

**DRAFT**  
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**REVIEW AND RECOMMENDATIONS FOR  
UPDATING THE COMMUNITY-BASED LAND USE PLANS  
FOR THE NAVAJO NATION**

**Submitted to Arbin Mitchell  
Office of the President  
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**We Have Been Told Many Things  
but We Know This to Be True**

*The land. The people.  
They are in relation to each other.  
We are in a family with each other.  
The land has worked with us.  
And the people have worked with it.  
This is true:*

*Working for the land  
and the people – it means life  
and its continuity.  
Working not just for the people,  
but for the land too.  
We are not alone in our life;  
we cannot expect to be.  
The land has given us our life,  
and we must give life back to it.*



*The land has worked for us  
to give us life—  
breathe and drink and eat from it  
gratefully—  
and we must work for it  
to give it life.  
Within this relation of family,  
it is possible to generate life.  
This is the work involved.  
Work is creative then.  
It is what makes for reliance,  
relying upon the relation of the land and  
people.  
The people and the land are reliant  
upon each other.  
This is the kind of self-reliance  
that has been—  
before the liars, thieves, and killers—  
and this is what we must continue  
to work for.*

*By working in this manner,  
for the sake of the land and people  
to be in vital relation  
with each other,  
we will have life,  
and it will continue.*

*We have been told many things,  
but we know this to be true:  
the land and the people.*

*- Simon J. Ortiz,  
from Woven Stone, 1992*

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# 1. Introduction

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## ***1.1 Objectives of the Study***



In the 1930s the Navajo Nation established local political jurisdictions called Chapters based on grazing rights and range management, supported by the US Bureau of Indian Affairs (BIA). Up to the late 1990s the authority granted Chapters was limited but they functioned mostly to support local development, education, and infrastructure and to represent their community to the Navajo Nation on various local and regional issues. Today, there are 110 Chapters with growing decision-making and policy-making autonomy. Groups of Chapters also comprise an area representing a Council Delegate seat to the Navajo Council, the legislative branch of the national government, and Chapters also come together to form five Agencies, which provide assistance and support along a number of dimensions including land use planning. In 1998, the Navajo government passed the Local Governance Act (LGA), which permits Chapters to become “certified” resulting in greater autonomy in their financial and decision-making authorities among other local matters. The LGA legislation is transformative as it gives significant empowerment to local decision-making and a strong role of community members in governance. The legislation is also important to planning in that it provides authority to the Chapters to administer and manage the lands within their jurisdictions and produce land use plans.



The central objective of this study is to evaluate the planning process utilized in the development of these local plans, to examine the various elements of the plans and how well they are integrated, and to see if there are any inadequacies in developing the plans and where. Moreover, in such evaluations the question of the effectiveness or impacts of the plans emerge as a central issue and whether the plans have been implemented to improve conditions in the Chapters. To date 98 Chapters have submitted “Community Based Land Use

Plans” that have been approved by the Navajo central government. Under the LGA, Chapters who want to administer their own lands and make decisions about land uses and growth are required to develop a land use plan, and as we will see, these plans require a public or community participatory foundation and community assessments based on natural resources, population, land suitability, and development. An important element of land use planning in the LGA is the incorporation of the planning principle of “Land Carrying Capacity”.

The LGA was promulgated in 1998 as a way to decentralize authority from the central government toward greater local control and decision-making based on local culture and traditions. By 2000, community based land use plans for the Chapters were underway. The critical point for this study is that the LGA also instructed Chapters that these plans were to be updated every five years. Therefore, the principal reason for this study is to examine the existing plans and identify problems and barriers to effective plan-making, in order to provide guidelines for updating these plans.

There is no shortage of information, data and experience in land use planning in the Navajo Nation over the last two decades to gauge how planning was accomplished. Currently, most departments in the Nation conduct planning services for natural resources decisions and recreation; strategic planning is an ongoing activity for capital projects and accountability throughout the Nation; regional plans for economic development projects and facilities are prevalent as are facility and transportation studies for development purposes. Master planning for local site development and design is an ongoing activity as well and a Master Plan is currently being developed for the capital city of Window Rock. In addition, a major and first-of-its-kind regional “recovery” plan was completed a few years ago for the Former Bennett Freeze Area consisting of nine Chapters, an area of 1.4 million acres. Lastly, in the 1980s a centralized Navajo Nation planning department was established to evaluate land use plans of significance.

