

Indian Health Financing Series

Paper VIII

What the Infrastructure Study Shows — and What It Cannot: A Review and Critique of the FY2023 Urban Indian Organization Infrastructure Study

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Designation Note

This paper is designated Paper VIII in the Indian Health Financing Series. It functions as a methodological review — identifying where the FY2023 Infrastructure Study provides useful data, where its analytical choices limit its usefulness, and where its headline findings require correction before they can be cited in policy arguments. The critique is constructive: the study is the first national UIO infrastructure assessment ever conducted, and its program-reported operational data are a genuine contribution. The methodological problems are confined to the population denominator and the market capture rate derived from it.

Abstract

The Urban Indian Organization Infrastructure Study, Report to Congress, Fiscal Year 2023 (February 2024) is the first national infrastructure assessment ever conducted for the 41 Urban Indian Organizations funded under Title V of the Indian Health Care Improvement Act. Its program-reported data — staffing counts, operating budgets, facility conditions, and 10-year service visions from 40 of 41 UIOs — constitute a genuine and valuable contribution to the Indian health policy evidence base. This paper reviews the study's methods, findings, and analytical limitations. Three methodological problems are identified: (1) the population denominator uses the Census AI/AN-alone count rather than the AI/AN-alone-or-in-combination count, understating the IHCA-eligible population and overstating the market capture rate; (2) the denominator is drawn from post-2020 Census data that reflect a question redesign causing AI/AN population inflation unrelated to actual tribal enrollment or descendency; and (3) patient counts conflate IHCA-eligibility determinations with Census race categories without resolving the definitional incompatibility. Applying a corrected denominator using the 2015–2019 ACS 5-year AI/AN-alone-or-in-combination estimate, the study's headline 28% market capture rate falls to approximately 14–16% — roughly half the reported figure, and a substantially different policy message. The paper concludes that the Infrastructure Study's operational findings stand on solid ground; its population-based findings require the corrections developed here before use in policy advocacy.

I. Introduction and Context

The Consolidated Appropriations Act, 2021 (P.L. 116-260) designated funds for a national infrastructure study of Urban Indian Organizations — the first ever conducted. IHS engaged a private-sector contractor, which conducted site visits to 40 of 41 UIOs between April and June 2022. The resulting report was submitted to Congress on February 22, 2024. IHS has explicitly noted that the report does not represent the views of IHS or HHS and that IHS has not adopted the reports; they are treated as ‘a significant collection of useful data points.’

That characterization is apt. The operational data the study assembled — FTE counts, operating budgets, facility square footage, and 10-year service visions — were collected directly from UIOs and represent program-reported information of a kind that has not previously been available at the national level. The study is a genuine first and its program-level data deserve to

be used. Its population-based analysis, however, rests on methodological choices that require examination before its headline market capture figure can be cited in policy arguments. This paper is organized around a distinction the study itself does not draw clearly: the difference between what the study's program-reported data show (which is reliable) and what its population analysis concludes (which requires correction).

II. What the Study Shows Well: The Program-Reported Data

The study's most durable contributions are its program-reported operational findings. These do not depend on population denominators or Census definitions.

Staffing

Thirty-nine UIOs provided staffing data. The study documents a current total of 3,420 FTEs across the UIO system. To fulfill each UIO's self-described 2032 service vision, FTEs would need to grow to 6,275 — a 78% increase — or to 8,083 if overall patient demand were served. This is the first systematic national count of UIO staffing. It establishes that workforce is a binding constraint equal in importance to financing, and that the staffing shortfall is not a marginal gap but a structural one.

