

# **2020 Census Program Management Review**

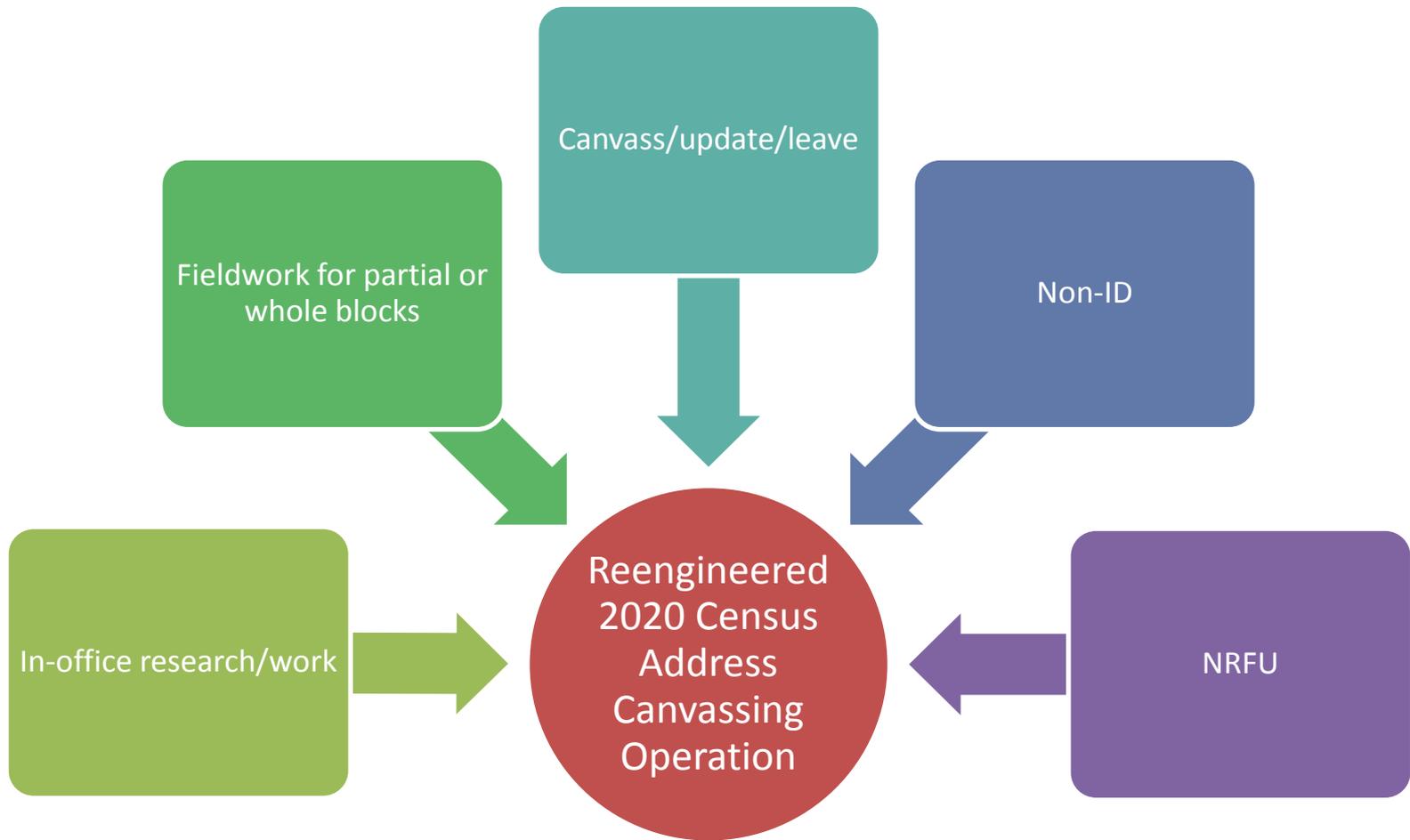
## **Recommendation for a Reengineered Address Canvassing**

