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Major Revision Change History

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Reading and Understanding the Model

Example Activity Model

BPM Purpose

- Describe Census Operations business processes – activities, resources and key milestones
- Provide the details necessary for non-subject matter experts to understand the business process
- Contribute to the requirements development process
- Facilitate the linkage of business processes to IT capabilities
- Capture Operations inputs and outputs

Legend

1. Business Process Modeling & Analysis Toolkit
2. Reading and Understanding the Model
3. Example Activity Model
4. BPM Purpose
5. Data Object – Input: This represents any incoming data (e.g., files, data, etc.) to the activity.
6. Data Object – Output: This represents any outgoing data (e.g., files, data, etc.) from the activity.
7. Gateway – Exclusive decision gateway: This represents that the process must go one way or the other but not both at once.
8. Gateway – Parallel split gateway: This represents the start of activities that happen in parallel. All incoming flows must complete before triggering the outgoing flow.
9. Gateway – Parallel merge gateway: This represents the end of activities that happen in parallel.
10. Sub Process: This represents a further detailing process model. The details about this activity appear on another page.

Key:

- Start: Activity at atomic level.
- End: Activity at atomic level.
- Intermediate Timed Event: Activity involving:
  - USER interacting with a system or software;
  - SENDING a message;
  - RECEIVING a message;
  - RECEIVING steps;
  - Any system developed specifically for Census’ use.
- Optional Activity Numbering:
  - Sub Process +
  - Sub Process –
  - Sub Process

Event: Sequence Flow

Data Object – Input: This represents any incoming data (e.g., files, data, etc.) to the activity.

Data Object – Output: This represents any outgoing data (e.g., files, data, etc.) from the activity.

Gateway: Exclusive decision gateway: This represents that the process must go one way or the other but not both at once.

Gateway: Parallel split gateway: This represents the start of activities that happen in parallel. All incoming flows must complete before triggering the outgoing flow.

Gateway: Parallel merge gateway: This represents the end of activities that happen in parallel.

Sub Process: This represents a further detailing process model. The details about this activity appear on another page.

Data Objects:

- Data Store:
- Event Based:
- Data Store:
- Annotation:

Other:

- Sequence Flow:
- Association:

17. 2020 Census Questionnaire Assistance Operation (CQA) v6.0 - ANNOTATED draft.vsd

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2020 Census 17. Census Questionnaire Assistance Operation (CQA)

Purpose: Provide questionnaire assistance for respondents by answering questions about specific items on the census form or other frequently asked questions about the 2020 Census and provide an option for callers to complete a census interview over the telephone. Also, provides outbound calling in support of Coverage Improvement.
10 Develop and Prepare

**Purpose:** Develop, configure, and plan all of the operating procedures and devices that will be necessary for the establishment of the Census Call Centers.

- **17-1.1 Develop and Prepare**
  - 10.10 Develop Automatic Call Distribution System
  - 10.20 Develop Outbound Dialer
  - 10.50 Develop Plans and Processes
  - 10.60 Develop Training Management System
  - 10.70 Develop Agent Desktop
  - 10.80 Develop External Interfaces
  - 10.100 Develop Interactive Voice Response
  - 10.110 Develop Call Recordings System
  - 10.120 Develop Management Reporting System
  - 10.130 Provide data storage for call recordings and paradata
  - 10.40 Configure Call Treatment for Coverage Improvement
  - 10.40 Conduct Hiring and Training
  - 10.140 Establish Call Centers
  - 10.150 Receive ATO

**Visual Diagram:**

- Start Sub-Process
- 17-1.1 Develop and Prepare
- 10.10 Develop Automatic Call Distribution System
- 10.20 Develop Outbound Dialer
- 10.50 Develop Plans and Processes
- 10.60 Develop Training Management System
- 10.70 Develop Agent Desktop
- 10.80 Develop External Interfaces
- 10.100 Develop Interactive Voice Response
- 10.110 Develop Call Recordings System
- 10.120 Develop Management Reporting System
- 10.130 Provide data storage for call recordings and paradata
- Conduct Hiring and Training
- Establish Call Centers
- Receive ATO

**Business Process Model & Analysis Toolkit**

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10.90 Conduct Hiring and Training

Purpose: Conduct the necessary tasks for hiring and training the Census Call Center Staff.

17-1.1.1 Conduct Hiring and Training

- Develop Inbound Training Materials
- Conduct Inbound Training
- Develop Outbound Training Materials
- Conduct Outbound Training
- Onboarding and Suitability

Start Sub-Process

End Sub-Process
**20 Receive English, Spanish, PR English, and PR Spanish Inbound Phone Calls**

**Purpose:** Receive, route, and provide live assistance for inbound calls from Respondents, in reference to the US Census.

