Integration Phase One Plan for the Census Bureau's Four Key Initiatives

Transformation

By Michael Thieme September 2022

INTRODUCTION

The U.S. Census Bureau's mission is to provide quality data on the nation's people and economy. These data are used by policymakers, researchers, businesses, and the public to answer both simple questions like: "What's the population of Utah?" and more complex ones like: "How are declining business start-up rates related to living standards?" We have historically answered those questions by conducting censuses and surveys and publishing the results. While critical, censuses and surveys alone can no longer answer these questions completely or quickly enough to satisfy the modern appetite for information.

At the same time, our society produces vast amounts of data that are directly related to the Bureau's mission from a multitude of sources and much of it in real time. These nontraditional (for official statistics) data sources have great potential to help the Census Bureau vastly improve the information it provides data users on the characteristics and wellbeing of the nation's people and businesses However, without significant modernization of the Census Bureau's approach, it will not be possible to leverage this unprecedented amount of data and provide the timely, high-quality products our data users need.

This plan describes the early steps in a new era for the Census Bureau. It describes our challenges and proposes new ways in which we will take advantage of modernized data collection, storage, and processing capabilities. It describes cutting-edge linking of survey, census, and third-party data; modernized data processing; quality product creation; and innovative dissemination to the public. Our focus as an agency must no longer be simply to field surveys and censuses and publish the results, but rather to shift to combining data science with traditional survey methods, elevating and diversifying our data products, and placing data at the center of our approach.

IMPLEMENTING A DATA PRODUCT-FOCUSED ECOSYSTEM

We need to adjust our focus from managing surveys and censuses to managing an ecosystem of data collection, processing, and dissemination designed to deliver the data products that best address the questions our data users have—both simple and complex. To build the foundation for this approach, the Census Bureau has created four integrated enterprise initiatives.

Enterprise Data Lake (EDL)

The EDL is the central hub of our modernization efforts from a data processing and computational perspective. Built in the cloud to allow for scalability and the use of a cloud-native software stack and modern processing tools, the EDL is the Census Bureau's primary location for collected and ingested data. The EDL also provides both analytical and operational processing capabilities to allow for a better flow between ongoing research and current operations. From the EDL, products can be created and published to our dissemination platform— CEDSCI (Census Enterprise Dissemination Services and Consumer Innovation).



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Frames

The Frames Program envisions a growing variety of linked datasets within the EDL. While some of these datasets already exist as standalone entities at the Census Bureau (e.g., Master Address File [MAF], Business Register [BR]), the Frames approach will collocate these and any number of curated datasets and provide an easy and efficient way to link them for purposes both familiar (e.g., providing a tailored survey frame) and unanticipated (e.g., answering a new question about jobs and COVID vaccination rates). Centralization and "linkability" will increase efficiency, reduce duplicative efforts to maintain and manage data, and greatly expand our capacity to answer critical questions about the population and economy at multiple geographic scales. These linked, augmented, and continuously updated datasets will provide a more comprehensive means for maintaining and updating the inventory of our nation's addresses, jobs, businesses, people, and other linked data. They will be used as improved collection and sampling frames for our censuses and surveys with augmented information from the linked sources.

Further, these improved datasets will allow for the downstream creation and use of new data that cannot easily happen within our current ecosystem.

Data Ingest and Collection for the Enterprise (DICE)

Providing a modern platform for both data collection and ingest, DICE will be a key entry point for data into the Census Bureau for subsequent transfer, storage, and use in the EDL. DICE will refresh legacy field, online, and paper data collection technology with updated, flexible capabilities that reinforce the new operations and data ecosystem approach. DICE will also provide much needed functionality to interact with external data ingest, frames, and other modern data processing capabilities. DICE will leverage both operations research and data science techniques to enable more efficient operations and adaptive survey design. DICE will enable flexible scaling to support the diversity of the Census Bureau's data collection operations, from rapid, lightweight surveys to the decennial census, without the need for costly updates or system rebuilds. Many of the key functions provided by DICE were developed and successfully deployed in the 2020 Census, providing a strong foundation for further development and use by the entire Census Bureau.

