

# Update on Cybersecurity

**Kevin Smith**

Associate Director for Information Technology and Chief Information Officer  
IT Directorate

# 2020 Census Cybersecurity

## Agenda

- Overview
- Plan
- Challenge
- Design
- Cyberthreat Landscape
- Approach

# 2020 Census Cybersecurity Overview

U.S. Census Bureau: Leading source of quality data about the nation's people, places, and economy.

## ***Cyberattacks impact our data and could compromise our mission:***

- Cybersecurity is our highest IT priority.
- Evolve cybersecurity to meet new threats.
- leveraging best resources and knowledge inside and outside the federal government.

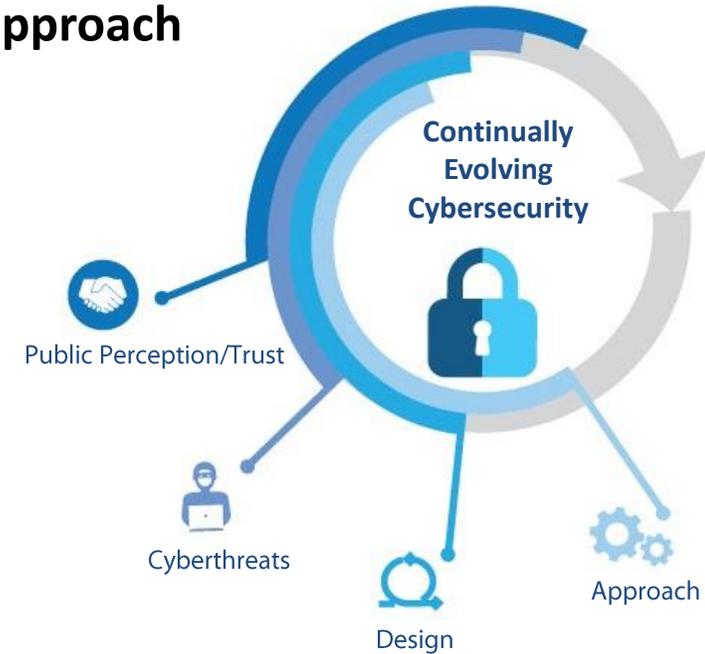


# 2020 Census Cybersecurity

## Our Plan

### Cybersecurity program focus areas:

- Improving **public perception and trust**.
- Proactively addressing **cyberthreats** through **design** and **approach**
- Respond immediately to contain threats
- Partnerships to understand and manage threats
  - Federal intelligence community
  - Private sector



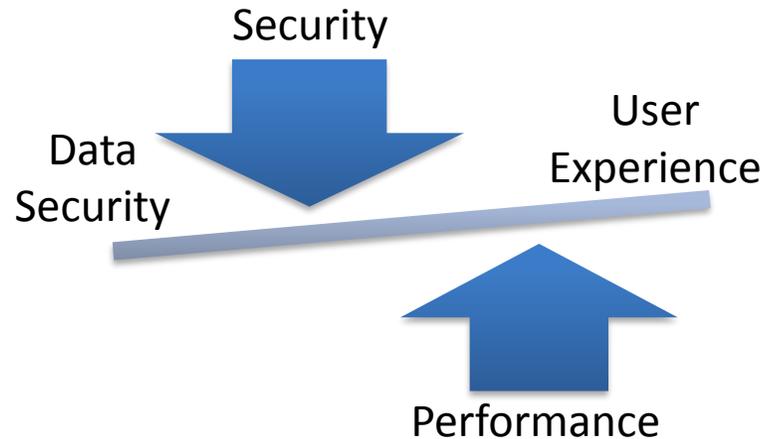
# 2020 Census Cybersecurity

## Challenge: Ensure Public Perception/Trust

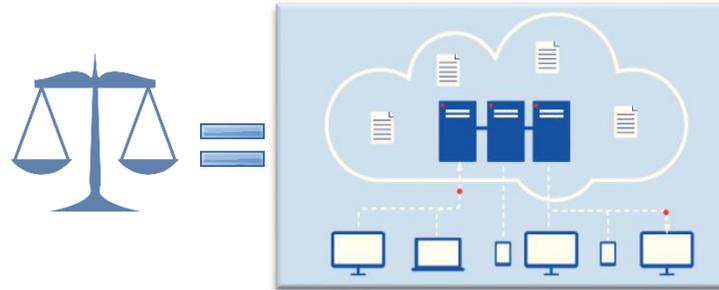
### Top Priorities

- **Data Security** – Protecting respondent data
- **User Experience** – Performance that public expects with confidence that their data will be protected

### Top Priorities are Opposing Forces



### Balance in Cloud Based Solution



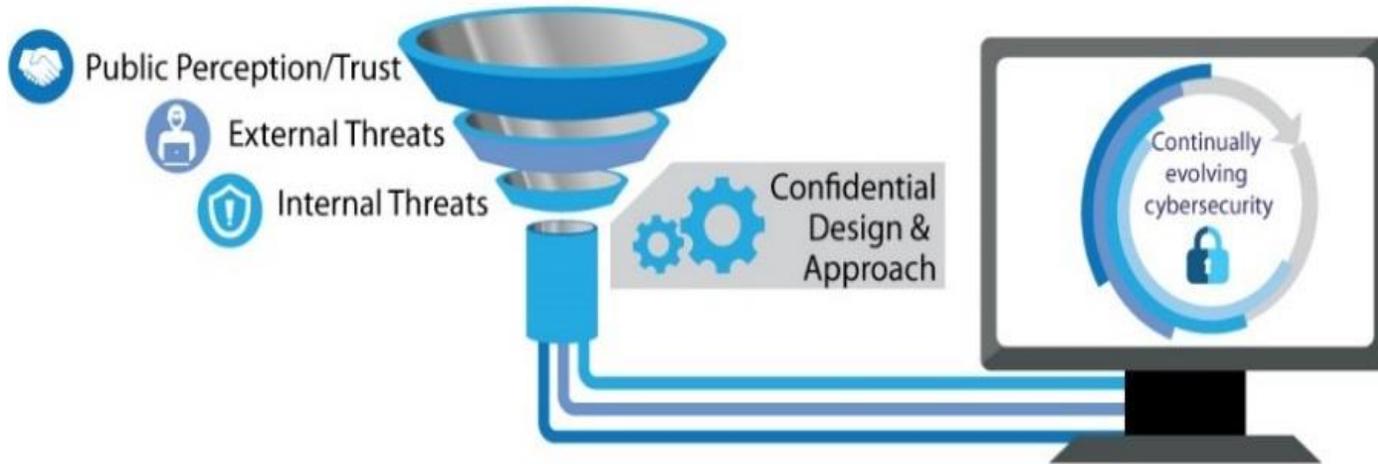
### Data Security:

Layer public facing systems in secure segments

### User Experience:

Rapid, Repeatable, and Efficient scaling of isolated segments to ensure performance

# 2020 Census Cybersecurity Cybersecurity Design



Incorporate many layers and levels of isolation.

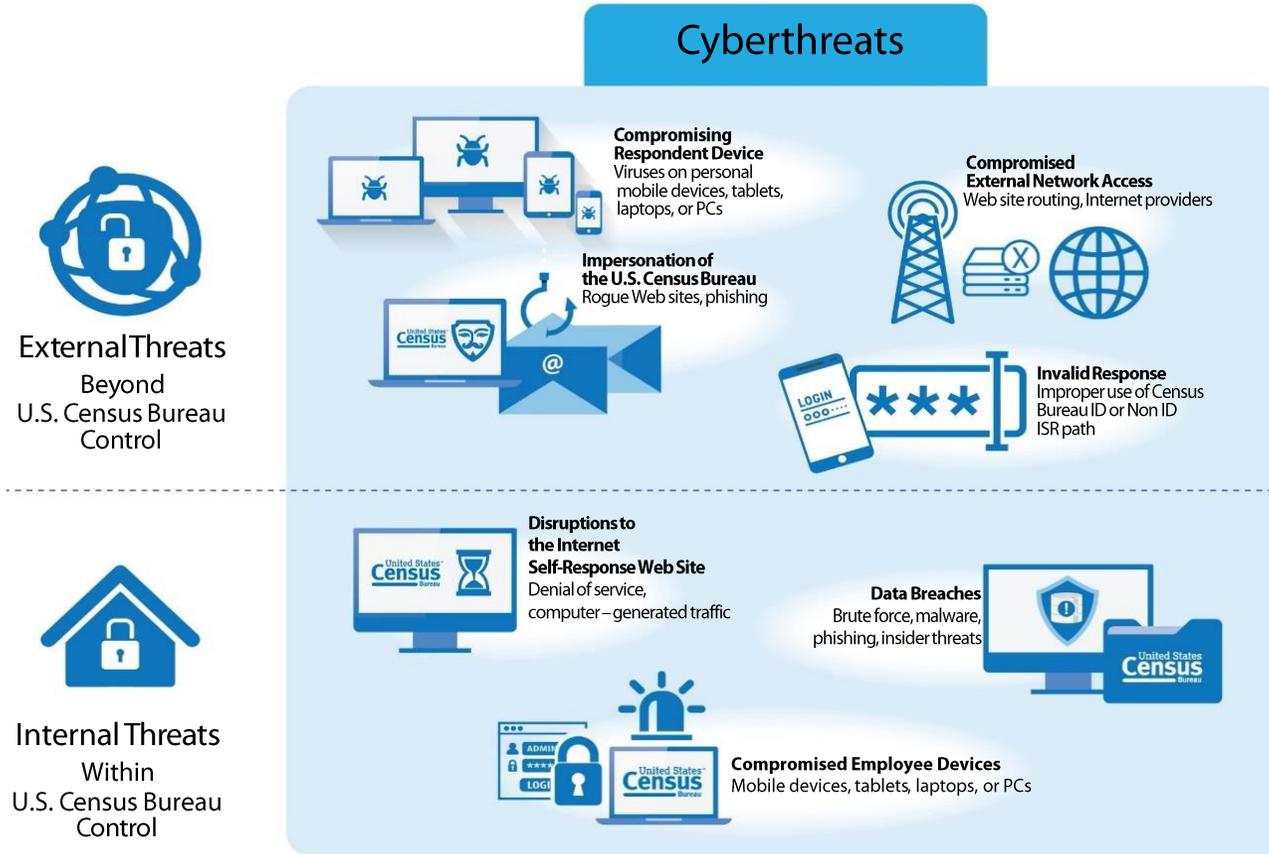
- Apply right balance of security and performance
- Does not sacrifice overall security.

