Hopi Tribe

Comprehensive Economic Development Strategy (CEDS)

Hopi Tribe

Comprehensive Economic Development Strategy (CEDS) Plan

2021/2022 Update

COTA HOLDINGS

THE HOPI TRIBE

COTA HOLDINGS

Submitted to the Hopi Tribe

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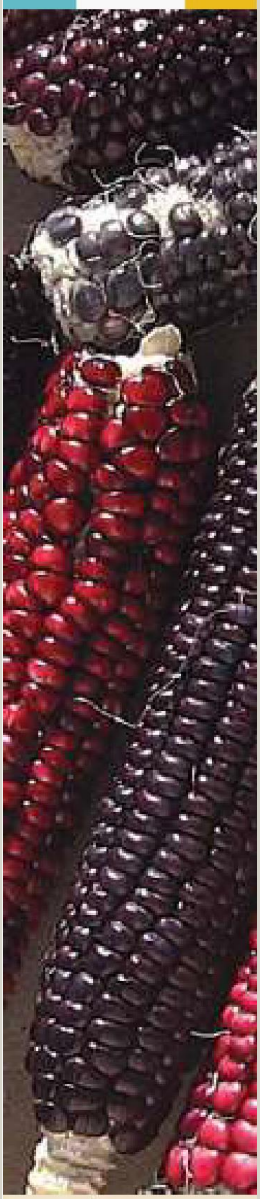

Village of Mishongnovi
Delores Coochyamptewa
Mervin Yoyetewa
Pansy K. Edmo

First Mesa Consolidated Villages
AAlbert T. Sinquah
Dale Sinquah
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Villages not represented by Council
Village of Shungopavi
Village of Oraibi
Village of Hotevilla
Village of Lower Moencopi

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Despite centuries of western civilization encroachment, exploitation and development, the Hopi people have largely retained their language, traditions and culture into the present day.

EXECUTIVE SUMMARY

Hopi Tribal Planning

The last three decades have witnessed a remarkable resurgence of Indian Nations. After centuries of turmoil, oppression, attempted subjugation, and economic deprivation, Indian Nations have asserted their rights and identities and have built and rebuilt political systems in order to implement self-rule. They have begun to overcome what once seemed to be insurmountable problems of poverty and social inequities stemming from centuries of oppression, including long periods of racial and cultural genocide.

Tribes are the only entities in the United States that can act both as a government and a business. The status of Tribes as sovereign entities within the United States allows Tribal enterprises to take advantage of many unique opportunities. Most of these advantages are not well understood by the private sector, or for that matter by many Tribes. Some of these advantages include:

- Self-regulatory authority
- Gaming
- Super 8(a) marketing (Section 8(a) of the Small Business Act)
- HubZone status
- Foreign Trade Zone Status
- Tax advantages
- Preference contracting
- Public Law 93-638 government contracting
- Government grants
- Guaranteed loans
- Tax exempt bonds and financing
- Tax equity financing
- New Market financing
- EB-5 financing
- Private joint ventures
- Taxation authority
- Section 17 Tribal Corporations

The economic development strategy put forth in this CEDS Report is partly based upon some of the above advantages as they may apply to Hopi based on the potential to create Tribal revenue relatively quickly with minimal risk and capital.

Economic development planning at Hopi has taken on added importance due to the recent closure of regional coal-fired generating stations and coal mines causing the termination of the coal royalty contract between the Hopi Tribe and Peabody Coal, resulting in the loss of roughly 80% of the Tribe's non-federal income.

POTENTIAL NEW and EXISTNG RECENT PROJECTS SUMMARY			
PROJECT	PROJECT DESCRIPTION	ESTIMATED COST	POTENTIAL FUNDING OR COLLABORATORS
Hopi Health Center 638 Contract (Salaries, management and benefits can stay the same.)	An IHS 638 contract can provide substantial new revenue to the Tribe if coupled with third-party insurance billing.	$60k for an attorney to assist with securing the contract	Indian Health Services, Health Center Management.
Helium Extraction (no environmental or water repercussions.)	Hopi ranch lands are in the area of the purest helium in the world. The price of helium has increased several fold.	Finance with outside investment while under Hopi control	DOI and private consultants are excited about the potential to work with Hopi to develop this resource.
Solar Energy Development (potential to bid on power generation)	APS will issue an RFP for 350MW of renewable power over the next two years.	Finance with outside investment	DOE/ DOI/ Cota Holdings/ tax equity developers
Tribal Utility	An RFP for a Feasibility study for a Tribal power Utility has been issued.	$90k	Cost for the feasibility study has been funded.
Hopi Tribe Arsenic Mitigation Project (HAMP)	Will provide clean water to several Villages - project in process.	$20M	Funded through EPA & IHS
Tourism Development - potential to benefit Villages and cottage industry if done with cultural sensitivity.	Strengthen Hopi Tourism Dept. and Market the Hopi Tribe as a destination in U.S., Europe and Asia - while controlling tourism.		BIA, USDA, ANA etc.
Hopi Tribe Arsenic Mitigation Project (HAMP)	Will provide clean water to several Villages - project in process.	$20M	Funded through EPA and IHS
Tourism Development	Establish regulations/system to protect, conserve and protect areas like Blue Canyon and Dawa Park; build Hopi Museum		EDA/ DOI/ ANA/ USDA etc.
New Modular Community - Tawa-Ovi	New modular units have been set-up for offices and housing.	Funded - CARES Act	
SBA 8(a) Construction Co.	The federal government will be spending on infrastructure. A Tribal 8(a) firm can joint-venture and have substantial marketing advantages.	Minimal cost	Private Sector Partner
Gaming	The Hopi Tribe has permits for 900 class III Gaming machines that can be leased or set-up off-Reservation.		Potential Private Sector Partner
Tax Code	A tax code to tax non-Tribal members can bring in extra revenue	Minimal cost	
Village Projects	New developments can subsidize community service businesses in Villages such as small groceries.		Villages, Tribe
Agriculture	Add- value to Hopi successful cattle operation; hydroponic growing; industrial hemp & carbon sequestration.		USDA, NAAF, foundations, BIA
Broadband	Expand Hopi Telecomm		Tribal Broadband Connectivity Program

As of the writing of this plan, a $1.9 trillion dollar Covid Relief Bill was recently passed by Congress that includes more than $31.2 billion for Tribal governments and Native communities in areas such as health and substance abuse, economic development and agriculture, energy development, justice issues and Tribal infrastructure among other initiatives. The Hopi Tribe needs to monitor new federal grant money carefully and use the CEDS to be ready to submit new applications for appropriate projects.

Hopi has been minimally engaged in this new era of Tribal economic development because of a variety of factors. Hopi is isolated and completely surrounded by the Navajo Reservation. Some of the economic development activities that Hopi has engaged in have at times come at a price. This is true regarding coal development whereby Hopi was left with less than an optimal business arrangement that did not yield what the resource was worth, while coal mining depleted Hopi water resources causing environmental damage.

Shortly after the loss of the Hopi/Peabody coal contract was publicized, the Tribe received well over a dozen business proposals, mostly from companies looking for large investments from the Hopi Tribe for speculative and unproven start-up ventures. A workshop was held that was related to the CEDS process with the Hopi Tribe Economic Development Corporation (HTEDC), which represented most of the entities dealing with economic development regarding how to vet business proposals and evaluate risk. A Hopi business vetting manual was also developed. As a result, no investments were made in outside companies. However, a list was made of alternative low-risk, internally developed opportunities that could be lucrative for the Hopi Tribe. This list forms the basis of the projects recommended in this CEDS Plan and is summarized above:

Hopi leadership began searching for economic development projects that would meet Hopi needs for minimizing risk and Tribal investment, would take advantage of singular advantages that Hopi has and could remain wholly or largely under Tribal control with the potential to generate substantial revenue relatively quickly to make up for the loss of coal revenue.

Several projects have the potential to more than make up for lost coal contract revenue, including IHS 638 contracting with third-party insurance billing, helium development, tourism development and off-reservation gaming.

The Tribe made the decision not to lay-off staff as a result of the loss of coal contract revenue. This will seriously impact Tribal finances and reserves in the future if alternative sources of revenue are not developed.

The Hopi Tribe developed a robust response to the COVID crisis that served to limit cases on the Reservation,. Among other measures the Tribe went through extensive lockdown periods. The Tribe did not layoff any staff, however, and they were encouraged to telecommute. Connectivity and the lack of hardware, however, were issues that seriously curtailed Tribal operations. Many non-Tribal businesses on the Reservation were forced to lay-off staff.

INTRODUCTION

Introduction to the CEDS Plan

This Comprehensive Economic Development Strategy (CEDS) was developed for and by the Hopi Tribe as part of a systematic approach by the Tribe's Council, villages and departments to further its mission of creating a self-sustaining economy, income and employment opportunities that is consistent with the Tribe's community, cultural and environmental values.

The 2021 CEDS update is an amalgam from similar documents that have been produced by the Hopi Tribe over the past few years. Prior CEDS plan have been produced by Joelynne Ashly, by Brian Coal of Building Communities, Inc., and by Cota Holdings, LLC. In addition, separate economic development plans have been completed by for the Hopi Tribe, including studies on Village economic development and land jurisdiction, mineral development, tourism development, Indian Health Services 638 contracting, energy development, and SBA 8(a) marketing. This 2021/22 CEDS update draws upon those plans as well.

In order to meet federal EDA (Economic Development Administration) requirements there is some emphasis on updated demographic information (pages 17-24), the impact of the CEDS Pandemic on the Hopi Tribe and villages (pages 52-55), information on progress and adjustments to prior plans and goals (pages 60-64), and a schedule of new and continuing goals (pages 60-64).

This CEDS was designed to facilitate effective decision making by creating a framework that the Hopi Tribe can use to evaluate potential economic development options. This framework comprises the Tribe's expressed needs, values, and priorities and an analysis of the characteristics of the Tribe and the regional economic environment. This CEDS then uses the framework to identify economic opportunities and outlines a plan to pursue them.

A CEDS Plan is also concerned with the number of Jobs created/or retained, the number, types and amount of major investments undertaken in the region, the reduction in unemployment rates and the number of group business training sessions. This information has been impacted by the COVID-19 Pandemic, and by the fact that the Tribe was under strict lockdown for much of the time that the current CEDS update was put together. At the same time, there were investments made during this period: The HAMP (Hopi Arsenic Mitigation Project) which is a $20 million project funded by the federal EPA (Environmental Protection Agency) and IHS (Indian Health Services) to bring healthy drinking water to Hopi Villages (pages 30-34); the construction of the Kykotsmovi Travel Center (pages 65-66); and infrastructure and new modular office development at Turquoise Wells/ Tawa'ovi. The Hopi tribe is also in the process of finalizing a lease on Tribal fee simple land for the potential construction of a 100MW solar array.

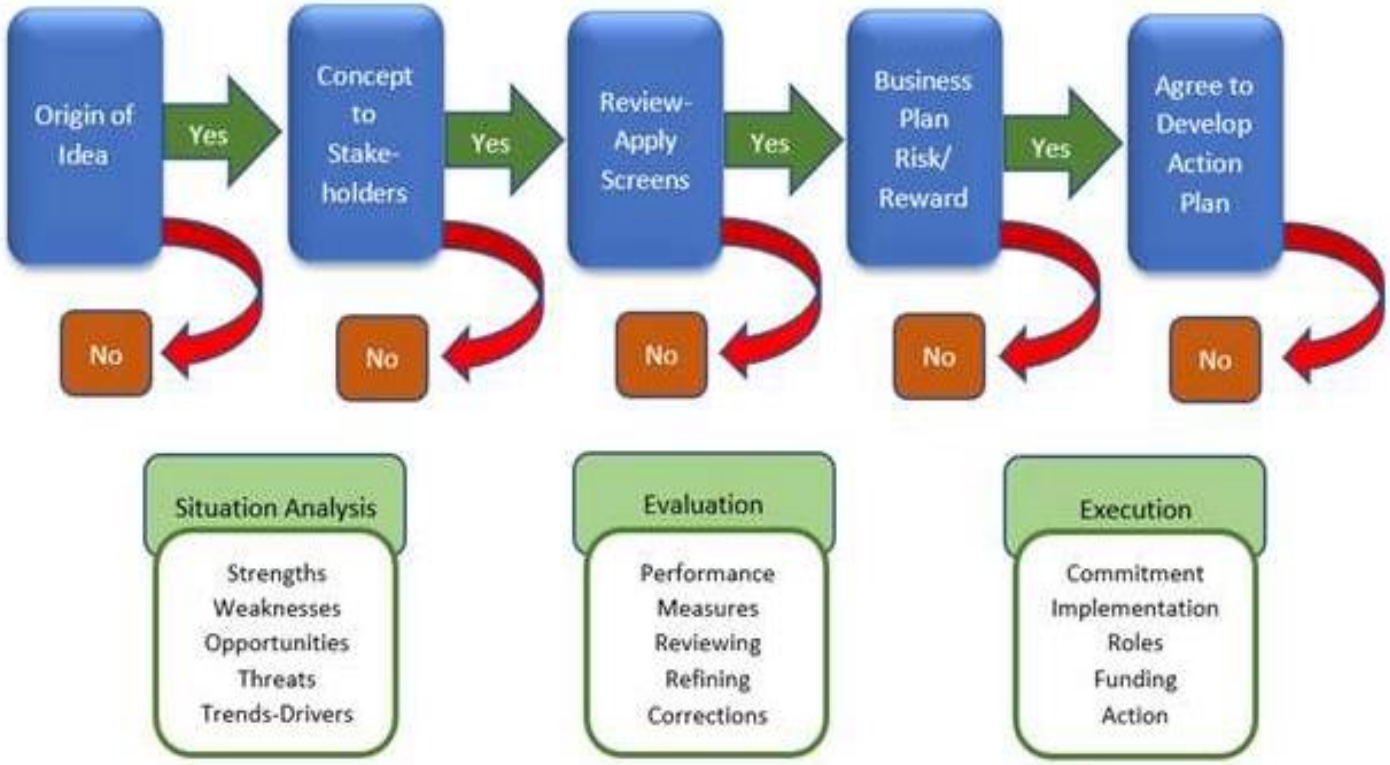
These investments created mostly temporary construction jobs. The Kykotsmovi store, however, will create about seven full-time jobs. Of note is that the Hopi Tribe decided not to lay-off staff as a result of the coal

revenue cutback or COVID-19. There have been some temporary lay-offs from private businesses on the Reservation during the lockdowns. The most up-to-date unemployment data that could be found is for 2019 (pages 22-23). No business workshops were scheduled due to the COVID-19 Pandemic and the lockdowns.

The CEDS Planning Process

An effective CEDS Plan is part of the Economic Development Administration (EDA) requirement for financial consideration and support. The EDA designates a Tribe as its own Economic Development District (EDD) making it eligible for project funding if the Tribe has completed a recent CEDS plan and specific projects are discussed. The EDA makes funds available for publicly or Tribally owned infrastructure that will support job creation. A well-done CEDS Plan can also assist in the preparation of other economic development grant applications and funding by providing data and by referencing projects as documented in prior planning efforts that often make new applications more competitive. Adoption of a CEDS by the Tribal Council indicates broad support for projects mentioned within the Plan.

Most contemporary CEDS Plans are 1) tailored to the specific needs of those responsible for implementing it, 2) capture true and complete background information regarding the characteristics of the affected community, 3) Identify potential economic challenges, opportunities and strategies for economic development based on that background, and 4) engage broad participation from the targeted community. A CEDS plan is general in nature, however, and can serve as an overview of broad opportunities that Hopi administration, The Tribal Council, the Hopi Tribe Economic Development Corporation (HTEDC) and Villages can then agree to prioritize and pursue. Once projects are identified, comprehensive business plans should be commissioned that outlines implementation steps, funding strategies, feasibility, risk and potential financial returns to the Tribe.



A CEDS Plan typically encompasses background information and demographics, describes regional challenges and opportunities, involves broad participation, and provides strategic direction for an economic development Plan of Action, as well as a plan to measure results.

When prepared for the EDA, a CEDS should include the following:

- **Summary Background**: A summary background of the economic conditions of the Tribe and region;
- **SWOT Analysis:** An in-depth analysis of regional strengths, weaknesses, opportunities and threats (commonly known as a "SWOT" analysis);
- **Strategic Direction/Action Plan**: The strategic direction and action plan should build on findings from the SWOT analysis and incorporate/integrate elements from other regional plans (e.g., land use and transportation, workforce development, etc.) where appropriate as determined by the EDD (Economic Development District) or community/region engaged in development of the CEDS. The action plan should also identify the stakeholder(s) responsible for implementation, timetables, and opportunities for the integrated use of other local, state, and federal funds;
- **Evaluation Framework**: Performance measures used to evaluate the organization's implementation of the CEDS and impact on the regional economy.
- **Resiliency:** Many definitions of economic resilience limit its focus on the ability to quickly recover from a disruption. However, in the context of economic development, economic resilience becomes inclusive of three primary attributes: the ability to recover quickly from a shock, the ability to withstand a shock, and the ability to avoid the shock altogether.

  Establishing economic resilience in a local or regional economy requires the ability to anticipate risk, evaluate how that risk can impact key economic assets, and build a responsive capacity.[4] Resiliency measures can assist the Hopi Tribe to deal with the loss of coal revenue, the COVID-19 Pandemic and environmental issues such climate change and drought. The Tribe has put many measures in place to deal with these issues, including this CEDS Plan update.

Hopi Tribal Planning

The Hopi Tribe's and Village elected officials will set the policies and plans that will guide the departmental staff in implementing strategies aimed at diversifying the Tribe's economy away from the former dependency upon coal revenues. By diversifying the Tribe's economy through strategically planned and implemented economic development the Hopi Tribal Council along with the Villages will have the opportunity to create a self-sustaining economy that reflects the core Hopi traditional and cultural values that have sustained the Hopi in their homeland since time immemorial.

4 Comprehensive Economic Development Strategy (CEDS) Content Guidelines, US Economic Development Administration - 090820

Since at least the late 1990's, the Hopi Tribal government has worked to generate economic development through the purchase of commercial developments off the main Reservation as a source of revenue and as an investment for the Tribe. The ranch lands located on I-40 are the Hart & Drye Ranch, the Clear Creek and Chevelon Ranch; the Aja Ranch; and 26 Bar Ranch near Springerville. There are also the agricultural lands in La Paz County and on the Cibolla property. Additionally, Hopi lands that have been purchased include commercial properties in Flagstaff, Sedona, Winslow, and Holbrook. The purchase of these assets will help the Tribe improve and diversify Tribal government revenues.

The Village and Clan authority over lands and sacred sites are included as part of the CEDS. The CEDS will be utilized as a document not only for planning economic development, but also as a means of protecting Village's right to develop their own plans for future housing, small to major infrastructure improvements/ developments and other initiatives within each village's jurisdiction. Village efforts are included in the CEDS so that the document can create awareness for all members, leaving the Villages to handle its own growth according to its own decisions as time goes forward.

The Hopi Comprehensive Economic Development Strategy will be a guide for the Tribal Council, the Villages and the people to be utilized for applying for federal, state, and local funding opportunities that will assist the Tribe in facing the challenges of building a sustainable homeland in a remote reservation environment with few direct links to the regional and national economies.

Cultural Factors

The relative isolation of the Hopi people and their continued existence in their traditional homeland have contributed to the maintenance of strong cultural traditions. The Hopi are one of the few Tribes that have never been at war with the United States and so do not have a treaty. Because the Hopi live in an isolated and arid region their land was not usurped, and they were left alone by the colonizing powers to a larger extent than many other Tribes. This did not entirely stop the governments of Spain, Mexico and the United States, along with Catholic, Mormons, Mennonite and other churches, to try and change the ways of the Hopi, mostly with little to show, except for substantial hardship inflicted upon the Hopi people.

A tradition of independence and self-sufficiency, along with strong Hopi culture have meant that the Hopi people have not participated in economic development and Tribal businesses to the same extent as some other American Indian Tribes. This has partly been through a lack of opportunities and challenges brought about from relative isolation, but also by choice. For example, some Hopi Villages are not electrified and will remain that way preferring to maintain a traditional way of life. The Hopi Tribe has also voted down gaming on the Reservation.

Hopi cultural traditions and beliefs are intricately intertwined into the decision-making process when it comes to allocating land for use in economic development projects or selecting which projects to pursue. The *November 29, 2011 Hopi Potskwaniat* (Hopi Strategic Plan) defines Hopi Values as: *Preservation, practice and protection of the religion and ceremonies, cultural customs and practices; language, arts and crafts, etc., of the Hopi*[5].

Because of its importance in Hopi culture, land use issues can sometimes present challenges due to required approvals and permits for economic development for capital construction for housing, commercial buildings and other types of infrastructure. Traditional Hopi practices have strong ties to the land and natural resourc-

5 Hopi Potskwaniat, November 29, 2011 pg 10

es. For example, the ongoing traditional practice of dry farming in an arid homeland continues to be a very visible aspect of Hopi life. Land practices and relations to clans and clan lands create binding limits for each village as they work to create their own economic development ventures through land approvals for housing and small commercial business sites. Across the main Reservation as a whole, land use will continue to be constrained by traditional land values. The Hopi Tribe will continue to face case-by-case decision-making resolutions of land use issues when it comes to deciding locations for future economic development.

Village-based Outreach and Economic Development Priorities

All Hopi villages are experiencing annual population growth. The traditional villages must deal with ownership issues which are complicated when it comes to clan, farm, home and/or village lands. However, under the Hopi Tribal Government, some lands are being set aside for future communities that do not fall under strict land classifications per the traditional *Kikmongwi.* With this parallel plan for future economic development, the difficult dilemma facing the Hopi people is the task of maintaining Hopi values and other community values, while living and operating within a larger, more dominant society. Finding a delicate balance to co-exist within the two worlds is difficult but necessary to achieve the Tribe's vision for the future without having to sacrifice the "Hopi way".[6]

Some villages continue to practice the traditional form of leadership and do not have elected individuals representing them on the Hopi Tribal Council. The "majority rule" western perception continues to be a point of contention when long time respect and understanding for the Kikmongwi traditional knowledge and ways have been in existence for hundreds of years prior to the "majority vote".

The Hopi Tribe engaged the services of consultants to assist Hopi Villages to identify and implement projects that address the pending jobs and budgetary crisis stemming from the closure of the Black Mesa Mines and the termination of the Hopi/Peabody Coal Company contract. From December of 2017 through September 2018 over 40 face-to-face meetings were held with Village leaders, staff and volunteers.

The following tables shows the meeting activity for the 11 Villages/Communities that chose to participate in the process along with Village work plans and economic development projects.

