

**IHBG Negotiated Rulemaking Data Study Group**  
**Final Report**  
July 31, 2015

**Volume I**

## Table of Contents

### Table of Contents

#### Executive Summary and Recommendations

#### Section 1. Brief Summary of Committee-Approved Proposal Authorizing Data Study Group, Guiding Principles and Rules of Order

#### Section 2. Brief Summary and Explanation of Process for Nominating, Characterizing and Evaluating Data Sources

#### Section 3. List of Data Study Group Members and Participants/Contributors

#### Section 4. List of Technical Support Persons/Committee Members

#### Section 5. Narrative Description of Specific Process Used to Nominate Data Sources

#### Section 6. List of Nominated Data Sources

#### Section 7. Narrative Description of Specific Process Used for Initial Screening followed by Characterization of Data Sources Passing Initial Screening

#### Section 8. Results of Data Source Initial Screening and Characterization

#### Section 9. Narrative Description of Specific Process Used to Evaluate Data Sources

#### Section 10. Results of Data Source Evaluation

#### Section 11. Technical Experts' Recommendation for improvements to American Community Survey

### Volume II. Appendices

## Executive Summary and Recommendations

The Indian Housing Block Grant (IHBG) Negotiated Rulemaking Committee (Committee) established a study group to assess potential data source(s), including the American Community Survey (ACS), to drive the allocation of IHBG funding via the IHBG allocation formula.

### Executive Summary

The Data Study Group consisted of seven voting members, one from each HUD region plus a HUD representative. The Data Study Group members identified three technical experts, and HUD provided a technical expert to assist with the work.

This report summarizes the work of the study group from August 2014 through July 2015 and provides a recommendation from the study group on what data the Committee may wish to consider adopting for use in the IHBG allocation formula.

The Data Study Group used a carefully constructed process that included:

- A nomination process for potential data sources;
- An initial screening process of the data sources agreed upon by the Data Study Group;
- A characterization process of data sources that passed through the initial vetting process; and
- An evaluation of data sources that were identified by the Data Study Group as meeting the criteria for further consideration.

The nomination process identified 49 data sources that were reviewed by the technical experts against a pre-determined set of screening criteria. Of the 49 nominated data sources, the Data Study Group agreed unanimously that 30 did not meet these criteria. The technical experts then prepared detailed characterizations of the remaining 19 data sources. Based on the characterization process and the discussion that followed with the Data Study Group, the Data Study Group rejected 10 more data sources that did not meet the pre-determined criteria.

The Data Study Group moved nine data sources forward for comprehensive evaluation. The technical experts divided the nine data sources into two categories, core data and support data. Core data sources are data sources that could replace the Census 2000

data currently used in the formula. Support data are sources that could be used to adjust the core data, such as adjusting for population growth or construction costs. The nine data sources that the study group evaluated are:

Core Data:

- Most Recent Decennial Census data collected by the U.S. Census Bureau
- ACS collected by the U.S. Census Bureau
- National Tribal Survey to be Administered by a Federal Agency
- National Tribal Survey to be Administered by Tribes

Support Data:

- Tribal Enrollment Data
- Indian Health Service (IHS) Population Projections
- U.S. Census Bureau Population Estimates
- Data Reported by IHBG Grant Recipients on Formula Response Form
- Total Development Costs (TDC)

The Data Study Group carefully considered the evaluation results of the technical experts, had multiple discussions among the Data Study Group membership, including requests for clarification from the technical experts, and made the recommendations noted below..

## Recommendations

The Data Study Group has two major recommendations for the Committee:

### 1. **American Indian and Alaska Native (AIAN) Persons Variable:**

The AIAN population will be the greater of the most recently available ACS, Decennial Census, or Challenge data.

If this is adopted, the data would no longer be “aged”:

- Core Data: better-of ACS, tribal challenge, or Decennial Census (not-aged)
- Challenge life cycle: ten years\*

*\*Any challenges pre-implementation of the new rule will have its ten year start date on the date of implementation (Fiscal Year (FY) 2018), including any aging of the challenge up to this time, with an expiration of FY 2028.*

*Motion approved by consensus at 2 pm, June 24, 2015.*

**1a. Recommendation for Committee to discuss whether or not to exclude South, Central, and Canadian AIAN from the Decennial Census and the ACS.**

**2. Support Data Sources:**

Of these three sources, TDC, Tribal Enrollment, and Formula Response Form, suggest using them as they are presently used in the formula. And with respect to the two data sources suggested to potentially age the population data, reference Proposal 2 if necessary.

*Motion approved by consensus at 4 pm, June 24, 2015.*

The following proposals were considered but no consensus was reached by the Data Study Group

(1) Development of both Federally Administered and Tribally Administered National Tribal Surveys. The proposal was that the Committee recommend to the U.S. Department of Housing and Urban Development (HUD) and Congress to develop both surveys. A Tribal Survey that is focused on Indian housing need would provide data that is tribal specific and allow for tribes to structure the survey and be intricately involved in the process to provide data for their housing program. This proposal envisions using a temporary/interim data source as determined by the full Committee, and then implementing the new Tribal Survey as soon as it becomes available.

(2) Feasibility Study for National Tribal Survey. This proposal would request that HUD conduct a study on the feasibility and cost related to replacing the Decennial Census and the ACS with a National Tribal Survey for use in the IHBG funding formula. The study conducted by HUD should, at a minimum, determine the cost to develop and implement a National Tribal Survey, identify funding sources to pay for the additional cost, evaluate the capability of tribes to administer the Survey and determine the extent that a National Tribal Survey would duplicate efforts already being done by the U.S. Census Bureau. The study should be completed within the next three years, and the information from the study should be considered by any future Negotiated Rulemaking Committee tasked with developing regulatory changes to the funding formula for the IHBG.

(3) Other remaining variables. There were two proposals for Data Study Group recommendations were considered, but neither achieved consensus. The first proposal

was to recommend one of the three options below for full Committee consideration, and the second was to present the options listed below for the full Committee to discuss. For all options, recommendation 1 for the AIAN Persons variable (see above) would apply.

**Option 1:** Status quo, apply 2000 Decennial aged.

Or

Status quo, apply 2000 Decennial aged until the Committee changes the variables to match the questions in the ACS.

**Option 2:** use ACS five-year rolling average, updated annually, as the core data on the remaining variables.

If 2010 Decennial Census or challenge data AIAN population exceeds ACS population, all of the need variables will be adjusted as a ratio of:

$[AIAN\ persons / ACS\ AIAN\ persons] \times$  each of the remaining six need variables

Translation: AIAN persons (per recommendation 1) divided by ACS AIAN persons, multiplied by each remaining six need variables in the formula.

**Option 3:** use ACS five-year rolling average, updated annually, as the Core data on the remaining variables with no adjustment factor.

## **Section 1. Brief Summary of Committee-Approved Proposal Authorizing Data Study Group, Guiding Principles and Rules of Order**

In “Guiding Principles for Study Group 7-30-14 FINAL,” the IHBG Committee resolved that the purpose of this study is to assess potential data source(s), including the ACS, to drive the allocation of IHBG funding via the IHBG allocation formula. The Data Study Group was to attempt to reach a consensus recommendation to the Committee regarding the source(s) of data to be used in the IHBG allocation formula. This recommendation could include revisions and modifications to data sources and data sets in order to address weaknesses in the data.

In addition to defining the purpose of this study, the Data Study Group “Guiding Principles” addressed participation, meetings, duration of the study, data sources, and presentation of product. The Data Study Group was to consist of one Committee member from each of the six HUD-designated regions, plus one HUD representative. All Committee members and other individuals were welcome to participate. The Data Study Group members selected a chair to oversee the Data Study Group meetings. The Data Study Group committed to having at least two face-to-face meetings and convening over the telephone as the group determined necessary. Data Study Group members made a good faith effort to attend/participate in all Data Study Group meetings, but sometimes designated an alternate to participate in their absence. Data Study Group members and other participants generally covered their own costs of participation unless other funding was identified.

The “Guiding Principles” state that the first meeting of the Data Study Group was to occur within two weeks of the formation of the Data Study Group, but no later than August 25, 2014. The Data Study Group was to have no more than 12 months from its first meeting to complete the study and submit the final report to the Committee. The Data Study Group could work as a full group or divide into working groups. Working groups must be chaired by a Data Study Group participant. If the Data Study Group divided into smaller working groups, all research would be brought back to the Data Study Group for evaluation and assessment within six month. Only Data Study Group members or their alternates could vote for consensus purposes. The Data Study Group could request technical support as needed. To the extent that any technical request requires funding, the request was subject to funding availability. The regional representatives from each region were responsible for communicating the Data Study Group's progress to tribes and Tribally Designated Housing Entities (TDHEs) within their region.

According to the “Guiding Principles,” at the onset, the Data Study Group established a timeline for identifying potential data sources, and once these data sources were identified, no other data sources could be introduced for evaluation. After data sources were nominated, they were characterized on a number of criteria, including but not limited to: data relevance, data collection methodology, proficiency of persons/organizations collecting the data, timing considerations, the burden imposed upon tribes and TDHEs, cost, and ability to implement by FY 2018. Specifically, the Data Study Group was instructed by the full Committee to look for data source(s) that achieve an optimal balance of:

1. Providing data that is relevant to AIAN housing needs
2. Having a data collection methodology that is objective, equitable, transparent, consistent, statistically reliable, and replicable both over time and diverse geographies
3. Being collected by proficient persons/organizations having appropriate capacity and training
4. Being collected on a recurring basis at reasonable intervals or being capable of reliable statistical aging
5. Not imposing an undue administrative or financial burden upon tribes and TDHEs
6. Implementable by FY 2018

The Data Study Group was instructed to provide quarterly updates to the Committee, which could include minutes, draft reports, status reports, etc. Upon completion of its work, the Data Study Group was to distribute its report and recommendations to the Committee. This report will include the assessment and recommendations for the Committee. After the Committee’s negotiation is completed, this report is to be made available on the IHBG Rulemaking website and on HUD’s Codetalk web page.

The Data Study Group established the following Rules of Order (“Study Group Rules of Order 9-19-2014) to supplement the “Guiding Principles”:

1. Meeting Notices. Regular meetings of the Data Study Group were published on the IHBG website, <http://ihbgrulemaking.firstpic.org>, at least two (2) weeks in advance of the scheduled meeting. The Chairman of the Data Study Group was to notify members of the Data Study Group by email. Meeting notices could also be distributed through the National



American Indian Housing Council (“NAIHC”) and Regional Associations. Emergency meetings of the Data Study Group could be called on forty-eight (48) hours’ notice to the members of the Data Study Group, or on less notice, if all Data Study Group members agreed.

2. Telephonic Meetings. HUD provided a call in number and technical assistance to facilitate telephonic meetings of the Data Study Group and such working groups, if any, that the Data Study Group established. To participate in a telephonic meeting, a participant needed a phone line, a computer, and access to the internet. Instructions were provided on the IHBG website, <http://ihbgrulemaking.firstpic.org>.

3. Minutes. To the extent feasible, minutes were kept of all Data Study Group meetings, and HUD provided a note-taker to take and distribute the minutes to all Data Study Group members.

4. Submission of Documents. Members of the Data Study Group could post documents on the IHBG website for review by all Data Study Group members. Non-members of the Data Study Group who wished to post documents on the IHBG website could submit those documents through a member of the Data Study Group.

5. Proposal Concept. The Guiding Principles were applied consistent with the Proposal Concept from the Needs Work Group to the full Committee, which was approved by the Committee on June 13, 2014, and is an attachment to the Guiding Principles.

## Section 2. Brief Summary and Explanation of Process for Nominating, Characterizing and Evaluating Data Sources

All members of the Data Study Group were given the opportunity to nominate existing or new data sources and to designate technical support experts to evaluate sources. In addition, Data Study Group members could nominate data sources on behalf of Committee members and participants who were not part of the Data Study Group. When a new data source was nominated, the nominator was required to provide basic information about that source to facilitate the research of the technical experts during the screening, characterization and evaluation phases.

On September 25, 2014 HUD published in the Federal Register a Request for Information (<http://www.gpo.gov/fdsys/pkg/FR-2014-09-25/html/2014-22897.htm>) requesting “interested members of the public to provide information regarding alternate data sources, including ACS, which might serve as the basis upon which the needs variables of the IHBG formula could be based.” The Federal Register requested that all comments be submitted by October 27, 2014.

The Data Study Group closed the data source nomination period three weeks after final assessment and overview documents were posted on the IHBG Formula Negotiated Rulemaking website. After nominations were closed, the Data Study Group compiled and finalized a list of data sources submitted by Data Study Group members and participants and by others in response to the Federal Register notice. The Data Study Group then identified technical experts to screen, characterize and evaluate the nominated data sources.

The technical experts were identified by individual members, and formed a technical workgroup to coordinate their work. Each technical expert screened an assigned list of nominated data sources. All designated technical experts answered the screening questions for all nominated data sources, and then compiled their answers to the initial screening into a single matrix which they provided to the Data Study Group. The Data Study Group used this matrix to attempt to reach consensus over which nominated sources did not meet the minimum requirements for use in the IHBG formula and should be eliminated from further consideration. If the Data Study Group did not reach consensus to eliminate a data source at the screening stage, the data source progressed to the next stages.

Each nominated data source that was not rejected by the group was characterized by the technical experts over the following months, and data sources meeting a series of specific

criteria were moved on to the evaluation stage. Generally, in the characterization phase, the technical experts established a list of current variables and other identified aspects of housing need that each data source could support. Where applicable, they identified potential means to improve or enhance the data provided by these source(s), identifying the resources needed to implement such improvements and weighing the costs of those improvements against their potential value. In addition, they identified other potential needs that currently are not included in the IHBG formula that could be measured using data from the sources that were evaluated.

The characterization process included identification of current formula needs variables and other aspects of housing need that each data source is able to measure. Because the characterization questions were not exhaustive, there was another opportunity to gather facts about data sources following the initial evaluation when necessary. The data sources were divided evenly among the technical experts, who performed the initial characterization. Then, each technical expert redistributed the initial characterization to all the technical experts for the following three weeks, so that each technical expert had the opportunity to add to each answer and to make their own recommendation about whether or not the data source should move on to the evaluation stage. The full narrative of each characterization, including the recommendation from each technical expert, was distributed to the Data Study Group, which reviewed the final product and gave the technical experts feedback for consideration during the evaluation phase.

