2020 Census Readiness

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2016 Census Test

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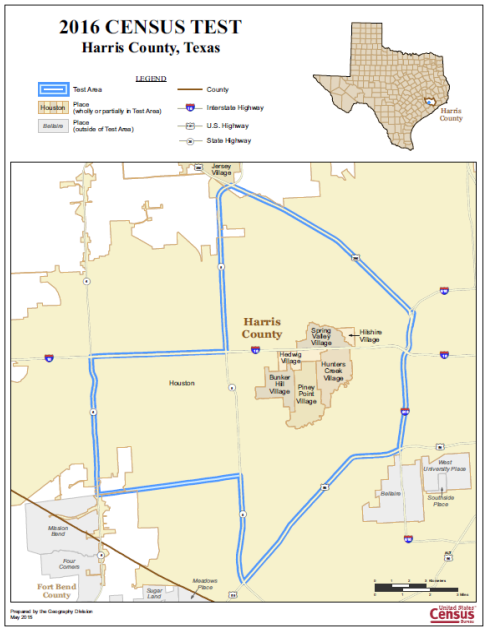
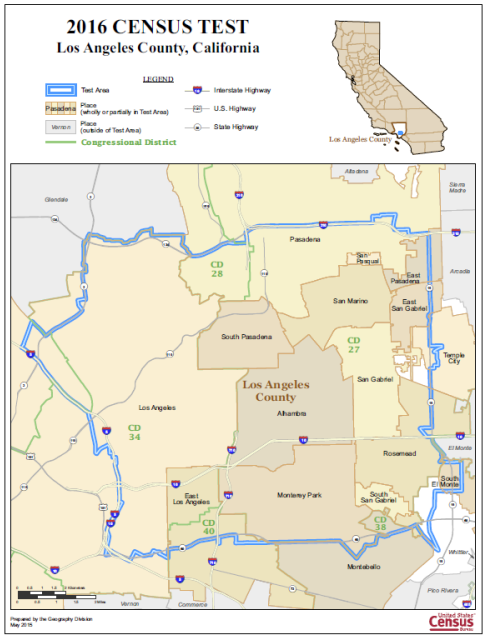
2016 Census Test

Overview

- Purpose: Refine technologies and methods associated with Self-Response and Nonresponse Followup operations
- April 1, 2016 Census Day
- A site test in parts of Harris County, TX and Los Angeles County, CA
  - Language diversity
  - Demographic diversity
  - High vacancy rates
  - Varying levels of Internet usage
  - Multiple locations across different time zones
  - Approximately 225,000 housing units in each test area





2016 Census Test
Self-Response: Overview

- Five Self-Response Contact Strategy Panels
- Multiple mailings to encourage self-response
- Provide language support to Limited English Proficient populations
  - Non-English questionnaires (Internet, paper, Census Questionnaire Assistance, Nonresponse Followup)
  - Multilingual brochures
  - Envelopes with messages written in non-English languages
- New Internet software application PRIMUS
- Refinement of Real-Time Non-ID Processing methods
- Partnerships to reach demographically diverse populations

2016 Census Test

Self-Response: Contact Strategies

Five Self-Response Contact Strategy Panels with Multiple Mailings

	Panel	Contact 1 March 21, 2016	Contact 2 March 24, 2016	Contact 3 April 4, 2016	Contact 4 April 11, 2016	Contact 5 Nonresponse Followup
1	Internet Push	Letter	Postcard	Postcard	Mail Questionnaire + Letter	Postcard*
2	Internet Push with reminder letter	Letter	Letter	Postcard	Mail Questionnaire + Letter	Postcard*
3	Internet Push with language brochure	Brochure	Postcard	Postcard	Mail Questionnaire + Brochure	Postcard*
4	Internet Push with language insert	Letter + Insert	Postcard	Postcard	Mail Questionnaire + Letter/Insert	Postcard*
5	Internet Choice	Mail Questionnaire + Letter	Postcard	Postcard	Mail Questionnaire + Letter	Postcard*

*Weekly NRFU mailings will occur to any addresses removed from the NRFU workload as a result of our administrative records modeling process.

2016 Census Test
Self-Response: Language Materials

Language Materials Provided for the 2016 Census Test

Operation/Materials	Non-English Languages
Internet Questionnaire	Spanish, Chinese (Simplified), Korean
Paper Questionnaire (and mailing materials)	Spanish, Chinese (Simplified), Korean
Nonresponse Followup Questionnaire (and field materials)	Spanish, Chinese (Simplified), Korean
Census Questionnaire Assistance Interview	Spanish, Chinese (Mandarin, Cantonese), Korean, Vietnamese, Tagalog, Arabic, French
Web Pages with Fact Sheet and FAQs	Spanish, Chinese (Simplified), Korean, Vietnamese, Japanese, Tagalog, Arabic, Farsi, Dari, French, Burmese, Thai

2016 Census Test

Self-Response: Internet (CEDCaP System)

New Internet Software Application PRIMUS

United States Census Bureau | FAQ | Instructions | Burden Statement | Select Language | Save and Logout

Home > Household > Residence

Where will you be living on April 1, 2016 (Help)

Please select the type of address associated with your residence.

Note: If you have a street address associated with your residence, such as one you would provide to have a package delivered to your home, then please provide it here; not your P.O. Box or Rural Route address.

- (•) Street Address
- ( ) Rural Route
- ( ) P.O. Box

Address Number

000

Street Name

Main Street

Apt/Unit

Apt#

City Anytown

State District Of Co

ZIP Code 00000

Previous | Next

73° 2:47

United States Census

Home > Household > Residence

Where will you be living on April 1, 2016 (Help)

Please select the type of address associated with your residence.

Note: If you have a street address associated with your residence, such as one you would provide to have a package delivered to your home, then please provide it here; not your P.O. Box or Rural Route address.

