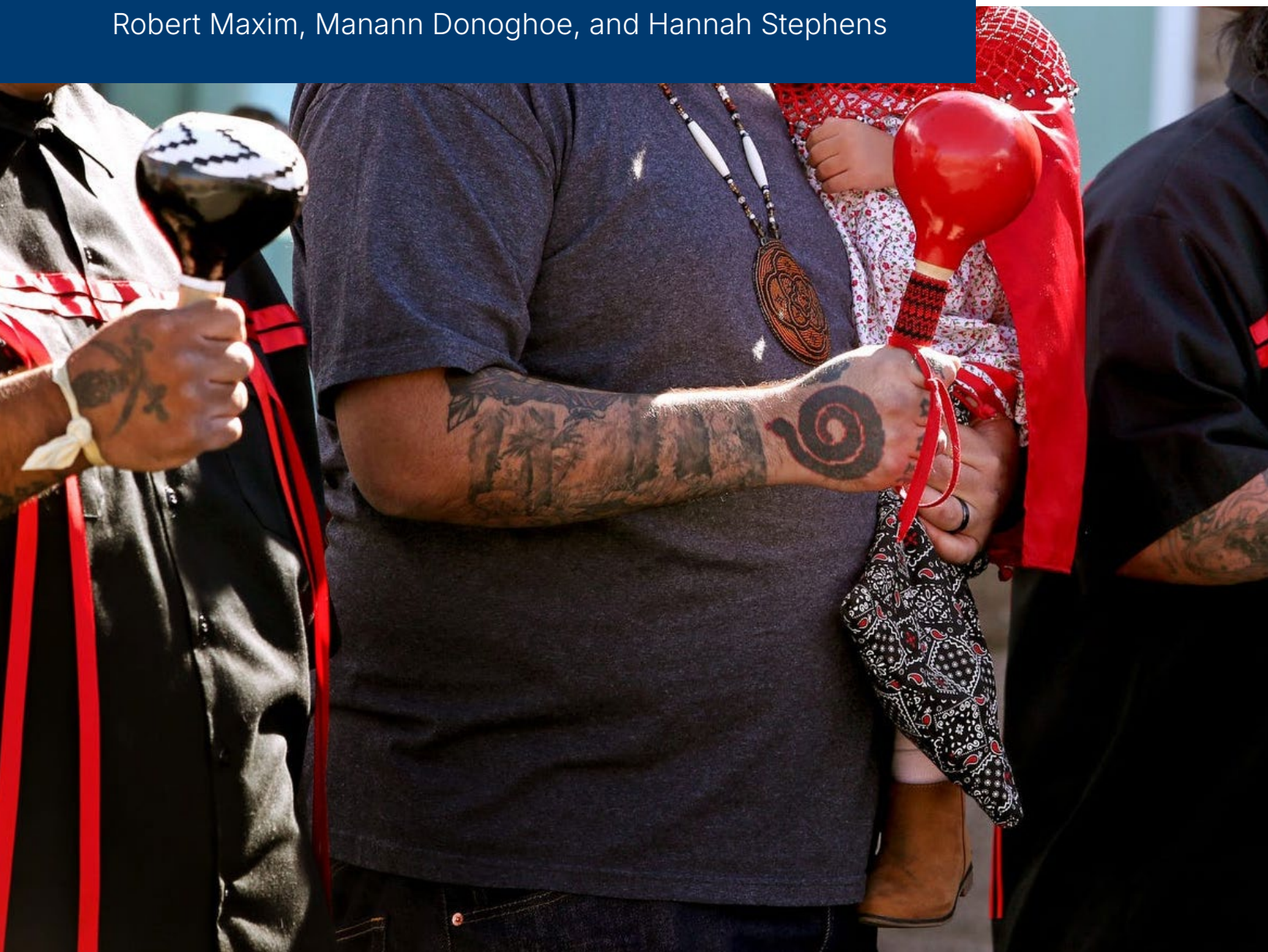


GOOD DATA, STRONGER TRIBES: OVERCOMING NATIVE AMERICAN DATA CHALLENGES IN SOUTHERN CALIFORNIA

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CONTENTS

Executive Summary.....	5
Tribal leaders and stakeholders provided Brookings with six insights about the state of Native American data	7
Regional organizations, the federal government, and state officials can take several actions to improve Native American data governance in the SCAG region and nationally	8
The SCAG region can prioritize efforts to craft strategies and other tools to support Tribes' data needs .	9
Introduction	11
Brookings and SCAG sought to better understand Tribal partners in the region.....	13
Native American communities face a range of data challenges in the SCAG region and nationally	15
Challenge #1: Sample sizes for data about Native Americans are often too small, which affects the quality of many data sets about Tribes and Native American people	18
Challenge #2: The relative remoteness and noncontiguous geography of Tribal reservations make data collection and aggregation difficult	20
Challenge #3: Many data sets treat Native Americans as just a race, a decision that reflects misunderstandings of Native identity and Tribal governance	22
Challenge #4: Data sets are often designed without Tribal input, and data sets do not always reflect Tribal needs or interests.	27
Challenge #5: Some federal, state, and local data remains inaccessible to Tribes	29
Tribal leaders and stakeholders in the SCAG region highlighted the range of data needs, challenges, and capacity issues that affect Tribes in the region.....	31
Finding #1: Tribes engage with data in a variety of ways, and they have a strong interest in data that more accurately measures their populations and lands	32
Finding #2: While Tribes face a wide array of different economic conditions, they see data as a key enabler for accessing federal, state, and regional funding to meet critical economic development needs	34
Finding #3: The lack of understanding of Tribal sovereignty contributes to misunderstandings about Tribes as government entities	36
Finding #4: Sample size limitations, Tribal boundaries, and other challenges inhibit the development of new data products by and for Native American communities	37

CONTENTS

Finding #5: Tribes vary significantly in their data capacity, priorities, desire for autonomy, and stances on regional or state involvement in data creation	37
Finding #6: Many current government processes and structures struggle to support Tribal data capacity	38
Regional, federal, and state policymakers can advance Indigenous self-determination in the SCAG region and nationally by investing in supporting Tribal data sovereignty and capacity .	40
Idea #1: Implement data strategies for interacting with Tribes and Tribal data	41
Idea #2: Invest in Tribal data capacity.	45
Idea #3: Support tribal sovereignty and self-determination.	49
Idea #4: Make government data more accurate and relevant to Tribes and Native American people . .	52
The SCAG region can prioritize efforts to craft strategies and other tools to support Tribes' data needs	57
Conclusion	58
References	59
Acknowledgements	62
Endnotes	64



Executive Summary

Data is integral to the well-being of communities. With good data, policymakers can make laws and regulations that reflect the conditions and needs of the populations they serve, and they can make informed decisions about how best to support their citizens.

Native Americans frequently contend with insufficient sample sizes, data that lags by months or years, less accurate demographic estimates, and exclusion from major statistical publications. For Native nations, also referred to as Tribes, this issue cuts to the core of effective governance: Native nations face the challenge of governing their citizens and territories while needing to rely on data that would be considered inadequate for nearly any other group in the United States.

This analysis, published jointly by Brookings Metro and the Southern California Association of Governments (SCAG), aims to identify the role that regional organizations can play in solving the many data challenges that exist for Native nations and Native American people.

To do so, the report first gives an overview of five challenges that affect data about Tribes and Native American people. It then presents six insights from Tribal leaders and stakeholders about the use of data and data priorities in the SCAG region. From there, the report provides a set of actions that regional governments could take to improve data quality for Tribal partners and Native American citizens and outlines some state and federal actions that would amplify and scale regional efforts. While the report is centered on the SCAG region, its findings have national applications.

This report comes at a critical moment. In 2025, the federal government has taken a new stance toward data by removing a growing number of federal data sets and research reports from the public domain, such as demographic information on minority groups and public health statistics. This has had a disproportionate effect on topics of interest to Native American communities.

Regional and state governments have a more important role than ever before in partnering with Tribes to support data and foster community and economic well-being. This report informs those efforts by helping regional and state government organizations better understand how data can be more effectively deployed to support the well-being of Native nations, Native American people, and all communities, in the SCAG region and nationwide.

Native American communities face a range of data challenges in the SCAG region and nationally

Many existing government and non-government data sets face at least five key limitations for measuring Native American people and Native Tribes.

1. **Sample sizes for data on Native Americans are often too small, which affects the quality of many data sets about Tribes and Native American people.** Small sample sizes for Native Americans can lead to several data quality challenges, including significant variance across data sets about Native Tribes and Native American people, large margins of error within data sets, and data that is missing entirely. The National Congress of American Indians (NCAI) has described this trend as creating an “Asterisk Nation” because an asterisk is often used in data displays about Native Americans, rather than a data point.
2. **The relative remoteness and noncontiguous geography of Tribal reservations make data collection and aggregation difficult.** Today, many reservations in the SCAG region, and across the country, are arranged into seemingly odd shapes because of the loss of land that Tribes faced during the 19th and 20th centuries. These unique geographic patterns make it more difficult to align data sets with Tribal lands and contribute to undercounts of Native American populations on Tribal lands.

3. **Many data sets treat Native Americans as just a race, a decision that reflects misunderstandings of Native identity and Tribal governance.** Native nations predate the United States and today maintain government-to-government relationships with the federal government. Yet most data sets classify Native Americans as one of multiple racial groups, rather than as a separate designation that reflects the political nature of Native American identity. In addition, because most Native Americans in California are either multiracial or Hispanic, only about one in 10 individuals identified as American Indian or Alaska Native in California are classified as such in many federal, state, and local data sets.

“The National Congress of American Indians (NCAI) has described this trend as creating an “Asterisk Nation” because an asterisk is often used in data displays about Native Americans, rather than a data point.”

4. **Data sets are often designed without Tribal input, and data sets do not always reflect Tribal needs or interests.** Federal and state surveys are based on the requirements of laws and agency regulations at those levels of government. While some federal and state efforts are underway to identify how surveys and data can be made more relevant for Native Tribes, these efforts remain nascent.
5. **Some federal, state, and local data remains inaccessible to Tribes.** In the SCAG region and across the United States, Tribes disproportionately rely on data collected and controlled by federal, state, and local government agencies; nonprofit organizations;

and even for-profit companies. This approach puts many Tribes in a state of data dependency, which hinders Tribal governance and undermines Tribal sovereignty.

TRIBAL LEADERS AND STAKEHOLDERS PROVIDED BROOKINGS WITH SIX INSIGHTS ABOUT THE STATE OF NATIVE AMERICAN DATA

Through in-depth conversations with Tribal leaders, non-Native government officials, and other stakeholders serving Native American communities, this analysis identifies six key findings about the state of Native American data in the SCAG region.

- 1. Tribes engage with data in a variety of ways, and they have a strong interest in data that more accurately measures their populations and lands.** During conversations, nearly all Tribal stakeholders could name multiple use cases for data that they leverage across different government functions, including economic and business development, infrastructure investment, and spatial planning. Moreover, Tribal leaders were nearly unanimous in their belief that more could be done to ensure that government data sources accurately represent them.
- 2. While Tribes face a wide array of different economic conditions, they see data as a key enabler for accessing federal, state, and regional funding to meet critical economic development needs.** Because Tribes typically do not have a tax base, federal, state, and regional grants account for a significant portion of their government budgets. A core emphasis of Tribal stakeholders was that limited data harms Tribes' ability to successfully access federal, state, and other grants.
- 3. The lack of understanding of Tribal sovereignty contributes to misunderstandings about Tribes as government entities.** Tribal leaders and state government officials emphasized that many non-Native governing

partners do not have a strong understanding of Tribal sovereignty, and they noted that these non-Native partners often do not understand that Tribes are governmental entities. Multiple Tribal leaders said that they sometimes felt that they are treated not as government partners, but as nonprofit organizations or even as private sector developers. This lack of understanding of Tribal sovereignty leads to less data transparency and less collaboration between Tribal governments and non-Native officials.

- 4. Sample size limitations, Tribal boundaries, and other challenges inhibit the development of new data products by and for Native American communities.** Tribal leaders expressed an interest in developing new data products and in leveraging outside data products to support Tribal decision-making. But challenges such as small sample sizes and insufficient public data for Tribal lands have created barriers to developing new data products.
- 5. Tribes vary significantly in their data capacity, priorities, desire for autonomy, and stances on regional or state involvement in data creation.** Tribal leaders noted that Tribes vary in their data analysis capacity. Some tribes have robust in-house analytics departments, while others have little capacity to engage in data work given more pressing needs. Tribal leaders also varied in their opinions of how involved state and regional agencies should be in data development, a reality that illustrated the challenges of having a one-size-fits-all approach.
- 6. Many current government processes and structures struggle to support Tribal data capacity.** Tribal leaders and non-Native government officials acknowledged that there is wide variation in how non-Native government agencies engage with Tribes and that policy design and government operations may inhibit the ability of well-intentioned state, regional, and local government officials to support Tribal data needs.

REGIONAL ORGANIZATIONS, THE FEDERAL GOVERNMENT, AND STATE OFFICIALS CAN TAKE SEVERAL ACTIONS TO IMPROVE NATIVE AMERICAN DATA GOVERNANCE IN THE SCAG REGION AND NATIONALLY

Given the complex array of laws, policies, practices, and other factors that affect Tribal data governance, flexible action across multiple fronts is needed to meet the data needs of Tribes and Indigenous groups. This report surfaces ideas for action at two levels: regional initiatives, which are actions that regional government organizations could implement, and state and federal ideas for action, which would smooth the pathway for (and amplify the impact of) regional efforts. These ideas cover the following four themes.

1. Implement data strategies for interacting with Tribes and Tribal data.

To set a foundation for ethical, meaningful, and mutually beneficial engagement, regional organizations should develop strategies for interacting with Tribal data in collaboration with Tribes and other regional stakeholders. These strategies should emphasize data, but they could also encompass other relevant areas of formal and informal relationship building between Tribes and regional entities to strengthen mutual trust.

To do so, regional organizations should explore two initiatives:

- develop a regional Indigenous data strategy and
- create a memorandum of understanding (MoU) to formalize regional government agencies' relationships with Tribes.

Two ideas for state and federal action could help complement these regional efforts:

- create federal and state Indigenous data strategies and

- convene Tribes and regional organizations to share best practices.

- 2. Invest in Tribal data capacity.** After establishing a strategy for working with Tribes on data issues, regional, state, and federal agencies could explore ways to deploy resources to develop Tribes' internal data capacity. While not every Tribe will want or need outside assistance with data work, regional organizations can be critical for supporting those that do.

To help Tribes develop their own data capabilities, regional organizations can take the following actions:

- develop new data programs and tools in partnership with Tribes,
- relay Tribal data needs to local, state, and federal government counterparts,
- engage with and fund local Indigenous-led data coalitions, and
- expand internships and other opportunities for data-focused skill development for Tribal and non-Tribal youth.

The following actions by state and federal organizations can help support these regional efforts:

- offer funding for Tribes and regional organizations to enhance Tribal data capacity and
- provide technical backbones and expertise to support the development of new data tools.

- 3. Support Tribal sovereignty and self-determination.** Regional, state, and federal policies that limit access to Indigenous data can undermine Tribal governance. In other cases, existing policies may unknowingly weaken Tribal sovereignty and government-to-government relationships.

To support Tribal sovereignty and self-determination, regional organizations can consider taking the following action:

- allow Tribes to provide their own data to access regional grants and funding.

Meanwhile, state and federal agencies can consider the following actions to complement regional efforts to support Tribal sovereignty:

- explore alternatives to blanket sovereign immunity waivers for state- and federal-funded projects,
- give agencies more flexibility to waive grant requirements, including data requirements, for Tribes,
- increase Tribal access to public agencies' data about their citizens, and
- develop secure online portals for Tribal government leaders to more easily access data about Tribal lands and Tribal citizens currently held by state and federal agencies.

4. Make government data more accurate and relevant to Tribes and Native American people. Many existing federal, state, regional, and local data sets have significant data quality issues that make the data pertaining to Native Americans less accurate and less useful for Tribes.

Regional government actors could take the following steps to improve the quality of data on Native American people:

- make regional data about Native American populations more comprehensive and accessible,
- encourage municipalities and other government entities in the region to update their data policies to more accurately identify Native American people,
- develop and distribute model data policies

for Native American–related data,

- develop trainings and other supportive resources for local government agencies, and
- foster relationships between Tribes and other governments in the region.

The following state and federal actions could help strengthen the aforementioned regional efforts:

- fund efforts to make existing state and federal data sets more relevant for Tribes and Native American groups,
- provide Tribes themselves with a bigger role in surveying their own residents for relevant data sets,
- change data aggregation practices to address undercounts of Native American people, and
- increase the representation of American Indians and Alaska Natives in agencies that engage in data work.

THE SCAG REGION CAN PRIORITIZE EFFORTS TO CRAFT STRATEGIES AND OTHER TOOLS TO SUPPORT TRIBES' DATA NEEDS

Finally, the report lays out four ideas that the SCAG region can initially prioritize to help meet Native American data needs.

