy and informing GDP estimates before traditional government data sources were available. In addition, the Bureau is testing machine learning methods for identifying and adjusting for outliers that could ultimately improve the accuracy of BEA’s economic accounts.

As BEA moves forward with this innovative work, there are many questions that must be answered, such as:

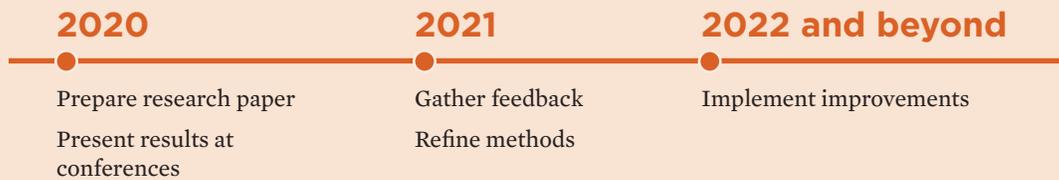
- What are the strengths and weaknesses of various analytical techniques?
- For what types of problems are each of these analytical techniques best suited?
- What are the implications of machine learning and alternative data when used to accelerate or improve GDP statistics?
- What are the best practices for applying data science tools?

Looking to the future, BEA will continue to search out opportunities to harness advanced data techniques to improve the Bureau’s statistics, ensuring that the methods are fully tested and clearly communicated to the public.

* Strategy in Focus: **Enhance Consumer Spending Statistics**

BEA, in collaboration with the Census Bureau, is exploring the use of private sector data to enhance and extend estimates of consumer spending. These data offer the potential for creating timely economic indicators at geographic levels customers demand but are not currently available or achievable through traditional survey methods.

BEA is using data on debit and credit card transactions to verify and improve consumer spending statistics. Initial results of this project show close correlations between the transactions data and Census Bureau retail sales data, creating the possibility of enhancing the early estimates of consumer spending and of producing more timely and higher frequency estimates of consumer spending at the regional level.



1.2. Data Collection

Objective: Modernize survey data collection and processing to ensure high-quality statistics, while minimizing respondent burden.

BEA will ease the burden for respondents and BEA survey editors by streamlining data collection, editing, and analysis.

Key strategies

- * Modernize survey processing systems.
- Educate survey respondents to reduce respondent burden and inform survey design. BEA will continue to send representatives across the country to visit respondents, address questions or issues they have about surveys, explain methods, and test new survey instruments.

Commerce link

We are committed to reducing the burden of responding to surveys...

* Strategy in Focus: **Modernize Systems**

BEA will modernize survey data systems by:

- Adding new features to the primary systems that BEA uses to edit and aggregate survey data, to apply adjustments, and to prepare data for publication in order to streamline data validation and facilitate cross-survey comparisons.
- Expanding and improving the electronic filing system to make it easier for companies to report data and for survey editors and respondents to communicate securely.
- Integrating human and programmed editing of survey forms by using third-party software to automate the editing or the adjustment of specific survey items.

2020

Develop, expand, and refine automatic editing for selected annual and benchmark surveys

Add features to primary survey systems to streamline data validation

Add first-time filer option for electronic filing on selected benchmark surveys

2021

Expand and refine automatic editing for use on additional survey instruments

Add features to primary survey systems to facilitate cross-survey comparisons

2022 and beyond

Expand and refine automatic editing for use on other survey instruments

Investigate options for upgrading or replacing BEA's electronic survey filing system

1.3. International Guidelines

Objective: Improve methodologies and presentation of data consistent with international guidelines.

The international statistical community has established a comprehensive set of standards to guide countries establishing or maintaining economic accounting systems. BEA experts play a pivotal role in shaping these guidelines, and the Bureau has a long track record of improving its economic accounts to better reflect international standards. BEA will continue to enhance its estimation methods according to these guidelines in order to increase the accuracy of BEA’s statistics, foster data comparisons with other countries, and support the analysis of global economic developments.

Key strategies

- * Expand statistics on international trade in services.
- * Align BEA’s accounts with the coverage recommended by international guidelines.
- Improve submissions to international organizations, including preparing quarterly versions of annual submissions and posting submission datasets to the BEA website.



* Strategy in Focus: **Expand International Trade in Services Statistics**

Services exports are increasingly important to the U.S. economy and to the trade balance. In 2019, exports of services represented 34 percent of total U.S. exports and led to a \$254 billion surplus in international trade in services.

A few years ago, BEA launched an initiative to improve and expand its trade in services statistics. In October 2016, the Bureau began providing greater geographic detail on the destination of U.S. services exports and the source of U.S. services imports, expanding the number of countries from 33 to 72, and extending these estimates back in time. BEA will continue to improve international trade in services statistics by:

- Accelerating the release of detailed annual statistics by country and by type of service by 4 months—moving the release from October to June each year.
- Publishing more detailed annual statistics for some of the most dynamic industries with high-value jobs, including research and development, cloud computing, and intellectual property transactions.
- Expanding the geographic detail published in BEA’s quarterly services measures—from 21 trading-partner countries to 72.
- Releasing industry-based statistics more broadly and on a more regular basis. In December 2019, BEA published industry-level statistics for nine industries as part of an article profiling services exporters and importers. The goal is to add this dataset to BEA’s regular library of international trade statistics.

Enhanced information on U.S. trade in services will inform trade negotiations, which are increasingly focused on issues related to intellectual property and services enabled by digital technologies, and will support U.S. trade promotion efforts by identifying overseas markets with potential for increased U.S. services exports.

2020

- Accelerate the release of detailed statistics by country and by type of service
- Expand geography published in quarterly statistics from 21 countries to 72
- Research data and methods for regularly releasing expanded industry-based statistics

2021

- Develop and test prototype industry-based statistics for regular release

2022 and beyond

- Release expanded industry-based statistics on a regular basis, as feasible

* Strategy in Focus: **Increase the Coverage of the National and International Accounts**

The growing importance of multicountry production arrangements and of globally synchronized business cycles highlights the urgent need to enhance the international comparability of economic statistics. While BEA has instituted many changes over the last two decades to bring its statistics into closer alignment with international standards, differences remain in coverage, definitions, and accounting conventions. Planned improvements include:

- **Expand the capital account.** Additions include sales and purchases of franchises and trademarks, government grants that are capital in nature, and new measures such as transfer agreements related to sports players.
- **Account for illegal activities in the national accounts.** According to international standards, nonobserved market activity—like the distribution of illegal drugs, criminal prostitution, and theft—should be included in GDP. BEA will investigate potential data sources and methods for measuring these transactions and incorporating them into its existing accounts.

Building on a strong foundation of compliance with international guidelines, BEA will research alternative data sources, develop methods, and update presentations to move BEA's accounts more toward international standards.



1.4. Harmonize BEA Statistics

Objective: Harmonize BEA’s statistics to improve the accuracy and overall quality of the national, international, industry, and regional accounts.

BEA will improve the accuracy and reliability of its economic accounts by sharing source data, streamlining estimation methods, and accelerating data releases.

Key strategies

- * Accelerate the publication of BEA datasets.
- * Improve estimation methods for housing services in GDP.
- * Tackle the coordination, measurement, and communication challenges of the COVID-19 pandemic.



* Strategy in Focus: Accelerate Releases

Over the last few years, BEA has made substantial strides to get key economic datasets into the hands of data users and decisionmakers faster. These efforts include Bureau-wide coordination to sync up the three quarterly releases of GDP—at the national level, by industry, and by state. Moving forward, BEA will continue to accelerate the publication of its releases.