- (•) Street Address
- ( ) Rural Route
- ( ) P.O. Box

Address Number

000

Street Name

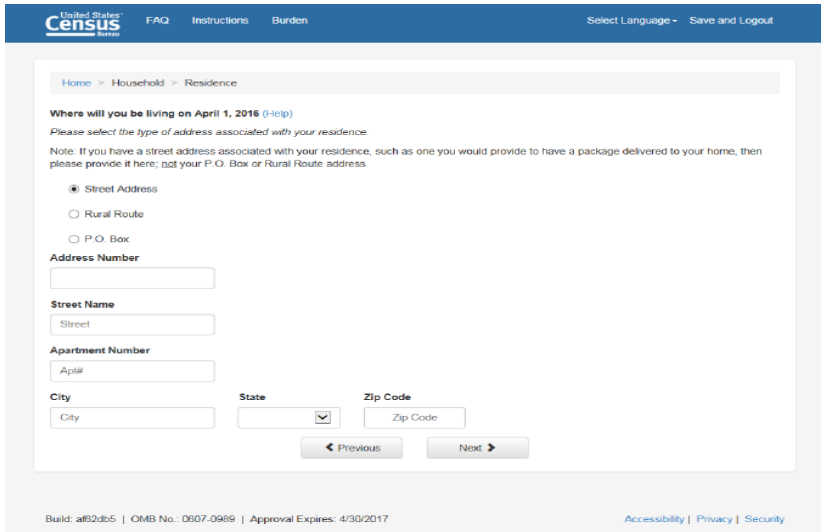
Main Street

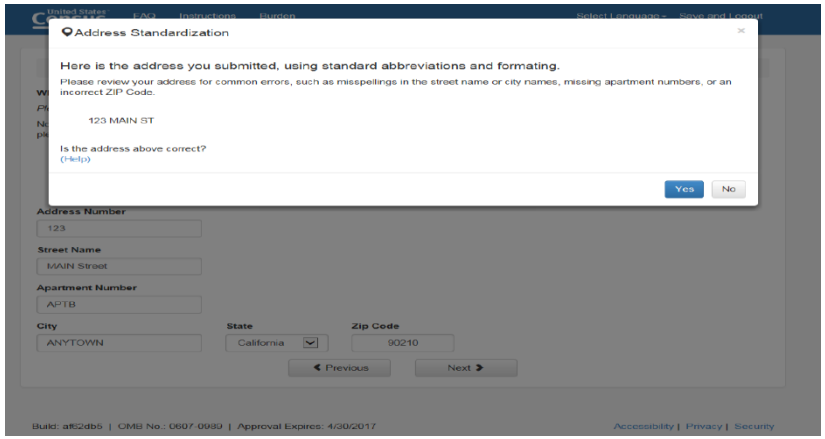
Apt/Unit

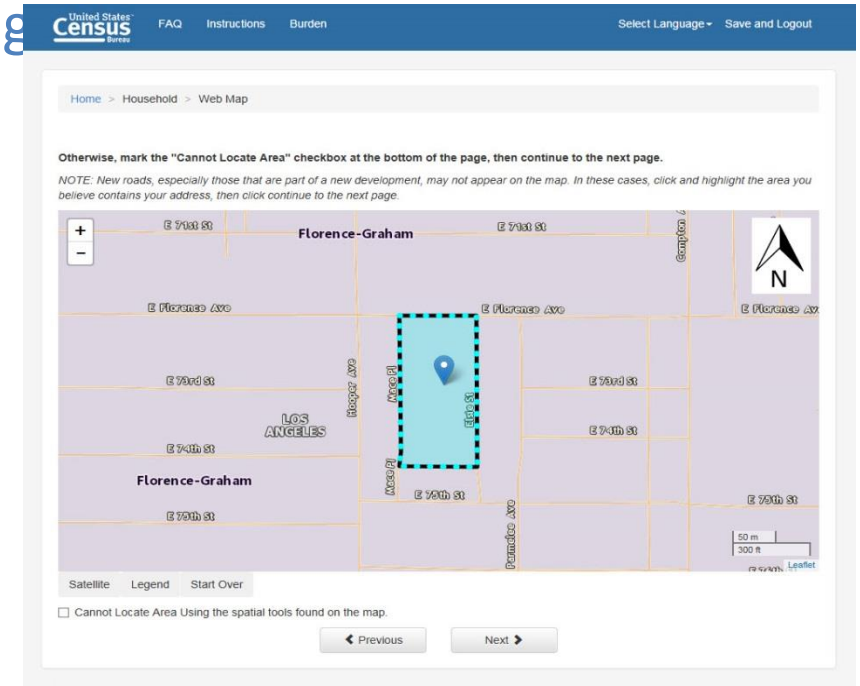
Apt#

2016 Census Test

Self-Response: Non-ID Processing



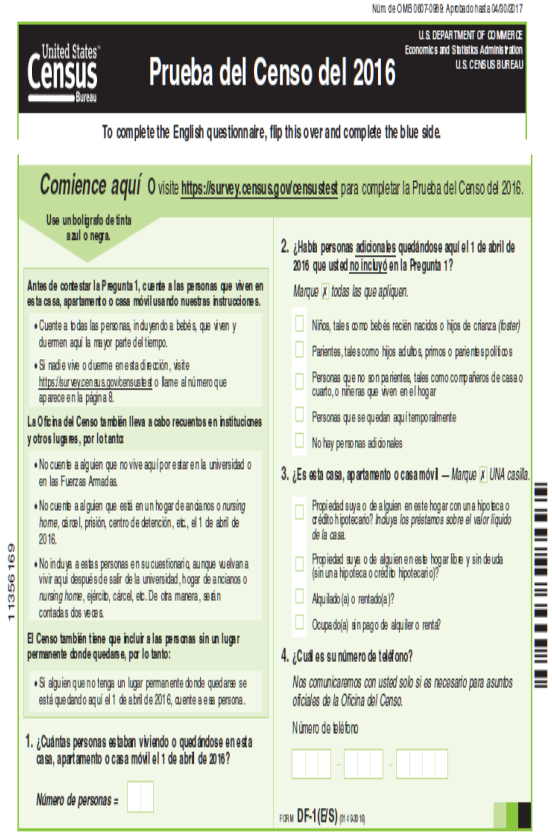




2016 Census Test

Self-Response: Questionnaire

Questionnaire in Four Languages - English, Spanish, Chinese, and Korean



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Prueba del Censo del 2016

To complete the English questionnaire, flip this over and complete the blue side.

Comience aquí O visite https://survey.census.gov/censustest para completar la Prueba del Censo del 2016.

Use un bolígrafo de tinta azul o negra.

Antes de contestar la Pregunta 1, cuente a las personas que viven en esta casa, apartamento o casa móvil usando nuestras instrucciones.

- Cuente a todas las personas, incluyendo a bebés, que viven y duermen aquí la mayor parte del tiempo.
- Si nadie vive o duerme en esta dirección, visite https://survey.census.gov/censustest o llame al número que aparece en la página 8.

La Oficina del Censo también lleva a cabo recuentos en instituciones y otros lugares, por lo tanto:

- No cuente a alguien que no vive aquí por estar en la universidad o en las Fuerzas Armadas.
- No cuente a alguien que esté en un hogar de ancianos o nursing home, clínica, prisión, centro de detención, etc., el 1 de abril de 2016.
- No incluya a estas personas en su cuestionario, aunque vuelvan a vivir aquí después de salir de la universidad, hogar de ancianos o nursing home, ejército, cárcel, etc. De otra manera, serían contadas dos veces.

El Censo también tiene que incluir a las personas sin un lugar permanente donde quedarse, por lo tanto:

- Si alguien que no tenga un lugar permanente donde quedarse se está quedando aquí el 1 de abril de 2016, cuente a esa persona.

1. ¿Cuántas personas estaban viviendo o quedándose en esta casa, apartamento o casa móvil el 1 de abril de 2016?

   Número de personas =

2. ¿Había personas adicionales quedándose aquí el 1 de abril de 2016 que usted no incluyó en la Pregunta 1?

   Marque ☒ todas las que apliquen.

   - ☐ Niños, tales como bebés recién nacidos o hijos de crianza (foster)
   - ☐ Parientes, tales como hijos adultos, primos o parientes políticos
   - ☐ Personas que no son parientes, tales como compañeros de casa o cuarto, o niñeras que viven en el hogar
   - ☐ Personas que se quedan aquí temporalmente
   - ☐ No hay personas adicionales

3. ¿Es esta casa, apartamento o casa móvil — *Marque ☒ UNA casilla.*

   - ☐ Propiedad suya o de alguien en este hogar con una hipoteca o crédito hipotecario? *Incluya los préstamos sobre el valor líquido de la casa.*
   - ☐ Propiedad suya o de alguien en este hogar libre y sin deuda (sin una hipoteca o crédito hipotecario)?
   - ☐ Alquilado (a) o rentado(a)?
   - ☐ Ocupado(a) sin pago de alquiler o renta?

4. ¿Cuál es su número de teléfono?

   Nos comunicaremos con usted solo si es necesario para asuntos oficiales de la Oficina del Censo.

   Número de teléfono

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FORM DF-1(E/S) (01-19-2016)

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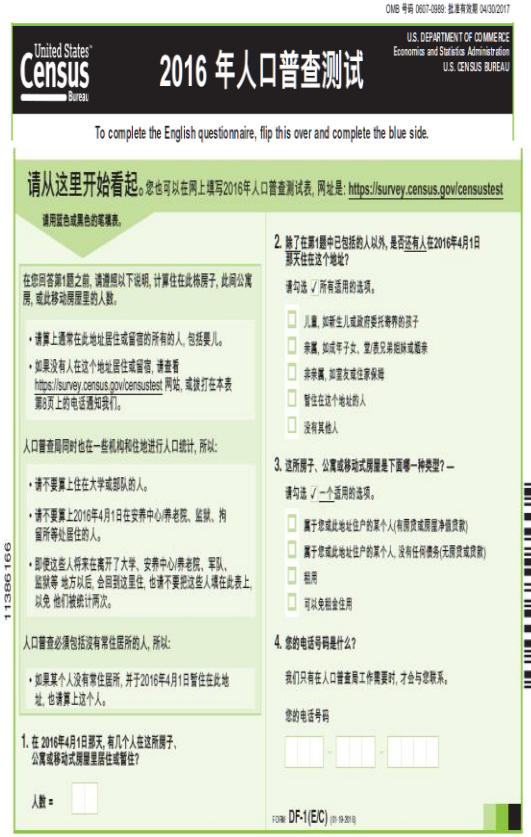

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2016 年人口普查测试

To complete the English questionnaire, flip this over and complete the blue side.

请从这里开始看起。您也可以在网上填写2016年人口普查测试表，网址是：https://survey.census.gov/censustest

请用蓝色或黑色的笔填表。

在您回答第1题之前，请遵照以下说明，计算住在此栋房子，此间公寓房，或此移动房屋里的人数。

- 请算上通常在此地址居住或留宿的所有的人，包括婴儿。
- 如果没有人在这个地址居住或留宿，请查看 https://survey.census.gov/censustest 网站，或拨打在本表第8页上的电话通知我们。

人口普查局同时也在一些机构和住地进行人口统计，所以：

- 请不要算上住在大学或部队的人。
- 请不要算上2016年4月1日在安养中心/养老院、监狱、拘留所等处居住的人。
- 即便这些人将来在离开了大学、安养中心/养老院、军队、监狱等 地方以后，会回到这里住，也请不要把这些人填在此表上，以免 他们被统计两次。

人口普查必须包括没有常住居所的人，所以：

- 如果某个人没有常住居所，并于2016年4月1日暂住在此地址，也请算上这个人。

1. 在2016年4月1日那天，有几个人在这所房子、公寓或移动式房屋里居住或暂住？

   人数 =

2. 除了在第1题中已包括的人以外，是否还有人在2016年4月1日那天住在这个地址？

   请勾选 ✓ 所有适用的选项。

   - ☐ 儿童，如寄生儿或政府委托寄养的孩子
   - ☐ 亲属，如成年子女、堂/表兄弟姐妹或姻亲
   - ☐ 非亲属，如室友或住家保姆
   - ☐ 暂住这个地址的人
   - ☐ 没有其他人