**Tim Trainor  
Chief, Geography Division**

**October 3, 2014**

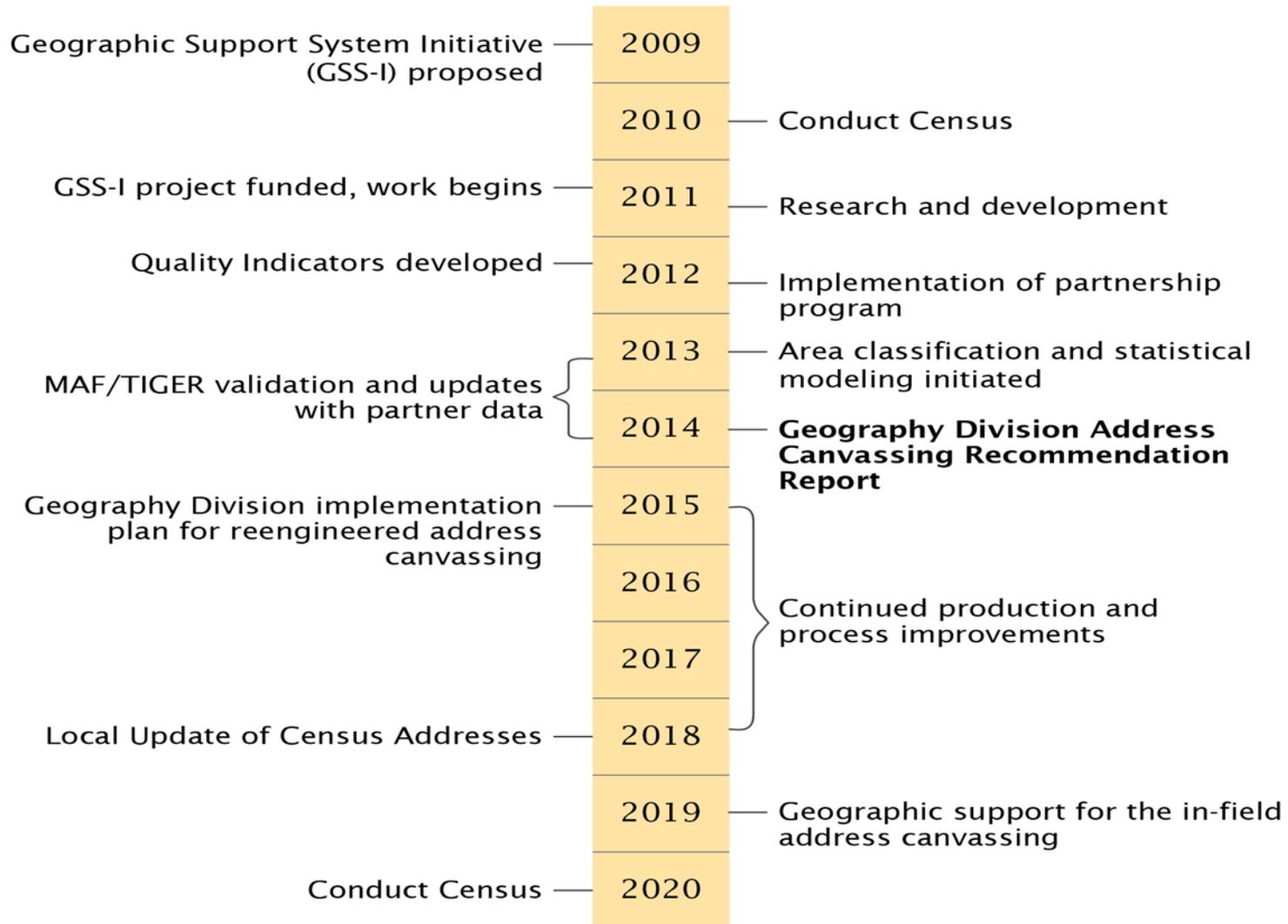
# Recommendation

*The Census Bureau recommends that the 2020 Census design include plans for a reengineered address canvassing operation.*