Census Enterprise Dissemination Services and Consumer Innovation (CEDSCI)

As the Census Bureau's primary platform for data dissemination, CEDSCI will provide the gateway to our information for the public. As new data products are produced in the EDL with collected, ingested, and linked data, CEDSCI's standardized platform will allow the Census Bureau to provide those products quickly. Allowing for discovery of data products and new visualizations and renderings of data, CEDSCI will provide a scalable solution for long-term data dissemination and a better experience for the user.

Because CEDSCI has been built to enable easier data discovery for our external data users via data. census.gov and census APIs, reusing and repurposing existing CEDSCI code may also provide a distinct benefit to the integration of the four key initiatives by providing a similar data discovery capability to internal Census Bureau users. These capabilities will be particularly useful in the Frames context—for example, to discover and link diverse datasets within Frames that can quickly enable new survey frames, analysis questions, or innovative data products. We propose using CEDSCI in this way in keeping with a "build once, use many times" approach.

The Census Operations and Data Ecosystem (CODE)

Integrating the four pillars described above into a unified enterprise approach will not only enable the Census Bureau to continue serving data users with traditional survey and census products, it will also make possible an expanded role where highly discoverable and easily linkable data can accurately answer more questions on a shorter timeline than ever before. The building of this integrated system of systems—CODE—represents a key element in the Census Bureau's strategy to anticipate and prepare for a world driven by and dependent on accurate, timely, and relevant data.

During the COVID-19 pandemic, data users of all types were hungry for information on the impact it was having on the people, systems, and economy of the United States. In this case, the Census Bureau was able to respond quickly by creating and fielding the Household Pulse Survey. This survey and others developed since continue to provide a much-needed view of key aspects of the pandemic. Despite the groundbreaking approach that delivered highly relevant data quickly, the Household Pulse Survey had some common limitations shared by many surveys, including low response rates and significant margins of error. In a future with CODE in place, the Census Bureau's options for modernized data collection; storage; advanced linking of survey, census, and third-party data; and modernized data processing will be greatly expanded. If a similar crisis were to occur, CODE would enable more robust, rapid, and accurate data products—possibly without the need for a survey.

Similarly, CODE will provide myriad data linking capabilities using secure and confidential data sources for evidence-building questions like: "Was poverty reduced where a government business incentive program was offered?" Using a combination of survey methodology and data science techniques, CODE could help quickly answer questions like:

- Which businesses relocated to the neighborhood or opened new establishments where incentives were offered?
- Did the business(es) hire workers from within the neighborhood? When were they hired?
- Where do those who work in the community reside? How many reside within the neighborhood? How many commute from other locations?
- Did existing businesses hire additional workers? How have businesses' revenues changed?
- How many new businesses were established that address the needs of workers?
- Where do individual residents of the community spend their money? In other words, assuming increased salaries and wages among residents as a result of investment, are dollars staying in and circulating within the community, or are residents going elsewhere to spend money?
- If the poverty rate declined and median income increased, how is that related to gains on the part of longer-term households or due to higher income households moving in (i.e., gentrification)?

CHALLENGES

A House Divided

Building a modern, integrated, processing ecosystem via the four enterprise initiatives presents many challenges considering the Census Bureau's historical siloed approach to doing business. The Census Bureau has long been a production agency with success tied to methods that involve manual processes like paper-based surveys, telephone surveys, and field-intensive data capture procedures. Operations continue to be controlled by rigid timelines for the release of survey- and censusbased data products that often reflect the needs of a step-by-step, linear production cycle. The continued protection of segregated, specialized processing within our siloes, while routine, familiar, and safe, represents the single most challenging barrier to the vision and innovation that a unified, integrated operations and data ecosystem can make possible.

Management Vision and Commitment

A Census Bureau IT Mission Assessment & Strategy completed in June 2021 stated, among other recommendations, the following:

- We must manage our people, process, technology, and financial resources more effectively and efficiently.
- We need full management commitment to successfully deliver new technology and transition away from legacy approaches.

Unfortunately, the incentive structures at the Census Bureau described above can provide a missionfocused argument for leaders in different areas to "wait on the sidelines" looking for signs of success or failure before committing to the new direction. If leaders take this approach, there is little chance of success for the four initiatives and a modernized operations and data ecosystem.

With full management commitment, however, this plan proposes that there is little question the Census Bureau has the resources and talent to move effectively in a new, data-centric and innovative direction. There is risk involved, but management commitment correlates strongly with risk reduction. Shared risk among fully committed leaders further increases the probability of success. The question should not be "When will I have enough information on whether to commit to this direction?" Rather, it should be "How do I work together with the full Census Bureau team to make this work?"