- 1. Develop a regional Indigenous data strategy** in partnership with Tribes, Native American–serving organizations, regional government agencies, and state government stakeholders.
- 2. Develop an MoU** with Tribes and Tribal associations in the SCAG region to bolster regional governance.
- 3. Review existing regional data products** to determine areas in which regional data practices

can be adjusted to improve data quality for Tribes.

4. Seek funding to support Tribal data needs

such as building new data products, facilitating technical assistance for Tribes, and providing grants to Tribes to expand their own data work.

Improving the quality of data about Tribes and Native American people is integral to supporting Tribal sovereignty and Native American well-being. In doing so, regional and state government organizations in the SCAG region and across the United States can take another significant step toward creating regions that are economically prosperous and inclusive and can help generate genuine opportunities for all.



Introduction

Data is integral to the well-being of communities. With good data, policymakers can make laws and regulations that reflect the conditions and needs of the populations they serve, and they can make informed decisions about how best to support their citizens. Indeed, robust public data is the bedrock of federal, state, regional, and local governance.

The United States needs to collect data in ways that ensure that all its citizens are fairly and adequately served. As part of that, American Indians and Alaska Natives, collectively referred to in this report as Native Americans, need data that sufficiently measures their populations, lands, and governing priorities. Native Americans frequently contend with insufficient sample sizes, data that lags by months or years, less accurate demographic estimates, and exclusion from major statistical publications. For Tribes, also referred to in this report as Native nations, this problem cuts to the core of effective

governance: Native nations face the challenge of governing their citizens and territories while relying on data that would be considered inadequate for nearly any other group in the United States.

This analysis, published jointly by Brookings Metro and the Southern California Association of Governments (SCAG), aims to identify the role that regional organizations can play in solving the many data challenges that Tribes and Native American people face. SCAG is the metropolitan planning organization (MPO) for six counties in Southern California (Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura) and for 191 cities in an area covering more than 38,000 square miles. As the largest MPO in the United States, SCAG serves nearly 19 million people, nearly half of California's population. This population includes 16 federally recognized Tribes, approximately 37,000 people living on Tribal lands, and over 500,000 residents

who identify as American Indian or Alaska Native. SCAG has seven voting policy committee seats that represent Tribal governments.

SCAG develops long-range Regional Transportation Plans, including Sustainable Communities Strategies and growth forecast components, regional transportation improvement programs, Regional Housing Needs Assessment, and a portion of the South Coast Air Quality Management Plan. Economic data and analysis are important to many planning and research efforts at SCAG, such as informing the development of annual regional economic outlooks and other analyses at the nexus of transportation and economic growth.

While the relationships between the federal government and Tribes, and to a lesser degree the relationships between states and Tribes, have been defined through laws and court rulings, less attention has been directed to the relationships between regional government organizations and Native communities. Yet, because of their involvement in matters of regional significance such as long-range transportation and land use planning, regional government organizations can have an outsized effect on Native communities.

To help regional government organizations deepen their data relationships with Tribes, the report first overviews five challenges that affect data about Tribes and Native American people. It then presents six insights from Tribal leaders and stakeholders about the use of data and data priorities in the SCAG region. Next, the report provides ideas for actions that regional governments can take to improve data quality for Tribal partners and Native American citizens and ideas for state and federal actions that would amplify and scale these regional efforts. While the report is focused on the SCAG region, its findings have national applications.

This report comes at a critical moment. In recent years, federal government agencies have taken steps to improve the data quality for Native American populations. Moreover, several states and regions have more clearly defined their relationships with Tribal partners and have centered Native American citizens in new policies.

However, in 2025, the federal government has taken a new stance toward data by removing a growing number of federal data sets and research reports from the public domain, such as demographic information on minority groups and public health statistics.¹ This stance has had a disproportionate effect on topics of interest to Native American communities. In other instances, federal funding cuts and agency closures have resulted in the loss of critical data sources.²

Regional and state governments have a more important role than ever before in partnering with Tribes to support data governance and foster community and economic well-being. This report informs those efforts by helping regional and state government organizations better understand how data can be more effectively deployed to support the well-being of Native nations, Native American people, and all communities in the SCAG region and nationwide.



Brookings and SCAG sought to better understand Tribal partners in the region

Brookings Metro and SCAG jointly produced this report. In late 2022, SCAG approached Brookings with the goals of developing a deeper understanding of Tribal partners in the region and of determining how SCAG could better support its Tribal partners' community and economic development needs.

This project began in March 2024 and was undertaken over fifteen months. This analysis focuses on Southern California for four reasons. First, Southern California has a significant number of Tribes that have historically had strong regional engagement. Within Southern California (defined as the SCAG region plus San Diego County), there are 33 federally recognized Tribes, plus additional non-federally recognized Tribes (including Tribes that have had their previous federal recognition terminated). Many of these Tribes are active participants in regional governance, including SCAG's governance.

Second, Southern California has proactive regional and state governments that are looking to engage more closely with Tribes, as does California as a whole. Because regional and state governments lack a clearly defined relationship with Tribes, and because Tribes typically focus their energies on engaging with federal policymakers, regions and states must offer Tribal governments a clear and positive value proposition if they want to develop effective working relationships.

Third, Southern California is a region of historical and modern relevance for Indian Country. In addition to the Native nations that are indigenous to the region, Southern California has been a significant migration point for Native American people from across the United States and the Americas more broadly.

Finally, Southern California is a large and economically powerful region that has significant

resources to act without relying on the federal government. Because of its economic size and substantial Native American population, Southern California can demonstrate what is possible for Native American data issues at a national level. It can likewise serve as a first mover on issues of Native American data needs and create templates for other regions to use.

The core of this effort was a series of interviews with Tribal leaders and regional stakeholders, including both virtual and in-person sessions, as well as key informational interviews with academics and practitioners working on these issues. Over the course of the project, the Brookings Metro and SCAG teams conducted over 30 interviews and listening sessions with more than 60 individuals. For the purposes of this report, we limited our engagement to Tribes within the SCAG region.

In addition, the Brookings and SCAG teams arranged a series of in-person site visits to convene Tribal leaders on Tribal land and discuss their data needs in the reservation context. During this project, the Brookings and SCAG teams visited six of the 16 reservations in the six-county region served by SCAG, and the teams also met with government leaders and officials from seven federally recognized Tribes and one non-federally recognized tribe in the region.

Brookings engaged with the following eight Tribes:

- the Agua Caliente Band of Cahuilla Indians,
- the Cahuilla Band of Indians,
- the Fernandeño Tataviam Band of Mission Indians,
- the Morongo Band of Mission Indians,
- the Pechanga Band of Indians,
- the Quechan Tribe of the Fort Yuma Indian Reservation,
- the Soboba Band of Luiseno Indians, and
- the Torres Martinez Desert Cahuilla Indians.

Brookings paired these interviews with literature reviews of Indigenous data sovereignty efforts in the United States and globally; Indigenous-led censuses, surveys, and other data initiatives in the United States; and Southern Californian data sets containing data about Tribes and Native American people.

This report does not try to exhaustively reflect the perspectives of all Tribes or Native-serving organizations in the SCAG region or elsewhere in the United States. It also does not seek to speak on behalf of Tribes. Given that, this analysis should be leveraged to inform government approaches, but it should not be seen as a substitute for Tribal engagement by state and regional government officials.



Native American communities face a range of data challenges in the SCAG region and nationally

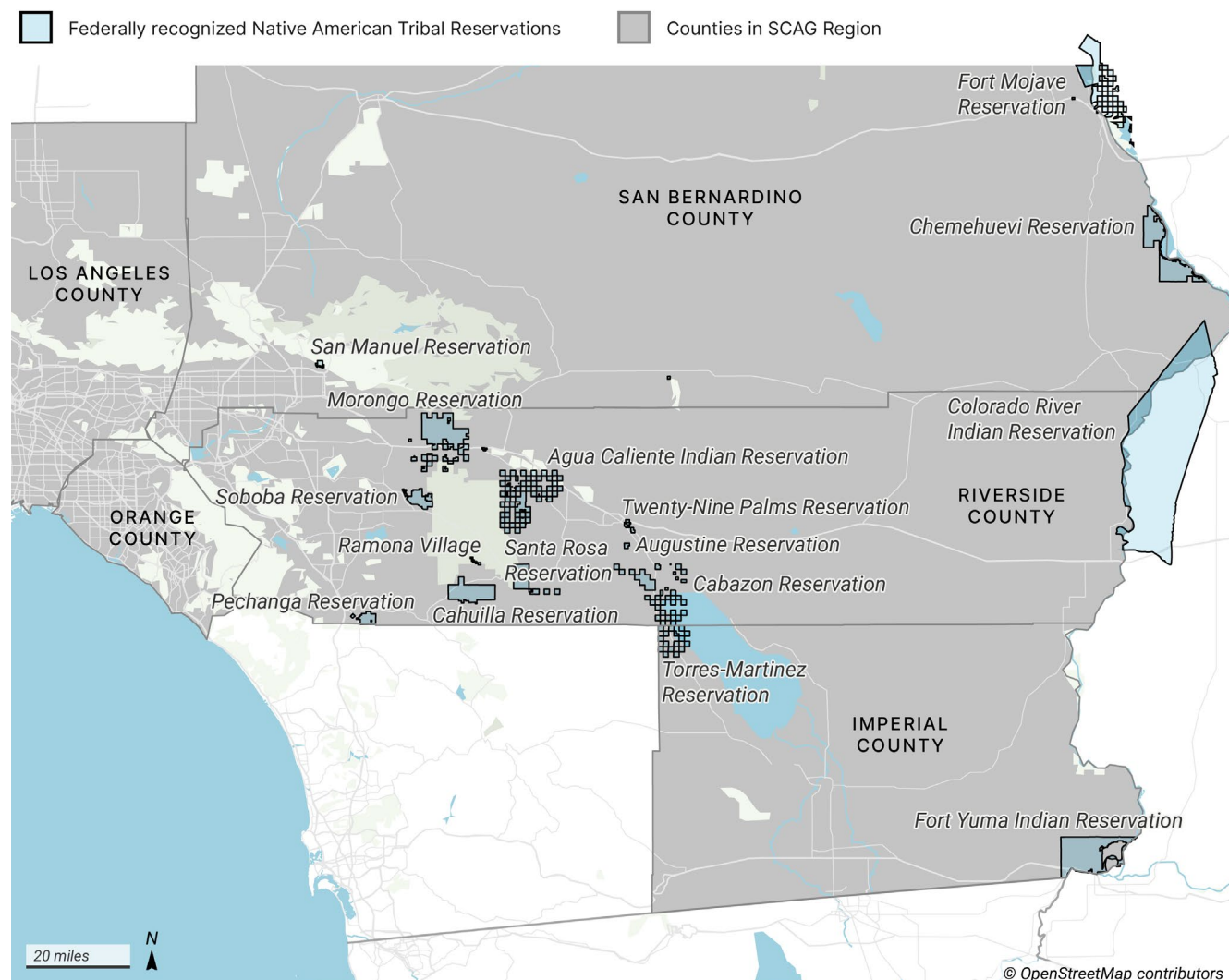
Today, the Native American population in Southern California is extremely diverse, reflecting the many Native communities that existed in the region prior to colonization and that were shaped by the complex effects that colonization, treaties, and relocation had on the region.

Native nations predate the modern lines dividing municipalities, counties, states, and even countries. While this report focuses on the six counties of the SCAG region, many Tribes and Native American people see themselves as part of a broader group of Native nations that have existed across Southern California and the surrounding region since time immemorial, and they do not distinguish themselves in a way that aligns with how MPOs are organized.

For example, regional Tribal groups such as the Southern California Tribal Chairmen's Association (SCTCA) and the Tribal Alliance of Sovereign Indian Nations (TASIN) promote intertribal cooperation across Southern California as a whole, rather than just in the SCAG region. In other instances, historical Native nations such as the Cahuilla Nation today comprise multiple Tribes that exist in the SCAG region and in other regions served by different MPOs. While this report focuses on just the SCAG region, its findings have applicability for Southern California and the broader region.

MAP 1

Federally Recognized Native American Tribal Reservations in the SCAG region



SOURCE: Esri, HERE, Garmin, USGS, EPA, NPS

Today, there are 33 federally recognized Tribes in Southern California (defined as the SCAG region plus San Diego County), 16 of which have reservations that are partially or fully within the six counties of the SCAG region (see Map 1). These 16 Tribes include the:

- Agua Caliente Band of Cahuilla Indians,
- Augustine Band of Cahuilla Indians,
- Cabazon Band of Cahuilla Indians,
- Cahuilla Band of Indians,
- Colorado River Indian Tribes,
- Chemehuevi Indian Tribe,
- Fort Mojave Indian Tribe,
- Morongo Band of Mission Indians,
- Pechanga Band of Indians,
- Quechan Tribe of the Fort Yuma Indian Reservation,
- Ramona Band of Cahuilla,
- Santa Rosa Band of Cahuilla Indians,
- Soboba Band of Luiseno Indians,
- Torres Martinez Desert Cahuilla Indians,
- Twenty-Nine Palms Band of Mission Indians, and the
- Yuhaaviatam of San Manuel Nation.

There are also many Tribes in Southern California that the federal government does not recognize; however, many still operate as Tribal governments for their communities, organize as nonprofits, and form coalitions to offer services and advocacy for the large Native diaspora in the state.³ At least five of these Tribes are in the SCAG region.⁴

The SCAG region is home to at least 500,000 people who are classified as American Indian or Alaska Native based on data from the U.S.

Census Bureau's American Community Survey (ACS), the most detailed U.S. public data source on income, employment, housing, and other important economic and demographic indicators. These individuals live both on Tribal land and in urban areas, and they come from a variety of backgrounds, including Native nations in the SCAG region, individuals from Tribes that are indigenous to other places in the United States, and Indigenous people from other countries throughout the Americas.

Data on or about Native nations, their citizens, assets, and lands is necessary for Tribes to effectively govern and advance the prosperity of their citizens. It is also necessary for regional and local government agencies to be able to measure the effects of their policies on Tribal communities and to effectively serve their Native constituents.

However, many existing government and non-government data sets face limitations for measuring Native American people and Tribes. The following limitations are especially relevant.

1. Sample sizes for data on Native Americans are often too small, which affects the quality of many data sets about Tribes and Native American people.
2. The relative remoteness and noncontiguous geography of Tribal reservations make data collection and aggregation difficult.
3. Many data sets treat Native Americans as just a race, a decision that reflects misunderstandings of Native identity and Tribal governance.
4. Data sets are often designed without Tribal input, and data sets do not always reflect Tribal needs or interests.
5. Some federal, state, and local data remains inaccessible to Tribes.

This combination of factors means that Tribal and non-Tribal governments alike can struggle to access relevant and accurate data on Native American people, such as data on the wealth and incomes

of residents; information about on-reservation businesses, roads, water sources, and other assets; data on the health of residents; or data on agriculture, climate, and environmental quality. What follows is an overview of some of the challenges that affect data about Tribes and Native American people in the SCAG region and nationally.

CHALLENGE #1: SAMPLE SIZES FOR DATA ABOUT NATIVE AMERICANS ARE OFTEN TOO SMALL, WHICH AFFECTS THE QUALITY OF MANY DATA SETS ABOUT TRIBES AND NATIVE AMERICAN PEOPLE

Sample sizes for Native Americans in many federal, state, and other data sets are frequently small. This can lead to several data quality challenges, including significant variance across data sets about Tribes and Native American people, large margins of error within data sets, and data that is missing entirely. The National Congress of American Indians (NCAI) has described this trend as creating an “Asterisk Nation” because an asterisk is often used in data sets reporting on racial and ethnic data about Native Americans, rather than actual data points about those populations.⁵

NCAI has identified four reasons why many data sets have small sample sizes for Native Americans: there are costs to constructing a large enough sample of Native Americans, many Native American populations are geographically dispersed, there is an overall lack of investment in Tribal data infrastructure, and there is a lack of awareness about the uniqueness of Tribal governments.⁶

These small sample sizes mean that the data available about Tribes and Native communities often has more significant variance than data about other groups. One of the most notable examples of this trend comes from the ACS, which is compiled by the Census Bureau. The bureau only conducts a full enumeration of the country’s population for the U.S. Census once every ten years, in accordance with the U.S. Constitution. To maintain high-quality data for the years in between each census, the

ACS surveys select locations every year, creating estimated data profiles for different places and demographic groups.