**17-2.1 Receive English, Spanish, PR English, and PR Spanish Inbound Phone Calls**

1. **Start Sub-process**
2. **Receive Phone Calls**
   - **High Call Volume?**
     - No: **Play Broadcast Messages**
     - Yes: End Sub-process
3. **Within Business Hours?**
   - Yes: **Provide IVR Assistance**
   - No: End Sub-process
4. **Agent Assistance Needed?**
   - Yes: **Provide Live Agent Assistance**
   - No: End Sub-process
5. **Call Center Agents Available?**
   - Yes: **Provide Live Agent Assistance**
   - No: **Offer Callback Option**
6. **Callback Accepted?**
   - Yes: **Collect Respondent Information**
   - No: End Sub-process
7. **Phone Number and Time of Day**

---

**17. 2020 Census Questionnaire Assistance Operation (CQA) v6.0 - ANNOTATED draft.vsd**

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Within Business Hours?

No

Yes

25 Receive Non-English and Non-Spanish Inbound Phone Calls

Purpose: Receive, route, and provide live assistance for inbound calls from Respondents, in reference to the US Census.

17.2.2 Receive Non-English and Non-Spanish Inbound Phone Calls

TTY calls follow the non-English and non-Spanish path but do not include a callback option.
20.10 Provide IVR Assistance

**Purpose:** Provide Interactive Voice Responses (IVR) to Respondents for Inbound Calls. These are recorded responses that can provide the caller with frequently asked questions and answers.

---

[Diagram of the process flow is shown, detailing the steps involved in providing IVR assistance.]

---

**Highlight:**

- **Start subprocess**
- **Select Option for Type of Assistance Needed on Telephone Keypad**
  - **What Type of Assistance Is Needed?**
    - (20.10.01)
- **Provide (IVR) FAQ Assistance**
  - **Additional Help Required?**
    - Yes
    - No
  - **FAQs**
- **Request To Provide Data**
  - **Enumeration**
- **End Sub-process**
20.70 Provide Live Agent Assistance

Purpose: Provide live agent assistance and enumeration to Respondent inbound calls, as they complete the Census questionnaires.
30. Receive GQ Phone Calls

Purpose: Receive, route, and provide live assistance for inbound calls from GQ Respondents, in reference to the US Census.
50 Perform Coverage Improvement

**Purpose:** Perform outbound calls to Respondents as part of the Coverage Improvement operation, verifying and recollecting case information for accuracy.

17-3.1 Perform Coverage Improvement

Start Sub-process

1. Receive Coverage Improvement workload from ECaSE-OCS
2. Validate workload
3. Ingest workload
4. Perform outbound dialing
   - **50.05**
   - **50.10**
   - **50.20**
5. **Start Recording the Call**
   - **50.50**
6. Ask for Consent To Continue Recording
   - **50.60**
   - **50.61**
   - **50.62**
   - **50.63**
7. Conduct Interview?
   - Yes
   - **50.70**
   - Collect Information from household
8. Remove exception cases from dialing table
   - **50.80**
9. Leave configurable voicemail message
   - **50.40**
10. End Recording the Call
    - **50.63**
11. **End Recording the Call**
    - **50.50**
12. **Ask for Consent To Continue Recording**
    - **50.60**
13. Consent Given?
    - Yes
    - **50.70**
    - Collect Information from household
    - No
14. **End Recording the Call**
    - **50.50**
15. **End Recording the Call**
    - **50.50**
16. **End Recording the Call**
    - **50.50**
17. Output call recordings for Quality Assurance

End Sub-process
70. Collect, Send, and Report on CQA Phone Call Data

**Purpose:** Collect inbound and outbound phone call paradata/metrics, produce some CQA reports, save it in the Census central data repository for future access/analysis.

**Business Process Modeling & Analysis Toolkit**
80. Perform Quality Assurance

Purpose: Perform QA Evaluation on a sample of CQA agent assisted inbound and outbound calls.

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Business Process Modeling & Analysis Toolkit

17-5.1 Perform Quality Assurance

Start Sub-Process

Select Calls for Evaluation

Evaluate a call

Collect Evaluation feedback

Assess Evaluation feedback

End Sub-Process
90. Perform CQA Closeout

Purpose: Prepare CQA Phone Call Data for the Archiving Operation and close all activities for the CQA Operation.

17. 2020 Census Questionnaire Assistance Operation (CQA) v6.0

NARA Archival Request

Select CQA Event and Response Files For Archival, According to NARA Specifications

Provide Archival Response Files to ARC Operation for Archiving at National Archives (NARA)

Closeout CQA Operation

Start

End