After all data sources were characterized, the Data Study Group decided which sources should be evaluated. If the Data Study Group did not reach consensus to eliminate a data source at the characterization stage, it progressed to the evaluation stage. The Data Study Group assigned the data sources that passed the characterization phase to the technical experts to answer the evaluation questions. As with the characterization phase, the data sources were divided evenly among the non-HUD technical experts. The technical experts wrote their initial evaluation and then redistributed their work to all the technical experts to allow them to contribute to the discussion. To the extent possible, technical experts harmonized and reconciled their answers to provide a consistent opinion to the Data Study Group. When responses could not be reconciled, each opinion was included in the report presented to the Data Study Group.

The data sources were evaluated on six broad categories that had been previously established by the Data Study Group: relevance, currency, accuracy, completeness, availability, and transparency. The evaluation criteria also included a list of current variables and other aspects of housing need identified by the technical experts as being measured by the nominated and characterized data sources. The answers to and summaries of the evaluation questions included a substantial narrative component that

explained the specific ways a data source does or does not meet the identified criteria and ways that the source might be improved. The technical experts also reviewed the merits of and potential ways to improve the data source for each of the six broad categories, and provided an overall summary of the strengths and weaknesses of the data source with regard to the IHBG formula. The full narrative answers to the questions, including a discussion of topics where the technical experts were unable to reach agreement and a summary matrix for each data source, was provided to the Data Study Group.

The Data Study Group reconvened after receipt of the initial matrix to review these preliminary evaluation documents and to identify, draft, and submit any additional questions or requests necessary to complete the data evaluation process. Over the course of the next month, and by June 12, 2015, the technical experts worked together to prepare a preliminary evaluation report containing a list of evaluated data sources and a list of the optimal data source(s) for each current variable and other aspects of housing need that could potentially be measured by the evaluated data source(s), along with the basis for the determinations made. At the end of the month, the Data Study Group met again to review and discuss responses to their questions and to offer comments on the preliminary report. In July, the assigned technical expert submitted a final evaluation report to the Data Study Group that incorporated the new information. The Data Study Group met regularly to review and discuss the final evaluation report and recommendations and to finalize the report language, including minority and majority opinions if the group was unable to reach consensus. They submitted the final report language to the Committee on July 28, 2015.

### **IHBG Study Group Timeline**

<b><u>Stage</u></b>	<b><u>Date</u></b>	<b><u>Activity</u></b>
Meeting	August 28, 2014	<i>DATA STUDY GROUP IN-PERSON MEETING</i>
Meeting	September 19, 2014	<i>DATA STUDY GROUP TELEPHONE MEETING</i>
Meeting	October 3, 2014	<i>DATA STUDY GROUP TELEPHONE MEETING</i>
Meeting	October 17, 2014	<i>DATA STUDY GROUP TELEPHONE MEETING</i>
Meeting	November 3, 2014	<i>DATA STUDY GROUP TELEPHONE MEETING</i>
Meeting	November 17, 2014	<i>DATA STUDY GROUP TELEPHONE MEETING</i>

<b><u>Stage</u></b>	<b><u>Date</u></b>	<b><u>Activity</u></b>
Meeting	December 1-2, 2014	<i>DATA STUDY GROUP IN-PERSON MEETING</i>
<b>Assessment &amp; Process Documents</b>	December 2014	Send final draft assessment documents to Data Study Group members for final review
		Data Study Group members send final approval to HUD on assessment & process documents
		HUD uploads documents to IHBG website; nomination phase commences
Meeting	December 17, 2014	<i>DATA STUDY GROUP TELEPHONE MEETING</i>
<b>Nomination Phase</b>	January 2015	Nomination of sources and designation of technical experts are due. Screening process commences. Note, if a Data Study Group member can't find a technical expert during this period, the technical expert can start at any time during the evaluation process.
Meeting	January 12, 2015	<i>DATA STUDY GROUP TELEPHONE MEETING</i>
<b>Screening Phase</b>	January 2015	<i>Technical experts meet over the phone to discuss screening results</i>
		Technical experts finish first draft of screening; send draft to Data Study Group members
	January 26, 2015	<i>DATA STUDY GROUP TELEPHONE MEETING.</i> Data Study Group members agree to move 19 of 49 nominations to the characterization phase.
<b>Characterization Phase</b>	February 2015	<i>Technical experts meet over the phone to divide up the 19 nominations for initial review.</i>
		1st round of draft characterizations are completed; technical experts rotate drafts
		<i>Technical experts discuss first round of initial characterizations among themselves.</i>

<u>Stage</u>	<u>Date</u>	<u>Activity</u>
		All technical experts finalize draft characterizations and circulate drafts to Data Study Group members
	March and April 2015	<i>Technical experts meet multiple times during the characterization phase and submit a set of first round characterizations to the Data Study Group.</i>
	March 2, 2015	<b>DATA STUDY GROUP TELEPHONE MEETING</b>
	March 16, 2105	<b>DATA STUDY GROUP TELEPHONE MEETING - Decisions on 1st round of characterizations</b>
	April 13, 2015	<b>DATA STUDY GROUP TELEPHONE MEETING - Decisions on 1st round of characterizations</b>
	April 20, 2015	<b>DATA STUDY GROUP TELEPHONE MEETING - Final Decisions on 2nd round of characterizations. Data Study Group agrees to move 9 of 19 data sources on to evaluation phase.</b>
<b>Evaluation Phase</b>	April 27, 2015	<b>DATA STUDY GROUP TELEPHONE MEETING - Discuss Final Report Outline</b>
	May and June 2015	All technical experts finalize draft evaluations and circulate drafts to Data Study Group members
	June 1, 2015	<b>DATA STUDY GROUP TELEPHONE MEETING - 1st Discussion on Evaluation Drafts</b>
	June 4, 2015	<b>DATA STUDY GROUP TELEPHONE MEETING - 2<sup>nd</sup> Discussion on Evaluation Drafts</b>
	June 16, 2015	<b>DATA STUDY GROUP TELEPHONE MEETING - 3<sup>rd</sup> Discussion on Evaluation Drafts</b>
	June 18, 2015	<b>DATA STUDY GROUP TELEPHONE MEETING - 4<sup>th</sup> Discussion on Evaluation Drafts</b>

<u>Stage</u>	<u>Date</u>	<u>Activity</u>
Meeting	June 24-24, 2015	DATA STUDY GROUP IN-PERSON MEETING
Final Report Phase	July 2015	DRAFT final report sent to Data Study Group July 11, 2015
	July 13, 2015	<i>DATA STUDY GROUP TELEPHONE MEETING - Discuss Final Report Draft</i>
	July 20, 2015	<i>DATA STUDY GROUP TELEPHONE MEETING - Discuss Final Report Draft</i>
	July 21, 2015	<i>DATA STUDY GROUP TELEPHONE MEETING - Discuss Final Report Draft</i>
	July 27, 2015	<i>DATA STUDY GROUP TELEPHONE MEETING - Discuss Final Report Draft</i>
	July 30, 2015	Final Report made available to the full Committee.

### **Section 3. List of Data Study Group Members and Participants/Contributors**

The Data Study Group consisted of one Committee member from each of the six HUD-designated regions plus one HUD representative. The Data Study Group members, their designated region and organizational affiliation are as follows:

1. Heather Cloud, Eastern Woodlands Region: Ho-Chunk Nation
2. Jason Adams, Northern Plains Region: Salish & Kootenai Housing Authority
3. Gary Cooper, Southern Plains Region: Cherokee Nation
4. Karin Foster, Northwest Region: Yakama Nation Housing Authority
5. Deirdre Flood, Southwest Region: Washoe Housing Authority
6. Carol Gore, Alaska Region: Cook Inlet Housing Authority
7. Glenda Green, HUD: Office of Native American Programs

All Committee members and other individuals were welcome to participate in the Data Study Group.



## Section 4. List of Technical Experts

During the initial screening phase of the Data Study Group, the technical experts consisted of Ben Winter from HUD, Kevin Klingbeil from Big Water Consulting (Northern Plains Region), and Gabe Layman from Cook Inlet Housing Authority. Gabe Layman temporarily served as a technical expert until the Alaska, Eastern Woodlands, Southern Plains, and Southwest regions nominated Jim Anderson as a technical expert for their regions.

In addition to Ben Winter and Kevin Klingbeil; Jim Anderson and Pat Boydston (representing the Northwest Region) served as the technical experts for the data characterization phase of the study.

Todd Richardson from HUD then replaced Ben Winter as the HUD-nominated technical expert, and, with Jim Anderson, Kevin Klingbeil, and Pat Boydston, worked on the evaluation phase of the study.

Short bios of each for each of the technical experts are as follows:

### **Jim Anderson** (Alaska, Eastern Woodlands, Southern Plains, and Southwest Regions)

Jim Anderson is retired from the University of Illinois where he held positions as Associate Dean, Chair of the Building Research Council, Professor of Architecture, and Professor of Landscape Architecture.

He has had extensive experience with implementation and evaluation of federal housing programs. In 1995 he was the Principal Investigator for a study examining the ability of residents of Section 8 housing to assess the HQS compliance of their housing. This study was funded by HUD. During 1997-1999 he directed a follow-up HUD study that examined the ability of residents of public housing and FHA-Assisted housing to assess the condition of their dwelling. This involved comparisons of data collected from tenants with data collected by on-site inspectors. In 1998 he completed a national study of building codes provisions related to construction in existing buildings.

He directed several contracts with HUD's Office of Native American Programs (ONAP). First, he directed technical assistance for the IHBG program. This work involved maintaining a database on over 575 tribes and using that data for calculating the annual IHBG allocations for the tribes. He provided support to the 2004 Negotiated Rulemaking Committee. Subsequently he directed the Indian Housing Operating Cost Study ONAP.

Professor Anderson has extensive experience in research methods, particularly survey methods. Along with his colleagues, he conducted a long-term program of research to explain satisfaction with an environment in terms of the physical, social and organizational characteristics. Settings for this past research included multifamily housing, housing for the elderly, housing for disabled adults, correctional facilities, military housing, offices, and central business districts. He has developed software for the analysis of energy loss in single family homes.

Professor Anderson's teaching included seminars focused upon methods of research in designed environments, and his design studios focused on the application of research information and the inclusion of social and cultural issues in design.

### **Kevin Klingbeil (Northern Plains Region)**

Kevin Klingbeil was appointed by the Northern Plains Region to serve as its designated technical expert for the Data Study Group. Kevin is the Managing Director of Big Water Consulting, a firm located in Seattle, Washington which specializes in building data collection, analysis and utilization capacity for Indian tribes, nonprofit organizations, academic institutions and government agencies. He is also a geographer and a former executive director of the Jean Monnet Center at the NYU School of Law, Indian housing lawyer and regional manager for the U.S. Census Bureau during the 2010 Census.

After spending several years as a lawyer in the fields of environmental, water and international trade law, Kevin served as special and general counsel to several TDHEs throughout the United States while working as an associate attorney at Wagenlander & Heisterkamp, LLC in Denver, Colorado. During that time, he represented tribal housing clients in government-to-government consultations with the U.S. Census Bureau and HUD concerning ongoing surveys and the collection of housing-related data in Indian country.

While serving as Regional Manager for Quality Assurance for the 10-State Denver Region for the 2010 Census from 2009-2011, Mr. Klingbeil was a primary regional point of contact for tribes and regional tribal organizations concerning operational issues. In this capacity, he advised senior management concerning the impacts of specific procedural decisions on the accuracy of the enumeration within tribal and non-tribal lands.

From 2012-2013, Mr. Klingbeil served as General Coordinator of the Dakota Housing Needs Assessment Pilot Project (Dakota Pilot Project), a joint venture of five tribes in North Dakota and South Dakota to map their housing units and conduct housing needs assessments on all five participating reservations for purposes of challenging and

replacing Census data as well as initiating the development of a model data collection process for use by tribes nationwide.

Since August 2014, Mr. Klingbeil and Big Water Consulting have served as the data consultant for the United Native American Housing Association (UNAHA) during the six initial sessions of the IHBG Formula Negotiated Rulemaking Committee.

**Patricia (Pat) Boydston** (Northwest Region)

Patricia Boydston is currently the Executive Director of Cowlitz Indian Tribal Housing, where she oversees housing programs that serve the Tribe's 3,800 members. These programs include homeownership, rental assistance, repair and rehab, down payment assistance and an elder's apartment complex.

Ms. Boydston retired from ONAP on January 31, 2012 after 22 years with the federal government. As Director of the Office of Grants Evaluation for the past ten years, Ms. Boydston dedicated her team's efforts to ensuring the success of tribal housing programs in the Northwest. She championed the single year grant and was instrumental in the development of the new APR format. She was also instrumental in standardizing HUD's monitoring procedures and providing grantees with copies of all monitoring programs. Additionally, Ms. Boydston provided support to housing programs throughout the U.S., assisting with accounting and finance issues such as developing systems to account for 1937 Act units, transitioning from HUD accounting to GAPP, inventory controls, warehouse controls and procedures, Tax Credit project accounting, management and organizational structure, and development of internal controls over systems.

Prior to working with ONAP, Ms. Boydston worked for HUD's Office of the Inspector General and the Defense Contract Audit Agency. Her work always included interactions with tribal programs. At the Office of the Inspector General, she undertook a nationwide review of the NAHASDA program. At the Defense Contract Audit Agency, she worked with the 8a program and conducted operational reviews of tribal enterprises to assess efficiency and determine what changes would ensure ongoing success of these entities. She worked diligently with her clients to ensure successful implementation of effective business plans and resolution of audit findings.

Ms. Boydston has degrees in Accounting and Finance and is a Certified Public Accountant and a member of the Association of Certified Fraud Examiners.