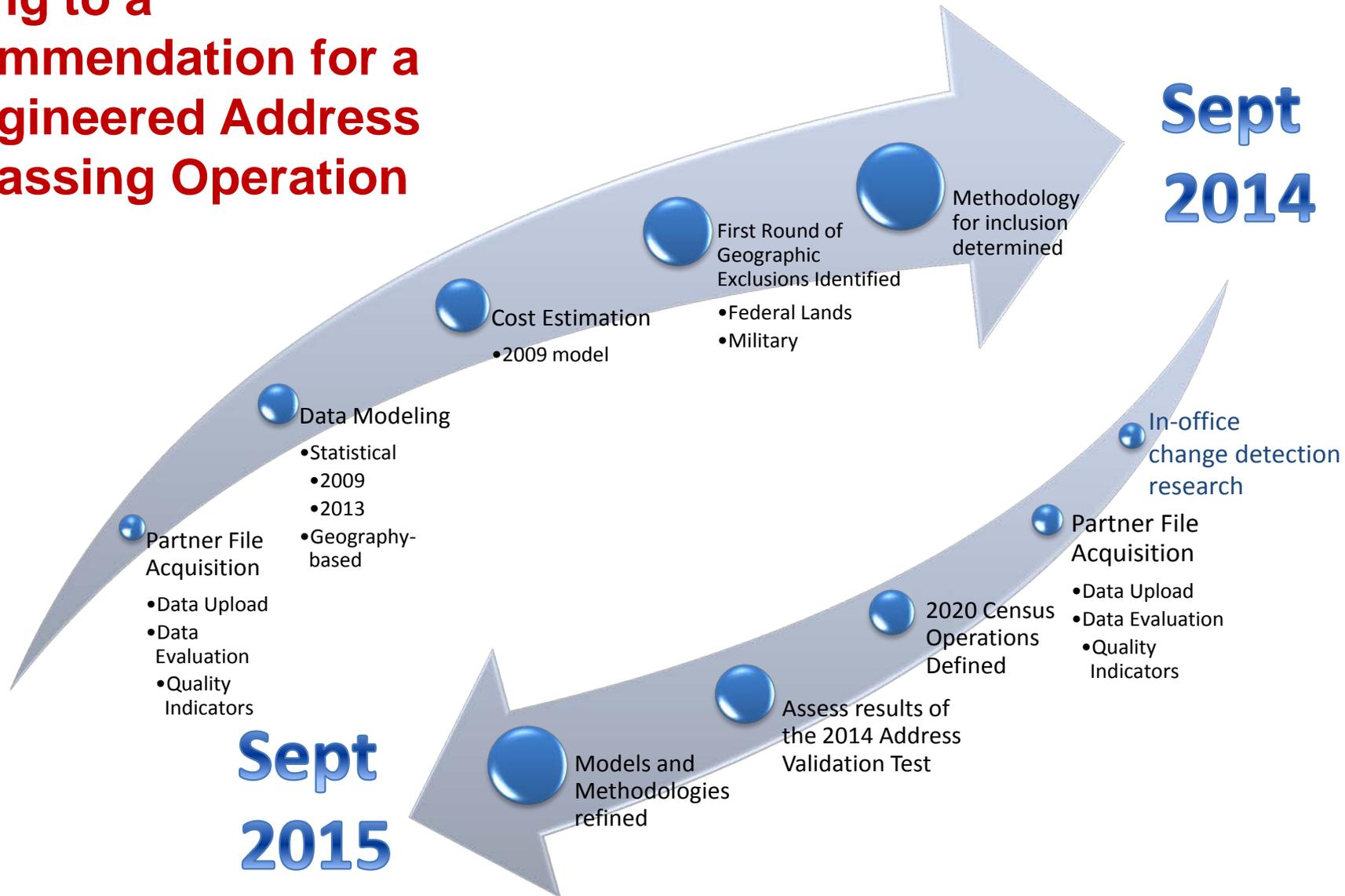


# Rationale for Pursuing a Reengineered Address Canvassing

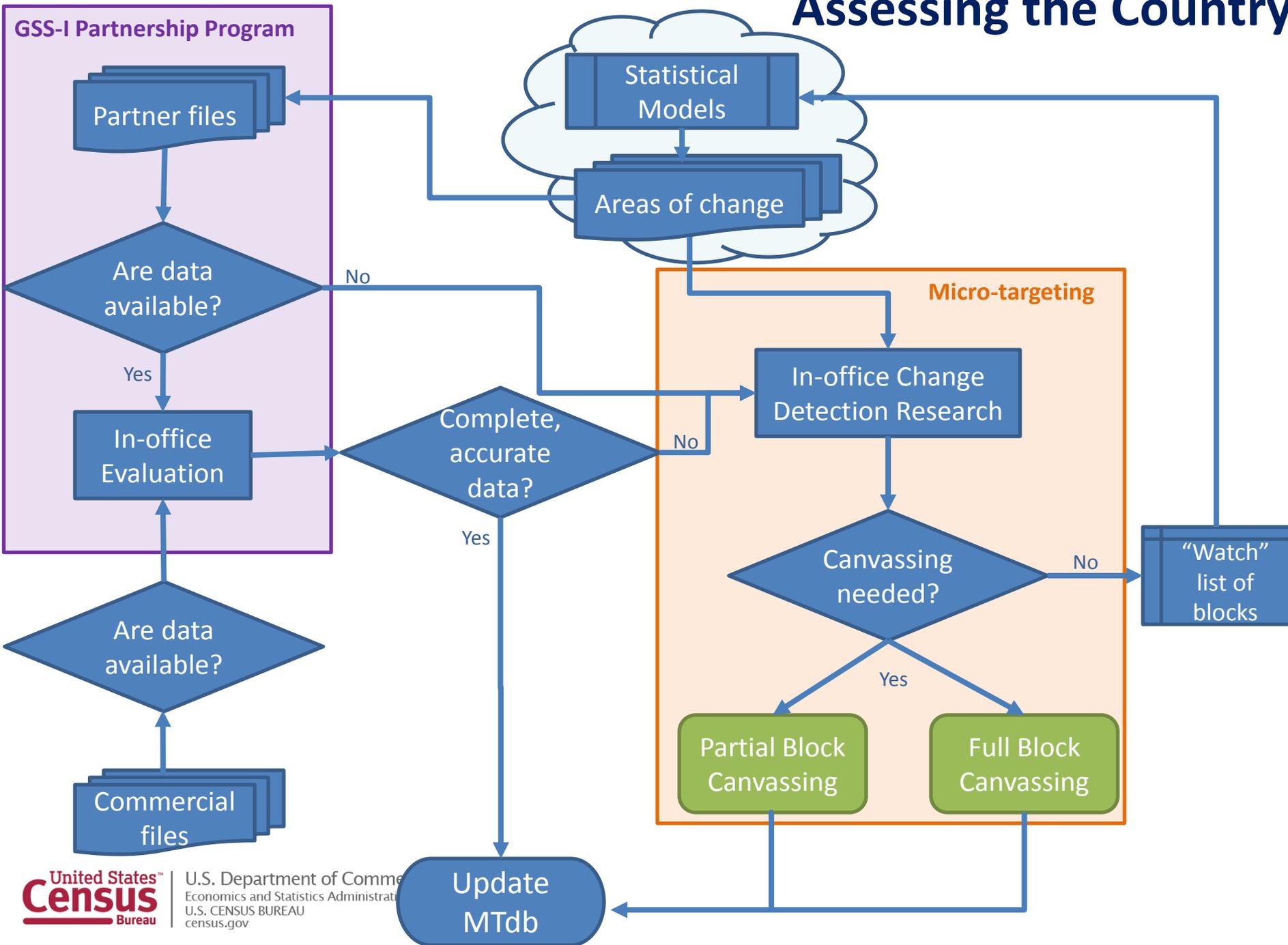
- The need to reduce cost
- More partners were collecting address data and were willing to share
- Recognition that technology could support process improvements