Create “funnel effect” to minimize undesired users

- Apply very high levels of security early to our publicly facing system.

# 2020 Census Cybersecurity

## Cyberthreat Landscape



A cloud-based system alone does not protect our data from all cyberthreats

- External - Rely on industry and other federal agencies to provide services to resolve threats
- Internal - Monitor and directly respond to internal threats to Census Bureau systems through design and approach

# 2020 Census Cybersecurity

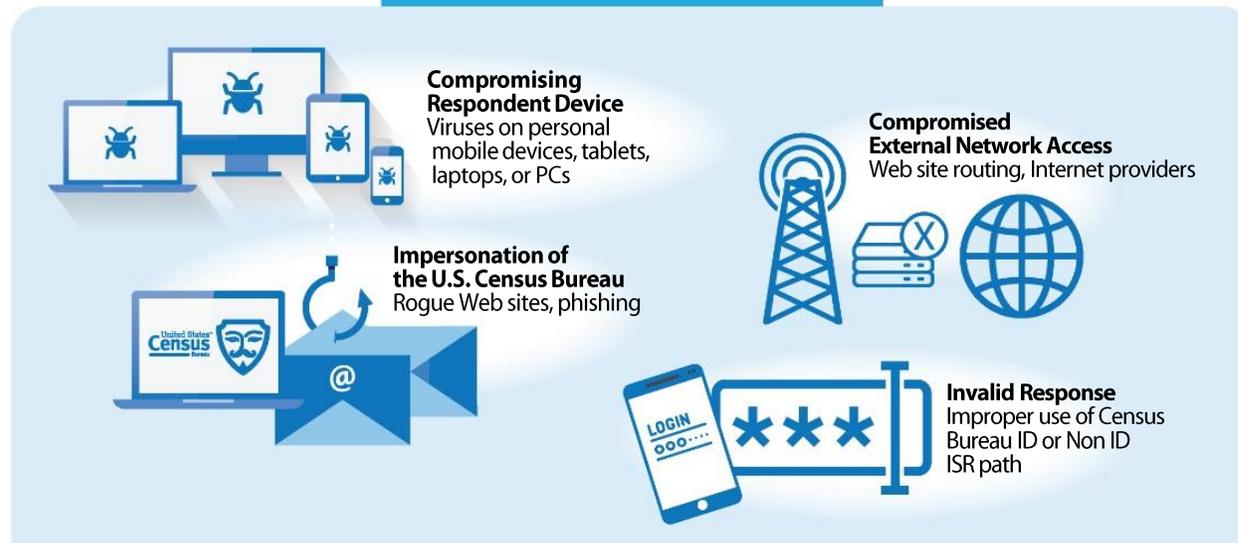
## Cyberthreats: External

- Census Bureau does not have direct control over **external cyberthreats**
- We can detect some threats but cannot take direct action to resolve



External Threats  
Beyond  
U.S. Census Bureau  
Control

### Cyberthreats



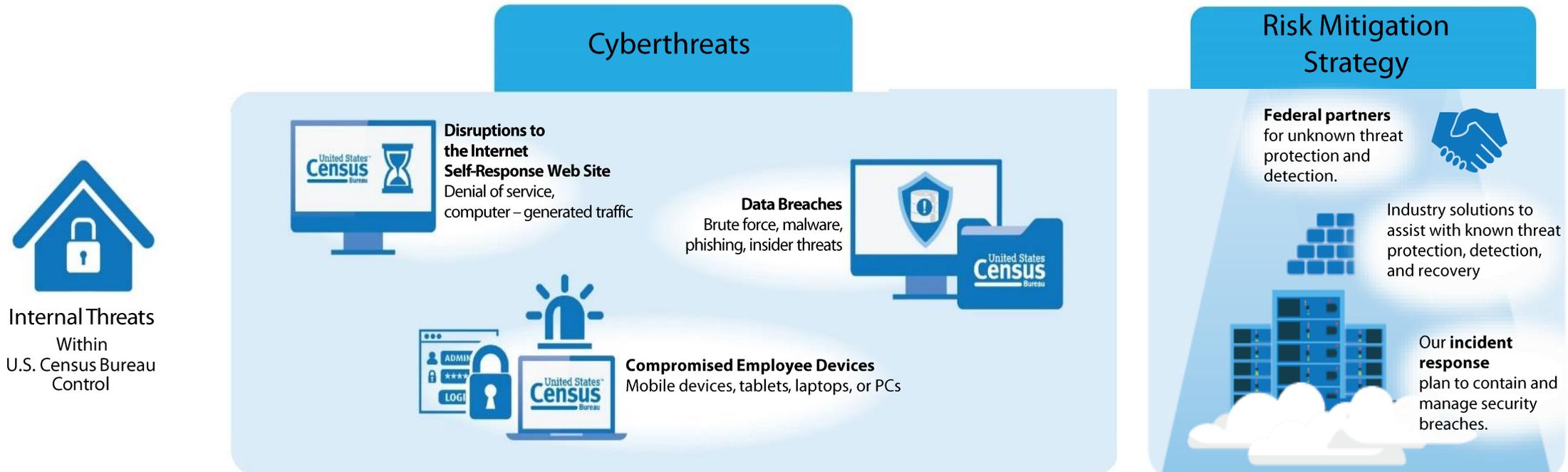
### Risk Mitigation Strategy



# 2020 Census Cybersecurity

## Cyberthreats: Internal

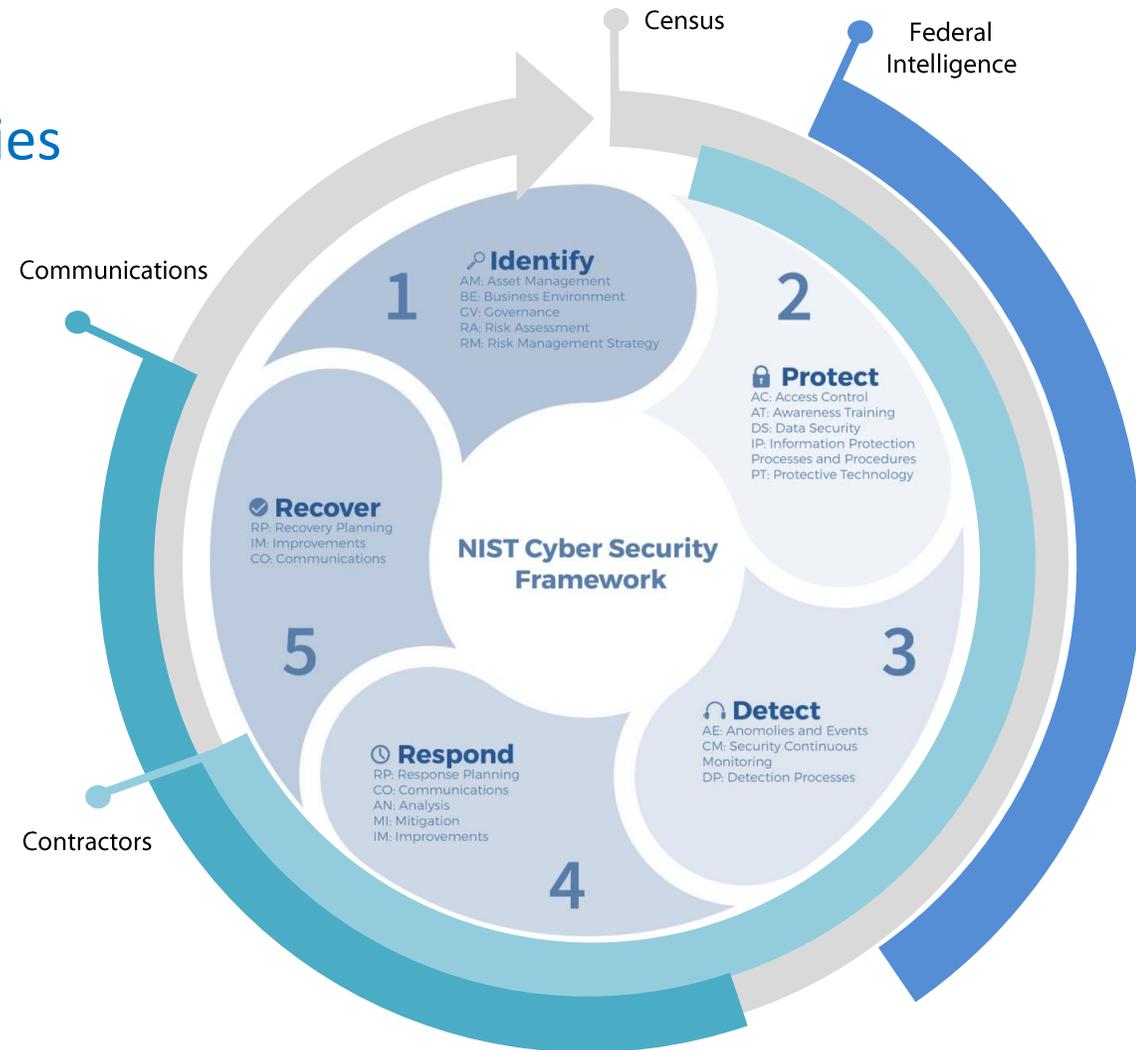
- Census bureau has the ability to take direct action to prevent and resolve **internal threats**
- Our team proactively monitors known threats