Outreach Meetings								
Village/Community	December 5-7, 2017	January 23-26, 2018	March 12-15, 2018	April 17-19, 2018	May 15-18, 2018	June 11-15, 2018	July 24-26, August 1, 2018	August 27, 2018
Bacavi						◎		
Lower Moencopi	◎	◎	◎	◎	◎	◎	◎	
Kykotsmovi	◎	◎	◎	◎		◎		
Mishongnovi							◎	◎
Sichomovi	◎	◎	◎	◎	◎		◎	
Sipaulovi				◎	◎	◎		
Shungopavi				◎		◎	◎	
Spider Mound		◎	◎	◎	◎	◎		
Tewa				◎				
Upper Moenkopi		◎	◎	◎	◎	◎		
Walpi						◎		

6 Hopi Potskwaniat, November 29, 2011 pg 10

Phase Three Work Ian Village	Priority	Projected Activity
Bacav	Yet to officially designate priority project	Offering business planning assistance to the Community Service Administrator for a preliminary agriculture-related business development project.
Hotevilla	Still awaiting invitation for first meeting; no projects identified	To be determined.
Kykotsmov	Land use plan including community mapping and land ownership identification	Drone-based mapping services were completed; final Land Use Plan yet to be delivered
Lower Moencopi Village	Poosiwlelena project development	Existing project documentation has been reviewed; initial work has been completed to refine the project location parameters. Continued development of the project should be conducted as a part of a broader commitment to address the land and infrastructure requirements for the project.
	Hydroponics project development	Funding from the Economic Development Administration (EDA) Assisting Coal Communities (ACC) has been committed to the Hopi Tribe for this project. Feasibility analysis being completed.
Mishongnov	Yet to officially designate priority project	To be determined.
Shungopavi	Grinding Mill Business Plan	The project priority was changed in the Sum mer of 2018 from "water filtration project" to "grinding mill." The next step for the project might be the development of a business plan.
Sichomovi	Tourism development strategy	This project has been funded by the Economic Development Administration (EDA) Assisting Coal Communities (ACC) program. The Tourism Strategic Plan has been completed.
	Mesa geological analysis	Outreach has been conducted to the United States Geological Survey (USGS). Pending the response from USGS and potentially from universities, this analysis may proceed.
Sipaulovi	Marketplace project	Up through August 2018, it was presumed that this project would be positioned for a grant request for Indian Community Development Block Grant (ICDBG) funding. Potential conflicts amongst Villages and Clans caused the project not to be submitted for ICDBG funding in early 2019. This situation is in flux at the moment.
Spider Mound	Updated Land Use Plan	The drone-based mapping activity has been completed and a report is in process for Yuwehloo Pahki Community. This will enable their engagement with the Joint Village Strategic Plan (JVSP) to be more successful.
Tewa	Eight projects are under consideration as the priority project for Tewa.	Awaiting invitation by Village to focus upon project selection and implementation.
Upper Moenkopi Village	Administrative office space project	The Village is coordinating with the Tribe to gain consensus on the historic ownership situation of the building and any current environmental hazards (asbestos, for example). Grant writing services for the project can begin once preliminary issues are resolved.
Walp	Outhouse system	Assistance is being provided to understand outhouse system alternatives and funding sources. Grant writing services can then be offered.

Prioritization of Projects (as of September 2018)										
Village/ Community	Action Item	Type of Service								
		Business/Marketing	Capacity Building	Engineering	Analysis	Grant Writing	Housing	Assessment	Land Use Planning	Project Development	Strategic Planning	Village Outreach
Bacavi	Five projects are in the preliminary discussion stages	X				X				X		
Hotevilla	Outreach efforts to engage the Village have yet to result in a meeting.											
Kykotsmovi	Land Use Plan including community mapping and land ownership								X			
Lower Moenkopi Village	Poosiwlelena project development						X				X	
	Hydroponics project development	X					X				X	
Mishongnovi	The first meeting with Mishongnovi Village took place in July 2018											
Shungopavi	Grinding Mill project					X				X		
Sichomovi	Tourism Development Strategy										X	
	Mesa geologic analysis and recommendations				X							
Sipaulovi	Marketplace Project	X			X	X				X		
Spider Mound	Update Master Land Use Plan								X			
Tewa	Eight projects are in the preliminary discussion stages	X			X	X			X	X		
Upper Moenkopi Village	Administrative office space project					X				X		
Walpi	Outhouse system					X				X		
Multiple-Village Services	Joint Village Strategic Plan										X	
	Hopi Tourism Strategic Plan										X	

BACKGROUND

Region

The limited population base on the Hopi Reservation, even with the additional population of the non-Hopi communities of Winslow (population of 10,194), which is about 60 miles from the center of the Hopi Reservation, and Holbrook (population of about 5,000) about 90 miles distant, comprises a small local trade area and labor market. The regional trade area grows to nearly 33,000 with the inclusion of neighboring Navajo towns such as Tuba City, adjacent to the Hopi village of Moenkopi and U.S. Route 160 on the northwestern portion of the Reservation. Adding Flagstaff, Arizona and Gallup, New Mexico as well as the bordering Navajo Census Designated Place (CDP) areas, the trade area expands to just over 120,000. Still, to reach the larger population centers from Hopi involves considerable drive time.

Northeastern Arizona is part of the Four Corners region where the states of Arizona, New Mexico, Colorado and Utah meet. The Four Corners regional economy is based upon fossil energy resources, primarily oil, gas and coal. The San Juan Basin, which is mostly in New Mexico, but extends into the border area of northeastern Arizona, is the second largest natural gas field in the world, with over 40,000 drilled wells. The energy sector, including coal mining, has provided good paying, skilled work for generations of area residents.

Navajo Generating Station

Starting in 1963, one of the largest industrial developments in the country was initiated on the Colorado Plateau in the Four Corners region of Arizona and New Mexico. The burgeoning metropolises of Los Angeles, Phoenix and Albuquerque spurred an immense need for power. Large coal deposits were found to exist in the Four Corners region far enough away from the cities so as not to produce pollution, but close enough to deliver cheap power. Over the next few decades power plants were built, and coal mines were opened to fuel them. An all-out effort to tap these energy resources led a coalition of 21 utility companies from Arizona, California, New Mexico, Colorado, Nevada, Utah and Texas to join forces as Western Energy Supply and Transmission Associates (WEST). Efforts to develop these resources impacted:

- The division of joint-use ancestral lands through the 1974 Navajo- Hopi Land Settlement Act.
- A federally imposed building moratorium for Navajos and Hopi on Partition Lands (Bennett Freeze).
- The relocation of Navajo and Hopi people.

Several power plants and mines were constructed on Indian land, mostly on the Navajo Reservation, but also on Hopi lands. Especially in the early days, Tribes would receive minimal compensation in the form of royalties. Later, the operating budgets of the Navajo and Hopi became heavily dependent upon coal rev-

enues and thousands of high paying jobs were created for Tribal members and non-Tribal members alike. Very few Hopis worked at the mines, however. The Kayenta Mine has a Navajo Preference Clause fostering limited Hopi employment. Distance is also a factor.

The prior CEDS documents identified and reviewed the current external national and state policies regarding climate change and the economic challenges and threats posed by this issue for the Hopi Tribe through the Clean Air Act (CAA). The national movement has swayed the pendulum from fossil fuels to renewable energy. The demise of the U.S. coal industry was largely brought about by hydraulic fracturing and horizontal drilling technology used to extract natural gas. The resulting glut of natural gas and the decline in gas prices caused utilities to increasingly shut-down coal fired power plants in favor of natural gas fired plants.

The partition lands will likely continue as an obstacle to development caused by vestiges from the past unless an effort can be mounted for change.

The shut-down of the Navajo Generating Station and the Mojave Generating Station along with the Black Mesa mines resulted in the recent termination of the Hopi/ Peabody coal contract. Having no tax base, the Hopi Tribe over the last 40 years relied on its Black Mesa coal leases with Peabody Energy to produce the bulk of its non-governmental revenues. The coal revenues have been relied on historically to produce 88% of the Hopi Tribe's General Fund – the revenues that are used to fund the essential governmental services provided by the Tribe to its people.[4] Therefore, Hopi economic development is now more important than ever. The closure of the Four Corners power plants and generating stations has resulted in a major economic decline in Northeastern Arizona and the loss of thousands of high paying jobs.

At the same time, the region south of Hopi has been experiencing fast population growth. According to US Census data Coconino County population has been growing at an estimated average rate of about 3% per year from 2010- 2014. The main population center in Coconino County is Flagstaff. Flagstaff is home to Northern Arizona University and is the only regional population center with an amount of manufacturing, including fluid power process machinery manufacturing, dog and cat food manufacturing, surgical appliance and supplies manufacturing, sanitary paper product manufacturing and turbine and turbine generator set manufacturing.

Navajo County has grown 10.2% from 2000-2010 (an average rate of 1% per year). Navajo County includes population centers of Holbrook (adjacent to Hopi) and Show-Low. Yavapai County, south of Coconino, has experienced population growth of more than 30% from 1990 to 2015. 2015 (average of 1.2% annually). Population growth within the region is being driven largely by retirees moving into less expensive rural areas with an ideal year-round climate, scenic attractions and comfortable amenities. The implication for Hopi is that strategically located hospitality, visitor venues, tourism development and retirement housing including RV facilities are businesses that are in demand from a regional and demographic perspective.

4 Analysis of Economic Impacts on the Hopi Tribe and Navajo Nation of a Stringent NOx BART Decision for the Navajo Generating Station, March 1, 2010, Pg. 39. Prepared for the Hopi Tribe. ICF Resources,

The Hopi Tribe

The Hopi Tribe was in part a creation of the U.S. Government and economic interests motivated by the desire to have one official entity to negotiate with regarding mineral leases. Prior to contact with the U.S., Hopi was a culture rather than a Tribal organization. The Hopi developed and survived as part of an autonomous village system governed by clan leaders and consensus driven decision making. Hopi Villages still maintain a level of autonomy that is responsible for a challenging governing environment as the Hopi attempt to reconcile a more conventional Tribal government system that was imposed on them with semi-autonomous traditional village governments. There are several Villages that still do not participate directly in Hopi Tribal government.

The U.S. Government first attempted to create a Hopi Tribal Government as part of the 1936 Indian Re-organization Act. This set-up conflicting jurisdictions between traditional Village Governments and the Hopi Tribal Council along with issues of legitimacy. The original Hopi Tribal Council lasted for seven years, from 1937 to 1943, and was disbanded primarily because Hopi traditional leaders refused to recognize it.

In 1938, Congress enacted the Indian Mineral Leasing Act, which provided that “lands within an Indian reservation may, with the approval of the Secretary of the Interior, be leased for mining purposes, by authority of the Tribal Council or other authorized spokesmen for the Indians”. In 1944 geologists working for a subsidiary of Standard Oil requested a lease to drill within the 1882 Executive Order Hopi Reservation. An opinion was issued by the federal government in 1946 stating that “the rights of the Navajo within the area...are co- extensive with those of the Hopis with respect to the natural resources of the Reservation.” In order to negotiate leases, the Hopi Tribal Council was revived through an effort led largely by non-Hopi interests.

On April 24, 1943, the Hopi Reservation was enlarged by an area known as “Grazing District Six,” which designated about 650,000 acres of land surrounding the Hopi mesas (within the 1882 Executive Order Area) as exclusively Hopi land. District Six placed a boundary around the Hopi Villages on the First, Second, and Third mesas.

Congress enacted a law in 1958 authorizing the Hopi and Navajo Tribal Councils to participate in a lawsuit to determine the rights and interests of the 1882 Executive Order Area. In 1962, the District Court, in a case known as Healing v. Jones, held that, except for the Hopi Reservation District Six land, the Hopi and Navajo Tribes have joint, undivided, and equal interests to the surface and subsurface land, “including all resources pertaining thereto”.

The Hopi Tribe was in part a creation of the U.S. Government and economic interests motivated by the desire to have one official entity to negotiate with regarding mineral leases.

In 1955, the BIA and the University of Arizona College of Mines completed a detailed study of mineral resources on Navajo and Hopi lands, including the Black Mesa formation, which substantiated the rich coal and petroleum content of the land. In the same year, a petition was filed to acquire Hopi mineral rights to the jointly owned land within the 1882 Executive Order Area exclusive of District Six. Hopi traditional- ists filed suit in federal court in 1964 challenging the delegation of mineral leasing authority to the Tribal Council. The suit was dismissed on the grounds that the Council could not be sued because of its sovereign immunity. This was a rare example of the doctrine of sovereign immunity used to ignore the wishes of Tribal people.

In 1966, Peabody Coal Company was granted the right to mine more than 64,000 acres of coal-laden land in the Black Mesa area - 40,000 acres of which lay within the Joint Use Area (Partition Land) and the rest on Navajo Reservation land. The Hopi Tribe received 3.3% of gross sales, about half the rate that the federal government was receiving for mining royalties at that time. Taxes to the Tribe were also waived. The lease had no provision for re-negotiation. The area was estimated to contain 20 billion tons of strippable coal and inestimable amounts of uranium, oil and other minerals. The lease was amended in October 1966 to allow Peabody to withdraw more than 4,000 acre-feet of potable water from the regional aquifer each year. Peabody Coal company used the water rights to build the longest water slurry line in the world to transport coal to the Mohave Generating Station a distance of over 273 miles, seriously degrading Hopi water resources and sacred springs.

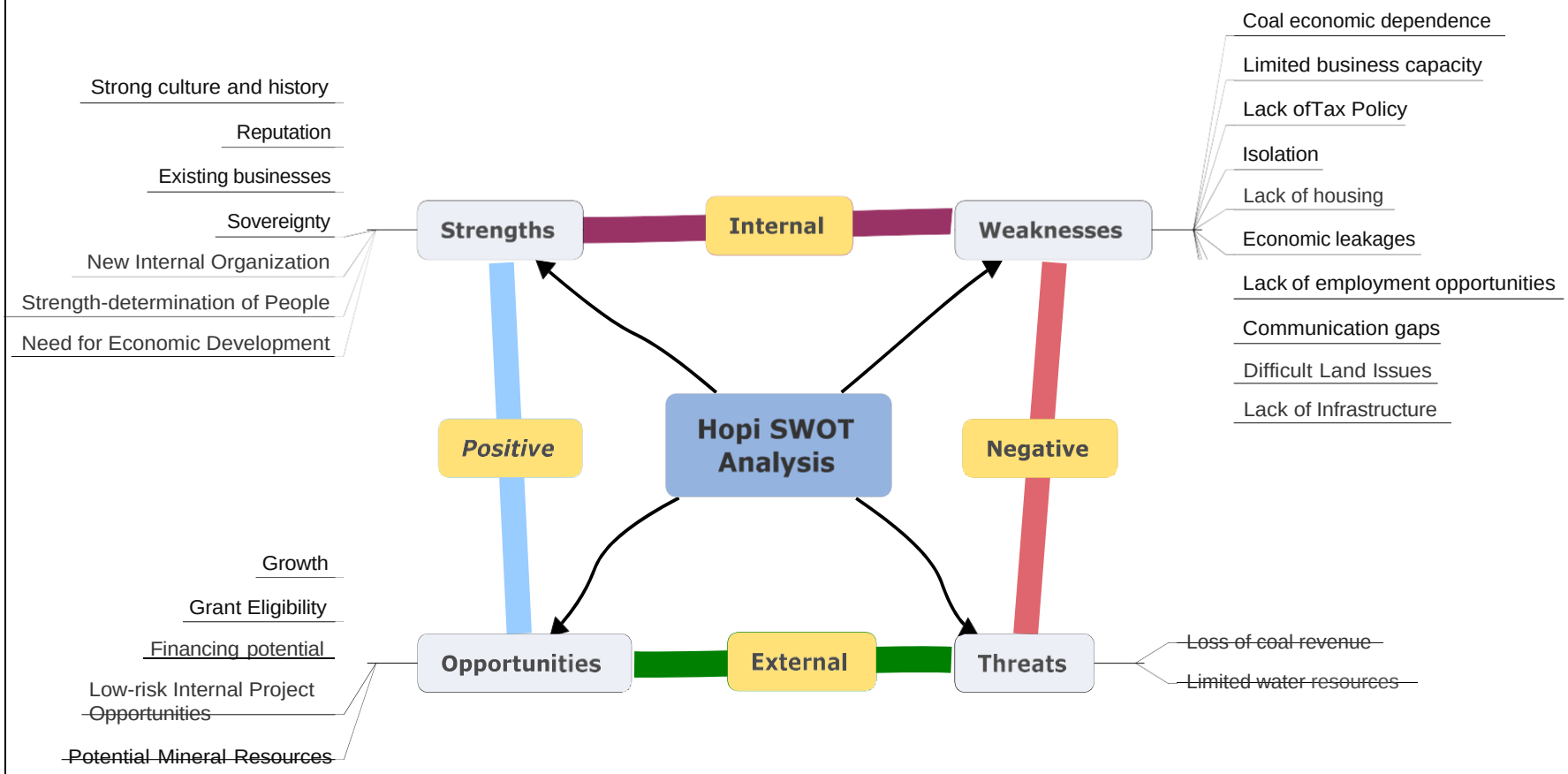
SWOT and Key Success Factor Analysis

The CEDS planning team created a SWOT analysis based on meetings and interviews with staff and leadership. The SWOT Analysis identified several key areas informing eventual strategic directions. A SWOT Analysis is defined as “an in-depth analysis of regional strengths, weaknesses, opportunities and threats.”

The Hopi Tribe also utilized an enhancement to the traditional SWOT Analysis which is referred to as Key Success Factor Analysis (KSFA). The KSFA recognizes that all communities have 88 Key Success Factors that are relevant to the successful implementation to one or more of 25 economic development strategies. These economic development strategies are options that Tribes, communities and regions can select to improve their economic condition and overall quality of life.

On Thursday, April 18, 2019, the Hopi Office of Community Planning and Economic Development and Land Information Services (OCPEDLIS) participated in a session with the Village Community Service Administrators (CSA’s) to conduct the KSFA. Although Village members and leaders may have differing viewpoints from the CSA’s, the CSA’s provide an informed audience in which to conduct the analysis. In general, CSA’s are aware of the opportunities, challenges and priorities of their Villages and have administrative skills to support priorities.

Each of the CSA’s in attendance were furnished an electronic response card (i.e. “clicker”) and were presented with a 285-slide presentation which basically asks one question relevant to each Key Success Factor. The Key Success Factors are divided into seven KSF Categories: Assets, Capital, Expertise, Government, Infrastructure, Land and Location. The SWOT and summary results of the KSFA are presented in the following tables.


Hopi SWOT Analysis
Internal
External
Positive
Negative
Strengths
Weaknesses
Opportunities
Threats
Strong culture and history
Reputation
Existing businesses
Sovereignty
New Internal Organization
Strength-determination of People
Need for Economic Development
Coal economic dependence
Limited business capacity
Lack ofTax Policy
Isolation
Lack of housing
Economic leakages
Lack of employment opportunities
Communication gaps
Difficult Land Issues
Lack of Infrastructure
Growth
Grant Eligibility
Financing potential
Low-risk Internal Project Opportunities
Potential Mineral Resources
Loss of coal revenue
Limited water resources

Three of the KSF strategies scored in the '50s,' including Cultural Tourism, Value-added Mining and Local/ Regional Tourism. Successful implementation of these strategies may prove to be "less challenging" than others. A fourth strategy, Destination Tourism, scored a '40.' All of the other strategies score 34 points or lower.

Hopi Tribe Prioritized Strategy Report		
Strategy	Score	Strategy Group
Cultural Tourism	58	Tourism
Value-added Mining	55	Value-added
Local/Regional Tourism	50	Tourism
Destination Tourism	40	Tourism
Energy Development	34	Sector-specific
Environmental Restoration	34	Sector-specific
Health Care Expansion	29	Community Development
Logistics Centers	28	Sector-specific
Attracting Government Jobs	22	Other
Attracting Funding	21	Other
Value-added Agriculture	20	Value-added
Education Development	20	Community Development
Bedroom Community Development	20	Community Development
Business Recruitment	19	General Business
Pass-through Visitor Services	19	Tourism
Entrepreneurial Development	18	General Business
Business Cultivation	14	General Business
Leading-edge Development	14	Sector-specific
Attracting Lone Eagles	14	Other
Business Retention and Expansion	13	General Business
Value-added Fisheries	13	Value-added
Value-added Forest Products	12	Value-added
Attracting Retirees	10	Other
Downtown Development	0	Community Development
Infrastructure Development	0	Other
*An analysis of this report, showing the "categories" of Key Success Factors is shown in Appendix B at the back of this CEDS document.		

Demographics

The year 2010 marked a major turning point in the collection of information on the American population. For the first time in over 70 years, the Census Bureau's once a decade headcount of the nation's people did not collect information on detailed socio-economic characteristics. There were no questions on aspects of the population's well-being such as employment and income. Those detailed socio-economic characteristics are now gathered through a separate operation called the American Community Survey (ACS) from a smaller sample size.

One consequence of the smaller sample size is that the Census Bureau aggregates the information it collects over a five-year period in order to get results it considers reliable for communities with populations of less than 20,000 - a category that includes nearly every Indian reservation. This produces a "period in time," rather than a "point in time" set of results - data covering a five-year time frame instead of one day (Census Day) as is the case with the decennial census. One result is a blurring of the impact of year-to-year changes in the populations in smaller geographic areas. However, new ACS data is available every year, not just once a decade. The timeliness of the data, with results published annually, is considered to be a major advantage of the ACS. The most recent time that data is available is for 2019.

The Hopi Tribe is a recognized Indian entity and eligible to receive services from the United States Bureau of Indian Affairs pursuant to Federal Register Vol. 81, No.86, May 4, 2016. Census data to substantiate demographic information for federal grants has always been problematic for Hopi. There are traditional Hopi members who will decline to participate in any type of survey or count that may be conducted by the U.S. Census Bureau or the Tribe or Villages. There are other aspects that impact demographic information as well, such as having a Hopi home on the Reservation with some family members living and working off-Reservation for part of the year, making it difficult to include such part-time residents in the count. A varying percentage of Hopis live and work off the main Reservation and return for ceremonies and other family obligations.

Approximately 14,390 Tribal members live on and off the Hopi Reservation. Hopi Tribal members living on reservation live within 14 residential communities or villages. The majority of these residents live along the State Highway 264 corridor in villages near or on First, Second, and Third Mesas. However, four outlying communities exist – Spider Mound (Yu Weh Loo Pahki) and Keams Canyon to the east, and to the west the Villages of Upper and Lower Moenkopi located adjacent to the Navajo community of Tuba City.

According to ACS data, in 2018, the Hopi Reservation and Reservation Trust Land contained a total population of 9,268. The median age was 30.3 years. An estimated 30.7% of the population was under 18 years, 36.1% was 18 to 44 years, 21.6% was 45 to 64 years, and 11.7% was 65 years and older.

The following charts represent the population for total enrolled Tribal members. The sharp increases in 2000 and 2010 are due to changes in blood quantum enrollment criteria from 100% to 25%. According to the Hopi Enrollment Office, the following data was current as of January 2020.