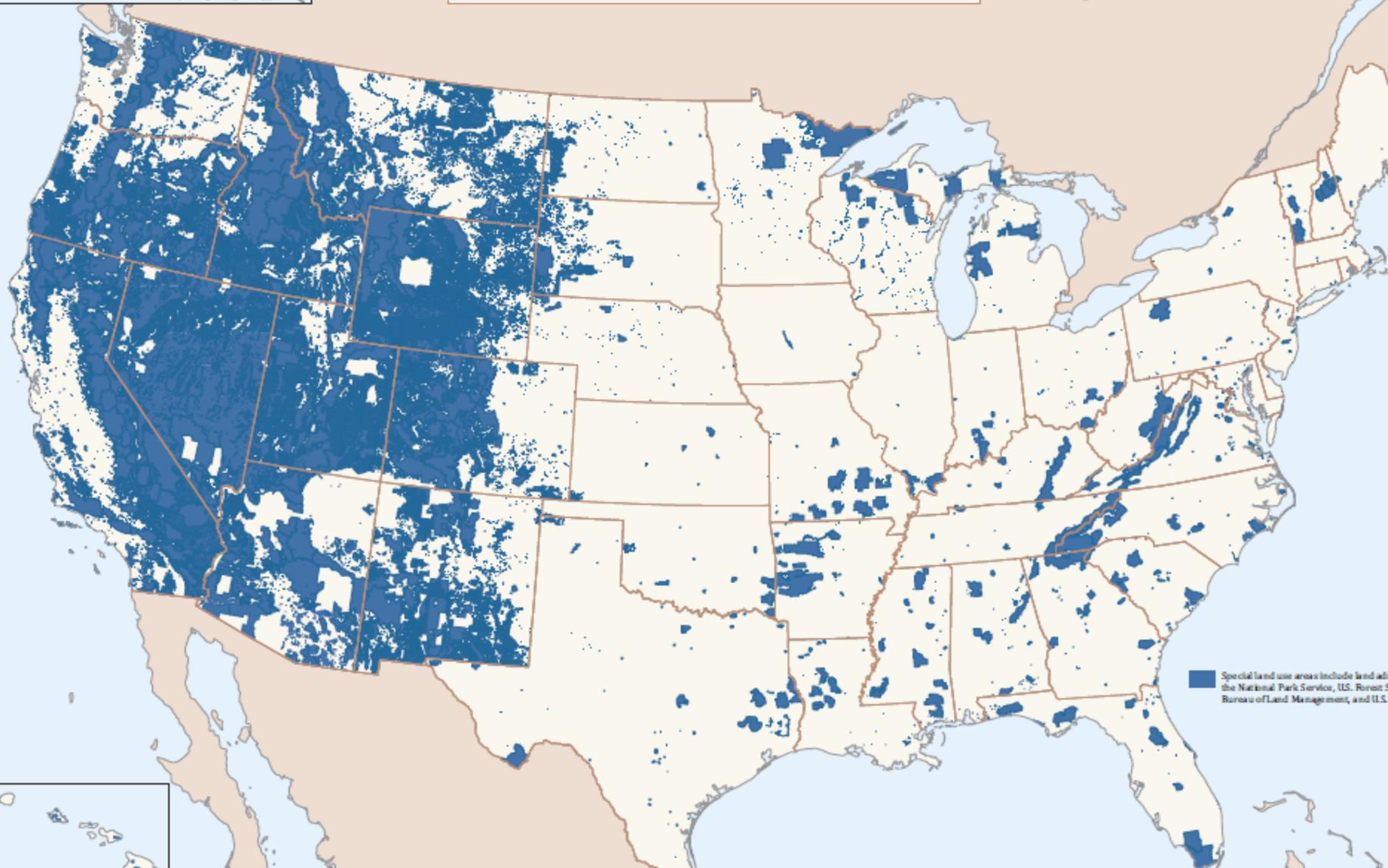
# Getting to a Recommendation for a Reengineered Address Canvassing Operation