- **Detailed international statistics.** Once a year, BEA issues its most detailed annual statistics on international trade in services by service type, country and region, and company affiliation. Beginning in 2020, BEA will accelerate the publication of these statistics by 4 months—moving the release from October to June each year. (For more information on improvements to BEA’s measures of trade in services, see “Expand International Trade in Services Statistics” on page 10.)
- **GDP estimates.** In the fall of 2020, BEA will publish for the first time near-simultaneous snapshots of quarterly GDP for the entire nation and GDP broken out by industry and by state (within a couple days of the “third” GDP estimates for the second quarter of 2020). At that time, BEA will also publish the results of the annual updates of the GDP by industry and GDP by state accounts—accelerating these releases by a few weeks compared with previous years. Moving forward, BEA will continue to speed up the publication of these statistics—ultimately issuing the quarterly GDP by industry and GDP by state statistics around the time of the “advance” GDP estimates.
- **Real state personal income measures.** In December 2020, BEA will release real personal income statistics for states and metropolitan areas for 2019—a 5-month acceleration. These data are used to compare the buying power of personal incomes across the 50 states and the District of Columbia or from one metropolitan area to another.

Accelerating these releases will provide data users earlier access to a more complete story of changes in the economy. In addition, processing various BEA datasets all at once will allow the Bureau to improve the accuracy of its statistics and to lay the foundation for improvements across BEA’s statistical products.

2020

- Test and finalize processes
- Publish the most detailed annual statistics on international trade 4 months earlier than usual
- Release quarterly estimates of GDP by industry and GDP by state around the time of the “third” estimates of national-level GDP
- Accelerate the release of real personal income by state and metropolitan area data by 5 months

2021 and beyond

- Develop methods and procedures for further acceleration
- Identify and implement statistical improvements, as feasible

* Strategy in Focus: **Improve Housing Services Estimates**

Housing services are a large slice of the U.S. economy, comprising about 15 percent of consumer spending in 2018. BEA recently launched a Bureau-wide initiative aimed at improving its national and regional measures of housing services. Goals of this work include:

- **Streamline and simplify data sources and methods.** Currently, BEA estimates housing services using a variety of uncoordinated data sources, including the decennial census, housing surveys, and consumer price indexes. BEA is evaluating whether to utilize data from a single source—the American Community Survey (ACS) produced by the Census Bureau—for these estimates.
- **Replace discontinued data.** Nonfarm homeowners’ housing services make up about 70 percent of total U.S. housing services. A key data source for measuring these services, the Residential Finance Survey (RFS), was discontinued in 2001. Since then, BEA has relied on other indicators and extrapolation methods. BEA is researching alternative data sources, including the ACS, that could replace the RFS.
- **Harmonize national and regional statistics.** Currently, BEA’s measures of housing services are estimated first at the national level and are then allocated to U.S. states using the best available allocation factors. BEA is considering an alternative approach, made possible with Census data, that harmonizes national and regional measures of housing services by estimating individual housing units and then aggregating those estimates directly to national and state totals without the need for allocations.
- **Verify, supplement, and further improve.** While a new core methodology may rely heavily on data from one source (like the ACS), BEA is researching other data sources (such as big data from Zillow) and alternative methods that could be used for robustness checks, supplemental estimates, and future improvements.

By modernizing the data sources and methods underlying the Bureau’s housing statistics and leveraging alternative data sources, BEA will provide users with a more accurate picture of this important sector of the U.S. economy.



* Strategy in Focus: **Tackle the Challenges of the COVID-19 Pandemic**

The economic effects of the COVID-19 pandemic first appeared in BEA’s datasets for the first quarter of 2020. The changes in consumer behavior, business shutdowns, and supply chain interruptions are embedded in the statistics for all parts of the U.S. economy. The rapid onset of the crisis and the widespread economic consequences present a variety of measurement challenges.

BEA is taking a unified approach to handling operational and statistical issues related to the outbreak, so that decisions on source data, estimation, and communication strategies are executed consistently across the Bureau and throughout the U.S. statistical system.

BEA is committed to transparency around reporting the impacts of the pandemic on the Bureau’s statistics and to advancing work with source data partners on research and analysis related to COVID-19. BEA will also apply the lessons learned from the coronavirus crisis to improve its statistical processes and products during the pandemic and in the years to come.

- **Coordination inside and outside the Bureau.** BEA economists will work with colleagues around the government to understand source data changes and gather insights into estimation methods and data adjustments. BEA will also use internal working groups to monitor data sources, document data quality issues, track and synthesize information about COVID-19 impacts, and analyze specific topics related to the outbreak.
- **Measurement challenges.** The Bureau will explore innovative approaches for addressing statistical complications related to the pandemic, including identifying and vetting alternative indicators and evaluating government legislation enacted to support businesses and households. For example, BEA expanded its use of credit card transactions data to inform estimates of consumer spending before standard data sources were available. (For more information, see “Use Data Science Tools to Improve BEA’s Statistics” on page 7.)
- **Communication and outreach.** To provide transparency around the pandemic’s impacts on the Bureau’s statistics, BEA will continue to execute a multipronged communications plan. This includes leveraging a wide range of mechanisms, like notes in press releases, BEA working papers, blog posts, articles, FAQs, and guidance for users of specific products.

2020

- Coordinate with government partners
- Launch BEA working groups
- Track source data and estimation issues and document actions
- Execute communications plan

2021

- Gather feedback on BEA’s COVID-19 response
- Incorporate input to improve processes, procedures, and products

2022 and beyond

- Continue to enhance BEA’s data products and statistical operations

The economy is changing, as evidenced by the world’s increasing reliance on rapidly evolving technologies, the growing importance of global supply chains, and the expanding complexity of financial relationships. BEA is committed to the continual development of new and more detailed statistics that heighten customers’ understanding of key sectors of the economy and inform decisionmaking by businesses, entrepreneurs, households, and government officials.

Mission Goal

2. Relevance

Develop new and expanded products to measure a dynamic economy.

Objectives

- 2.1. Implement the principles and practices of the Federal Data Strategy.
- 2.2. Build new and expanded datasets to more accurately portray regional and industry trends.
- 2.3. Develop tools and techniques to better value the digital economy and to further capture technology’s role in economic growth.
- 2.4. Explore new ways of understanding and describing the impact of globalization on the U.S. economy.
- 2.5. Launch new and improved data products to better measure economic well-being and growth.
- 2.6. Expand the use of satellite accounts to highlight and provide more information on specific activities or sectors of the economy.

2.1. Federal Data Strategy

Objective: Implement the principles and practices of the Federal Data Strategy.

In 2018, the President’s Management Agenda set forth a new objective to establish and execute a comprehensive Federal Data Strategy. The mission of the Federal Data Strategy, as outlined in the Foundations for Evidence-Based Policymaking Act of 2018, is to fully leverage the value of data for mission, service, and the public good by guiding the federal government in practicing ethical governance, conscious design, and a learning culture. To accomplish this, BEA will carry out improvements according to three guiding principles:

- Build a culture that values data and promotes public use.
- Govern, manage, and protect data.
- Promote efficient and appropriate data use.

Key strategies

- * Continue and expand joint research initiatives.
- * Strengthen BEA’s relationships with peer and stakeholder organizations, both inside and outside the government.
- Establish access to partner agency microdata, following exacting confidentiality requirements. This access will allow BEA economists to coordinate with data partners to analyze variations in survey data, identify reporting issues, and develop new and improved data products. For instance, BEA is working with the Bureau of Labor Statistics (BLS) to secure access to the full set of state-level microdata from the Quarterly Census of Employment and Wages; currently, BEA receives microdata for 35 states and 2 territories. Access to this detailed information for all states and territories will unlock new opportunities for BEA to improve existing statistics and develop new datasets.
- Share data with researchers through the Federal Statistical Research Data Centers network. This partnership provides a convenient way for academics and other researchers to access, link, and analyze BEA’s confidential, company-specific trade and investment data from secure locations across the country. BEA will continue to leverage this process to provide data users with new insights into the U.S. economy.



*** Strategy in Focus: Carry Out Joint Research Projects**

BEA is currently working with statistical agencies in the United States and abroad to combine datasets in ways that support groundbreaking research on topics such as globalization and regional employment and income.

Census data link project. BEA will continue to coordinate with the Census Bureau to link multiple datasets, including BEA data on multinational enterprises, data on international trade in goods and services, and establishment-level Census Bureau data, to develop new international trade statistics that support the analysis of globalization.