Total enrolled members:

Total Population and Trends	Arizona	Navajo County	The Hopi Tribe
Total Population 1990	3,665,228	77,658	8,258
Total Population 2000	5,130,632	97,470	10,571
Total Population 2010	6,392,017	107,449[50]	13,532[51]
Total Population 2014	6,479,703	108,101[52]	13,532
Total Population 2015	6,817,565[53]	108,277[54]	14,152[55]
Total Population 2016	6,931,071[56]	110,026[57]	14,282[58]
Total Population 2017	6,392,017[59]	107,656[60]	14,390[61]
Change in Population 1990-2017	74%	39%	74%

Enrolled members living on-Reservation

Total Population and Trends	Arizona	Navajo County	The Hopi Tribe
Total Population 2000	5,130,632	97,470	6,946
Total Population 2010	6,392,017	107,449	7,185
Change in Population 2000-2010	24.6%	10.2%	3.4%

The first chart reflects enrolled Tribal members, many of whom may be living off-reservation. The 3.4% population increase clearly shows an increase in population growth over the last 5 years from 2000 to 2010 for Hopis living on-Reservation. As such, the new percentage supports the need to increase planning and for key improvement projects both in the Villages and within the Tribe overall. A fairly comprehensive demographic study of the Hopi Tribe was completed for the Hopi Office of Community Planning and Economic Development based upon 2010 Census data and 2010 American Community Survey (ACS) information. The Report was compiled and disseminated by Arizona Rural Policy Institute of Northern Arizona University, and partially funded under an award from the Economic Development Administration.

This comparative increase in Tribal members, however, may not truly reflect the actual change in the Tribe between the census periods because this rate reflects growth by birthrate alone and not growth through in-migration as is the case with both the State and the County. The Census is considered the official count, and accounts for only the population within the exterior boundaries of the Tribal lands. Both the State (24.6%) and the County (10.2%) grew at much faster rates between the 2000 and 2010 Census largely due to in-migration.

The following chart from Enrollment Office data shows Village affiliation and age categories for each Village based on current data:

Age Data											
Village	0-10	11-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	100+
Bacavi	75	117	112	108	93	87	62	27	15	2	1
Hotevilla	165	274	302	261	240	195	157	99	39	10	0
Kykotsmovi	111	211	241	199	218	147	149	97	33	9	2
Mishongnovi	185	211	278	214	155	147	102	39	20	5	1
Moenkopi	202	397	377	383	252	305	214	103	53	10	0
Oraibi	55	70	95	70	65	64	48	27	17	3	2
Shungopavi	277	382	352	318	193	232	156	70	35	10	1
Sichomovi	151	196	247	247	209	194	156	77	32	13	2
Sipaulovi	89	122	129	108	100	81	65	36	11	0	1
Tewa	174	240	299	235	183	160	131	70	34	3	1
walip	93	143	134	96	95	73	64	44	14	4	0
TOTAL	1577	2363	2566	2239	1803	1685	1304	689	303	69	11

* More current age data is in Appendix

ACS data (2019) lists the total population of Hopi people living on-reservation and on off-reservation trust lands as 9,222 with a margin of error of +/-645 with a population of 18 years and over of 6,691. This would put the percentage of Hopi under 18 at 27% and the number of Hopi Tribal members living off-reservation at 5,387 (37%).

The Hopi Tribal database shows an upward trend in Tribal member population growth, increasing by 74% between 1990 and 2017, with little change in 2017 from 2016. As of June 2015, the Hopi total population was 14,152 with 7,815 living on the Reservation and 6,312 living off the Reservation. As of May 2017, the Hopi total population increased slightly to 14,390 with 7,800 living on the Reservation and 6,590 living off the Reservation.

In 2018 (ACS data), there were 2,242 households in Hopi Reservation and Off-Reservation Trust Land. The average household size was 4.12 people. Families made up 77.2 percent of the households in Hopi Reservation and Off-Reservation Trust Land. This figure includes both married-couple families (33.6 percent) and other families (43.6 percent). Female householder families with no husband present and children under 18 years are 10.9% of all households. Non-family households made up 22.8% of all households in Hopi Reservation and Off-Reservation Trust Land.

The Hopi Constitution provides under Article II the membership qualifications all Hopi have to meet. In some instances, some Hopis are not officially enrolled due to the membership requirements or due to voluntary dis-enrollment, although they speak Hopi fluently and live on and off the Hopi Reservation. The Hopi Tribal requirements for enrollment depend upon documentation of parents and grandparents and the degree of Indian Hopi blood. Tribal membership provides individual eligibility for the various Tribal programs such as Tribal housing, land assignments and grazing permits, scholarships, jobs and various social service programs of Tribal government.

Types of Households in Hopi Reservation and Off-Reservation Trust Land, AZ in 2013-2017	Percent
Married-couple families	33.6
Other families	43.6
People living alone	19.9
Other nonfamily households	2.9

Source: US Census Bureau, American Community Survey 2013-2017

The following is from ACS information:

In Hopi Reservation and Off-Reservation Trust Land, 818 grandparents lived with their grandchildren under 18 years old. Of those grandparents, 34.6% were responsible for the basic needs of their grandchildren. In 2018, an estimated 99% of the people living in Hopi Reservation and Off-Reservation Trust Land, were U.S. Natives with 91.2% of the Hopi Reservation and Off-Reservation Trust Land population living in the state where they were born.

Family households (74.5%) predominate on the Hopi Reservation, although traditional married couple families are in the minority (33.2%), at rates lower than the State (48.1%) or the County (49.1%). Many Hopi households are married the traditional Hopi way rather than by Civil Law and so may not be counted by the Census as married.

Households headed by a female head of household (single moms) account for one-third (32.1%) of all house- holds. Almost two-thirds (65.3%) of all households are either married couple families (33.2%) or households headed by single mothers (32.1%). Other household structures include non-family households (25.5%), the majority of whom are unmarried partner households (13.4%). Family households dominate among Hopi Tribal members (75%), compared to 66% for the State and the County (73%). Non-family households account for one-fourth (25%) of Tribal member households, more than the State (34%) or County (27%). Husband and wife families account for half (44%) of households, whereas residents of the State (73%) and the County (68%) are more likely to live in husband and wife households. Households on the Hopi Reservation are three times more likely to be headed by a female householder (43%) with no husband present. Households on the Hopi Reservation are many times more likely to be multi-generational (20.1%), than are households in the State (4.9%) or the County (8.7%).[5]

The median household income on the Hopi Reservation is $34,016, less than the County ($39,774) and less than the State ($51,310). Per capita Income on the Hopi Tribe ($11,753) is lower than the per capita income for the County ($16,745) and far lower than the State ($25,680). Roughly one-fourth (28%) of all households on the Hopi Reservation have incomes of less than $20,000 compared to the State at 17% and the County at 25%. Tribal members are more likely to have household incomes between $20,000 and $40,000 (29%) at roughly the same proportions as the County (25%) though higher than the State (22%).

5 Demographic Analysis of the Hopi Tribe Using 2010 Census and 2010 American Community Survey Estimates, Arizona Rural Policy Institute, Center for Business Outreach, Northern Arizona University.

One-fifth (21%) of Tribal members have incomes in excess of $60,000. Households on the Hopi Reservation are four times as likely (30%) to receive Food Stamps/SNAP than are residents of the State (10%) and the County (20%). Considerably more Tribal members (10%) receive public assistance income than do residents of the County (5%) and the State (2%). [6]

Poverty rates on the Hopi Reservation (35%) are more than twice as high as the State (15%) and higher than the County (24%). Almost half (48%) of all children under 18 years of age are considered to be living in poverty, while less than one-third (28%) of Tribal members between 18 and 64 live in poverty. Over one-third (35%) of persons in families on the Hopi Reservation live below the poverty line, a substantially higher rate than families in poverty at the state level (13%) or the County (23%). The same amount, or one-third (35%) of those living on the Hopi Reservation are classified as "severely poor". [7]

Hopi Reservation and Off-Reservation Trust Land, AZ

Source: 2011-2015 American Community Survey 5-Year Estimates

Income and Benefits (In 2015 inflation-adjusted dollars)	Estimate	ACS Margin of Error
Total households	2,042	(+/- 123)
Less than $10,000	304	(+/- 73)
$10,000 to $14,999	158	(+/- 50)
$15,000 to $24,999	278	(+/- 79)
$25,000 to $34,999	218	(+/- 63)
$35,000 to $49,999	360	(+/- 77)
$50,000 to $74,999	449	(+/- 85)
$75,000 to $99,999	131	(+/- 45)
$100,000 to $149,999	100	(+/- 45)
$150,000 to $199,999	34	(+/- 26)
$200,000 or more	10	(+/- 12)
Median household income (dollars)	$37,754	(+/- 3,347)
Mean household income (dollars)	$43,778	(+/- 3,049

- See more at: https://www.census.gov/tribal/application/#sthash.Mu2JKLYR.dpuf

The various communities in Hopi show unemployment rates from a low of 4.3% at Moenkopi (21.5% at Moenkopi CDP) and 14% at Hotevilla, to a high of 45% at Shongopovi, with an average unemployment rate on the Reservation of over 20%. Many Tribal members do not register as being unemployed so that the real unemployment rate is many times higher. Around 20% of the Hopi people did not finish high school. The U.S. Department of Interior listed the labor force at 6,123 in 2010. The current 2017 labor force is 5,987. The Center for Economic Advancement at the Arizona Department of Commerce lists the following unemployment figures for the first quarter of 2010.[8]

6 Demographic Analysis of the Hopi Tribe Using 2010 Census and 2010 American Community Survey Estimates, Arizona Rural Policy Institute, Center for Business Outreach, Northern Arizona University.

7 Ibid

8 Demographic Analysis of the Hopi Tribe Using 2010 Census and 2010 American Community Survey Estimates, Arizona Rural Policy Institute, Center for Business Outreach, Northern Arizona University.

Moenkopi CDP	21.5%
First Mesa CDP	16.0%
Second Mesa CDP	24.7%
Hotevilla-Bacavi CDP	14.2%
Kykotsmovi CDP	20.9%
Shongopovi CDP	45.3%
Keams Canyon CDP	18.6%

Although the estimated unemployment on the Reservation is extremely high, many Hopi subsist through dry land farming and cottage industry and live a modest traditional life style. Employment on the Reservation comes from Tribal Government, the school system, the Hopi Health Center and from tourism, along with cottage industries and a few retail establishments.

The table below shows the Hopi Tribe's major employers:

Employer	2015	2016	2017
Hopi Tribal Administration	491	564	561
U.S. Indian Health Service	261	260	262
Moenkopi Legacy Inn / Denny's Restaurant	113	112	110
McGee' s Trading Post affiliates	50	50	49
Hopi Cultural Center Hotel/Restaurant	49	48	50
U.S. Department of Interior Law Enforcement Service	43	43	43
Kykotsmovi Village Store	39	38	38
U.S. Bureau of Indian Affairs (B[A)	20	20	20
Hotevilla Co-op Store	14	13	12
Total	1080	1148	1145

In Hopi Reservation and Off-Reservation Trust Land, 44.3% of the population 16 and over were employed; 52.3% were not currently in the labor force. An estimated 28.9% of the people employed were private wage and salary workers; 54.9% were federal, state, or local government workers; and 16.2% were self-employed in their own (not incorporated) business.

The Tribal members that live off the Reservation seek other job opportunities as well as higher secondary education by way of obtaining a post-secondary college degrees or vocational certification. Other reasons for living off the Reservation may be to seek housing and other common household amenities that are not available on the Reservation. Given the importance of family to the Hopi culture, the population out-flow has special meaning that far exceeds the economic impact for Hopis not living on their homelands nor participating in religious ceremonies.

Although the Tribe was able to keep most people employed, layoffs have started due to the budget shortfall. There have been other layoffs as well. The Hopi Tribe Unemployment Office offers layoff aversion resources and transition strategies. In addition, One-Stop Centers provide free services including; job placement, skills assessments, job training, career counseling and resume development.

Percent by Industry in Hopi Reservation and Off-Reservation Trust Land, AZ in 2013-2017	Percent
Agriculture, forestry, fishing and hunting, and mining	0.8
Construction	6.1
Manufacturing	6.6
Wholesale trade	0.0
Retail trade	10.5
Transportation and warehousing, and utilities	3.3
Information	0.0
Finance and insurance, and real estate and rental and leasing	3.9
Professional, scientific, and management, and administrative and waste management services	2.3
Educational services, and health care and social assistance	35.4
Arts, entertainment, and recreation, and accommodation, and food services	8.2
Other Services, except public administration	2.4
Public administration	20.6

Source: US Census Bureau, American Community Survey 2013-2017

Education

Among people at least five-years old living in Hopi in 2010-2014, 60% spoke a language other than English at home. Of those speaking a language other than English at home, 3% spoke Spanish and 97% spoke some other language (Hopi or Tewa); 29% do not speak English "very well." Also, 85% of people 25 years and over had at least graduated from high school and 10% had a bachelor's degree or higher. An estimated 12.8% did not complete high school.

The total school enrollment in the Hopi Reservation and Off-Reservation Trust Land was 2,403 in 2013-2017. Nursery school enrollment was 232 and kindergarten through 12th grade enrollment was 1,966. College or graduate school enrollment was 205.

Educational Attainment of People in Hopi Reservation and Off-Reservation Trust Land, AZ in 2013-2017	Percent
Less than High school diploma	12.8
High school diploma or equivalency	42.6
Some college, no degree	22.8
Associate degree	10.9
Bachelor's degree	7.1
Graduate or Professional degree	3.9

Hopi's current education system includes 7 elementary schools, Moenkopi Day School, Hotevilla-Bacavi School, Hopi Day School, Second Mesa Day School, First Mesa Day School, and Hopi Mission School and Keams Canyon Elementary School. A total of 6 of the 7 schools receive full funding from the Bureau of Indian Education (BIE); Hopi Mission School is privately funded.

The Hopi Board of Education, made up of Members from each school, is a regulated entity that reports directly to the Hopi Tribal Council. The purpose is to develop a more consistent education policy. The existing education ordinance was developed under the BIA, now known as the Bureau of Indian Education. The Department's goal is to structure the ordinance to meet the education needs of the Hopi people according to the current Arizona State Standards on providing a quality education.

The Hopi Tribe's Education office indicated, through direct conversation with Director, Dr. Noreen Sakiestewa, the changes that will be required in order to meet the challenges of education on Hopi. According to Dr. Sakiestewa, the needed change was in the form of having the Hopi Tribal Education Department take control of the grant schools. The Hopi Schools have now changed from Bureau of Indian Education to grant schools under the direct supervision and oversight of the Hopi Education Department.

The purpose or strategy behind this change is to provide a quality education that incorporates strengthening the Hopi language, culture and history into the curriculum and strengthens nation building through K-12 education. Strengthening the Hopi'lavayi (Hopi language) into the K-12 core curriculum enhances values of sovereignty and cultural integrity at an early age.

Education has been a high priority for the Hopi people. In 2000 the Tribal Council established a Hopi Education Endowment Fund (HEEF) of $10 million. HEEF was created by Tribal Ordinance through a Tribal Resolution to preserve and protect the education fund. The Hopi Endowment Education Fund received most of its annual funding from Peabody Energy (formally Peabody Western Coal Company) based coal revenues.[9] The Hopi Tribe's goal was to help Hopi members further their education through the education fund. The Hopi Tribe's Higher Education program works with graduating seniors and other Tribal members who want to further their education. As a result of the Mohave Generating Station closure in 2005, funding was cut dramatically for Hopi education, including individual scholarships. For example, in 2005 the Hopi Tribe received just over $1.9 million in educational funding from Peabody Western Coal Company. In 2006 the figure dropped

9 Socioeconomic Study in Support of a Hydrographic Survey Report for the Hopi Indian Reservation Socioeconomic Study April 30, 2008. Prepared by SWCA Environmental Consultants for Arizona Department of Water Resources. Pg. at 27

to $169,000 and in 2007 the figure remained at $170,000.[10] Due to the more recent shutdown of Navajo Generating Station and the termination of the coal contract, the scholarship fund will continue to decline.

Most vocational training programs are off-reservation in Flagstaff or even as far as Albuquerque and Phoenix. Training options are mostly limited to demand occupations where graduates can get jobs. There are options for local training provided by Northland Pioneer College (NPC). Northland Pioneer College has issued Certificates of Proficiency in Restaurant Operations, accounting, Emergency Medical Training (EMT) and Medical Assistant which are careers needed at Hopi.

HOPI RESOURCES

Land

The Hopi Reservation, approximately 3,000 square miles in area, is comprised of lands surrounding the main population center (District 6), the adjoining Hopi Partitioned Lands (HPL), and the separated Moenkopi District. The 1882 Executive Order Reservation consists of approximately 2.5 million acres and was established by an Executive Order dated December 16, 1882, issued by President Chester A. Arthur. The 1882 Executive Order Reservation is completely surrounded by the Navajo Reservation. Lands within the 1934 Act Reservation consist of Moenkopi Village (sometimes referred to as Moenkopi Island) and allotted lands.

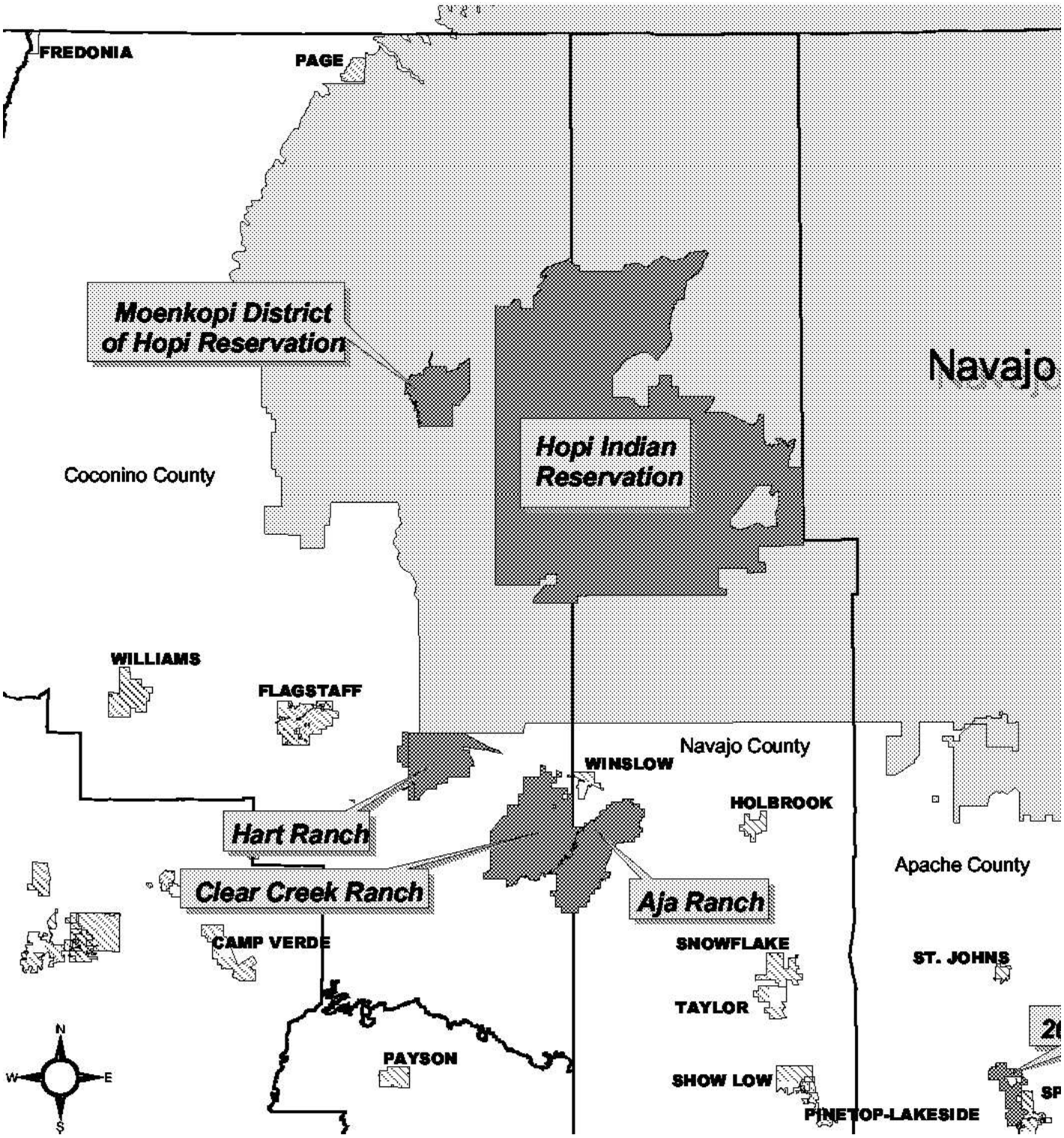
Following years of land disputes, the U.S. District Court in 1962 designated an additional 1.8 million acres as a Joint Use Area to be used by both the Hopi and Navajo Nations. The Navajo-Hopi Land Settlement Act of 1974 additionally gave the federal courts the power to equally divide the Joint Use Area land between the Hopi and Navajo. Five years later the courts equally divided the land into 900,000-acre segments labeled Hopi Partitioned Lands (HPL) and Navajo Partitioned Lands (NPL).

Subsurface mineral rights on the HPL and NPL are jointly owned and managed by the two Tribes. In exchange for allowing some Navajo families to remain as tenants on HPL, the Hopi Tribe in 1996 reached settlement with the Federal government enabling the Tribe to purchase about 300,000 acres of aboriginal land. Land acquisitions include five cattle ranches, an office complex in Flagstaff, two Flagstaff shopping centers, land in Winslow and Holbrook, land along I-40 and a Sedona motel.

The main Hopi Reservation now includes a total of 1,620,000 acres. In addition, there is the non-contiguous Villages of Upper and Lower Moenkopi consisting of 61,604 acres and non-contiguous ranchlands of 175,441 aces, for a total of 1.857 million acres or roughly 2,900 square miles:

- Hopi Main Reservation - 1,615,686 Acres (District Six & Hopi Partitioned Lands restored to Hopi Tribe in 1974)
- Moenkopi District Reservation - 61,604 Acres (Restored to Hopi Tribe in 1996)
- Hopi Three Canyon Ranch Lands - 175,441 Acres (Consisting of purchased lands that were converted to Hopi Trust Lands in 2010 and are managed by Department of Natural Resources)
- In addition, there is Hopi Tribe fee simple land (land owned by the Hopi Tribe, but not held in trust) on the southern boundary of the Reservation.

10 Socioeconomic Study in Support of a Hydrographic Survey Report for the Hopi Indian Reservation Socioeconomic Study April 30, 2008. Prepared by SWCA Environmental Consultants for Arizona Department of Water Resources. Pg. at 27


FREDONIA
PAGE
Moenkopi District of Hopi Reservation
Hopi Indian Reservation
Navajo
Coconino County
WILLIAMS
FLAGSTAFF
Navajo County
WINSLOW
HOLBROOK
Hart Ranch
Clear Creek Ranch
Aja Ranch
Apache County
CAMP VERDE
SNOWFLAKE
ST. JOHNS
TAYLOR
PAYSON
SHOW LOW
PINETOP-LAKESIDE
N
W
E
S

Due to the difficult history related to Hopi land, land jurisdiction is complex. The Hopi Council has authority on Hopi Partitioned Land that is outside the boundaries of the District 6 Village lands; Villages have authority over District 6 Land; Subsurface rights on Partitioned Land must be shared with the Navajo. There is similar partition land on the Navajo side that the Navajo must split with the Hopi. Both Tribes must agree for mining activity to take place on these parcels. There is also allotment land that is controlled by individual Tribal members in the Village of Lower Moenkopi. The traditional village jurisdictions in District Six have mostly not been formally surveyed so are subject to conflicts. The variety of jurisdictions and land divisions create complex issues that have hindered development.