Operating budgets

Seventeen UIOs provided full operating budget data. Their combined budget was \$211.2 million. To support those 17 UIOs' 2032 visions, budgets would need to grow to \$739 million. Extrapolated to the full 41-UIO system, the study estimates that IHS annual Urban Indian funding would need to increase by \$1.37 billion — a 1,270% increase over current levels. The IHS caveat that individual UIO future plans may exceed what is legally authorized under Title V is worth noting; the \$1.37 billion figure reflects UIO aspiration, not a confirmed IHS funding commitment or a legal entitlement analysis. The figure is nonetheless useful as an order-of-magnitude statement of the gap between current investment and full-vision operation.

Facilities

The study documents 2.75 million additional building gross square feet needed across 32 reporting UIOs, with capital investment of \$2.95 billion for new construction and \$4.4 billion to replace the full existing inventory. The Infrastructure Study established the midpoint of construction costs for all estimates at November 2026. These figures are the first national UIO facility needs assessment and provide a defensible baseline for capital appropriations advocacy. The 2021 Infrastructure Investment and Jobs Act's expansion of IHS construction authority to include UIO leased facilities, which the study notes, partially addresses the third-pillar gap that IHF Series Paper VI documents; the capital figures quantify the remaining gap.

Non-Indian patient share

Twenty-three of the 32 UIOs with primary care data provide care to non-Urban Indian patients under their FQHC open-access designation. The study documents 116,210 unique non-Urban Indian patients annually across those 32 UIOs — approximately 46% of total unique patients. This is the first national quantification of the non-Indian patient share and confirms that the mixed-patient-population complication analyzed in IHF Series Paper VI Section 6 is not limited to California. The California UIOs are outliers in the degree of their non-Indian patient share; the phenomenon is national.

Out-of-service-area patients

The study documents approximately 31,100 unique Urban Indian patients annually who travel beyond their designated service area to access UIO care. In Denver and Dallas — where there are no IHS facilities within 90 miles — more than 50% of patients travel from outside the

designated service area. This finding has direct implications for service area definitions in UIO contracts and for the adequacy of the current geographic coverage of the UIO system.

III. The Population Analysis: Three Methodological Problems

The study's headline market capture finding — that UIOs currently serve approximately 28% of the AI/AN population within their service areas — rests on a population analysis with three distinct methodological problems. Each problem individually understates the eligible population. Together they produce a denominator that is both definitionally too narrow and numerically inflated in ways that move in opposite directions, with the definitional narrowness being the larger and more consequential error.

Problem 1: AI/AN-alone as the denominator when eligibility is set at descendency

The study defines its potential patient population as 'the census count of AI/AN individuals who reside solely within these service areas' — the AI/AN-alone Census count, excluding everyone who identifies as AI/AN in combination with one or more other races. The study acknowledges this explicitly in the Population Summary: the 493,797 figure 'does not include the census estimates of AI/AN +1 other race, AI/AN +2 other races, AI/AN +3 other races populations and represents the most conservative count of local market opportunity.' Having made this acknowledgment, the study then presents 28% as the operative market capture rate without developing an alternative.

The use of AI/AN-alone is wrong for this purpose. IHClA eligibility at 25 U.S.C. § 1603(28) is grounded in membership in or descendency from a federally recognized tribe — a legal determination with no necessary relationship to Census race self-identification. A person who identifies as AI/AN and white on a Census form is not less likely to be a tribal member or descendant than a person who identifies as AI/AN alone. The AI/AN-in-combination population is not a different or lesser population for IHClA purposes; it is the same population using a different Census response category. Excluding it from the denominator systematically understates the IHClA-eligible population and overstates the fraction currently being served. Illustrative scale of the error: The 2015–2019 ACS 5-year national estimates — the last pre-discontinuity data (see Problem 2) — placed the AI/AN-alone population at approximately 2.56 million and the AI/AN-alone-or-in-combination population at approximately 5.2 million, a ratio of roughly 1:2. Applying that ratio to the study's 493,797 service-area denominator produces an AI/AN-alone-or-in-combination service-area population of approximately 860,000–988,000. With 138,114 Urban Indian patients in the numerator, the corrected market capture rate is approximately 14–16% — roughly half the 28% the study reports.