However, many reservations, including those in the SCAG region, are small in size and population, which is a key limit to federal data availability. The latest ACS data from the Census Bureau (from 2023) for all reservations in the SCAG area are only available as five-year estimates—estimated averages for a five-year period leading up to the indicated year.⁷

Multi-year averages limit the extent to which public data from sources like the ACS can provide an accurate empirical foundation for Tribal decision-making. Economic conditions can vary widely over a five-year period. For example, the five years contained in the most recent estimate, ranging from 2019 to 2023, include the final year of the 2010s economic recovery, the entirety of the COVID-19 pandemic and the accompanying economic crisis, and the subsequent economic recovery and period of high inflation. In addition, in 2020, one-year ACS estimates were not collected due to the COVID-19 pandemic. Thus, five-year estimates spanning 2020 are missing up to 20% of the five-year sample, meaning that data pertaining to some detailed characteristics, cross-tabulations, or smaller areas may be unavailable.

In addition, full ACS data on Native Americans at the county and metropolitan level is only available in the 2021 five-year ACS estimate—other years are missing certain geographies or certain data indicators. This means that some Tribes and other government entities that use ACS data can only use estimates from 2017–2021 when making decisions about the needs of Native American residents in 2025. Such data is not responsive to real-time events. For example, Tribes may undergo significant economic shocks, such as the closure of a casino or other Tribal business venture, that have negative effects on the Tribe’s economic prospects.⁸ When data is out of date, it cannot capture these real-time economic changes, and this may put Tribes at a

disadvantage in their efforts to seek needed grant funding or other resources.

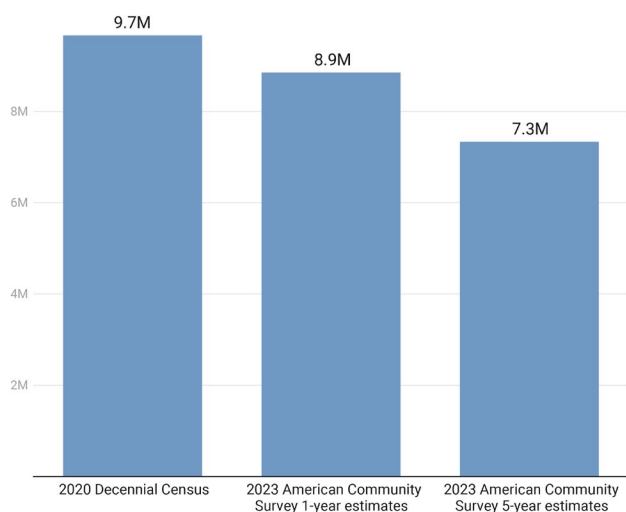
In some cases, sample sizes may be so inadequate that data is suppressed. Suppression is the statistical process employed by federal, state, and other data entities whereby data below a certain size threshold is not released to avoid potentially publishing personally identifiable information about individuals, companies, or other entities. While suppression is widely considered a best practice for statistical enumeration, it can reduce the amount of data available for Tribes. For example, two of the 16 reservations in the SCAG region (Ramona Village and Augustine Reservation) were missing Native American population data entirely in the most recent release of ACS data. For the 14 reservations with five-year estimates available, the margin of

error on these population estimates, an indicator of accuracy, were unusually high: three reservations had margins of error that exceeded the population count entirely.

When aggregated at the population level, data about Tribes and Native American populations can vary significantly across major Census Bureau products, making it difficult to know which data set is most accurate. As an example, on the national level the total population of Native Americans varies by a range of 2.3 million people (a 24.1% variance) across three common federal data sets: the 2020 decennial census, the 2023 ACS one-year estimates, and the 2023 ACS five-year estimates (see Figure 1). In comparison, the total U.S. population varies by just 1.0% across those three data sets.

FIGURE 1

The population of American Indians and Alaska Natives in the United States varies by over 24% across different Census Bureau data sources

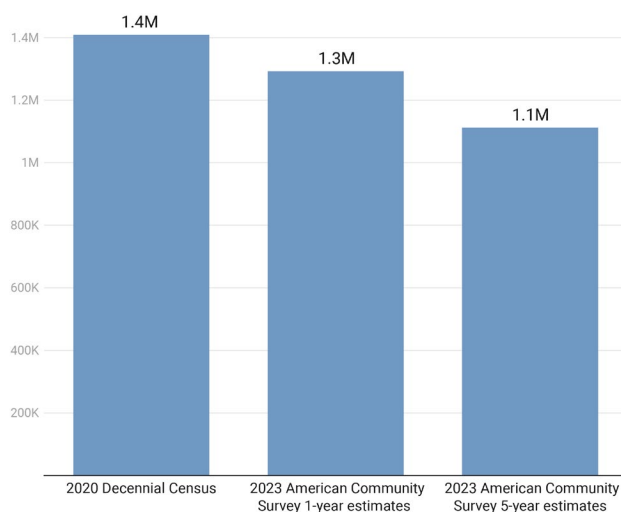


SOURCE: Brookings analysis of US Census data

Looking at the total population of Native Americans in California, there is a difference of almost 300,000 people between the largest and smallest values in these three data sets (see Figure 2).

FIGURE 2

The population of American Indians and Alaska Natives in California varies by 21% across different Census Bureau data sources



SOURCE: Brookings analysis of US Census data

In future years, the accuracy challenges with federal data for Tribes may be exacerbated. Beginning with the 2020 census, the Census Bureau implemented a new set of safeguards to protect respondent confidentiality in the digital age, at least three of

which could have a significant effect on data about Native American tribes: differential privacy, dynamic population thresholds, and synthetic microdata.

With differential privacy, the Census Bureau leverages an algorithm to add a random number to each statistic before publishing the data, creating what is called statistical noise to protect the privacy of individual respondents. Work by the Center for Indian Country Development affiliated with the Federal Reserve Bank of Minneapolis has found that the implementation of differential privacy measures decreases the accuracy of data on small Native American reservations, such as those in Southern California.⁹

This inaccuracy could be exacerbated by a related policy called dynamic population thresholds. Prior to 2020, the Census Bureau published full decennial census data for all Tribes with more than 100 individuals who identified as part of that Tribe, but it did not publish any data for Tribes with fewer than 100 respondents. Beginning in 2020, the federal government began publishing limited decennial census data for Tribes with as few as 22 respondents, with two caveats. First, all individual Tribal data published by the Census Bureau contains statistical noise (that is, random numbers) to protect individual privacy. Second, for Tribes with under 1,000 people, only a single statistic is published: that Tribe's total population based on the number of census respondents. The result of this policy change is that Tribes with between 100 and 999 respondents actually had less data published about them in the 2020 census than they did in previous years.¹⁰

Finally, in 2021, the Census Bureau announced that it planned to replace ACS research data with fully synthetic microdata by 2024. Synthetic microdata is artificially generated survey responses that mimic real responses for statistical purposes while maintaining respondent confidentiality. While synthetic microdata can be helpful for protecting the privacy of members of larger populations, it can lead to even greater inaccuracies for smaller populations such as individual Tribes or small

geographic areas such as Native American reservations. After backlash from data users, the Census Bureau backtracked and said that it no longer had a firm timeline for implementing synthetic data. However, the bureau remains committed to eventually moving toward synthetic microdata.¹¹

CHALLENGE #2: THE RELATIVE REMOTENESS AND NONCONTIGUOUS GEOGRAPHY OF TRIBAL RESERVATIONS MAKE DATA COLLECTION AND AGGREGATION DIFFICULT

Statistical surveys tend to undercount Native American populations on reservations.¹² In addition, reservations have unique geographic patterns that make it more difficult to align data sets with Tribal lands.

As with Native nations in other regions of the country, many Tribes in the SCAG region were forcibly relocated from their historical homelands to smaller reservations. In 1851 and 1852, the U.S. government entered into 18 treaties with Tribes in California reserving 8.5 million acres for the Tribes. However, before these treaties were implemented, the U.S. Senate rejected them in a series of secret sessions in 1852, which were hidden from public record until 1905.¹³ In 1864, Congress passed the legislation known as the Four Reservations Act, which established four Native American reservations in California and tried to relocate all Indigenous people in the state onto those reservations.¹⁴ Ultimately, the goal of relocating the state's Native people to just four plots of land proved unattainable, and from 1875 to 1970 a number of smaller reservations were created around the state.¹⁵ Today, 16 reservations are located in the six counties that make up the SCAG region. Meanwhile, some Tribes were not granted reservations at all, often because their land was in or near highly valued urban centers.¹⁶

The 16 reservations in the SCAG region today are mostly situated in smaller communities in the

central and eastern portions of the region. There are no federally recognized Tribes in the region's two most populous counties, Los Angeles County and Orange County (though there are non-federally recognized Tribes in both of these counties). In addition, just two reservations in the SCAG region have more than 2,000 residents, and just one (the Agua Caliente Indian Reservation, which is the most highly populated reservation in California and which encompasses portions of the cities of Palm Springs, Cathedral City, and Rancho Mirage) has over 10,000 residents.¹⁷ The remoteness of rural areas, featuring homes hidden from main roads or homes that may not use formal addresses, makes survey enumeration more difficult.¹⁸ Many reservations must also contend with underdeveloped infrastructure, which makes all government functions, including enumeration, more challenging.

In addition, Native American populations tend to be undercounted in urban and rural areas, a tendency that exacerbates the issues facing rural reservations. These challenges unfolded during enumeration for the 2020 census, which is estimated to have undercounted Native American populations by more than 5%.¹⁹ Because access to funding for many federal programs is based on census data, this undercount likely reduced some Native nations' access to funding, including for education and employment programs, health and nutrition services, and housing block grants.²⁰ In interviews, Tribal leaders indicated as much, noting that some Tribal citizens were reluctant to support census enumeration efforts given how severe the undercount of Tribal citizens had been in the past.

Many reservations' irregular geographic areas have compounded these enumeration issues. Today, many reservations in the SCAG region, and across the country, are arranged into seemingly odd shapes because of the loss of land that Tribes faced during the 19th and 20th centuries. Tribal lands such as the Agua Caliente Indian Reservation and Morongo Indian Reservation are organized in checkered patterns, alternating between one-square-mile blocks of Tribal and non-Tribal land.²¹ This pattern is due to the construction of the

Southern Pacific Railroad in the 1850s because the federal government expropriated and leased alternating checkerboard plots of Tribal land to extend the railroad to Los Angeles (see Map 2).

In other cases, contiguous reservations include disconnected "off-reservation trust land," a legacy of reservations being broken up through the 1887 General Allotment Act, also known as the Dawes Act. This law broke up communally held land on reservations into individual parcels allotted to families. What was deemed surplus land left over after the allotment process was opened for sale and settlement to non-Native people, creating a massive transfer of land from Native nations to white Americans.²²

These complex boundaries can exacerbate issues related to small sample sizes, creating larger margins of error and reducing the chances that the resulting data can be published publicly. The unique geography of many reservations also means that many data indicators available for other geographic areas, such as municipalities or states, can be difficult to access for Tribal reservations. For example, mortality and other health data derived from vital statistics are not available for some Tribal jurisdictions.²³ Moreover, public data dashboards that combine Tribal boundaries with census data can give users a false sense of precision. For example, CalEnviroScreen is a statewide map that uses census and environmental data to identify "disadvantaged" communities to prioritize state funding for them.²⁴ The tool relies on census data and overlays Tribal boundaries on census tract data. While doing so is helpful for viewers to reference where reservations are located, it may also give users the impression that data was specifically collected to represent the Tribe and Tribal members rather than reflecting tract-level census data.

Complex Tribal boundaries can also affect governance and jurisdictional responsibilities, complicating questions around data about Tribal citizens. In the SCAG region, it is common for Tribal lands to cross jurisdictional borders, with some reservations extending across municipalities,

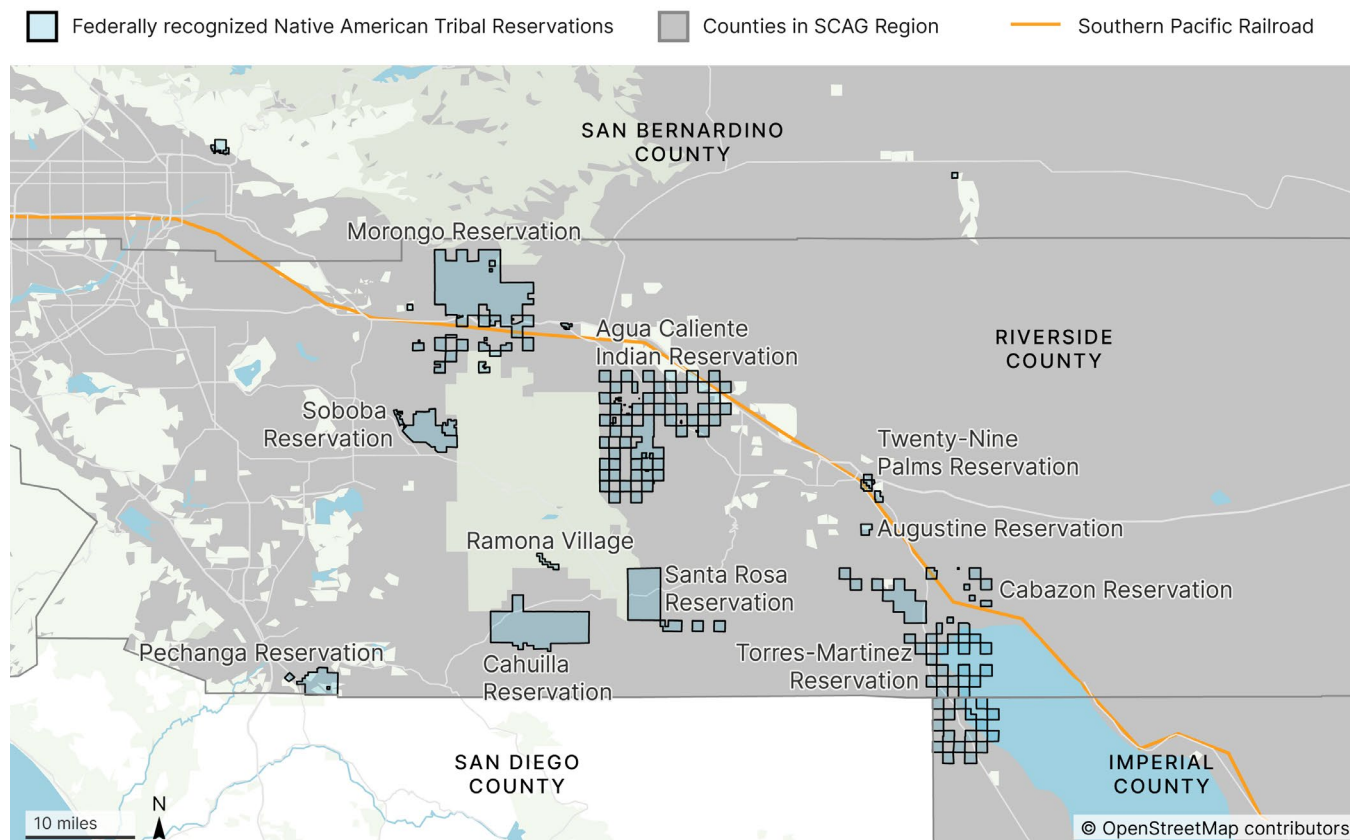
counties, states, and even international borders. For example, while the Quechan Tribe is a SCAG member, many of the Tribe's citizens are Arizona residents, meaning that they pay taxes and receive social services outside of California. As another example, while Census Bureau data shows that the Colorado River Indian Tribes reservation, which straddles the California-Arizona border, has approximately 2,700 Native American residents, census data measures only about 140 individuals living in the SCAG region that list their Tribal affiliation as the Colorado River Indian Tribes.

CHALLENGE #3: MANY DATA SETS TREAT NATIVE AMERICANS AS JUST A RACE, A DECISION THAT REFLECTS MISUNDERSTANDINGS OF NATIVE IDENTITY AND TRIBAL GOVERNANCE

Unique among the demographic groups in the United States, Native American identity is considered both a racial identity and a political classification. This is because many Native American people are citizens of Tribes that predate the United States, and today those nations continue their government-to-government relationships with the U.S. federal government. As a result, these Tribes oversee a broad array of governmental

MAP 2

Railroad expansion contributed to noncontiguous Tribal reservations in the SCAG region



SOURCE: Esri, HERE, Garmin, USGS, EPA, NPS

functions. Some of these functions resemble local governance, such as determining zoning ordinances and the local housing supply. Others resemble state policy, such as setting policy regarding minimum wages or even adherence to daylight saving time.

Yet most data sets collect and classify data on Native Americans as one of multiple racial groups, rather than as a separate designation that reflects the political nature of Native American identity. Consequently, data sets that follow typical collection and aggregation practices may be less representative for Native American people than for other groups. This misunderstanding of Native American identity and the data practices that often result can make it harder for government agencies to rely on data to accurately define their obligations to Native American people, and these factors also make it challenging for Native American-serving organizations to get an accurate scope of the population they are meant to help.