The Hopi Natural Resources Department has authority over the Hopi Ranches that are non-contiguous to the Tribe on the south side. The Hopi Tribal Economic Development Corporation (HTEDC) has authority over fee simple lands bordering Interstate 40, including checkerboard fee simple lands on the southern boundary of the Reservation that are interspersed with State lands. In addition, there are departments such as the Land Commission, the Office of Mining & Mineral Resources, the Office of Renewable Energy; Water Resources Program; Wildlife & Ecosystems Management Program, the Office of Real Estate Services, the Tribal Land Information System, and so forth, with various roles that may relate to land use and projects.

Traditional cultural activity occurs across the Reservation. There are numerous shrines, sacred springs, and resource gathering areas throughout the original Hopi homeland which are now on the Navajo Reservation. The traditional territory or Hopi homeland is called Tutsqua and includes the entire southeastern portion of the Colorado Plateau and large areas to the South.

The Hopi Tribe has completed several land use plans, including the *Hopi Integrated Resources Management Plan* (Adopted May 2001), the *Hopi Tunatya'at 2000-Hopi Strategic Land Use & Development Plan*, and the *Hopi Pötskwani'at 2011—Hopi Tribal Consolidated Strategic Plan*. These plans are dated. There is a major need to develop and update land use plans and resolve some of the jurisdictional issues. In 2018, the Office of Community Planning and Economic Development Land Information Systems (OCPEDLIS) proposed the development of a Master Land Use Plan for Spider Mound (Yu Weh Loo Pahki), Kykotsmovi Village and Upper Moenkopi Village that apart from Kykotsmovi, have undisputed boundaries. However, that plan was never completed.

The *Hopi Strategic Land Use and Development Plan* that was completed in 2000 identified an immediate need for 765 new homes to alleviate structural deficiencies in existing homes and overcrowding. The plan mentioned an additional need for 90 new houses each year for the next twenty years to keep pace with projected population growth. The Hopi Strategic Land Use Plan also called for five planned Community Development Districts to be located on Hopi Partitioned Lands under the control of the Tribal Council. Development at these districts will require substantial planning, infrastructure and capital development. There is currently an amount of confusion regarding development potential as to which areas are appropriate for infrastructure development, what areas may be flood plains, where it makes sense to plan for transportation corridors, and which areas should be zoned commercial or residential. An updated land use plan should answer these questions.

The Hopi Tribe does have a Public-Law 93-638 contract in place with the BIA so that the Tribe is able to make its own decisions and develop procedures and documentation for land use. Some of the Hopi departments work well and efficiently to provide required information and permitting for development.

A useful land use plan will develop a road map for how the various agencies can work together on various parcels of land to help fast-track development and land uses rather than create obstacles. The Realty Office

Traditional cultural activity occurs across the Reservation; there are numerous shrines, sacred springs, and resource gathering areas on the Reservation and throughout the Tribal homeland, which are now on the Navajo Reservation.

has been in charge of coordination up to now but may be able to update their procedures to make them more efficient. Prior land use plans did not address cross agency communication and efficiency. There are models of successful development on Hopi land such as the construction of the Hopi Health Care Center and the on-going HAMP (Hopi Arsenic Mitigation Project) where examples of viable land use decisions can be codified and adopted by the Tribal Council.

The rationale for the Hopi/Navajo partition lands was based upon the Peabody Coal contract whereby the Navajo and Hopi Tribes would have joint jurisdiction and share in coal royalties and revenues. The Peabody Coal contract is no longer in effect. Therefore, it no longer makes sense to continue joint jurisdiction. The partition lands will likely continue as an obstacle to development caused by vestiges from the past unless an effort can be mounted for change.

The Hopi Constitution states under Article VII – Land, Section 1. *Assignment of use of farming land within the traditional clan holdings of Villages, as recognized by the Constitution, shall be made by each Village according to its established custom, or such rules as it may lay down under a Village Constitution adopted according to the provisions of Article III, Section 4. Unoccupied land beyond the clan and Village holdings mentioned shall be open to the use of any member of the Tribe, under the supervision of the Tribal Council.*

Besides the minerals that are discussed later in the CEDS, including oil and gas, potash and helium, Hopi land resources include quarried sandstone, fuel wood, rangeland, coal, sand and gravel, natural springs and reservoirs and wildlife suitable for big and small game hunting. Hopi Dry Land Farming and irrigated fields in Upper and Lower Moenkopi, support various Hopi crops, including corn, squash, beans, melons, gourds, pump- kin, chile, onions, grapes, peaches apricots and apples. Range units support Hopi stockmen who raise grass-fed sheep and beef cattle with cow/calf operations.

The Office of Real Estate Services has identified fourteen separate steps that may or may not all be necessary to getting Hopi Tribal approval for land use for development purposes according to the type of land and project being pursued. This complex system of jurisdictions and authorities has tended to hinder development, communication and decision making. Nonetheless, if the process is followed

and each agency does its job, approvals are granted. The Director of the Realty Office commonly drives the process. The process should now be facilitated due to the fact that projects are now originated and followed through by the HTEDC and the Economic Development Board rather than the Council.

A list of off reservation properties include:

- Hopi Three Canyon Ranch - Winslow, AZ
  - Cattle ranching business owned by the Tribe, which operates the Drye, Hart, Clear Creek, Aja, and 26 Bar Ranches, Springerville, AZ
- Flagstaff Commercial Properties – Flagstaff, AZ
  - Continental Plaza Shopping Center, Kachina Square Shopping Center and Heritage Square Shopping Center are real estate property investments of the Hopi Development Corporation. The revenue stream derived from these properties is steady and predictable given the current market and property values in Flagstaff, Arizona. There are no employees, as the business is run and managed entirely under a contract with Sterling Real Estate Management.
- Days Inn Wyndham at Sedona in Oak Creek Village/Sedona, Arizona
  - The Days Inn Wyndham at Sedona has a total of 48 rooms and 1 conference center/breakfast room. A total of 17 employees are currently employed (housekeeping; front desk and maintenance). The Inn currently breaks even because of recurring maintenance issues.
- Land in Winslow and land along I-40
  - Including 13,200 acre Dobell Ranch and the 210 acre Twin Arrows parcel located on Interstate 40, 15 miles east of Flagstaff.

A short list of on-Reservation properties include:

- Hopi Cultural Center on Second Mesa
  - The Cultural Center currently employs 30 people (from the hotel to the restaurant). The business is currently above the monthly average of profit by 40%, due to the tourist season beginning a bit early this year.
- Housing unit to rent 75 homes near the Hopi Health Care Center
  - The Walpi Housing is managed by the HTEDC. The housing units are located next to the Hopi Health Care Center and the tenants are Hopi Tribal government and Indian Health Service employees. The numbers of employees are estimated at five. The housing is not a big economic profit and breaks even with maintenance and up keep of the housing units on a day-to-day basis.

Water, HAMP and Agriculture

Groundwater, and more specifically the Navajo sandstone aquifer (N-aquifer), along with two other smaller aquifers, are the primary source of water for 11 Hopi Villages and numerous Navajo communities that adjoin the Hopi Reservation. The aquifers are also the source of water to numerous springs and perennial water flows that are sacred to the Hopi. Remote springs and geographically isolated wetlands of Black Mesa and surrounding areas have sustained the Hopi people for close to 2,000 years. Aquifer depletions have affected the rare wetlands and associated springs on the Hopi Reservation in addition to the quality of drinking water.

The Peabody Coal Lease was amended in October 1966 to allow Peabody Coal Company to withdraw more than 4,000 acre-feet of potable water from the regional aquifer each year. Peabody Coal company used the water rights to build the longest water slurry line in the world to transport coal to the Mohave Generating Station a distance of over 273 miles, seriously degrading Hopi water resources and sacred springs.

Kayenta Slurry Line

The Hopi Tribal Council delegated authority to the Hopi Water Resources Program (WRP) to implement and enforce policies intended to ensure safe and dependable supplies of water on the Reservation. The WRP works with Northern Arizona University to carefully monitor water availability and wetlands and recommends conservation measures but has not proposed a viable solution to deal with a declining water supply. There are two on-going developments that directly impact Hopi water: The HAMP (Hopi Arsenic Mitigation Project) and the Little Colorado River Adjudication Case.

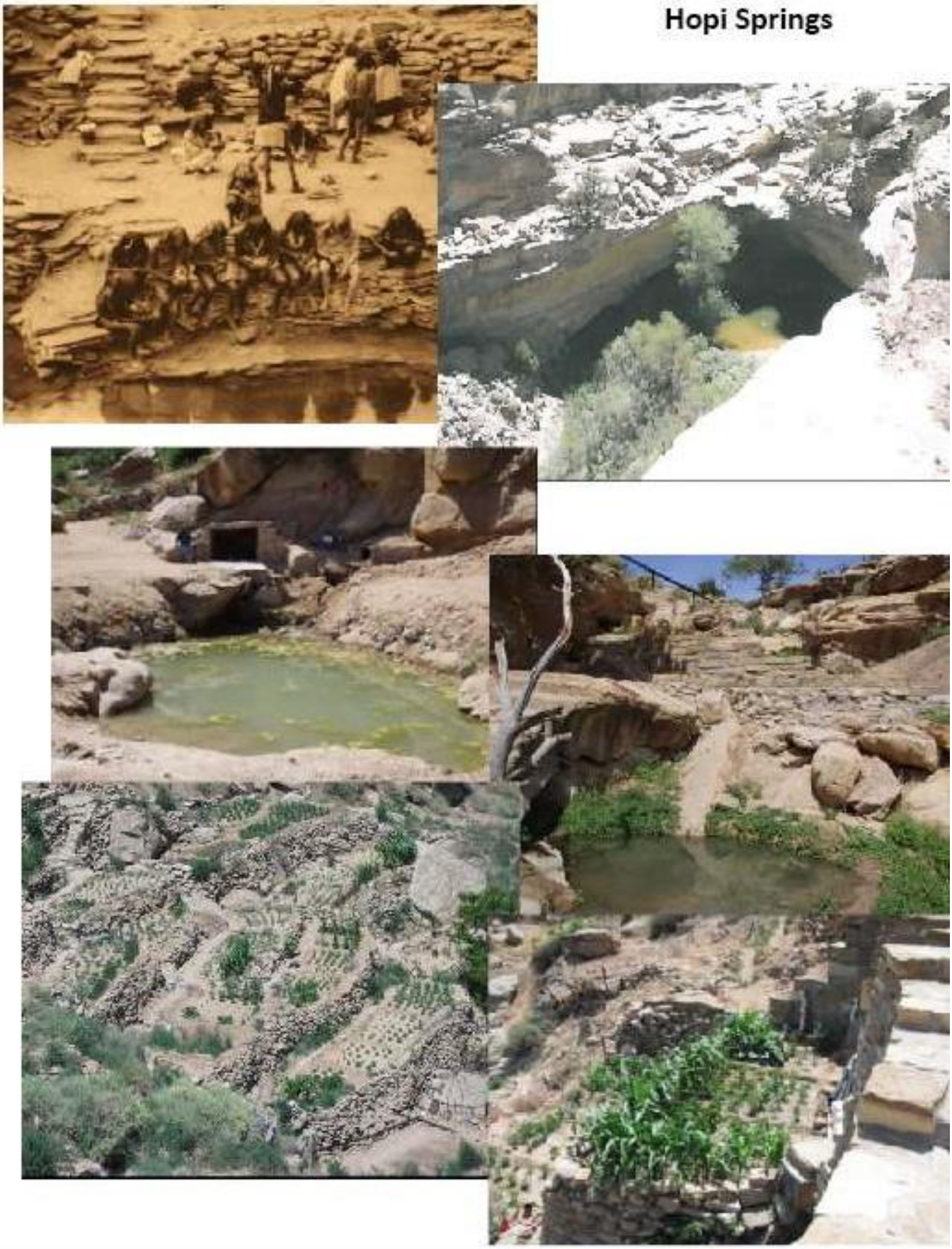
The HAMP (Hopi Arsenic Mitigation Project) was designed and funded to address the fact that water for eight of the Tribe's Villages is contaminated with high levels of naturally occurring arsenic. The first phase of HAMP provides water to designated Villages. The second phase of HAMP will provide water to sites such as BIA schools, health care facilities and employee housing. The level of arsenic contamination currently exceeds the Environmental Protection Agency's (EPA) safe drinking water standards by as much as three times the allowable contaminants. The EPA has ranked the contamination on the Hopi Reservation as one of its highest priorities and longest running arsenic drinking water violations. While the primary purpose of the HAMP is to provide arsenic compliant drinking water, additional benefits to the regional system will include an increase in the quantity of water available and improved water system reliability. The HAMP has been funded and construction is on-going.

Up to now all but three villages - Lower Moenkopi, Old Oraibi and Walpi – have been served by community water systems. All Hopi communities on the main Reservation, except Yu Weh Loo Pahki (Spider Mound), are dependent on the N-Aquifer (groundwater) as their source of domestic water. Annual water consumption by Hopi communities in 2000 was approximately 300 acre-feet/year.

All water and sewer systems have been developed with federal assistance from the Department of Housing and Urban Development (HUD), the Indian Health Service (IHS), US Environmental Protection Agency (US EPA), Office of Environmental Health (OEH) through Indian Health Service, and the Bureau of Indian Affairs (BIA). To determine if future water and sewer infrastructure projects will meet local needs and desires, the IHS and EPA requests each village to identify and set priorities for its water and sanitation needs on a yearly basis. Supplemental information, such as areas of planned village expansions, is also gathered to help plan future projects. The IHS OEH program work with villages on plans designs and constructs most water systems on Hopi.

Some village homes lack indoor plumbing facilities compared to other Indian Reservations. The difficulty of bringing in water lines is shown by the percentage of homes having to get water from "some other source" which might be a village well (hauling water to and from location), a spring or, more recently, the purchase of bottled water as the usual sources become too polluted to use for drinking and cooking purposes. The HAMP should improve this situation.

A majority of existing water and wastewater treatment systems were not built to accommodate growth of the local population or for economic development purposes since being implemented 60 years ago. The operation, maintenance and repairs for the systems tends to be heavily subsidized by village governments' annual budget. The majority of the villages charge flat rate fees, however some villages such as Sipaulovi charge


Hopi Springs

a metered rate and many more need to move in this direction. There is no separate charge for sewage system disposal. Most villages experience significant problems with their water infrastructure, including:

- Broken pumps
- Pumping for long periods of time without resting the equipment (i.e., water is hauled for livestock watering; systems were designed for domestic demand only).
- Erratic pressure, small pipe diameters, and insufficient storage capacity obstruct fire suppression.
- Unaccountable losses (leaks or aging pipes)

Many Hopi villages have deficient sewage treatment systems while other villages have none at all. Some villages still have outhouses (outdoor bathrooms) that are not lined. Although there are functioning systems to be found across the Reservation, wastewater management tends to be crisis driven and, therefore, is more expensive in the long run.

HAMP Survey

HAMP was funded at roughly $20 million primarily by the EPA (Environmental Protection Agency) and the IHS (Indian Health Services) with additional funds coming from the Tribal reserve account to develop a new field, drill new wells and provide over forty miles of pipe to connect to village water systems. The project is being administered by the Hopi Utilities Corporation (HUC) and is under construction with a completion date of April 2022. Under HUC management the construction company has been laying about 2,000 feet of new water line per day.

HUC is a Section 17 corporate entity that functions independently from the Tribe but is 100% owned by the Tribe and is accountable to the Tribe as its sole stockholder. The HUC Board includes engineers and utility managers in addition to Tribal stakeholders.

HUC is also developing plans to integrate the Village water systems under HUC administration. Currently each Village operates their own independent water system funded through the Tribe. Integrating the Village systems will provide better service, allow the Villages to meet consistent environmental standards and save considerable money.

One water project that HUC has worked on consists of bringing power and infrastructure to up to three capped wells that can supply quality drinking water to First and Second Mesas as well as provide water for the planned Tawa'ovi community. Bringing power involved connecting to an NTUA (Navajo Tribal Utility Authority) line.

The Little Colorado River Adjudication Case has been going on for close to forty years with many competing plaintiffs. The Hopi Tribe has been paying lawyers and providing testimony over the last several years. The adjudication will determine how much

water the Hopi will be allowed to utilize from the Little Colorado Watershed which encompasses virtually all of the Tribe's water resources. Hopi Chairman Nuvangyaoma recently expressed his consternation regarding the adjudication by stating that, *This is a rare case where our Hopi people have to fight for water, gallon for gallon, that is naturally occurring on the Hopi Reservation … we are not going to other communities or towns demanding their water. We are simply trying to protect our Hopi people's future water rights.*

The largest claims for water on the Reservation are for irrigation of agricultural lands. About 63% of the Reservation, or over 1 million acres, have been determined to have soils that could potentially grow crops if irrigated (ADWR, 2008). The Hopi have a long history of dry farm- ing and irrigation in the region and have developed traditional practices to adapt to a limited water supply and relatively harsh climate. The latter is characterized by strong winds, early and late frosts, and a semi-arid climate. Despite the fact that the Hopi Reservation is currently impacted by climate change and drought many Traditional Hopi farming practices are still being used to grow crops on the Reservation today.

There is an amount of irrigated farmland on the Hopi Reservation. A crop that is getting some attention in Indian Country is hemp. The marijuana and CDC markets have been fairly chaotic with many small farmers who initially planted crops for those purposes losing money. However, hemp can be grown for industrial purposes and for many different products, including fiber for clothing and paper, building material, insulation, food, bioplastics, animal feed, packaging, and biofuels among other uses. Hemp is one of the fastest growing plants in the world and is a viable vehicle for carbon sequestration.

The industrial hemp markets are just starting to develop. One of the largest producers and marketing companies of hemp in the country is Santa Fe Farms. Santa Fe Farms is a cultivator and processor of industrial hemp focused on regeneration and carbon sequestration. Santa Fe Farms management is developing alliances with Tribes for profitable hemp cultivation. Although hemp is far from being a traditional crop, the Hopi tribe can explore this option with Santa Fe Farms and may also be able to use hemp directly for cattle feed.

Lower Moenkopi Village is a farming community that relies on irrigated agriculture. There have been issues of water seepage along the irrigation system of the Pasture Canyon Reservoir. Improvements and maintenance of the Pasture Canyon Reservoir is a high priority.

Minerals

According to a recently completed survey by a certified geologist, there are likely commercial deposits of helium, coalbed methane gas and oil and gas on Hopi lands. There are also verified commercial deposits of Potash. Helium is used in a variety of military and industrial applications. At this time helium development is extremely lucrative. The U.S. Government has eliminated its helium reserve causing the price of helium to increase exponentially.

Although there are verified deposits of oil, gas and coal deposits on Hopi land, the fossil fuel sector is in decline; there are concerns about global warming; and the fossil fuel sector has been characterized by volatility.

There are verified deposits of potash on Hopi lands. In 2012, Passport Potash spent millions of dollars on geologic studies and has verified extremely valuable deposits of potash worth billions of dollars on and around Hopi ranch lands. Potash is used worldwide as a component of industrial fertilizer. However, the current price of potash does not justify the billion or so dollars it would take to set-up a potash processing operation.

The situation with helium, however, is the opposite. New technology makes helium extraction extremely economic. The price is near an all-time high and is predicted to increase further over the foreseeable future. There is a worldwide shortage of helium. Helium is used for many technical and strategic industrial and medical purposes.

The Holbrook Basin has some of the purest and most valuable helium deposits in the world. Several major companies have tied up land within the Basin and are doing exploratory drilling. There are helium deposits underneath Hopi fee simple ranchlands in a checkerboard area within the Basin. One company has leased state lands adjacent to Hopi land in the checkerboard area and is starting to drill. If helium is taken from this area, the company will be pulling helium from underneath Hopi land. Helium is a benign gas that has no environmental or climate repercussions and does not require water in the extraction and development process.

Hopi was helped to coordinate a team of experts to assist Hopi to develop he- lium, as well as write funded DOI grants on behalf of Hopi to verify and develop helium. DOI geologists and financial staff came to meet with Hopi to support this opportunity. Although there was considerable excitement and interest at the time, there has been no follow-up since. The development of Hopi helium could easily be more lucrative for the Tribe than past coal royalties with no environmental or water issues. New technology has made helium extraction even more efficient. There are potential joint venture partners who will pay for Hopi helium development and provide technical expertise without Hopi giving up majority ownership

of a helium company. A similar opportunity may exist for potash at some time in the future. However, the price of helium warrants development now.

Energy

One of the Hopi Tribe's strategies to improve the reliability and cost efficiency of energy services on the Reservation and to diversify away from coal revenue is to implement the Hopi Sustainable Energy Program. The goal of this program is to develop and manage the Tribe's own energy resources in a sustainable manner. The Hopi Tribe has commissioned a number of renewable energy feasibility studies and plans, including a recent feasibility study to ascertain the potential to develop a Tribally owned and managed power utility company under HUC (Hopi Utility Corporation). The Tribe currently receives less then reliable power from Arizona Public Service Company over old 69 kV lines at high cost. About a dozen Tribes have established and operate their own power utility around the country.

Solar resources on the Hopi Reservation are considered to be "world class." The annual average solar resource for the Hopi Reservation and most of Arizona is 6 to 7 kWh/m2 /day, among the highest levels in the U.S. and the world.

The formation of the Hopi Office of Energy Efficiency and Renewable Energy was established in 2004. Feasibility was completed for a 19MW solar array with power to be sold to the City of Flagstaff. Tribal land along I-40 would have been leased to a development company. The City of Flagstaff made preliminary commitments to purchase the power. However, market and regulatory conditions made this project not feasible.

More recently, the Hopi Renewable Energy Office, along with other Hopi offices and at the direction of Hopi Tribal Council, worked towards another utility scale solar project on land along I-40. The project was the result of more than 5 years of feasibility studies, land surveys and clearance work, consultation with Hopi stakeholders, and collaboration between Hopi and Federal agencies. The project went out to a competitive RFP bidding process in 2019 and is proceeding with a large renewable energy development company.

Historically, energy projects on Tribal lands have been largely based on leasing land for a comparatively low amount to a developer that owns the project and retains most of the profits providing the least control and least return to the Tribe. Although this is a low-risk and easier method of developing a revenue stream from a potential energy project this paradigm has shifted over the last few decades. Tribes are increasingly acting as developers and owners as well as structuring business arrangements and projects themselves and realizing additional profits. This can position Tribes in a unique niche. Tribes can realize a number of advantages as their own developer or as a joint-venture partner.