Proprietary Technology

Over time, the Census Bureau has developed a portfolio of IT systems based largely on closedsource, proprietary technologies. These systems have been successful, but often come at a heavy cost—both for licensing and for the limitations they can impose on internal Census Bureau innovation. When systems are built with proprietary products, the Census Bureau is at the mercy of both the cost structure and innovation paradigms of the originating companies. Further, with little insight into the proprietary source code of these technologies, our security profile depends on passive scans and tests to ensure security compliance.

Technology and Data Science Skills Deficit

The Census Bureau has maintained its computing and processing skills and environments in a consistent state for several decades with notable success, generally focusing on batch file-based processing on proprietary software with proprietary databases and on-premises server-based hardware. However, the type and level of skills and expertise needed to operate and maintain our current-state systems are not easily transferable to the new, cloud-computing approach critical to a data-centric ecosystem. We cannot scale fully for high-end computing, nor can we house the data that will be needed in the future by maintaining our on-premises, data center paradigm. Adopting new cloud technologies and more importantly, acquiring the skills needed to implement them at scale for high-end computing, processing, data storage, and analytics will be critical in the very near future.

Rising IT Costs

As described above, Census Bureau systems are largely siloed by project or directorate, often resulting in duplicative systems supporting the same or similar capabilities. Each of these systems requires separate staff and infrastructure to support it, leading to increased overall IT costs. High IT costs are further exacerbated when contractor support is required for legacy or niche systems or for older/ proprietary technologies. Premium payments must be made to acquire the rare skills necessary to keep outdated technologies in operation. These siloed systems also make it difficult to share and link data across different organizations within the Census Bureau creating barriers in our ability to quickly react to new data. These barriers continue to slow the speed of innovation and our time to market with data products.

Cybersecurity

Of utmost importance to the Census Bureau is the security of the data we collect about the public. The trust that our respondents and data providers have in us is central to our core mission. Without it, we would be unable to provide the high-quality federal statistics that data users have come to expect from the Census Bureau. However, our security processes, while effective at protecting our data, have often been challenged to balance a document-compliance approach with more effective security risk management. Further, our processes do not always take advantage of the latest tools and techniques that can ease the implementation burdens on both system developers and security staff. The success of transitioning to a new data-centric ecosystem with the four key initiatives is highly dependent on an effective and efficient approach to cybersecurity.

Recent History

Like other organizations working through modernization challenges, we have attempted similar enterprise-wide initiatives before with nominal success. Ambitious, often disruptive change efforts can test the resolve required for success. The most recent example was the outcome of the Census Enterprise and Data Collection and Processing (CEDCaP) effort. The original vision of CEDCaP was never realized because of schedule and specification misalignment, as well as oversight issues. It is important that the current effort take advantage of existing strengths and follow the lessons learned in previous efforts like CEDCaP.

MITIGATIONS

While the challenges described above increase the risks to a data-centric approach supported by the four enterprise IT initiatives, we can mitigate these risks in several ways. As the need for more timely, high-quality products intensifies, the four enterprise initiatives also provide the Census Bureau with a distinct opportunity to break down the barriers between the program directorates and to streamline our processes across the enterprise.

One Census Bureau

The Census Bureau director, deputy director, and associate directors are providing the focused and unified leadership necessary to guide the significant internal change described in this plan to completion. With the urgency called for by a changing world, they model an enterprise mindset and consistently demonstrate the communication, collaboration, and commitment that supports a "One Census Bureau" approach. The deliberate strategy of this approach builds enterprise-wide functionality, competence, and confidence from the beginning of the decade by successfully onboarding progressively larger demographic and economic surveys, such as the American Community Survey and the 2027 Economic Census, while continually planning for the next decennial census in 2030.

Management Vision and Commitment

Portfolio Executive

The IT Mission Assessment & Strategy completed in June 2021 referenced above also recommended the creation of a Portfolio Executive Office within the Census Bureau's Office of the Deputy Director. This new Portfolio Executive Office was established in early 2022. The portfolio executive, the senior advisor for IT and operations, and other staff positions were established to focus the necessary attention and resources on the four initiatives. With decisionmaking authority delegated from the deputy director, the portfolio executive oversees the integration and success of the initiatives, providing direct support to the initiative leads and their programs and ensuring the timely removal of any barriers to their success along the way.