Despite this experience, there has been no systematic analysis and review of how well the land use plans have met the goals and standards of current planning and the objectives required of Chapters under the LGA in order to administer and manage land. Such a review would be critical in providing recommendations for a new phase in updating plans, another requirement under

LGA legislation. Land use planning is done under various legal foundations and tradition in decision-making, and many of the authorities given to Chapters for land use planning have not been attempted because of legal constraints and ambiguities between local and central governmental jurisdictions. As the next phase of plan updates approaches, Chapters will need to know what activities and decisions apply to them as local jurisdictions in such matters related to land withdrawal for development, zoning ordinances, and eminent domain and how these decisions effect change. These issues have to be considered in this review in order to provide clarity for updating the plans. Furthermore, this assessment for plan updates has to consider the analytical strengths and completeness of various approaches in past planning practices as well as the quality of the methodologies utilized. Updated plans will require the application of rigorous spatial-planning analytics and GIS/mapping applications. These methodological issues and the quality of applications are addressed in this review and recommendations are made.

Thus, recommendations and guidelines for updating Chapter land use plans are the primary objective of this study. Certainly, the guidelines do not just cover the inclusion of various planning elements such as land suitability and infrastructural analyses, but how community visioning and other processes can and should be established in addition to conducting community assessments. What is the quality of the analytical sections in the previous plans and what changes are required to meet current planning standards? We evaluate these through applying performance standards to actual plans, interviews with key planners and officials in both Chapters, for departments in central governments, focus groups and pilot projects with Chapters among other evaluation methods.

## ***1.2 Overview of Review and Evaluation Approaches***

There has been much discussion within the Navajo Nation about introducing land use planning and training needs for planning at the Chapter level, and the nation has agreed with the following steps to develop guidelines for updating previous plans. While approximately 98 Chapters have completed Community

Based Land Use Plans, there has not been any evaluation of their quality and coverage, the level and capacity of public input, their analytical quality, and whether these plans will serve as the basis for long term, effective decision-making and economic development. According to the LGA, “Chapters wanting to administer land are required to develop a Community Land Use Plan based on the results of a Community Assessment.” Unfortunately many of these plans have focused exclusively on the housing needs of the Chapters due to the funding source for these plans, the Native American Housing and Self-Determination Act (NAHASDA), at the exclusion of other land uses. Moreover, having been completed by different private consultants, there is also knowledge inconsistency among the plans. Almost none of the plans have been implemented, even including their primary focus—housing. Moreover, as the memberships of the Community Land Use Planning Committees within Chapters (CLUPCs) are voted on every four years, there is considerable need for continuous education on plans, plan-making and communications. This education process needs to be done continuously; but without adequate resources and professional planning staff in most Chapters, the process of plan making has been slow. Most critical is the fact that although these land use plans are required by legislation to be updated every 5 years, since 2000, only one Chapter has an approved plan, and its quality has been challenged by Chapter members themselves.

The five-year review for updating plans is important to accomplish for other reasons as well. The growing view from the Tribal planning literature is that the benefits of targeted economic development without community planning—which incorporates housing, infrastructure, health, transportation and social assessments—has been less successful than expected. Another factor is the growing interest in pooling resources from several Chapters to increase efficiencies, reduce redundancy and promote economic development at a regional level. These factors need consideration in plan updates and at the national level.

The following represents the key approaches taken to develop the guidelines and a template for updating the land use plans.

### **1.2.1 Survey and Evaluation of Land Use Plans in Indian Country**

This task included obtaining important land use and development plans from across the country from various American Indian communities. These included a variety of plans, from comprehensive plans to focused Master Site Planning to economic development plans. Altogether 18 plans were reviewed and evaluated for their relevance in updating the Navajo Chapters' land use plans. The reviews of these plans included questions on approaches utilized, level of success, key methods used, decision-making processes and how community members were included in decisions. Important questions in this part of the review were: What are the lessons learned from these plans and planning processes? How did these plans deal with complex decisions such as land withdrawal, community participation, sustainability and tradeoffs? What training and education were needed to complete the plans? How were the implementation planning phases done? This review was complemented by the literature on national planning in Indian Country and workshops at Arizona State University on tribal planning.

### **1.2.2 Evaluation of Community Based Land Use Chapter Plans**

Out of the 98 plans available from Navajo Nation Chapters, the study reviewed in-depth 22 plans representing each Agency and incorporating both rural and more urban Chapters. These plans were evaluated along such dimensions as planning elements covered, quality of the analysis, methods utilized, approaches and coverage of citizen participation and implementation approaches, among other factors. The review was done systematically and each plan was scrutinized by more than one reviewer. In addition to the assessment, the study team together with Navajo Nation officials identified several highly successful and exemplary plans for detailed study and interviews with Chapter and Agency personnel that participated in developing these plans. In addition, a detailed case study was done on the Beclabito Chapter's plan because it was the only Chapter plan that had been updated. Because of the Chapter's experience in its plan update, a focus group was completed with personnel and officials from that Chapter.