Additionally, this is a particularly opportune time for Tribal renewable energy development. The Biden administration is promoting a 10-year renewal of the Investment Tax Credit (ITC) with the possibility of the credit taken in cash. This would make the credit directly available to Tribes. The ITC will cover 30% of the cost of a renewable energy project. A Tribe can also avail itself of a New Market Tax Credit, and or an ITC, in conjunction with a taxable investor. If both of these financial instruments are used together more than half the costs of a project can be subsidized. A taxable joint-venture investor/partner can also take advantage of accelerated depreciation, subsidizing even more of a renewable energy project. The IRS allows tax credits from a Tribal energy project to be passed through to a taxable project partner.

Under this model, the taxable joint-venture partner would own the majority of the project for the first five-years in order to benefit from the tax equity and depreciation and receive almost all of the required returns from tax subsidies with an amount of energy revenue accruing to the Tribe. The project could then be turned over to 100% Tribal ownership for the remaining fifteen years or more of the useful life of a solar project. This arrangement has been successfully done by Tribes in other parts of the country. The Tribe ends up owning a solar project at no or minimal cost and receives revenue for a period of up to 20 or more years. There are currently identified trustworthy developers who are interested in working with Hopi in this regard. The major feasibility factors are a Power Purchase Agreement (PPA) and a Transmission Agreement (TA). A PPA and a TA may be forthcoming from APS (Arizona Public Service Company)

Arizona Public service Company (APS) recently announced that they will be issuing RFP's within the next two years for 350 MW worth of solar power either on or near Navajo and Hopi lands. Hopi can position itself to competitively bid on APS RFP's with a joint-venture partner. In addition, APS will be allocating $3.7M to the Hopi Tribe over five years to assist the Tribe transition its economy away from coal. The time to start planning for this is now. If Hopi does not start working with the right developer, the RFP's will likely go to the Navajo. Funding is available from DOE and/or DOI for planning.

Transportation

The transportation system on the Reservation includes highways, local roads, an airstrip and two helicopter landing pads.[11] There are 668.9 miles of BIA roads (both paved and unpaved), 99.1 miles of paved Arizona Department of Transportation (ADOT) owned roads, and 467.1 miles of paved and unpaved Tribal roads. There is a total of 1235.1 system miles in the Hopi Indian Reservation Roads Program.[12] There are no Coconino or Navajo County constructed or maintained roads on the Hopi reservation. The Integrated Reservation Roads System, a multi-jurisdictional road system that incorporates the State of Arizona, Coconino County, the Bureau of Indian Affairs Hopi Agency, the Hopi Tribe and the Navajo Nation road maintenance agencies, manages approximately 800 miles of roads. The remaining roads, most of which are "non-system" primitive roads (not part of ADOT or a BIA governmental entity) are a Tribal responsibility to maintain or manage.

The Hopi Office of Range Management has developed and maintains a few "ranch roads" that are used by local cattlemen and farmers to access remote areas of the Reservation. In addition, there are approximately 3,580 miles of non-maintained 4x4 trails and tracks mapped on the main reservation.

No U.S. highways pass through the main Reservation. Arizona State Highway 264 runs in an east-west direction and is the busiest highway on the Reservation linking the villages. The east-west road across the Reservation starts at the Arizona Highway 160 and 264 junctions in Moenkopi starts ending at Ya-Ta-Hey, 8 miles north of Gallup, New Mexico. Arizona Highway 87 is a secondary road that begins at Second Mesa and connects with Interstate 40 near Winslow. The third route is Indian Route 6 to Spider Mound, which is partially maintained by Arizona Department of Transportation (ADOT). Indian Route 6 runs north to south and connects to Interstate 40 near Holbrook.

The BIA Roads Branch maintains all Indian Route roads both paved and dirt, constituting over 700 miles of

11 Socioeconomic Study in Support of a Hydrographic Survey Report for the Hopi Indian Reservation Submitted to Arizona Department of Water Resources by SWCA Environmental Consultants April 2008.
12 Indian Reservation Roads Program FY 2016 Inventory, Hopi Department of Transportation

roads on the Reservation. Indian Route 2 (Luepp Road) and Indian Route 6 (Holbrook Road) are paved secondary roads. The majority of BIA roads are unpaved local roads. The majority of these local roads are maintained due to school bus routes. These local roads are dirt, fair weather roads that are often impassable in the winter snows and summer thunderstorms. Indian Route 2 links Kykotsmovi with Flagstaff covering 92 miles. Indian Route 6 begins 8 miles east of Keams Canyon and ends at Interstate 40 covering 70 miles east of Holbrook.

Interstate 40 and U.S. Highway 160 are major routes that influence traffic patterns throughout Northern Arizona. Interstate 40 lies about 35 miles south of the Reservation and is one of the principle east-west Interstate highways in the United States. The Hart Ranch, part of the Hopi Three Canyon Ranches lies on both sides of Interstate 40 that runs east/west through the northern edge of the Ranch. The Ranch is accessible from Interstate 40 by the Twin Arrows, Buffalo Range, Two Guns and Meteor Crater interchanges. U.S. Highway 160 runs northeast/ southwest on the northwest boarder of the Hopi Reservation adjacent to the communities of Upper and Lower Moenkopi.

Polacca Airstrip, located 2 miles west of Polacca, is available for charter or private usage. The primary use is medical evacuation and personal transportation. The airstrip consists of a 4,200-foot paved and lighted runway, a paved parking apron for 12 aircraft, a graded entrance road and a parking lot. Polacca Airstrip requires frequent maintenance because of weeds, local flooding and poor soils. The Hopi Tribe is a limited sponsor due inclusion of the FAA Airport Capital Improvement Program for reconstructing the runway in the future. A recent RFP was issued for repairs.

The present airport facilities need numerous improvements to increase safety and accessibility. These include extending and resurfacing the runway, paving the entrance road, fencing the airport perimeter and upgrading the runway lights. A site study and master plan was prepared in 1977.[13] It proposed improving the existing airport to meet immediate Tribal needs and developing a new airport on Second Mesa. The Airport Capital Improvement Grant is being used to complete an Airport Layout Plan and Narrative. The Hopi Department of Transportation (HDOT) is working on the Hopi Long Range Transportation Plan (LRTP). The LRTP will help guide the Hopi Tribe with future community planning for economic development and basic road improvements.

INFRASTRUCTURE

Solid Waste

In earlier days Hopi disposed of their refuse off the sides of the mesas in village designated community-dumps. Many dumps had poor physical characteristics that compounded waste management problems. Several were located in natural washes contributing to surface water and ground water contamination. Other dumpsites were located close to the villages and have a steep, high dumping face. These sites were often visible from miles away. In a few villages, combustible refuse was burned in masonry incinerators or simply thrown over the side of the mesas.

The Hopi Solid Waste Management Plan provides a system of public refuse collection with a centralized sanitary landfill. The current Hopi Solid Waste Sanitary Landfill occupies 100 acres and is projected to serve the Tribe and villages' needs for 25 years based on IHS projections of population and generated waste.

13 PRC-R Dixon Speas Associates, 1977.

The Tribal government subsidizes solid waste collection on the Reservation. Residents must rent dumpsters as well as pay additional fees for collection of large items or dumping additional loads at the landfill. As a result, some individuals illegally dump their solid waste in remote locations to bypass these fees.

The Hopi Solid Waste Program cleaned up all historic mesa-side dumps. However, since there was no education component to change people's disposal habits, some dumps are being re-used again. Even when villagers make an effort for proper disposal, other village residents who do not rent dumpsters dispose of their refuse in the rented dumpsters of others, over the side of the mesa, or into the wash.

The year-round presence, and healthy populations of crows and ravens, which are pest species, can be traced to this continuous source of food increasing the populations of the birds (crows and pigeons) threatening the success of farmer fields and harvests. There is also a concern that wildlife may be picking up diseases from litter as well as the possibility that illegal dumps near raptor nests attract crows to the vicinity, thereby increasing the chances of them stealing raptor nests.

Power

Electric service on the Hopi Reservation is substandard when compared to the reliable service in many cities. Reservation electricity infrastructure exists mainly along Arizona Highway 264, serving most of the Villages, but is essentially non-existent elsewhere on the Reservation. Three of the twelve villages, Lower Moenkopi, Old Oraibi and Walpi have chosen not to allow utilities within their boundaries.

Arizona Public Service (APS) and the Navajo Tribal Utility Authority (NTUA) provide electrical services on the Hopi Reservation. Approximately 65% of the Hopi homes have electricity. A majority of the homes and businesses with electricity are served by APS. A 69-kilovolt-transmission line provides electrical service from Holbrook (through the Navajo Nation) to a substation several miles west of Keams Canyon. Arizona Public Service Company (APS) lines are now well over 40 years old.

Electrical service is a radial feed, meaning that the power serving the Reservation comes from one source and extends across the service territory without a back-up interconnection. From the substation, two 21-kilovolt lines branch off east to Keams Canyon and westward to the villages ending on Third Mesa. The electrical lines within the villages usually range from 1.2 to 2.4 kilovolts. NTUA provides electrical service to seven Hopi relocation families who live several miles south of Jeddito and to the new Hopi community of Spider Mound (Yu Weh Loo Pahki). The Villages of Moenkopi (northeast of the main Hopi reservation) have electricity service from APS that services Tuba City. NTUA operates a Questar gas line in Tuba City and to the Moenkopi Legacy Inn. However, there is no domestic gas pipeline distribution system even though there is a wholesale gas pipeline that traverses the Reservation.

APS has acknowledged that the duration of outages on the distribution feeder is longer than the APS Company average. Distribution system maintenance records, which have been provided to the Tribe only recently, would indicate likely system replacement requirements. Power reliability from APS has been improving, however.

While systems of this age are not uncommon in rural areas, enhanced routine maintenance, including power pole replacements and equipment upgrades and replacements are needed to assure long-term reliability.

It was noted that some portions of the system appear very old, and some safety issues may exist with some of the drop lines from feeder poles into homes appearing quite close to the ground. APS continues to work with the Hopi Tribe to address the number of brownouts that occur throughout the Hopi Reservation. It is estimated that the total peak power load on the Hopi Reservation is 5MW.

In the summer of 2004, the former HCAP Project Manager (HCAP refers to the Hopi Clean Air Partnership - a project done in partnership with the US Environmental Protection Agency) and an employee of the Navajo Tribal Utility Authority (NTUA) conducted an inspection of the entire APS transmission line on Hopi and compiled a deficiencies list of the line from which a report was generated and submitted to APS. The inspection was performed in response to the Hopi Tribe's interest in purchasing the transmission system. Soon after, the Arizona Corporation Commission (ACC) held a panel discussion on electrical and other utilities reliability on Hopi at an Energy Summit. Several individuals testified about how unreliable utilities are on Hopi. Soon after the Energy Summit, Arizona Public Service (APS) began making improvements to the transmission system.

NTUA (Navajo Tribal Utility Authority) service territory surrounds the Hopi Reservation. NTUA maintains service lines and facilities up to the edge of the Hopi Reservation in many places. It is not believed that NTUA facilities exist on Hopi lands outside of limited service to Moenkopi and the homes near to Jeddito. Because standard utility practices call for electrical facilities to be interconnected to neighboring facilities for increased reliability and for coordination, Hopi and APS cooperation with NTUA on utility related matters is essential for the development of reliable electrical service. 14

There has been talk of establishing a Tribally owned utility since before the HCAP in 2004. APS has indicated an interest in selling its distribution system on the Hopi Reservation and in some surrounding Navajo communities. The APS system at Hopi is an "island" system, meaning that it is wholly surrounded by the system owned by the NTUA and is fed by one transmission line which crosses through the Navajo Reservation. NTUA has indicated an interest in acquiring and improving the APS system within its boundaries, but APS has agreed not to sell the system to NTUA without Hopi approval. It may make sense for the Hopi Utility Corporation (HUC) to take over APS assets in conjunction with NTUA or independently.

In 2004, the Hopi Tribe began receiving allocations of low-cost WAPA (Western Area Power Administration) power. This allocation comes in the form of a check. However, the WAPA allocation to Hopi is currently administered by the Navajo (NTUA) for high fee.

Tribes that have applied receive allocations of 4¢/kwh power from the federal Western Area Power Administration (WAPA) which is the approximate cost that the government pays to secure hydropower from federally built dams. This is done to make up for the prevalent flooding of reservation lands in the earlier part of the last century when many dams were built with no compensation to impacted Tribes. Tribes with power utilities or with the capacity to sell power themselves can receive direct power allocations. Other Tribes elect to receive checks. It may be possible for Hopi to both receive their allocation directly instead of going through the Navajo.

The above factors could all be reasons as to why the Tribe should set up its own utility. There are about 12 Tribally owned utilities in the country. The Hopi Tribe recently issued an RFP for a Tribal utility feasibility study.

Other options to improve electrical service include a regulatory body to oversee existing utilities, or a partnership with the Arizona state regulatory bodies for more careful oversight and the enforcement of utility standards and regulations. This could be facilitated with the passing of an energy plan which Hopi currently does not have.

The cost of new service at Hopi is dependent on the customer's location and power requirements. Extensions are considered on the basis of economic feasibility and each utility authority prepares separate cost estimates for each project. In 1999, APS and NTUA estimated an average cost of $15,000 per mile for service that extends beyond present service areas.

Telecommunications

Customers at Hopi have experienced telephone service outages, cross-talk and fast-busy signals due to inadequate network capacity. Many Tribal residents lived without phone service because a network was not available in their location.

According to the 2000 Census, 68% of Hopi homes had telephone service. In contrast, in 1980, the Census indicated that only 32% had such service. Only 2% of homes in the U.S. generally were without telephone service as of the 2000 Census. The lack of quality service was hindering the social and economic health of the Tribe. Conventional telephone services are now provided by Hopi Telecommunications, Inc. throughout all the Reservation's communities with the exception of the Moenkopi/Tuba City area, which obtains its service from Navajo Communication Co. and service has been greatly improved. CellularONE provides wireless telephone service to a part of the Reservation through a cell tower located on Antelope Mesa.

The Tribe received a 5-year grant from the Economic Development Administration (EDA) to create a wireless, satellite, broadband connection to the Internet at two initial sites. The Hopi Police Department, Tribal Courts, Hopi Health Care Center, Hopi High School and Northland Pioneer College were the first to be connected. One of the conditions of the grant was to partner with Hopi Telecommunications, Inc. (HTI) to ensure proper operation, maintenance and repairs. The project is operated by HTI as a Tribal telecommunications utility for broadband Internet and other wireless services for the Hopi Tribe.

HTI was established by the Hopi Tribal Council in 2004 to deploy advanced telecommunications that serves the best interests of the Hopi Nation. HTI currently provides land line and satellite phone service as well as internet services in specific areas and is

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Since HTI has successfully rolled out this network, the Hopi Tribe and HTI should be in a strong position to benefit from new government funding.

in the process of expanding. There is a fiber optic line that runs from Holbrook into Kykotsmovi. There is potential to connect additional communities and facilities to that line.

Additional funding for the HTI broadband initiative was provided through USDA Recovery Act funding authorized in 2010. Since HTI has successfully rolled out this network, the Hopi Tribe and HTI should be in a strong position to benefit from new government funding. An announcement was recently made that $600 million will be allocated to support rural broadband connectivity that will flow through the USDA Rural Development Program in the near future with additional allocations as part of the new federal Infrastructure Bill. HTI and the Tribe should remain vigilant and attempt to identify projects to take advantage of this funding.

In late 2000, The Hopi Foundation launched the Hopi FM radio station, KUYI. The broadcast station is sited at the Bureau of Indian Affairs Police/Hopi Courts complex near First Mesa and a 69,000-watt tower is sited on Antelope Mesa.

ECONOMIC DEVELOPMENT

Organizational Infrastructure

The Hopi Office of Community Planning and Economic Development (OCPED) is charged with land use, development and economic development planning assistance within the Villages. In addition, the Hopi Economic Development Board (EDB) was created by Council Resolution in September of 2017 and assigned the task of developing economic development opportunities for the Hopi Tribe. The EDB is now the point of contact for any outside businesses and organizations interested in establishing business partnerships with the Tribe and is responsible for receiving and reviewing proposals. Previously, there was no consistent referral for those seeking to do business with Hopi, and contacts would be made randomly often resulting in a lack of appropriate follow-through. Now that EDB is fulfilling that function it may still take some time before correct referrals become the norm.

One of the best ways to help ensure effective economic development implementation is to provide appropriate organizational infrastructure. This was done by the Hopi Tribe through the creation of the Hopi Tribe Economic Development Corporation (HTEDC). The HTEDC is a Tribally owned Section 17 Corporation. A Tribally-owned Section 17 Corporation may establish and manage subsidiary corporations as joint-venture enterprises with private companies; however, the main Section 17 must remain 100% Tribally owned. U.S. Tribes have operated construction, manufacturing, gaming, government contracting companies as well as many other businesses through Section 17 Corporations. A Section 17 Corporation can arrange for financing without subjecting Tribal governmental assets to the risks and liability associated with borrowing money.

A Section 17 Corporation has a separate Board and accounting and reports to the Tribal Council. The Tribal Council acts as the sole stockholder but does not become involved in direct management of HTED projects. A Section 17 Corporation or its subsidiaries can enter into contracts and joint-venture businesses with outside entities independently. A Section 17 Corporation insulates Tribal businesses from political considerations that often come from direct control of Tribal businesses by a Tribal Council. A Section 17

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Corporation can facilitate capitalization through limited waivers of sovereign immunity for assets controlled by the Section 17 in order to provide loan collateral without putting Tribal assets at risk, and also to provide assurances to potential business or joint-venture partners that a Tribal government may find difficult to do as a result of independent management. A Section 17 Board is normally made up of a mix of Tribal members and trusted advisors with specific valuable business expertise.

Currently the HTEDC manages:

- Hopi Cultural Center (Second Mesa)
- Days Inn (Sedona)
- Flagstaff Properties (Flagstaff)

Business concepts are often complex and may not be well understood by Tribal members. This is where a well-functioning Section 17 Corporation can make a difference by having the expertise and specialized sophistication to properly analyze projected risk and reward and to take charge of the funding and implementation process as well as educating Tribal members and eliciting support. The Section 17 should report periodically and be accountable to the Council. Villages and Tribal members should also be aware of economic development plans with questions and concerns answered with an emphasis on how the Tribe and Village residents will benefit.

Many potential economic development projects involve land use. Not all of the entities that have land jurisdiction may be in agreement as far as best use is concerned. Permitting, external permitting and clearances are mostly controlled by the Office of Real Estate Services pursuant to federal regulations and can be cumbersome. It is possible that external processes can be expedited either through a BIA 638 con- tract administered by the Hopi Section 17 Corporation or through Hopi becoming a HEARTH Act Tribe. The Hopi Tribe has BIA 638 status.

There are many steps to go through to satisfy internal regulatory requirements to obtain Tribal approval for specific land use. The Office of Real Estate Services is adept at driving this process. Now that potential projects are vetted by HTEDC, the HTED and the EDB (Economic Development Board) are able to monitor and help move the process along. A thorough understanding of the land use approval process has not been as widespread among Council members, so that the efficacy of Council follow-up was not as great when the Council served to approve business development instead of the HTEDC.

The HTEDC has a responsibility to set the guidelines, policies and procedures for the development of a new business or the continuation of regulated entities on and off Reservation lands. These procedures incorporate the Department of Natural Resources (DNR) that carries out the Hopi Tribal Ordinances to help protect the Tribe's land, water, mineral and other resources. The Hopi Tribe through the Hopi Office of Community Planning and Economic Development (OCPED) conducted various strategic work session in February through May of 2017 to bring Hopi Departments/ Programs, Hopi Tribal Council and HTEDC together to work on setting priorities for the

Hopi Tribe to begin the first steps to identify key economic development projects. This process has been expanded through the current CEDS Plan.

The Hopi Corporate Charter conveys numerous powers to HTEDC, including general powers to conduct business on behalf of the Tribe, acquire or lease property, incur debts, enter into contracts, manage and invest in commercial enterprises, distribute revenues, establish subsidiaries and so forth. The HTEDC cannot sell, mortgage or otherwise encumber any trust or restricted lands held by the United States for the benefit of the Hopi Tribe; nor can HTEDC lease any lands of the Hopi Tribe, whether held in trust or in fee, without the prior authorization of the Hopi Tribal Council.

However, a major advantage of a Section 17 is that the Board has authority to approve, fund and administer business projects without seeking direct approval from the Council which can greatly expedite business development by serving as the prime conduit for vetting new business arrangements. At the same time, the HTEDC must be managed responsibly and serve the best interests of the Tribe. Since the Tribe is the sole stockholder of the Corporation the HTEDC Board is required to make formal reports to the Council, including financial reports, and the status of agreed upon plans and goals, so that the Council has assurance that appropriate direction and goals are being met. Up to now, this vital communication has been lacking, at least in a formal setting.

In 2012 Congress enacted the Helping Expedite and Advance Responsible Tribal Home ownership (HEARTH) Act amendments to the Indian Long-Term Leasing Act. This Act provides authority for Indian Tribes to lease Tribal trust lands directly pursuant to Tribal law, without further Secretarial approval. Despite these sub- stantial benefits, to date, comparatively few Tribes have taken advantage of the opportunity to use this tool and promulgate Tribal leasing ordinances that take advantage of HEARTH Act authority.

The HTEDC can elect to establish and administer HEARTH Act regulations on behalf of the Tribe. However, the 638 contracting authority with the BIA Office fulfills many of the same functions. Going through the exercise of becoming a HEARTH Act Tribe may make sense if the Hopi Tribe gets involved in leasing land in conjunction with energy or mineral projects.

Housing Authority

The Hopi Tribal Housing Authority (HTHA) has been serving the Hopi People for more than 50 years. The mission of HTHA is to provide the Hopi Community opportunities for safe, decent, sanitary, and quality housing; to enable improvement of the physical conditions of housing; to continually upgrade the management and operations of the Housing Authority, while developing and enhancing a stronger, healthier and viable economic initiative related to low-income housing assistance.

The BIA Consolidation Report of Tribal Inventories of Housing Needs identified approximately 800 families in need of housing assistance with an additional 300 families needing rehabilitative assistance. While most homes are located within or near the Villages, some families obtain land leases located outside of the Village land boundaries. Known as scattered-site housing, these home site locations are becoming important alternative places for the Hopi to build and live.

The availability of affordable housing on the Hopi Reservation is an increasing problem as the population grows. Many Hopi people have been forced to move off-Reservation for employment and/or the lack of

housing. They cite not being able to build within the villages which are crowded to capacity, not being able to secure an uncontested land assignment on which to build, not being able to secure funding to build a home and not having opportunity to buy an existing home as the reasons.

The BIA and Indian Health Services provide rental housing at Keams Canyon. In addition, there are federal rentals for BIA teachers at the Hopi Junior/Senior High School and in Polacca, Second Mesa, Kykotsmovi and Hotevilla. A small amount (33 units) of low-income housing is available on Hopi trust lands in Winslow. The Walpi Housing Project added 75 town home rental units, which are managed by Hopi Tribal Economic Development Corporation (HTEDC). These are located at First Mesa and maintain a 99% occupancy rate.

