

## Business Case: Capital Asset Summary

### Part I: Summary Information and Justification (All Capital Assets)

#### Section A: Overview & General Information

**Date Investment First Submitted:** 2020-09-27  
**Date of Last Change to Activities:** 2021-08-09  
**Investment Auto Submission Date:**  
**Date of Last Investment Detail Update:** 2021-04-27  
**Date of Last Business Case Update:** 2021-04-27  
**Date of Last Revision:** 2021-08-09

**Agency:** 006 - Department of Commerce      **Bureau:** 07 - Bureau of the Census

**1. Name of this Investment:** Census - Data Ingest and Collection for the Enterprise (DICE)

**2. Unique Investment Identifier (UII):** 006-000000135

#### Section B: Investment Detail

- Provide at least one Agency Strategic objective code ([A-11 Section 230](#)) and/or Agency Priority Goal code ([A-11 Section 250](#)) that this investment aligns to on performance.gov. If this investment aligns to more than one Agency strategic objective code and/or Agency Priority goal code list all that apply. If your agency does not report to performance.gov please use "0". This is required for Agency IT Portfolio Summary Part 1 and Part 2 Investments, not for Part 3 Investments.**

Agency Strategic Objective(s):

Agency Priority Goal(s):

006APG200119: Conduct a Complete and Accurate 2020 Decennial Census

- Briefly describe the investment's return on investment, including benefits internal and external to the government and outcomes achieved or planned.**

The goal is to maintain a similar ROI based on the migration from survey-specific systems to enterprise shared systems across all surveys and censuses. There are currently six unique systems at the U.S. Census Bureau for managing survey samples during data collection operations; twenty unique systems to manage the different modes of data collection, data capture, and field control; and five major unique survey and census data processing systems. In the preparation and execution of the 2010 Census, the Census Bureau spent over \$1 billion to build and deploy only four of the nearly thirty systems mentioned above. After the 2010 Census, those four systems were retired. In the Enterprise Data Collection and Processing initiative, we are creating an integrated and standardized system of systems that offers shared data collection and processing services across the enterprise. We will consolidate costs by retiring unique, survey-specific systems and redundant capabilities and bring a significant portion of the Census Bureau's total IT expenditures under a single, integrated and centrally managed

program.

3. If this investment will result in the elimination or the reduction of another major or non-major investment(s), please complete the following:

Table I.B.1 Affected Investment Information	
Investment UII	To Be Status
NONE	

4. Does the Investment currently include an intra- or inter-Agency shared service (common, shared, or centralized solution)?:  
NO
5. Does the Investment plan to include an Intra- or Inter-Agency shared service that it does not currently include (common, shared, or centralized solution)?:  
NO
6. If systems contained in this Investment collect data from the public, please identify the OMB Control Numbers which authorize that data collection as per the Paperwork Reduction Act. Use [Reginfo](#) at the following link to identify information collection requests and OMB control numbers. Agencies can work with their Records Officers to determine the applicability.
7. Provide the name of the Investment-level project manager:  
Lora Rosenberger
8. Select the qualification/experience level of the Investment-level project manager (select one):  
2 - FAC-P/PM(DAWIA-2)- Mid-Level

## Section C: Life Cycle Costs

1. Provide the total estimated life cycle costs for the investment in millions. Note: Do not enter information in the grey cells as these will be calculated.

Table I.C.1 Life Cycle Costs				
	PY-1 & Prior	PY 2021	CY 2022	BY 2023
Planning Costs:	0	0	0	0
DME (Excluding Planning) Costs:	0	0	\$21.120000	\$21.370000
DME (Including Planning) Govt. FTEs:	0	0	\$37.654000	\$17.453000
Sub-Total DME (including Internal Labor (Govt. FTE)):	0	0	\$58.774000	\$38.823000
O & M Costs:	0	0	0	\$11.616000
O & M Internal Labor (Govt. FTE):	0	0	0	\$10.579000
Sub-Total O & M Costs (Including Internal Labor (Govt. FTE)):	0	0	0	\$22.195000
Total Cost (Including Internal Labor (Govt. FTE)):	0	0	\$58.774000	\$61.018000
Total Cost Internal Labor (Govt. FTE) costs:	0	0	\$37.654000	\$28.032000
# of FTE rep by costs:	0	0	100	97
Total change from prior year final President's Budget (\$)		0	\$58.774000	
Total change from prior year final President's Budget		0.00%	0.00%	