BLS data link project. BEA will also continue to collaborate with BLS to combine BEA data on multinational enterprises with BLS data on employment and wages. Initial results of this initiative, released in 2019, provided, for the first time, information on average employment, types of occupations, and how much foreign-owned companies pay their employees compared to domestic companies in states, metropolitan areas, and counties. Ongoing efforts will allow the two agencies to publish more in-depth geographic, industry, and occupational detail on foreign direct investment in the United States for a longer time span.

Bilateral trade asymmetries. BEA will engage with statistical offices in other countries to identify and reduce differences in how the United States and its trading partners measure interrelated trade and investment flows. Understanding variations in concepts and methods that result in these statistical asymmetries will facilitate a better understanding of the economic ties between the United States and its trading partners.

In addition, BEA and its fellow statistical agencies will share institutional knowledge and expertise to expand joint research initiatives, including establishing cross-agency working groups to investigate topics such as improving measures of high-tech goods and services and refining BEA's core statistics by incorporating Census and BLS microdata.

	2020	2021	2022 and beyond
Census and BLS Data Link Projects	<ul style="list-style-type: none"> Study the feasibility of updating research and publishing results on a regular basis Evaluate BLS microdata for potential use in BEA's core accounts 	<ul style="list-style-type: none"> Update and extend research Solicit feedback Refine methods 	<ul style="list-style-type: none"> Publish results Incorporate BLS microdata into core accounts, as feasible
Bilateral Trade Asymmetries	<ul style="list-style-type: none"> Establish international working groups Develop work plans Exchange data and information on methods Complete preliminary analysis 	<ul style="list-style-type: none"> Continue research Publish results 	<ul style="list-style-type: none"> Continue to exchange information and investigate sources of asymmetries

* Strategy in Focus: **Strengthen Partnerships**

As pressures for timelier and more detailed statistics mount, BEA will strengthen its partnerships with other agencies, organizations, and experts, both inside and outside the government. To cultivate these relationships, BEA will:

- **Cast a wide net.** In today's fast-moving, technologically advanced world, BEA will look to experts outside the Bureau to help address economic measurement challenges. These experts can be found across the public and private sectors—from contractors to academics to big data providers to colleagues in other statistical agencies, not only here in the United States but also around the world. BEA will find ways to pool resources and knowledge in creative ways that yield dividends for everyone involved.
- **Build on past successes.** Over the past several years, BEA and the Census Bureau have joined forces to speed up the release of several key inputs that feed into the early estimates of GDP, including data on business inventories, international trade in goods, and services spending. As a result, both bureaus have refined their data products and ultimately reduced revisions to the early GDP estimates by more than \$10 billion, or about 0.3–0.4 percentage point, on average. Moving forward, BEA will continue to share institutional and technical knowledge with its data agency partners to produce better outcomes for the American public.
- **Fill the research pipeline.** BEA has a long history of successfully partnering with outside experts to carry out research that spurs improvements to official government datasets—from working with IBM to develop quality-adjusted prices for computers to producing new measures of research and development with the National Science Foundation to teaming up with academics to craft the first-ever prices for cloud computing services. BEA will continue to look for these types of opportunities.

Partnerships provide an effective mechanism for government agencies and other organizations to share resources and technical knowledge. Looking to the future, BEA will use these types of relationships to enrich the source data underpinning its accounts and expand its suite of data products, including:

- Reaching out to source data providers to address questions and explain methods.
- Continuing work with statistical agencies to accelerate source data for the quarterly GDP estimates.
- Participating in international working groups and technical teams to develop guidelines for measuring emerging sectors of the economy.
- Establishing public-private partnerships to leverage big data resources and expand research on high-tech goods and services.

2.2. Regional and Industry Data

Objective: Build new and expanded datasets to more accurately portray regional and industry trends.

Investors, policymakers, and consumers are demanding increasing amounts of data at more detailed levels to guide their economic decisions. BEA will respond to this demand by offering new and expanded regional and industry data products to further enlighten users' analyses.

Key strategies

- * Improve and expand county-level statistics.
- * Develop and publish statistics on Puerto Rico's economy.
- Release estimates of state-level exports of selected types of services. BEA will test the feasibility of aggregating export sales for certain service types, like legal services and accounting services, for each state. These data have the potential to provide users with a more detailed picture of regional economic activity, help inform the hiring and investment decisions of both domestic and foreign businesses, and guide economic development strategies across the country.
- Modernize industry classifications. BEA will coordinate with the Census Bureau and other stakeholders to update industry classifications and harmonize them throughout BEA's accounts. By improving the consistency of industry terminology and treatments, BEA will make it easier for customers to compare and synthesize BEA's datasets.

Commerce link

Our economists and statisticians are improving Commerce data that American businesses and communities use to plan investments and identify growth opportunities.



* Strategy in Focus: **Update and Extend County-Level Statistics**

To answer the call for richer economic data at the local area level, in 2019, BEA published its first official GDP estimates for the nation's over 3,100 counties. The release of these data marked a critical step in BEA's ongoing plan to expand the information it provides on the health of regional economies.

The county-level data will help local governments target resources to attract investment, will guide businesses in identifying favorable markets for their products or areas where residents have the skills needed for their operations, and will inform households' relocation decisions by highlighting areas with high demand for their skills or lower costs of living.

Moving forward, BEA will gather feedback to improve this dataset and will continue to update and extend the GDP by county estimates.

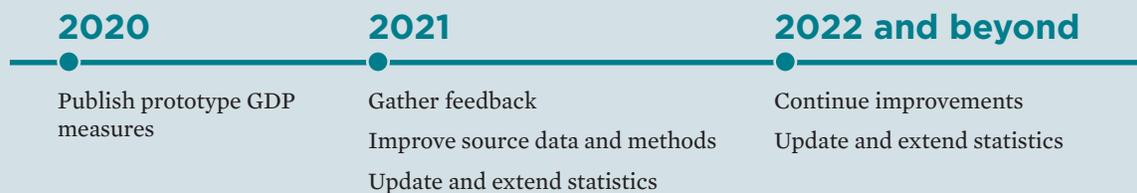


* Strategy in Focus: **Publish Puerto Rico GDP**

BEA recently launched an initiative aimed at producing GDP and related statistics for Puerto Rico.

History. For more than a decade, BEA consulted with the Puerto Rico government to modernize the island’s economic data. Puerto Rico’s financial crisis and the island’s devastation from Hurricanes Irma and Maria in 2017 highlighted a greater urgency to improve these statistics. In 2017, the Congressional Task Force on Economic Growth in Puerto Rico recommended that BEA begin directly estimating GDP for Puerto Rico, as it does for the other U.S. territories and states. In 2018, BEA began laying groundwork for these efforts. BEA reached its first major milestone on this project by releasing prototype data on several key components of GDP—consumer spending, business investment, and international trade in goods—in the fall of 2019.

Next steps. In 2020, BEA will update and refine statistics published in 2019, will develop estimates for the remaining components of GDP (that is, government spending, inventory investment, and international trade in services), and will release prototype GDP statistics. This new dataset will provide users with a better understanding of Puerto Rico’s economic trends and how they compare with data for the nation, states, other U.S. territories, and other countries. The data can also support economic recovery and development efforts, like informing and evaluating actions taken in response to the COVID-19 pandemic. BEA’s long-term goal is to fold Puerto Rico GDP statistics, along with data for the other U.S. territories, into its standard catalog of regional measures.



Introduction

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2.3. Digital Economy

Objective: Develop tools and techniques to better value the digital economy and to further capture technology’s role in economic growth.

In an era when business is increasingly conducted in virtual environments enabled by rapidly evolving technologies, BEA is committed to estimating the digital economy more accurately.