Much of the housing found on the Reservation is public housing financed under Housing and Urban Development (HUD) programs and administered through the Hopi Tribal Housing Authority (HTHA). Currently, the HTHA manages 230 homes through ownership and 33 as rentals (6 are low income and 27 are tax credit). The HTHA has developed a one-year plan to include community input as well as a five-year plan. A study identified that most homes were built between 1969-1984 and are in need of repairs.

The Hopi Tribe to date does not have a recent updated Reservation wide housing assessment. The Hopi Housing Department was able to complete 40 units of rental housing in 2018 with energy saving amenities at the Winslow Hopi Housing residential area. There are additional projects in the pipeline.

As with most Tribes, there is tremendous pressure on Tribal leadership to provide housing, infrastructure, jobs and economic opportunity to Tribal members on the Reservation, especially for young people.

Currently HTHA has a list of projects proposed for the next five years:

- Warehouse Construction at Polacca and Winslow;
- Youth Center Subsurface Drainage System
- Spider Mound housing;
- Twin Arrows housing;
- First Mesa Consolidated Villages Community Development Master
- 20 unit scattered site development proposals,
- 40 unit Winslow Development and site improvement
- 2 BIA HIP Homes
- Home Rehabilitation Program

Hopi Tribal Government

Tribal Government existed for many hundreds of years before the founding of the United States. Hopi governmental authority was traditionally exercised at the local Village level through religious leadership and clans. While the United States has insisted on dealing with the Hopi as if they were a single Tribe, the Hopi Tribe is a union of self-governing Villages.

The concept of “Hopi” has historically indicated a culture, but not a governmental entity. Within each Village there is a hereditary group of religious leaders or chiefs. The traditional Hopi Villages were ruled by clan theocracies. A few Hopi villages continue the traditional form of Village administration, which includes a leader - *kikmongwi* - from a specific clan. Each Village has its own social, religious, and political organization. There

are significant structural similarities between most Villages. Hopi clans are matrilineal. Each of the clans has its own ceremonies and its own history.

The primary role of the *kikmongwi* was to ensure the success of crops and thus the well- being of the Villages by carrying out ceremonial obligations. Political authority focused primarily on resolving disputes regarding land use. The *kikmongwi l*eads by examples of humility, hard work and good thoughts. Each Hopi Village also had a *qaletaqmongwi* or war chief who was responsible for enforcing internal social order and for dealing with external affairs.

While some Hopi supported the creation of the administrative system of 1936, there was some opposition to its establishment, traced to the Hopi refusal to adopt the white man's political systems. Hopi and Tewa people face the challenges of working together and working with the Council. The Tewa Village at Hopi is made up of descendants of the Rio Grande Pueblo Tribes who fled the Pueblo Revolt of 1680-1692 and settled in Hopi rather than returning to their homeland Villages.

The Villages have continued to be self-governing and sometimes ignore the Tribal Council. The Tribal Council has limited authority within Village jurisdictions. Empowering the Council to make decisions by majority vote, rather than through the traditional religious leadership, was viewed by many Hopi as undercutting the rightful authority of the traditional *Kikmongwi.* Unoccupied land beyond the clan and Village holdings is open to the use of any member of the Tribe under the supervision of the Tribal Council. Each Village has either a Community Service Administrator (CSA) or an appointed individual(s) as representatives to handle daily Village matters.

The Hopi Tribal Council retains the authority to represent and *speak for the Hopi Tribe in all matters for the welfare of the Tribe, and to negotiate with federal, state and local governments, and with the councils or governments of other Tribes and to provide a way of organizing to deal with modern problems, with the United States Government and with the outside world generally* The constitution consists of thirteen articles, addressing territory, membership, and the organization of government.

The Tribal Council includes a Chairman, Vice Chairman, Secretary, and Treasurer and Village representatives based on the population of each Village, consisting of 22 representatives from Upper Moenkopi, Bacavi, Kykotsmovi, Sipaulovi, First Mesa Consolidated Villages (Walpi, Sitsomovi and Tewa), and Mishongnovi.

The following Villages chose traditional government over Council authority and do not have Village representation on the Tribal Council: Shungopavi, Oraibi, Hotevilla, and Lower Moenkopi. Representatives to the Council are selected either by a community election or by an appointment from the Village *kikmongwi,* or leader. Each representative serves a two-year term.

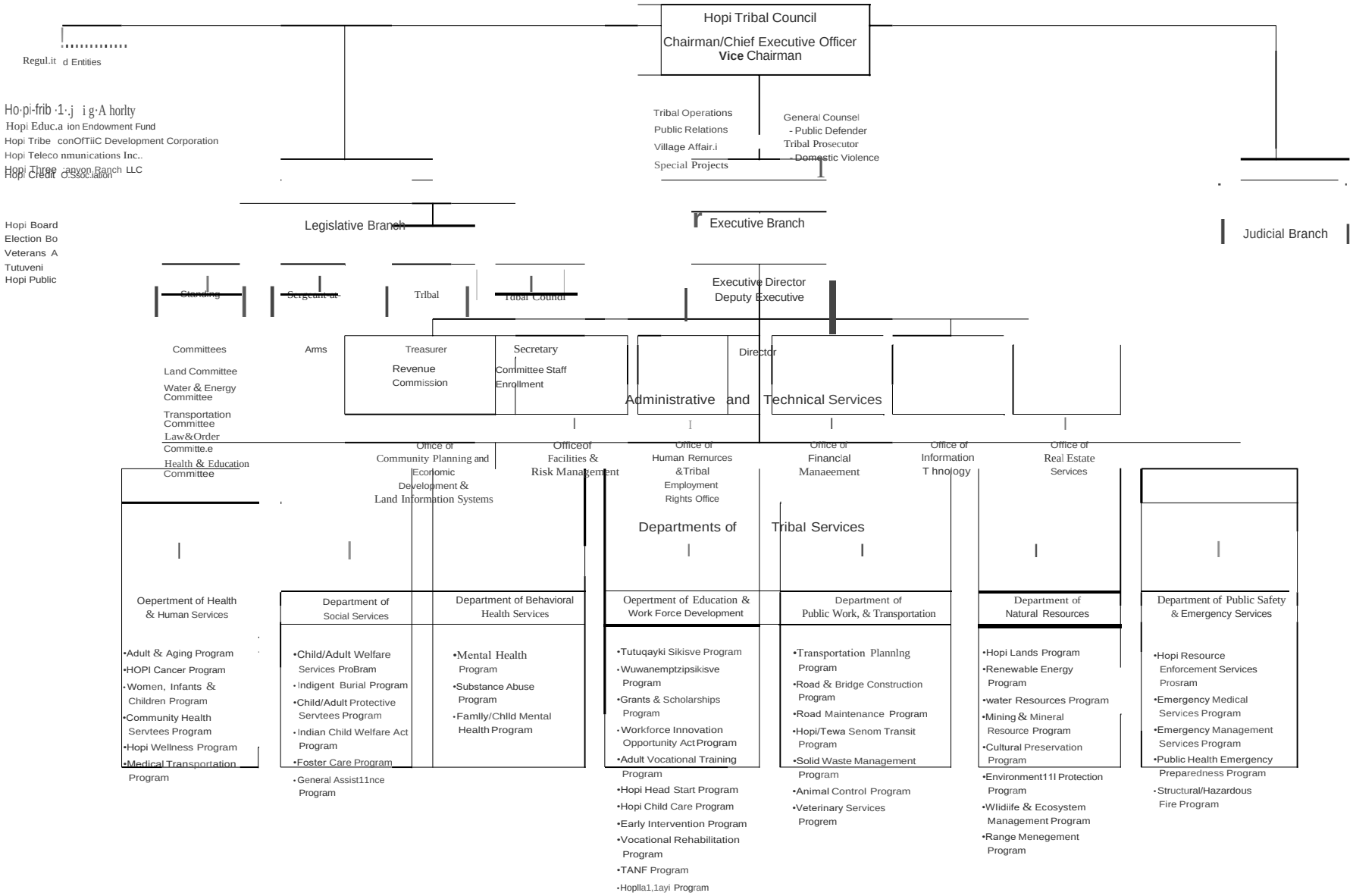
Hopi Villages:

First Mesa

- Walpi
- Sitsomovi
- Hano (Tewa)
- Polacca

HOPI TRIBAL GOVERNMENT ORGANIZATION CHART

Amended by H-066-2016



Second Mesa
- Shungopavi
- Sipaulovi
- Mishongnovi

Third Mesa
- Oraibi (Old Oraibi)
- Kykotsmovi
- Hotevilla
- Bacavi

Other Hopi Communities
- Spider Mound (Yuwehloo Pahki)
- Keams Canyon
- Moenkopi (Upper and Lower Villages)

Second Mesa

Traditional villages include First Mesa's Walpi which oversees Sitsomovi and Tewa. Second Mesa includes Mishongovi and Shungopavi; Third Mesa traditional governance has also included Oraibi and Hotevilla. The Upper and Lower Villages of Moenkopi, Kykotsmovi, Sipaulovi and Bacavi embrace democratic forms of government authorized by the Constitution and have village Boards of Directors and/or Governors. Upper Moenkopi is the only village with an adopted federally recognized constitution.

The Tribe is governed by an executive, legislative and judicial branches with limited powers under the Hopi Constitution. The Chairman and/or in his absence the Vice Chairman, is responsible to conduct the day-to-day business of the Hopi Tribal government. The Hopi Tribe Executive Director is responsible for overseeing all Tribal departments and programs. The Executive Director reports to the Hopi Chairman. Most Tribal constitutions were established under the 1936 Indian re-organization Act whereby the BIA influenced Tribal constitutions by following the model of the U.S. government.

The Hopi Tribe is headquartered in Kykotsmovi, Arizona. The Hopi Tribal Government operates a Trial Court and Appellate Court in Keams Canyon. These courts operate under a Tribal Code, amended August 28, 2012. The Council adopted the current Hopi Organizational Chart and a new Organizational Plan in January of 2016. The major organizational change enacted in 2016 was that the Vice Chairman no longer has direct authority over the departments and programs that were under his office from the last reorganization of 1988/1989. Instead, the Council created the Executive Director position as the direct line of authority/supervision/accountability for all Department Managers and Directors.

Land, Water and Energy, Transportation, Law and Order and Health and Education Committees are under the Legislative Branch. The Executive Branch consists of Community Planning and Economic Development, Facilities and Risk Management, Human Resources, Financial Management, Information Technology and the Office of Real Estate Services. The service departments are underneath the Executive Branch and consist of: Health and Human Services, Social Services, Behavioral Health, Education and Workforce, Public Works and Transportation, Natural Resources and Public Safety and Emergency Services. There are many programs within these categories, with a total of close to fifty Tribal Programs in all and close to 550 employees.

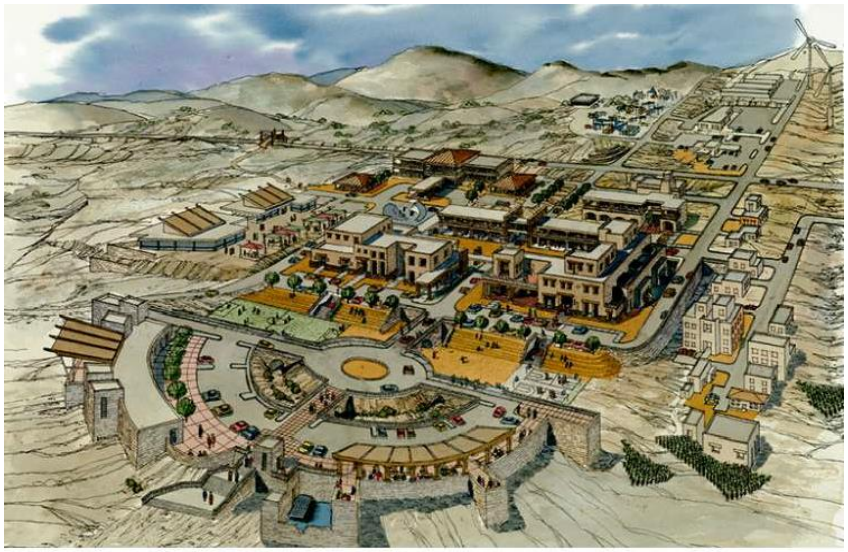
Finances and Economic Development

The 1966 Peabody Company coal contract had profound impact on Hopi finances, the environment and water resources. The Hopi Tribe lost close to $7.3 million of annual coal royalty revenues when the Mojave Generating Station was closed in 2005. The subsequent shut- down of the Navajo Generating Station (NGS) Power Plant in 2019 resulted in a monetary loss to the Tribe of close to $12 million annually. Together these losses represent almost all of the Tribe's non-federal revenues. The Tribal operating budget is normally between $20 to $25 million. Due to the loss of coal income the Tribe has been operating in the red. The Tribe does have an invested reserve fund. The goals for the fund, however, are to build it and not deplete it. The reserve fund is not meant to cover Tribal operating expenses.

The Hopi Tribal Planning Ordinance No. 55, along with the Hopi Tribe Strategic Land Use and Development Plan give some indication for planning new proposed communities. The Tawa'ovi Project is a master planned project overseen by the Hopi Tribal Council looking at creating a "new community" where Tribal and non-Tribal individuals can live, work and create other economic venues, such as small retail and visitor attractions along with residential and Tribal government expansion.

The Hopi Tribe has proposed planned community developments such as: Yu Weh Loo Pahki known as Spider Mound; Tawa'ovi; Side Rock Well and Hollow Mesa East. The new communities could include: housing, commercial, government/institutional buildings, recreation, tourism/museum facilities and other small light industrial developments. These new developments would all be located on the main Hopi Reservation lands. Off-Reservation community planned locations can be found on the Hopi ranch lands or at the Hopi Industrial Park location in Winslow, Arizona.

The Hopi Tribe has invested in three successful hotel properties with one off- Reservation in Sedona, a successful modern hotel in Moenkopi, and a modest hotel property on Second Mesa at the Hopi Cultural Center. The Tribe also operates a successful ranching operation and off-Reservation real estate, including commercial property in Flagstaff. Almost all of the Hopi businesses are profitable but collectively do not bring in much more than about $1 to $2 million in profits annually.



Rendering of Tawa'ovi Planned Community (T&P Architects)

The Villages are concerned about economic development. The most successful economic development Village is Upper Moenkopi which is away from the main reservation area of District Six next to Tuba City. The Upper Moenkopi Village has set-up a Developers Corporation and received a $4 million grant from HUD for a waste water treatment plant that produces Class A water. Upper Moenkopi Village also manages the Moenkopi Legacy Inn that serves as the western gateway to Hopi and operates the Tuuvi Travel Center. Upper Moenkopi also benefitted

financially from the Bennet Freeze Court Settlement. The Village is planning additional projects related to water, energy and housing.

The traditional Villages on the mesas in District Six face different economic development challenges. The Villages are small, self-contained and difficult to access with minimal services or amenities. Villages off the mesas, such as Kykotsmovi which is the site of most government offices, have potential to expand retail development. Kykotsmovi is home to the primary Tribal administrative offices and some retail. The Village is currently completing construction of a new travel center and convenience store.

Most of the mesa Villages are interested in refurbished meeting and program space, small convenience groceries and corn mills. The Tribes provide limited funds to the Villages to operate their governments. Recent budgetary cuts to the Villages from the Tribal Administration due to the decrease in coal contract revenues, however, total over 24%. Some Villages earn limited funds through managing utilities.

As part of the CEDS process a Village Economic Development Plan was developed that recommended a closer economic development/ Tribal Council partnership and information sharing, emphasizing that the Hopi Tribe is the Villages. The traditional Villages can benefit from Tribal economic development in two ways: increased employment opportunities; and what has been called community service businesses. The Tribe and Villages could decide to use a portion of new potential economic development revenues to subsidize corn mills, meeting space and small grocery stores that are too small to earn a profit but provide a community service.

The sector with the most potential to benefit the traditional villages is tourism. Hopi Tourism and Experience Hopi Tours is located at the Moenkopi Legacy Inn. There is tremendous potential to sensitively increase tourism by investing in tourism marketing, both domestically and abroad. At the same time, tourism can be carefully regulated so as not to interfere with sacred ceremonies and dances. Villages, however, could decide to present exhibition dances and cultural events especially for tourists and control visitation periods. Increased tourism will have an impact on cottage industry development such as arts and craft and food sales. Tourism may be additionally enhanced through the scheduled refurbishment of the Polacca Airport. The Hopi Reservation is one of the most unique living environments in the world, and probably could be designated as a World Heritage Site.

In order to support cottage industry as well as more extensive entrepreneurial development the Hopi Credit Association (HCA) can be strengthened. HCA was established in 1952 as a 501(c)3 organization relending program to members of the Hopi Tribe and became a Community Development Financial Institution (CDFI) in 1998. Over the years, HCA has become more of a consumer lending organization than a business loan entity. The HTEDC (Hopi Tribe Economic Development Corporation) has plans to develop a new CDFI to focus on entrepreneurial development through both business training and making loans available to qualified start-ups. Now is the time to do it, either as an independent entity or as an expansion of the HCA. The federal government through the State Small Business Credit Initiative (SSBCI) has made over $10 billion available to both states and Tribes to fund or strengthen small business lending programs as part of the American Rescue Plan Act.

The Hopi Tribe recently applied to federal funding agencies to increase its Indirect Cost Rate (IDC). The rate had been close to 10%. Most Tribes with government contracts receive an IDC rate closer to 30%. Most Tribal budgets are primarily financed through federal contracts. Tribes provide comprehensive services to their Tribal members that are commensurate with non-Tribal local governments such as cities, counties and even states, without the same ability to tax. The federal government normally provides an amount of

funding to local governments, including Tribes. Federal agencies provide a negotiated Indirect Cost Rate for administrative expenses. The Hopi Tribe was recently able to increase the Indirect Cost Rate that it receives from the federal government closer to a normal amount. This will help to make up for the coal revenue budget shortfalls.

The Tribe recently took over law enforcement from the BIA and has plans to fund and complete a new detention center on Hopi land. Methamphetamine is a major issue on the Reservation that impacts Hopi Youth and crime. The Hopi Behavioral Health Services/Mental Health Program operates an effective outpatient substance abuse treatment program to help deal with that and other substance abuse related issue.

The Hopi Tribe, along with all of the other U.S. federally recognized Tribes received substantial CARES Act funds. The funds were distributed to Villages, departments and programs through an application process in a fairly opaque manner. In addition, CARES Act funds were used to develop a modular community at the newly developed turquoise well site by Tawa'ovi just inside the Hopi Reservation boundaries. Some of entities that have moved there include the Hopi Emergency Response Team quarantine units, the Hopi Solid Waste Department, Hopi Public Safety Department, the Department of Natural Resource Programs and Hopi Behavioral Health and Social Services Departments.

Original plans for the area were included in the early Hopi Tribal Master Plans as one of the development districts and encompassed an ambitious mixed use community. The Tawa'ovi Project is a master planned community project authorized by the Hopi Tribal Council. Despite substantial planning and the creation of a development team, progress on the community has come to a standstill replaced at least temporarily by the Turquoise Well site modular project.

Retail Development and Economic Leakages

One viable economic development strategy revolves around plugging economic or trade leakages. An economic leakage is defined as a situation whereby money earned in a given community or economic area is spent outside of the area as a result of a lack of services or goods within the area. There are minimal services or goods offered within the Hopi region so that the main reservation population is used to traveling long distances to local bordering towns, both on the Navajo Reservation such as Tuba City and Bilcon, as well as to communities like Winslow, Holbrook, Gallup and Flagstaff, in order to satisfy the demand for jobs and amenities that cannot be purchased or secured on the main Hopi Reservation. Due to the relative isolation of Hopi these driving distances are great. There is a lack of basic services such as full-service groceries, retail stores, vehicle service facilities and entertainment venues. This implies that either recruiting or starting-up businesses at Hopi that can offer these and other services should be viable from an economic development standpoint. The Hopi Reservation should be able to support the number and variety of businesses close to a small town of 6,000 to 7,000 people even though the Hopi population is scattered over a large area. The few businesses on Hopi don't begin to fill that demand.

Economic strategy to address this opportunity revolves around entrepreneurial development and recruitment. Most Hopi entrepreneurs are focused on cottage industries such as craft businesses or roadside stands that appeal to tourists. There are organizations that provide business training at no cost such as the Small Business Development Center Network (SBDC). The OCDEP (Office of Community Development

and Planning) has formed a relationship with the SBDC (Small Business Development Center) in Flagstaff to hold classes in starting a business that can be supported by the HTEDC and a new CDFI (Community Development Financial Institution) Program.

Tourism

Village of Walpi

Potential recreational areas are four lakes in the Keams Canyon area, known as Lake Maho (also known as Upper Keams Lake) Twin Dam No. 1 and Twin Dam No. 2 located on the main Hopi Reservation. The Pasture Canyon Reservoir located near Moenkopi Villages is also seen as a recreational area; however, it is prioritized for irrigation purposes. Pasture Canyon Reservoir, is being considered to be included into the annual fish stocking for the Tribe, from the USFWS Alchesay-Williams Creek National Fish Hatchery (NFH) located in Whiteriver. The Hopi Tribe will need to meet with both Upper and Lower Moenkopi villages to get their input, as any stocking may impact the use of the water for irrigation. Some village members from both villages (Upper Moenkopi and Lower Moenkopi) have requested that it be stocked, however the Tribe has to see what can be worked out between the farmers and village to enter into a compromise if one exists.

One need to promote tourism is to establish regulations to protect and conserve areas like Blue Canyon and Dawa Park on the Hopi Reservation, together with publicizing these unique scenic areas. Blue Canyon is a section of Moenkopi Wash on the Hopi Indian Reservation where red and white rocks have been eroded into countless spectacular patterns and shapes. Dawa Park is an ancient Hopi petroglyph site. Tourism promotion of these areas needs to be accompanied with the means for increased protection. A Parks and Recreation Program could be funded and set-up as part of a larger tourism program. Land has also been designated by the Hopi Tribe for the construction of a museum that needs to be funded, designed and built.

Blue Canyon

Most Hopi Villages wish to be more involved with agriculture and tourism. Experience Hopi Tours based at the Moenkopi Legacy Inn is a separate LLC with its own independent Board. With the support of HTEDC and the Hopi Tribal Council Experience Hopi Tours can be expanded as a Tribal Tourism Department. The Department can promote cultural events and programs at the Villages and coordinate events with special tours and outside tour companies. Now outside tour companies compete with Experience Hopi Tours.

A Tourist Department can charge outside tour organizations and control tourist activity, protecting privacy and special ceremonies, while promoting and coordinating programs appropriate for the public. A Tourism Department can help to maximize revenue to artists and make maximum use of Village assets at appropriate times, as well as maximize Tribal training and employment as guides to outside companies. A Department can more easily promote Hopi as a destination as well as receive grant funding for marketing. Tourism is a major industry that Hopi is only taking minimal advantage of. Hopi can be marketed as a prime tourist destination at trade shows and other venues both nationally and internationally.

A source of information for Native American tourism development is AIANTA (American Indian Alaska Native Tourism Association). AIANTA serves as the national center for providing tourism and travel training and technical assistance to American Indian nations.