3. 这所房子、公寓或移动式房屋是下面哪一种类型？—

   请勾选 ✓ 一个适用的选项。

   - ☐ 属于您或此地址住户的某个人(有房贷或房屋净值贷款)
   - ☐ 属于您或此地址住户的某个人，没有任何债务(无房贷或贷款)
   - ☐ 租房
   - ☐ 可以免租金住用

4. 您的电话号码是什么？

   我们只有在人口普查局工作需要时，才会与您联系。

   您的电话号码

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FORM DF-1(E/C) (01-19-2016)

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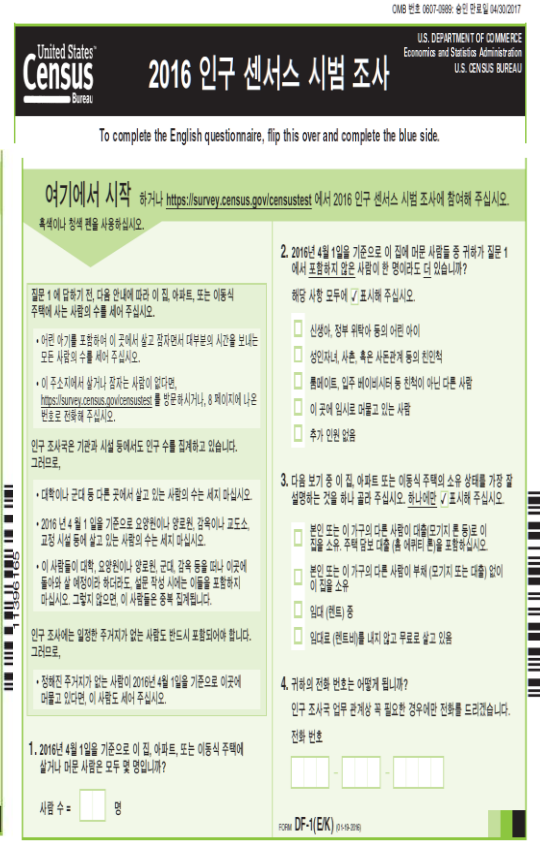

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2016 인구 센서스 시범 조사

To complete the English questionnaire, flip this over and complete the blue side.

여기에서 시작 하거나 https://survey.census.gov/censustest 에서 2016 인구 센서스 시범 조사에 참여해 주십시오.

흑색이나 청색 펜을 사용하십시오.

질문 1 에 답하기 전, 다음 안내에 따라 이 집, 아파트, 또는 이동식 주택에 사는 사람의 수를 세어 주십시오.

- 어린 아기를 포함하여 이 곳에서 살고 잠자면서 대부분의 시간을 보내는 모든 사람의 수를 세어 주십시오.
- 이 주소지에서 살거나 잠자는 사람이 없다면, https://survey.census.gov/censustest 를 방문하시거나, 8 페이지에 나온 번호로 전화해 주십시오.

인구 조사국은 기관과 시설 등에서도 인구 수를 집계하고 있습니다. 그러므로,

- 대학이나 군대 등 다른 곳에서 살고 있는 사람의 수는 세지 마십시오.
- 2016 년 4 월 1 일을 기준으로 요양원이나 양로원, 감옥이나 교도소, 교정 시설 등에 살고 있는 사람의 수는 세지 마십시오.
- 이 사람들이 대학, 요양원이나 양로원, 군대, 감옥 등을 떠나 이곳에 돌아와 살 예정이라 하더라도, 설문 작성 시에는 이들을 포함하지 마십시오. 그렇지 않으면, 이 사람들은 중복 집계됩니다.

인구 조사에는 일정한 주거지가 없는 사람도 반드시 포함되어야 합니다. 그러므로,

- 정해진 주거지가 없는 사람이 2016년 4월 1일을 기준으로 이곳에 머물고 있다면, 이 사람도 세어 주십시오.

1. 2016년 4월 1일을 기준으로 이 집, 아파트, 또는 이동식 주택에 살거나 머문 사람은 모두 몇 명입니까?

   사람 수 = ☐ 명

2. 2016년 4월 1일을 기준으로 이 집에 머문 사람들 중 귀하가 질문 1 에서 포함하지 않은 사람이 한 명이라도 더 있습니까?

   해당 사항 모두에 ✓ 표시해 주십시오.

   - ☐ 신생아, 정부 위탁아 등의 어린 아이
   - ☐ 성인자녀, 사촌, 혹은 사돈관계 등의 친인척
   - ☐ 룸메이트, 입주 베이비시터 등 친척이 아닌 다른 사람
   - ☐ 이 곳에 임시로 머물고 있는 사람
   - ☐ 추가 인원 없음

3. 다음 보기 중 이 집, 아파트 또는 이동식 주택의 소유 상태를 가장 잘 설명하는 것을 하나 골라 주십시오. 하나에만 ✓ 표시해 주십시오.

   - ☐ 본인 또는 이 가구의 다른 사람이 대출(모기지 론 등)로 이 집을 소유. 주택 담보 대출 (홈 에퀴티 론)을 포함하십시오.
   - ☐ 본인 또는 이 가구의 다른 사람이 부채 (모기지 또는 대출) 없이 이 집을 소유
   - ☐ 임대 (렌트) 중
   - ☐ 임대료 (렌트비를 내지 않고 무료로 살고 있음

4. 귀하의 전화 번호는 어떻게 됩니까?

   인구 조사국 업무 관계상 꼭 필요한 경우에만 전화를 드리겠습니다.

   전화 번호

   ☐☐☐ - ☐☐☐ - ☐☐☐☐

FORM DF-1(E/K) (01-19-2016)

Spanish

Chinese

Korean

2016 Census Test

Preliminary Response Rates as of April 11, 2016

		Los Angeles County Site				Harris County Site			
	Panel	Internet	Telephone	Mail	Total*	Internet	Telephone	Mail	Total*
1	Internet Push	23.35%	2.00%	0.00%	25.35%	19.30%	1.34%	0.00%	20.63%
2	Internet Push with Reminder Letter	24.62%	1.79%	0.00%	26.41%	19.99%	1.39%	0.00%	21.38%
3	Internet Push with Language Brochure	23.94%	2.08%	0.00%	26.02%	18.15%	1.20%	0.00%	19.35%
4	Internet Push with Language FAQ Insert	25.93%	2.09%	0.00%	28.02%	19.73%	1.26%	0.00%	20.99%
5	Internet Choice	10.85%	0.41%	19.06%	30.31%	6.66%	0.24%	8.19%	15.10%
	Total	21.66%	1.67%	4.11%	27.45%	17.71%	1.16%	1.02%	19.90%

*Individual components may not add to total due to rounding.

2016 Census Test
Partnership and Outreach

- Partners for the 2016 Census Test Sites
  - Houston - 159 Partners
  - Los Angeles - 187 Partners

- Partnership Commitment Activities for the 2016 Census Test Sites
  - Houston - 179 Activities
  - Los Angeles - 311 Activities

- Partnership specialists have also provided recruiting support for the Field staff

Note: Data as of April 11, 2016. This information will continue to change as new partners and activities are identified.

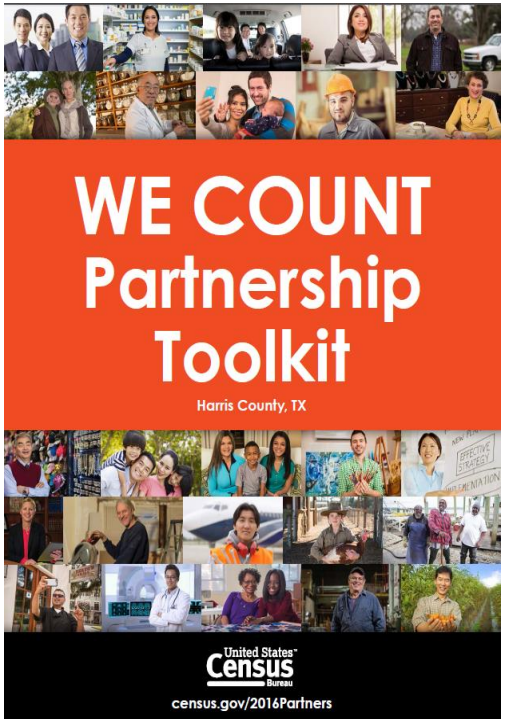
2016 Census Test
Partnership and Outreach

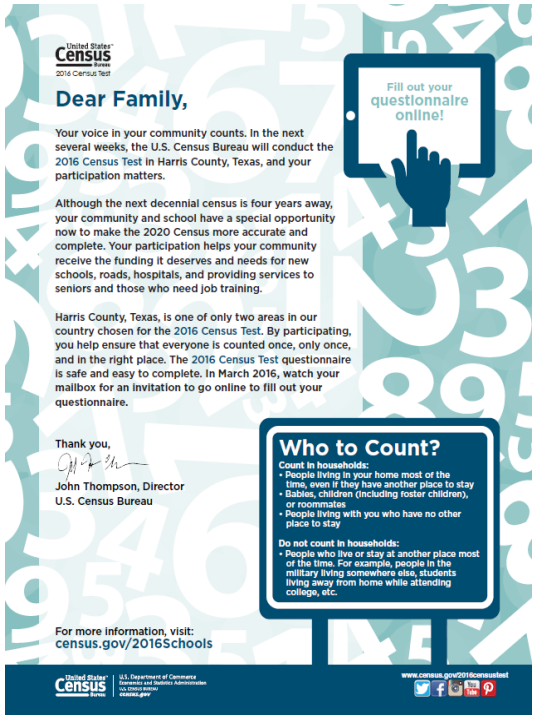
Partnerships Toolkit

Partnership Toolkits were developed for both Harris County, TX and Los Angeles County, CA