### **Todd Richardson (HUD)**

Todd Richardson is Associate Deputy Assistant Secretary for Policy Development in HUD's Office of Policy Development and Research. He leads a team that is responsible for analyzing current data and drawing on the results of past research to assist the Secretary with making informed policy decisions. He has played a key role in developing a number of funding allocation formulas for HUD programs, including the IHBG formula in the 1990s, the Neighborhood Stabilization Program formula, and formulas to allocate post-disaster supplemental appropriations. He used data from multiple federal sources to create detailed housing unit damages post Hurricanes Katrina and Sandy. He is also author of a study on how well the Community Development Block Grant targets funds to its intended beneficiaries, and has managed numerous program evaluations, including the long-running Moving To Opportunity evaluation that measures the impact on poor families of moving from high poverty neighborhoods to low poverty neighborhoods. In addition to this work, Mr. Richardson has been a HUD Field Economist in Detroit, Michigan; developed scattered site public housing; and was program administrator for a housing non-profit in Saginaw, Michigan. Todd Richardson has a Master of Public Policy from the University of Michigan.

### **Ben Winter (HUD)**

Ben Winter is currently serving as Mayor Eric Garcetti's housing policy specialist in the City of Los Angeles. Before moving West, Ben was an analyst for the Office of Policy Development at HUD, where he provided support to program offices, tribal leaders and senior staff in the Obama Administration on a variety of housing and community development initiatives. Ben received his Master of Urban Planning from the NYU Wagner School for Public Service, and an undergraduate degree in International Relations and Spanish Literature at UW-Madison.

## Section 5. Narrative Description of Specific Process Used to Nominate Data Sources

On September 25, 2014 at 79 FR 57489, HUD published a Notice in the Federal Register requesting information to assist the Native American Housing Assistance and Self-Determination Formula Negotiated Rulemaking Committee. Specifically, the Notice stated that HUD's Negotiated Rulemaking Committee is:

"...reviewing whether the current data source for the needs variables, which is the U.S. Decennial Census, should be updated or revised. HUD and the Committee are considering all relevant data sources, including the American Community Survey (ACS), and how each data source might be used or modified, to serve as the source of the data upon which the needs variables of the IHBG formula would be based."

The Notice requested interested members of the public "to provide information regarding alternate data sources, including ACS, which might serve as the basis upon which the needs variables of the IHBG formula could be based." The September 25, 2014, Notice also stated that the Committee established a Data Study Group to identify and review all relevant data sources to determine whether the source might serve as the basis for the needs variables of the IHBG formula. The deadline for comments was October 27, 2014.

Six organizations and one individual responded with public comments: Oglala Sioux (Lakota) Housing, Housing Assistance Council (HAC), Choctaw and the Five Civilized Tribes, Northern Pueblos Housing Authority, Potawatomi Nation, Association of Alaska Housing Authorities and Jane Scarlett. They offered suggestions about Census/ACS data, data sources for the population variable, data sources for the Data Study Group to evaluate, potential variables to use in determining the IHBG allocation, how to deal with formula area overlap, how to address perceived inequities between large and small tribes, and other related issues.

While responses were broad-ranging, the Data Study Group determined that two suggestions clearly fit within the Data Study Group's purview. The first is using ACS for needs variables, but finding ways that ACS data can be enhanced. The second is developing a new national tribal survey. Oglala Sioux outlined an approach to a new national tribal survey:

"A national Tribal Survey jointly designed by HUD and tribes (with possible future input by other federal agencies working in Indian program(s)) to collect demographic data directly related to the IHBG formula. The federally conducted

National Tribal Survey could be administered by the Census Bureau under contract from HUD, much the same way the American Housing Survey is now done for special data related to public housing information."

Commenters responding to the Notice recommended two data sources for the population variable of the formula: Tribal Enrollment records and IHS user population data. Commenters also recommended that the Data Study Group evaluate several other specific data sources: TDHE administrative records, Head Start early childhood education program data, U.S. Department of Agriculture 515 Housing Program, Free and Reduced Lunch program population and Longitudinal Household Employer Dynamics data. Other issues raised by commenters -- measuring alternative needs, handling Formula Area overlaps, and mitigating perceived inequity between small and large tribes -- already are being addressed by the full Committee process.

As stated previously, only Data Study Group members could nominate data sources; however, Data Study Group members could nominate data sources on behalf of Committee members and participants who were not part of the Data Study Group. Nominators were asked to provide basic information about the data source to facilitate the research of the technical support experts. This information was listed on a nomination sheet, which requested the following specific information:

- Data source name
- Who nominated the data source and the nominator's contact information
- Does the nominator agree to provide additional information and clarification to technical support if necessary
- The purpose for which the data are collected and the specific aspects that are relevant to the IHBG formula
- Does the data source currently exist and, if yes, the sponsor, organization or agency responsible for collecting the data
- If the data source does not currently exist, the proposed sponsor of the data collection project and a general overview of the methodology. If the proposed data source is based on a model, include the model name, the reason(s) the model source itself is not appropriate, and a summary of the changes proposed to address these concerns

The Data Study Group agreed to close the data source nomination period three weeks after final assessment and overview documents were posted on the IHBG Formula Negotiated Rulemaking website.

## Section 6. List of Nominated Data Sources

In total, 49 nominations were received. The nominations and source of nominations are listed below:<sup>1</sup>

**Chart 1. Data Source Nominations**

<b>Nomination Number</b>	<b>Data Source Nomination</b>	<b>Source of Nomination</b>
1	National Tribal Survey - Administered by Federal Agency	Oglala Sioux (Lakota) Housing
2	National Tribal Survey - Administered by Tribes	Oglala Sioux (Lakota) Housing, Northern Pueblos Housing Authority,
3a	Most Recent Decennial Census	In-Person Data Study Group Meeting on 8/28/2014
3b	ACS	Housing Assistance Council, Choctaw and 5 civilized tribes, Potawatomi Nation, In-Person Data Study Group Meeting on 8/28/2014
4	2000 Decennial Census Data	Current Data Source, In-Person Data Study Group Meeting on 8/28/2014
5	Formula challenges with tribally collected data	Current Data Source
6	Data on number of NAHASDA developed units and number of CAS units	Current Data Source

<sup>1</sup> Nomination items 8, 9, and 10 were withdrawn by the nominator and are not listed. Nomination 15, Consumer Price Index (CPI), is a measure of inflation. This nomination was inadvertently dropped during the Technical Expert review without a firm decision on whether or not it should have moved to the Characterization phase. In retrospect, the Technical Experts are unanimous that this measure does not reflect housing need and likely would have recommended at the Characterization phase to the Data Study Group that this measure not be considered for the Evaluation phase.

<b>Nomination Number</b>	<b>Data Source Nomination</b>	<b>Source of Nomination</b>
7	IHS Population Projections based upon birth and death rate data as provided by the National Center for Health Statistics	Current Data Source
11	Tribal Enrollment data	Current Data Source , Potawatomi Nation
12	Data reported by IHBG grant recipients in Formula Response Forms	Current Data Source
13	Total Development Cost	Current Data Source
14	Per unit amount for FCAS side of the formula (for rental, Section 8, and Mutual Help/Turnkey)	Current Data Source
16	IHS User Population Data	Potawatomi Nation, In-Person Data Study Group Meeting on 8/28/2014
17	TDHE administrative records	Oglala Sioux (Lakota) Housing
18	Head Start early childhood education program	Oglala Sioux (Lakota) Housing, In-Person Data Study Group Meeting on 8/28/2014
19	U.S. Department of Agriculture 515 housing program	Oglala Sioux (Lakota) Housing, In-Person Data Study Group Meeting on 8/28/2014
20	Free and reduced lunch program population	Oglala Sioux (Lakota) Housing
21	Longitudinal Household Employer Dynamics data	Oglala Sioux (Lakota) Housing
22	ICDBG performance data	In-Person Data Study Group Meeting on 8/28/2014
23	IRS data on Low Income Housing Tax Credit (LIHTC) housing	In-Person Data Study Group Meeting on 8/28/2014
24	WIC (Department of Agriculture)	In-Person Data Study Group Meeting on 8/28/2014



<b>Nomination Number</b>	<b>Data Source Nomination</b>	<b>Source of Nomination</b>
25	Low Income Home Energy Assistance Program (LIHEAP) (Department of HHS)	In-Person Data Study Group Meeting on 8/28/2014
26	IRS data	In-Person Data Study Group Meeting on 8/28/2014
27	Workforce Investment Act (Department of Labor)	In-Person Data Study Group Meeting on 8/28/2014
28	USPS vacancy data	In-Person Data Study Group Meeting on 8/28/2014
29	BIA data from educational system	In-Person Data Study Group Meeting on 8/28/2014
30	Counties' property level data (foreclosure, taxes, sale, etc.)	In-Person Data Study Group Meeting on 8/28/2014
31	BLS employment/unemployment data	In-Person Data Study Group Meeting on 8/28/2014
32	BIA Indian Labor Force Report	In-Person Data Study Group Meeting on 8/28/2014
33	Other allocation formulas used by other federal programs in Indian country (e.g., WIC, Head Start, HIP, IRS, EPA)	Oglala Sioux (Lakota) Housing
34	Annual data reports done by other federal agencies (for Indian Country)	Oglala Sioux (Lakota) Housing
35	Data matching by Census using Tribal enrollment information (which is currently a way to determine data in overlapping formula areas)	Oglala Sioux (Lakota) Housing
36	Data from Department of Health	Jane Scarlett
37	Data from Department of Education	Jane Scarlett
38	Data from programs at the Department of Veterans Affairs	In-Person Data Study Group Meeting on 8/28/2014
39	Annie E. Casey (and other private foundation data)	In-Person Study Group Meeting on 8/28/2014
40	Commodities, CHR, EPA, HID	In-Person Data Study Group Meeting on 8/28/2014
41	Tribal needs studies	Oglala Sioux (Lakota) Housing

<b>Nomination Number</b>	<b>Data Source Nomination</b>	<b>Source of Nomination</b>
42	US Census, Population Estimates Program	Additional Nomination from Nomination 39
43	US Substance Abuse and Mental Health Services Administration (SAMHSA), National Survey on Drug Use and Health	Additional Nomination from Nomination 39
44	US Dept. of Education, National Center for Education Statistics, National Assessment of Educational Progress	Additional Nomination from Nomination 39
45	U,S, Dept. of Education, National Center for Education Statistics, Common Core of Data (CCD)	Additional Nomination from Nomination 39
46	Centers for Disease Control and Prevention (CDC), National Center for Health Statistics, Vital Statistics	Additional Nomination from Nomination 39

## Section 7. Narrative Description of Specific Process Used for Initial Screening followed by Characterization of Data Sources Passing Initial Screening

### *Initial Screening Methods*

Each data source underwent an initial screening. The purpose of the screening was to determine whether or not the data source could potentially be used in the IHBG formula, and therefore was worth the time and effort of doing a thorough characterization. In the initial screening, each identified technical expert answered several questions for all nominated data sources. The answers were compiled into a matrix and, along with any additional narrative component of the answers, provided to the Data Study Group. The Data Study Group reviewed the matrix and the narratives, and tried to reach consensus about which nominated sources did not meet the minimal requirements and should be eliminated. When the Data Study Group did not reach consensus about eliminating a data source at the initial screening stage, it progressed to the later stages.

The questions for the initial screening were:

1. Is it an independent, verifiable data source or a repackaging/special tabulation of some other data?
  - If the data source is not independent, stop and consider the source it is based on instead.
2. Is this data collection project active or is it a proposed new data source?
  - If the data source is no longer being collected and cannot be reliably enhanced to bring current, reject it.
3. Does this source measure some aspect of Indian housing need? If yes, what aspect(s)?
  - If the data source does not include any data relevant to Indian housing need, reject it.
4. Is the project national in scope, collecting data and estimating values for all Indian areas?
  - If not currently or potentially national, reject it.

### *Data Characterization Methods*

The data sources that passed the initial screening were moved on to the second step in the process, the data characterization stage. The data sources were divided evenly among the technical experts. The technical experts (Winter, Klingbiel, Boydston, and Anderson) answered a series of questions about each data set. These questions were designed to gather the facts that formed the basis for the judgments made during the evaluation process. The data characterization questions addressed: purpose and methodology, accuracy and precision, implementation and funding, transparency and potential for challenge and other potential concerns.

After two weeks (or longer if necessary to get the required information), the data sources and completed work was redistributed among all the technical experts for the following three weeks. During this time, all technical experts had the opportunity to add to the narrative answers and to make their own recommendation about whether the data source should move on to the evaluation stage. The full narrative, including the recommendation and supporting evidence and documentation from each technical expert, was then distributed to the Data Study Group. Based on the answers to the questions and the technical experts' recommendations, the Data Study Group decided whether to reject a potential data source or to move it on to the evaluation stage. The Data Study Group attempted to reach consensus over which characterized sources to move on. When they did not reach a unanimous decision to reject a data source, it was retained for evaluation.

## Section 8. Results of Data Source Initial Screening and Characterization

### *Initial Screening Results*

Based on the responses to the four questions above in the initial screening, each technical expert recommended acceptance or rejection of each data source. If all of the technical experts agreed to reject a data source, it was not moved forward to the data characterization phase.

The data sources rejected at initial screening by all three technical experts and reasons for rejection by the Data Study Group were as follows.