Economic Resilience and COVID-19 Impact

Economic resiliency is defined as the ability of an economy to withstand shocks such as natural disasters or rapid outside change such as economic cycles. Establishing economic resilience in a local or regional economy requires the ability to anticipate risk, evaluate how that risk can impact key economic assets, and build a responsive capacity. Usually the shocks/disruptions to the economic base of an area or region are manifested in one of three ways:

- Downturns or other significant events in the national or international economy which impact demand for locally produced goods and consumer spending;
- Downturns in particular industries that constitute a critical component of the region's economic activity; and/or
- Other external shocks (a natural or man-made disaster, closure of a military base, exit of a major employer, the impacts of climate change, etc.)

In the case of the Hopi Tribe the closure of the Generating Stations and coal mines meets all of the above criteria.

One resiliency strategy is to undertake efforts to broaden the economic base through diversification initiatives, such as targeting the development of emerging clusters or industries that build on a region's unique assets and competitive strengths and provide stability during downturns that disproportionately impact any single cluster or industry. Economic diversification is a prime economic resiliency strategy.

The way that the Hopi Tribe can implement an income diversification strategy is to pursue the low-risk potentially lucrative development projects that are addressed in this plan, especially IHS 638 contracting and third-party billing, helium development, solar energy development, tourism development and potentially gaming.

Another strategy includes adapting business retention and expansion to assist firms by strengthening existing enterprises through planning and goal setting. Strong and profitable enterprises are more easily able to withstand economic disruptions. A strong business culture and retention program with profitable enterprises fosters additional business development by making it easier to recruit businesses, form joint venture partnerships and obtain financing. The HTEDC can coordinate this function and is already moving in that direction with the creation of an entrepreneurial CDFI fund and business training program.

Building a resilient workforce that can better shift between jobs or industries when core employment is threatened through job-driven skills strategies and support organizations is another important resiliency strategy.

Promoting business education and keeping communication channels open is an important part of a retention strategy. Tribal businesses should understand their vulnerabilities. Establishing a process for regular communication, monitoring, and updating of business community needs and issues, and reaching out to businesses to address concerns as well as potential risks and opportunities, are part of a strong retention program. The OCDEP (Office of Community Development and Planning) and the HTEDC should maintain relationships and the capability to rapidly contact key local, regional, state, and federal officials to communicate business sector needs and opportunities, help to provide training and education programs, and help to coordinate impact assessments and plans as partners.

Maintaining up-to-date and complete information on funding opportunities, land and potential business sites, strategic and growing regional economic sectors, links to the regional business community, local business strengths and weaknesses assessments, and developing and updating business policies and regulations also helps to grow and strengthen Tribal economics and position Tribes to be proactive. This can include a strong tax policy.

All these factors are important and should be conscientiously pursued by Hopi. Most of these strategies are long-term. Strategies with the potential to address the immediate financial situation in the short-term include the specific diversification strategies already mentioned and addressed in more detail below.

Other resiliency challenges that the Tribe is facing includes climate change and drought along with the COVID-19 Pandemic. The Hopi Tribe is no stranger to water scarcity, as the Hopi people have managed to sustain themselves in an extremely arid area with limited water for many hundreds of years. The depletion of the water table by the coal slurry line built by Peabody Coal put unprecedented strain on water accessibility. The Hopi Tribe has consequently prioritized water development through drilling new wells, through the HAMP development and through instituting conservation measures. However, extreme drought conditions continue to put pressure on water availability. Nevertheless, the measures that the Tribe is taking are a good example of effective resiliency measures.

The first confirmed case of COVID-19 in a Hopi resident was reported on March 28, 2020. Between April and May, cases continued to be diagnosed at low levels. Average daily incidence (using a moving 7-day average case count) among Hopi peaked in mid-June at over 100 cases per 100,000 population (average eight to nine new cases per day), declined, and then peaked again in mid-July. The Hopi Tribe was quick to respond and put together a model program to limit the spread of the disease.

Tribal Leadership followed the lead of Indian Health Services with regard to disseminating legitimate information and actions about COVID-19 protocols and procedures. The Hopi Tribe issued various Executive Orders and three Tribal government shutdowns.

On May 18, 2020, a team from the US Centers for Disease Control and Prevention (CDC) was deployed at the request of the Tribe in response to increases in COVID-19 cases. Collaborating with the Hopi Health Care Center (the reservation's federally run Indian Health Service Health Facility) and CDC, the Hopi strengthened public health systems and response capacity from May to August including:

(1) implementing routine COVID-19 surveillance reporting;
(2) establishing the Hopi Incident Management Authority for rapid coordination and implementa tion of response activities across partners;
(3) implementing a community surveillance program to facilitate early case detection and educate communities on COVID-19 prevention; and
(4) applying innovative communication strategies to encourage mask wearing, hand hygiene and physical distancing.

These efforts, as well as community adherence to mitigation measures, helped to drive down cases in August. As cases increased in September–November, the improved capacity gained during the first wave of the pandemic enabled the Hopi leadership to have real-time awareness of the changing epidemiological landscape. This prompted rapid response coordination, swift scale up of health communications and redeployment of the community surveillance program.

The Tribe was closed and under lockdown during the major portion of the Pandemic. The stay-at-home order made it difficult for Hopi ranchers to get hay for their livestock. Native Waters on Arid Lands, a federal grant-funded project, delivered 350 bales of hay to Hopi in June of 2020.

As of the beginning of the year (2021), the Hopi Tribe was still on lockdown. The Hopi Health Care Center tested over 7,456 patients to January 2021. Over 1,013 of those tests at the Hopi Health Care Center came back positive with 696 from Hopi Tribal members. The Hopi Tribe Department of Health and Human Services (DHHS) partnered with the Hopi Health Care Center and the CDC to deploy a team of community health workers to every household in villages with high case counts. Community health representatives went door to door, tested exposed individuals, and provided educational materials to families.

While taking effective measures to deal with the health crisis, the Hopi Tribe was able to apply for CARES Act funding. CARES Act funding paid for a new water well at Old Oraibi and new wells and the modular offices at Tawa'ovi. Additional funds were distributed to Villages during the lockdown periods.

The Tribe made the decision not to lay off any personnel during COVID or as a result of the termination of the coal contract. During the COVID lockdowns employees were encouraged to telecommute to work. However, connectivity was a major issue, and many employees did not have laptops or cell phones. The Tribe began furnishing this hardware to many staff, but the COVID disruption had a major impact on Tribal operations. Some of the non-Tribal businesses on the Reservation were forced to lay-off staff. The decision not to lay-off staff as a result of the curtailment of the coal contract will have a major impact on Tribal finances and reserves in the future so that replacing that revenue is a major priority.

Strategic Economic Development Projects

Prioritized economic development projects consist of low-risk endeavors that can be internally controlled, with minimal capital outlay, do not compromise the environment and can potentially generate high returns. Projects that meet this criteria include:

- Hopi Health Center 638 Contracting
- Helium Extraction
- Solar Energy Development
- Tourism Development
- Gaming

Helium, solar energy and tourism development have been discussed in earlier sections.

IHS 638 contracting

Tribes are sovereign entities with special treaty relationships with the US government. The IHS (Indian Health Services) operates or funds hundreds of medical facilities that serve approximately 2.5 million Native Americans. The IHS both operates medical facilities directly and encourages Tribes to manage their own medical programs under Public Law 93-638 (Indian Self-Determination and Education Assistance Act - ISDEAA) whereby the Tribe still receives roughly the same level of funding from the IHS. If the Tribe runs an efficient operation, the Tribe can retain any excess revenue as long as it is used either for administrative purposes or to expand health care programs.

The major opportunity from a revenue standpoint regarding IHS 638 contracting for Tribes is that Tribes can bill third-party providers (private insurance, Medicare, and Medicaid) and still receive a similar level of IHS funding.

Tribes that institute 638 contracting with the IHS need to work with health directors to prepare business processes that will ensure streamlined billing of insurance providers through competent coders and billers. Many small Tribal clinics that are much smaller than Hopi earn millions of dollars of annual revenue from 638 contracts and third-party billing that helps to subsidize administrative expenses and allows Tribes to fund and expand services such as early childhood centers, senior centers, gymnasiums, exercise centers, health programs, substance abuse programs, direct medical services and offset Tribal administrative costs.

THE HOPI TRIBE

Tribes are the only entities in the United States that can act both as a government and a business. The status of Tribes as sovereign entities within the United States allow Tribal enterprises to take advantage of many unique opportunities.

The IHS interprets “health care related programs” broadly. For example, providing clean and safe drinking water to Hopi Tribal members may fit. Now the Hopi Tribe finances the water program through general funds. This function and potentially others could be subsidized through third-party insurance collections. Currently, 39% of the Hopi Tribal population is covered by Medicaid, 16% is covered by Medicare and 31% is covered by private insurance, including the Tribal employee plan. The Hopi Tribe is missing out on third-party billing revenues.

The Hopi EMS (Emergency Medical Services) third-party billing program currently has a surplus of over $1 million, and the Hopi Behavioral Health programs collects over $800,000 per year from third-party billing. Both of these programs already operate under 638 contracts. If general medical services are put under a 638 contract the Tribe could collect many millions of dollars that would go to both expanding health related services and potentially replacing general fund costs that are currently spent on administration and programs linked to health and Tribal Member well-being. This program has potential to assist with the Hopi financial situation in the short-term with minimal risk.

That does not mean that a 638 Program will not encounter implementation challenges. Hopi Tribal employees currently have health care coverage through a Tribal self-insurance program. The self-insurance program may be able to be re-negotiated resulting in increased access to surplus funds and savings.

Assurances must be given to both Hopi Tribal members and Medical Center staff that their current benefits under IHS will be continued or improved. Many examples can be provided from other Tribes where this was the case. There is a special program under IHS whereby current IHS employees can retain their federal benefits under a 638 Tribal compact. Initially, there will likely be an amount of opposition to the new plan until it is understood. Health Center management and the employee base can remain essentially the same. Both patient care and employee benefits can be improved under the new system.

The process of IHS 638 contracting involves many steps. The first step is to hire appropriate consultants to prepare a feasibility study and Action Plan to help walk the Tribe and Health Department management through the process. The IHS provides a planning grant of up to $120,000 for Tribes that wish to implement 638 contracting.

Gaming

On November 30, 2017, in his last day as Chairman of the Hopi Tribe, Herman G. Honanie and Arizona State Governor Doug Ducey signed the Hopi Tribe-State of Arizona Tribal Gaming Compact. The historic agreement, which gives the Hopi Tribe the opportunity to operate or lease out up to 900 or more Class III gaming machines, makes Hopi the 21st and last Arizona Tribe to sign a gaming compact with the State. Hopi was previously the only Tribe in Arizona unable to participate in or generate any revenue from Tribal gaming. Currently, there are 23 Tribal casinos statewide. Under the Compact, which will run for at least 20 years, the Tribe has the right to own and operate as many as 900 gaming machines on Hopi Tribal land, or the right to lease those machines to other Tribes within the state.

Potential sites for a Hopi Casino are in Moenkopi next to the Moenkopi Legacy Inn property by Tuba City, which will soon have competition from a Marriott Hotel, or/and on Hopi Trust land along I-40. Gaming has been voted down twice before by Tribal members, but considering the financial situation, it is likely to pass this time. Authorization for 900 machines should be able to attract external investment so that the Tribe would not have to use its own money to develop a facility.

8(a) Marketing

Tribes can use their ability to form "super 8(a) corporations" (Section 8(a) of the Small Business Act) attracting bargaining leverage to form joint ventures with companies that have federal contracts. Tribes can apply to be their own 8(a) company with or without a partner. In FY2016, 8(a) firms were awarded more than $27 billion in federal contracts, including $8.5 billion in 8(a) set-aside awards and $8.7 billion in 8(a) sole-source awards. Minority, small business firms that apply for and receive SBA 8(a) status can bid on 8(a) set-aside contracts with most government agencies, competing only with other 8(a) firms. In addition, 8(a) designated firms can receive extra points when competing for government contracts with non-8(a) companies. Numerous Tribes have developed large diversified business enterprises based on their 8(a) status.

Any minority owned business can apply to the SBA for 8(a) status. The application process is fairly onerous. A firm must have been in business for a minimum of two years to be considered. A Tribally owned business is exempt from this rule and can achieve 8(a) status much quicker. Tribally owned "8(a)'s" are exempt from other restrictions applicable to non-Tribal 8(a) firms as well and can achieve what is known as "super 8(a) status" as a result of regulatory exemptions.

- Tribally owned 8(a) firms are entitled to receive sole source contracts of any value. The $3M size standard limitations applied to other 8(a)s do not apply. The award of a sole source contract can not be challenged by another participant or any other party, either to the SBA or any administrative forum as part of a bid or other contract protest.
- Tribes may form and operate multiple 8(a) companies without regard to affiliation if the NAICS codes are unique to each.
- The affiliation rules, applicable to size standard determinations by the SBA, do not apply to Tribal 8(a) enterprises.
- Any firm owned 51% or more by a Tribe is presumed to be socially disadvantaged without formal explanation (per requirement of 124.112(b)(2)). (This avoids having to produce a substantial amount of evidence to prove disadvantaged status.)
- Tribally owned enterprises do not have to be in business for the 2-year minimum usually required by SBA regulation if they can provide an acceptable business plan indicating the firm can meet the combination of performance requirements established by the SBA for 8(a) companies.
- The United States government may directly outsource non-inherently governmental services or functions to a Tribal 8(a) enterprise under OMB circular A76 without study or cost comparison.

There are two types of affiliations that can facilitate 8(a) designated entities between Tribes and private businesses: 8(a) joint ventures and 8(a) teaming arrangements.

The Federal Acquisition Regulations define joint ventures as "when two or more companies form a partnership to act as a potential prime contractor." Two of the most important features of joint ventures are that:

1) they are generally independent legal entities from their founding companies, and
2) because they constitute a single entity, they are considered "affiliated."

Joint venture partnering companies can receive direct federal procurement contracts, subcontract work, and serve as subcontractors. However, the SBA has placed restrictions on the number of contracts that may be awarded to most joint ventures. “An 8(a) joint-venture can carry out no more than three specific or limited-purpose business ventures for joint profit over a two-year period, for which purpose they combine their efforts, property, money, skill, or knowledge, but not on a continuing or permanent basis for conducting business generally.” Populated joint ventures have been eliminated from the SBA’s small business programs, meaning that employees would come from the independent firm and Tribe that make up the joint-venture.

According to a December 2016 correction by the SBA, joint venture parties will receive profits commensurate with the work they perform. The Tribal partner must perform at least 40% of the total work. Also, according to these rules, the 8(a) firm (Tribe) must manage and provide the project manager and have an ownership stake in at least 51% of the resulting joint venture entity.

The Federal Acquisition Regulations define a teaming agreement for 8(a) purposes as a situation in which “a potential prime contractor agrees with one or more other companies to have them act as its subcontractors under a specified Government contract or acquisition program.” Teaming agreements are much more flexible than joint ventures, which makes them valuable, and parties to a teaming agreement are not considered affiliated. The 8(a) partner under a teaming agreement would be required to perform at least 50 %of the cost of the contract incurred from personnel with its own employees on a services contract. Profits are determined on the basis of individual contracts rather than a proportional sharing of profits or losses.

The Small Business Administration created the 8(a) Mentor-Protege Program to encourage large businesses to partner with small businesses to serve as prime contractors on federal contracts. To construct a men- tor-protege relationship, the parties enter into “a written agreement setting forth the protégé’s needs and describing the assistance that the mentor is committed to providing to address those needs,” for at least one year.

One way to structure Tribal 8(a) companies is to secure 8(a) status for the HTEDC. In order to submit federal bids, 8(a) status would be applied for according to individual NAICS codes that authorize the 8(a) entity to conduct business in specific sectors. HTEDC could submit on its own or spin off subsidiary 8(a) businesses.

It may be possible for Hopi, working with technical assistance, to approach existing minority 8(a) firms that are about to sunset, and offer to form a joint venture Tribal “super 8(a),” which does not sunset. Non-Tribal 8(a)’s must graduate from the program within 9 years. Each 8(a) joint-venture relationship would have to be negotiated separately under individual terms.

The Hopi Tribe may be able to form its own 8(a) construction company and bid on federal contracts, especially if the federal government increases infrastructure spending. Hopi had a successful construction company for an extensive period in the past that was not an 8(a) firm, and there are Tribal members with construction skills. If Hopi forms a mineral company to mine helium, potash or other materials, it may make sense to put that activity under an 8(a) umbrella as well to be able to sell under incentivized terms to the federal government.

Tax Code

Indian Tribal governments have the authority to impose and collect sales and other taxes on products,services and business activities within the territorial jurisdiction of the Hopi Tribe. Although not all Tribes exercise this inherent authority, Tribes are increasingly relying on the imposition of taxes on transactions within their territory as a stable and long-term revenue source for Tribal governments. In 1993, the Hopi Constitution was amended, authorizing the Council to enact a Tax Ordinance that was never implemented. A Tribal referendum is required in order to implement a Hopi tax program. In 1998, the Tribe contracted a feasibility study for a Tribal Tax program which came out positive. A referendum held in 2000, however, failed. A recommendation is to establish a campaign to promote a carefully constructed tax program that makes sense for Hopi given the new financial challenges and hold a new referendum while educating Tribal members. A tax program would only impact non-Tribal members doing business on the Hopi Reservation.

Additional projects

Additional potential projects include:

Hopi Industrial Park: The Tribe conducted an overview of the development of Hopi Industrial Park with Coe and Van Loo (CVL) firm in 2014 on Tribal property in Winslow. Although some infrastructure is already in place, additional infrastructure, utilities, as well as police, fire and maintenance services need careful planning. The report concluded that land use plans should be organized into a cohesive plan with time frames and the development of investment requirements and strategies along with the expected returns from investments. The report gives a step-by-step guidance on what to identify when evaluating proposed projects for the Hopi Industrial Park.

The Hopi OCPED office receives and reviews corporate proposals to lease and benefit from the Industrial Park building. The Park is on Interstate 40 and near the Burlington Northern Santa-Fe Railroad, the Winslow airport and near the original Route 66. The property is located on the Hopi Reservation and has trust land status.

Hopi Cultural Center Motel and Restaurant: The Cultural Center is in need of renovation/rehabilitation and expansion. It provides the only overnight rooms on the main Reservation, thus allowing only a small percentage of visitors to fully experience the countryside and, more importantly, providing a place to spend money on the Reservation. The expansion project will involve all areas of work to include feasibility, business and marketing planning, assessment of existing facility, redesign, and engineering and final construction. A new wastewater treatment facility will be needed to facilitate expansion. A tourist information center could also be created to provide a place where visitors would have the opportunity to ask questions, learn what is acceptable and feel more comfortable while on the Hopi Reservation. It could also provide space for demonstrations of various crafts, display cases for galleries and places where individual artisans could display and sell their art.

Tawa'ovi Infrastructure and Community Development: The Tribal Council adopted the Tawa'ovi Community Master Plan through the Office of Community Planning and Economic Development (OCPED). Under the Hopi Tribe Resolution H-044-2001, the Tawa'ovi Community Development Team was created to oversee the master planned community.

Dialysis Center: The Hopi Tribe's Department of Health and Human Services is pursuing a location to establish a Dialysis Center on the Reservation to accommodate the Hopi and Navajo dialysis patients. Several locations have been reviewed.

Elderly Care Center: The Hopi Tribe continues to look for a site for an Elderly Care Center to accommodate Tribal members who are currently provided services off-reservation. Hopi elders who need additional care are forced to live off-reservation due to the lack of a facility and support services.

Hopi Veteran's Memorial Center: The Hopi Tribe continues its efforts to expand the Hopi Veterans Memorial Center to accommodate the increased interest in indoor and outdoor activities. A Fitness Center would include a Kids Corner to care for children while parents participate in organized activities.

Plan of Action for Implementation

Continued improvements in education and job training are necessary to enhance the understanding of development efforts that will benefit the Tribe, villages and community members. Regional collaborative efforts with the villages and private sector will increase opportunities for development of projects that will create healthy employment and revenue opportunities for the Tribe. Therefore, the regional strategy of the Hopi Tribe is to work closely with the villages along with Tribal economic development organizations and departments and outside resource partners to encourage coordination, cooperation and understanding of the economic development process through community-based learning and developing capacity. The next step from an implementation standpoint is to develop business plans for prioritized projects.

Many economic development plans or studies address Action Plans in general terms so that a road map or specific activities are not spelled out. Other studies often present lists of projects that can be done without prioritization or the assignment of roles and responsibilities. Many times, these lists are overwhelming. It is important to prioritize projects, ensure that human resources and capacity are in place, pick a limited amount of achievable projects to implement, and build on success. In order to have a positive outcome and bring projects to fulfillment strong and consistent leadership and motivation are primary requisites.

Implementation at Hopi has been somewhat hampered by a lack of communication and follow-through. Various officials may get excited and committed about specific projects without sufficient time or capacity to follow-through on development. The Hopi Tribe needs to develop and fund trusted outside resources when necessary to assist with implementation and funding. Ultimate responsibility for project coordination and implementation can get lost among the variety of entities involved with Tribal economic development.

Trust is an important prerequisite. In the past, there have been instances of various business interests that have taken advantage of, or attempted to take advantage of, the Hopi Tribe. The HTEDC that includes strong business expertise on its board can guide Hopi in this regard and should serve as a focal point for appropriate business development and follow-through.

Normally, Tribal department heads and other Tribal professionals have too much to do as it is and are not in a position to take on new projects. Tribal governments have the same responsibilities as small local

government such as cities and counties, and even states, but must operate with much fewer financial and human resources. Since Tribes are often in isolated rural areas, it is difficult to attract talent. When Tribal members obtain advanced degrees or experience, they often move off-reservation to pursue better opportunities, creating a ”brain-drain” and limiting capacity. Although there are many competent and dedicated staff and administrators at Hopi, It is still within this type of an environment that Tribal economic development occurs.

The CEDS process and subsequent economic development implementation is facilitated when there is involvement of broad constituencies and stakeholders as well as community members and a level of consensus is reached.

Goals and Objectives:

1. The Tribe shall continue to pursue funding opportunities for all equitable economic development projects from developers and federal/state grants.
   - ◊ Prioritize and develop consensus list of achievable projects
   - ◊ Assign roles, responsibilities, timeline and leadership for project development
   - ◊ Develop feasibility studies and business plans
   - ◊ Strengthen strategic fundraising capacity employing outside resources if warranted
2. The Tribe shall create land use planning maps that have set aside commercial and industrial sites from encroachment by residential and other uses in the planning and zoning process. (Villages need to participate in zoning.)
   - ◊ Secure funding and resources for plan development
3. Increase Tribal investments in support of local economic development
   - ◊ Leverage Tribal investment with public and private sources of funds as appropriate
4. Encourage individual self-entrepreneurship to establish small business enterprises
   - ◊ Secure additional funding for a new business CDFI program working with Villages and the HTEDC
   - ◊ Provide workshops in entrepreneurial development along with a new CDFI business loan program
5. Support and increase job-training programs for all ages.
6. Protect the scenic and cultural vistas of the Hopi Reservation from roadside disorder that results from scattered, unplanned development.
   - ◊ Fund and develop a Parks and Recreation Department
7. Expand on eco-tourism – educate on eco-and cultural tourism
   - ◊ Develop a Tribal Tourism Department with a marketing budget and acumen in conjunction with Villages and Tribal values
8. Invest funds to refurbish and upgrade existing economic development centers

Measurement, Control and Metrics

A good Action Plan has a timeline and milestones and agreed upon assigned roles and responsibilities- and then is monitored and controlled. Reducing plans into a practical course of action that can be used to put projects in place that will be controlled and monitored is recommended in order to meet Hopi needs for rapid implementation. An Action Plan will not be effective, however, unless there is a broad agreement as to goals, roles and responsibilities are clearly defined, there is strong commitment and motivation from stakeholders and strong leadership is in place.