Contents include:

- Fast facts about the 2016 Census Test
- Email Samples
- Article Samples
- Event Hosting Tips
- Social Media Content
- A list of places with public computers
- Important Internet URLs





2016 Census Test
Reengineering Field Operations

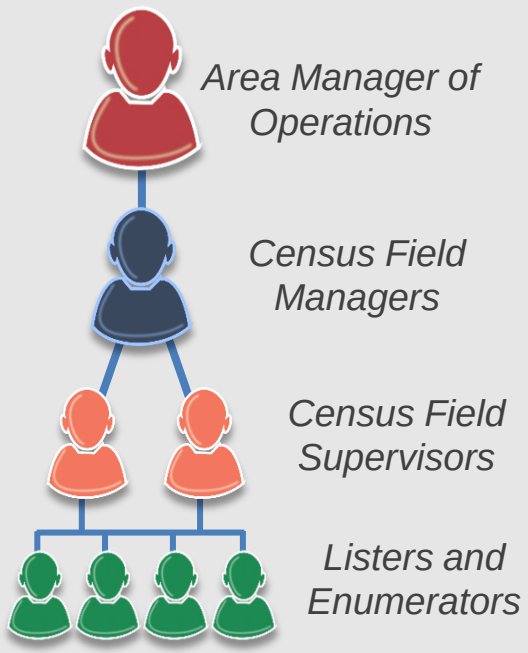
The 2016 Census Test will allow us to operationalize our new methods and new technology across multiple locations and time zones during nonresponse followup.

Our objectives related to nonresponse follow up include:

- Determine the nonresponse followup strategy for the 2020 Census – how do we use administrative records to reduce the nonresponse followup universe and to determine the number of contacts we make with each nonresponding housing unit
- Refinement of the field management staffing structure
  - What is the best ratio of enumerators to local supervisors of operations and local supervisors of operations to field managers of operations
- Enhancements to the Operational Control System and COMPASS
- Refinement of the path in COMPASS to conduct proxy interviews
- Automated applications for field recruiting and administration
- Multi-unit accessibility and contact procedures

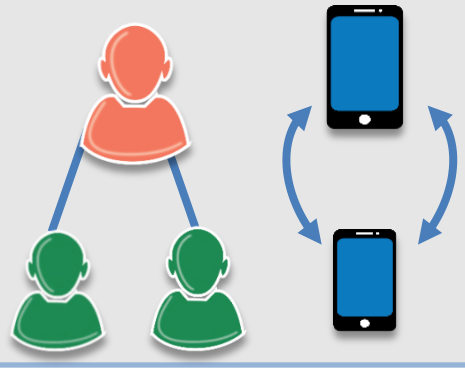
2016 Census Test
Reengineering Field Operations

Streamlined Office and Staffing Structure



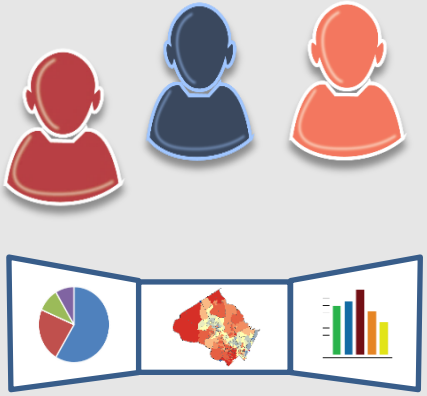
Increased use of Technology

- Automated and optimized work assignments
- Automated recruiting, training, payroll and expense reporting
- Ability to conduct address updates and enumeration on same device
- Reduced paper and manual processing



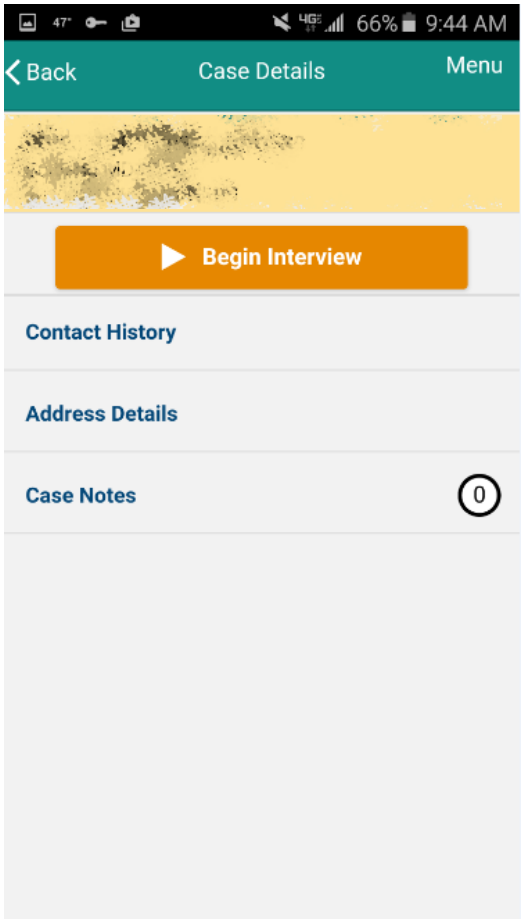
Increased Management and Staff Productivity

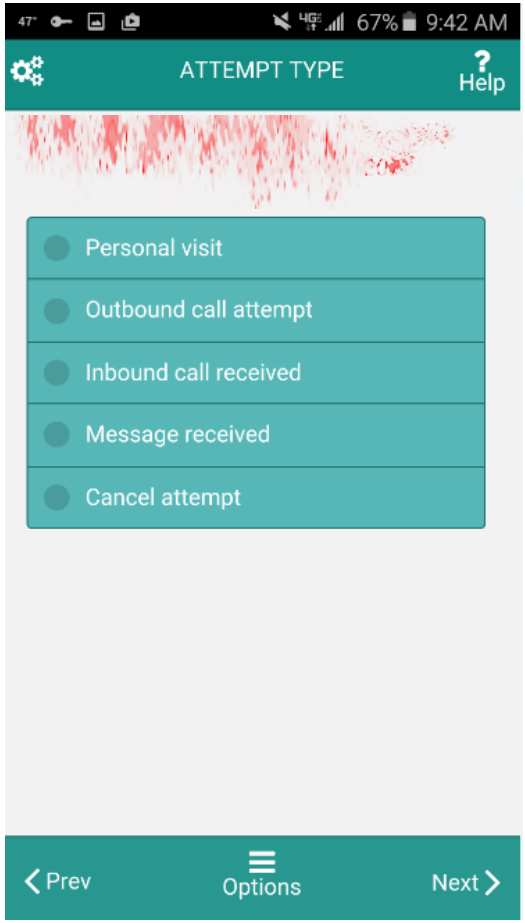
- Increased visibility into case status for improved workforce management
- Redesigned quality assurance operations
- Improved communications

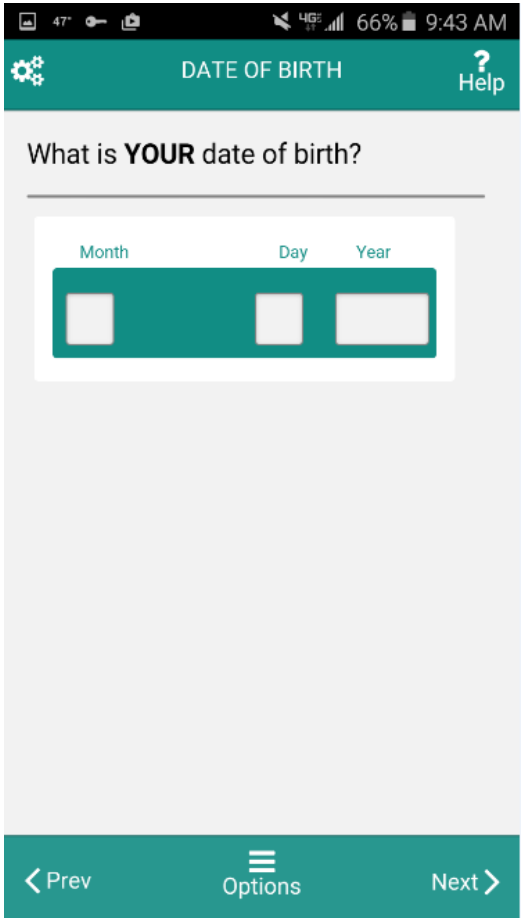


2016 Census Test

Reengineering Field Operations: COMPASS (CEDCaP System)







Note: Screenshot contains test data.