# Assessing the Country



## Special Land Use Areas With Little Expected Development

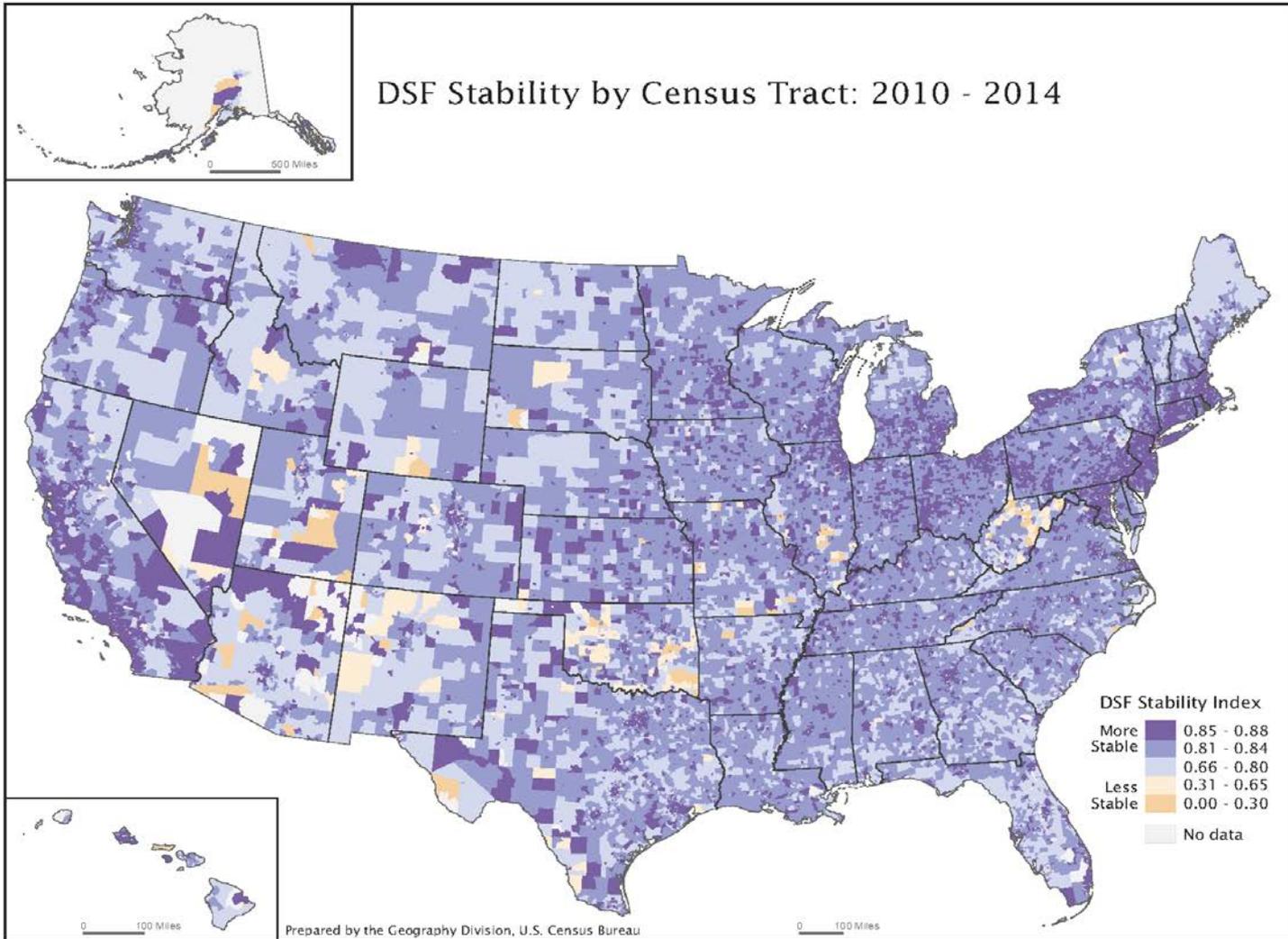


# Assessing Stability and Consistency

- Comparison of the MAF to:
  - USPS Delivery Sequence File
  - Partner provided data
  - Third party data