### **1.2.3 Pilot Projects for Updating Chapter Plans**

Two Chapters were in the process of organizing to update their land use plans—Black Mesa and Chinle. The study team as well as the Navajo Nation officials deemed it important to participate with these two chapters in their plan updates in order to identify barriers to plans, problems encountered by the CLUPCs, the pace of plan development, approaches utilized and difficulties in analysis, and training needs at the Chapter level. These were referred to as pilot projects and the notion was to learn about challenges faced by Chapters in updating their plans by participating in their planning process. The study team worked with each CLUPC to develop the planning elements, especially in the initial phases during the visioning sessions. The coordinated efforts to participate in plan-making for these two chapters were a critical dimension of this study.

### **1.2.4 Focus Groups with Chapter Leadership and Personnel of Five Agencies**

Focus groups and their analyses were completed for 10 Chapters and the five Agencies. Altogether the 10 Chapters were represented by around 80 officials and staff. The purpose of the focus groups was to gain information on such topics as: experience with plan development, identification of planning issues, problems, delays etc., ways to improve communications between community members and CLUPC, training programs needed, and problems in updating plans. Notes were taken in each focus group in addition to taping the conversations. Each taped session was analyzed using the most current qualitative methods regarding focus groups and interviewing. Important insights were gained through the use of focus groups.

### **1.2.5 In-Depth Interviews**

In-depth interviews were conducted with governmental officials from various chapters and governmental departments on planning processes and planning needs such as GIS mapping, land suitability analysis and pre-planning needs for planning education of the CLUPCs. Of particular importance were interviews

with personnel from the Navajo Nation's various departments that deal with planning-related issues, such as the Department of Justice, on such questions as land withdrawal and zoning. Interviews were also focused on mapping issues and the use and development of GIS tools.

### **1.2.6 Development of Guidelines for Updating the CBLUPs**

The following report presents the results from each of these tasks. Problems in the existing plans were identified and recommendations made for updating and expanding the scope of these plans to current practice and identified needs. The recommendations made were the result of a group process and information from Navajo Nation officials.

## ***1.3 Significant Laws, Policies, and Events Affecting Tribal Planning in the United States***

Prior to the arrival of Europeans in America, tribal land-use planning was well underway; examples range from the Anasazi settlement in Chaco Canyon, built and occupied between 850 CE and 1250 CE (nps.gov, 2013), to Tuzigoot, a pueblo with 110 rooms constructed by the Sinagua people between 1125 and 1400 CE, with hundreds more settlements nationwide (National Park Service, 2013). Tribal planning has long been based upon the principles of land tenure, management of resources, land stewardship, and sustainability (Jojola, 2008), which, until recently, has been in direct conflict with the Western notion of land-use regulation as the primary tool in land use planning (Gromulat, 2012).

The complex nature of relations between the United States government and American Indian nations has had a substantial impact on the development of tribal self-governance, nation building, and planning in Indian Country. This status as a quasi-sovereign "domestic dependent nation" has deprived American Indian nations of the opportunity to grow in a self-deterministic, tenure-based approach, as was used in the past (Gromulat, 2012), and has led to dependency upon the United States government for economic development, land use



planning, and community development. This relationship between the U.S. and tribal nations has been constantly evolving since the formation of the United States government.

In 1790, the Indian Nonintercourse Act gave American Indians inalienable aboriginal title, which restricted the purchase of land by non-Indians and required approval through the federal government (Library of Congress, n.d.). This placed limits on the development of land within Indian Country, and has had substantial impacts on economic development in the Navajo Nation, according to interviews with tribal leaders (Personal interviews, 2013). At this point the tribes were left to their own devices and not governed by the United States government. It was not until the 1850's, during the treaty-making period with the U.S., that the federal government officially began to reach into Indian affairs (Zaferatos, 1996). Prior to this era, however, was a phase in which a number of Indian Removal Laws were passed, the first of which was adopted in 1830, by President Andrew Jackson—effectively removing all Native Americans from their homelands, disrupting established economic and trade systems, and in many cases ending their land tenure. By 1890, all surviving tribal groups were confined to reservations (Hibbard, 2006).