# 2020 Census Cybersecurity

## Federal Cybersecurity Framework Responsibilities

- The **Cybersecurity Framework** is the continual life cycle used to coordinate interactions of people, process, and technology to have a complete approach to Cybersecurity
- **Census** responsible for all areas across Census systems
  - Coherency, Coordination, Consistency
- **Contractors** work within Census to protect, detect, and respond for the systems they maintain.
- **Federal Intelligence Community** can assist in protecting against and detecting cyber threats
- **Communications** coordination necessary ensure public trust and confidence during potential response and recovery



# 2020 Census Cybersecurity

## Key Areas and Partners

- **Secure Federal Network Connectivity for 2020 Respondents**

*Working with Industry and Federal Government to ensure scalable and secure federal network connection*

- **Strengthen Incident Response capabilities**

*Advance ability to continually Identify, Protect, Detect, Respond, and Recover from possible cyberthreats*

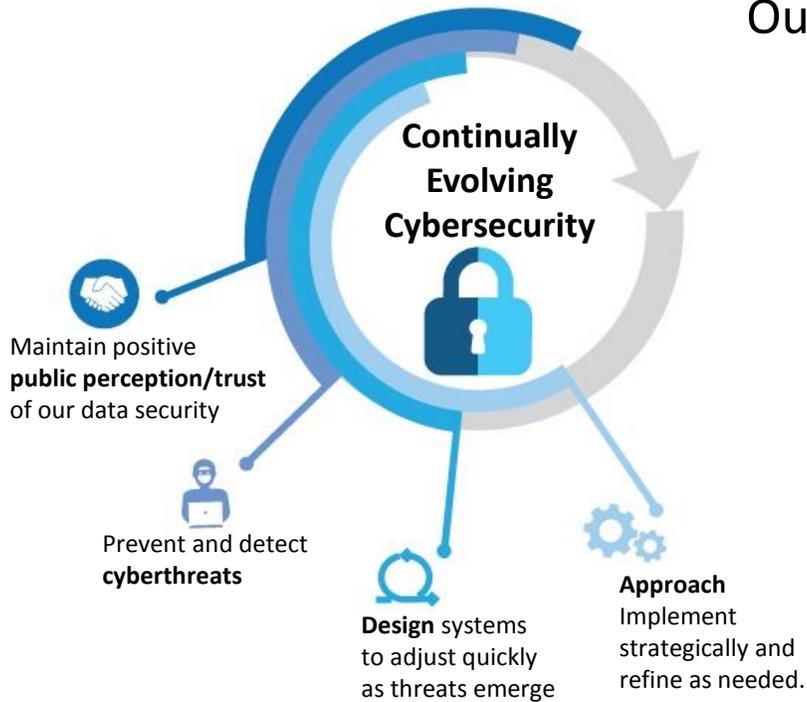
- Improving visibility of cybersecurity issues by implementing tools from private industry and federal government
- Engaging Federal Intelligence Community for a coordinated Federal response.

- **Improve Cybersecurity Posture**

*Improve knowledge, processes, procedures, and/or technology.*

- Improving Knowledge, Processes, and Procedures
  - ✓ Regular Cybersecurity briefings with Federal Intelligence Community
  - ✓ Test response procedures to cybersecurity incidents through simulations with Federal Partners
- Testing Technology
  - ✓ Security Tested Internet Self Response system by Industry and Federal Government
  - ✓ Engaging Industry and Federal Government to simulate cybersecurity attacks

# 2020 Census Cybersecurity Approach

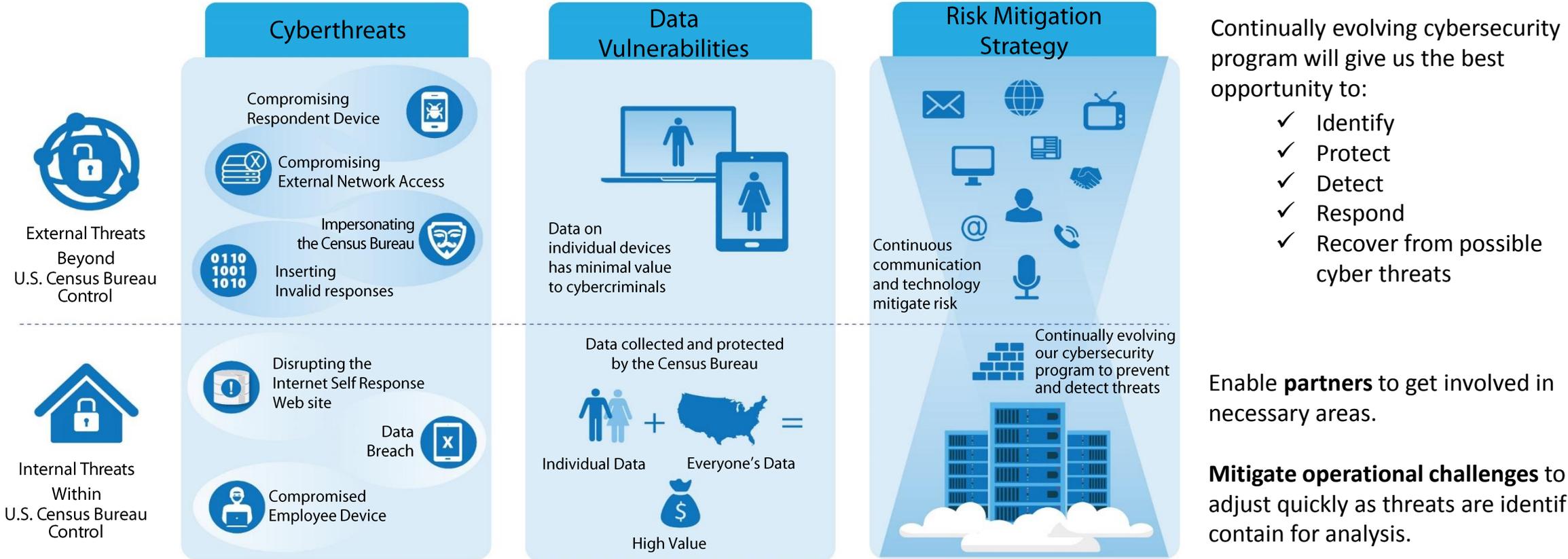


Our approach will **continually be refined** as threats emerge and evolve.

We will:

- Maintain the public's trust and confidence by protecting their data and keeping them informed
- Protect, detect, and respond to cyberthreats through technology and partnerships
- Adjust solutions accordingly within our flexible design
- Work with federal and industry partners to help us fill gaps

# 2020 Census Cybersecurity Summary



Questions?