Key strategies

- * Define the digital economy and capture its contribution to U.S. economic growth.
- * Improve the price and volume measures of high-tech goods and services.
- * Estimate the economic impact of “free” digital media and internet services.
- Evaluate the changing role of data. Data are becoming more important in business models and economic activity. Currently, neither the value of data embedded in in-house databases nor the value of data purchased for inclusion in databases is treated as capital formation. BEA will take a close look at how to value the data collected, stored, analyzed, and distributed by private businesses and consider whether the data should be treated as investment assets similar to how databases are treated.
- Serve on international working groups and technical teams to develop and implement guidelines for defining and measuring the digital economy. (For more information, see “Globalization” on page 23.)



Commerce link

Given the speed of economic shifts and technological advances in the 21st century, new statistics are needed to accurately report on the economy.

* Strategy in Focus: Define and Measure the Digital Economy

Through collaboration with international organizations, BEA is developing tools to better capture the effects of fast-changing technologies on the U.S. economy. Over the last couple of years, BEA has released preliminary statistics on the contribution of the digital economy to GDP. While these estimates only cover goods and services that are “primarily digital” (things like network infrastructure, e-commerce transactions, and digital media), they shine new light on this dynamic part of the economy and have become the model for other countries to follow. The latest estimates show that the digital economy accounted for \$1.4 trillion, or about 6.9 percent of GDP, in 2017. In addition, 5.1 million jobs, or about 3.3 percent of total U.S. employment, were connected to the digital economy, with the average worker making about \$132,000.

Looking to the future, BEA plans to expand the information it provides on the digital economy, including developing statistics on the peer-to-peer transactions of the sharing economy (like the activity of ride-hailing companies), tracing the flows of digital services around the globe, valuing “free” digital content (like internet searches, online games, and social media posts), and developing prototype estimates for data as an asset. (For more information on the value of “free” content, see “Update the Treatment of ‘Free’ Content” on page 22.)

2020

- Update digital economy statistics using existing framework
- Research data and methods for new statistics

2021

- Refine and expand digital economy statistics
- Publish prototypes
- Gather feedback

2022 and beyond

- Continue to refine and expand digital economy statistics
- Implement improvements to BEA’s core accounts, as feasible

* Strategy in Focus: **Improve Prices of High-Tech Goods and Services**

An important dimension of BEA's work on the digital economy is finding ways to more accurately account for technological change and rapid rates of product innovation in the prices of high-tech goods and services. In 2018 and 2019, BEA partnered with colleagues at the Bureau of Labor Statistics and the Federal Reserve Board to introduce new quality-adjusted prices for software, medical equipment, and cell phones.

Moving forward, BEA will leverage external collaborations to expand this price index research, including:

- Studying the usefulness of new cloud computing price indexes proposed by an academic partner for potential application in BEA's official accounts.
- Developing and testing prototype price indexes for ridesharing, using a case study approach based on big (ride-level) data to explore how best to compile price indexes for platform-enabled services.
- Launching a multiyear project to examine quality-adjusted price indexes for telecommunications services, building on previous work on cell phones and bundled wireless services.

New information gained from this research will help BEA identify possible improvements for the official estimates of consumer and investment prices and overall technology spending.

2020–2021

- Research data and methods
- Complete prototypes
- Gather feedback
- Incorporate new prices into core accounts, as feasible

2022 and beyond

- Incorporate new prices into core accounts, as feasible
- Research other prices of high-tech goods and services, as feasible

* Strategy in Focus: **Update the Treatment of “Free” Content**

The internet has fundamentally changed the way households consume entertainment and acquire information. Over the last two decades, consumers have downloaded increasing amounts of “free” content, such as Facebook apps, Google searches, and internet games, which are largely supported by advertising revenue or provided in exchange for personal data. To accurately portray the economic impact of online content, BEA will continue to research ways to measure “free” digital media and internet services.

Currently, the value consumers get from posting on social media or playing games online is not directly included in GDP. Instead, such content may be treated as an input to the advertising industry, and advertising, in turn, is treated as an input to the production of other types of goods and services. This method assumes that the costs of these inputs are embedded in the market prices of the goods and services being advertised; however, the additional value to consumers of the entertainment and other internet services is not captured.

Estimating the value of “free” digital media will pave the way for alternative measures of GDP and productivity, allowing government officials, business executives, and consumers to track the growth and importance of the digital economy better and to identify shifting business models more quickly.

2020

- Work with the international statistical community on treatment of transactions

2021

- Develop experimental estimates of “free” digital media to include in existing digital economy estimates and supply-use tables

2022 and beyond

- Explore possibilities for implementing changes to BEA's core accounts

2.4. Globalization

Objective: Explore new ways of understanding and describing the impact of globalization on the U.S. economy.

The world’s economies are becoming increasingly interconnected, as more and more businesses utilize highly complex global networks to produce and distribute their products. BEA will develop new and improved statistics to provide a consistent and up-to-date view of the evolving global economy.

Key strategies

- * Measure global value chains. 
- * Provide a more complete picture of the treatment of intellectual property transactions.
- * Develop statistics on international trade in manufacturing services (including goods for processing).
- * Improve information on international financial transactions.
- Serve on international working groups and technical teams to develop and implement guidelines for producing extended supply-use tables and trade in value-added statistics.

Commerce link

We continually explore the development of new economic statistics and data services to provide a timely, in-depth, and accurate picture of the U.S. economy and its role in the global marketplace.

* Strategy in Focus: **Measure Global Value Chains**

The goods and services that consumers and businesses purchase are increasingly composed of intellectual property, labor, materials, and other inputs from various countries around the world. However, the value that is created at each step in these global value chains (GVCs) is not always apparent from conventional measures of international trade, which capture the gross flows of goods and services as they move around the globe. To measure GVCs through trade in value-added (TiVA) statistics, BEA has embarked on a series of interrelated projects.

Over the last several years, BEA has made notable progress on this initiative. BEA now publishes tables using the framework recommended by international guidelines to provide an integrated presentation of the total supply of goods and services from both domestic and foreign producers and the use of this supply across the U.S. economy. These “supply-use” tables are an essential building block in analyzing global production networks.

BEA continues to collaborate with statistical agencies around the world to improve data on international trade relationships, including working with partners in North America, the Asia-Pacific Economic Cooperation, and the Organisation for Economic Co-operation and Development. These improved datasets paint a more complete, accurate, and nuanced picture of the impacts of international trade on the U.S. economy.

Looking forward, BEA will continue to work toward publishing “extended” supply-use tables that show how the activities of multinational and non-multinational firms differ and how those differences impact the economies in which they operate. BEA will also continue to develop more detailed statistics by linking interrelated datasets from trading partners to trace the flows of goods and services between countries.

Synthesizing information from across these projects will allow users to assess more easily the impacts of globalization on the U.S. economy.

2020

- Develop preliminary extended statistics on the domestic supply of goods and services
- Publish working paper

2021

- Gather feedback on supply tables
- Refine methods for estimating supply
- Begin work toward preliminary extended statistics on the domestic use of goods and services

2022 and beyond

- Gather feedback on use tables
- Refine methods for estimating use
- Publish official extended supply-use tables, as feasible

*** Strategy in Focus: Research the Use of Intellectual Property in Production by Multinational Companies**

In today’s digitally connected economy, companies are readily able to share their research and development (R&D)-related knowledge and easily shift their intellectual property (IP) between subsidiaries around the world. To gauge the effects of these transactions, BEA will explore the connections between the conduct of R&D and the movement of IP assets and how these activities affect the industry classification and location of production for multinational companies.

2020	2021	2022 and beyond
<ul style="list-style-type: none"> Produce research paper on IP within U.S. multinationals Participate in discussions with international organizations on measuring IP in global value chains 	<ul style="list-style-type: none"> Continue research and discussions with international organizations 	<ul style="list-style-type: none"> Assist in updating international guidelines on measuring IP in global value chains

*** Strategy in Focus: Develop Statistics on International Trade in Manufacturing Services**

According to international standards, goods sent abroad for processing without a change in ownership should be excluded from statistics on international trade in goods, rather than including the value of the goods before processing in exports and the value of goods returned after processing in imports. These guidelines recommend that the processing fee charged by the foreign manufacturer be recorded as imported services.