Problem 2: Post-2020 Census data and the question redesign discontinuity

The study's population projections use ESRI Annual Growth Rate methodology 'derived from census information' — specifically the 2020 Census and ESRI projections from 2022 to 2027. This creates a second problem independent of the AI/AN-alone definition: the 2020 Census and post-2019 ACS surveys reflect a question redesign and changed prompt structure that caused dramatic AI/AN population inflation unrelated to actual tribal enrollment or descendency. IHF Series Paper IV-F documents this discontinuity in detail. The AI/AN alone-or-in-combination population nationally grew 47% between the 2015–2019 and 2020–2024 ACS 5-year periods. This growth was concentrated in non-IHS-proximate states and is not consistent with actual changes in tribal enrollment. In contrast, the AI/AN-alone population nationally grew from approximately 2.56 million (2015–2019 ACS 5-year) to 3.7 million (2020 Census) — an increase of 45%. The 2020 Census enumeration of AI/AN-alone at 3.7 million is substantially higher than pre-2020 survey data would have predicted. Population projections based on the 2010–2020 historical growth rate are particularly affected, because the 2020 endpoint in that growth

calculation includes a question-redesign artifact. The Infrastructure Study's growth rate methodology — specifically the Historical AGR option using the 2010–2020 change — imports this inflation directly into the 2032 projections. The study notes that Chicago and other programs with growth rates exceeding 2% typically used the historical census rate; the 8.1% annual growth rate for Chicago's service area is almost certainly a question-redesign artifact, not genuine population growth.

Problem 3: Patient count definitional inconsistency

The study's patient count numerator and population denominator use different definitional frameworks without reconciling them. The 138,114 'unique Urban Indian patients' figure comes from UIO program records using IHCIA eligibility determinations — a legal standard based on tribal membership and descendency. The 2021 UDS figure of 70,388 'American Indians and Alaska Natives living in urban areas' cited in the Background section comes from UDS patient self-report at program enrollment, which captures both AI/AN-alone and AI/AN-in-combination respondents. The denominator uses AI/AN-alone Census counts.

The result is a ratio whose numerator and denominator are drawn from three different definitional frameworks. The study presents this ratio as a coherent market capture rate without acknowledging the definitional incompatibility. A rigorous market capture analysis would require either applying the IHCIA eligibility definition to both numerator and denominator (which would require tribal enrollment data not available in the Census) or applying a consistent Census race definition to both (which would require re-running UDS patient counts by race category). The study does neither.

IV. A Corrected Market Capture Estimate

The appropriate denominator for a market capture analysis grounded in IHCIA eligibility is the AI/AN-alone-or-in-combination population from the 2015–2019 ACS 5-year estimates — the last non-overlapping 5-year period fully predating the 2020 question redesign. This choice has two methodological justifications: it uses the broader definition that better approximates the IHCIA-eligible population, and it avoids the question-redesign inflation embedded in 2020+ data.

V. Policy Implications of the Corrected Estimate

The corrected market capture rate of approximately 14–16% is a substantially different policy message than 28%. The study's 28% figure has been read in policy discussions as evidence that UIOs serve a meaningful share — more than a quarter — of the urban AI/AN population, suggesting a system that, while underfunded, is not dramatically underscale relative to demonstrated demand. A capture rate of 14–16% tells a different story: UIOs are currently reaching fewer than one in six or seven of the AI/AN population within their service areas who are eligible under the IHCIA's descendency-based definition.

This correction does not undermine the infrastructure and staffing findings, which are based on program-reported data rather than population denominators. The \$2.95 billion capital estimate, the 1,270% IHS funding increase, the 78% FTE growth requirement — these figures come from UIO-reported operational data and are unaffected by the denominator analysis. If anything, the corrected capture rate strengthens the case for those investments: the demand gap is larger than the study implies, because the eligible population is larger than the study acknowledges. Similarly, the 100% FMAP reform argument in IHF Series Paper VII is not affected by the Infrastructure Study's denominator problem. Paper VII's cost estimate uses program-level visit data for the 32 UIOs with available UDS data, not population-based projections. The

Infrastructure Study's operational data on UIO visit volumes are consistent with Paper VII's analytical framework and provide a useful update to the 2015 UDS baseline.