# Update on Systems Readiness

**Atri Kalluri**

Chief

Decennial Information Technology Division

# 2020 Census Systems Readiness Agenda

2018 End-to-End Census Test Solution Architecture

2018 Production Status of Self Response and Field Data Collection Operations

2018 End-to-End Census Test Systems Deployment Status

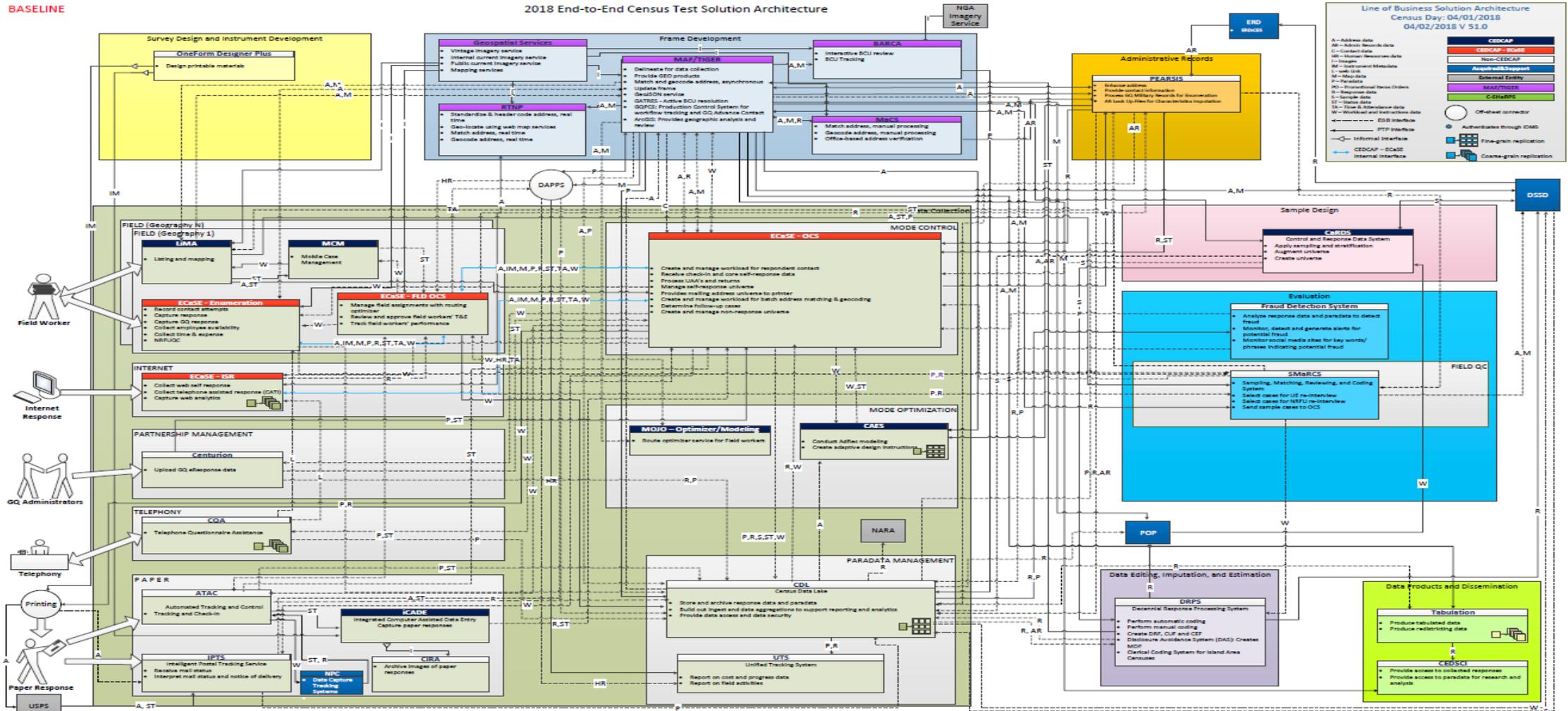
Update on 2018 End-to-End Census Test Releases

2020 Census Releases

# 2020 Census Systems Readiness

## 218 End-to-End Census Test Solution Architecture

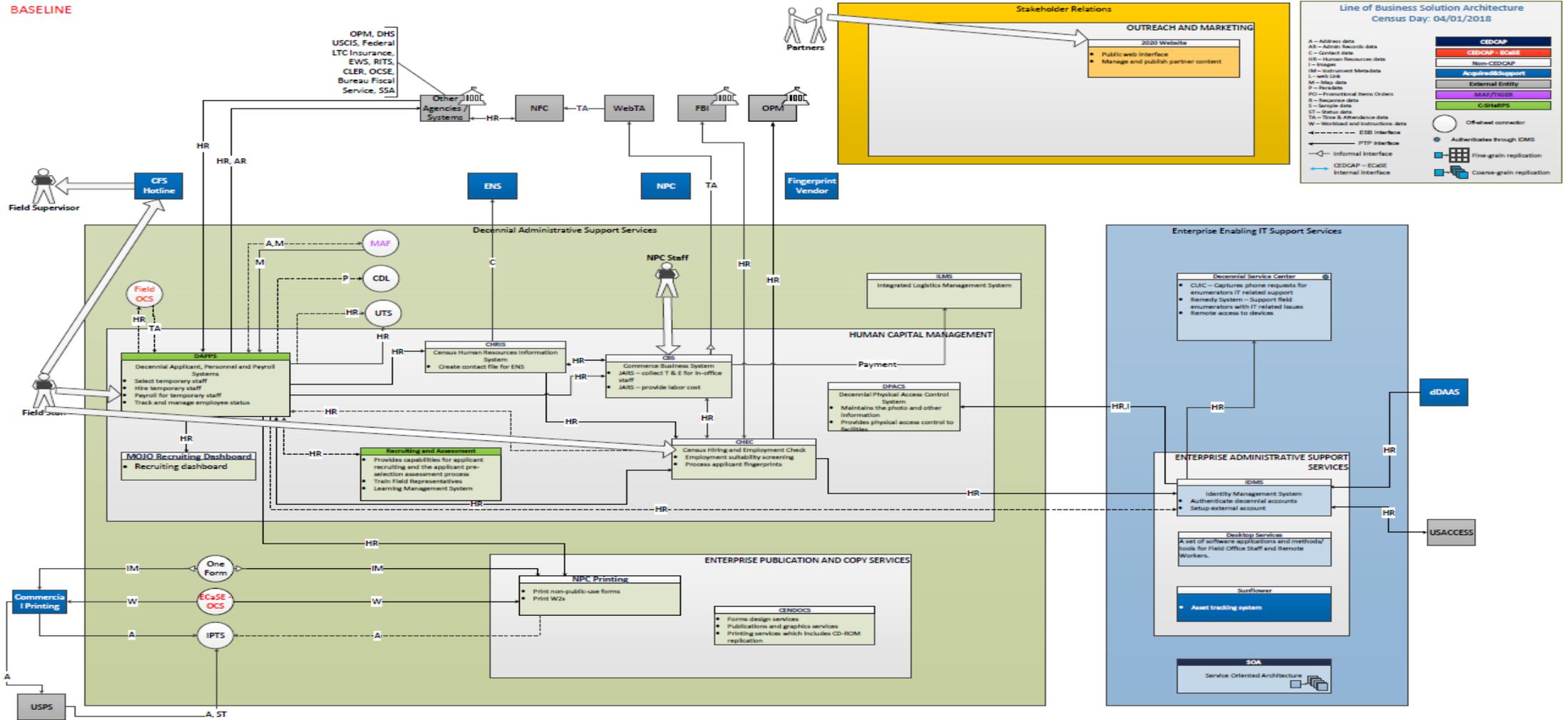
BASELINE



# 2020 Census Systems Readiness

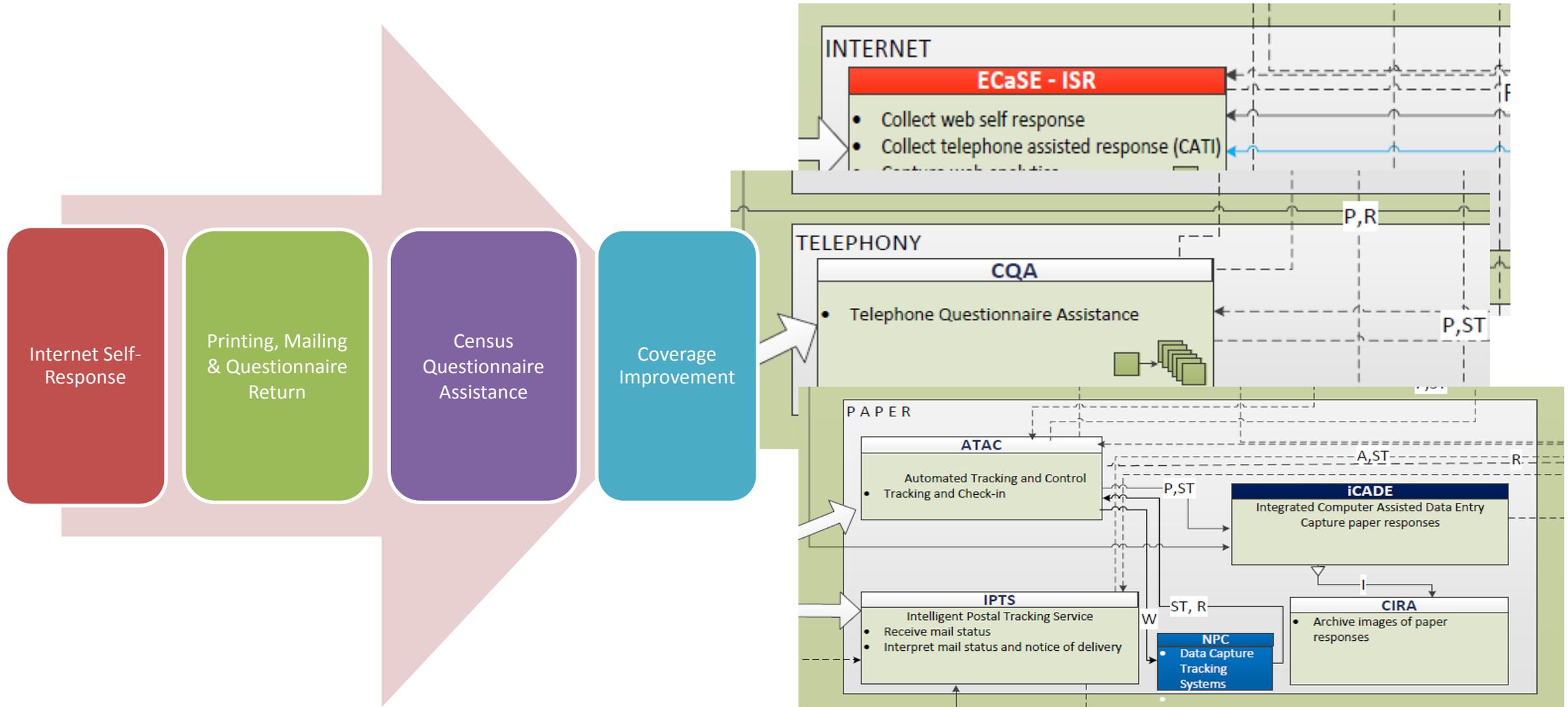
## 2018 End-to-End Census Test Solution Architecture (continued)