Table I.C.1 Life Cycle Costs

	PY-1 & Prior	PY 2021	CY 2022	BY 2023
(%)				

2.
  - a. In which year did or will this investment begin? (specify year - e.g., PY-1= 2019)  
2021
  - b. In which year will this investment reach the end of its estimated useful life? (specify year - e.g., FY+5 = 2027)  
2024
3. Compare the funding levels for PY and CY to the final FY 2022 President's Budget for those same years. Briefly explain any significant changes. When making comparisons, ensure that you compare same-year-to-same-year (e.g., the FY20 level for 2020 versus the FY21 level for 2020):

## Business Case Detail: Performance Measurement Report

### Section A1: General Information

1. **Name of this Investment:** CENSUS - DATA INGEST AND COLLECTION FOR THE ENTERPRISE (DICE)
2. **Unique Investment Identifier (UII):** 006-000000135

## Section C1: Projects Table

Projects Table C.1

Unique Project ID	Project Name	Project Goal	Project Start Date	Project Completion Date	Project Lifecycle Cost (\$M)	Software Project?
001D210010	DICE Questionnaire Design and Metadata	Project to develop, implement, and maintain survey initiation and repository for common survey content and instrument metadata for the DICE Program.	04/14/2021	09/30/2023	\$16.0	Yes
0001D21002	DICE Electronic Data Collection Standards	Project to develop standards for electronic Instruments	04/14/2021	09/30/2023	\$18.7	Yes
001D21006	DICE Electronic Correspondence	Develop, implement, and maintain the system to provide Online User Help Desk for business respondents and allow individual respondents and partners to create user accounts, set survey response mode preferences, check filing status and view FAQs.	04/14/2021	09/30/2023	\$20.3	Yes
001D21009	DICE Data Ingest	Project to develop, implement, and maintain the system to ingest data from third party sources to be used for survey data collection for the DICE Program.	04/14/2021	09/30/2023	\$6.2	Yes
0001D21003	DICE Operational Control System	Project to develop, implement, and maintain the hub of DICE systems to assigns and consolidate cases at the modes and field level, based on predetermined criteria for the DICE Program	04/14/2021	09/30/2023	\$24.9	Yes
001D21008	DICE Adaptive Design	Develop, implement, and maintain the models and methodology that will be used to achieve benefits such as improved data collection, efficiency, quality, and reduced cost	04/14/2021	09/30/2023	\$23.0	Yes
001O210011	DICE Program Management	Provide DICE Program	04/14/2021	09/30/2023	\$23.5	No

Projects Table C.1

Unique Project ID	Project Name	Project Goal	Project Start Date	Project Completion Date	Project Lifecycle Cost (\$M)	Software Project?
Direction to Project Teams.						
001D21005	DICE System Engineering	Project to oversee the System Engineering activities for the DICE Program.	04/14/2021	09/30/2023	\$51.9	Yes
001D210011	DICE Survey Inventory	Project to develop inventory of surveys and censuses throughout the Census Bureau	04/14/2021	09/30/2023	\$5.3	Yes
001D21004	DICE Electronic Data Collection Instruments DEV	Project to develop, implement, and maintain the system for respondents to report electronically via the web or personal interview for the DICE Program.	04/14/2021	09/30/2023	\$23.3	Yes

## Section C2: Project Activities

1. Provide all non-agile project activities for projects in Table C.1 that started in a previous FY (PY and earlier) and that have not been completed by the beginning of the CY, as well as activities that are scheduled to start in the current FY and BY.

Project Activity Table C.2.1

Unique Project ID	Activity Name	Activity Description	Structure ID	Planned Start Date	Projected Start Date	Actual Start Date	Planned Completion Date	Projected Completion Date	Actual Completion Date	Planned Total Costs	Projected Total Costs	Actual Total Costs
001D210010	DICE Questionnaire Design and Metadata System PI-01 Development	Develop agreed to functionality and tasks for Program Increment 1 for Questionnaire Design that will be used for all surveys to begin onboarding to questionnaire	001D210010.1	2021-04-14	2021-04-14	2021-04-14	2021-07-06	2021-07-06		1.743000	1.743000	