Bureau Leadership Team (BLT)

Also established in early 2022, the BLT includes the portfolio executive, Chief Information Officer (CIO), and Chief Financial Officer (CFO). The group reports to the senior leadership and provides overarching executive guidance to the initiative leads. The strategic combination of these three positions on the BLT assures a coordinated, multidisciplinary, unified management approach that addresses the programmatic, technological, and financial considerations of the four initiatives. Along with their delegates, the BLT ensures that the initiatives are able to deliver a timely, functional, complementary, scalable, integrated, and cost-effective product. The BLT also lends its support to the initiative leads and their programs and assists in ensuring the timely removal of any barriers to their success.

True North

This simple idea augments management vision and commitment by providing concrete and easily understandable principles—shared by leaders at all levels and well-communicated across the Census Bureau—that guide how we get where we plan to go. True North does not replace the Census Bureau's mission statement—To serve as the nation's leading provider of quality data about its people and economy. Rather, it identifies a common direction that tells us how to plan our IT ecosystem in conjunction with a data-centric view of our products. True North helps align the paths that lead to new and innovative methods and products based on a "One Census Bureau" approach. Specifically:

- Consistent Focus—Ensure all our work contributes to the estimate/product.
- Cohesive Ecosystem—Build and use the suite of foundational systems to develop a cohesive ecosystem that enables product creation while strengthening and integrating consistent cybersecurity defense and rapid incident response
- Push Boundaries—Embrace productive discomfort by adopting a modern (i.e., cloud-based) computing approach, plan to move all data to and perform processing in the cloud, and develop staff skills and capabilities to use modern computing tools and methods
- One Census Bureau—Be a single team rather than separate groups of "customers" and "service providers," valuing diverse perspectives in creating innovation, collaborating widely and often with internal and external partners to acquire new data sources, create new products, and advance data and computer science.

The principles laid out in True North provide clear criteria for how the initiatives will prioritize work, make decisions, and manage complex challenges. Further, True North is not merely aspirational. From the top of the organization to all levels of management and staff, the Census Bureau holds firmly to these principles.

Streamlined Governance

As work on the ecosystem moves forward, the four pillars must be governed as one to ensure seamless management and technical integration. In doing so, we have implemented streamlined governance structures and processes. These generally take the form of combined and integrated milestones, management communication and meetings, and schedules. The "One Census Bureau" approach translates here to "One Integrated Governance Approach."

Phase Gate Reviews

Based upon the lessons of the most recent decennial IT management paradigm, phase-gate reviews can be useful tools in ensuring that initiatives are being appropriately managed both as individual programs and as an integrated whole. The Testing Readiness Review (TRR) serves as the gateway for a set of capabilities to shift from development team testing to program-level testing and paves the way for full integration of these capabilities into the ecosystem. The Production Readiness Review (PRR) provides leadership with an opportunity to assess the readiness of the ecosystem for production given any outstanding defects.

Migration to Open-Source Software

As discussed, the Census Bureau has developed many of its current systems using closed-source, proprietary products. While these technologies have served the Census Bureau well, we need to acknowledge that open-source technologies allow us a powerful and scalable platform upon which to build our future, particularly as we move into a datacentric, data science-based paradigm.

- Security—Security is paramount to the Census Bureau's mission; open-source software has a community of users who push the software to be secure and maintainable. Because the code is available, the Census Bureau can scan the software upon entrance to the Census Bureau and can examine the code, ensuring we maintain our strong security posture.
- Innovation—Because open-source software is driven by the community of users, it will often be on the cutting edge of design, drawing from universities and technology think tanks. Rather than being attached to a single product's lifecycle

or company roadmap and priorities, the Census Bureau can take advantage of the open-source community's pace of innovation.

- Hiring—Open-source software is often taught at universities and colleges. It is much easier to recruit new talent for our agency when we are recruiting with familiar tools. Proprietary software often has a higher-learning curve with training exclusively available through expensive vendors, rather than online and community resources.
- Maintainability—Given its easy maintainability, open-source software may not require a vendor and can be maintained by Census Bureau staff using the package. Additionally, many resources exist within the online community to assist in troubleshooting, making much more costly vendor provided support unnecessary.
- Interoperability—Open-source software often relies on open and free standards that allow it to interoperate very cleanly and simply with other open-source software. Additionally, open-source software is typically built to serve a very specific problem space, affording us much more flexibility to build a modular architecture where each piece can be swapped out over time as the landscape of products changes.