2016 Census Test

Milestones

Milestone	Date	
Announced 2016 Site Selections Area Operations Support Center (AOSC)	June 26, 2015	✓
Published Federal Register Pre-Submission Notice	August 4, 2015	✓
Opened Regional Census Centers	September 24, 2015	✓
Began Recruiting	November 2, 2015	✓
Received OMB Approval	January 14, 2016	✓
Opened Houston, TX AOSC	January 25, 2016	✓
Opened Los Angeles, CA AOSC	February 23, 2016	✓
Begin Self-Response Data Collection	March 21, 2016	✓
Census Day	April 1, 2016	✓
Begin Nonresponse Followup (NRFU)	May 12, 2016	

2020 Census Address Canvassing

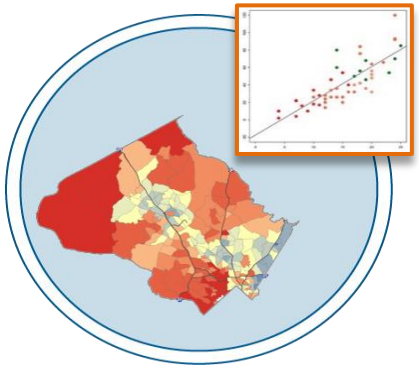
Evan Moffett

Decennial Census Management Division

The 2020 Census: Establish Where to Count

2020 Census Address Canvassing

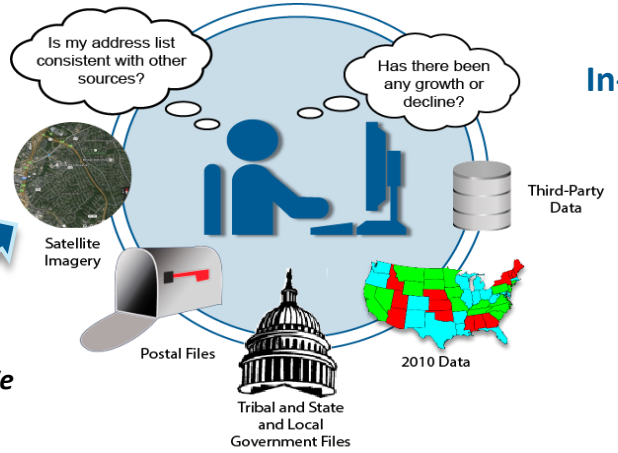
Reduce the nationwide In-Field Address Canvassing by developing innovative methodologies for updating and maintaining the Census Bureau's address list and spatial database throughout the decade.



Continual Research and Updating

Ongoing Process for
In-Office Canvassing

Where Should We Start?



In-Office Address Canvassing

In-Field Address Canvassing

Address List and Spatial Database

2020 Census Address Canvassing

In-Office Address Canvassing

Purpose: 100 percent review of all addresses in the office

Components

- Interactive Review (IR): Clerical staff identify geographic areas that are stable and do not require address or geospatial updating and those that are changing and do require updating.
- Active Block Resolution (ABR): Clerical staff perform a “virtual canvass” of the block to address issues such as over-coverage, under-coverage, etc.

Path Forward

- Interactive Review (IR)
  - FY 16 = 50 percent of all addresses worked
  - FY 17 = 50 percent of all addresses worked
- Active Block Resolution (ABR)
  - Begin at HQ in April 2016
  - Transition to NPC in July 2016

2020 Census Address Canvassing

In-Office Address Canvassing

Interactive Review: Status as of April 5, 2016

	Addresses	Percent
Active	4,696,026	21.4
Passive	15,200,107	69.2
On Hold	2,063,498	9.4

Status as of 04/5/16

2020 Census Address Canvassing

Master Address File Coverage Study

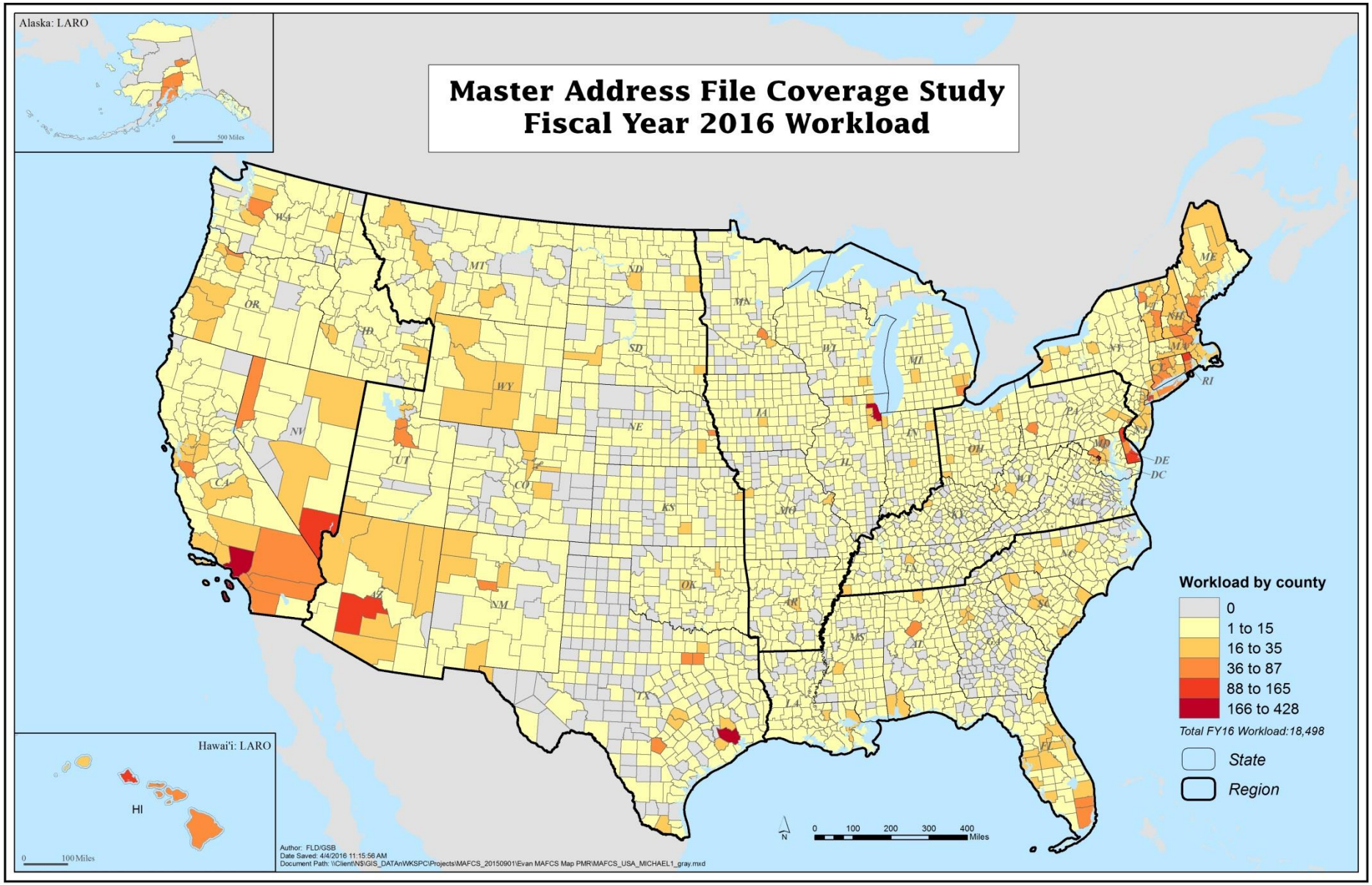
Independent annual Address Canvassing activity designed to meet the following objectives:

- Provide annual Master Address File coverage estimates
- Evaluate the In-Office Address Canvassing operation

Sample Design

- FY 2016: 20,000 blocks listed
  - 1,500 blocks listed October – March
  - 18,500 blocks listed April - September

- FY 2017 and beyond: 20,000 blocks listed
  - Twelve-month data collection
  - Two-month assignment periods



United States Census Bureau

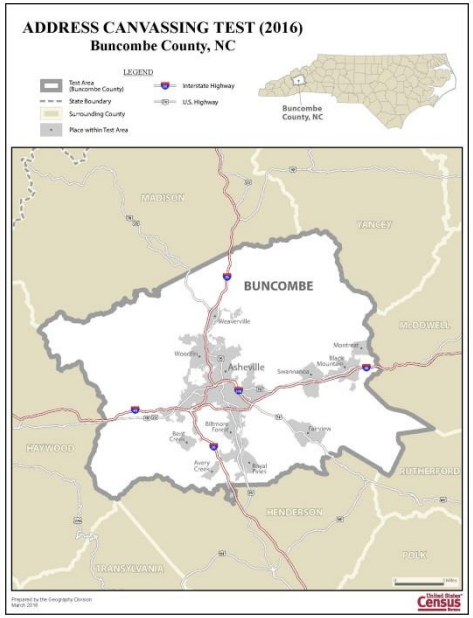
U.S. Department of Commerce
Economics and Statistics Administration
U.S. CENSUS BUREAU
census.gov