**Chart 2. Data sources rejected at initial screening**

<b>Nomination Number</b>	<b>Data Source Nomination</b>	<b>Reason for rejecting</b>
4	2000 Decennial Census Data	Data collection is inactive.
5	Formula challenges with tribally collected data	Most see this as a formula process rather than a data source, but a successful data challenge does indeed become a data source when entered into the formula.
14	Per unit amount for FCAS side of the formula (for rental, Section 8, and Mutual Help/Turnkey)	This functions as a formula weight, not actually a data source.
17	TDHE administrative records	Like county records listed in nomination #30, not standardized and not specific.
20	Free and reduced lunch program population	There seem to be concerns with eligibility rules of this program as well as its geographic coverage, but some may wish to investigate the program further.
22	ICDBG performance data	Not all tribes are eligible or receive ICDBG funds.
23	IRS data on Low Income Housing Tax Credit (LIHTC) housing	We only have data of project location and some tenant information, but this doesn't necessarily indicate anything about Indian housing need.
24	WIC (Department of Agriculture)	Data is not available for all tribes, but we may be able to make a regional indicator (ex. State level)

<b>Nomination Number</b>	<b>Data Source Nomination</b>	<b>Reason for rejecting</b>
25	Low Income Home Energy Assistance Program (LIHEAP) (Department of HHS)	This program is not available to all tribes.
27	Workforce Investment Act (Department of Labor)	There are many programs under this Act and the nominations needs to be more specific. We did find, however, grant performance data available, but that does not meet the Indian housing need screening criterion.
28	USPS vacancy data	There are concerns about data quality and usefulness in rural areas and how useful vacancy data can be for the formula.
29	BIA data from educational system	Nomination isn't specific and technical experts couldn't find a source that was active and available for all Indian areas.
30	Counties' property level data (foreclosure, taxes, sale, etc.)	Not specific recommendation; not available for all Indian areas; not standardized.
32	BIA Indian Labor Force Report	No longer active.
33	Other allocation formulas used by other federal programs in Indian Country (e.g., WIC, Head Start, HIP, IRS, EPA)	Not a specific data source nomination.
34	Annual data reports done by other federal agencies (for Indian Country)	Not a specific data source nomination.
35	Data matching by Census using Tribal Enrollment information (which is currently a way to determine data in overlapping formula areas)	Not a specific data source nomination.
36	Data from Department of Health	Not a specific data source nomination.
37	Data from Department of Education	Not a specific data source nomination.
38	Data from programs at the Department of Veterans Affairs	Not a specific data source nomination.
39	Annie E. Casey (and other private foundation data)	Repackaging of data from various sources; included these sources as new nominations.

<b>Nomination Number</b>	<b>Data Source Nomination</b>	<b>Reason for rejecting</b>
40	Commodities, CHR, EPA, HID	Not a specific data source nomination.
41	Tribal needs studies	Not a specific data source nomination.
43	US Substance Abuse and Mental Health Services Administration (SAMHSA), National Survey on Drug Use and Health	Not relevant to Indian housing need.
44	US Dept. of Ed, National Center for Education Statistics, National Assessment of Educational Progress	Not relevant to Indian housing need.
45	US Dept. of Ed, National Center for Education Statistics, Common Core of Data (CCD)	There is some debate about whether we could use administrative data as a supplement to Indian population numbers from other sources.

*Data Characterization Results*

The technical experts answered a series of questions about each data source that passed the initial screening and was moved on to the data characterization phase. These questions were designed to gather the facts that formed the basis for the judgments made during the evaluation process. The questions addressed: purpose and methodology, accuracy and precision, implementation and funding, transparency and potential for challenge, as well as other potential concerns. Technical experts also were asked to recommend whether to evaluate or reject the data source.

The data sources were divided evenly among the technical experts. After two weeks (or longer if necessary to get the required information), the data sources and completed work were redistributed among all the technical experts for the following three weeks. During this time, all the technical experts had the opportunity to add to the narrative answers and to make their own recommendation about whether the data source should move on to the evaluation stage. The full narrative, including the recommendation and supporting evidence and documentation from each technical support person, was distributed to the Data Study Group. Based on the answers to the questions and the technical experts' recommendations, the Data Study Group decided whether to reject a potential data source or move it on to the evaluation stage. The Data Study Group attempted to reach consensus over which characterized sources were moved on. If they were unable to reach a unanimous decision, the data source was evaluated.

Chart 3 has hyperlinks to the detailed characterizations. As Chart 3 shows, sometimes the experts reached consensus on recommending that the data set be considered for further evaluation or that it be rejected. Other times there were differences of opinion among the technical experts. The technical experts provided the data characterizations to the Data Study Group and explained their recommendations, including any differences in viewpoint. The Data Study Group then decided whether or not to pass the data source on for further evaluation. Of the 19 data sources reviewed in the characterization phase, the study group agreed that nine should be moved on for further evaluation. These nine data sources are identified in Chart 3 as “Evaluate” under Study Group Decision. More information on each characterization can be found in the appendix.

**Chart 3. Data sources passing initial screening and characterization recommendations**

<b>Data Source (hyperlink to detailed characterization)</b>	<b>Key Points</b>	<b>Technical Evaluation Experts (TE) Recommendation</b>	<b>Study Group Decision</b>
<a href="#"><u>1. National Tribal Survey- Administered by Federal Agency</u></a>	<p>New survey specifically designed to capture more appropriate and relevant data for tribal programs. Survey would be developed with active tribal participation. In addition to questions that measure all housing needs variables, there would be an opportunity to include alternative questions to measure unique needs in tribal areas. Data would be collected over a defined period of time every 5 years to reflect a single point in time. Data collection would be managed by the Census Bureau or other data collection entity contracted by HUD. <i>Concerns:</i> Because this survey does not exist, it can only be evaluated in concept - there is no methodology or survey instrument to consider. There likely would be challenges in survey design, sampling strategy, affording and achieving sufficient sample size to produce accurate estimates, and time and effort. The cost would be substantial.</p>	<p>The TE were split: two said evaluate because of the opportunity to create a new survey and collect more appropriate and relevant data, and two said reject because it seems duplicative of other Federal data collection activities, and there are significant costs in terms of time and dollars.</p>	<p><b>Evaluate</b></p>



Data Source (hyperlink to detailed characteriza- tion)	Key Points	Technical Evaluation Experts (TE) Recommendation	Study Group Decision
<a href="#"><u>2. National Tribal Survey- Administered by Tribes</u></a>	<p>New survey specifically designed to capture more appropriate and relevant data for tribal programs. Survey would be developed with active tribal participation. In addition to questions that measure all housing needs variables, there would be an opportunity to include alternative questions to support tribally-developed variables. Tribes will be able to decide for themselves the most appropriate starting point for a sampling frame that fits their unique geographies and circumstances. Data would be collected over a defined period of time every 5 years to reflect a single point in time. Individual tribes would collect and compile the data using standardized questions and processes. HUD would analyze the data, incorporate it into a national data set and apply it in the formula.</p> <p><i>Concerns:</i> Because this survey does not exist, it can only be evaluated in concept - there is no methodology or survey instrument to consider. There likely would be challenges in survey design, sampling strategy, affording and achieving sufficient sample size to produce accurate estimates, and time and effort. The cost would be substantial. Further, HUD would need a very large amount of incremental resources to audit data collection efforts to ensure that data is being collected in a fair and equitable manner.</p>	<p>The TE agreed by consensus to evaluate this data source.</p>	<p><b>Evaluate</b></p>

Data Source (hyperlink to detailed characterization)	Key Points	Technical Evaluation Experts (TE) Recommendation	Study Group Decision
<a href="#"><u>3a. Most Recent Decennial Census</u></a>	<p>The U.S. Bureau of the Census collects data using a standardized form and a strict and relatively uniform data collection methodology. Nationwide data is collected every 10 years over a several month period to reflect a single point in time. The Census is intended to enumerate the entire population, and overall response is high. The Census has protocols for increasing response: after mail and phone efforts are unsuccessful, they send field enumerators to collect data in face-to-face interviews.</p> <p><i>Concerns:</i> There are biases in data collection. It is impossible to measure every person in the U.S. because of non-response. . Census data cannot identify the specific subset of the population (enrolled members of federally-recognized tribes) that are deemed eligible to receive services under section 201(b) of NAHASDA. Finally, the Decennial Census cannot incorporate new formula variables.</p>	<p>The TE agreed by consensus to evaluate this data source.</p>	<p><b>Evaluate</b></p>

Data Source (hyperlink to detailed characterization)	Key Points	Technical Evaluation Experts (TE) Recommendation	Study Group Decision
<a href="#"><u>3b. American Community Survey (ACS)</u></a>	<p>ACS data is collected by the U.S. Bureau of the Census using a standardized form. ACS measures many demographic, social, economic, and housing characteristics of AIAN households and people, most of which can be used as indicators of housing need. Further, HUD can work with Census to tabulate ACS responses to create alternative formula variables. ACS uses MAF to select participants, which may adversely affect Tribes in rural areas. However, ACS uses more addresses in the MAF than the Decennial Census, and starting in 2012, new Census sampling procedures, including increased sample sizes, should ACS should better reflect in the 2012-16 ACS the new non-standard addresses as well as improve accuracy after 2000. ACS has a very high overall response rate. The ACS produces three different period estimates – 1, 3 and 5 years. For the purposes of the IHBG formula, only the 5 year ACS products are appropriate because they are the only ones that apply to Formula Areas with populations below 20,000.</p> <p><i>Concerns:</i> Small sample sizes over the 5-year data collection period in some areas is currently too small to be accurate and it is too early to know if the new sampling procedures will improve this; undercount in some areas due to non-response or incomplete addresses; the definition of Native American is not limited to IHBG eligible tribes.</p>	The TE agreed by consensus to evaluate this data source	<b>Evaluate</b>

Data Source (hyperlink to detailed characterization)	Key Points	Technical Evaluation Experts (TE) Recommendation	Study Group Decision
<a href="#">6. HUD's IHBG Annual Performance Report Data on number of NAHASDA developed units and number of CAS units</a>	<p>Information is collected through the administration of the IHBG program. Tribal housing entities report data on Annual Performance Reports (APR). HUD's regional level ONAP staff enter APR data into an Access database, and ONAP headquarters maintain a centralized file of all responses. All NAHASDA grant recipients are required to report annually. Each Tribal housing program reports all units under operation and all units constructed using NAHASDA funds each year. Currently, data collected in the APR is not used to measure any current formula variable; however, could use data to calculate housing shortage variable.</p> <p><i>Concerns:</i> The report only collects information on activities that occurred during the program year end (PYE) for each IHBG grant recipient. Individuals on the waiting list and eligible recipients who are not living in a managed unit are not included in the APR unit data. This data source does not address need. If the APR is revised to include needs data, there would be additional cost at the Tribe/TDHE level to collect and report the information and at the HUD level to analyze, collate, and monitor the additional information. Verifying the accuracy of reported data may require increased monitoring and auditing.</p>	<p>The TE were split: two said "maybe," one said evaluate and one said reject. One TE said to evaluate because they could use the APR as an alternative means of calculating the housing shortage variable. The two "maybes" felt that the APR would need to be revised to address needs variables and to elicit consistent responses across tribes. One TE said reject because the data is similar to the FRF, and administrative records lack consistency.</p>	<p><b>Reject</b></p>

Data Source (hyperlink to detailed characterization)	Key Points	Technical Evaluation Experts (TE) Recommendation	Study Group Decision
<a href="#">7. Indian Health Service (IHS) Population Projections</a>	<p>IHS combines existing enumeration/survey data from the 2000 Decennial Census with administrative birth and death data for the AIAN population from the Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS) to produce an estimate of the total number eligible for IHS services. The IHS does two major updates. The first is every 10 years, with every decennial Census, The current data still relies on 2000 Decennial Census data and has not yet been updated with 2010 Census data. The second major update occurs annually, when the IHS incrementally adds the net population gain of counties based on death and birth records from the NCHS.</p> <p><i>Concerns:</i> There are three major concerns about the data set design. First, the decennial Census and state death and birth statistics reported to NCHS use inconsistent definitions of race and ethnicity. This means that different people are included in the data collected by the US Census Bureau, birth records, and death records. Second, AIAN may be under-reported in death records because race is not self-reported. Third, IHS service population estimates do not account for migration patterns across the country. The resulting IHS service population estimates may overestimate population growth in some Indian areas and underestimate growth in others, where AIAN people have moved back into Indian areas.</p>	<p>The TE were split three to one in favor of rejecting this data source. One TE wanted to evaluate because IHS population projections are currently used to age data in the IHBG formula. Three TEs wanted to reject because of the many data quality issues, the primary one being that the data source does not take into account migration patterns which greatly affect the accuracy of population projections.</p>	<p><b>Evaluate</b></p>

Data Source (hyperlink to detailed characteriza tion)	Key Points	Technical Evaluation Experts (TE) Recommendation	Study Group Decision
<a href="#">11. Tribal Enrollment Data</a>	<p>Tribes establish membership criteria based on shared customs, traditions, language and tribal blood. Tribal enrollment criteria are set forth in tribal constitutions, articles of incorporation or ordinances. Data are collected at the time in an individual's life that they chose to seek enrollment.</p> <p><i>Concerns:</i> There are concerns about the accuracy of tribal enrollment data and the comparability of these data across tribes. Further, enrollment requirements are not consistent across tribes. Enrollment data is most likely to be accurate when it is used as the basis for per capita payments or for service receipt. Deaths are not updated regularly in some tribal enrollment records, which may overstate population for some tribes. In addition, while enrollment data provides the number of a given tribe's members who live within the tribe's Formula Area, the data does not include the members of other tribes living within that Formula Area. This would have to be calculated for each area.</p>	<p>The TE agreed by consensus to evaluate this data source. However, one TE does not think this data set is suitable for any particular variable in the IHBG formula because it cannot measure IHBG formula/service areas, and because the data sets are not very transparent.</p>	<p><b>Evaluate</b></p>

Data Source (hyperlink to detailed characteriza tion)	Key Points	Technical Evaluation Experts (TE) Recommendation	Study Group Decision
<a href="#"><u>12. Data Reported by IHBG Grant Recipients on Formula Response Forms</u></a>	<p>HUD uses the Formula Response Form to provide notice of the data that will be used to calculate the block grant for each Tribe/TDHE for the following fiscal year. Tribes and TDHEs make any necessary corrections to the Formula Response Forms based on their program records. The formula response form is designed specifically for the IHBG formula, so additional questions could be added to provide respondents with the opportunity to correct or update any new data needed based on changes to the formula or formula areas.</p> <p><i>Concerns:</i> The regulations would need to be changed to make this a mandatory form for all TDHEs, which would dramatically increase the cost of monitoring and auditing the incoming data.</p>	The TEs said to reject this data set.	<b>Evaluate</b>
<a href="#"><u>13. Total Development Cost (TDC)</u></a>	<p>The TDC factor currently used in the formula “is calculated by averaging the current construction costs for a moderately designed house as listed in not less than two nationally recognized residential construction cost indices.” These two proprietary cost indices are from RS Means and Marshal and Swift/ Boeckh. Both data sets provide estimates for some cities across the U.S; however, they do not provide estimates for tribal areas. HUD estimates a TDC for each tribal area. HUD updates this analysis every year with new construction cost data from the two data sources. The underlying surveys cannot be modified, but HUD’s use of the data to calculate different TDC estimates for individual tribes can be changed at any time.</p> <p><i>Concerns:</i> Need more information about how the data making up the two or more nationally recognized surveys is collected and how the decisions are made about what components of those data sources are averaged.</p>	The TE agreed by consensus to evaluate this data source. However, one TE said evaluate only if there is some assurance that we will have access to information about the proprietary data involved.	<b>Evaluate</b>