Project Activity Table C.2.1

Unique Project ID	Activity Name	Activity Description	Structure ID	Planned Start Date	Projected Start Date	Actual Start Date	Planned Completion Date	Projected Completion Date	Actual Completion Date	Planned Total Costs	Projected Total Costs	Actual Total Costs
		design functionality.										
001D21006	DICE Electronic Correspondence PI-01 DEV	Develop agreed to functionality and tasks for Program Increment 1 for Electronic Correspondence that will be used for all surveys to begin onboarding to create Electronic Correspondence functionality.	001D21006.1	2021-04-14	2021-04-14	2021-04-14	2021-07-06	2021-07-06		1.641000	1.641000	
001D21009	DICE Data Ingest PI-01 Development	Develop agreed to functionality and tasks for Program Increment 1 for Data Ingest that will be used for all surveys to begin onboarding to create Data Ingest functionality.	001D21009.1	2021-04-14	2021-04-14	2021-04-14	2021-07-06	2021-07-06		1.845000	1.845000	
0001D21003	DICE Operational Control System PI-01 Development	Develop agreed to functionality and tasks for Program Increment 1 for Operational Control that will be used for all	0001D21003.1	2021-04-14	2021-04-14	2021-04-14	2021-07-06	2021-07-06		4.040000	4.040000	



Project Activity Table C.2.1

Unique Project ID	Activity Name	Activity Description	Structure ID	Planned Start Date	Projected Start Date	Actual Start Date	Planned Completion Date	Projected Completion Date	Actual Completion Date	Planned Total Costs	Projected Total Costs	Actual Total Costs
		surveys to begin onboarding to Operational Control functionality.										
001D21008	DICE Adaptive Design PI-01	Develop agreed to functionality and tasks for Program Increment 1 for Data Ingest that will be used for all surveys to begin onboarding to create Data Ingest functionality.	001D21008.1	2021-04-14	2021-04-14	2021-04-14	2021-07-06	2021-07-06		4.255000	4.255000	
001O210011	DICE Program PI-01 Development	Complete agreed to tasks for Program Increment 1 for Program Management Office.	001O210011.1	2021-04-14	2021-04-14	2021-04-14	2021-07-06	2021-07-06		5.245000	5.245000	
001D21005	DICE System Engineering PI-01 Activities	Develop agreed to functionality and tasks for Program Increment 1 for System Engineering that will be used for program testing and system integration.	001D21005.1	2021-04-14	2021-04-14	2021-04-14	2021-07-06	2021-07-06		21.841000	21.841000	

Project Activity Table C.2.1

Unique Project ID	Activity Name	Activity Description	Structure ID	Planned Start Date	Projected Start Date	Actual Start Date	Planned Completion Date	Projected Completion Date	Actual Completion Date	Planned Total Costs	Projected Total Costs	Actual Total Costs
001D210011	DICE Survey Inventory PI-01 Development	Develop agreed to functionality and tasks for Program Increment 1 for Survey Inventory that will be used for all surveys to begin onboarding to create Survey Inventory functionality.	001D210011.1	2021-04-14	2021-04-14	2021-04-14	2021-07-06	2021-07-06		1.407000	1.407000	
001D21004	Electronic Data Collection Instruments DEV PI-01	Develop agreed to functionality and tasks for Program Increment 1 for Electronic Data Collection Instruments DEV that will be used for Electronic Data Collection Instruments DEV functionality.	001D21004.1	2021-04-14	2021-04-14	2021-04-14	2021-07-06	2021-07-06		3.786000	3.786000	
001D210010	DICE Questionnaire Design and Metadata System PI-02 Development	Develop agreed to functionality and tasks for Program Increment 2 for Questionnaire Design that will be used for all surveys to begin onboarding to	001D210010.2	2021-07-07	2021-07-07	2021-07-07	2021-09-28	2021-09-28		2.770000	2.770000	