For example, a U.S. manufacturer sends parts to China, where they are assembled into a smartphone, and then the smartphone is sent back to the United States. With the existing treatment, the value of the parts sent to China would be counted in exports of goods, and the value of the smartphone would be counted in imports of goods. According to international guidelines, however, because the U.S. manufacturer owned the parts and the finished smartphone, only the costs associated with assembling the phone should be counted as international trade and recorded in imports of manufacturing services; nothing should be recorded in exports or imports of goods.

Successful implementation of the recommended treatment of manufacturing services requires detailed information on manufacturing processing fees and on the underlying goods transactions. Direct measures of this activity are either not available from U.S. statistical agencies or are incomplete.

Despite these data challenges, BEA will continue to investigate options for implementing the new treatment of manufacturing services. Current efforts focus on preparing indirect measures of this activity, including profiling the types of firms, types of transactions, and types of goods associated with processing trade. In addition, BEA will continue to analyze responses to new survey questions on the value of manufacturing services and on the destination of goods for processing and will conduct research with the Census Bureau to produce estimates of manufacturing services.

2020	2021	2022 and beyond
<ul style="list-style-type: none"> Refine methods Submit working paper to conferences Evaluate responses to new survey questions 	<ul style="list-style-type: none"> Analyze initial results Publish selected statistics Continue research 	<ul style="list-style-type: none"> Continue research Expand coverage of statistics, as feasible



* Strategy in Focus: **Improve Information on International Financial Transactions**

The explosion of new financial arrangements has heightened the need for improved economic statistics for the global financial sector. BEA will expand and improve its measurement and presentation of international financial transactions to better serve the public and to aid analysts in the earlier identification of emerging trends. Key projects include:

- **Recognize cross-border implicit financial services.** Instead of charging explicit fees, many financial institutions are compensated through margins built into the interest rates or spreads on the financial products they offer. For instance, commercial banks may boost the interest rates they charge on loans or reduce the interest rates they pay on deposits rather than charging customers explicitly for services like loan underwriting or check clearing. Likewise, security dealers earn a spread between their buying and selling prices instead of charging an explicit fee. BEA refers to these services as “implicit financial services.” The Bureau will extend its long history of work in this area by preparing and implementing new methods for measuring cross-border transactions in implicit financial services, including banking services and dealer services.
- **Compile statistics on the international investment position by currency.** To provide statistics on the currency composition of the international investment position to the public and fulfill international reporting requirements, BEA will expand its direct investment surveys to collect additional detail for intercompany lending and will work with its data partners to obtain more information on the currency composition of portfolio debt securities.
- **Update the treatment of special purpose entities.** Domestic and foreign businesses are increasingly routing investment through offshore holding companies, complicating the analysis of international investment. A better understanding of this practice will allow BEA to separately identify these entities in its direct investment statistics, to reclassify data according to where investment ultimately leads to production, and to provide a new perspective on the impacts of globalization.

Expanding and improving BEA’s measures of international financial transactions will bring the Bureau’s economic accounts into closer alignment with international guidelines and will more accurately depict the global economic story.

	2020	2021 and beyond	
International Trade in Implicit Financial Services	Introduce statistics into BEA’s core accounts	Gather feedback Refine methods Implement improvements, as feasible	
International Investment Position by Currency	Research source data and methods Expand BEA’s surveys Engage data partners	Publish statistics Provide data to international organizations, as requested	
	2020	2021	2022 and beyond
Treatment of Special Purpose Entities (SPEs)	Develop and refine criteria for identifying SPEs in BEA’s international investment statistics Research source data and methods for reclassifying international investment by the location of production	Publish statistics on investment related to SPEs Gather feedback on and refine methods for reclassifying international investment by the location of production	Evaluate the feasibility of producing experimental statistics that reclassify international investment by the location of production

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2.5. Economic Well-Being and Growth

Objective: Launch new and improved data products to better measure economic well-being and growth.

BEA recently embarked on an initiative to extend its work in areas outside traditional economic accounts measures like GDP. Developing such estimates will improve the relevance of BEA’s datasets for policymaking and will increase the public’s understanding of economic well-being and growth.

Key strategies

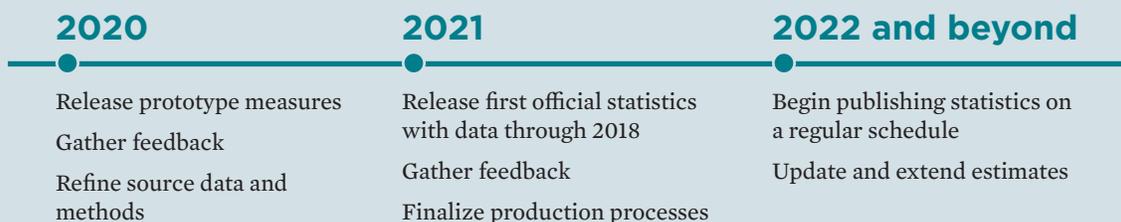
- * Develop and release official estimates of the distributions of income and consumption. 
- * Publish and update a set of measures of economic well-being and long-term economic growth based on existing BEA statistics.
- Update estimates of household production. BEA’s Household Production Satellite Account measures the value of unpaid work done in the home—things like cooking, cleaning, and caring for children. Such unpaid work is not included in BEA’s core statistics, because it is not tracked through marketplace transactions. Measuring these activities provides users with significant insight that complements GDP and offers a more nuanced perspective that goes beyond the boundaries of the market economy. BEA will formalize the production of its estimates of household production by exploring the feasibility of updating the satellite account annually, highlighting statistics on a dedicated section of the BEA website, and streamlining the production process.
- Participate in international work on income distribution. BEA will continue to participate with the international statistical community to develop distributional estimates that are fully consistent with national accounting concepts for income, consumption, and saving.

* Strategy in Focus: **Publish Official Income Distribution Estimates**

BEA’s headline statistics—such as GDP, gross domestic income, and personal income—show how the economy is doing overall, for example, by reporting the amounts that consumers are spending, businesses are investing, companies are profiting, and workers are earning. However, these data points do not give an indication of how the “economic pie” is divided up among American households.

To provide this information, BEA is compiling a new set of statistics that takes one of its primary economic indicators—total U.S. personal income—and measures how it is distributed across households in different income groups. Building on over a decade of BEA research and innovation, the Bureau will bring in new data sources, construct a consistent historical time series, and begin releasing estimates on a regular schedule.

This dataset will offer more timely and comprehensive insights into how U.S. households share in overall economic growth and will provide government officials with a new tool for targeting resources and driving economic development.

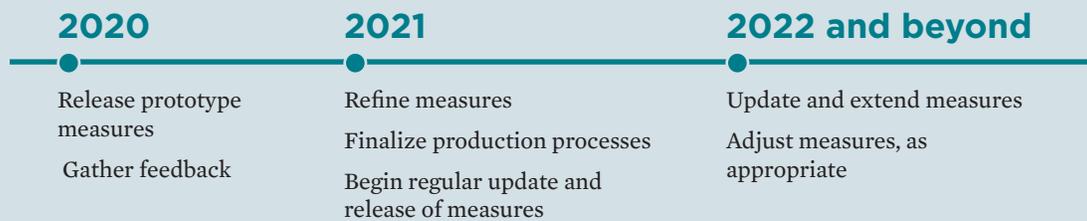


* Strategy in Focus: **Highlight Measures of Economic Well-Being and Growth**

BEA's detailed economic accounts provide a wealth of information that can stretch the public's understanding beyond the picture of the economy captured in GDP, personal income, and other aggregate statistics. BEA will repackage estimates from its core accounts with data from statistical agency partners in ways that provide new perspectives on economic well-being and the distribution and long-term growth of the economy. Information that will be featured includes:

- **Economic well-being measures.** Growth in GDP and GDP per capita, household net worth as a share of disposable personal income over time, and inflation and employment trends.
- **Industry, regional, and distributional statistics.** Real GDP growth by industry, real personal income per capita by state, and distribution of personal income across households.
- **Long-term growth indicators.** Trade balances and U.S. budget deficits over time, net saving and net investment as percentages of GDP, and trends in U.S. business cycles.