Data Source (hyperlink to detailed characteriza tion)	Key Points	Technical Evaluation Experts (TE) Recommendation	Study Group Decision
<a href="#">16. National Data Warehouse (aka "IHS User Population Data')</a>	<p>The National Data Warehouse (NDW) is the national data repository for Indian Health Service (IHS) statistical health care data on patient registration and encounters occurring at either IHS facilities or contracting facilities that provide care. IHS collates information collected by IHS clinics and fed into the National Patient Registration System (NPIRS). This program is designed to store health data collected by IHS providers on Indians who live on or near Indian reservations. In concert with Indian Health Services and in consultation with Tribes, some changes or additional information could be collected. NPIRS maintains an informal 'wish list' of new fields that have been requested for possible implementation in a future version of the NDW. There is a formal process for getting a field added.</p> <p><i>Concerns:</i> This data source is very limited relative to housing need factors. It provides numbers of AIAN being served by IHS programs, which may or may not be representative of the actual AIAN population. The source may under-represent Tribes without IHS programs. In addition, reporting to the NPIRS database is optional, so not all AIAN who receive services through IHS funded services are captured. Depending on the policies of the clinic in their area, AIAN who are not Tribal members may not be served. Further, AIAN who do not use IHS services are not included in the data. To the extent that the data includes information that is covered under the Health Information Privacy Act (HIPA), this protected information cannot be disclosed. Finally, it is unclear how HUD could have IHS provide unique aggregations of person-level data at IHBG formula service areas.</p>	<p>The TE were split: two said reject, one said "maybe" and one said evaluate. One TE wanted to evaluate because it is a potential alternative data source for a current IHBG variable, and one TE said "maybe" because it potentially could be used as a verification or weight for other factors. Two TEs gave reasons to reject: (1) the data are not appropriate for allocating Federal housing resources because they do not reflect the whole AIAN population for a number of reasons; (2) the data is limited to IHS service users; and (3) unlike the decennial Census, it does not provide a snapshot of all AIAN persons at a given point in time.</p>	<p><b>Reject</b></p>



Data Source (hyperlink to detailed characteriza tion)	Key Points	Technical Evaluation Experts (TE) Recommendation	Study Group Decision
<a href="#"><u>18. Head Start Early Childhood Education Program</u></a>	<p>Head Start collects administrative data on the aggregate number of children and pregnant mothers served in over 1,700 public and private entities that provide school readiness program for kids 5 years of age and under. Every program funded by Head Start must provide basic information about their programs by filling out and submitting the annual Head Start Program Information Report (PIR) every year. The National American Indian and Alaska Native Head Start Collaboration Office (NAIANHSCO) administers about 152 Head Start and 58 Early Head Start programs in 26 states, which seem to have about 600 physical locations across Indian Country. Most of these AIAN grantees seem to be individual tribal governments, but many may be structured as regional coalitions or national entities. In 2013, the program served about 22,000 kids under 5 years old in these 150 programs. Data is collected annually. All programs are required to submit PIRs, but it is not clear if this is enforced or if there are consequences for non-submittal. <i>Concerns:</i> There are no strategies to ensure sufficient and equitable coverage of all Indian areas. This program is an administrative record of the individual Head Start programs and the children and families they serve. There are many poor children not represented in this data set. Further, individuals are self-selected to participate in the program, but because there are often long waiting lists, applying to the program does not guarantee being counted or served. Significant resources would be required to transform this data into an accurate and precise representation of real conditions in all formula areas.</p>	<p>Two TE said reject, and two expressed major concerns about using this data set.</p>	<p><b>Reject</b></p>

Data Source (hyperlink to detailed characteriza tion)	Key Points	Technical Evaluation Experts (TE) Recommendation	Study Group Decision
<a href="#"><u>19. Section 515 Housing Program Data</u></a>	<p>Section 515 loans are available to parties working in rural areas with populations of up to 20,000. More densely populated areas are not part of the program. Federally recognized tribal lands are also eligible regardless of population, but not all tribal lands have 515 projects. Private and public enterprises receiving 515 loans (or lenders) fill out and submit administrative forms to the USDA Rural Housing Service. There are administrative data on all recipients of Section 515 loans. Monthly reporting is a requirement of the loan.</p> <p><i>Concerns:</i> This data only records information about rural rental units subsidized by 515 loans. There is no information about rental units in urban areas, non-rental units, or non-subsidized rental units. Not all formula areas contain 515 projects. Alaska especially lacks good coverage with 515 projects. Further, there are substantial variances in 515 operating cost data from year to year, which suggests that the data reflects unique circumstances of actual properties, rather than the unique circumstances of tribes.</p>	<p>All technical support members agreed that it should not move forward.</p>	<p><b>Reject</b></p>

Data Source (hyperlink to detailed characteriza tion)	Key Points	Technical Evaluation Experts (TE) Recommendation	Study Group Decision
<a href="#"><u>21. Longitudinal Household Employer Dynamics (LHED) Data</u></a>	<p>Under the Local Employment Dynamics Partnership (LED), the LHED data are a unique linkage of job-level data to employer level data. It is a hybrid database that combines administrative data from state records with survey data from the Census Bureau to produce unique indicators used for planning purposes at the local level. The linked data are: Unemployment Insurance earnings data (UI), Quarterly Census of Employment and Wages (QCEW), Business Dynamics Statistics (BDS) and demographic data sources. The LEHD program produces two main data sets, the Quarterly Workforce Indicators (QWI) and the Origin-Destination Employment Statistics (LODES). There may be opportunities for collaboration on imputation methods and potentially linking additional administrative data sources to improve the data quality. However, any change on the Census side would require several years (5 or more) to vet and implement. <i>Concerns:</i> There are design issues: several categories of jobs are not covered by UI including unemployed, self-employed, railroad jobs and some agricultural workers; Federal employment has not been integrated into the regular releases of the QWI; data are not currently collected in Massachusetts; and there are state variations in exempted jobs and in who is covered by unemployment compensation. The data only break AIAN out by single race, not in combination with another race. It is not clear that the original data sources were designed for smaller, more rural geographies, which may have higher relative error. The data lack transparency because they are based on several data sets with different collection methods and margins of error.</p>	<p>All technical support members agreed that it should not move forward.</p>	<p><b>Reject</b></p>

Data Source (hyperlink to detailed characteriza tion)	Key Points	Technical Evaluation Experts (TE) Recommendation	Study Group Decision
<a href="#"><u>26. IRS Data</u></a>	<p>These are program administration data that the IRS collects from families' and business' tax filings. The main public files that the IRS publishes for research purposes are the Statistics of Income (SOI) files that show aggregations of the components of income and dependents by adjusted gross income categories and by zip codes, counties, and states. If HUD can arrange special tabulations of the IRS micro level data with Census data, these data could, in theory, measure the household income variables. However, this may be problematic for IRS filers that use PO Boxes. <i>Concerns:</i> IRS tax returns do not collect data on race and ethnicity. Only individuals and families meeting income requirements are required to complete a tax return. The very poor probably are severely under-represented in this data set because they are much less likely to file a tax return. This data source is not very transparent because the IRS has strict confidentiality rules.</p>	<p>The TE were split: three said reject and one said evaluate. One TE wanted to evaluate, but only if they want to consider data that would be used only for general factors related to local/regional income statistics, and only if IRS will provide more information about filing rates in Indian Country. Three TEs would reject because of (1) low rates of IRS filing in Indian country; (2) this is not the best or most complete source of information on economic status of areas; and (3) major flaws in the data set, especially inability to distinguish between AIAN and non-AIAN.</p>	<b>Reject</b>

Data Source (hyperlink to detailed characteriza tion)	Key Points	Technical Evaluation Experts (TE) Recommendation	Study Group Decision
<a href="#">31a. Current Population Survey (CPS)</a>	<p>The Current Population Survey (CPS), a monthly household survey conducted by the Bureau of the Census for the Bureau of Labor Statistics, provides a comprehensive body of information on the employment and unemployment experience of the Nation's population, classified by age, sex, race, and a variety of other characteristics. It provides data on the <a href="#">labor force</a>, <a href="#">employment</a>, <a href="#">unemployment</a>, persons <a href="#">not in the labor force</a>, <a href="#">hours of work</a>, <a href="#">earnings</a>, and other <a href="#">demographic</a> and <a href="#">labor force characteristics</a>. Currently, the Census Bureau obtains interviews from about 56,000 households monthly, scientifically selected on the basis of area of residence to represent the nation as a whole, individual states, and other specified areas. in any given year, the CPS can introduce supplemental questions to the survey through sponsorship agreements from other federal and state agencies, private foundations, and other organizations</p> <p><i>Concerns:</i> The measure of unemployment seriously underestimates AIAN unemployment and the available labor pool. The sample size is much too small to produce reliable estimates for small geographies. Significant resources would be needed to increase the CPS sample size so it could produce reliable statistics at lower level geographies, which are needed for the current IHBG formula. No strategies are used to ensure coverage of any Indian areas. Further, the use of addresses on MAF may adversely affect tribes in rural areas.</p>	<p>The TE were split: two said reject, one said “maybe” and one said evaluate. The TEs who gave the reject and maybe responses cited the need to dramatically increase the sample size in rural areas to produce reliable statistics for IHBG Formula Areas, and the need to improve identification of housing with non-standard addresses. One TE said they should evaluate but only if they could demonstrate that the data could be equally representative of all IHBG Formula Areas.</p>	<p><b>Reject</b></p>

Data Source (hyperlink to detailed characteriza tion)	Key Points	Technical Evaluation Experts (TE) Recommendation	Study Group Decision
<a href="#"><u>31b. Current Employment Statistics</u></a>	<p>The Bureau of Labor Statistics uses a survey to collect data on individuals employed in non-farm wage and salary jobs. Data collection efforts target the people employing those individuals. Data is collected monthly at a single point in time.</p> <p><i>Concerns:</i> The survey design could cause significant bias against rural tribes. In particular, there are a limited number of businesses on many tribal lands and fewer registered businesses. Further, the CES excludes agricultural jobs, proprietors, the unincorporated self-employed, paid volunteer or family workers, elected officials, and domestic workers. Data collection methods vary widely in order to encourage greater rates of participation. The program cannot produce accurate estimates based on Formula Area because the sampling strategy does not distinguish between tribal and nontribal lands, so there is no guarantee that even one employer from each Formula Area will be included in the sample. Estimates for formula areas would be considerably less reliable than state estimates due to their smaller sample sizes. In addition, there is a nonresponse bias for average weekly earnings.</p>	<p>The TE said to reject this data set.</p>	<p><b>Reject</b></p>

Data Source (hyperlink to detailed characteriza tion)	Key Points	Technical Evaluation Experts (TE) Recommendation	Study Group Decision
<a href="#"><u>31c. Quarterly Census of Employment and Wages (QCEW)</u></a>	<p>The Quarterly Census of Employment and Wages is a cooperative program involving the Bureau of Labor Statistics, the US Department of Labor, and State Employment Security Agencies (SESAs), collecting data on wages and employment to evaluate and monitor labor trends. Employers submit state-specific unemployment insurance tax forms on a quarterly basis to their SESA. SESAs report that information to BLS as quarterly contribution reports. Data is collected for wage and salary workers whose employers are subject to state unemployment insurance laws or Unemployment Compensation for Federal Employees. Data is collected quarterly at clearly defined times. To improve potential application in Indian country there are opportunities to change the scope or range of employment considered to reflect the unique composition of the workforce and types of jobs available. However, it may be very difficult to get all 50 states to change their own state specific tax forms to reflect the needs of the IHBG formula.</p> <p><i>Concerns:</i> QCEW measures “official” employment only. It does not include the self-employed, members of the armed forces, domestic and agricultural workers, unpaid family workers, railroad workers, student workers and some small nonprofit organizations. Since the data source only counts employed persons working in typical companies subject to state or federal unemployment insurance laws, it likely under-counts tribal people on reservations. Further, the reference period error under-counts small businesses, and further biases the data set against rural and tribal areas.</p>	<p>All TE agreed that QCEW should not move on to the evaluation stage because of problems with the data and because the data is not linked to housing need.</p>	<p><b>Reject</b></p>

Data Source (hyperlink to detailed characteriza tion)	Key Points	Technical Evaluation Experts (TE) Recommendation	Study Group Decision
<a href="#">42. US Census, Population Estimates Program (PEP)</a>	<p>PEP is designed to produce population estimates of the entire population of the United States, states, counties, and municipal governments by aggregating data collected from the US Decennial Census and integrating migration and vital statistics data. The population base data from the 2010 Census race categories and the race categories of the birth and death data are modified to be consistent. Estimates are produced in five race categories and their combinations, including American Indian, Eskimo or Aleut. Base population data is collected every 10 years; other data is collected more frequently.</p> <p><i>Concerns:</i> Since PEP is the product of combining multiple data sources, in order to fully evaluate it or challenge reported data, each of the underlying data sources would need to be independently evaluated. The populations are slightly different for each of the component datasets. There is an inconsistency in the way AIAN individuals are identified across the various data sources that feed into these estimates. Further, there is likely more error in sub-county population estimates than at the county and state level. For questions that are not answered by the respondent, data is imputed in a not entirely transparent way. It is uncertain how much nonresponse occurs with regard to NCHS data and the data that contributes to migration estimates. Given the lack of population estimates for AIAN areas, significant staff resources would be needed at the Census Bureau to produce estimates for IHBG formula areas, and it may not be possible.</p>	<p>The TE were split: three said reject and one said evaluate.</p>	<p><b>Evaluate</b></p>