Increase Skillsets Internally/Contract When Required

To provide the expertise necessary for this integration effort, the Office of the Chief Information Officer (OCIO) is employing new strategies to attract staff with appropriate expertise in several different ways:

- Identifying existing federal and contractor staff from across the Census Bureau with relevant skills and abilities and reassigning them to work directly as part of a new Secure Cloud Team (SCT).
- Opening additional training opportunities for federal staff.
- Working closely with existing contract program managers (PMs) and contracting officer represesentatives (CORs) to ensure new contract staff possess the necessary skillsets and training to support Census Bureau cloud initiatives.

Using these strategies, staff and contractors are assigned to the new enterprise SCT. This innovative team attracts the "best and the brightest" at the Census Bureau to be on a unique, highly technical team that is not bound by organizational lines. The SCT transforms the former model of a siloed support by leveraging the talent and expertise best suited to meet the needs of Census Bureau cloud projects and initiatives. Under the direction and authority of the SCT program manager (a new position reporting directly to the CIO) the SCT architects, designs, delivers, and maintains cloud services, capabilities, and solutions. It reduces the organizational, process, and management bottlenecks that led to slow implementation of process improvements and possible customer hesitation to adopt cloud services.

Cost Strategies

Over the long term, consolidation of enterprise capabilities and the retirement of siloed legacy systems will reduce both the Census Bureau's IT footprint and its IT costs. However, short- to mid-term IT costs in support of the transition will increase. The BLT is working to develop a funding approach and strategy for the transition that enables transparent accounting for development, transition, operation, and maintenance for the lifecycle of the four initiatives. Working from examples and lessons learned in other government organizations that have transitioned significant operations to modern computing (such as the Patent and Trademark Office), the BLT will develop this transition funding approach over the next 18 months.

Security Strategies

Our approach to securing our systems and data is critical to the success of the Census Bureau and to our approach to integrating four initiatives. Knowing that the public's trust is in our hands to ensure our ability to produce high-quality federal statistics, security is spread throughout the initiatives' ecosystem to form an enhanced set of safeguards for our systems.

 Data Access and Governance—As we move to an ecosystem that allows for seamless linkages between datasets and access to enhanced data sources for official uses, we must ensure our compliance with the various policies, laws, and agreements that govern these data. In coordination with other offices at the Census Bureau, the initiatives require a streamlined data access and governance approach to ensure that they can be successful in safeguarding our data. This will involve the establishment of a new data governance group to establish the framework by which we govern our data and to provide the tools needed to implement that governance.

 Putting the "Sec" in DevSecOps—A DevSecOps strategy can only ensure security to the point that its toolset and paradigms resonate with the current security posture desired. Under the guidance of the Office of Information Security (OIS), the security of our continuous integration/continuous delivery (CI/CD) pipeline will be enhanced to take advantage of our modern development architecture in the cloud. This will take the form of less human involvement and more automation. Simple code scanning can provide a layer of security but often comes with false positives. To facilitate a strong security profile, new products and tools will be needed to do this.

Key Differences From Recent History

When considering recent history there are fundamental differences in timing and approach. The decennial census loomed large in ultimately determining the fate of CEDCaP. Learning from that experience, we are several years earlier in the decennial census cycle and do not anticipate the same schedule challenges. Further, unlike CEDCaP, we are relying largely on systems and solutions that have already been successful in fulfilling the Census Bureau mission. We are blending those highly effective and proven designs with emerging and future technology to provide an approach that works across our enterprise. Finally, our approach to integration and implementation addresses all areas of the Census Bureau in concert with key dates of delivery. We are very mindful of the lessons learned from what happened with CEDCaP and other previous initiatives.

INTEGRATION

Although each of the initiatives was established with its own separate IT budget initiative prior to this integration effort, together, they will form the backbone of our modern ecosystem. While we should maintain a modular architecture for resiliency, we must ensure that our initiatives are building complementary applications that integrate well and reduce duplication.