For starters, many government data sets do not report any data by Tribe or nation affiliation. When agencies do publish Tribal affiliation data, they typically rely on the self-identification of the individual completing the survey. This practice can affect the quality of data for certain Tribes. For example, while the Census Bureau collects and publishes detailed demographic data for nearly 1,200 Tribal affiliations, this data frequently does not align with Tribes' own data.²⁵ Tribes whose names represent a broader ethnic or linguistic group or pre-colonial Native nation tend to be disproportionately affected. To illustrate this, consider that there are nine federally recognized Tribes or Bands of Cahuilla people in Southern California, eight of which are in the SCAG region. Today, some individuals in those Tribes identify as only "Cahuilla" on government surveys. This tendency disproportionately affects the data for the federally recognized Cahuilla Band of Indians, as the number of individuals self-identifying as Cahuilla in government survey data is significantly higher than the total number of people enrolled in the Cahuilla Band of Indians. Moreover, it is often

impossible for the Tribe to disaggregate individuals identifying as part of the Cahuilla Band of Indians from those identifying as Cahuilla more broadly, making self-identification data significantly less useful for that Tribe's governance.

Moreover, the federal government defines an American Indian or an Alaska Native as "individuals with origins in any of the original peoples of North, Central, and South America."²⁶ This means that a large portion of the Native American population in the SCAG region is indigenous to places outside not just the SCAG region, but the United States entirely. The inclusion of Indigenous people from other countries means that the count of American Indian and Alaska Native people in data collected by statistical agencies differs from, and is typically substantially larger than, the population of people who are indigenous to what is today the United States. In addition, classifying American Indian and Alaska Native people as a single race masks the significant racial and cultural diversity among Native American people in the SCAG region.

Nearly two-thirds of people classified as American Indian or Alaska Native in California are also Hispanic (see Figure 3). This is partially due to historical Spanish colonialism. Today, many Tribes in California still use Spanish names, and many Native American people in the state identify as Hispanic as well as American Indian. This number is also influenced by the significant migration to the region of Latino or Hispanic Native people from throughout the United States as well as from Mexico and other countries in Latin America.

However, rather than reflecting this broad diversity by publishing detailed data on Native American people, many federal, state, and local data sets only publish data on single-race, non-Hispanic Native Americans. Data sets often also aggregate multiracial individuals into a catch-all "two-or-more races" category, and some data sets opt to topcode Latino or Hispanic ethnicity, meaning that they classify any individual who identifies as Latino or Hispanic as such, regardless of race. For example, the SCAG region's Demographic and Growth

Forecast Technical Report only includes data for non-Hispanic, single-race American Indian people.²⁷ This approach is an expansion over previous versions of the report, which only broke out data on three racial and ethnic groups (non-Hispanic white, non-Hispanic Black, and Latino or Hispanic) and which included most Native people in a catch-all “Others” category.²⁸

These practices have disproportionate effects on data about Native Americans compared to data about other groups. While most white, Black, and Asian American individuals identify as one race alone, most Native Americans identify as multiracial, Latino or Hispanic, or both.²⁹ As such, topcoding Latino or Hispanic identity and having a catch-all two-or-more-races bucket reduces the number of Native American people who are actually counted as such in many data sets. For example, in California 89% of Native American people are classified as two-or-more races or as Latino or Hispanic, the

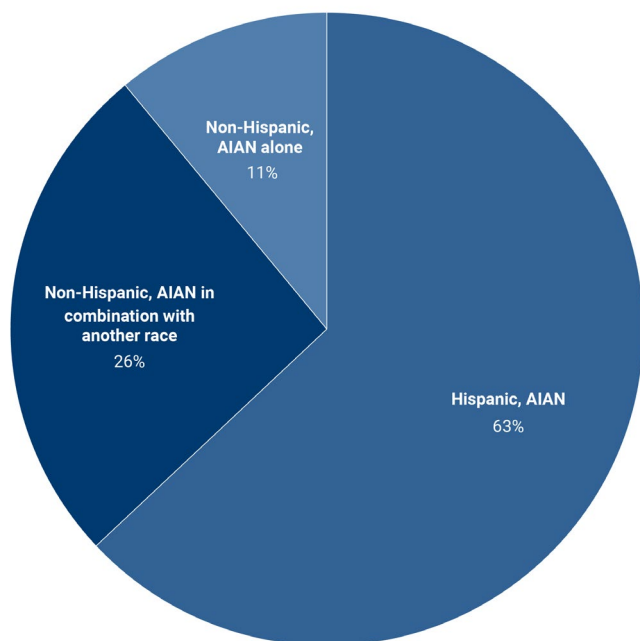
highest rate of any state.³⁰ This means that in many data sets about California, only about one in 10 individuals identified as American Indian or Alaska Native will be classified in that category, while nearly nine in 10 individuals will be classified as either Latino or Hispanic or as two-or-more races.

In 2024, partially in recognition of the challenges that existing data practices pose for smaller populations like Native Americans, the U.S. Office of Management and Budget (OMB) introduced new standards for measuring race and ethnicity in federal data. These standards are published in “Statistical Policy Directive No. 15: Standards for Maintaining, Collecting, and Presenting Federal Data on Race and Ethnicity” (a document also known as SPD 15).³¹ Within the standards is policy guidance that can help federal, state, regional, and local organizations collect and aggregate more useful data about Native American communities.³²

Most notably, the new guidance recommends two new approaches for aggregating and publishing data. Approach 1 is to report all individuals who identify as a specific racial or ethnic group alone or in combination. While this approach addresses historical undercounts by counting all individuals who belong to a racial or ethnic category, it also causes all categories in race and ethnicity data sets to add up to more than 100% of the total because the responses are not mutually exclusive. This issue can complicate analyses that seek to compare measures across different races and ethnicities. Approach 2 allows government agencies to report on as many combinations of race and ethnicity as possible provided that they meet a predefined population threshold. Rather than a large, catch-all “two-or-more-races” category, this approach would instead provide details on the various breakdowns of the different racial and ethnic combinations within the multiracial and multiethnic category. Meanwhile, the new SPD 15 guidance advises against using single-race categories, combined with a catch-all “two-or-more-races” category, which it calls Approach 3. Approach 3 is the common method for many existing demographic data sets. By choosing to embrace Approaches 1 and 2 rather than

FIGURE 3

Nearly nine in 10 American Indians and Alaska Natives (AIAN) in California are Hispanic or multiracial



SOURCE: Brookings’ analysis of 2020 Decennial Census data

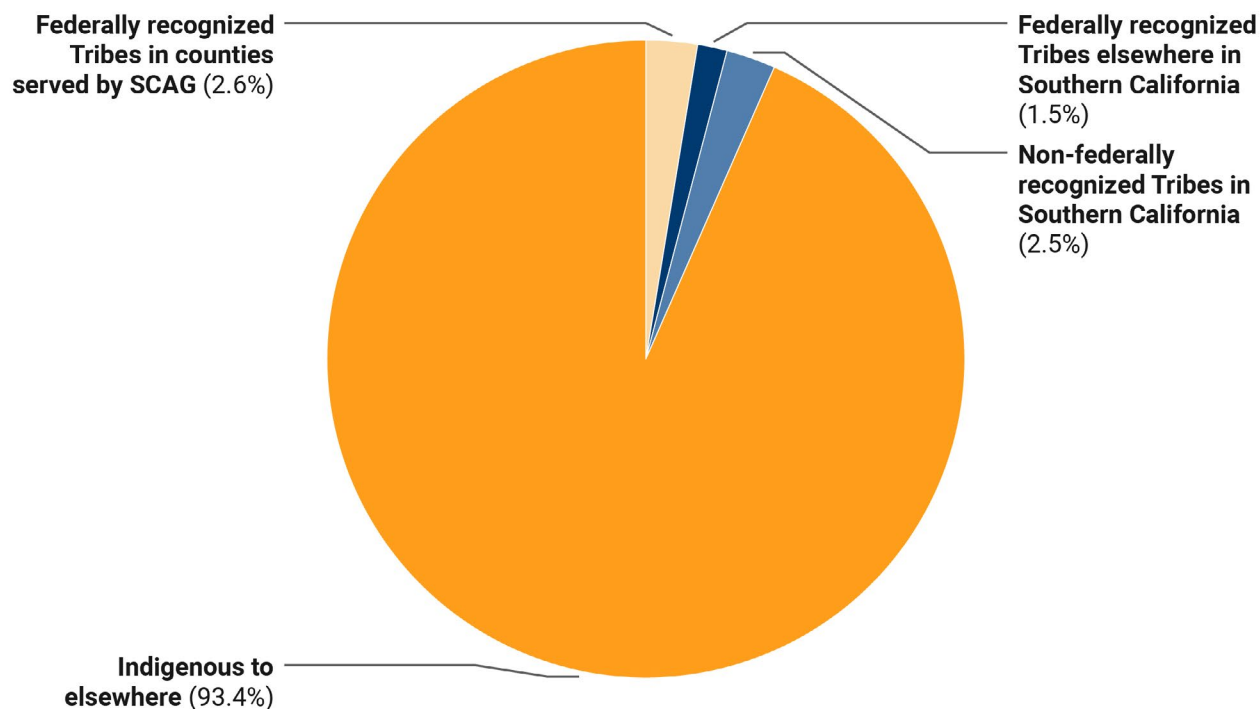
Approach 3, state, regional, and local agencies can help create more robust data on Native American populations.

In addition to being racially and ethnically heterogeneous, Native American populations in the SCAG region have origins in Native communities from across the United States and throughout other countries in the Americas. During the 20th century, a series of U.S. policies made Southern California a significant hub for Native American migration. In 1902, the Sherman Institute, one of the most well-known federal Indian boarding schools, opened in Riverside.³³ After leaving the boarding schools, Native American children and young adults were often sent to work in urban hubs like Berkeley and Los Angeles, a practice that fueled the growth of the urban Native American population in Southern California.³⁴

In 1956, Congress passed the Indian Relocation Act, which established vocational and job programs that sought to assimilate Native people into white culture by relocating Native people from across the country to urban areas.³⁵ In the 1950s and 1960s, the federal government also pursued policies to further increase assimilation by terminating its recognition of many Tribes (including 44 in California), dissolving their reservations, and moving thousands of Native people to city centers.³⁶ Riverside and Los Angeles experienced some of the largest population increases due to these policies.³⁷ With the influx of Native Americans through relocation and termination policies, Los Angeles and Riverside also became culturally significant hubs for voluntary Native American migration starting in the 1960s.³⁸ The cities became known as centers for Native American activism, bringing together an diverse array of Native American people from different

FIGURE 4

Nearly nine in 10 American Indians and Alaska Natives (AIAN) in California are Hispanic or multiracial



SOURCE: Brookings' analysis of US Census 5-year ACS estimates (2022)

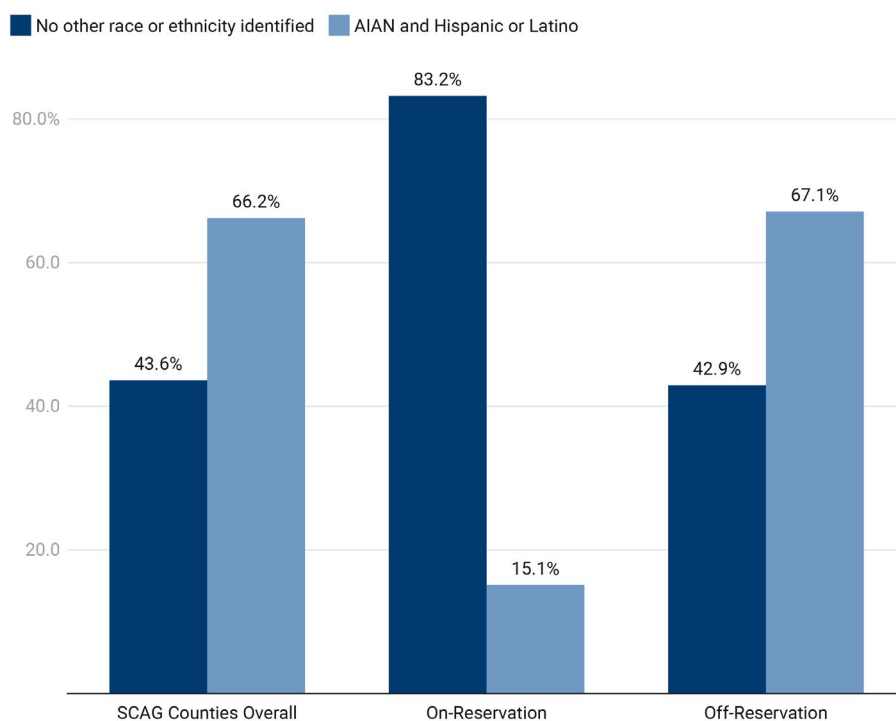
Native nations who formed pan-Indian coalitions that still serve residents in the SCAG region. The total number of Native Americans living in Los Angeles grew by more than 600% between 1960 and 1980, from less than 9,000 to 61,000.³⁹

This mass migration of Native people to urban areas in Southern California affects data on Native Americans in the SCAG region today. Most Native Americans in the region do not live on Tribal land, but in urban areas. Moreover, because of federal relocation efforts and migratory patterns in the 20th and 21st centuries, most Native American people in the SCAG region today are not indigenous to the region (see Figure 4). This has significant effects on data for Tribes in the region. Citizens of Tribes that are indigenous to the SCAG region are only a small percentage of the region's Native American population, and this makes it difficult to disaggregate data for local Tribes in federal and state data sources.

These distinctions are illustrated by the differences in identity between Native Americans who live on Tribal land and those who live elsewhere in the SCAG region. For example, ACS data from the Census Bureau shows that the share of American Indians on Tribal land who identify as American Indian alone is substantially higher (83% to 43%) than Native Americans who do not live on Tribal land in the SCAG region (see Figure 5). Meanwhile, the share of American Indians living on Tribal land who identify as Latino or Hispanic is substantially lower (15% compared to 67%) than the share of Native Americans who do not live on Tribal land.

FIGURE 5

Native Americans living on Tribal land are significantly more likely to be classified as single race and non-Hispanic in the SCAG region



SOURCE: Brookings' analysis of 2021 US Census ACS 5-year estimate data

CHALLENGE #4: DATA SETS ARE OFTEN DESIGNED WITHOUT TRIBAL INPUT, AND DATA SETS DO NOT ALWAYS REFLECT TRIBAL NEEDS OR INTERESTS

Data on Indigenous people does not always reflect the needs and priorities of Tribes and Native nations.⁴⁰ For example, while other levels of government can rely on tax revenue to fund government operations, taxes are frequently not an option for Tribes, many of which have small populations, have a significant number of low-income citizens, and are trying to maintain competitiveness with off-reservation communities. Instead, many Tribes operate Tribally owned enterprises that bring both economic growth and revenue to their respective Tribe and its region, but these Tribally owned businesses do not fit neatly into existing data sets.⁴¹ In other cases, Tribes may want to measure indicators that other levels of government are not interested in, such as Indigenous language proficiency.⁴² However, federal and state surveys are based on the requirements of laws and agency regulations at those levels of government, and the needs of Tribal governments have not historically been prioritized in developing statistical surveys.⁴³

Some efforts are underway at the federal and state levels to identify how existing data can be made more relevant for Tribes or how Tribal data can be utilized in federal and state data sets. For example, the Census Bureau has an ongoing initiative aimed at improving access to Tribal data by repackaging existing statistics and data sets across a variety of Tribal and Native boundaries. The Census Bureau is also working to create more incentives for Tribes to source data to bureau officials and is exploring how to calculate regional GDP for Tribal areas.⁴⁴ However, these types of efforts are nascent and need more resources to scale up.

Some Tribes have taken the initiative to improve their own data. Over the past 40 years, Tribes across the United States have undertaken initiatives, often in partnership with local universities, to survey

Tribal citizens or Native lands to improve the quality of Tribal data or the Tribe's own data capacity.⁴⁵ One example is the Swinomish Indian Tribe in the state of Washington's survey of Tribal lands, which focused on changes in land productivity under climate change; another example is the New Mexico-based Laguna Pueblo Tribal census, which was undertaken entirely by Tribal citizens.⁴⁶ Moreover, at least six Native nations across the United States have independent internal review boards to guide engagements with external data or research providers, and at least one Tribe, the Saginaw Chippewa Indian Tribe in Michigan, has a data governance board.⁴⁷ In the SCAG region, nonprofits like the Data Warriors Lab—led by Dr. Desi Small-Rodriguez at the University of California, Los Angeles (UCLA)—are helping to develop Tribal capacity independent of government actions, through efforts like traveling to Native nations to teach Tribal leadership and government staff how to collect and analyze Tribal data for governance. In addition, the non-federally recognized Fernandeno Tataviam Band of Mission Indians in the SCAG region has conducted a census of its Tribal citizens (see Box 1).

BOX 1

Limitations of government data sets for non-federally recognized Tribes

Non-federally recognized Tribes are described as such because the federal government does not recognize them as a Tribe with a government-to-government relationship with the United States. In some states, certain non-federally recognized Tribes have official recognition from their state government. In other instances, Tribes may be referred to as “unrecognized” because they do not have official recognition from either the federal government or the state in which they are located.