BASELINE



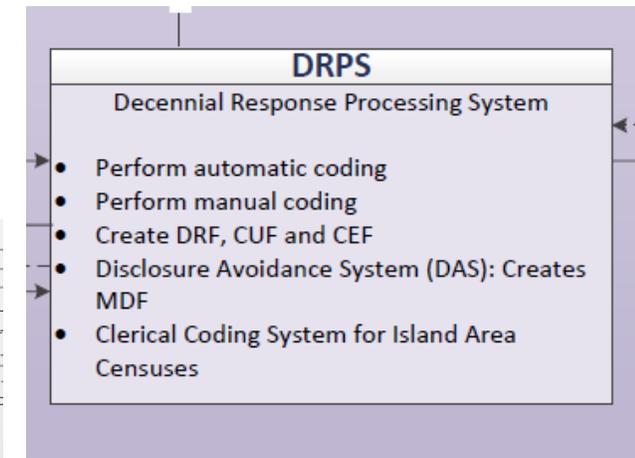
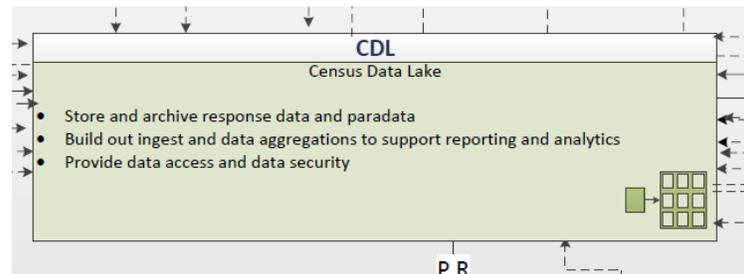
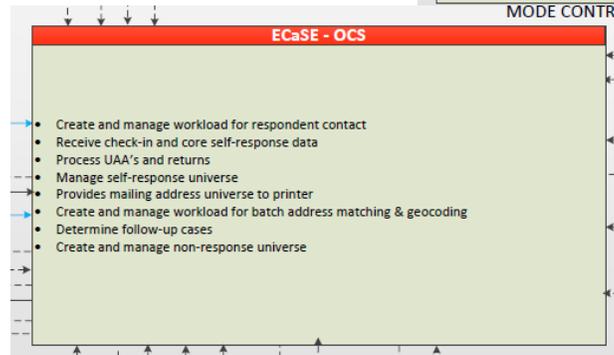
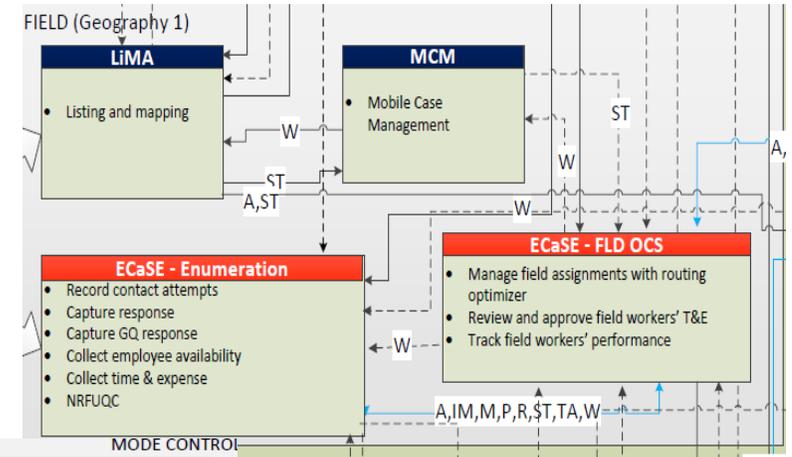
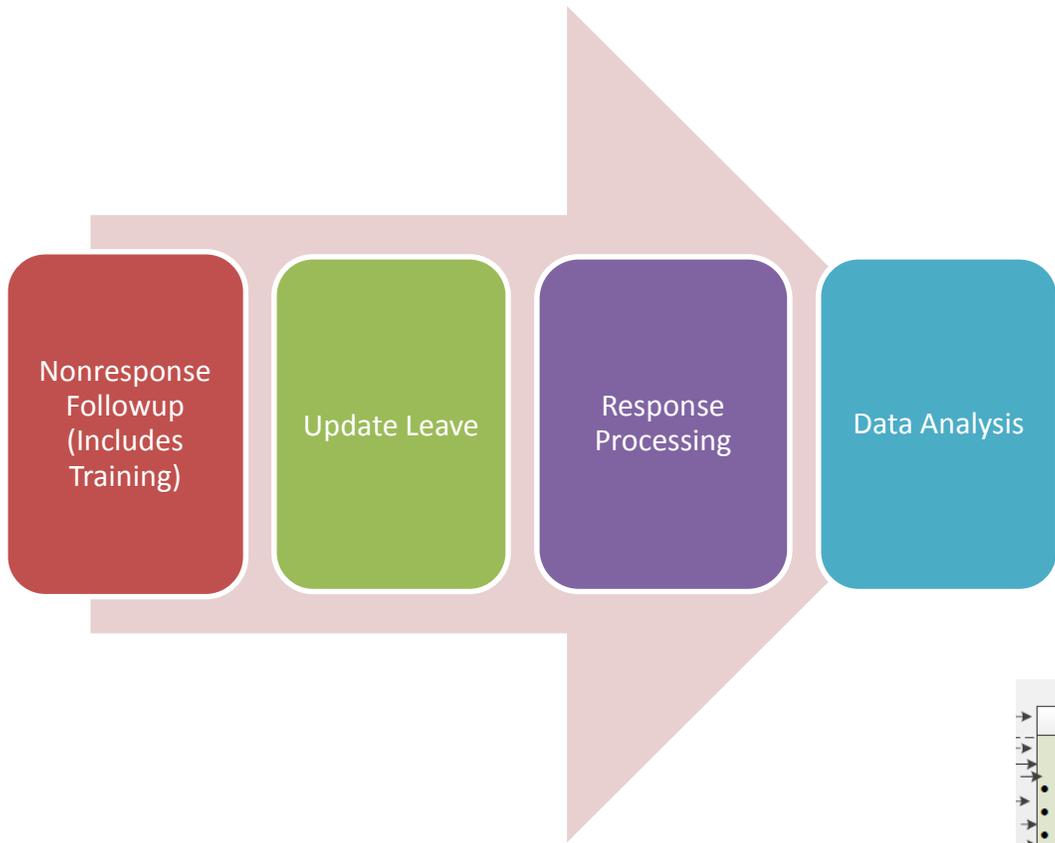
# 2020 Census Systems Readiness