Highlighting information that is already included in BEA's datasets or that can be easily derived from existing statistics will give public and private decisionmakers a fresh look at trends in economic well-being and the drivers of economic growth.



2.6. Satellite Accounts

Objective: Expand the use of satellite accounts to highlight and provide more information on specific activities or sectors of the economy.

Satellite accounts fuel the expansion and development of BEA's core set of economic accounts and provide alternative economic perspectives, which are of keen interest to the user community. BEA will expand the use of satellite accounts to provide a framework for testing experimental measures and for offering alternative packaging of existing data to evaluate a specific sector or commodity.

Key strategies

- * Improve the Health Care Satellite Account.
- * Research the development of new statistics that highlight the contribution of space-related activities to U.S. economic growth.
- Release official Outdoor Recreation Satellite Account statistics by state and investigate the feasibility of estimating outdoor recreation activities for earlier periods.
- Improve and expand economic statistics for coastal areas. BEA will coordinate with the National Oceanic and Atmospheric Administration to develop new tools for understanding the economic importance of ocean-dependent activities on the U.S. economy. These data will assist public and private decisionmakers by identifying the most effective maritime investments as well as calling out alternative uses of these natural resources.
- Introduce statistics to measure the economic impact of small businesses. BEA will develop a Small Business Satellite Account to measure the economic activity generated by small businesses and to track the overall growth and health of America's small business sector.



* Strategy in Focus: **Improve Health Care Statistics**

Health care spending has more than doubled over the last 15 years and now accounts for about one-sixth of GDP. To better measure spending trends and treatment prices, in 2015, BEA began releasing sets of statistics that detail U.S. health care spending by the diseases being treated (for example, cancer or diabetes) instead of by the types of goods and services purchased (such as doctors’ office visits or prescription drugs).

These supplemental datasets—collectively called the Health Care Satellite Account—give policymakers, researchers, and the public another way of understanding the economics of health care. For example, disease-based statistics can be used to analyze the impacts of external shocks like the coronavirus pandemic, highlighting shifts in disease spending related to a wide range of drivers—such as increases in virus cases and decreases in patients seeking treatment for “nonessential” medical services.

Over the last few years, BEA has continued to improve its data offerings on the health care sector—from leveraging massive datasets that cover millions of enrollees and billions of medical claims to vastly expanding the level of detail published on specific medical conditions. Looking at spending by disease is just one step toward BEA’s goal of developing a comprehensive account that allows for better assessment of the value in health care spending. Future improvements to BEA’s health statistics include:

- **Accelerating the release of annual statistics for the Health Care Satellite Account.** Currently, these vital statistics lag by about 2 ½ years. Speeding up the release of data will provide the public with more timely and cohesive data on the size and growth of health care spending.
- **Introducing enhancements to the account.** Improvements include closing coverage gaps (by incorporating claims data for the Medicaid population and expanding the account to include nursing home spending) and producing estimates that link spending by type of disease to spending by type of health care product.
- **Improving regional price indexes by leveraging large claims databases.** Currently, the regional program of BEA generates price index estimates using information from BLS. The sample size for the health care sector from the BLS data is relatively small, leading to increased volatility in the regional price estimates for this segment. As an alternative to the BLS-based statistics, BEA will leverage the billions of health care claims used in the Health Care Satellite Account to improve the regional price indexes.
- **Laying the foundation for developing quality-adjusted price indexes.** BEA will move forward with research linking changes in the costs of treating diseases to improvements in the quality of treatment, including advances that lead to better health outcomes. Without methods to adjust for quality and to attribute changes in quality to specific medical interventions, the value of spending on medical care cannot be accurately measured.



* Strategy in Focus: **Develop New Statistics on the Space Economy**

The great promise of space exploration has yielded significant dividends for the U.S. public—stimulating economic growth, bolstering national security, and improving the well-being of all Americans. In the last few years, a new race to space has emerged. Governments around the world are funding space programs at levels not seen since the 1960s, with the United States accounting for a large share of the global space budget. In addition, technological advances are driving new opportunities in space, particularly business opportunities.

To maintain their competitive edge, U.S. space businesses require data about the types and size of economic activity connected to space commerce and the linkages throughout the U.S. economy and around the globe. To meet this need and assess the evolving impact of the space economy, BEA will research the possibility of developing a new Space Economy Satellite Account, with emphasis on capturing the value of the expanding commercial space segment. This new account will systematically measure the contribution of space-related activities to U.S. economic growth, employment, and compensation, pursuant to funding and resources.

BEA's existing accounts include activity associated with the space economy—like private investments in earth observation equipment and weather satellites, research and development related to global navigation satellite systems, salaries of aerospace engineers, and international trade in space-related high-tech goods and services. A new satellite account will allow these activities to be separately identified, tracked over time, and analyzed in ways not currently possible.

In the end, business decisionmakers, policymakers, and the American public will have meaningful, easy-to-access, user-friendly statistics that detail the importance of this evolving sector of the U.S. economy.

2020

- Gather feedback on definitions and industries
- Publish a *Survey of Current Business* article that presents existing definitions and estimates of the space economy
- Research data sources and methods
- Release prototype estimates, as feasible

2021 and beyond

- Gather feedback
- Update and extend account, as feasible

In today's rapidly shifting, digitally interconnected world, investors, policymakers, and consumers demand timelier and more in-depth data to guide their economic decisions and expect better ways to extract, analyze, and visualize those data. BEA's effectiveness as a statistical agency is inexorably tied to its ability to provide timely, meaningful information to customers in user-friendly formats. To meet this challenge, BEA is developing innovative tools that make its data more accessible and easier to use. In addition, the Bureau is employing new technologies to reach diverse audiences and is gathering user feedback to inform ongoing improvement efforts.

Mission Goal

3. Customer Service

Improve customer understanding, access, and use of BEA's products.

Objectives

- 3.1. Improve and enhance the dissemination of BEA's statistics to respond to expanding communication channels and customer bases.
- 3.2. Increase outreach to educate new and existing customers about BEA's statistics, to promote the Bureau's data to a diverse audience, and to solicit user feedback.

3.1. Dissemination

Objective: Improve and enhance the dissemination of BEA's statistics to respond to expanding communication channels and customer bases.

BEA will continue to explore and leverage the latest available technologies to ensure that data are disseminated effectively and efficiently to a wide array of customers. BEA will strive to push increasing amounts of data through the website in ways that are easily accessible and user friendly. BEA will also standardize and streamline its products to help users more seamlessly navigate BEA's offerings.

Key strategies

- * Launch new and improved website functionality.
- Integrate advanced graphics into publications and releases.



Commerce link

More than 30 million U.S. business enterprises; 325 million Americans; and 93,000 tribal, state, and local governments rely on our data to make informed decisions.

* Strategy in Focus: **Improve the BEA Website**

The BEA website is the primary mechanism by which customers access BEA's data and information on estimation methods and the underlying economic theory. BEA will enhance and modernize the website to ensure that content is available in easily accessible and user-friendly formats.

In 2018, BEA launched a more intuitive user experience and website architecture centered on the Bureau's products. BEA will build on this framework to introduce new and improved website functionality, including streamlining dissemination infrastructure and enhancing the customer experience. Moving forward, BEA will deploy new technologies to collect and distill user input and will leverage this feedback to design, implement, and test website improvements.

2020

- Improve the dissemination infrastructure for news releases
- Upgrade the information technology backbone for the interactive applications on the BEA website
- Enhance email contact forms to streamline data collection and reporting
- Gather customer feedback

2021 and beyond

- Develop reporting functionality on inquiries gathered through the website
- Gather customer feedback
- Conduct quarterly review of customer satisfaction survey to inform site changes
- Continue to streamline dissemination infrastructure and enhance the customer experience

3.2. Outreach and Feedback

Objective: Increase outreach to educate new and existing customers about BEA’s statistics, to promote the Bureau’s data to a diverse audience, and to solicit user feedback.