# Comparing the MAF to the DSF

DSF Stability Index	2009-2010		2010-2011		2011-2012	
	Census Tracts	Addresses Spring 2010 DSF	Census Tracts	Addresses Spring 2011 DSF	Census Tracts	Addresses Spring 2012 DSF
1.0	12,380	19,058,903	13,834	21,656,324	19,167	30,558,455
0.980 – 0.999	47,771	81,370,407	50,405	86,173,997	46,642	80,834,772
0 – 0.979	12,906	19,405,534	8,818	12,793,266	7,248	10,009,467
<b>Total</b>	<b>73,057</b>	<b>119,834,844</b>	<b>73,057</b>	<b>120,623,587</b>	<b>73,057</b>	<b>121,402,694</b>

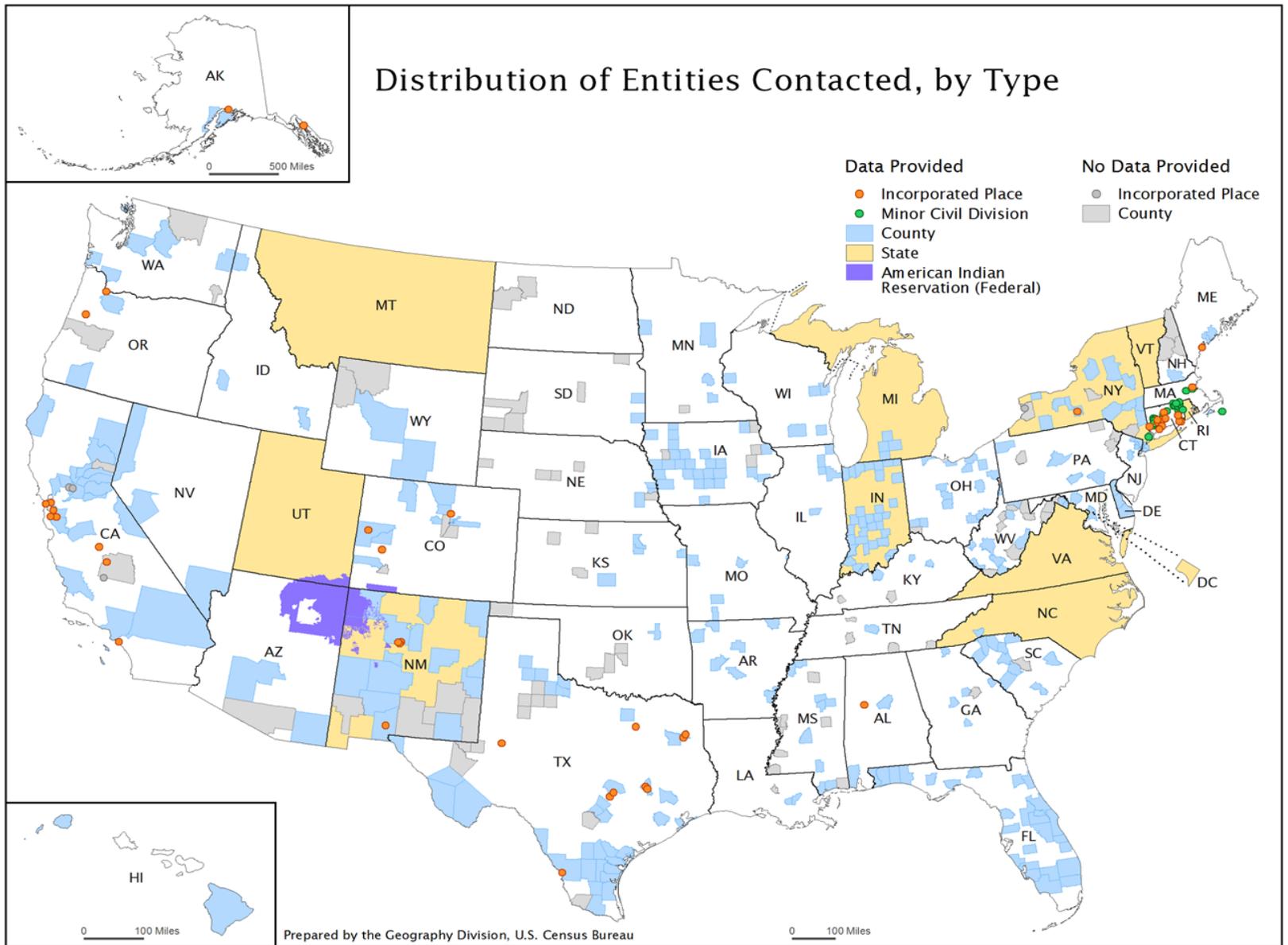


# MAF Updates from Partner Address Data

	Number	Percent
Total partner addresses	30,547,359	
Partner addresses matched existing MAF addresses	23,410,653	76.6
Geocode unchanged	22,876,559	97.7
Geocode updated	236,259	1.0
Geocode added (previously ungeocoded)	306,835	1.3
Partner addresses did not match existing MAF addresses	7,136,706	23.4
Partner addresses added to the MAF	64,183	0.2
Partner addresses not used for MAF update*	7,072,523	99.8

\*An address was not used for MAF update, e.g., it was a duplicate in the partner file or a non-residential address.

# Distribution of Entities Contacted, by Type



# Impact on Ungeocoded Addresses After Processing Partner Address and Road Data

Areas Evaluated to Date	Number of Addresses	Percent of Area Total
MAF addresses in partner areas	57,303,095	
Ungeocoded MAF addresses before processing partner data	1,545,676	2.7
Geocoded based on partner data	327,799*	0.6
Ungeocoded addresses remaining in MAF	1,217,877	2.1

\* This number equals about 21% of the total ungeocoded addresses in the partner areas evaluated to date.

# Initial Match Rates of Third Party Data and the MAF

	Number	Percent