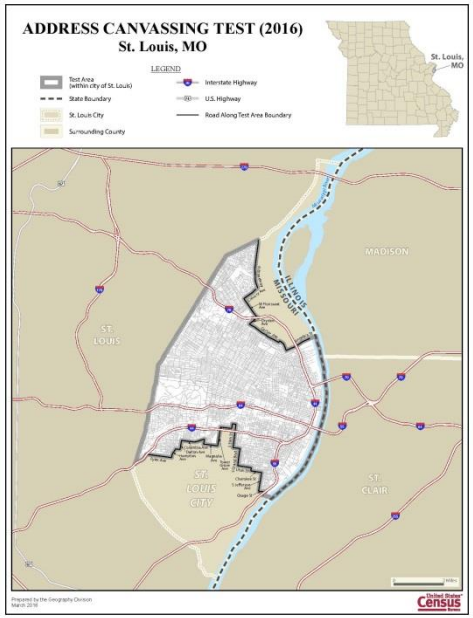
United States Census 2020

Address Canvassing Test

Overview

- A site test in Buncombe County, NC and a part of St. Louis, MO
  - Site experiencing population and housing growth
  - Site with a city which has experienced sustained population decline
  - Mix of urban, suburban, and rural territory
  - Mix of address styles and housing unit types





Address Canvassing Test

Purpose

- Measure the effectiveness of In-Office Address Canvassing through In-Field Address Canvassing
- Measure the effectiveness of In-Field Address Canvassing
- Understand the implications of moving from Assignment Area to Basic Collection Unit
- Conduct an In-Field Relisting to collect data to refine Quality Control operations

Methodology

- 100 percent In-Office Address Canvassing
- 100 percent In-Field Address Canvassing
- In-Field Relisting Operation

Address Canvassing Test

2020 Census Address Canvassing

Activity	Date
Begin Field Management Training	August 29, 2016
Begin Field Supervisor Training	September 12, 2016
Begin Field Representative Training	September 26, 16
In-Field Data Collection	October 3 – November 15, 2016
In-Field Relisting Data Collection	November 16 – December 16, 2016
Release Address Canvassing Test Analysis Report (through clearance)	April 29, 2017

Questions?

2020 Census Systems

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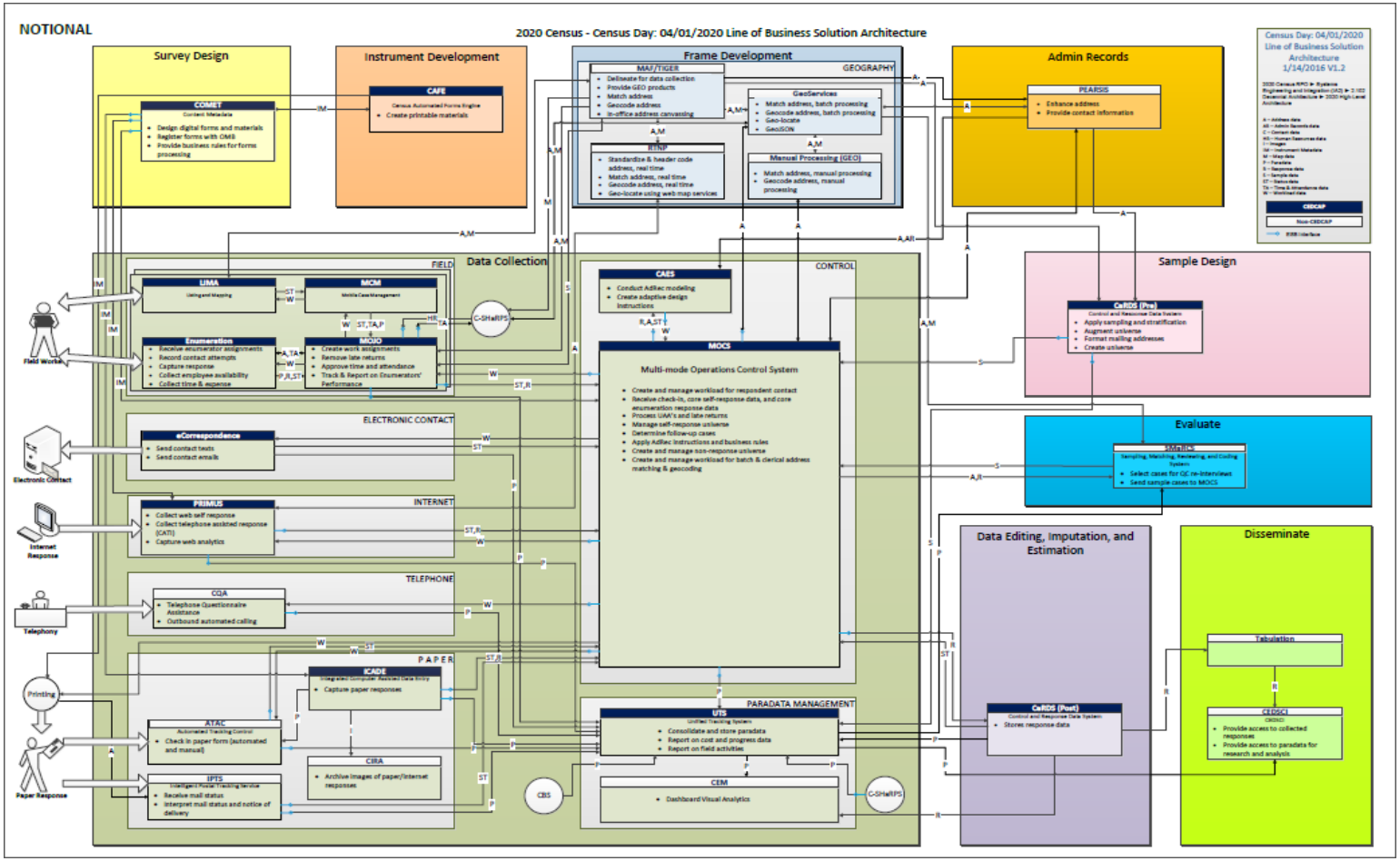
2020 Census Systems

2020 System Architecture



2020 Census Systems

2020 Census Enterprise Architecture and Infrastructure Transition Plan

- Designed to support the 2020 Census Operational Plan, with a phased approach aligned with the Census Tests
- Multi-year plan for the Census IT evolution from the 2015 Solution Architecture to the 2020 Target Solution Architecture
- Provides an integrated view and actionable plan of the IT activities and activity milestones
- Helps realize the desired Solution Architecture that can fulfill the business goals of achieving cost efficient Census via modern technology