Project Activity Table C.2.1

Unique Project ID	Activity Name	Activity Description	Structure ID	Planned Start Date	Projected Start Date	Actual Start Date	Planned Completion Date	Projected Completion Date	Actual Completion Date	Planned Total Costs	Projected Total Costs	Actual Total Costs
		questionnaire design functionality.										
001D21006	DICE Electronic Correspondence PI-02 DEV	Develop agreed to functionality and tasks for Program Increment 2 for Electronic Correspondence that will be used for all surveys to begin onboarding to create Electronic Correspondence functionality.	001D21006.2	2021-07-07	2021-07-07	2021-07-07	2021-09-28	2021-09-28		1.866000	1.866000	
001D21009	DICE Data Ingest PI-02 Development	Develop agreed to functionality and tasks for Program Increment 2 for Data Ingest that will be used for all surveys to begin onboarding to create Data Ingest functionality.	001D21009.2	2021-07-07	2021-07-07	2021-07-07	2021-09-28	2021-09-28		0.849000	0.849000	
0001D21003	DICE Operational Control System PI-02 Development	Develop agreed to functionality and tasks for Program Increment 2 for Operational Control that will	0001D21003.2	2021-07-07	2021-07-07	2021-07-07	2021-09-28	2021-09-28		0.483000	0.483000	

Project Activity Table C.2.1

Unique Project ID	Activity Name	Activity Description	Structure ID	Planned Start Date	Projected Start Date	Actual Start Date	Planned Completion Date	Projected Completion Date	Actual Completion Date	Planned Total Costs	Projected Total Costs	Actual Total Costs
		be used for all surveys to begin onboarding to Operational Control functionality.										
001D21008	DICE Adaptive Design PI-02 Development	Develop agreed to functionality and tasks for Program Increment 2 for Adaptive Design that will be used for all surveys to begin onboarding to create adaptive design functionality.	001D21008.2	2021-07-07	2021-07-07	2021-07-07	2021-09-28	2021-09-28		1.737000	1.737000	
001O210011	DICE Program PI-02 Development	Complete agreed to tasks for Program Increment 2 for Program Management Office.	001O210011.2	2021-07-07	2021-07-07	2021-07-07	2021-09-28	2021-09-28		0.903000	0.903000	
001D21005	DICE System Engineering PI-02 Activities	Complete agreed to tasks for Program Increment 2 for System Engineering and Integration.	001D21005.2	2021-07-07	2021-07-07	2021-07-07	2021-09-28	2021-09-28		1.551000	1.551000	
001D210011	DICE Survey Inventory PI-02 Development	Develop agreed to functionality and tasks for Program	001D210011.2	2021-07-07	2021-07-07	2021-07-07	2021-09-28	2021-09-28		0.046000	0.046000	

Project Activity Table C.2.1

Unique Project ID	Activity Name	Activity Description	Structure ID	Planned Start Date	Projected Start Date	Actual Start Date	Planned Completion Date	Projected Completion Date	Actual Completion Date	Planned Total Costs	Projected Total Costs	Actual Total Costs
		Increment 2 for Survey Inventory that will be used for all surveys to begin onboarding to create Survey Inventory functionality.										
001D21004	Electronic Data Collection Instruments DEVs PI-02	Develop agreed to functionality and tasks for Program Increment 2 for Electronic Data Collection Instruments DEV that will be used for Electronic Data Collection Instruments DEV functionality.	001D21004.2	2021-07-07	2021-07-07	2021-07-07	2021-09-28	2021-09-28		1.890000	1.890000	
0001D21002	Elec. Data Coll. Standards PI-02	Develop agreed to functionality and tasks for Program Increment 2 for Electronic Data Collection Standards that will be used for all surveys to begin onboarding to create electronic instruments.	0001D21002.1 a	2021-07-07	2021-07-07		2021-09-28	2021-09-28		1.107000	1.107000	
001D210010	DICE	Develop	001D210010.3	2021-09-29	2021-09-29		2021-12-21	2021-12-21		1.609000	1.609000	

Project Activity Table C.2.1

Unique Project ID	Activity Name	Activity Description	Structure ID	Planned Start Date	Projected Start Date	Actual Start Date	Planned Completion Date	Projected Completion Date	Actual Completion Date	Planned Total Costs	Projected Total Costs	Actual Total Costs
	Questionnaire Design and Metadata System PI-03 Development	agreed to functionality and tasks for Program Increment 3 for Questionnaire Design that will be used for all surveys to begin onboarding to questionnaire design functionality.										
001D21006	DICE Electronic Correspondence PI-03 DEV	Develop agreed to functionality and tasks for Program Increment 3 for Electronic Correspondence that will be used for all surveys to begin onboarding to create Electronic Correspondence functionality.	001D21006.3	2021-09-29	2021-09-29		2021-12-21	2021-12-21		2.048000	2.048000	
001D21009	DICE Data Ingest PI-03 Development	Develop agreed to functionality and tasks for Program Increment 3 for Data Ingest that will be used for all surveys to begin onboarding to	001D21009.3	2021-09-29	2021-09-29		2021-12-21	2021-12-21		0.369000	0.369000	