BEA’s statistics are only as useful as data users’ ability to access, use, and understand them. The Bureau will continue its proactive approach for helping customers retrieve, apply, and interpret its data. BEA will strive to identify the needs of users and to tailor its outreach accordingly, ensuring that the Bureau’s products reach new audiences with varying levels of knowledge. In addition, BEA will use outreach opportunities to collect customer feedback and will apply this input to inform its data production, dissemination, and communication practices.

Key strategies

- * Harness online content and social media to connect with and educate data users.
- * Solicit customer feedback to enhance outreach efforts and to improve BEA’s data products and services.
- Target user groups. BEA will engage users through in-person and/or virtual events and data workshops, will leverage professional conferences to expand knowledge of BEA products, and will promote BEA’s datasets to university students to expand information sharing and to build relationships.



Commerce link

We will increase awareness of Commerce data and partner with the private sector to increase its capacity to scale and deliver data services, thus improving the public’s ability to visualize and leverage our data.

* Strategy in Focus: **Harness Online Content and Social Media**

The internet, social media, online apps, and multimedia tools offer BEA vast opportunities to connect with and educate data users. BEA will leverage these resources to enhance communication with the public, including:

- Launching an Instagram account to educate users on specific topics related to BEA’s data.
- Releasing videos and hosting in-person and online information sessions that help users and survey respondents better understand BEA’s data products and surveys.
- Publishing blog posts that describe BEA’s statistics and explain how BEA’s data can be used to inform decision-making by businesses, government officials, and households.
- Providing regular snapshots of BEA’s datasets to the public through Twitter and Instagram.

2020

- Launch Instagram account
- Release video on how to navigate BEA’s interactive data and synthesize the three dimensions of GDP
- Build on “BEA in the Classroom”

2021 and beyond

- Further enhance Instagram and Twitter content
- Release videos and blogs explaining BEA’s data products
- Build on “BEA in the Classroom”

* Strategy in Focus: **Leverage Customer Feedback**

Feedback from customers provides a scorecard for evaluating BEA's existing products and services and a roadmap for developing new and improved datasets. BEA will use a wide range of mechanisms to collect input from data users, including:

- **BEA Advisory Committee meetings.** BEA will hold semiannual meetings to tap into outside expertise in order to improve BEA's existing and future products as well as to gain insights into the needs of BEA's expert users.
- **BEA website.** BEA will analyze usage statistics and other metrics to steer communication improvements and outreach efforts.
- **Data workshops.** BEA regularly conducts data workshops with the media, students, businesses, and other customers. In these workshops, BEA will continue to solicit feedback on its products and ask users about data needs that may not be met currently.
- **Educational sessions.** The Bureau will utilize in-person and online sessions, as appropriate, not only to provide useful information on BEA's statistics to a wide swath of data users but also to give participants the opportunity to ask questions and to provide BEA staff with a forum for collecting customer feedback.
- **Customer meetings.** BEA will meet with customers to request feedback on specific topics. For instance, the Bureau can customize special data packets for specific conferences. Prior to a conference, BEA may solicit feedback on the packets from a targeted group of customers and adjust the materials accordingly. BEA will use this model to gather feedback on new data products and changes to the BEA website.

BEA will employ input gathered through these methods to assess its communications efforts, track the emerging needs of customers, and improve its statistical releases and data products.

For BEA to successfully carry out its statistical mission, the Bureau must build its human capital and technological capacities. From a personnel standpoint, this means recruiting the specific talent and skills needed to address emerging data issues, training staff in a diverse range of topics—from foundational economic theories and statistical approaches to cutting-edge data management and analytics techniques—and bolstering employee engagement and satisfaction to retain BEA’s internal knowledge base. In addition, maintaining an innovative and agile information technology (IT) infrastructure and establishing appropriate security and operational safeguards ensures that BEA is poised to readily predict and respond to customers’ evolving needs.

Mission Goal

4. Operational Excellence

Strive for operational excellence to meet mission-critical goals in a cost-effective and efficient manner.

Objectives

- 4.1. Recruit, retain, and engage a high-caliber workforce.
- 4.2. Manage and modernize BEA’s IT infrastructure and security protocols to maximize efficiency in the production of the Bureau’s statistics and to protect the integrity of BEA’s datasets.
- 4.3. Ensure the continuation of mission-essential functions in an emergency.

4.1. Recruit, Retain, and Engage Staff

Objective: Recruit, retain, and engage a high-caliber workforce.

BEA's greatest strength is its employees. BEA will uphold its reputation as one of the world's leading statistical agencies by continuing to attract, develop, and retain a talented, diverse, and inclusive workforce that is driven to improve BEA's statistics and promote the OneBEA vision. To increase employee satisfaction, the Bureau will build on the existing foundation of what its staff values about BEA, while regularly checking in with personnel to gauge satisfaction and engagement.

Key strategies

- * Promote workforce development and information sharing.
- * Support diversity and inclusion efforts.
- * Implement Enterprise Services and automation.
- Enhance employee recruitment and onboarding efforts. BEA will improve the diversity and quality of its candidate pool through career fairs, campus recruiting, and other hiring efforts. In addition, BEA will expand the OneBEA onboarding program, which provides new employees and their supervisors with resources, tools, sponsors, and events designed to equip and engage new employees as they begin their careers at BEA.
- Leverage BEA's Project Share program. Project Share provides developmental job opportunities by introducing BEA staff to other program areas and different types of work around the Bureau while they are still working in their current positions.



Commerce link

Employee engagement is the emotional commitment employees have to the organization and its goals... All employees should know their work matters.

*** Strategy in Focus: Promote Workforce Development and Information Sharing**

Recognizing the need to innovate and adapt, BEA will prioritize and promote workforce development and information sharing. In addition to providing training opportunities inside and outside the Bureau, BEA will offer several ongoing developmental opportunities to employees, including mentoring programs for junior staff, aspiring leaders, and new supervisors. BEA will also participate in these types of programs with its statistical agency partners.

BEA workforce development activities include:

- OneBEA sessions that provide an interactive and engaging environment for BEA employees to learn more about the Bureau, its products, and its customers.
- Management and leadership workshops, including annual training for new supervisors.
- Communication skills training, including seminars on generational differences and how to accommodate different work styles.
- Cross-estimate training to ensure that the Bureau is poised to handle attrition and emergencies.
- Bureau-wide presentations on BEA’s products, including using the BEA intranet to host a national accounts basics training program and to promote training modules on the international guidelines for national accounts.
- Training on advanced data analysis and programming skills.

In addition, BEA will continue to promote the free exchange of information among its staff by encouraging analyst-to-analyst communications, holding forums to discuss cross-cutting issues, and expanding meetings between work groups who share data. BEA will also facilitate formal opportunities for employees to share their accomplishments with the entire Bureau and the broader statistical community.

2020	2021	2022 and beyond
Conduct 90-day leadership development review to align training offerings to developmental needs Improve and expand developmental opportunities, as feasible	Conduct agency-wide training needs assessment to reassess training needs Improve and expand developmental opportunities, as feasible	Assess progress made toward increasing information sharing and improving advanced programming skills in the workforce Improve and expand developmental opportunities, as feasible

Introduction

Accuracy and Reliability

Relevance

Customer Service

Operational Excellence

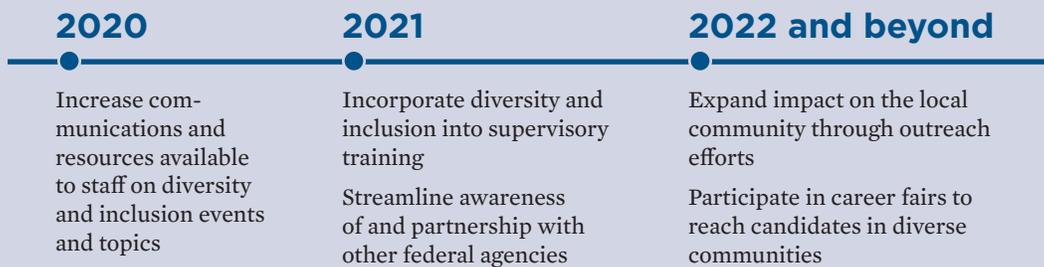
*** Strategy in Focus: Support Diversity and Inclusion Efforts**

BEA is committed to promoting an inclusive culture that values, fosters, and leverages the power of its diverse workforce to provide the best possible products and service to its customers. Exceptional outcomes are produced only when people of diverse perspectives and backgrounds work together and share their knowledge and experiences in a supportive and respectful environment.