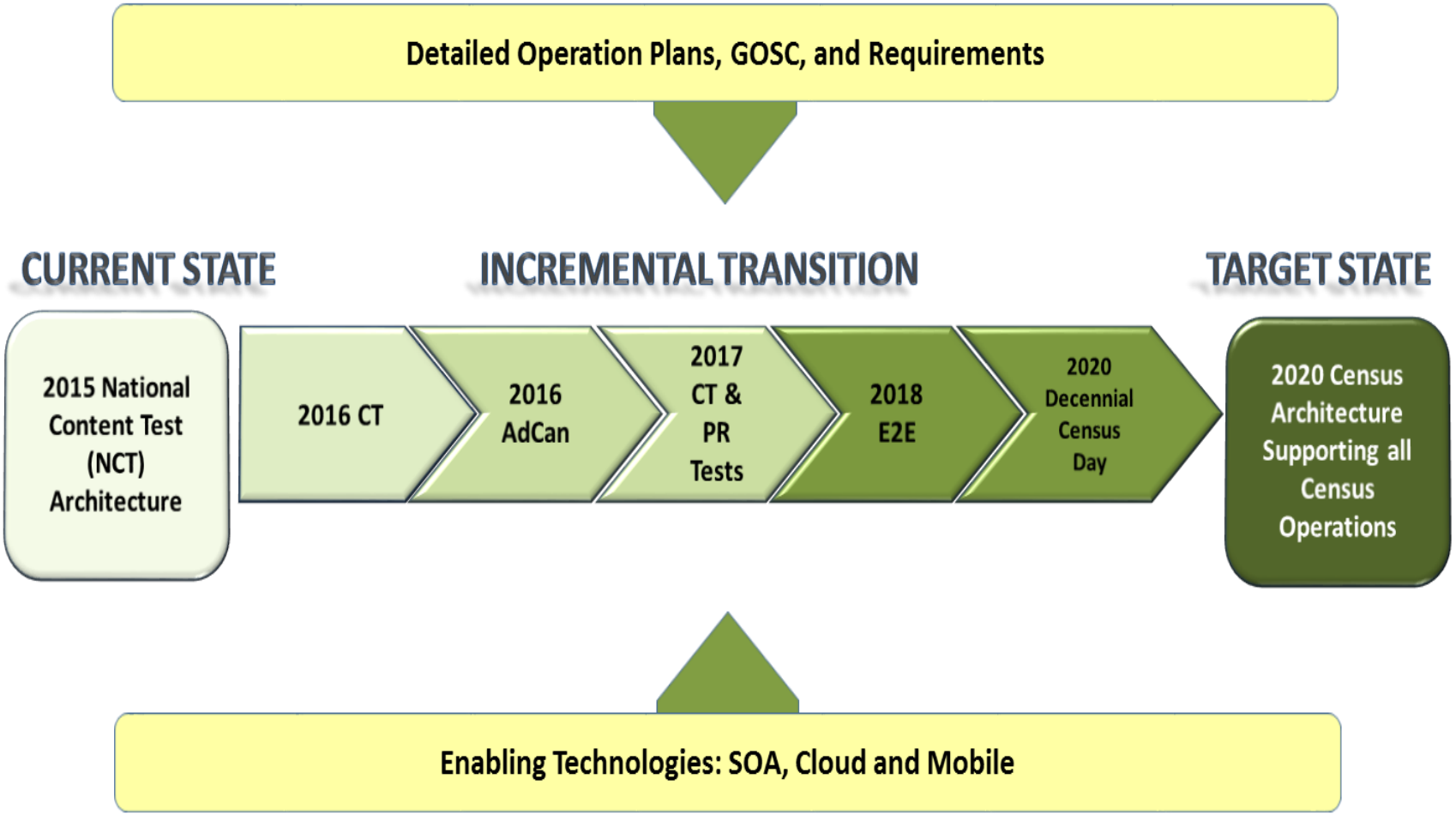
2020 Census Systems

Transition Plan Development Strategy

- Transition Plan development according to three strategies
  - The transition process is incremental by nature, as the solution evolves from the current to target state
  - The sequencing of the transition plan has timelines for the architecture domains - Business, Application, Information, Technical, Security, and Quality, and consists of evolving these domains from the current state to the target state
  - Maximizes the utilization of enterprise standards, patterns and programs, including CEDCaP and CEDSCI
- The 2020 Census Enterprise Architecture and Infrastructure Transition Plan is a living document, and will help meet the ultimate timelines of 2018 End-to-End Test and 2020 Census