Tribal recognition has a significant impact on the quantity and quality of data available to Tribes. Federal agencies do not have a mandate to acknowledge unrecognized Tribes in their data collection, aggregation, or publication, and this severely limits the amount of data that these Tribes have available to them. For example, unrecognized Tribes are not included in federal demographic and economic data products such as the Census Bureau’s My Tribal Area tool.

One source of data for unrecognized Tribes comes from federal surveys that use self-identification data, meaning that respondents can self-select their Tribal identity even if the Tribe is not federally recognized. However, this data is not without its problems. Federal guidelines generally require a minimum number of Tribal respondents before the data is published, meaning that even the limited data collected on some smaller non-federally recognized Tribes may not be published. In addition, because self-identification is disconnected entirely from Tribal enrollment processes, this data may not reflect these Tribes’ actual demographics or economic conditions.

However, a lack of federal recognition does not equate to a lack of data in all circumstances. The Fernandeño Tataviam Band of Mission Indians, based in Los Angeles, not only maintains data on current land holdings and historical Tribal boundaries and places, but it also collects its own data on Tribal citizens via a Tribal census, which it used to inform its Tribal Climate Resiliency Plan.⁴⁸ In addition, the Tribe acquires and manages land through the Tataviam Land Conservancy, but these lands are not considered “Tribal areas” by the federal government because the Tribe does not have federal recognition.

CHALLENGE #5: SOME FEDERAL, STATE, AND LOCAL DATA REMAINS INACCESSIBLE TO TRIBES

In the SCAG region and across the United States, many Tribes are in a state of data dependency. Federal, state, and local government agencies; nonprofit organizations; and even for-profit companies collect data through surveys or other processes, and they store and control that data for their own uses. However, because Tribes disproportionately rely on data from outside sources, these non-Tribal entities often control data about the Tribes' lands or citizens. When Tribes are unable to access data about their lands and citizens, this disconnect hinders Tribal governance and undermines Tribal sovereignty.

There is wide variation in how accessible data held by non-Tribal government agencies is to Tribal governments. While Tribal leaders can always access publicly available data sets, that data may not have the level of detail needed by Tribal leaders, or the information may not be available for geographic areas of relevance for the Tribes. Some data about individuals is available as anonymized microdata, meaning that Tribes can download anonymized individual survey responses. However, this data is often more technically difficult to access and tends to require someone with specialized data skills. Moreover, because this data is anonymized, there is no way for Tribal leaders to confirm if it is actually about Tribal citizens.

Personally identifiable data about Tribal citizens is the most difficult for Tribes to access. Because of the confidential nature of personally identifiable data, the federal government, states, and localities have strict protections for it and significant restrictions on sharing it. As a result, Tribes often cannot access data about their citizens that other government entities control.

Similar challenges can occur with data about Tribal lands and natural resources, particularly for data held by state or local governments or by nonprofit or for-profit entities. Because Tribes

primarily interface with the federal government, state and municipal agencies typically have limited or no authority over Tribes, so they may not have structures in place to collect data about Tribes or Tribal lands or to share data that is collected. In other cases, state or municipal agencies may not know when they are required to consult with Tribes on data collection and aggregation or how to do so.

The federal government has taken steps to make personally identifiable federal data more accessible to certain groups, including Tribes, through the Foundations for Evidence-Based Policymaking Act of 2018. This law calls on federal agencies to create a standard application process for entities—including state, local, and Tribal governments; researchers; and other individuals—to apply for access to confidential federal microdata, which consists of personally identifiable survey responses. Individuals or entities approved through this process receive a designation known as special sworn status (SSS).⁴⁹



While this law provides a legal pathway for Tribes to access suppressed data, it nonetheless leaves several significant barriers. First, Tribal officials must proactively apply to access confidential data, and they can only access data sets for use in specific projects. This is not only a time-intensive process, but it leaves open the possibility that Tribal officials may be denied access to data. In some cases, Tribes may not know how to apply or may not have the technical staff needed to put together a successful application. The project-based nature of this status also means that Tribes typically cannot access all the confidential data that the federal government has on its citizens, just the data needed to complete a specific project. Second, some data sets can only be accessed on site at a secure Federal Statistical Research Data Center. In addition to raising issues of data sovereignty, needing to physically go to a secure facility can be a prohibitive barrier for Tribes in more rural or remote areas.

Third, due to recent federal cuts to statistical agencies, at the time of the report's publication in August 2025, the federal government was not accepting or processing requests for certain data, such as data from the National Center for Education Statistics or the Center for Behavioral Health Statistics and Quality. As a result, SSS designation is not a complete solution for Tribes to access data on their citizens. However, the existence of the SSS designation shows that there are pathways that federal, state, and local governments could take to securely share relevant data with Tribes to support their governance.





Tribal leaders and stakeholders in the SCAG region highlighted the range of data needs, challenges, and capacity issues that affect Tribes in the region

Through in-depth conversations with Tribal leaders, non-Native government officials, and other stakeholders serving Native American communities, this analysis identifies six key findings about the state of Native American data in the SCAG region.

1. Tribes engage with data in a variety of ways, and they have a strong interest in data that more accurately measures their populations and lands.
2. While Tribes face a wide array of different economic conditions, they see data as a key enabler for accessing federal, state, and regional funding to meet critical economic development needs.
3. The lack of understanding of Tribal sovereignty contributes to misunderstandings about Tribes as government entities.
4. Sample size limitations, Tribal boundaries, and other challenges inhibit the development of new data products by and for Native American communities.
5. Tribes vary significantly in their data capacity, priorities, desire for autonomy, and stances on regional or state involvement in data creation.
6. Many current government processes and structures struggle to support Tribal data capacity.

These findings represent insights from conversations with leadership from seven federally recognized Tribes in the SCAG region, one non-federally recognized Tribe, state and local government officials, nonprofit organizations serving Native communities, and Native American scholars and other individuals with expertise in data.

Because Brookings and SCAG were unable to engage with every Tribe and Native-serving organization in the region, these findings should not be seen as representative of all Tribes or every individual's experience. However, this section reflects the themes that Brookings heard consistently across different conversations with a diverse range of stakeholders.

FINDING #1: TRIBES ENGAGE WITH DATA IN A VARIETY OF WAYS, AND THEY HAVE A STRONG INTEREST IN DATA THAT MORE ACCURATELY MEASURES THEIR POPULATIONS AND LANDS

During these conversations, nearly all Tribal stakeholders could name multiple use cases for data that they leveraged across different government functions, including economic and business development, infrastructure investment, and spatial planning. Moreover, Tribal leaders were nearly unanimous in their belief that more could be done to ensure that government data sources accurately represent their populations.

Starting with demographic data, Tribal leaders consistently expressed that Census Bureau data, which remains the primary source of demographic information on Tribal citizens, does not fully represent their populations and economic conditions due to problems like small sample sizes, limited geographic breakouts, and data points that did not allow them to share the full context of reservation life. Many Tribal stakeholders also identified federal economic data sets that they felt did not accurately represent their Tribes and citizens, including federal data on wealth, income, and employment estimates. They also commonly

identified data about the health of Tribal citizens as inadequate; organizations working in the Tribal epidemiology space, for instance, named COVID case data and vaccination data as recent challenges.

Stakeholders said that these limitations harmed their efforts to engage in economic development and other governance functions, such as pursuing funding opportunities, planning infrastructure investments, or supporting the health and well-being of residents on Tribal land.

Tribal stakeholders also named a variety of nondemographic data sets that they used, including data sets focused on environmental quality, land use, business ownership, and other topics (see Box 2). However, they noted that when this data was available, it was often insufficient. Moreover, Tribal stakeholders confirmed that many types of data remain unavailable for reservation geographic areas or are inaccessible to Tribal governments.

BOX 2

Examples of relevant federal, state, and local data

Data encompasses a broad array of different information that describes Indigenous people, Tribal citizens, and Tribal lands. In conversations with Tribal stakeholders, Brookings consistently heard about seven categories of data that were of the most relevance for Tribal decision-making. Across each of these areas, there are examples of relevant federal and state data sets that Tribes have either used in the past or would like to use but do not have access to. The seven major themes are data about demographics, labor markets, businesses and entrepreneurship, geospatial mapping, the environment, health, and education.

Demographic data: This data pertains to the characteristics of Native American people and households within Tribes or communities. Major federal sources of demographic data include the U.S. Census Bureau's decennial census files and ACS data, including the My Tribal Area tool.

Labor market data: This data relates to the employment characteristics of residents on Tribal lands or of other Native American people. Major federal sources of labor market data include the Census Bureau's Current Population Survey, ACS data, and the My Tribal Area tool, as well as data from the Bureau of Labor Statistics.

Business and entrepreneurship data: This data is about the formation of new businesses and startup activity on Tribal lands and by Native American people. Major sources include the Census Bureau's Annual Business Survey, Longitudinal Business Database, Statistics of U.S. Businesses, and Business Formation Statistics data sets. Of note, there is no comprehensive federal government data set on Tribally owned businesses, a key source of Tribal economic activity and Tribal government revenue. However, in April 2025, the Center for Indian Country Development affiliated with the Federal Reserve Bank of Minneapolis released the Native Entity Enterprises Dataset (NEED), the first effort to compile a comprehensive list of businesses owned by Tribes, Alaska Native Corporations, and Native Hawaiian Organizations.⁵⁰

Geospatial and planning data: This type of data presents the physical mapping of Tribal lands or other land areas. Multiple federal agencies develop different forms of geospatial data for different purposes, including topographic data, local and regional planning data, and light detection and ranging (LIDAR) data that measures both at the earth's surface and below it. At the federal level, the Department of Interior's Bureau of Indian Affairs plays a significant role in mapping Tribal lands. In the SCAG region, SCAG maintains a Regional Data Platform that helps aggregate, standardize, and exchange geospatial data for stakeholders in the region.

Environmental data: This data measures the well-being of environmental assets and the nature of human interactions with the environment. Many federal, state, and local agencies gather environmental data. The U.S. Environmental Protection Agency (EPA) is a significant source of federal environmental data, but other sources include the Department of the Interior, Department of

Commerce, Department of Agriculture, and others. On the state level, the California Environmental Protection Agency maintains significant environmental data, as do other state agencies such as the California Department of Water Resources. Regional, county, and local organizations, such as water districts and utilities, also maintain relevant environmental data.

Health data: This data pertains to the health and well-being of Native American people or people living on Tribal lands. Major federal sources include the Centers for Disease Control and Prevention (CDC) and other agencies within the Department of Health and Human Services. In California, the California Health Interview Survey collects additional health data on state residents, and it has periodically included an oversampling of Native American residents (typically every 10 years).

Education data: This data relates to access and outcomes for students at every level of the education system, from K-12 through postsecondary education. Major federal data sources include the Department of Education's National Center for Education Statistics and the Census Bureau. On the state level, education data is maintained by state departments of education, and some data is held by individual school districts or schools. In higher education, state systems of higher education and individual universities also maintain a significant amount of data.

These seven categories were not the only types of data that Tribes identified. Rather, these were the most frequently identified sources of data used by Tribal decision-makers. Other data may have overlaps with multiple topics outlined above. For example, some data, such as water or sewer data, can be leveraged both for planning reasons and for environmental protection. Likewise, housing data cuts across both demographic data and geospatial and planning data, depending on the data set and the use case.

FINDING #2: WHILE TRIBES FACE A WIDE ARRAY OF DIFFERENT ECONOMIC CONDITIONS, THEY SEE DATA AS A KEY ENABLER FOR ACCESSING FEDERAL, STATE, AND REGIONAL FUNDING TO MEET CRITICAL ECONOMIC DEVELOPMENT NEEDS

One of the central themes in the importance of data for Tribal stakeholders was the ability to access federal, state, and regional grants and other forms of funding. Because Tribes typically do not have a tax base, grant-based funding flows account for a significant portion of their government budgets. As such, grant opportunities play an outsized role in the health and economic well-being of their citizens.

A core emphasis of Tribal stakeholders was that limited data harmed Tribes' ability to successfully access federal, state, and other grants. Tribal leaders identified data sets that did not allow them to break out population subgroups, data sets that used out-of-date or lagging data, and data sets that did not cover relevant geographic areas as examples of limitations on existing public data. Several Tribal leaders noted instances in which they were locked out of funding opportunities because sufficient public or private data was not available.

To get around these limitations, Tribal leaders have engaged with outside entities to help support their data work. Some Tribes partner with Native-serving consulting firms with expertise in Tribal economic development. Others worked with University Centers in the region; these are university-based economic development organizations designated

by the U.S. Economic Development Administration. These entities help Tribes gather new data and organize existing data in ways that can be used for the Tribal context.

For example, very few off-the-shelf public data sets are based on reservation boundaries. Tribal leaders said that outside organizations like consulting firms and University Centers help them transform off-the-shelf data into a format that is relevant for the reservation context. In other cases, Tribes may not have certain data sets available at all to them, so they must work with outside entities to create new data entirely. Examples of new data products that Tribes have created in partnership with outside entities include economic impact analyses demonstrating the wider community benefits of funding to Tribes beyond reservation boundaries or estimates of the current economic conditions of reservation residents and Tribal citizens when such data had been unavailable.

These data limitations affect Tribes of all resource levels. In discussions, less-resourced Tribes that would otherwise be eligible for needs-based funding reported that they struggle to access some funding streams due to data constraints. These Tribes also face additional resource constraints in applying for grants. For example, Tribal leaders noted that they have limited staff capacity to seek out grant opportunities and write grant applications. They also noted that they have less financial capacity to afford outside consultants to produce new data or analyze existing data needed for grant applications. In some cases, federal and California state agencies have been able to offer support for grant writing and data analysis. Examples include Bureau of Indian Affairs grant writing workshops, the California State Water Resources Control Board's Tribal Water Data Initiatives, and the California Department of Housing and Community Development's (HCD) California Indian Assistance Program (CIAP).⁵¹ But Tribal and state government interviewees framed these cases as the exception rather than the norm.

Tribes with greater fiscal capacity, which include several Tribes with significant gaming operations in the region, noted that they also face data-based barriers to accessing grants and other federal and state funding. While trust and treaty obligations are not needs-based, many federal grant programs are. These needs-based formulas often incorporate census data or data from other federal data sets. Tribal leaders told Brookings that these formulas can put certain Tribal communities at a disadvantage. When Tribes have success with economic development or business ventures, including gaming, this success can inflate the income and housing values on reservations in federal data. In some cases, these numbers reflect investments or per capita payments that the Tribe is making on behalf of Tribal citizens. In other cases, such figures may reflect non-Native residents moving onto Tribal land. When this happens, economic data can become delinked from the lived realities of many Tribal citizens, and Tribes can become ineligible for certain needs-based grants despite having a significant number of low-income Tribal citizens who would benefit greatly from grants and other funding programs.

During the discussions with Tribal leaders, many of them framed data challenges in immediate terms, focusing on topics such as funding and grant access as a first priority. Because of that, other topics like data sovereignty, which means the rights of Tribes and Native nations to collect and manage their own data, were discussed as important, but not as top of mind for some Tribal leaders.⁵² This may be due to the urgency of federal and state funding for supporting Tribal community and economic development.

When Tribal leaders brought up issues of data sovereignty, they often spoke about Tribally generated data. As such, it was often representatives of Tribes that had robust in-house data operations that provided the strongest sentiments about data sovereignty. However, several Tribes with less-developed data capacity took the position that non-Native government partners should be doing more to enable Tribes to

develop and own their own data, rather than acting on the Tribes' behalf. Some Tribal stakeholders highlighted the need for resources and best practices to inform their own approach to data collection and to help shape how federal, state, and regional government organizations engage in data collection on reservations and data sharing with Tribes.

FINDING #3: THE LACK OF UNDERSTANDING OF TRIBAL SOVEREIGNTY CONTRIBUTES TO MISUNDERSTANDINGS ABOUT TRIBES AS GOVERNMENT ENTITIES

In multiple sessions with both Tribal leaders and non-Native state government officials, stakeholders emphasized that many non-Native governing partners still do not have a strong understanding of Tribal sovereignty and that these non-Native officials often do not understand that Tribes are governmental entities. Multiple Tribal leaders said that they felt they were treated not as government partners in a peer-to-peer intergovernmental relationship, but rather as nonprofit organizations or even as private-sector developers.

Non-Native entities' lack of understanding about Tribal sovereignty and the legal status of Tribes leads to less data transparency and less collaboration with Tribal governments. Tribal leaders expressed that they at times feel like an afterthought when non-Native government entities create data products. Meanwhile, during discussions with state and government agencies, officials noted that capacity to engage with Tribes varies widely by agency and, in some cases, even across offices within an individual agency. In some cases, the level to which an agency or office understands Tribal sovereignty and partners with Tribes could be contingent on the specific individuals working in that agency or office. Individuals with more extensive experience working with Tribes tended to have a much more robust understanding of Tribal sovereignty and a stronger interest in working with Tribes, but officials with less experience working with Tribes often had a much weaker understanding

of Tribes and were less likely to center them in data products. Several Tribal leaders said that, in some cases, state or regional actors are reluctant to share data with Tribes because they incorrectly perceive them as a developer, akin to a private-sector property development organization, rather than as a partner government agency.