## 2018 End-to-End Census Test – Self Response Operations



# 2020 Census Systems Readiness

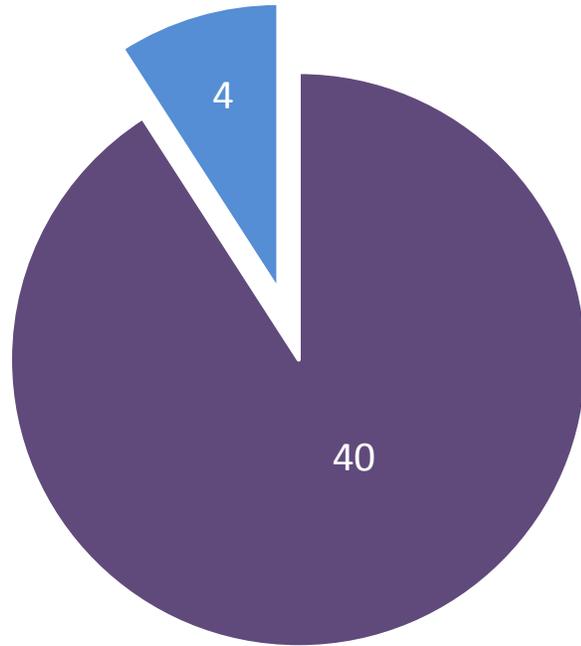
## 2018 End-to-End Census Test – Field Data Collection Operations



# 2020 Census Systems Readiness

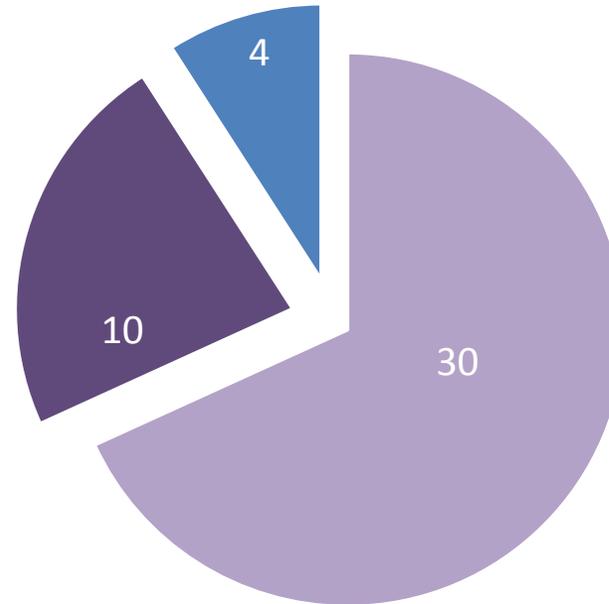
## 2018 End-to-End Census Test System Deployment Status

### System Deployment Status



- Systems Deployed in Support of Operations to Date
- Systems Not Yet Deployed in Support of Operations to Date

### System Enhancements Status



- No Further Enhancements for Future Operations
- Enhancement for Future Operations Planned
- Systems Not Yet Deployed in Support of Operations to Date

# 2020 Census Systems Readiness

## 2018 End-to-End Census Test Releases

2018 End-to-End Census Test Releases	Operational Areas Supported	Test Readiness Review (TRR)	Production Readiness Review (PRR)	Conduct Operation	Status
Release I	In-Office Address Canvassing (AdCan)	----	12/13/2016	----	In-Production
Recruiting Release 1	AdCan Recruiting	11/18/2016	12/1/2016	3/31/2017	Complete
Training Release 1	AdCan Training	3/8/2017	6/22/2017	7/31/2017	Complete
Release A	In-Field AdCan (TRR 1 = Final functionality for all AdCan systems except ECaSE, LiMA/MCM, and UTS; TRR 2 = Final ECaSE, LiMA/MCM, UTS functionality)	(1) 3/8/2017	7/26/2017	8/28/2017	Complete
		(2) 5/10/2017			
Recruiting Release 2	Field Enumeration Recruiting	6/15/2017	7/31/2017	9/5/2017	Complete
Training Release 2	Nonresponse Followup (NRFU) Training	10/11/2017	1/12/2018	3/19/2018	In-Production
Release C	(2) Self-Response; includes: Printing/Mailing/Workload & Census Questionnaire Assistance (CQA)/Self-Response	11/17/2017	1/26/2018	2/12/2018	In-Production
	(3) Group Quarters Workload (GQ)/Advanced Contact/All GQ Training	3/27/2018	5/21/2018	6/11/2018	Program-level Testing
Release D	(1) Field Enumeration; includes Update Leave/NRFU/Coverage Improvement operations	12/6/2017	2/12/2018	3/14/2018	In-Production
	(2) GQ eResponse/GQ Enumeration/Service Based Enumeration	4/17/2018	6/11/2018	7/16/2018	Program-level Testing
Release E	(1) Tabulation and Dissemination - Residual Coding	2/26/2018	4/4/2018	5/1/2018	Operational Readiness Testing
	(2) Tabulation and Dissemination - Post Capture Data Interface, Primary Selection Algorithm, Census Unedited File/Fraud Detection	7/11/2018	9/4/2018	10/1/2018	Development/Project-level testing
	(3) Tabulation and Dissemination - Census Edited File, Micro Data File, Disseminate redistricting data required by Public Law 94-171	10/31/2018	12/3/2018	1/7/2019	Development/Project-level testing

# 2020 Census Systems Readiness

## 2018 End-to-End Census Test Systems

System	No Further Enhancements for Future Releases	2018 End-to-End Census Test Releases								
		Systems in Production						Future Releases		
		In-Office AdCan (Release I)	Recruiting Release 1	Training Release 1	Release A	Recruiting Release 2	Training Release 2	Release C	Release D	Release E
<b>Test Readiness Review Dates</b>		----	11/18/2016	3/8/2017	(1) 3/8/2017 (2) 5/10/2017	6/15/2017	10/11/2017	(2) 11/17/2017 (3) 3/27/2018	(1) 12/6/2017 (2) 4/17/2018	(1) 2/26/2018 (2) 7/11/2018 (3) 10/31/2018
<b>Production Readiness Review Dates</b>		12/13/2016	12/1/2016	6/22/2017	7/26/2017	7/31/2017	1/12/2018	(2) 1/26/2018 (3) 5/21/2018	(1) 2/12/2018 (2) 6/11/2018	(1) 4/4/2018 (2) 9/4/2018 (3) 12/3/2018
<b>Conduct Operation Dates</b>		----	3/31/2017	7/31/2017	8/28/2017	9/5/2017	3/19/2018	(2) 2/12/2018 (3) 6/11/2018	(1) 3/14/2018 (2) 7/16/2018	(1) 5/1/2018 (2) 10/1/2018 (3) 1/7/2019
<b>2020 Website</b>	1							✓ <sub>3</sub>	✓ <sub>2</sub>	✓ <sub>3</sub>
<b>ATAC</b> (Automated Tracking and Control)	2							✓ <sub>2</sub> ✓ <sub>3</sub>	✓ <sub>1</sub> ✓ <sub>2</sub>	
<b>BARCA</b> (Block Assessment, Research, and Classification Application)	3		✓							
<b>CAES</b> (Concurrent Analysis and Estimation System)	4								✓ <sub>1</sub>	
<b>CaRDS</b> (Control and Response Data System)								✓ <sub>2</sub> ✓ <sub>3</sub>	✓ <sub>1</sub> ✓ <sub>2</sub>	✓ <sub>2</sub> ✓ <sub>3</sub>
<b>CBS</b> (Commerce Business System)	5		✓	✓	✓ <sub>1,2</sub>	✓	✓	✓ <sub>2</sub> ✓ <sub>3</sub>	✓ <sub>1</sub> ✓ <sub>2</sub>	
<b>CDL</b> (Census Data Lake)							✓	✓ <sub>2</sub> ✓ <sub>3</sub>	✓ <sub>1</sub> ✓ <sub>2</sub>	✓ <sub>2</sub> ✓ <sub>3</sub>
<b>CENDOCS</b> (Census Document System)	6		✓	✓	✓ <sub>1,2</sub>	✓				

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		----	11/18/2016	3/8/2017	(1) 3/8/2017 (2) 5/10/2017	6/15/2017	10/11/2017	(2) 11/17/2017 (3) 3/27/2018	(1) 12/6/2017 (2) 4/17/2018	(1) 2/26/2018 (2) 7/11/2018 (3) 10/31/2018
Production Readiness Review Dates		12/13/2016	12/1/2016	6/22/2017	7/26/2017	7/31/2017	1/12/2018	(2) 1/26/2018 (3) 5/21/2018	(1) 2/12/2018 (2) 6/11/2018	(1) 4/4/2018 (2) 9/4/2018 (3) 12/3/2018
Conduct Operation Dates		----	3/31/2017	7/31/2017	8/28/2017	9/5/2017	3/19/2018	(2) 2/12/2018 (3) 6/11/2018	(1) 3/14/2018 (2) 7/16/2018	(1) 5/1/2018 (2) 10/1/2018 (3) 1/7/2019
<b>CHEC</b> (Census Hiring and Employment Check System)	7		✓	✓	✓ <sub>1,2</sub>	✓	✓	✓ <sub>3</sub>		
<b>CHRIS</b> (Census Human Resources Information System)	8		✓	✓	✓ <sub>1,2</sub>	✓	✓	✓ <sub>2</sub> ✓ <sub>3</sub>	✓ <sub>1</sub> ✓ <sub>2</sub>	
<b>CIRA</b> (Census Image Retrieval Application)	9							✓ <sub>2</sub>	✓ <sub>1</sub> ✓ <sub>2</sub>	
<b>CQA</b> (Census Questionnaire Assistance)	10							✓ <sub>2</sub>	✓ <sub>1</sub>	
<b>DAPPS</b> (Decennial Applicant, Personnel and Payroll Systems)	11		✓	✓	✓ <sub>1,2</sub>	✓	✓	✓ <sub>3</sub>	✓ <sub>1</sub> ✓ <sub>2</sub>	
<b>Desktop Services</b>	12		✓	✓	✓ <sub>1,2</sub>	✓		✓ <sub>2</sub> ✓ <sub>3</sub>	✓ <sub>1</sub> ✓ <sub>2</sub>	
<b>DRPS</b> (Decennial Response Processing System)								✓ <sub>2</sub>	✓ <sub>1</sub>	✓ <sub>1</sub> ✓ <sub>2</sub> ✓ <sub>3</sub>
<b>DPACS</b> (Decennial Physical Access Control System (PACS))	13						✓	✓ <sub>3</sub>		