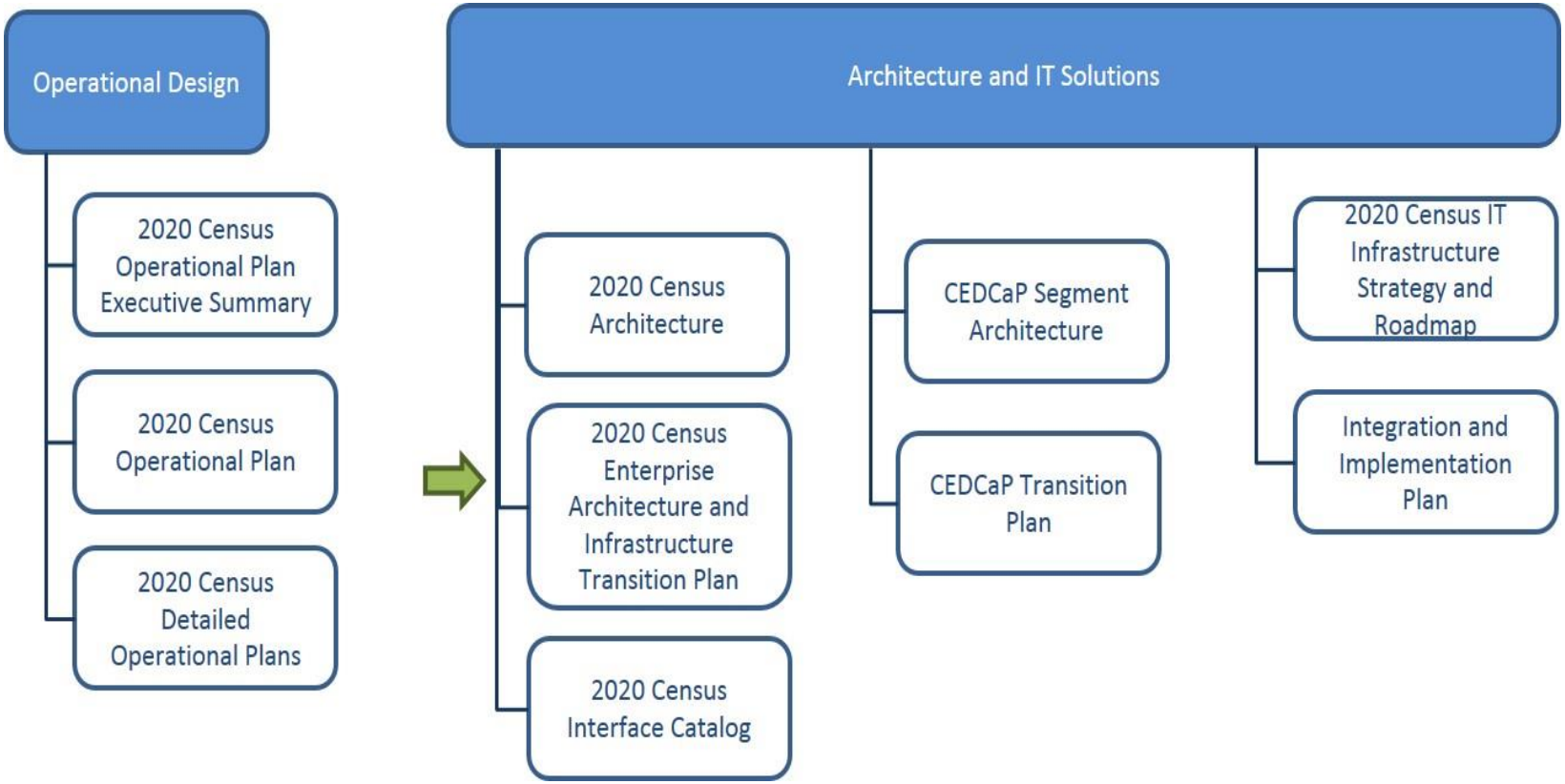
2020 Census Systems

2020 Census Architecture Incremental Transition Model



2020 Census Systems

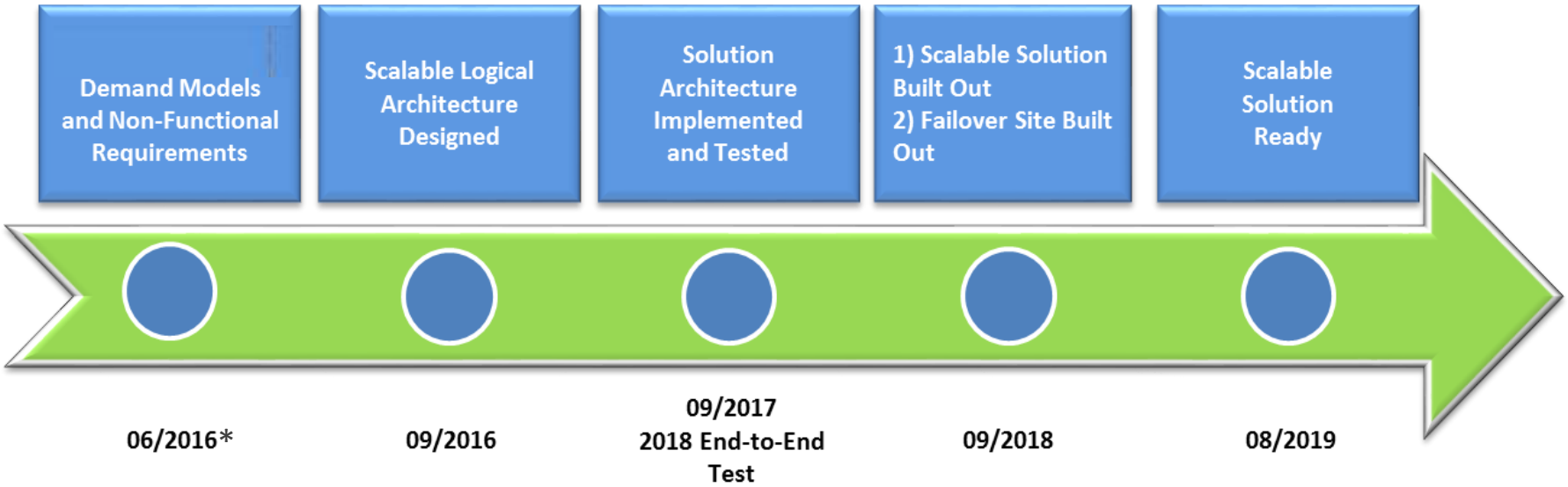
How the Transition Plan Relates



2020 Census Systems

Transition Plan – IT Infrastructure

Planned High-Level Timeline for Scalable and High Available Solution



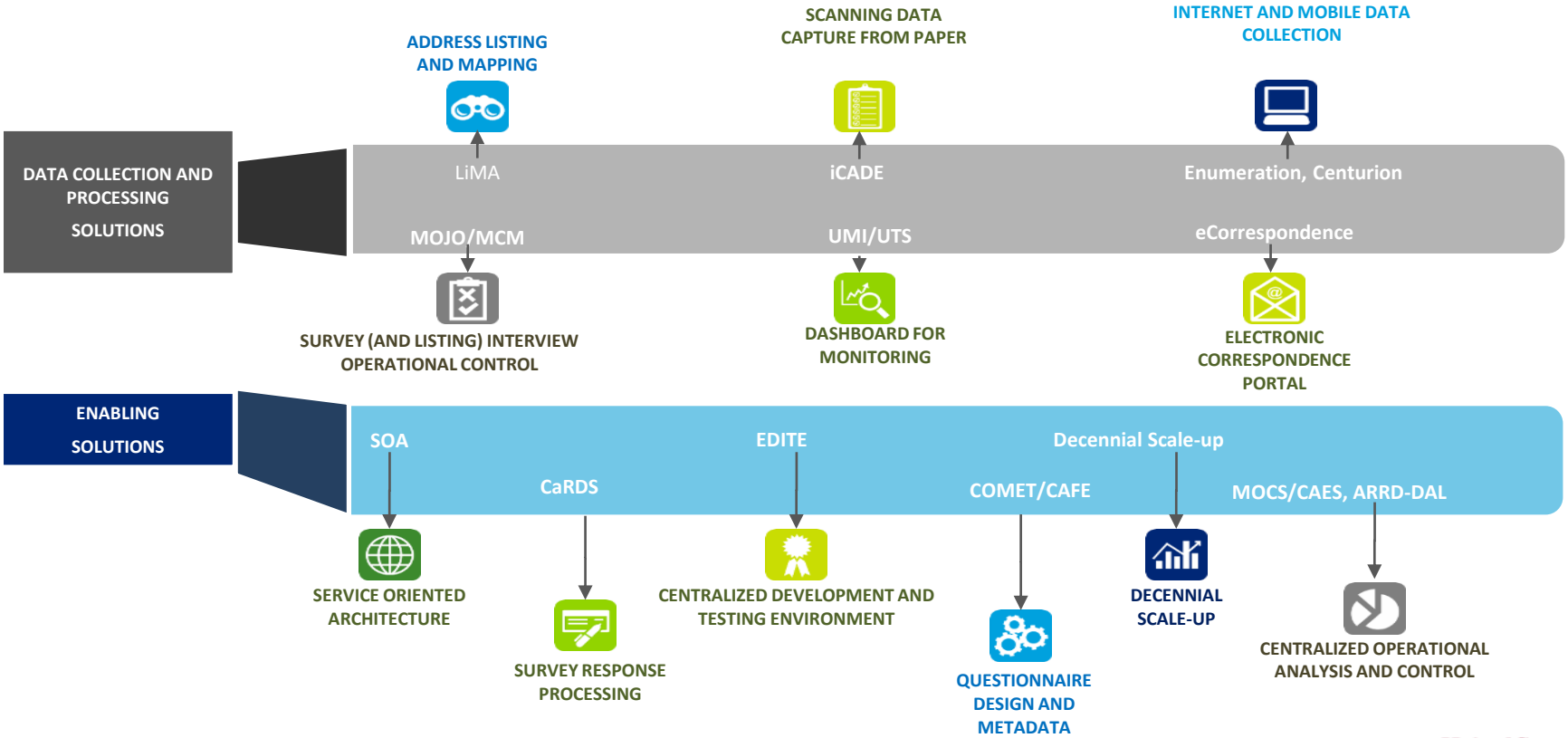
These are the major systems being considered for scalability:
PRIMUS, RTNP, MOJO, MCM, MOCS, UTS, LMS, Online DAPPS (CARAT)

* 'Preliminary Demand Models have been used in earlier tests.

Census Enterprise Data Collection and Processing

Capabilities and Solutions

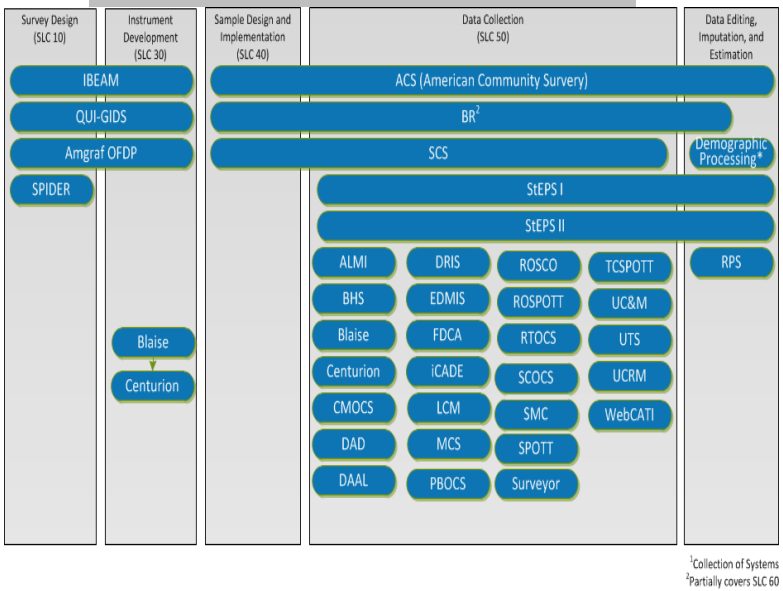
Census Enterprise Data Collection and Processing (CEDCaP) is comprised of delivery of 12 enterprise capabilities and the solutions to provide those capabilities.



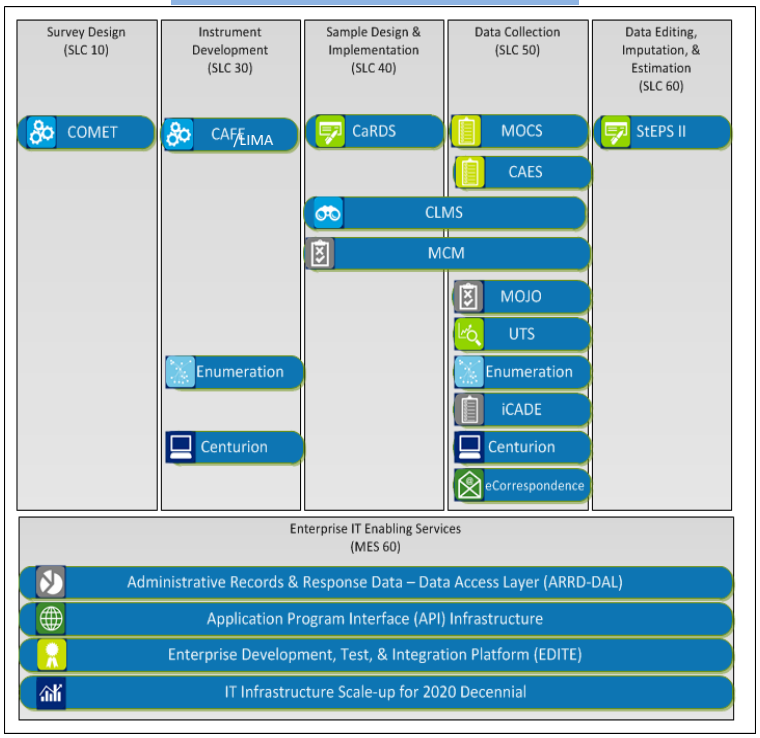
Census Enterprise Data Collection and Processing

CEDCaP Solution Architecture Transition

Current State

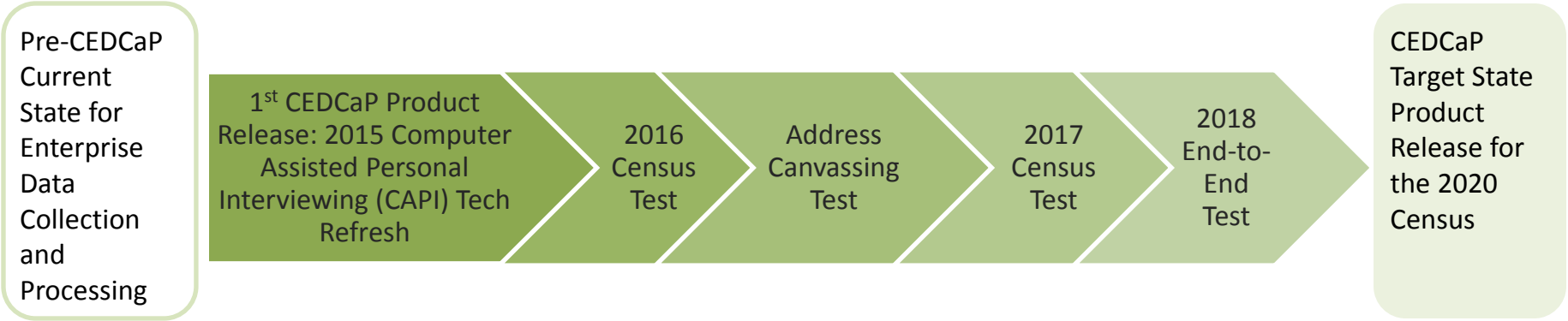


End State



Census Enterprise Data Collection and Processing

CEDCaP Transition in Support of the 2020 Census



Census Enterprise Data Collection and Processing

CEDCaP Transition Plan

- Baselined CEDCaP Solution Architecture and Transition Plan V1.0 in 2015
- Conduct periodic reviews with stakeholders to ensure alignment with their programs' plans
- Iteration, V3.0 to align with 2020 Census Transition Plan due April 30, 2016
- Next iteration will address changes, if any needed, based on outcome of build vs buy assessment