Total third party addresses	168,623,188	
Duplicates within third party data	626,675	0.4
Total third party addresses to match to the MAF	167,996,513	
Matched	139,192,124	82.5
Unmatched	28,804,389	17.1

# Comparison of the MAF to Imagery

2010 vintage



Current vintage



Missing units on the address list

Field	Value
GQHU_2	0
GQHU_4	0
GQHU_5	0
MITFCC_U1000	24
MITFCC_U1200	0
MITFCC_U2000	0
MITFCC_U2100	0
MITFCC_U2200	0
MITFCC_U3000	0
XTYP_0	22
XTYP_1	0
XTYP_2	0
XTYP_3	0
XTYP_4	0
XTYP_5	0
XTYP_9	2
NUJ_9	0
NUJGT30	0
POP10	97
NU10	34
CLASS01	SU_1_0

# Recommendations

- Reduce the in-field address canvassing universe;
- Commit resources for continuing partnership activities to cover the whole nation where local address lists exist and to solicit and process partnership files for areas with the most change;
- Continue review of imagery to detect change and compare results with housing unit counts in the MAF. This work should be integrated with address and feature acquisition processes;
- Identify other potential sources of information for areas where a local government does not have a file, such as administrative records and third party data;
- Continue to develop overall measures of certainty about the quality and completeness of the MAF at multiple levels of geography, from nationwide MAF coverage to the census block level; and
- Continue the development of web services to improve the quality of data that local governments provide and to ease the burden on local governments with consistent approaches for address data management.

# Questions?

- Send questions to the email address below.

[census.2020.program.management.review@census.gov](mailto:census.2020.program.management.review@census.gov)