In addition to this variation in levels of experience, agencies and offices also have wide variation in the capacity and resources they have available to maintain robust relationships with Tribes in the region and across the state. State officials noted that agencies with fewer resources allocated to working with Tribes tend to also have weaker understandings of Tribes as sovereign governing entities.

"...stakeholders emphasized that many non-Native governing partners still do not have a strong understanding of Tribal sovereignty and that these non-Native officials often do not understand that Tribes are governmental entities."

In some cases, these misunderstandings of Tribes' status as sovereign governing entities have real effects on the implementation of programs. For example, several stakeholders mentioned clauses in economic development funding provisions across the local, state, and federal levels that require Tribes to waive their sovereign immunity. These sovereign immunity waivers have become a significant sore spot for Tribes in the region. Tribal leaders felt that these waivers put them in a position where they are forced to choose between undermining their rights as sovereign governments or refusing needed investments that would build Tribal capacity and well-being. These sentiments are consistent with past findings from Tribal law and economics

literature. As scholars David D. Haddock and Robert J. Miller have written, “many aspects of U.S. law upholding tribal sovereignty have only been defined and enforced in the past few decades. Tribes are thus understandably sensitive about being asked to waive these newly enforced powers for every little purchase of ten computers, for example.”⁵³

FINDING #4: SAMPLE SIZE LIMITATIONS, TRIBAL BOUNDARIES, AND OTHER CHALLENGES INHIBIT THE DEVELOPMENT OF NEW DATA PRODUCTS BY AND FOR NATIVE AMERICAN COMMUNITIES

In the interviews, Tribal leaders expressed an interest in developing new data products and leveraging outside data products to support Tribal decision-making. However, the discrete challenges outlined in the previous section of this report, such as small sample sizes and insufficient public data for Tribal lands, create barriers to developing new data products that could help Tribes govern.

Tribal leaders in the region who spoke to Brookings did not have any examples of data tools built by Tribes that relied on publicly available data. There are non-public data sets that Tribal leaders felt could provide more accurate estimates of Tribal demographics, such as classified federal microdata. However, Tribal leaders did not provide examples of times that they had leveraged that data, such as by applying for an SSS designation. Tribal stakeholders also mentioned state and municipal data sets that they felt could be of potential use, such as those related to environmental resources like reservoirs or local businesses. However, discussions with Tribal leaders surfaced few examples where state or local data holders routinely share non-public data on or about Tribal lands or citizens with Tribal leaders on a government-to-government basis.

These barriers raise questions about Tribal data sovereignty and governance, who has access to data, how data is stored, and what data is used for. For example, relying on a consultant to generate new Tribal data leads to questions of who owns

and stores that data after it is collected and used. Only a few of the Tribes interviewed as part of this process reported that they have data agreements; data infrastructure; or policies to store, share, or reuse data after relationships with consultants have ended. In some cases, Tribes did not have the leverage or capacity to fully engage with all these questions, as they needed to focus most of their resources on more immediate needs, such as economic development.

FINDING #5: TRIBES VARY SIGNIFICANTLY IN THEIR DATA CAPACITY, PRIORITIES, DESIRE FOR AUTONOMY, AND STANCES ON REGIONAL OR STATE INVOLVEMENT IN DATA CREATION

In the interviews, Tribal leaders noted that data analysis capacity varies across Tribes. Some Tribes have robust in-house analytics departments, while others contract with outside data analysis services. In some cases, particularly in less resourced Tribes, Tribal government leaders have relatively little capacity to engage in data work given more pressing needs. This variation is true between and within Tribes. Internally, data collection and use varies across different Tribal government agencies and programs.

Likewise, Tribal stakeholders reported that they have different priorities for governance, and thus different needs for data and for data systems. For example, when Tribal leaders and officials from less-resourced Tribes discussed how they use data for governance needs, they often framed their efforts around accomplishing specific goals or projects (such as an economic development study or a health project). Meanwhile, Tribes with more financial resources or larger economic development operations discussed the importance of data to their long-term governance and planning efforts.

Tribes also varied in their opinions of how involved state and regional agencies should be in data development. This variation in needs and priorities illustrates the challenges of having a one-size-

fits-all approach. For example, some Tribal leaders wanted to see more proactive involvement by state and regional government agencies in improving Tribal data, through efforts like developing an action plan on Tribal data. Others advocated for a balance between regional and state support and Tribal leadership that would enable Tribes to slowly and systemically scale up their own data operations.

“Tribes also varied in their opinions of how involved state and regional agencies should be in data development. This variation in needs and priorities illustrates the challenges of having a one-size-fits-all approach.”

Still others wanted more autonomy and recognition to do their own data collection with little external support or oversight. Some Tribes that produce their own data advocated for expanding the ability to self-certify Tribally generated data to access grants and to use Tribally generated data to validate state and federal data sets. Some interviewees expressed a sentiment that if Tribes are sovereign, then other government entities should respect their data. Some Tribal leaders told Brookings that they have been allowed to use their own enrollment data to apply for certain grants, but they indicated that this has not been done in a systematic and sustained way, or with structures and agreements for supporting the development of high-quality Tribal data systems.

Finally, some Tribal leaders expressed distrust of government-held data sets, including a skepticism about how census data would be used by the federal and state governments. These individuals also shared a reluctance to provide information to federal and state agencies. While this perspective was not the view of the majority of stakeholders that

Brookings spoke with, multiple stakeholders across different Tribes nonetheless expressed this view.

FINDING #6: MANY CURRENT GOVERNMENT PROCESSES AND STRUCTURES STRUGGLE TO SUPPORT TRIBAL DATA CAPACITY

Tribal leaders and non-Native government officials acknowledged that there is wide variation in how non-Native government agencies engage with Tribes; they also said that current policy design and government operations may inhibit the ability of well-intentioned state, regional, and local government officials to adequately support Tribal data needs.

Under federal and state law, non-Native state and local agencies have an obligation to consult with Tribes (see Box 3). However, as discussed above, Tribal engagement varies widely across different non-Native government organizations. Tribal leaders and non-Native officials noted that the structure of many state agencies, which have one or more designated Tribal affairs liaison(s), contributes to this variation. Interviewees noted that, in some agencies, Tribal affairs liaisons work frequently with their colleagues. In other cases, though, consolidating Tribal outreach into a single Tribal affairs office or liaison actually marginalizes Tribal affairs by creating an environment where most employees have relatively little contact with Tribes, so they have a limited understanding of how to engage with them. Interviewees also noted that there could be inconsistent engagement with Tribes, meaning that agencies sometimes develop deep relationships with certain Tribes while they have limited or no contact with others.

BOX 3

Overview of federal and California state Tribal consultation

The Congressional Research Service defines Tribal consultation as the formal dialogue between official representatives of Tribes and the federal government (or state governments) when a federal (or state) agency is considering undertaking an action.⁵⁴

Federal Tribal consultation: The U.S. Congress has not established a general Tribal consultation mandate, and there is no single statutory definition of federal-Tribal consultation. Rather, since the 1970s, the federal government has laid out a series of circumstances when Tribal consultation is required through multiple federal laws. These laws have been enhanced by presidential directives, including presidential messages to Congress, executive orders, and presidential memoranda, which clarify when and how federal agencies are required to consult with Tribes before taking an action.⁵⁵

California Tribal consultation: In addition to federal law, California Assembly Bill No. 52 (AB 52), passed in 2014, creates a Tribal consultation requirement and structure for lead state agencies undertaking a project covered by the California Environmental Quality Act.⁵⁶ Under AB 52, Tribes can submit a request for consultation for projects that will affect their traditional territory or a Tribal cultural resource. Notably, AB 52 broadly defines Tribes to include federally recognized Tribes and non-federally recognized Tribes included on the list maintained by the California Native American Heritage Commission. As with federal consultation, state law has been coupled with gubernatorial executive orders that further define when state agencies are required to undertake Tribal consultations, most notably Executive Order B-10-11 issued by Governor Edmund (Jerry) G. Brown, Jr. and Executive Order N-15-19 issued by Governor Gavin Newsom.⁵⁷

These dynamics can create challenges for non-Native agencies seeking to engage with Tribes on data-related issues. Because Tribal data needs and data capacity vary significantly, non-Native governmental organizations need a dedicated plan and robust, sustained outreach to ensure that Tribal data needs are truly understood and that regional actors can help meet those needs. One way to do so would be to explore ways to better fund, elevate, and empower Tribal liaisons, with the goal of helping other government employees understand the capabilities and needs of Tribes in the region.

Tribal leaders also discussed examples of state and local government data about Tribal lands or

Native American people that remains inaccessible to Tribes. These include data held by regional and state utilities and energy-related agencies, water agencies, land use regulators, educational institutions, and school districts. Tribal leaders expressed an interest in seeing policies refined to facilitate greater data sharing with Tribes. In other cases, Tribal leaders mentioned that limited communication between Tribes and state or local agencies could mean that Tribes are unaware of relevant data, even if it exists.



Regional, federal, and state policymakers can advance Indigenous self-determination in the SCAG region and nationally by investing in supporting Tribal data sovereignty and capacity

Given the complex array of laws, policies, practices, and other factors that affect Tribal data governance, meeting the data needs of Tribes and Indigenous groups will require flexible action across multiple fronts. While this report is written with regional government agencies as its primary audience, federal and state support is also necessary. As such, this report surfaces ideas for action at two levels: ideas for actions that regional government organizations could implement and ideas for actions that federal and state officials could take to smooth the pathway for, and amplify the impact of, regional efforts.

This report offers ideas for actions across four areas that reflect the findings of the report.

1. Implement data strategies for interacting with Tribes and Tribal data,

2. Invest in Tribal data capacity,
3. Support Tribal sovereignty and self-determination, and
4. Make government data more accurate and relevant to Tribes and Native American people.

While the ideas recommended in this section will not solve every outstanding data challenge facing Tribes and Native American people in the SCAG region or nationally, they could be important initial steps for enabling regional organizations to serve Native American citizens more effectively and for fostering deeper government-to-government relationships with the Native nations that they serve.

IDEA #1: IMPLEMENT DATA STRATEGIES FOR INTERACTING WITH TRIBES AND TRIBAL DATA

To set a foundation for ethical, meaningful, and mutually beneficial engagement, regional organizations should work in collaboration with Tribes and other regional stakeholders to develop strategies for interacting with Tribes and Tribal data. These strategies should emphasize data, but they could also encompass other relevant areas of formal and informal relationship building between Tribes and regional entities to strengthen mutual trust. To do so, regional organizations should explore two ideas for action that could be complemented by two state and federal ideas for action.

Ideas for regional action

- Develop a regional Indigenous data strategy
- Create MoUs to formalize regional government agencies' relationships with Tribes

Ideas for federal and state action

- Create federal and state Indigenous data strategies
 - Convene Tribes and regional organizations to share best practices
-

Ideas for regional action

Regional organizations that engage with Tribes regularly should **develop a regional Indigenous data strategy** in partnership with Tribes. This strategy could explore how government entities in the region could work with Tribes to produce, store, use, and reuse Tribal data. It could also establish principles for engagement between Native nations and researchers to ensure the ethical design of research and the use and ownership of data on,

about, or for Native nations and Native American people.

Implementing a data strategy would shift regions closer to international best practices. Indigenous-led movements across Canada, New Zealand, and Australia have established sets of principles that are being adopted into national legislation and policy (see Box 4 below). Within the United States, Native-focused research organizations such as the Center for Indian Country Development, affiliated with the Federal Reserve Bank of Minneapolis, have adopted Principles for Research and Data Use that can be adapted by regional organizations such as SCAG to guide their data engagements with Tribes and Native American communities.⁵⁸

Indigenous data organizations like the U.S. Indigenous Data Sovereignty Network (currently in the process of finalizing national principles for Indigenous data), or local academic institutions that specialize in Indigenous sovereignty, could provide the knowledge base to support strategy development. In addition, regional entities could partner with Native-led organizations to ensure that this process is guided by the priorities and expectations of local Tribes. In Southern California, this could include the Tribal Alliance of Sovereign Indian Nations (TASIN) and the Southern California Tribal Chairmen's Association (SCTCA).

BOX 4

The CARE Principles: Action-oriented principles for an Indigenous data strategy

While approaches to developing an Indigenous data strategy will differ depending on the priorities, needs, capabilities, and the culture of different Native nations, international efforts have coalesced around a set of universal principles.⁵⁹ The CARE principles—which stand for collective benefit, authority to control, responsibility, and ethics—are intended to guide the development of more effective and equitable policy that takes seriously the role of Indigenous people as custodians of their own data.⁶⁰ The CARE principles provide four overarching objectives for the use, reuse, access, and storage of data about, for, or collected by Indigenous peoples.

Collective benefit: This principle means that data facilitates inclusive development and innovation, improves governance and citizen engagement, and helps Indigenous people to realize equitable outcomes.

Authority to control: This means that Indigenous people have an inherent right to govern and control data for and about them and their lands. Indigenous people must be empowered to determine data governance protocols and must be involved in data stewardship when Indigenous data is held by other entities.

Responsibility: This means that those working with Indigenous data should be respectful of relationships with the Indigenous people that the data represents. This includes a commitment to use Indigenous data in ways that advance self-determination.

Ethics: This means that Indigenous people's well-being and rights should be a focus across the systems and infrastructure used for data use and storage. Core to this concept is collaborating with Native nations and Tribal leaders when assessing the benefits, harms, and future uses of data based on community values and ethics.

Canada, Australia, and New Zealand have used the CARE principles, or similar ones, to develop Tribal capacity for data governance.⁶¹ For example, The First Nations Information Governance Center in Canada published a set of principles to guide stakeholder engagement with Tribes on data issues. This has helped to inform the Canadian federal government's recent commitment to a government-wide Indigenous data strategy, including establishing First Nations data champion teams: government-funded positions for First Nations leaders who will help build a national network of First Nation-led regional data centers.⁶²

Similarly, in Australia public service agencies recently collaborated to publish a government-wide framework for Indigenous data governance.⁶³ The document, grounded in the CARE principles, was developed in partnership with Indigenous groups and data practitioners throughout Australia. It established guidelines for how agency staff should engage with Indigenous communities when designing new programs and policies or conducting research.

These international examples provide concrete evidence of how regions could approach and design an Indigenous data strategy. A common set of actionable best practices is crucial to facilitating long-term, transformative policy. These principles can provide a foundation for good governance and engagement with Tribes and for the creation of new policies and programs to develop Tribal capacity for economic development and governance.

Relatedly, regional agencies could also **create MoUs to formalize regional government agencies' relationships with Tribes** and Tribal associations. MoUs could set terms for the use and storage of Tribal data in a manner that supports Tribal sovereignty. They could also lay the groundwork for partnerships to advance mutual interests around data sets, data infrastructure, and data products that affect Native nations and Indigenous people in the region. By including mechanisms for Tribal representation, like enabling Tribal representatives

to advise or vote on the decisions of regional bodies, these memoranda would ensure that Tribes have a stake during decision-making processes that affect local Indigenous data. Developing a template MoU for the SCAG region could be part of formulating a regional data strategy, creating a new resource for other regional and local government agencies and Tribes (see Box 5).

BOX 5

Regional-Tribal collaboration in Southern California: The San Diego Association of Governments' MoU with the Southern California Tribal Chairmen's Association

A groundbreaking collaboration between regional organizations and Tribes can already be found in Southern California. In 2007, the San Diego Association of Governments (SANDAG), the MPO for San Diego County, entered into an MoU with the SCTCA to give Tribes a formal role in regional planning and policy decisions in San Diego County.⁶⁴ The county is home to 17 federally recognized Tribes and 18 reservations that account for 4% of the county's landmass.⁶⁵

One of the central deliverables of the MoU is the incorporation of Tribes into the development of the San Diego County Regional Transportation Plan. This is important because Tribes in the SANDAG

region are largely located in the more rural eastern portion of the county, an area that frequently lacks the resources needed to sufficiently maintain its roads and transportation systems.⁶⁶ Engaging with Tribes provides SANDAG with a greater understanding of the needs of Tribal communities and those of eastern San Diego County more broadly.