Data Source (hyperlink to detailed characteriza tion)	Key Points	Technical Evaluation Experts (TE) Recommendation	Study Group Decision
<a href="#">46. National Center for Health Statistics, National Vital Statistics System</a>	<p>Data is collected by hospitals, morgues and courts from their administrative records on semi-standardized forms and reported to State Health Departments as part of administrative records, then collated and disseminated by the National Center for Health Statistics. Data is collected at the county level. This program was designed to enumerate all births and deaths in the United States. Standard data collection and compilation procedures are used for all geographies, and some counties perform regular data audits. Data are collected continually and submitted to NCHS monthly. State and federal law require collection of this data; while rates of participation are not published, they are expected to be very high. The data could be used to produce health statistics such as a source of mortality, infant mortality rates, marriage and divorce rates, maternal and infant health; however, the connection between health and housing conditions may be too tenuous to treat as a strong measurement of housing need.</p> <p><i>Concerns:</i> There is evidence that AIAN identification is low for death records since much of race information is recorded by funeral home directors and others who may not know AIAN identification.</p>	<p>All TE agreed that it should not be evaluated as a primary data source.</p>	<p><b>Reject</b></p>

## Section 9. Narrative Description of Specific Process Used to Evaluate Data Sources

The Study Group moved nine data sources forward for comprehensive evaluation. The technical experts divided the nine data sources into two categories, core data and support data. Core data sources would be sources that could replace the Census 2000 data currently used in the formula to support the primary seven weighted variables. Support data were sources that could be used to adjust the core data, such as adjusting for population growth or construction costs. The nine data sources that the Data Study Group evaluated are:

### Core Data:

- Most Recent Decennial Census data collected by the U,S, Census Bureau
- ACS collected by the U,S, Census Bureau
- National Tribal Survey to be Administered by a Federal Agency
- National Tribal Survey to be Administered by Tribes

### Support Data:

- Tribal Enrollment Data
- IHS Population Projections
- U,S, Census Bureau Population Estimates
- Data Reported by IHBG Grant Recipients on Formula Response Form
- TDC

The Data Study Group designed a series of detailed questions to be answered in a narrative format that identifies the ways the data source does and does not meet the criteria listed in each of six broad categories, and recommended methods to potentially mitigate any identified problems. Those six categories and a summary of the questions are as follows:

- Relevance (4 questions). These questions ask about:
  - Extent that the data collected reflect the need specified in the NAHASDA statute;
  - Other factors such as administrative capacity and coverage of State recognized tribes;
  - Variables used in the current regulations for the formula; and
  - Other measures of housing need.

- Currency (3 questions). These questions relate to:
  - Frequency of data collection;
  - Time it takes for the data to be available after they are collected; and
  - Stability of the data over time.
  
- Accuracy and Precision (6 questions). These questions inquire about the data in respect to:
  - Geographic coverage – estimates for formula areas;
  - Protocols to address respondent misunderstandings;
  - Data collection instruments and protocol cultural sensitivity;
  - Protocols to verify accuracy;
  - Precision of the estimates (i.e., Margins of Error);
  - Accuracy of the estimate (i.e., Potential bias due to weighting or imputation).
  
- Completeness (3 questions). Questions include:
  - Does the data source collect data for all covered Indian tribes;
  - The appropriateness and effectiveness of outreach efforts within all tribal areas; and
  - Representativeness of the data source for all populations as evidenced by high response and inclusion rates.
  
- Availability (4 questions).
  - Whether collection and analysis could be completed with no significant additional resources;
  - Whether there is a source of funding for data collection and analysis and an estimate of resources needed;
  - The extent of additional administrative burden on TDHEs; and
  - Ease of integrating the data into the funding formula.
  
- Transparency (2 questions).
  - If the data source had been subject to previous study/evaluation and whether these studies were available for review; and
  - If it was possible to find answers to most of the data screening, characterization, and evaluation questions.

After answering these questions and providing a summary review for each topic area, the technical experts provided an overall summary rating balancing out the ratings above. Specifically they answered these two questions:

1. Overall, is the data source appropriate for measuring one or more current IHBG formula variable(s)? Choose one of the following options and explain: Excellent, Good, Fair, Poor. What are the areas of biggest concern?
2. Overall, is the data source appropriate for measuring other aspects of housing need (as developed in the characterization phase) that are not current formula variables?

## Evaluation Process

The data sources were divided evenly among the three non-HUD technical experts based upon continuity with the characterization and familiarity with the source. For an initial period, the technical experts developed draft evaluations answering the evaluation questions. After the initial evaluation, the data sources and completed work were redistributed among all technical experts for the following three weeks. During this time, all technical experts were given the opportunity to add to the narrative answers and make their own recommendations and judgments. To the extent possible, technical experts aggregated and reconciled their answers to provide their final assessments to the Data Study Group, and compiled their findings into the summary matrix. The full narrative answers to the questions, including a discussion of topics where the technical experts were unable to reach an agreement and a summary matrix for each data source, were provided to the Data Study Group.

## Section 10. Results of Data Source Evaluation

Each detailed evaluation is available through a hyperlink in the text. This chapter provides summaries of each evaluation.

### Core Data Evaluations:

- **Most Recent Decennial Census data collected by the U,S, Census Bureau**
- **ACS collected by the U,S, Census Bureau**
- **National Tribal Survey to be administered by a Federal Agency**
- **National Tribal Survey to be administered by Tribes**

The four core data sources, those data that could replace Census 2000 data in the seven primary weighted variables of the formula for showing tribal housing need, were evaluated. The chart below provides a side-by-summary of how each data source is currently used in the formula, how it might be used in the formula, and its major caveats. That is followed by a chart with the technical support team “top line” ratings on each of the questions.

More detail on those ratings are available in the discussion below as well as in the attached detailed individual evaluations.

**Chart 4. Core Data – Current and Potential Use**

	<b>How these data are currently used:</b>	<b>What they might be used for:</b>	<b>Major caveat(s):</b>
<b>Most Recent Decennial Census</b>	This is used for the count of AIAN persons	Same	Undercount in some areas; definition of Native American not limited to IHBG eligible tribes and/or tribal members
<b>ACS</b>	None	To replace the Census 2000 long form needs data	Small sample sizes in some areas; undercount in some areas; definition of Native American not limited to IHBG eligible tribes and/or tribal members
<b>National Tribal Survey - Federal Administration</b>	None	To replace the Census 2000 population and long form needs data	Does not currently exist; time to develop, high cost to undertake, including administrative burden to tribes
<b>National Tribal Survey - Tribal Administration</b>	None, as the proposed survey anticipates the possibility of developing new IHBG formula variables and new survey questions. Tribes may currently challenge the Census data with their own survey, which must effectively ask questions which mirror the Census.	To replace the Census 2000 population and long form needs data	Does not currently exist; time to develop, high cost to undertake, including administrative burden to tribes; would be difficult to ensure uniform data collection across all tribal areas.

**Chart 5. Core Data – Technical Experts’ Evaluation Review Summaries**

<b><u>Top Line Summary</u></b>	<b><u>Decennial Census</u></b>	<b><u>American Community Survey</u></b>	<b><u>National Tribal Survey - Federal Administration</u></b>	<b><u>National Tribal Survey - Tribal Administration</u></b>
1. Overall, is the data source appropriate for measuring one or more current IHBG formula variable(s)?	Excellent, Good	Good	Good, Fair to Poor	Good, Fair
1a. is the data source appropriate for its use in the current IHBG formula?	Excellent, Good	NA	NA	Good, Excellent
1b. is the data source appropriate for another possible use in the IHBG formula?	Good, Fair	Good	Good, Fair to Poor	Good, Fair
2. Overall, is the data source appropriate for measuring other aspects of housing need (as developed in the characterization phase) that are not current formula variables?	Yes	Yes	Yes, potentially	Yes, potentially
Overall, is the data source RELEVANT?	Excellent, Good	Excellent, Good	Excellent, Fair, Unknown	Excellent, Unknown
Overall, is the data source CURRENT?	Fair	Good	Good	Good
Overall, is the data source ACCURATE and PRECISE?	Excellent, Good	Excellent, Good, Good to Fair	Good to Excellent, Fair, Unknown	Excellent, Fair, Unknown

<u>Top Line Summary</u>	<u>Decennial Census</u>	<u>American Community Survey</u>	<u>National Tribal Survey - Federal Administration</u>	<u>National Tribal Survey - Tribal Administration</u>
Overall, is the data source COMPLETE?	Excellent, Good	Excellent, Good, Good to Fair	Excellent, Unknown	Excellent, Fair, Unknown
Overall, is the data source AVAILABLE?	Excellent	Excellent	Fair/Poor	Fair/Poor
Overall, is the data source TRANSPARENT?	Excellent, Good	Excellent, Good	Assumed Excellent	Assumed Excellent

- **Technical Evaluation Discussion – Decennial Census Data**

OVERALL: Reviewers rate the 2010 Decennial Census as **Excellent** to **Good** overall. It is an attempted 100 percent count of all individuals in the U.S., and collects race data for all people at very small geographies. This activity is mandated by the U.S. Constitution. The data will be updated next in 2020. While largely comprehensive in coverage, there was an undercount in some tribal areas. The race question for AIAN is not limited to Native Americans eligible for IHBG assistance.

PRO: **Excellent** on AVAILABILITY. The data on number of AIAN persons, both as single-race and multi-race identification, are available at no cost to HUD or Tribes as standard tabulation data from the Census Bureau at all geographies across the United States, from block level to national level. The data for 2010 Census are currently available, and it is expected that 2020 Census data would be available in 2022.

**Excellent** to **Good** on RELEVANCY. The 2010 Decennial Census collects data on one of the current needs variables - AIAN population in Indian Areas. It also serves as the basis for ACS county level population estimates that impact the other needs variables. The Census definition of family is not consistent with how many tribes define family and the definition of AIAN person is not restricted to enrolled members of federally recognized tribes, and thus includes in the need calculation for many tribes, and therefore funding, people that they are not able to serve.

**Excellent** to **Good** on ACCURACY and PRECISION. As a Census, it is intended to be a 100 percent count of all people. A Census, by definition, does not suffer from sampling error and, assuming it succeeds as a 100 percent count, it is very accurate and precise at



the time it is collected. However, the Census Bureau acknowledges that there are likely undercounts (that is, not 100 percent counts) in some tribal areas and other rural areas, in part due to both an incomplete Master Address File (MAF) and/or respondent non-response. In addition, as population changes over time the accuracy declines, and the annual population estimates available to adjust for population change appear to be inaccurate in recording the birth and death of tribal members and capturing migration of individuals who have little or no contact with agencies and organizations that might track their address in tribal areas.

**Excellent to Good** on COMPLETENESS. The 2010 Census was a massive undertaking with a substantial budget for data collection and for marketing to achieve a goal of 100 percent response. The MAF and procedures for adding to it are the key to completeness, and it is incomplete in some tribal areas due to the prevalence of non-standard addresses and individuals living “off-the-grid.” This makes the development of a complete sampling frame difficult for this data source, or any other data source that uses the MAF as its starting point. The 2010 Census is better than the 2000 Census, however, and the MAF is improving.

**Excellent to Good** on TRANSPARENCY. The Census is subject to numerous rigorous reviews and evaluations, and those reviews are available for public inspection. The rating of Good was provided because certain specific information about the effectiveness of the Decennial Census in Indian areas was not readily available.

CON: **Fair** on CURRENCY. The data are updated only once every ten years.

- **Technical Evaluation Discussion – American Community Survey**

OVERALL, the technical evaluators unanimously rate the ACS as **Good** as a replacement for the Census 2000 long form data in the current formula and as a potential source of data for other formula variables.

PRO: One strong argument for the ACS is that it is AVAILABLE at no additional cost. All reviewers rate it as **Excellent** on this factor. It also does very well for RELEVANCY, with ratings from **Excellent to Good**. The ACS collects all of the data needed under the current regulations and offers some choice of other data that could be used for alternative aspects of housing need. It does not, however, have all data that might be asked for in a discussion of housing needs. For example, it does not contain information on enrolled members, nor does it collect data that aligns with some definitions of Indian families within an Indian area.

It has ratings of **Excellent to Good** on TRANSPARENCY. The ACS is subject to frequent and rigorous review and testing, with results of its reviews made available to the public. There was modest concern that more information is needed on response and imputation rates among AIAN respondents.

It was rated as **Good** on CURRENCY by all technical evaluators. The Census Bureau collects the data and releases new 5-year averages each year. There is an approximately two to three-year lag from data collection to the data being available for use in the IHBG formula. Aging the data is possible with either the IHS or Census Population Estimate data, but reviewers have a number of concerns associated with those “aging” variables (see below). However, if the ACS data was based on annual rolling averages there would be no need for aging.

MIXED: The technical evaluators had mixed reviews on the ACCURACY AND PRECISION of the ACS, with overall reviews ranging from **Excellent to Good to Fair**. The ACS has approximately 430 dedicated field representatives trained for working in AIAN areas. . The survey is mandatory which is seen as a major reason ACS achieves its exceptional response rates which exceed 90 percent. Concern remains about small sample sizes in some places as well as quality and completeness of responses. In the first five year samples, small sample sizes appeared to lead to over 100 tribal areas having AIAN population counts less than their 2010 Decennial Census count, and a similar number with counts above the 2010 Decennial Census AIAN population count. If the ACS is undercounting or over counting AIAN population, it also undercounts or over counts the corresponding data used for the need variables. In response to problems of small sample sizes, the ACS increased its sampling rate in tribal areas significantly beginning fully in 2012, meaning the 2012-2016 ACS most likely will have more accurate data collected in tribal areas.

Similarly, there were mixed evaluations on COMPLETENESS, ranging from **Excellent to Good to Fair**. High response rates are noted above. The MAF must be updated to reasonably represent tribal housing units nationwide. There are concerns about the MAF completeness in some tribal and rural areas; there also remain concern about communicating with tribal members.

- **Technical Evaluation Discussion – National Tribal Survey – Federal Administration**

This data source presents a challenge for reviewers because it does not currently exist. The responses, answers and ratings below reflect the reviewers’ assumptions and

projections based on the stated purposes, goals and identified components and characteristics of the proposed survey, including its proposed purpose of specifically collecting data to support the IHBG formula variables. As a result, each answer, rating or response below should not be interpreted as a guarantee or statement of known fact, but instead should be viewed as a product of that reviewer's best efforts to assess or predict the likely outcome and relative degree of success of the process that would create and implement this survey.