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Conduct Operation Dates		----	3/31/2017	7/31/2017	8/28/2017	9/5/2017	3/19/2018	(2) 2/12/2018 (3) 6/11/2018	(1) 3/14/2018 (2) 7/16/2018	(1) 5/1/2018 (2) 10/1/2018 (3) 1/7/2019
<b>DSC</b> (Decennial Service Center)	14		✓	✓	✓ <sub>1,2</sub>	✓	✓	✓ <sub>2</sub> ✓ <sub>3</sub>	✓ <sub>1</sub> ✓ <sub>2</sub>	
<b>ECaSE ENUM</b> (Enterprise Censuses and Surveys Enabling Platform – Enumeration)							✓	✓ <sub>3</sub>	✓ <sub>1</sub> ✓ <sub>2</sub>	
<b>ECaSE FLD OCS</b> (Enterprise Censuses and Surveys Enabling Platform – Field Operation Control System)				✓	✓ <sub>2</sub>	✓	✓	✓ <sub>3</sub>	✓ <sub>1</sub> ✓ <sub>2</sub>	
<b>ECaSE ISR</b> (Enterprise Censuses and Surveys Enabling Platform – Internet Self-Response)	15							✓ <sub>2</sub>	✓ <sub>1</sub>	
<b>ECaSE OCS</b> (Enterprise Censuses and Surveys Enabling Platform – Operational Control System)					✓ <sub>2</sub>		✓	✓ <sub>2</sub> ✓ <sub>3</sub>	✓ <sub>1</sub> ✓ <sub>2</sub>	
<b>Geospatial Services</b>	16				✓ <sub>1,2</sub>		✓	✓ <sub>2</sub> ✓ <sub>3</sub>	✓ <sub>1</sub> ✓ <sub>2</sub>	
<b>iCADE</b> (Integrated Computer Assisted Data Entry)	17							✓ <sub>2</sub>	✓ <sub>1</sub> ✓ <sub>2</sub>	

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<b>IDMS</b> (Identity Management System)	18			✓	✓ <sub>1,2</sub>	✓	✓	✓ <sub>2</sub> ✓ <sub>3</sub>	✓ <sub>1</sub> ✓ <sub>2</sub>	✓ <sub>3</sub>
<b>ILMS</b> (Integrated Logistics Management System)	19				✓ <sub>1,2</sub>	✓	✓		✓ <sub>1</sub> ✓ <sub>2</sub>	
<b>IPTS</b> (Intelligent Postal Tracking System)								✓ <sub>2</sub>	✓ <sub>1</sub> ✓ <sub>2</sub>	
<b>LiMA</b> (Listing and Mapping Application)	20				✓ <sub>2</sub>				✓ <sub>1</sub>	
<b>MaCS</b> (Matching and Coding Software)	21							✓ <sub>2</sub>		
<b>MAF/TIGER</b> (Master Address File/Topologically Integrated Geographic Encoding and Referencing Database)	22	✓	✓		✓ <sub>1,2</sub>	✓	✓	✓ <sub>2</sub> ✓ <sub>3</sub>	✓ <sub>1</sub> ✓ <sub>2</sub>	✓ <sub>2</sub> ✓ <sub>3</sub>
<b>MCM</b> (Mobile Case Management)	23				✓ <sub>2</sub>				✓ <sub>1</sub>	
<b>MOJO Optimizer/Modeler</b> (MOJO – Optimizer/Modeling)	24				✓ <sub>1,2</sub>				✓ <sub>1</sub>	

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<b>Conduct Operation Dates</b>		----	3/31/2017	7/31/2017	8/28/2017	9/5/2017	3/19/2018	(2) 2/12/2018 (3) 6/11/2018	(1) 3/14/2018 (2) 7/16/2018	(1) 5/1/2018 (2) 10/1/2018 (3) 1/7/2019
<b>MOJO Recruiting Dashboard</b>	25		✓	✓		✓	✓	✓ <sub>3</sub>		
<b>NPC Printing</b> (Printing at the National Processing Center)	26				✓ <sub>1,2</sub>	✓		✓ <sub>2</sub> ✓ <sub>3</sub>	✓ <sub>1</sub> ✓ <sub>2</sub>	
<b>OneForm Designer Plus</b>	27	Standalone system; no program-level integration testing required								
<b>PEARSIS</b> (Production Environment for Administrative Records, Staging, Integration, and Storage)								✓ <sub>2</sub>	✓ <sub>1</sub>	✓ <sub>2</sub> ✓ <sub>3</sub>
<b>R&amp;A</b> (Recruiting and Assessment)	28		✓	✓	✓ <sub>1,2</sub>	✓	✓	✓ <sub>3</sub>	✓ <sub>1</sub> ✓ <sub>2</sub>	
<b>RTNP</b> (Real Time Non-ID Processing)	29							✓ <sub>2</sub>		

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# 2020 Census Systems Readiness

## 2018 End-to-End Census Test Systems

System	No Further Enhancements for Future Releases	2018 End-to-End Census Test Releases								
		Systems in Production						Future Releases		
		In-Office AdCan (Release I)	Recruiting Release 1	Training Release 1	Release A	Recruiting Release 2	Training Release 2	Release C	Release D	Release E
<b>Test Readiness Review Dates</b>		----	11/18/2016	3/8/2017	(1) 3/8/2017 (2) 5/10/2017	6/15/2017	10/11/2017	(2) 11/17/2017 (3) 3/27/2018	(1) 12/6/2017 (2) 4/17/2018	(1) 2/26/2018 (2) 7/11/2018 (3) 10/31/2018
<b>Production Readiness Review Dates</b>		12/13/2016	12/1/2016	6/22/2017	7/26/2017	7/31/2017	1/12/2018	(2) 1/26/2018 (3) 5/21/2018	(1) 2/12/2018 (2) 6/11/2018	(1) 4/4/2018 (2) 9/4/2018 (3) 12/3/2018
<b>Conduct Operation Dates</b>		----	3/31/2017	7/31/2017	8/28/2017	9/5/2017	3/19/2018	(2) 2/12/2018 (3) 6/11/2018	(1) 3/14/2018 (2) 7/16/2018	(1) 5/1/2018 (2) 10/1/2018 (3) 1/7/2019
<b>SMARCS</b> (Sampling, Matching, Reviewing, and Coding System)					✓ <sub>1,2</sub>				✓ <sub>1</sub>	✓ <sub>2</sub>
<b>SOA</b> (Service Oriented Architecture)	30			✓	✓ <sub>1,2</sub>	✓	✓	✓ <sub>2</sub> ✓ <sub>3</sub>	✓ <sub>1</sub> ✓ <sub>2</sub>	✓ <sub>2</sub> ✓ <sub>3</sub>
<b>UTS</b> (Unified Tracking System)		✓	✓	✓	✓ <sub>2</sub>	✓		✓ <sub>2</sub> ✓ <sub>3</sub>	✓ <sub>1</sub> ✓ <sub>2</sub>	✓ <sub>2</sub> ✓ <sub>3</sub>

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# 2020 Census Systems Readiness