Project Activity Table C.2.1

Unique Project ID	Activity Name	Activity Description	Structure ID	Planned Start Date	Projected Start Date	Actual Start Date	Planned Completion Date	Projected Completion Date	Actual Completion Date	Planned Total Costs	Projected Total Costs	Actual Total Costs
		create Data Ingest functionality.										
0001D21003	DICE Operational Control System PI-03 Development	Develop agreed to functionality and tasks for Program Increment 3 for Operational Control that will be used for all surveys to begin onboarding to Operational Control functionality.	0001D21003.3	2021-09-29	2021-09-29		2021-12-21	2021-12-21		2.609000	2.609000	
001D21008	DICE Adaptive Design PI-03 Development	Develop agreed to functionality and tasks for Program Increment 3 for Adaptive Design that will be used for all surveys to begin onboarding to create adaptive design functionality.	001D21008.3	2021-09-29	2021-09-29		2021-12-21	2021-12-21		2.122000	2.122000	
001O210011	DICE Program PI-03 Development	Complete agreed to tasks for Program Increment 3 for Program Management Office.	001O210011.3	2021-09-29	2021-09-29		2021-12-21	2021-12-21		2.161000	2.161000	
001D21005	DICE System Engineering	Complete agreed to tasks	001D21005.3	2021-09-29	2021-09-29		2021-12-21	2021-12-21		4.009000	4.009000	

Project Activity Table C.2.1

Unique Project ID	Activity Name	Activity Description	Structure ID	Planned Start Date	Projected Start Date	Actual Start Date	Planned Completion Date	Projected Completion Date	Actual Completion Date	Planned Total Costs	Projected Total Costs	Actual Total Costs
	PI-03 Activities	for Program Increment 3 for System Engineering and Integration.										
001D210011	DICE Survey Inventory PI-03 Development	Develop agreed to functionality and tasks for Program Increment 3 for Survey Inventory that will be used for all surveys to begin onboarding to create Survey Inventory functionality.	001D210011.3	2021-09-29	2021-09-29		2021-12-21	2021-12-21		0.510000	0.510000	
001D21004	Electronic Data Collection Instruments DEV PI-03	Develop agreed to functionality and tasks for Program Increment 3 for Electronic Data Collection Instruments DEV that will be used for Electronic Data Collection Instruments DEV functionality.	001D21004.3	2021-09-29	2021-09-29		2021-12-21	2021-12-21		1.943000	1.943000	
0001D21002	Elec. Data Coll. Standards PI-03	Develop agreed to functionality and tasks for Program Increment 3 for	0001D21002.2	2021-09-29	2021-09-29		2021-12-21	2021-12-21		1.943000	1.943000	



Project Activity Table C.2.1

Unique Project ID	Activity Name	Activity Description	Structure ID	Planned Start Date	Projected Start Date	Actual Start Date	Planned Completion Date	Projected Completion Date	Actual Completion Date	Planned Total Costs	Projected Total Costs	Actual Total Costs
		Electronic Data Collection Standards that will be used for all surveys to begin onboarding to create electronic instruments.										
0001D21002	Elec. Data Coll. Standards PI-03	Develop agreed to functionality and tasks for Program Increment 5 for Electronic Data Collection Standards that will be used for all surveys to begin onboarding to create electronic instruments.	0001D21002.3	2021-12-22	2021-12-22		2022-03-15	2022-03-15		1.943000	1.943000	

## Section D: Operational Data

## 1. Provide the date and results of the last Operational Analysis (for operational and mixed life cycle systems/Investments):

1. Date of Analysis:

2. Analysis Results:

3. Analysis Conclusion:

2. Report a minimum of 5 metrics using the following table to provide metrics and actual results for each individual metric:

Metrics Definitions and Actual Results Table D.2 / D.3										
Metric ID	Metric Description	Unit of Measure	Performance Measurement Category Mapping	Agency Baseline Capability	2020 Target	2021 Target	Measurement Condition	Reporting Frequency	Agency Strategic Objective / Agency Priority Goal	Is Metric Retired?

NONE