**OVERALL:** The proposal is for a National Tribal Survey administered by a Federal Agency every 5-years in all tribal areas. If adequately funded, it could have a sample size in excess of the ACS, survey questions sensitive to issues in tribal areas, and a sampling frame more reflective of the eligible population for NAHASDA funding.

Reviewers had different overall ratings ranging from **Good to Fair to Poor**. It was rated **Good** because it could certainly collect all necessary data to support the current IHBG formula variables. It could have the added benefit of being able to collect data potentially more targeted to the specific families (see statute) that can be served by the funds and potential improvements in both the address file for tribal areas as well as more culturally sensitive questions.

The biggest areas of concern, and the source of the **Fair to Poor** rating overall, are the amount of funds required to undertake this every five years, the time and negotiations needed to develop a survey and methodology acceptable to all tribes and satisfying methodological rigor, the need for a pool of professionals for all tasks and maintaining that pool of professionals, and burnout that might occur from two similar surveys, the tribal survey and ACS.

**PRO:** As proposed with a survey conducted every 5-years, the CURRENCY of the data source was considered **Good**. This would be an improvement over the Decennial Census and be a point-in-time sample rather than a rolling sample like the ACS. It would likely still require some degree of "aging" in-between surveys.

Reviewers generally agree that conceptually a National Tribal Survey would be **Good to Excellent** on COMPLETENESS because it would be designed to collect complete data for the IHBG formula, covering the relevant geographic areas and populations. There would be initial challenges of improving the MAF and designing and implementing a new survey with tribally relevant questions that are presumed would be overcome with time because of a high level of tribal involvement.

It is assumed that this survey would be **Excellent** in terms of TRANSPARENCY because it would be federally administered and have similar protocols for transparency as other federal surveys. Moreover, the proposed process for development of the surveys and sampling frames with tribal involvement may make it more transparent. However, the lack of information on the conceptual survey makes it less transparent at this time.

MIXED: For RELEVANCY this variable was rated **Excellent** because it would be specifically designed to meet the needs of this program, while it also received a **Fair and Unknown** rating because it currently lacks an existing survey instrument to assess.

The technical experts had a range of views on the likely ACCURACY AND PRECISION of a federally administered National Tribal Survey. It was given a rating of **Good to Excellent** assuming that in its initial years it would have to resolve issues with MAF inaccuracies and make improvements to new survey questions. As those issues are resolved appropriately for Tribal Areas and adequate sample sizes are drawn, this would lead to an Excellent rating. An alternative view is **Fair** because of the conceptual nature of the data source, with no scope, no methodology, no survey instrument, or other details developed at this time. Finally, a **Good to Fair** rating is provided because although it would have the benefits noted above, unlike the Decennial Census or ACS, this would be a non-mandatory survey, raising concerns about lower response rates (and thus more non-response bias). Further, there are concerns about the probability of adequate funding to support a sample size as large as or larger than the current ACS. A lower sample size or lower response rate would add error to the estimates.

CON: This data source is not currently AVAILABLE, receiving a **Fair/Poor** rating. Collecting data is an expensive and labor-intensive endeavor. There were a wide range of views among reviewers on the likely cost and time it would take to successfully undertake the survey. All agree that the cost would be several tens of millions of dollars and a funding source would need to be secured. Moreover, all agreed it would take several years for development and effective implementation of the survey.

- **Technical Evaluation Discussion – National Tribal Survey – Tribal Administration**

This data source presents a challenge for reviewers because it does not currently exist. The responses, answers and ratings below reflect the reviewers' assumptions and projections based on the stated purposes, goals and identified components and

characteristics of the proposed survey, including its proposed purpose of specifically collecting data to support the IHBG formula variables. As a result, each answer, rating or response below should not be interpreted as a guarantee or statement of known fact, but instead should be viewed as a product of that reviewer's best efforts to assess or predict the likely outcome and relative degree of success of the process that would create and implement this survey.

OVERALL: This would be a new survey administered by each tribe every five years following established protocols utilizing the same set of questions. Reviewers had different overall ratings ranging from **Good** to **Fair**.

For reviewers giving the data source a **Good** overall, it was because it could certainly collect all necessary data to support the current IHBG formula variables. It would have the added benefit of being able to collect data potentially more targeted to the specific families that can be served by the funds and potential improvements in both the address file for tribal areas as well as more culturally sensitive questions.

The biggest areas of concern, and the source of the **Fair** rating, are the amount of funds required to undertake this every five years, and the challenge of implementing and ensuring consistency across more than 500 separate tribes.

PRO: As proposed with a survey conducted every five-years, the CURRENCY of the data source was considered **Good**. This would be an improvement over the Decennial Census and be a point-in-time sample rather than a rolling sample like the ACS. It would likely still require some degree of "aging" in-between surveys.

It is assumed that this survey would be **Excellent** in terms of TRANSPARENCY because the proposed process for development of the surveys and sampling frames with tribal involvement would make it more transparent.

MIXED: For RELEVANCY this variable was rated **Excellent** because it would be specifically designed to meet the needs of this program, while it also received an **Unknown** rating because it currently lack an existing survey instrument to assess.

The technical experts had a range of views on the likely ACCURACY AND PRECISION of a tribally administered national tribal survey. It was given a rating of **Good to Excellent** assuming that in its initial years it would have to resolve issues with developing a tribal address list and making improvements to new survey questions. As those issues are resolved appropriately for Tribal Areas and adequate sample sizes are drawn, this could lead to an Excellent rating. An alternative view is **Fair** because of the conceptual nature of

the data source, with no scope, no methodology, no survey instrument, or other details developed at this time. Unlike the Decennial Census or ACS, this would be a non-mandatory survey, raising concerns about lower response rates (and thus more non-response bias). Further, there are concerns about the probability of adequate funding to support a sample size as large as or larger than the current ACS. A lower sample size would add error to the estimates.

Reviewers were mixed, with a **Good to Excellent** on COMPLETENESS because it would be designed to collect complete data for the IHBG formula, covering the relevant geographic areas and populations. There would be initial challenges of developing an address list and designing and implementing a new survey with tribally relevant questions that are presumed would be overcome with time because of a high level of tribal involvement. COMPLETENESS also was reviewed as **Fair** because the effort would require participation of all of the more than 500 tribes, including development of the survey instruments and methodology through the consensus process. This is a very high expectation and we don't know if it is likely to be met. Most tribes are small, and while that would make doing a survey easier, it also means they are unlikely to have the capacity to undertake the survey.

CON: This data source is not currently AVAILABLE, receiving a **Fair/Poor** rating. Collecting data is an expensive and labor-intensive endeavor. There were a wide range of views among reviewers on the likely cost and time it would take to successfully undertake the survey. All agree that the cost would be several tens of millions of dollars and a funding source would need to be secured. Moreover, all agreed it would take several years for development and effective implementation of the survey.

### **Support Data Evaluations:**

- **Tribal Enrollment Data**
- **IHS Population Projections**
- **US Census Bureau Population Estimates**
- **Data Reported by IHBG Grant Recipients on Formula Response Form**
- **TDC**

The five Support data sources, those data that could supplement the core need data in some way, consistently have moderate to low ratings. As with the Core data, the chart below provides a side-by-side summary of how each data source is currently used in the formula, how it might be used in the formula, and its major caveats. That is followed by the

62

technical support team “top line” ratings on each of the questions. More detail on those ratings are available in the discussion below as well as in the attached detailed individual evaluations

**Chart 6. Support Data – Current and Potential Use**

	<b>How these data are currently used:</b>	<b>What they might be used for:</b>	<b>Major caveat(s):</b>
<b>Tribal Enrollment</b>	This is currently used to cap the needs data so tribes can't receive funding for more than 2 times their enrolled population.	As a variable itself; if enrollment data is available for the tribe's service area, then it could be used to (i) replace the Census AIAN population count; or (ii) be used to reweight the ACS/Tribal Survey data	Not currently available distinguishing enrolled members in tribal service area versus outside of service area. Tribes would have to agree on consistent data to be included in enrollment records, and a process for keeping data current.
<b>IHS Population Estimate</b>	This is currently used in the formula to "age" the needs data to account for population births and deaths since 2000	Same	Built on Census 2000 base; does not account for migration
<b>Census Population Estimate</b>	None	To "age" the needs data of formula areas based upon births, deaths, and migration in the formula area counties since the Decennial Census (or other survey date).	It is calculated for counties, not for AIAN areas; it estimates total county population and then county AIAN population a year later.

	<b>How these data are currently used:</b>	<b>What they might be used for:</b>	<b>Major caveat(s):</b>
<b>Total Development Costs</b>	This is currently used in both the needs formula and FCAS to adjust grants so that higher cost places (places with higher TDC relative to the national average) get relatively more funding per household in need than lower cost places.	Same	From private sources without much information on the underlying data; underlying data in tribal areas likely limited.
<b>Formula Response Form</b>	This is currently used to update counts of Formula Current Assisted Stock units and to verify the geographic housing service area for the tribe being used for the needs data.	Same	Self-reported by tribes

**Chart 7. Support Data – Technical Support Team Evaluation Review Summaries**

<b><u>Top Line Summary</u></b>	<b><u>Tribal Enrollment</u></b>	<b><u>IHS Population Estimate</u></b>	<b><u>Census Population Estimate</u></b>	<b><u>Total Development Costs</u></b>	<b><u>Formula Response Form</u></b>
1. Overall, is the data source appropriate for measuring one or more current IHBG formula variable(s)?	Poor but could be made Excellent	Fair	Fair, Excellent	Poor, Fair, Good	Good/ Fair



<u>Top Line Summary</u>	<u>Tribal Enrollment</u>	<u>IHS Population Estimate</u>	<u>Census Population Estimate</u>	<u>Total Development Costs</u>	<u>Formula Response Form</u>
1a. is the data source appropriate for its use in the current IHBG formula?	Good to Excellent	Fair, Good	Not currently used	Good	Good/ Fair
1b. is the data source appropriate for another possible use in the IHBG formula?	Poor, Fair	Poor	Fair, Excellent	Poor	Fair
2. Overall, is the data source appropriate for measuring other aspects of housing need (as developed in the characterization phase) that are not current formula variables?	Yes and No	No	No and Yes	Yes and No	No
Overall, is the data source RELEVANT?	Fair, Poor, Good, Excellent	Fair, Fair/ Good	Fair, Good, Excellent	Fair, Good, Excellent	Poor, Excellent
Overall, is the data source CURRENT?	Excellent	Poor	Excellent/Good	Excellent	Fair/Poor, Good/Excellent
Overall, is the data source ACCURATE and PRECISE?	Fair, Excellent	Fair, Good	Fair, Good, Excellent	Unknown	Good
Overall, is the data source COMPLETE?	Fair, Excellent	Fair, Good	Fair, Good, Excellent	Poor, Excellent	Poor

<u>Top Line Summary</u>	<u>Tribal Enrollment</u>	<u>IHS Population Estimate</u>	<u>Census Population Estimate</u>	<u>Total Development Costs</u>	<u>Formula Response Form</u>
Overall, is the data source AVAILABLE?	Excellent and Poor	Excellent	Excellent	Excellent	Good
Overall, is the data source TRANSPARENT?	Excellent to Good	Good	Fair, Excellent	Poor	Fair

● **Technical Evaluation Discussion – Tribal Enrollment**

OVERALL: Tribal enrollment as reported to the BIA is currently used to cap the needs data for any tribe at twice its enrollment. In this function, all of the reviewers rated it **Excellent**. However, as a variable representing need directly, such as a count of AIAN persons within a tribal area, the reviewers think in its current form it rates as **Fair to Poor**. It could possibly be used as a variable if tribes reported the data in a uniform way and also distinguished members living within the tribal area from those living outside the tribal area.

PRO: Generally reviewers rated the CURRENCY of Tribal Enrollment as **Excellent** because the data identifies the individuals who are currently enrolled members of the Tribe. Some tribes, however, may not be timely at removing deceased members from rolls.

They also rated the TRANSPARENCY of the Tribal Enrollment data as **Excellent to Good**. While there is a lack of a single set of criteria and a single procedure that all Tribes use to enroll members, each Tribe has a process for enrolling its own Tribal members. The resulting enrollment data identifies all the individuals who are enrolled members of each Tribe.

MIXED: Reviewers found the RELEVANCY of the variable to be **Excellent** in its current form for capping needs data, but reviews ranged from **Poor** to **Fair** to **Good** on the data as a source for AIAN population or as another needs variable. These lower ratings are due to the lack of uniform collection among tribes and the absence of consistent information for all tribes on members living within tribal areas versus outside of tribal areas.

Reviewers’ evaluations on ACCURACY AND PRECISION ranged from **Excellent** due to enrollment being an accurate identification of enrolled tribal members to **Fair** because it is

not an accurate measure of Indian families in Indian areas of the tribe as required by statute.

As with the other measures, it was rated as **Excellent** for AVAILABILITY in its current form to cap the needs variables in the formula, but because the data do not currently exist in a form that could be used in the formula for Indians in Indian Areas of the tribe, it get rated as **Poor** for any other use on this factor.

- **Technical Evaluation Discussion – IHS Population Estimate**

OVERALL: **Fair** source for aging AIAN persons. Generally, this would be a better source for AIAN if IHS updated to the 2010 Census. However, since the 2000 census is still the underlying data, this source is less reliable. In general, whenever aging or other strategies are used to estimate changes in a data set, the further away from the original data you are, the less reliable and accurate is the resulting information.

Even with a move to 2010 Census, there are potential underreporting concerns in tribal areas and its failure to address the migration of AIAN persons, the distinction between AIAN Alone and AIAN Alone or In Combination populations. The need for AIAN person data at the formula area rather than county level also make this a problematic data source.

PRO: The data are readily AVAILABLE at no cost so rated **Excellent**.

Similarly, the IHS makes the information available on how the data are created so TRANSPARENCY is **Good**, albeit there is some loss of transparency as it relates to the different county level policies on data collection on births and deaths that inform the variable.