## 2018 End-to-End Census Test Acquired & Support Systems

System	2018 End-to-End Census Test Releases								
	Systems in Production						Future Releases		
	In-Office AdCan (Release I)	Recruiting Release 1	Training Release 1	Release A	Recruiting Release 2	Training Release 2	Release C	Release D	Release E
<b>Test Readiness Review Dates</b>	----	11/18/2016	3/8/2017	(1) 3/8/2017 (2) 5/10/2017	6/15/2017	10/11/2017	(2) 11/17/2017 (3) 3/27/2018	(1) 12/6/2017 (2) 4/17/2018	(1) 2/26/2018 (2) 7/11/2018 (3) 10/31/2018
<b>Production Readiness Review Dates</b>	12/13/2016	12/1/2016	6/22/2017	7/26/2017	7/31/2017	1/12/2018	(2) 1/26/2018 (3) 5/21/2018	(1) 2/12/2018 (2) 6/11/2018	(1) 4/4/2018 (2) 9/4/2018 (3) 12/3/2018
<b>Conduct Operation Dates</b>	----	3/31/2017	7/31/2017	8/28/2017	9/5/2017	3/19/2018	(2) 2/12/2018 (3) 6/11/2018	(1) 3/14/2018 (2) 7/16/2018	(1) 5/1/2018 (2) 10/1/2018 (3) 1/7/2019
<b>Acquired and Support Systems</b>									
<b>CFS Hotline</b> (Census Field Supervisor Hotline)			✓	✓ <sub>1,2</sub>				✓ <sub>1</sub> ✓ <sub>2</sub>	
<b>Commercial Printing</b>							✓ <sub>2</sub>	✓ <sub>1</sub>	
<b>dDaaS</b> (Decennial Device as a Service)						✓	✓ <sub>2</sub> ✓ <sub>3</sub>	✓ <sub>1</sub> ✓ <sub>2</sub>	
<b>DSSD</b> (Decennial Statistical Studies Division)							✓ <sub>2</sub> ✓ <sub>3</sub>	✓ <sub>1</sub> ✓ <sub>2</sub>	✓ <sub>2</sub>
<b>ENS</b> (Emergency Notification System)		✓		✓ <sub>1,2</sub>	✓	✓	✓ <sub>2</sub> ✓ <sub>3</sub>	✓ <sub>1</sub> ✓ <sub>2</sub>	
<b>ERD</b> (Economic Reimbursable Surveys Division)								✓ <sub>1</sub> ✓ <sub>2</sub>	✓ <sub>2</sub> ✓ <sub>3</sub>
<b>Fingerprint Vendor</b>						✓	✓ <sub>3</sub>		
<b>NPC</b> (National Processing Center)							✓ <sub>2</sub> ✓ <sub>3</sub>	✓ <sub>1</sub> ✓ <sub>2</sub>	✓ <sub>2</sub> ✓ <sub>3</sub>
<b>POP</b> (Population Division)									✓ <sub>3</sub>
<b>Sunflower</b>		✓	✓	✓ <sub>1,2</sub>	✓			✓ <sub>1</sub> ✓ <sub>2</sub>	

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# 2020 Census Systems Readiness

## 2018 End-to-End Census Test - Systems Not Deployed in Support of Operations to Date

System	2018 End-to-End Census Test Releases								
	Systems in Production						Future Releases		
	In-Office AdCan (Release I)	Recruiting Release 1	Training Release 1	Release A	Recruiting Release 2	Training Release 2	Release C	Release D	Release E
<b>Test Readiness Review Dates</b>	----	11/18/2016	3/8/2017	(1) 3/8/2017	6/15/2017	10/11/2017	(2) 11/17/2017	(1) 12/6/2017	(1) 2/26/2018
				(2) 5/10/2017			(3) 3/27/2018	(2) 4/17/2018	(2) 7/11/2018
								(3) 10/31/2018	
<b>Production Readiness Review Dates</b>	12/13/2016	12/1/2016	6/22/2017	7/26/2017	7/31/2017	1/12/2018	(2) 1/26/2018	(1) 2/12/2018	(1) 4/4/2018
							(3) 5/21/2018	(2) 6/11/2018	(2) 9/4/2018
									(3) 12/3/2018
<b>Conduct Operation Dates</b>	----	3/31/2017	7/31/2017	8/28/2017	9/5/2017	3/19/2018	(2) 2/12/2018	(1) 3/14/2018	(1) 5/1/2018
							(3) 6/11/2018	(2) 7/16/2018	(2) 10/1/2018
									(3) 1/7/2019
<b>CEDSCI</b> (Center for Enterprise Dissemination Services and Consumer Innovation)									✓ <sub>3</sub>
<b>Centurion</b>								✓ <sub>2</sub>	
<b>FDS</b> (Fraud Detection System)									✓ <sub>2</sub>
<b>Tabulation</b> (Decennial Tabulation System)									✓ <sub>3</sub>

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# 2020 Census Systems Readiness

## 2020 Census Releases

2020 Census Releases	Operational Areas Supported	Test Readiness Review (TRR)	Production Readiness Review (PRR)	Conduct Operation
<b>Release 1</b>	Recruiting for all positions/AdCan Recruiting; Selection/Hiring/Training of Recruiting Assistants, Partnership Assistants, Office Operations Supervisors, and Clerks	<b>5/21/2018</b>	<b>7/23/2018</b>	<b>9/1/2018</b>
<b>Release 2</b>	Address Canvassing selection of Census Field Supervisors, Enumerator and Listers; Post Enumeration Survey (PES) Sample Release: Initial Sample for PES; AdCan Training; In-Field Address Canvassing; Peak Operation Recruiting	<b>11/5/2018</b>	<b>3/1/2019</b>	<b>5/1/2019</b>
<b>Release 3</b>	Advertising and Earned Media; Housing Unit Count Review; Peak Operation Training (includes UL/GQ/Update Enumerate (UE)/NRFU); PES - Independent Listing Training; PES - Independent Listing; GQ Workload and Advanced Contact/CQA Training/Printing and Mailing Workload; Remote Alaska; Island Areas Censuses; Enumeration at Transitory Locations; Self-Response (includes Mailing/Self-Response/CQA/Coverage Improvement); Peak Operations (includes UL/UE/GQ/SBE/Early NRFU/NRFU); PES - Person Interview; PES - Initial Housing Unit Follow-up; PES - Person Interview Matching (E-Sample ID, Computer Matching, Before Followup Clerical Matching)	<b>2/19/2019</b>	<b>6/5/2019</b>	<b>11/1/2019</b>
<b>Release 4</b>	Tabulation/Dissemination; Archiving; Federally Affiliated Count Overseas; Redistricting Data; PES - Person Follow-up; Count Question Resolution; PES - Final Housing Unit Follow-up; PES - Reports and Release Findings	<b>10/3/2019</b>	<b>2/3/2020</b>	<b>7/1/2020</b>

# 2020 Census Systems Readiness

## 2020 Census Only Systems

System	2020 Census Releases			
	Release 1	Release 2	Release 3	Release 4
<b>Test Readiness Review Dates</b>	5/21/2018	11/5/2018	2/19/2019	10/3/2019
<b>Production Readiness Review Dates</b>	7/23/2018	3/1/2019	6/5/2019	2/3/2020
<b>Conduct Operation Dates</b>	9/1/2018	5/1/2019	11/1/2019	7/1/2020
<b>CEM</b> (Customer Experience Management)			✓	
<b>CRM</b> (Customer Relationship Management)			✓	
<b>DMP</b> (Data Management Platform)			✓	
<b>GUPS</b> (Geographic Update Partnership Software)			✓*	
<b>PES Clerical Match and Map Update</b> (Post-Enumeration Survey - Clerical Matching System and Map Update)			✓	✓
<b>PES Imputation and Estimation</b> (Post-Enumeration Survey - Imputation and Estimation System)			✓	✓
<b>PES PCS</b> (Post-Enumeration Survey - Processing and Control System)			✓	✓
<b>WebTQA</b> (Web Telephone Questionnaire Assistance)	✓*			

✓\*= Release G for Geographic Programs

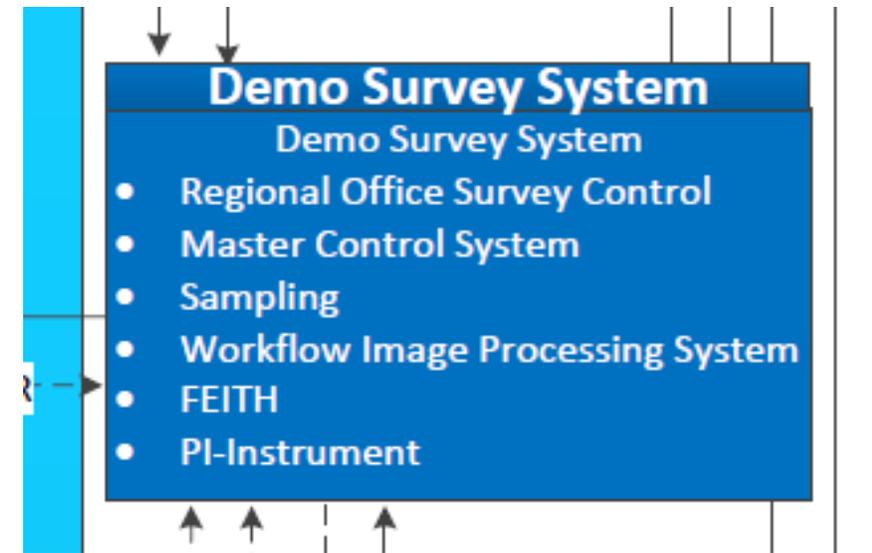
# 2020 Census Systems Readiness

## Demographic Survey System: Additional Support System for 2020

The Demographic Survey System is being added to support Post Enumeration Survey for the 2020 Census.

Functionality provided by the Demo Survey System:

- Manages data-collection activities
- Loads Sample Control Input File and receives response data
- Selects a sample of Basic Collection Units
- Processes workflow images
- Documents retrieval
- Collects Person Interview results during Coverage Measurement field operations



Questions?