A recommendation for effective Action Planning is to assign implementation procedures to a lead agency or organization such as the HTEDC that can control project implementation and report to the Council and Villages. A few strategic projects that will create high impact should be selected, and the resources, both internal and external, coordinated for implementation, with specific individuals who are knowledgeable, committed and accountable.

Implementation should consist of the following steps:

- Identify Desired Outcomes
- Conduct appropriate study to determine whether potential approach is feasible.
- If feasible, create a plan for implementing potential approach, such as a business plan or
- master plan.
- Assign lead roles and accountability to Implement plan; Involve stakeholders; communicate plan and timeline
- Periodically evaluate plan for efficacy, restructure or redesign as needed.
- Periodic evaluation should be conducted by lead entity and reported to HTEDC and Council on metrics related to the desired outcome.

In addition to periodic reporting, measurement of progress can be done through an annual or bi-annual economic summit with key stakeholders reporting, updating their opportunities and challenges to emerging sectors and initiatives.

The summit can be coordinated like an annual stock holder meeting that gives each stakeholder, including villages and the HTEDC, program, enterprises and sector leaders, the opportunity to present their past performance, update their SWOT and forecast their next twelve months strategic directions with Q & A.

Information can be recorded and put into the updated CEDS and distributed as appropriate. An updated annual CEDS will give the Tribe greater guidance and self-determination with respect to economic development-related decision-making.

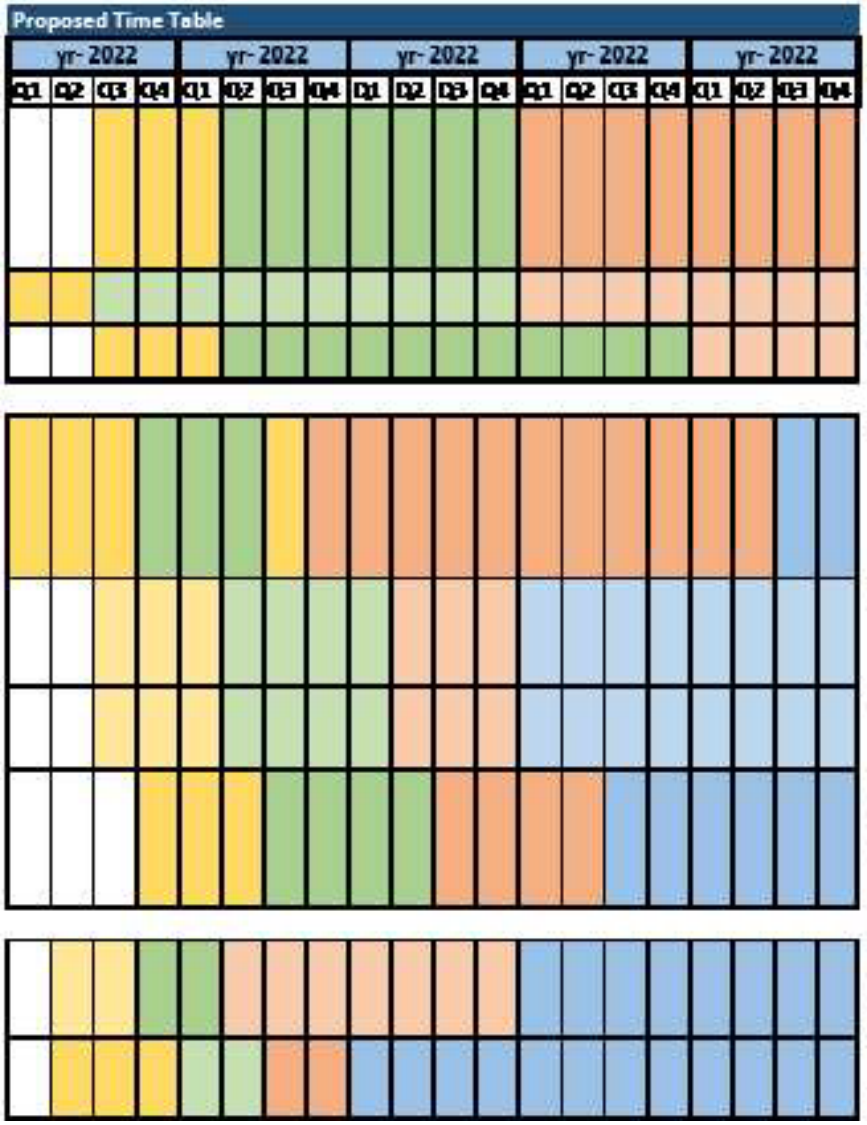
Reports should present progress on metrics based on the business or master plans and include factors such as:

- New businesses and/or programs
- Job creation;
- Quality of life improvements:
- New revenues;
- Amount of new funding and investments;
- New partnerships
- Educational programs and resources;
- Entrepreneurial activity;
- Amount of Training sessions;
- Reductions in unemployment

Economic development activities since the last CEDS report include discussions with department heads and Tribal officials regarding economic development plans. The Tribe was on lockdown during most of the

PROPOSED PRIORITY PROJECTS GANTT CHART

Objective	Description	Proposed Lead
Natural Rsrce.. Dvlpmnt..		
Helium Extraction	The price of helium is at unprecedented levels. Some of the richest helium deposits in the world are underneath Hopi Ranch lands in the Holbrook Basin. Helium is environmentally benign and does not require water to capture. Initial studies have been done indicating the presence of helium.	HUC
Solar Energy Development	Hopi is in one of the best areas of the country for solar development	HUC
Hopi Electric Utility	HUC is exploring the feasibility of a Tribal electric utility.	HUC
Business Expansion.		
IHS 93-638 contracting	If Hopi secures a "638" contract from Indian Health Services for operation of the Hopi Health Care Center, the Tribe can earn substantial revenue for health services expansion and to offset administrative expenses while management and employee benefits stays the same	Hopi HHS
Tourism	Hopi tourism can be marketed internationally while preserving the privacy of sacred traditions, providing jobs and promoting new Village businesses.	New Dpt.
Tourism	Hopi is interested in preserving significant natural areas as well as the possibility of building a museum.	New Dpt.
Construction & Cattle	The Hopi Tribe can consider taking advantage of projected new government infrastructure spending as well as near demand for meat processing and set-up 3(a) companies to market construction services and Hopi meat products	Nat. Rsrces. / HTEDC
Regulatory Expansion.		
Gaming	Hopi has an unused allocation for 500 slot machines that can be set-up away from the main Reservation or leased to other Tribes.	Tribal Admin/ HTEDC
Tax Code	The Hopi tax Code can be amended to that non-Tribal members pay tax on purchases made on-Reservation.	Tribal Admin



time that the CEDS 2021 update was in preparation due to the pandemic which precluded face-to-face meetings. Consequently, most of the interviews were done through Zoom or by phone.

Since the production of the CEDS 2021 update was mostly completed during the Tribal lockdown most of the economic development activities consisted of construction and infrastructure development that were still able to be pursued. These activities included continued development of the HAMP which is proceeding on schedule and the construction of a travel center/ convenience store by the Village of Kykotsmovi. The Kykotsmovi project will create a minimum of seven full-time jobs and is scheduled for completion in September 2021.

CARES funds during this period were used to bolster village budgets that had been cut due to the loss of coal revenue. CARES funds also subsidized new water well and power infrastructure development and the construction of modular units at Tawa'ovi and the move of several Tribal offices into that space to relieve congestion and lack of space at the old offices in Kykotsmovi. In addition, planning has proceeded on a hydroponic greenhouse project in Upper Moenkopi. A comprehensive Tourism Plan was completed in 2019. A study was initiated to find alternatives to the outhouse system in Walpi. An RFP was issued by HUC for a feasibility study for a Hopi Power Utility. An RFP was issued to lease land along I-40 for a 100MW solar instllation. The project is currently moving forward.

Tourism development will have a high impact on Hopi jobs and village economic development. The solar project will help to bring revenue into the Tribe to sustain existing jobs.

FUNDING MATRIX

PROJECT	Tribe	Private Equity	DOI	HCDA	EDA	DOE	New Market Tax Credits	Other Tax Credits	CDBG	BIA Loans	Bank	HUD	ANA	FB&S	Indian Health Services	WAPA	NAAF	SBCI / Treasury
General Planning	■		■	■	■								■					
Energy Projects	■	■	■	■		■	■	■		■	■					■		
Health Care - 638	■	■													■			
Commercial Developments	■	■	■	■	■		■	■	■	■	■	■		■				
SBA 8(a) Construction	■	■	■	■			■	■		■	■			■				
Tourism Development	■	■	■	■			■			■	■	■	■	■				
Entreprenuerial Development	■		■	■						■	■							■
Mineral Development		■	■		■		■	■		■								
Gaming/ Tax Code Planning	■		■	■														
Agriculture	■	■	■	■			■			■	■			■			■	
Land Use Planning			■	■	■													

A summary of more generalized goals and objectives from the previous CEDS Plan that have either not come to fruition or are in process are extensive and include:

Water:

1. The Hopi Tribe shall continue to work on drinking water infrastructure improvements through out the villages.
2. The Hopi Tribe shall continue to pursue funding opportunities for drinking water and wastewater infrastructure.
3. Proposed housing, commercial, small to light industrial and other proposed public facilities shall consult and work with Water Resources Program and Villages as part of the planning process for water and wastewater infrastructure.
4. Identify proposed Hopi Public Utility Authority (HPUA) goals and objectives to align with the Hopi Water Resources water codes.
5. Assure an adequate water supply for present and future uses for drinking and for planned sustainable economic development.
6. Develop and implement Navajo Sandstone aquifer (N-aquifer) management plan.
7. Balance water protection and use between religious and subsistence uses.
8. Increase and improve infrastructure for domestic and small to light industrial/commercial uses.

Energy:

1. The Office of Community Planning and Economic Development, in coordination with the Villages and Renewable Energy Office, will prepare a planning document to set land aside for future renewable energy development.
2. The Tribe will continue to work on an overall Hopi Tribal Energy Policy (or Ordinance) that will include all key renewable energy policy that is in line with the challenges of renewable energy development.
3. The Tribe will evaluate the potential demand drivers and the policy behind the demand.
4. The Tribe will contribute to funding energy infrastructure for domestic and small/large to light industrial/commercial uses.
5. The Tribe shall continue to pursue funding opportunities for technical assistance, public education, research and development, and outlook on future challenges and changes for renewable energy.
6. The Tribe will continue to update and review current data and technology upgrades for both solar and wind energy potentials for future development.
7. The Tribe shall monitor and become educated on national policy regarding renewable energy changes in national policy that could affect the energy market.
8. The Tribe will work on a 10-50 year strategic plan that will be reviewed to ensure task items are being implemented.
9. The Tribe will continue to educate the public on energy and renewable energy technology, equipment and policy.

Land:

1. The Tribe shall continue pursuing funding opportunities for land use planning and policy development.
2. Hopi land use planning document to be created
3. Continue to use traditional ways to settle land disputes within District Six.
4. Recognize customary use area within District Six to continue making decisions about range management and land use planning.
5. Require all claims to land and resources on the Hopi Partitioned Land (HPL) to be supported by tribal land assignments or use permits per tribal ordinances. This policy will not restrict subsistence, religious, or traditional gathering activities on the HPL.
6. Respect to continue those uses of land and resources that sustain religious, subsistence, and economic and recreational activities.
7. Regulation and Enforcement over tribal lands through Hopi Tribal Court.
8. Continue to coordinate with Hopi and Navajo Nation service providers to address social service and Navajo related jurisdictional issues.
9. Continue to provide education on Hopi Ordinances and laws for HPL Navajo families. Assistance has been provided by the Hopi Resource Enforcement Services (HRES) and Office of Range Management (ORM) on the tribal ordinances relating to natural resources i.e.; grazing, wood lands, wildlife, trespassing, etc., as well as poaching for all game.
10. Conduct feasibility studies for infrastructure, such as electrical power line extensions, water wells, water line extensions, roads, etc. to serve Hopi and Navajo families on the HPL. Work with the Indian Health Service (IHS), Office of Environmental Health & Engineering (OEH) on the approval and design construction of water cisterns and septic systems and specifications.
11. Develop the conflict process to deal with problems/issues arising from the Accommodation Agreements, thereby avoiding court litigation. Currently, emphasis has been on the jurisdictional ssues regarding the Hopi Tribal Courts and jurisdiction over domestic relations.
12. The program will continue to monitor the Non-Development Zones for any new developments within the zones and reports the findings. The initial monitoring report is submitted to the Hopi Land Team for their review and the findings will be forwarded to the Hopi members of the 1934 Board of Commissioners for their review and possible arbitration.
13. OHLA along with OCPED, HCPO and WEMP to conduct bi-annual monitoring of eagle nesting Non-Development Zones on the Navajo Reservation. Documenting new developments such as meetings of the Golden Eagle Advisory Task Team need to continue to strategize on lobby efforts for funds to implement the 12-year Golden Eagle study.
14. Gain Complete Jurisdiction over all Hopi Tribal Lands.

APPENDIX

(UPDATED DEMOGRAPHICS - November 2021 - Enrollment Office) -

Living Members - Age Distribution - On/Off Reservation as of 11/15/2021

* Includes Base Enrollees

	On-Reservation			Off-Reservation			Total		
Age	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
0	2	0	2	0	1	1	2	1	3
1	1	3	4	3	3	6	4	6	10
2	9	17	26	7	8	15	16	25	41
3	30	37	67	16	9	25	46	46	92
4	35	38	73	10	13	23	45	51	96
5	47	35	82	20	20	40	67	55	122
6	45	45	90	25	26	51	70	71	141
7	66	42	108	15	29	44	81	71	152
8	53	57	110	37	36	73	90	93	183
9	52	68	120	49	30	79	101	98	199
10	84	66	150	38	36	74	122	102	224
11	69	69	138	35	43	78	104	112	216
12	78	79	157	46	48	94	124	127	251
13	69	81	150	46	34	80	115	115	230
14	65	76	141	63	50	113	128	126	254
15	84	76	160	46	35	81	130	111	241
16	65	65	130	58	55	113	123	120	243
17	71	59	130	46	48	94	117	107	224
18	53	63	116	53	46	99	106	109	215
19	66	59	125	54	58	112	120	117	237
20	62	70	132	51	58	109	113	128	241
21	65	58	123	62	58	120	127	116	243
22	65	69	134	56	56	112	121	125	246
23	68	76	144	60	64	124	128	140	268
24	66	56	122	63	53	116	129	109	238
25	59	45	104	63	55	118	122	100	222
26	65	69	134	52	80	132	117	149	266
27	57	54	111	74	57	131	131	111	242
28	60	70	130	57	67	124	117	137	254
29	53	67	120	64	75	139	117	142	259
30	64	55	119	60	77	137	124	132	256
31	59	72	131	58	76	134	117	148	265
32	74	62	136	82	72	154	156	134	290
33	67	46	113	62	73	135	129	119	248
34	54	58	112	65	69	134	119	127	246
35	45	49	94	45	58	103	90	107	197
36	68	41	109	61	80	141	129	121	250
37	55	55	110	56	70	126	111	125	236
38	59	43	102	51	60	111	110	103	213
39	44	54	98	61	58	119	105	112	217
40	49	54	103	41	59	100	90	113	203
41	45	39	84	48	65	113	93	104	197
42	52	44	96	45	52	97	97	96	193
43	42	46	88	45	64	109	87	110	197
44	42	55	97	41	63	104	83	118	201
45	33	56	89	38	46	84	71	102	173
46	39	46	85	44	47	91	83	93	176
47	38	42	80	42	53	95	80	95	175

Living Members - Age Distribution - On/Off Reservation as of 11/15/2021

* Includes Base Enrollees

	On-Reservation			Off-Reservation			Total		
Age	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
48	35	25	60	40	54	94	75	79	154
49	39	36	75	37	51	88	76	87	163
50	49	42	91	45	38	83	94	80	174
51	34	45	79	47	41	88	81	86	167
52	33	42	75	42	56	98	75	98	173
53	43	44	87	31	37	68	74	81	155
54	41	36	77	33	48	81	74	84	158
55	28	34	62	40	46	86	68	80	148
56	30	32	62	33	52	85	63	84	147
57	48	41	89	36	57	93	84	98	182
58	48	40	88	40	46	86	88	86	174
59	44	56	100	30	56	86	74	112	186
60	43	48	91	33	44	77	76	92	168
61	40	53	93	29	28	57	69	81	150
62	45	45	90	39	40	79	84	85	169
63	36	49	85	22	32	54	58	81	139
64	31	60	91	24	35	59	55	95	150
65	37	40	77	17	26	43	54	66	120
66	29	46	75	24	41	65	53	87	140
67	41	40	81	27	35	62	68	75	143
68	31	41	72	20	24	44	51	65	116
69	33	41	74	20	18	38	53	59	112
70	22	34	56	17	23	40	39	57	96
71	28	33	61	19	20	39	47	53	100
72	37	28	65	19	24	43	56	52	108
73	20	28	48	14	30	44	34	58	92
74	20	37	57	15	23	38	35	60	95
75	17	27	44	12	17	29	29	44	73
76	19	19	38	12	12	24	31	31	62
77	12	21	33	9	17	26	21	38	59
78	9	25	34	6	11	17	15	36	51
79	15	22	37	8	13	21	23	35	58
80	9	12	21	12	19	31	21	31	52
81	11	20	31	9	6	15	20	26	46
82	8	6	14	5	8	13	13	14	27
83	2	15	17	6	11	17	8	26	34
84	13	15	28	6	13	19	19	28	47
85	4	10	14	5	15	20	9	25	34
86	10	15	25	3	14	17	13	29	42
87	7	9	16	3	6	9	10	15	25
88	5	5	10	4	5	9	9	10	19
89	3	8	11	2	7	9	5	15	20
90	2	7	9	2	9	11	4	16	20
91	0	11	11	1	3	4	1	14	15
92	1	4	5	2	5	7	3	9	12
93	1	6	7	0	2	2	1	8	9
94	2	0	2	1	3	4	3	3	6
95	0	3	3	1	5	6	1	8	9
96	0	5	5	2	1	3	2	6	8
97	0	5	5	0	2	2	0	7	7
98	1	1	2	0	0	0	1	1	2
99	0	1	1	2	4	6	2	5	7
100	0	4	4	1	3	4	1	7	8

Living Members - Age Distribution - On/Off Reservation as of 11/15/2021

* Includes Base Enrollees

	On-Reservation			Off-Reservation			Total		
Age	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
101	0	1	1	1	1	2	1	2	3
102	0	0	0	0	1	1	0	1	1
103	0	0	0	2	1	3	2	1	3
104	0	1	1	0	1	1	0	2	2
105	0	0	0	1	0	1	1	0	1
107	0	0	0	1	0	1	1	0	1
108	0	0	0	0	1	1	0	1	1
109	0	0	0	1	0	1	1	0	1
Total	**3,709**	**3,960**	**7,669**	**3,127**	**3,634**	**6,761**	**6,836**	**7,594**	**14,430**

The Hopi Tribe
P.O. Box 123, Kykotsmovi, AZ 86039
(928) 734-3153

Living Members - Age Groups (All BQ's)

*** Includes Base Enrollees**

Village	0 to 10	11 to 20	21 to 30	31 to 40	41 to 50	51 to 60	61 to 70	71 to 80	81 to 90	91 to 100	100+	Total
Bacavi	70	109	113	109	96	82	64	28	12	4	1	688
Hotevilla	128	259	302	266	256	189	162	107	40	10	2	1,721
Kykotsmovi	99	195	245	204	206	164	140	114	35	11	2	1,415
Mishongnovi	143	223	260	231	170	130	120	45	20	5	1	1,348
Moenkopi	164	385	372	382	282	267	227	118	51	10	0	2,258
Oraibi	46	71	93	75	53	75	42	33	16	5	3	512
Shungopavi	212	406	339	345	198	221	166	73	34	10	1	2,005
Sichomovi	126	197	228	265	199	200	150	83	39	14	2	1,503
Sipaulovi	74	116	128	120	93	85	72	34	15	1	1	739
Tewa	136	240	290	257	168	166	128	70	32	7	1	1,495
Walpi	70	153	124	112	82	79	64	45	20	6	0	755
Total	**1,268**	**2,354**	**2,494**	**2,366**	**1,803**	**1,658**	**1,335**	**750**	**314**	**83**	**14**	**14,439**

Text63: 11/15/2021

AGENCY PERFORMANCE - *Fiscal Year 2022 to date Uuly-October 2021)*

Number of Presentations

17

Year-End Goal: 65

Sales Appointments & Trainings

1,428

Year-End Goal: 5,825

Consumer eNewsletter Clickthrough Rate

2.08%

Year-End Goal: 2.25%

Global Earned Media Articles

288

Year-End Goal: 663

Number of Official State Travel Guides Distributed

188,621

Year-End Goal: 400,000

Social Media Engagements

268,676

Year-End Goal: 250,000- 350,000

Social Media Followers

424 THOUSAND

209 THOUSAND

52 THOUSAND

MONTHLY INDUSTRY PERFORMANCE

State Hotel REV PAR

$97.45

t Up66.3% Oct.202, vs. Oct 2020
t Up 10.8%-Oct. 2021 vs. Oct. 2019

Air Passenger Volume

3,666,197

1' Uo 106 5% Sept 2021 vs Sept 2020
J„ Down 5.5%- Sept. 2021 vs. Sept. 2019

State Park Visitation

206,821

J„ D,,wn 6'3/r Aug 2021 vs Aug 2020
J. Down 9%-Aug. 2021 vs. Aug. 2019

National Park Visitation

I, 178,366

f Up 167.5%-May 2U21 vs. May 2020
J, Down 2 0% May 2021 vs. May 2019

Estimated Tourism Taxes

$85,098,347

f Up 26.4%-Sept. 2021 vs. Sept. 2020
f Up 27 6% Sept 2021 vs. Sept 2019

ANNUAL INDUSTRY PERFORMANCE-2020p

Source: Dean Runyan Associates, Tourism Economics

Direct Spending **7$15** BILLION

J, Down41.2%YOY

Jobs

Down 28.1% YOY

J, Down 31% YOY

J,, Down 17.4% YOY