BEA will engage staff through its Diversity and Inclusion Council to craft policies and practices that harness the Bureau’s full potential and strengthen both the agency’s mission and the staff that carries out that mission. Goals of the Council include:

- Develop and implement more comprehensive diversity and inclusion initiatives.
- Educate staff on the importance of diversity and inclusion and provide an easily accessible catalog of related resources.
- Help identify and eliminate barriers to recruitment or advancement.
- Encourage managers to retain and engage a diverse and empowered workforce.

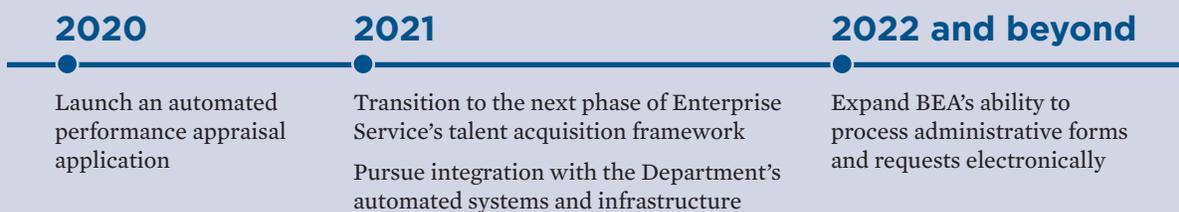
Achieving these goals will enhance BEA’s ability to fully utilize the talent and skills of its staff, making BEA a workplace where inclusive diversity is not just a goal but a reality.



*** Strategy in Focus: Implement Enterprise Services and Automation**

BEA will implement Enterprise Services, an effort to provide shared administrative services across the Department of Commerce, and automation to the fullest extent possible. Both efforts will increase efficiency and enable an increasingly geographically dispersed workforce to perform its functions during emergency events.

As part of the Department’s shift to shared services, BEA will leverage new partnerships and tools to enhance the provision of administrative services to supervisors and staff. In addition, BEA will implement a modernized platform to automate internal processes and workflows in order to facilitate information sharing, remote access, and ultimately improve mission-support functions.



4.2. Information Technology Modernization and Security

Objective: Manage and modernize BEA's IT infrastructure and security protocols to maximize efficiency in the production of the Bureau's statistics and to protect the integrity of BEA's datasets.

BEA will maintain highly flexible, adaptive, secure, and cost-effective IT systems that can respond quickly to changing data processing and dissemination needs and evolving cyberattacks. BEA will also continue to modernize processing systems to realize efficiency gains that will allow staff to dedicate more time to analyzing and improving BEA's products.

Key strategies

- * Update and expand the Bureau's data processing systems.
- * Maintain a high level of IT security.
- Transition BEA's IT infrastructure to a cloud computing environment, upholding the Bureau's requirements for the integrity and timeliness of its economic data and protecting the confidentiality of company-level source data. BEA will begin moving its data processing systems, support applications, and information warehousing to the "cloud" and will investigate the use of "private cloud" technology to share data with other statistical agencies.



Commerce link

Technology modernization will allow us to shift resources from supporting back-office functions to improving the customer experience.

Relevant network security policies and architectures are being updated to focus on both network and application security. Incident detection and prevention capabilities are being modernized to address the latest threats and respond to vulnerabilities.

* Strategy in Focus: **Modernize Processing Systems**

BEA will continue to update and expand the systems it uses to process and store economic data, including:

- Integrating the national and industry processing systems in support of near-simultaneous releases of GDP at the national level, by industry, and by state. (For more information, see “Accelerate Releases” on page 12.)
- Continuing to update and develop the international accounts processing systems, including harmonizing underlying calculations and creating user tools to review and edit data.
- Continuing to modernize the regional estimation and dissemination systems to improve review and analysis, enhance efficiency, support integration with other program areas, and promote the development of new regional statistics.
- Integrating a source data module into BEA’s internal data hub and building vintage histories for data stored in the hub. Ultimately, analysts will pull their source data from this single, centralized location and will be equipped to run revision analyses readily and easily.
- Expanding the use of BEA’s internal computing platforms to transfer data quickly and accurately between program areas and to perform data transformations and analyses more efficiently.

2020

- Develop architecture and data structures to integrate the national and industry production systems
- Implement new methods into the regional production systems
- Expand survey processing to include additional functionalities
- Utilize the OneBEA data system to enhance integration of BEA’s processing systems

2021 and beyond

- Complete ongoing modernization of BEA’s estimate production systems
- Provide ongoing architecture and data structure support for the industry-national integration

* Strategy in Focus: **Continuously Evaluate and Enhance BEA’s IT Security**

Threats, and the resulting risks, to the confidentiality and integrity of BEA’s data are constantly evolving. To meet this challenge, BEA has developed an IT security strategy based on ongoing risk assessments and management.

BEA will improve its IT security measures by:

- Upgrading security operations that support BEA’s network infrastructure.
- Implementing new controls of the Department of Homeland Security’s Continuous Diagnostics and Mitigation initiative to ensure that unauthorized devices do not connect to BEA’s network.
- Coordinating information flows between BEA and the Department of Commerce on issues related to IT security.
- Conducting ongoing security reviews of the Bureau’s high-value IT assets.
- Continuing to evaluate and enhance BEA’s IT security controls in response to new threats and new federal laws and regulations.

BEA will continue to protect the integrity of the Bureau’s IT systems and of the data it processes, transmits, and stores by maintaining appropriate security protocols.

4.3. Emergency Planning

Objective: Ensure the continuation of mission-essential functions in an emergency.

To accomplish its mission, BEA will ensure that its operations are performed efficiently with minimal disruption, especially during an emergency. While the severity and consequences of an emergency cannot be predicted, effective contingency planning minimizes the impact on BEA's mission, personnel, and facilities.

Key strategies

- * Execute a continuity of operations program. 
- Maintain and upgrade disaster recovery systems, including expanding LAN (local area network) backup capabilities to keep pace with data storage needs.

* Strategy in Focus: **Execute a Continuity of Operations Program**

BEA's continuity of operations program (COOP) provides planning and program guidance to ensure that the Bureau can conduct mission-essential functions under adverse conditions.

If BEA's primary facility is unusable for any reason, the program provides the roadmap for employees to work from remote locations, while maintaining communication between BEA and key leaders at the Department of Commerce, and subsequently facilitates the return of employees to either the primary location or to a new site when the emergency conditions have been resolved.

The coronavirus pandemic provided BEA with an unparalleled opportunity for a full-scale evaluation of its emergency planning processes and contingencies. The outbreak touched nearly every aspect of how BEA staff carries out its work—with mandatory telework, increased schedule flexibilities, and the expanded use of online conferencing and virtual collaboration tools. BEA stood up to the challenges of the pandemic by fine-tuning IT systems and support functions and opening new communication channels with colleagues, source data providers, and customers. Through all of this, BEA will stand in an even stronger position to respond to global and local emergencies.

Building on the lessons learned from the COVID-19 crisis, each year, BEA will:

- Conduct training for the Emergency Response Group—the primary team responsible for coordinating BEA's ongoing operations in an emergency—to practice COOP activities.
- Evaluate the effectiveness of COOP strategies and implement improvements.
- Review all COOP plans and documents and update them, as appropriate.

BEA will also participate in emergency preparedness meetings with the Department of Commerce and in national disaster recovery exercises.

Bureau of Economic Analysis
2020 Strategic Plan

June 2020