MIXED: The ACCURACY and PRECISION was rated **Fair** because the data source does not differentiate between single and multi-race AIAN populations, it does not take into account migration patterns, and it only collects information down to the county level, which doesn't reflect formula areas, and deaths may be underreported. But it also was rated **Good** because the underlying data are Decennial Census, noting however that the administrative records used in making the Service Area Population estimates are plagued with inaccuracy that varies by state. Other reviewers are concerned that problems with the Decennial Census are magnified by this variable.

As with the other ratings, different levels of concern about the underlying administrative data and the base Decennial data leads to varied ratings of COMPLETENESS from **Fair** to **Good**.

CON: The data source is RELEVANT only to age another data source's estimate of AIAN population. In the current iteration there are data quality issues (discussed above under accuracy) that lead to a **Fair** and **Fair/Good** rating.

CURRENCY rated **Poor**. The underlying AIAN persons data is from the 2000 census. IHS has not disclosed when they will update to the 2010 census. As the base data is aged it becomes less reliable and accurate.

- **Technical Evaluation Discussion – Census Population Estimate**

OVERALL: **Fair** and **Excellent**. Because this data source does include migration, unlike IHS, it was judged as **Excellent** for aging the data. However, due to concerns about how the underlying data sources capture race and the county level nature of the data source, it also receives a rating of **Fair**.

PRO: The data are AVAILABLE for no cost from the Census Bureau, so availability is rated **Excellent**.

CURRENCY rated **Excellent** for the geography it is made available - county - and for the all race population estimate. A rating of **Good** because the county population broken down by race lags by one year the population estimates for the full population.

MIXED: There was a wide variance in technical expert views on the RELEVANCY of this variable, with an **Excellent** rating for its use as an aging variable. Unlike the IHS data, this does capture county migration, including migration by race. Nonetheless, there is a concern that its county focus means that it is potentially highly inaccurate at the tribal area level, garnering a **Fair** rating as a result. Another rating was **Good** due to the inconsistent ways that AIAN is captured by the different sources of data that feed this variable.

Similarly, evaluations diverged for ACCURACY and PRECISION, with an **Excellent** rating for county level estimates based on research that found over 10 years that it misjudged population growth by only 3.1 percent across all counties. But it also received a **Fair** and **Good** rating because there is no evidence that shows its accuracy and precision for the Native American population over time, particularly in Tribal areas.

These different views are also apparent with the COMPLETENESS ratings of **Fair**, **Good**, and **Excellent**. An **Excellent** is based on the Census Bureau research that coverage is good and reasonably accurate in nearly all counties, a **Fair** over concerns about inaccurate recordings for race on birth and death certificates along with other administrative records, with a **Fair/Good** rating based on concerns about the completeness of migration data in and out of tribal areas.

Due to Census and CDC efforts to study the strengths and weaknesses of the underlying data, this received an **Excellent** for TRANSPARENCY, but it also received a **Fair** due to uncertainty about how the multiple data sets are combined to come up with an annual population change estimate, particularly by race, because it does not distinguish single AIAN race from multi-race AIAN.

- **Technical Evaluation Discussion – Total Development Cost (TDC)**

OVERALL: The lack of transparency and the absence of tribal areas specific construction costs garners a **Fair** overall rating, while the importance of taking construction costs into consideration when allocating funds and the widespread use of these estimates in the private sector leads to an overall **Good** rating.

PRO: The data are AVAILABLE from professional firms that provide the data to the housing industry and are CURRENT due to the data being updated annually. Thus a rating of **Excellent** on both of these evaluation factors.

MIXED: TDC was considered **Excellent** and **Good** for RELEVANCY as a measure to account for different construction costs by area, but generally considered **Fair** and **Poor** as a measure of any other type of need.

ACCURACY and PRECISION rated **Unknown**. The information collection processes are proprietary and the for-profit firms do not disclose their methodology. The lack of transparency makes it difficult to evaluate whether or not the information is accurate and precise with respect to its use in the IHBG formula. That noted, the data are relied on by the housing industry for estimating construction costs throughout the U.S. and Canada. In addition, the insurance industry uses this data when estimating building losses. It is a respected source in the private economy.

This leads to some variance in rating for COMPLETENESS. Recognizing that the variable does capture all dimensions of housing construction garners an **Excellent** rating, but significant concerns that the information is not available specifically for Tribal areas generates a **Poor** rating.

CON: Because the information collection processes are proprietary and the for-profit firms do not disclose their methodology, this receives a rating for **Poor** for TRANSPARENCY. That noted, the private sector makes extensive use of the data source implying there is some confidence in the accuracy of the sources.

- **Technical Evaluation Discussion – Formula Response Form**

OVERALL: **Good/Fair**. The Formula Response Form is itself merely a tool for HUD to report each recipient's current formula data and for recipients to submit any changes to that data. The form's role as a "data source" for the IHBG formula is dependent on its connection to the databases that contain the complete formula data sets which in turn provide the formula data reported on each recipient's form.

PRO: ACCURACY and PRECISION rated **Good**. The accuracy and precision of data concerning FCAS relies primarily upon the distribution of clear and accurate guidance from HUD as to when units cease to be counted as FCAS pursuant to the statute and regulations and recipient compliance with that guidance.

Additional resources would be necessary to ensure all recipients were able to accurately review and update their data, but the current program AVAILABILITY is **Good** for data on FCAS units, for example.

MIXED: Reviewers diverged on the RELEVANCY of data from the Formula Response Form, with ratings of **Poor** and **Excellent**. The Excellent rating was in respect to the limited data that is already collected on the form for updating the database on FCAS units. But others rated it poor for the same reason, that it only is useful for collecting these limited data.

There were also mixed reviews on the CURRENCY of the data, with ratings of **Good/Excellent** because the form is collected on an annual basis, while **Fair/Poor** ratings were provided because of uncertainty about the data for those that don't respond annually.

CON: TRANSPARENCY rated **Fair**. As this is an administrative data "source" that collects data only when individual recipients are obliged to submit changes to reported data, the transparency of this source hinges upon how many changes are in fact requested and the rate or regularity at which they are approved or denied.

As an independent “data source,” the Formula Response Form rates **Poor** on **COMPLETENESS** because it merely updates a database based on a subset of new data submitted each year and as such never develops a complete data set on an annual or any other cycle.

## **Section 11. Technical Experts’ Recommendation for improvements to American Community Survey**

The Technical Experts make the following recommendations for the improvement of the data collected by the existing Decennial and ACS processes. These recommendations are designed to be conveyed directly to the Census Bureau. These recommendations may also identify actions that tribes may take or request to improve the Decennial Census and ACS process and data for their tribe. Also, these recommendations will indicate to tribal leaders, HUD and others interested in the IHBG formula, where the Technical Experts see opportunities for improvement of the Census data products. These recommendations seek to remedy problems that were identified by the Technical Experts in the Characterization and Evaluation stages of the Data Study Group’s data source assessment process. Improvement of the Decennial and ACS data and data collection will be immediately useful if these data sources become the basis of the IHBG formula. Improvements will also be important if a National Tribal Survey becomes the data source of the IHBG formula; tools such as the MAF are described as being a potential starting point for national tribal surveys.

### **ACS:**

1. Treat tribal areas as counties for sampling purposes for all formula areas that do not exactly match existing county boundaries. Establish sample size based on the population of those areas alone rather than determining sampling based on the population of the county in which tribal areas are located. Alternatively, establish a uniform margin of error to be applied to each tribal area and ensure that the sample size for each tribal area will achieve this margin of error (for example, the census challenge process under NAHASDA requires all recipients to achieve a 5% margin of error, though the 10% margin maintained by the Census Bureau for ACS and Decennial Census may be a more appropriate standard for recipients as well as for the Census Bureau).
2. Prioritize and improve public relations for ACS in rural tribal areas where contact protocols are generally limited to in-person visits.. In addition, provide a

public relations “toolbox” for all tribes, including content for social media, to build awareness within their populations (likely public relations tools are already being developed for 2020 Census).

3. Examine the impact of the inability to carry out the full multi-stage contact protocol in collecting data in rural areas (response, inclusion, unable to locate and imputation rates) and test additional contact strategies with the goal of minimizing that impact in the future.

4. Recruit field staff specifically for tribal areas or for assisting existing field staff in tribal areas

5. Perform selected testing to determine whether overcrowding (room count and/or population) has in fact decreased between Census 2000 and ACS estimates (for 2010 and later) or if the revised room count instructions have caused an underestimation of overcrowding in tribal areas.

6. Monitor annual response rates for all individual tribal areas and formula area geographies. Develop and implement specific measures to be taken in any formula area when the annual rate falls below 85 percent returns.

#### **Decennial Census:**

7. Examine new and current methods of questionnaire delivery to ensure that residents of tribal areas have some feasible opportunity to submit their responses privately (either via questionnaire left with them, provided online form or completed via CAPI) In addition, specifically work with tribes to develop digital entry centers where tribal members can go to complete the online instrument. Provide the online survey forms with a “pin drop” ability to locate dwelling from digital map or aerial photos. These centers should be staffed with individuals able to assist in using the technology.

8. Evaluate the impact of not having available city-style addresses for all housing units on the Bureau’s ability to fully and effectively implement quality control procedures for the 2010 Census and take steps that will ensure that technology and procedures for 2020 Census will remedy any identified issues., for example using a “pin-drop” application that would allow respondents to locate their housing unit on a map or aerial.

9. If a larger operation is not already planned for 2020, consider completing targeted Address Canvassing in tribal areas without city-style addresses to verify and supplement the existing MAF, in addition to the LUCA that is planned.

10. Treat all tribal areas as “hard to enumerate” and allow for placement of Questionnaire Assistance Centers in Update/Enumerate areas (or equivalent type of in-person enumeration if it exists in the 2020 Census) to allow those who were likely not counted or believe they were missed by Census field staff to complete forms (note: Census may need to adjust questionnaire processing flow to allow for



this). Residents of tribal areas would also be encouraged to visit these Centers to obtain information about the Census and its benefits to their tribe and their fellow tribal members.

11. Specifically explain the particular benefits and drawbacks of the different types of enumeration (e.g., U/E, U/I and MO/MB for the 2010 Census) with tribes individually and collectively in advance of the 2020 Census to ensure that tribes fully understand the impacts of their decision-making on this subject.

12. Review the effectiveness of having the same office and staff address and prioritize cases between or among different operations (such as U/E, U/L and MO/MB in 2010 Census) and ensure that the operation predominantly addressing tribal areas receives equal operational priority as others with respect to access to human and technical resources, timing and continuity of operation, etc.

### **Both ACS and Decennial Census:**

13. Develop a proactive strategy to increase tribal participation in the Local Update of Census Addresses (LUCA) of the MAF from the level of participation experience in 2008 LUCA. Follow-up the initial letter to be sent out in 2017 with direct phone calls to non-responding tribal leaders. An improved MAF will help Census data collection, but it would also provide a better potential starting point for any national tribal survey.

14. Invite tribes to participate in the Geographic Support System Initiative (GSSI) of Census. <http://www.census.gov/geo/gssi/>

15. Increase the sample size of small tribal areas and formula areas for both Decennial Census and ACS data collections. Base sample sizes upon the minimum sample requirements necessary to meet the Census Bureau's standard 10% margin of error for the Decennial Census and ACS. Recognize the need for enhanced sample sizes for some of the smallest tribes, with ACS sampling 20%, or  $\frac{1}{5}$ , of the population every year to increase the number of completed surveys in these areas.

16. Develop and test a question that would distinguish, or allow the Census Bureau to subsequently filter out, all AIAN persons who are from North, Central and South American geographies outside of the United States.

17. Develop and test a question to identify the tribally-recognized enrollment status of American Indian and Alaska Natives as distinct from the current question concerning the respondent's racial status on the Decennial Census and ACS questionnaires.

18. Conduct a study to determine the specific causes of the apparent shift from AIAN alone to AIAN alone or in combination with other races in terms of relative percentages of the AIAN population.

19. Consider creating a separate tribal operation within the decennial census and ACS divisions of the Bureau to address particular issues and concerns in tribal areas and allow for procedural adjustments in Indian Country that reflect similar (though not uniform) issues that are unique or present to a higher degree in tribal areas.

20. Engage tribes earlier in the survey design and content development stages of these surveys and invite wider tribal participation than the present inclusion of 3-4 tribal representatives on the National Advisory Committee .

21. Establish and test a process that would allow “deputized” tribal staff members to help improve MAF by reviewing the actual map files and providing corrections to Census. The current process does not allow tribes to efficiently identify what is missing if units do not have city-style addresses as no meaningful list can be provided.

22. Work with tribes to link 9-1-1 addresses (or other accepted maps/lists of local addresses or survey frames) to units without street addresses in MAF where possible and consider using sources such as utility records (e.g., locations of active unit connections on map) to add to MAF and review estimated occupancy/vacancy rates.

23. Provide imputation rates for tribal areas (by population and/or sample size), determine their acceptability, and implement any appropriate and feasible changes to imputation process.

24. Develop and test a question that allows for self-identification of family units and the identification of homeless/doubled-up individuals. Develop and test new methods of identifying relationships among individuals in a housing unit.

25. Develop and test directions for listing the name of a respondent’s tribe to limit range of listed tribe names in responses.

26. Request a letter from each tribal chairman/president/governor and provide a copy to each field worker in order to assure respondents that participation can only benefit, not hurt, them or the respondent’s tribe or its programs. Provide these letters to individual Census field workers so they may quickly establish their credibility with respondents

27. Direct Census staff to request clearance from tribal president/chairman/governor to engage directly with tribal programs during the operational phases of data collection to allow for more effective outreach as well as to provide assurances of confidentiality and facilitate rapid and effective response to operational issues.

## Volume II. Appendices

Volume II contains the following:

- a. Data Study Group Guiding Principles
- b. Data Study Group Rules of Order
- c. Data Study Group Decision-Making Framework/Steps
- d. Data Source Nomination, Characterization and Evaluation Process
- e. Copies of Summaries or Briefing Sheets Describing Data Sources Evaluated
- f. Data Study Group Meeting Minutes