As part of the development of the Regional Transportation Plan, SANDAG and SCTCA periodically host joint Regional Tribal Summits to discuss Tribal transportation needs and other priority topics such as maintaining cultural resources and natural habitats and integrating Tribes more fully into the regional economy. Beyond the initial MoU, SANDAG has worked with SCTCA and Tribal leaders to develop more regular forums for Tribes to provide input into the regional planning process, such as its Interagency Technical Working Group on Tribal Transportation Issues, Tribal Taskforce, and quadrennial Tribal Summits.⁶⁷ A key deliverable from this relationship was the San Diego County Intraregional Tribal Transportation Strategy, most recently updated in 2022. SANDAG has also backed the framework with funding, by taking steps such as allocating \$5 million to two projects identified in the Intraregional Tribal Transportation Strategy.⁶⁸

Since 2007, SANDAG and SCTCA have entered additional MoUs to deepen their relationship. In more recent agreements, the two organizations have agreed to work jointly on grant opportunities to advance shared regional priorities. The two organizations collaborate on generating data, maps, illustrations, cost estimates, and finalized grant applications. In this regard, this relationship has created a new channel for Tribes and regional organizations to coordinate more closely on data needs.

As SANDAG has noted, the government-to-government relationship between Tribes and regional planning agencies, local governments, and counties is voluntary. This nearly two-decade-long relationship between SANDAG, SCTCA, and Tribes in San Diego County provides an example of the type of sustained partnership that regional organizations can develop with Tribes and Native American communities.

Ideas for federal and state action

Regional data strategies could be complemented by efforts to **create federal and state Indigenous data strategies**. While regional strategies are necessary to reflect the priorities and needs of Native nations in the region, federal and state strategies can help to standardize principles for partnering with Native nations across the state or country and can provide a mandate and rubric for regional action.

Second, state and federal agencies could **convene Tribes and regional organizations to share best practices** about Tribal engagement and data sharing. Both state and federal agencies have convening power that would allow them to

draw together an influential and diverse range of stakeholders to collaborate with Tribal leadership to set agency priorities and share best practices. In California, the Governor's Office of Tribal Affairs is already leading statewide efforts to encourage every state agency and department to meaningfully consult with Tribes in the state.⁶⁹ These efforts could be expanded to include best practices around data as well. These types of convenings could seed future forms of collaboration, policies, and legislation that enable or incentivize regional action.

IDEA #2: INVEST IN TRIBAL DATA CAPACITY

After establishing a strategy for working with Tribes on data issues, regional, state, and federal agencies could explore how to deploy resources to develop Tribes' internal data capacity. Strengthening Tribal data capacity would empower Native nations to access, produce, and utilize data to better govern their nations and citizens. While not every Tribe will want or need outside assistance with data work, regional organizations can be a critical partner for supporting those that do. To help Tribes develop their own data capabilities, regional, state, and federal actors can take the following actions.

Ideas for regional action

- Develop new data programs and tools in partnership with Tribes
- Communicate Tribal data needs to local, state, and federal government counterparts
- Engage with and fund local Indigenous-led data coalitions
- Expand internships and other opportunities for data-focused skill development for Tribal and non-Tribal youth

Ideas for federal and state action

- Fund Tribes and regional organizations to enhance their data capacity
- Provide technical backbones and expertise to support the development of new data tools

Ideas for regional action

Regional government organizations should **develop new data programs and tools in partnership with Tribes**. Doing so could involve several activities,

detailed below, which vary in scope and scale based on the capacity of regional organizations and the needs and priorities of Tribes.

First, regional organizations could invest in infrastructure to support Native nations in accessing regional, state, and federal data. For regional organizations with limited resources, this could include providing common data infrastructure that can support multiple Tribes' needs like subscriptions to private data sets or IT platforms. For example, during the interviews for this report, Tribal officials mentioned that SCAG was able to provide its constituent government agencies, including Tribal governments, with access to StreetLight, a transportation data set that Tribes could use to complement and augment their own data sets. In addition to increasing access to new data sources, better-resourced regional organizations may be able to provide pots of funding to facilitate Tribal data projects like Tribal surveys.

Second, to support Tribes earlier in their data journey, or Tribes that have data needs that extend beyond their current capabilities, regional organizations could provide more hands-on technical assistance. For example, regional organizations could partner with Tribes to develop digestible data best practices or data management checklists to guide Tribal data strategies. During the interviews for this report, Tribal stakeholders identified internal barriers to implementing and standardizing Tribal data practices, including variation in capacity across Tribal departments and a fear that codifying Tribal knowledge could undermine Tribal sovereignty. Having regional organizations co-develop best practices or checklists for Tribal government departments, a way to ensure that any materials produced through this process are then owned by Tribes, could provide a baseline for Tribal leaders to adapt data practices for their unique cultural contexts and support their underlying data capacity.

Third, regional organizations can help connect Tribes with trusted external researchers and

other service providers. For example, University Centers at the University of Southern California and Northern Arizona University's Economic Policy Institute have significant experience supporting Tribal economic development projects, including data-related projects. Given the national presence of the Economic Development Administration's University Centers program, regional organizations could work to connect Tribal officials and leadership to relevant centers. Additionally, regional organizations could help Tribal constituents to assess and vet potential consultants or other outside partner organizations.

These types of services could help more Tribes take advantage of state and federal funding opportunities. In the interviews, Tribal officials mentioned that public data sets like the Census Bureau's demographic and business formation data (which is required as part of some grant applications) often require technical manipulation to make the data reflective of Tribal demographics. In other cases, Tribal leaders said that Tribal governments simply lack the manpower needed to incorporate these data sets into grant applications. In those instances, Tribes are forced to seek help from outside organizations or miss out on grant opportunities entirely.

Fourth, regional organizations could explore how they can best provide user-oriented, free-of-charge data products for Tribes that do not have capacity to analyze their own data or enlist external support. The limitations of data about Tribes and Native American people outlined in this report mean that many off-the-shelf data products may not be relevant for Tribal needs. Some Tribes need data products in areas such as land use, the environment, and planning. Many regional organizations already have expertise in these areas. For example, SCAG manages a Regional Data Platform that provides data sets on land use, the environment, planning, and transportation; tools to streamline local and regional data collection; and ways to share data through a Local Data Exchange platform. They also provide technical assistance and a library of data learning and training materials.

Regional organizations could work with Tribes to transform existing public data into indicators that meet Tribal needs, and they could make this transformed data accessible to Tribal leaders via a secure dedicated portal. Regional organizations also could partner with Tribes to identify which existing publicly available data sets would be most critical for their needs. To respect the tenets of data sovereignty, these efforts should be managed consistently with the CARE principles or other best-practice principles on Indigenous research and data use. Any engagement with Tribes should be on a purely voluntary, opt-in basis, with Tribal leaders giving their consent for regional organizations to work with them on any data collection and transformation, and Tribes should retain ultimate control over their data. Regional leaders could look to New Zealand's Te Kāhui Raraunga portal (detailed in Box 6 below) as an example of global best-in-class efforts by Native and non-Native government entities to partner on data portal creation, access, and protection.

BOX 6

Te Kāhui Raraunga: New Zealand's efforts to expand data access for Indigenous people

New Zealand is a global leader in innovative approaches to collecting and sharing data with Indigenous Tribes. While there are clear differences between the New Zealand federal government and SCAG in terms of responsibilities for governing, New Zealand provides an example of the types of approaches that government entities can take to engage with Tribes and models of the types of data infrastructure that can be built to help foster Tribal data capacity.

In New Zealand, Iwi (New Zealand Tribal nations) have developed the concept of Māori data sovereignty, which adapts the concept of Indigenous data sovereignty to suit the unique perspective and history of the Māori people.⁷⁰ This approach is in part due to the Treaty of Waitangi, a foundational document for state-Iwi relations that sets a legal basis for Tribal self-determination in New Zealand. In modern interpretations of the treaty, data on or about Iwi and Māori people is increasingly seen as a “Taonga,” a treasure of tangible and intangible value, and is guaranteed explicit protections.

In response to an historical undercount of Māori citizens in 2019, Stats New Zealand (the federal government's lead statistical agency) and the Data Iwi Leaders Group, led through Te Kāhui Raraunga, an independent body of Māori leaders, signed a partnership agreement to pursue “data and statistics strategies and policies” that “enable the current and future data needs and aspirations of Māori throughout Aotearoa [New Zealand] to be met more effectively.”⁷¹

In collaboration with Iwi representatives, the New Zealand government's approach centers partnership and government-to-government relations with Tribes. The agreement gives the Data Iwi Leaders Group “equal explanatory power” to Stats New Zealand, meaning that neither entity dominates or dictates the relationship. Moreover, the agreement enshrines the principles of Māori data sovereignty, representing a commitment between both the government of New Zealand and the Iwi to uphold and act on these principles.⁷² The group meets twice yearly to track progress on key issues, including:

- Strategic issues, opportunities, and plans to strengthen understanding and trust in the relationship;
- Collective and common interests and needs; opportunities to improve Māori data outcomes; and the sharing of information and feedback for data strategies, initiatives, and outcomes;
- Approval and ongoing review of the work program to ensure that it continues to meet the requirements of the relationship.

One outcome of this agreement was the co-creation of Te Whata, a data platform for Iwi, which was created by the Data Iwi Leaders Group and Stats New Zealand.⁷³ The platform includes public data and protected Iwi-only data for the purpose of internal governance. Designed by Iwi leaders, the platform aims to deliver data in a way that is accessible and actionable for Iwi governance. The platform includes data profiles of Tribes with demographic information and measures of well-being and economic development as well as cultural information like the proportion of citizens who speak the Māori language and engage in cultural activities. Iwi also have control over their data via the nomination of an Iwi Information Manager who has the responsibility of tailoring a customizable dashboard of information on or about his or her respective Iwi as well as the power to hide Tribal information.

Next, regional organizations could use their strategic positioning to **convey Tribal data needs to local, state, and federal government counterparts**. Tribes experience wide variation in the level of engagement they receive from state and local agencies and offices that hold relevant data. In some cases, Tribes do not have direct connections with state or local agencies, while in other cases, whether due to statutory, regulatory, or other reasons, Tribes are unable to access data held by state agencies. In these instances, regional organizations can serve as partners for Tribes, using their convening power to facilitate connections between Tribes and agencies and amplify the data needs of Tribes to key policymakers and other non-Native government decision-makers.

Many Tribes are used to interacting with federal agencies and officials regarding data-related topics. As such, regional agencies should engage in a supportive role for Tribes, consulting with them about their major outstanding federal data needs and helping to emphasize to federal agencies the critical needs that regional agencies are hearing from Tribal partners in their regions.

Finally, there are a variety of Native-led and Native-serving groups focused on strengthening Tribal data capacity on the national, state, and regional levels. Regional organizations should **engage with and fund local Indigenous-led data coalitions** as a mechanism to develop Tribal data capacity.

Regional organizations can connect Tribal leaders to existing networking and peer-to-peer learning opportunities, and they can use their resources and convening power to support the creation of new networks in areas of need. In the SCAG region, for example, regional organizations should continue deepening their partnerships with organizations such as TASIN and SCTCA. National groups—such as the National Tribal Resilience Data Workgroup, which is an initiative by the Tribal Climate Health Project, and the UCLA-affiliated Data Warriors Lab, led by Dr. Desi Small-Rodriguez—originated in California and could be potential partner organizations. In other instances, Tribal leaders have been working with one another and with regional, state, and federal actors in formal and informal groups on topics such as developing geographic information system networks, improving the quality of climate data, and strengthening access to health data. Supporting the expansion of Indigenous-led data groups can help ensure that there are formal channels for Indigenous people to be heard and to have their input incorporated into federal, state, and regional data policies.

One outcome of these engagements could be that regional organizations work with Indigenous-led data coalitions to **expand internships and other opportunities for data-focused skill development for Tribal and non-Tribal youth**. Interns could be placed in positions within Tribal governments, Native-led nonprofits, universities, or regional and state government agencies across the region with

the goal of scaling up their data capabilities to serve their communities. Regional organizations could support this effort by identifying philanthropic partners to provide funding for paid internships, connecting interns with job opportunities, and hosting interns themselves.

Ideas for federal and state action

These regional efforts can be strengthened and scaled by additional support from state and federal governments. First, state and federal legislators could **fund Tribes and regional organizations to enhance data capacity**. State legislatures could create new funding streams for Tribes to support data initiatives. Funding should be broad in scope to allow Tribes to pursue flexible data projects that meet their unique needs. State legislatures could likewise provide funding for regional organizations to continue to deepen their partnerships with Tribes, including on data issues.

In addition to funding, state agencies can leverage their technical capacity to **provide technical backbones and expertise to support the development of new data tools**. Many state agencies have existing data teams with specific expertise in their areas of work. Some agencies and offices are already working with Tribes on data-related topics. For example, the California State Water Resources Control Board's Tribal Water Data Initiatives have worked with Tribes to develop an online mapping platform with information about water resources on Tribal lands informed by the expressed needs of local Tribal leaders.⁷⁴ In addition, the agency also runs training programs for educating Tribal leaders on how to monitor and track their own water quality. The California Natural Resources Agency also runs several programs directed at Tribes, including a Tribal Stewardship Policy and Toolkit that provides resources and runs workshops on land quality and management for Tribal leaders.⁷⁵ There are opportunities for more agencies to follow their lead.

For their part, more governors in other states can follow the lead of California and elevate their

respective states' Secretary of Tribal Affairs, or their states' equivalent officials, to cabinet-level status. Doing so can help strengthen the voice of Tribes and Native communities in state government, help state agencies improve their policies around Tribal data, and improve state government agencies' relationships with Tribes and Native American communities.

Federal actions can mirror these steps. For example, Congress can explore new funding streams for Tribal data, which can enhance the government-to-government relationships between the federal government and Tribes. The executive branch can also do more to engage with Tribes on issues of data capacity, including by protecting and scaling up existing initiatives. Examples of this type of work include the National Oceanic and Atmospheric Administration's efforts to keep Tribally sensitive LIDAR data confidential and to expand LIDAR data access for Tribal leaders, as well as efforts by the Census Bureau to create new MoUs for data sharing with Tribes (as outlined in more detail later in this report).

IDEA #3: SUPPORT TRIBAL SOVEREIGNTY AND SELF-DETERMINATION

Regional, state, and federal policies that limit access to Indigenous data can undermine Tribal governance. These policies create barriers for Tribes to access funding for economy-wide issues like climate resilience and smaller individual programs like business incubators, thus inhibiting community and economic development. In other cases, policies may unknowingly weaken Tribal sovereignty and government-to-government relationships. The actions below outline steps that regional organizations and state and federal agencies can take to support Tribal sovereignty and self-determination, with an emphasis on data sovereignty.

Ideas for regional action

To help Tribes gain better access to grants, regional organizations could **allow Tribes to provide their own data in funding applications**. Grant programs frequently default to using census data or other federal data sets for determining eligibility. While these federal data sets are generally seen as the most reputable, they are less reliable for Tribes. For some Tribes, federal data may underestimate Tribal needs. For others, it may provide an inaccurate representation of Tribal economic development indicators such as income levels or business development. In some instances, data on economic variables like employment rates may not be available for the right geographic area or timeframe, creating onerous or impossible burdens for Tribes.

Ideas for regional action

- Allow Tribes to provide their own data to access regional grants and funding

Ideas for federal and state action

- Explore alternatives to blanket sovereign immunity waivers for state- and federal-funded projects,
 - Give agencies more flexibility to waive grant requirements, including data requirements, for Tribes,
 - Increase Tribal access to public agencies' data about their citizens,
 - Develop secure online portals for Tribal governments to more easily access data about Tribal lands and Tribal citizens currently held by state and federal agencies
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Enabling more flexible use of Tribally generated data in grant applications could make funding accessible to more Tribes. Moreover, this change could also help to build trust between Tribal nations and regional agencies, demonstrating that agencies

recognize that data access is different for Tribes and that, as Native nations, they can be trusted to gather their own data on their citizens.

In doing so, regional organizations should explore how to best protect Tribal data and maintain consistency with the tenets of Tribal data sovereignty. For example, some grant programs have requirements that any application materials be made available to the public through federal or state Freedom of Information Act requests. In instances where this is applicable, regional organizations should explore ways that they can protect Tribal data when doing so is in the interest of Tribes. For example, regional organizations could find ways to allow Tribes to self-certify that they meet grant requirements, rather than require them to turn over extensive, and potentially vulnerable, data. In other instances, regional organizations could automatically designate Tribes as eligible entities for certain types of grants. These steps could help expand grant access to Tribes while working to avoid compromising the privacy of Tribal data.