Data-Centric Architecture

Historically, the Census Bureau has been a censusand survey-centric organization, focusing on collecting survey data, performing analysis, and producing the requisite products. In our shift toward a data-centric model, our architecture must also shift. As depicted in the diagram below, the EDL is at the center of the architecture. DICE forms the "inputs" to the lake-data collected from respondents and data ingested from third-party sources. The operational control system (i.e., Mojo) in DICE replicates its data to the EDL, ensuring that near real-time data are always available to users within the EDL. Meanwhile, ingested raw data are made available within EDL, allowing users to perform research and to create products with the latest data available from our providers. In our end-state architecture, the Frames Program is wholly contained within EDL, including the foundational frames. This allows the frames to be equally accessible to other data and to be combined with collected data in new ways to form new products. While CEDSCI is the external

data-discovery platform, its uses for internal data discovery are being investigated for use within EDL. In addition, as CEDSCI migrates to the cloud, seamless integration between EDL and CEDSCI will enable easier product dissemination.

FUTURE STEPS

Lifecycle Definition and Approach

At the highest level, CODE will follow the Office of Management and Budget's (OMB) defined, two-stage approach—namely, Development, Modernization, and Enhancement (DM&E) and Operations and Maintenance (O&M). The early years in the lifecycle will generally be an initiative-funded, DM&E effort leading to full-production status. Over the lifecycle as the four initiatives in CODE complete development, testing, operationalizing, and retiring replaced systems, budgets will shift from DM&E to O&M. A level of DM&E will be kept intact to help flatten future recapitalization costs for lifecycle replacement/ upgrades to reduce the risk of system obsolescence.





O&M will be largely supported by the program areas. However, there will be cases in which it is advantageous to the Census Bureau for O&M costs to be supported by the initiatives on a permanent basis. Examples of this include paper scanning equipment maintenance and replacement or foundational software upgrade costs. The approach for the four initiatives in this area is to be controlled but nimble and, most importantly, not forced to make a bad programmatic or funding decision based on arbitrary internal constraints.

Examples of O&M costs that should be supported by the program areas (not the initiatives) include onboarding a new survey, purchasing external data, or increasing cloud storage for a particular data or research project.

The initiatives will generally plan for and support O&M costs for system monitoring, including in the Enterprise Operations Center (EOC) and the Security Operations Center (SOC), except in cases where costs for scaling those efforts (e.g., the decennial census) are not within the scope or capability of the four initiatives.

Transition and System Decommissioning

A key part of the challenge of transition to modern computing is the decommissioning of legacy systems. For the purposes of the four initiatives, the BLT will assign, within 6 months of this plan, a Legacy System Decommission Group to develop a criteriabased, decommissioning process integrated with the development, testing, and production milestones in the four key initiatives.

Short-Term Priorities

Finalizing Data Standards

Data standards are critical to implementing the data-centric, innovative approach this plan envisions. Standards enable and facilitate accuracy and consistency through the full survey lifecycle, from questionnaire design to data collection and processing, to data linking, and finally to dissemination. The BLT established a Data Standards Group in March 2022 to ensure the proper data standards are in place to enable the planned ecosystem.

Frames Implementation Within EDL

To establish and grow the key linked datasets within the EDL, the BLT will establish within 60 days of this plan the Frames Technical Implementation Group. This group will work closely with subject matter experts to develop EDL processes, data linking standards, and technical priorities for the Frames Program. They will also work with the technical experts on the MAF and BR staffs to facilitate the technical aspects of transitioning the MAF and the BR design and architecture to the EDL.

The 2030 Census

As the flagship operation of the Census Bureau, the decennial census always influences the planning and execution of enterprise-level efforts. This is certainly the case with CODE. In fact, the excellent performance of many of the applications and processes built within the four initiatives for the recent 2020 Census greatly strengthened our confidence that they were the best tools to build on for the future.

Taking the lessons learned from the 2020 Census and maintaining an extensive awareness of 2030 Census planning, this first phase of CODE will use the early years of this decade to address foundational requirements that will support both the decennial census as well as the rest of the Census Bureau enterprise but focusing for the next 2 years (FY 2023 and 2024) on demographic and economic surveys and census capabilities.

Decennial planning milestones will be included in initiative schedules from the beginning. As 2030 planning ramps up through the decade, 2030 planning in CODE will follow suit with increasing decennial milestones. Current plans are to support new special census development (a decennial-style local count) in 2024, and the execution of the testing program for the 2030 Census when it is finalized.