The methodological correction is additive to the policy case, not subtractive. A larger unmet-need gap — which the corrected denominator implies — strengthens the case for 100% FMAP, expanded appropriations, and the capital investment the study documents. The correction should be incorporated into policy advocacy so that when the Infrastructure Study's market capture figure is cited, it is cited accurately.

VI. Conclusions: A Framework for Using the Study's Findings

The Infrastructure Study is the most comprehensive operational dataset ever assembled for the UIO system. Its program-reported data on staffing, operating budgets, facility conditions, and service visions are the product of site visits to 40 of 41 UIOs and deserve to be used in policy analysis. The following framework distinguishes findings that can be cited as-is from those that require the corrections developed here.

Corrected Market Capture Estimate

Denominator	Service area pop.	Patients served	Capture rate
Study: AI/AN-alone, 2020-derived	493,797	138,114	28% (as reported)
AI/AN-alone, 2015–2019 ACS 5-year (pre-discontinuity)	~430,000 (est.)	138,114	~32%
AI/AN alone-or-in-combination, 2015–2019 ACS 5-year (recommended)	~860,000–988,000 (est.)	138,114	~14–16%

Note: The ~430,000 and ~860,000–988,000 service-area estimates are derived by applying the national AI/AN-alone to AI/AN-alone-or-in-combination ratio from the 2015–2019 ACS 5-year (approximately 1:2) to the study's 493,797 service-area figure, then deflating for the 2020 question-redesign effect. A geographically precise correction would require running ACS table B02010 at county level for each UIO's defined service area. That analysis has not been performed; the ratio-adjustment approach is an approximation. The direction of the correction is not in doubt.

Reliability Framework for Using the Infrastructure Study Findings

Finding	Reliability	Guidance for use
3,420 current FTEs; 6,275–8,083 FTEs needed for 2032 vision	High — program-reported	Cite as-is; note IHS has not adopted UIO visions as authorized plans
\$211.2M operating budgets (17 UIOs); \$1.37B annual IHS increase needed	High for sample; extrapolation uncertain	Cite with sample-size caveat; note legal scope uncertainty on UIO visions
\$2.95B capital for new construction; \$4.4B for full replacement	High — facility-level data	Cite as-is; adjust to current-year dollars (costs midpointed to Nov 2026)
116,210 non-Urban Indian patients; non-Indian share is national, not California-	High — program-reported	Cite as-is; strengthens Paper VI Section 6 analysis

only ~31,100 Urban Indian patients travel outside service areas; 50%+ in Denver and Dallas 28% market capture rate	High — program-reported	Cite as-is; relevant to service area and coverage gap analysis
	Low — requires correction	Replace with ~14–16% using corrected AI/AN alone-or-in-combination denominator from 2015– 2019 ACS 5-year
2032 Urban Indian population projections by UIO service area	Unreliable — embeds 2020 discontinuity	Do not cite without applying pre-discontinuity adjustment from IHF Paper IV-F
8.1% annual growth rate for Chicago; high rates in other cities	Likely a question-redesign artifact	Verify against pre-2020 enrollment growth before citing as genuine population growth

The Infrastructure Study marks a genuine advance in the UIO evidence base. The methodological corrections developed here do not diminish its value; they sharpen its usefulness by identifying precisely where its findings can be relied upon and where they require adjustment. The corrected market capture rate of 14–16% is a more accurate description of where the UIO system stands relative to the population it is authorized and funded to serve — and it is a more compelling demonstration of the scale of investment the trust responsibility requires.

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Supplement I