Ideas for federal and state action

This change could be supported by state and federal action to update laws and policies to provide a more hospitable environment to Tribal governments. One important action would be for governments to **explore alternatives to blanket sovereign immunity waivers for state- and federal-funded projects**. Boiler plate waivers of sovereign immunity are sometimes included in state and federal grants and in contracts between private companies and Tribes. However, while these waivers can be important tools for encouraging external investment into Tribal economies, they may also be a non-starter for some Tribal governments, creating a barrier that holds back state and federal goals for grants to Tribes as well as Native nations' ambitions for development. In place of total sovereign immunity waivers, state and federal actors could explore alternatives that have more nuance around Tribal contexts. Some state agencies have already taken action to remove sovereign immunity waivers. For example, in September 2024,

HCD issued a memorandum that eliminated the need for Tribes to sign a limited sovereign immunity waiver to participate in most grant programs run by the department.⁷⁶ More agencies could adopt this approach. Drawing on ideas surfaced by the aforementioned scholars Haddock and Miller, other approaches could include rules prohibiting waivers in small deals; partial waivers or waivers only for specific Tribal assets; publicly backed performance bonds, insurance, or escrow accounts; or nonbinding arbitration provisions.⁷⁷

More broadly, state and federal policymakers could enact policies to **give agencies more flexibility to waive grant requirements, including data requirements, for Tribes**. As one example, in 2019 the California state legislature passed Assembly Bill 1010 (AB 1010), which requires HCD to meaningfully address Tribal access and participation in agency-funded programs. To do so, AB 1010 grants HCD's director the ability to modify or waive departmental program requirements to encourage Tribal participation.⁷⁸ AB 1010 also established CIAP, which takes a series of steps to increase Tribal participation in HCD programs, including by providing technical assistance to Tribes. CIAP also helps improve housing-related data for Tribes by providing support for analysis and accurate documentation of Tribal housing needs.⁷⁹

Relatedly, state and federal agencies should take steps to increase Tribal access to public agencies' data about their citizens. State and federal agencies, especially those engaged in resource or land management, typically hold data about the assets on, and the environmental quality of, Native nations' land. Yet Tribes often do not have access to this data. Empowering Tribes to have access to more data held by public agencies could build trust between government agencies and Tribal governments and could help Tribes pursue state and federal funding, measure citizen needs and Tribal priorities, and plan for threats like climate risks.

In the short run, federal agencies should reduce barriers for Tribal officials to gain SSS designations

to access confidential federal data about Tribal citizens. For example, the federal government could conduct proactive outreach to Tribes to inform them about the SSS designation and the different data sets that the federal government has available for access. They could also allow Tribes to designate certain Tribal officials as automatically eligible for SSS access, making them roughly equivalent to the Iwi Information Manager position used in New Zealand, and waive or expedite parts of the application process for Tribes trying to access data about Tribal citizens. Given the number of rural and remote reservations, the federal government could also make data about Tribal citizens available to Tribes through virtual access, rather than only offering in-person access at a Federal Statistical Research Data Center. Congress could also provide funding to federal agencies to train designated Tribal officials in using confidential federal data and fund infrastructure upgrades to Tribal data systems and processes to ensure that Tribal government buildings can meet the levels of security used at Federal Statistical Research Data Centers.

"State and federal agencies, especially those engaged in resource or land management, typically hold data about the assets on, and the environmental quality of, Native nations' land. Yet Tribes often do not have access to this data."

Finally, state and federal agencies could **develop secure online portals for Tribal governments to more easily access data about Tribal lands and Tribal citizens currently held by state and federal agencies**. Guaranteeing Tribal officials access to accurate data about their lands and citizens is an important policy to support Tribal sovereignty.

The need for Tribes to access accurate data has become even more critical as ongoing federal policy changes related to data confidentiality and data availability continue to affect the quality of data about Tribes and Native American people.

To ensure that Tribes have access to the most accurate data possible while continuing to respect individual confidentiality, state and federal policymakers could work to develop online data portals, in partnership and under the control of Tribes, to provide searchable, accurate, and secure data to Tribal leaders. Data platforms could mirror recent initiatives like those in New Zealand, as outlined above. By providing the data in a confidential clearinghouse, with Tribal input and control, these data portals could bypass the need to aggregate, omit, or add statistical noise (that is, random numbers) to data for Tribes with a small citizenry, and these portals could help enable access to data in the same way that a national, state, or regional government would have. On the state level, officials could explore how to make such efforts inclusive of non-federally recognized Tribes. One way to do so could be to mirror the approach taken in AB 52 and aim to make data available to all Tribes included on the list maintained by the California Native American Heritage Commission.

IDEA #4: MAKE GOVERNMENT DATA MORE ACCURATE AND RELEVANT TO TRIBES AND NATIVE AMERICAN PEOPLE

Making more data available to Tribal leaders and Native American-serving organizations is a critical step for supporting Tribal governance and Native American people. However, as outlined in this report, many existing federal, state, regional, and local data sets have significant data quality issues that affect their data about Native Americans. In some cases, the data may consist of indicators that are not relevant for Tribal needs. In other cases, agencies may have incomplete populations of Native American people, inadequate sample sizes, or other shortcomings that makes the data less useful for Tribes.

In response, regional, state, federal, and other government actors should take steps to improve the quality of data on Native American people in existing data sets.

Ideas for regional action

- Make regional data about Native American populations more comprehensive and accessible
- Encourage municipalities and other government agencies in the region to update their data policies to more accurately identify Native American people
- Develop and distribute model data policies for Native American-related data
- Develop trainings and other supportive resources for local government agencies
- Foster relationships between Tribes and other governments in their region

Ideas for federal and state action

- Fund efforts to make existing federal and state data sets more relevant for Tribes and Native American groups
- Provide Tribes with a bigger role in surveying their own residents for relevant data sets
- Change data aggregation practices to address undercounts of Native American people
- Increase the representation of American Indians and Alaska Natives in agencies that engage in data work

Ideas for regional action

Regional organizations vary in their data capacity. Some regional organizations collect and manage their own data sets about communities

and residents in their regions, others serve as clearinghouses for third-party data, and still others may have little or no involvement in data collection or aggregation.

Regional agencies that collect and publish their own data can take steps to **make regional data about Native American populations more comprehensive and accessible**. One way to do so would be for regional organizations to implement federal guidance issued in the OMB's 2024 document known as SPD 15, which laid out best practices for federal agencies in terms of collecting, aggregating, and publishing data about race and ethnicity. For example, when collecting demographic data about Native American people, regional organizations should ensure that Native American people of all racial and ethnic backgrounds, including multiracial and Latino or Hispanic Native American people, are properly included and disaggregated in data sets. Currently, many data sets include only single-race, non-Hispanic Native American people, an approach that ends up excluding nearly 90% of Native Americans in California. In addition, regional organizations should take care to ensure that Tribal affiliation data is collected in demographic data in ways that adhere to best practices around Tribal engagement.⁸⁰ Without Tribal affiliation data, any government data sets become less useful for Tribal partners. Regional organizations should leverage existing avenues of communication with Tribal leaders and data specialists to help identify how data sets can be made more comprehensive for Tribal leaders and Native-serving organizations.

Next, regional organizations can **encourage municipalities and other government agencies in the region to update their data policies to more accurately identify Native American people**. Local governments conduct a variety of data work that encompasses Native American people. For example, school districts have a significant amount of data on the educational outcomes and well-being of Tribally enrolled students, but they may not have direct relationships with local Tribes or may not be aware of the many shortcomings that exist in Native

American-related data. Regional organizations can take steps to help build relationships between Tribes and local government agencies.

To further facilitate this work, regional organizations can, in partnership with Tribes and Native-led organizations, **develop data governance templates for Native American-related data** to distribute to constituent government agencies throughout the region. Many regional organizations already have model data policies. For example, SCAG develops model data governance policies for distributing geospatial data and other information developed and maintained at SCAG. Working in partnership with Tribes, regional organizations could use similar approaches to develop effective governance policies for supporting Native American-related data. Regional organizations can complement this work by partnering with Tribal leaders and other Native American stakeholders to **develop trainings and other supportive resources for local government agencies** to help them improve their data processes to better support Tribes and Native American residents. Within this work, it will be crucial to establish clear data ownership and stewardship—most notably, by ensuring that Tribal governments serve as the primary data owners—to foster effective, sustainable, and culturally appropriate data governance.

Finally, regional government organizations can **foster relationships between Tribes and other governments in their region** to encourage dialogue and identify areas of shared governing interest. While the SCAG region contains many large cities, most reservations in the region are small, and some are rural or remote. Some Tribal leaders noted that this dynamic can leave Tribes feeling as though their interests are overshadowed by municipalities that are based closer to larger population centers. In response, regional organizations should facilitate introductions, partnerships, and deeper dialogue between Tribal leaders and non-Native government entities, with an emphasis on helping non-Native government entities understand the goals and priorities of Tribal leaders.

Ideas for federal and state action

While regional organizations have a central role to play in improving the quality and accuracy of data on Native American communities in their regions, ultimately state and federal policymakers will play the most significant role in ensuring that there is high-quality Native American data in most data sets.

First, Congress and state legislatures should **fund efforts to make existing federal and state data sets more accurate and relevant for Tribes and Native American groups**. More specifically, federal and state entities should grow the sample size of Native American people in existing data sets and adjust data sets to better meet the needs of Tribes.

To do so, national and state lawmakers should fund government statistical agencies to increase the sample sizes of Tribal communities in statistical surveys, allowing for more statistically significant estimates of Native Americans in key economic, health, and education data sets. To its credit, California has taken steps to this effect already. The California Health Interview Survey has included an oversample of American Indian and Alaska Native residents every 10 years, including oversamples in its 2001, 2011–2012, and 2021–2022 editions. State policymakers should provide additional funding to make this type of oversampling more frequent (such as having it done every year, rather than every 10 years) and to make it standard practice in all state surveys.

To complement these efforts, statistical agencies could identify ways to ensure that Tribal data remains accurate amid policy changes meant to protect privacy. On the federal level, this could include taking steps like releasing full decennial census data tables for Tribes with more than 100 people, as was done prior to 2020, rather than restricting data for Tribes with fewer than 1,000 people.⁸¹ Alternatively, statistical agencies could leverage secure portals such as those suggested in the previous section to provide Tribes with the most accurate data on their lands and citizens even if

public data needs to be adjusted for confidentiality reasons.

Next, Congress and state legislatures should provide dedicated funding to statistical agencies to make existing data sets more relevant for Tribes. This funding could be used to seek more robust Tribal input on how federal and state data sets can be adjusted to capture indicators of interest to Tribes or to create entirely new surveys focused on topics of interest to Native communities. This type of effort has been underway at the federal level since late 2023, with the Census Bureau undertaking a multiyear plan to design new experimental data projects focused on Native American communities. States and other federal agencies can use this federal initiative as an example of the type of engagement and products that can be developed with Tribes in mind.

In the long run, federal and state policymakers can explore how to **provide Tribes with a bigger role in surveying their own residents for relevant data sets**. Such partnerships already exist on the federal level, with Tribes playing an important role in supporting enumeration for the decennial census. Federal and state policymakers could provide Tribes with funding to conduct Tribal surveys designed by the Tribe that meet Tribal needs but that also include information that could inform relevant federal and state data sets (Box 7). Any data that Tribes provide to their state and federal partners could be done on a voluntary basis, with strict MoUs to govern the protection of data and Tribal data sovereignty.

BOX 7

The Osage Nation's groundbreaking data MoU with the Census Bureau

In 2022, the Osage Nation Congress passed a law requiring the Osage government to conduct a census of Tribal citizens every five years. The following year, the Osage Nation conducted its first national census, a comprehensive 86-question survey sent to all Osage Nation households. The Osage government received responses accounting for about 3,900 respondents, out of a total enrollment of about 25,000 Tribal citizens.⁸² Later in 2023, the Tribe published its initial census findings in a report titled *ᏱᏁᏍᏁᏁᏍᏁ ᏱᏁᏍᏁᏁᏍᏁ* (Counting the People).⁸³

During this time, the Census Bureau connected with Osage Nation Secretary of Administration Susan Bayro, a Tribal government official working to implement the Osage Nation census.⁸⁴ Through this connection, the Census Bureau began working with the Osage government to develop a pilot project to use data from the Osage Nation census to better inform Census Bureau data sets about the Osage Nation and Indian Country more broadly.

Over 2023 and 2024, the Osage Nation worked in cooperation with the Census Bureau to develop a groundbreaking MoU to voluntarily share data from the Osage Nation census to inform Census Bureau data sets. Under this MoU, which runs for five years, the Osage Nation will provide the Census Bureau with aggregated data on topics such as employment, income, household information, education, housing, health and wellness, and military service sourced from the Osage Nation census.⁸⁵ No individual-level data will be shared with the federal government, and all data sharing is strictly voluntary. The Census Bureau, in turn, will use this data to refine its own surveying and data products to ensure more accurate information about Indian Country.

This historic collaboration provides an example of what can be done when the federal government operates in a spirit of cooperation with Tribes on data issues. Regional, state, and federal government agencies should explore future opportunities to partner with Tribes in the SCAG region that conduct their own data work to help refine other data products and make them more accurate for Indian Country.

Federal and state statistical agencies should also **change data aggregation practices to address undercounts of Native American people.** To start, state governments should require state agencies to fully adopt the recommendations of SPD 15. Given that most Native Americans, including nearly nine out of every 10 in California, are either mixed-race or Latino or Hispanic, it is of particular importance for California state surveys to include data on multiracial and multiethnic Native Americans. The state could also consider empowering and funding the Office of Tribal Affairs to work with state data agencies to ensure that their data practices capture the full population of Native American people in the state and to embrace other data practices that are of high priority for Tribes in California.

Federal agencies should likewise embrace SPD 15's findings by publishing data on Indigenous people of multiracial and multiethnic backgrounds. In the future, the federal government should explore additional steps, such as delinking questions about Native American identity from the race and ethnicity question by making them separate questions in government surveys.⁸⁶

To enable federal and state governments to foster effective partnerships with Tribes and Native American communities, it will be critical that federal and state policymakers do more to **increase the representation of American Indians and Alaska Natives in agencies that engage in data work.** A critical piece of feedback that Tribal leaders and state government officials provided during this project was that Native American people remain underrepresented in local, state, and federal government agencies, and this weakens those agencies' relationships with Tribal government partners. Increasing the presence of Native American staff can help agencies better understand Native American and Tribal priorities for data work and can also help strengthen these agencies' communication and partnerships with Tribal leaders.⁸⁷

Tribal sovereignty should be the ultimate goal of improving data for and about Native nations. Actions taken by federal, state, and local governments and statistics agencies should work toward developing the capacity of Native nations to hold, manage, and produce their own data. This means working toward data repatriation, including by letting Tribes lead on the collection and ownership of data, rather than solely improving access.

The SCAG region can prioritize efforts to craft strategies and other tools to support Tribes' data needs

While the previous section lays out a broad set of actions that regional, state, and federal actors can pursue, regional actors cannot pursue every idea surfaced in this report at once. As SCAG and other regional actors evaluate their next steps to support Native American data needs, they should consider prioritizing the following four actions.

- 1. Develop a regional Indigenous data strategy** in partnership with Tribes, Native American-serving organizations, regional government agencies, and state government stakeholders. Developing a strategy in collaboration with Native communities is essential for ensuring that any subsequent data efforts meet the needs of Native constituents.
- 2. Develop a MoU** with Tribes and Tribal associations in the SCAG region to bolster regional governance. While Tribes are SCAG members and have voting membership on SCAG's policy committee, there is no formal MoU between Tribes and SCAG to guide the government-to-government relationships in the region. Such an agreement would formalize the roles and responsibilities that SCAG has in supporting Tribes and Tribal data, and an agreement can also serve as a signaling mechanism to other regional government entities in the SCAG region about how best to engage with Tribal governments on issues of data and governance.
- 3. Review existing regional data products** to determine where regional data practices can be adjusted to improve data quality for Tribes. This could include identifying opportunities to oversample Tribal communities in regional data sets, supporting updated data aggregation practices in regional and local data, or developing innovative agreements for sharing

data and resources to help Tribes scale up their own data work.

- 4. Seek funding to support Tribal data needs** such as building new data products, facilitating technical assistance for Tribes, and providing grants to Tribes to grow their own data work. Sources of funding could include the state legislature and state agencies, regional or national philanthropic partners, or corporations and business groups with a vested interest in improving regional economic development.

In taking these initial steps, the SCAG region can serve as a model for regions nationwide on how to develop effective partnerships with Tribes and Native American communities at a moment of policy ambiguity.



Conclusion

Improving the quality of data about Tribes and Native American people is integral to supporting Tribal sovereignty and Native American well-being. As discussed in this report, data is an essential ingredient to help Tribes govern effectively. This report identifies critical issues affecting Native American data quality in the SCAG region and beyond. It also provides ideas for action that regional, state, and federal government officials can take to support Tribes and Native American people.

While this analysis identifies steps forward, these steps should not be seen as the only actions needed to solve the outstanding issues about Native American data. Additional substantive engagement, sustained over time, is needed to continue surfacing the many data challenges facing Native American communities in the SCAG region. Such engagement will also be needed to identify, refine, and tailor solutions for the many diverse Native American communities in the region and the nation. Most

importantly, regional and national organizations must elevate and listen to Tribal leaders and other Native voices on issues of Native American data. In this regard, the most effective way to support Native American communities is to understand and fully enable Tribal sovereignty. In doing so, regional and state government organizations in the SCAG region and across the United States can take another significant step toward creating regions that are economically prosperous and inclusive while generating genuine opportunity for all.

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