The effect of this massive migration of people was an upheaval of the standard way of life for American Indians. This was exacerbated by two additional pieces of legislation: 1) the 1871 Indian Appropriations Act, by which no group of Indians was considered an independent nation by the federal government; this negated the treaty requirement for each appropriation of American Indian lands (replacing treaty-making with acts of Congress), thus enabling swifter, easier access to land (25 U.S.C., 2012); and 2) the General Allotment Act (sometimes known as the Dawes Act) of 1887 dissolved Tribal reservations in America, dividing previously communal lands into allotments for individual Indians and families. Advocates of the act saw it as a way to encourage private property ownership and “civilize” Indians (Indian Land Tenure Foundation, 2012). The result of the Dawes Act was the commercial exploitation of natural resources of formerly Native Nations, cultural assimilation of American Indians, fragmentation of land tenure and political structures (Zaferatos, 1996), the dissolution of tribes as a social unit, and opening



land to European settlers for profit (Carlson, 1981). The effects still linger today—including the loss of over 90 million acres and pockets of persistent poverty, and fragmentation of communities due to parcelization. The act had established private ownership under a simple 25-year trust of lands, but this structure was subsequently dissolved by the Burke Act of 1906 (also known as the Forced Fee Patenting Act). The Burke Act deemed most Indians “incompetent” to administer their own lands and gave the U.S. Secretary of Interior power to grant allottees a “fee simple” title to Indian lands, enabling allotments to eventually be passed to non-Indian owners (Bartecchi, 2007).

This drastic and cumulative erosion of tribal land rights continued until the 1934 Indian Reorganization Act (or the Wheeler-Howard Act), which created a process for the U.S. government to work with Indian tribes as sovereign nations. The act reversed the privatization of communal lands under the Dawes Act and also restored the rights of self-governance and of management of Indian assets, primarily land (Encyclopedia Britannica, 2013); it thus had the effect of stimulating economic activities on tribal lands by allowing native nations to enter into trade agreements with the federal government, develop tribal corporations, and implement economic development ventures (Section 17, Wheeler-Howard Act, 1934). The act was known popularly as the Indian New Deal and is seen as a progressive step in Indian affairs in the United States—a notable change from the prior policy of systematic colonization with its three primary goals of 1) accessing Indian land and resources, 2) transforming Indians into non-Indians, and 3) maintaining control over Indian groups (Hibbard, 2006). It has also been argued that this is the period in which political structure was first organized in tribes, which acts as the basis for land use planning, as a result of the sovereignty granted them (Zaferatos, 1996).

Unfortunately, the philosophy behind the Indian New Deal was soon overcome by one that believed Indians would be better off “assimilated” into White culture (Getches et al., 2005). From the mid-1940s to the mid-1960s, the U.S. government officially terminated its relationships with hundreds of tribes; without federally recognized status as sovereign entities, tribes lost trustee relationship and tax-exempt status of their land, and suffered the conversion of their land to private ownership (Cow Creek Band of Umpqua Indians, 2007).

During this period of time, over 1.3 million acres of tribal land were removed from trust and became private property, and 13,263 Indians lost their tribal affiliation (*Encyclopedia of the Great Plains*, 2011) and became dependent upon welfare programs, due of the termination of many federal services such as education and health care (Canby, 2004). Most notable, for our purposes, was the Bennett Freeze of 1966 (also known as Public Law 93-531 or the Navajo and Hopi Settlement Act), which restricted the development of a “joint-use” area that was disputed by the Navajo and Hopi Nations (Section 10, Public Law 93-531; Dorgan, 2008); this resulted in widespread poverty, restricted access to basic services such as water and electricity, and produced a generation of Navajo and Hopi people without access to education, water infrastructure, electricity, and other basic services. Termination also increased poverty in tribes, causing a surge in welfare costs in affected counties (Ourada, 1979).

In the late 1960’s the federal government began to change its policy on Indian affairs and, generally speaking, shifted toward self-determination, restoring a certain degree of autonomy to tribes. Self-determination remains the cornerstone of American Indian self-governance and the purest expression of tribal sovereignty. It is during the 1970’s that many reservations began to include strategic planning as a component of governance, primarily in order to more effectively appropriate federal funds in order to address social and economic needs (Gromulat, 2012). Alongside this period of introduction to strategic planning, the development of tribal nations was beginning to occur. The United States Office of Economic Opportunity, the agency responsible for administering programs under President Lyndon B. Johnson’s “War on Poverty,” began to introduce comprehensive planning to American Indian communities in the late 1960’s and early 1970’s. These attempts were complicated by limited funding and the requirement to adopt comprehensive planning approaches by the Bureau of Indian Affairs (BIA); the forceful nature in which comprehensive planning was introduced led tribes to depend on non-native economic development processes, often resulting in failures in implementing the comprehensive planning model (Jojola, 2008).

A significant step forward in self-determination and self-governance for tribes was the passage of the Indian Self-Determination and Education

Assistance Act of 1975 (ISDEAA). The act gave tribal governments greater control over the administration of tribal programs, the expenditure of funds, and allowed federally recognized tribes to receive grants directly from the federal government (25 U.S.C., 2012). Following the passage of ISDEAA, tribes began to experiment with different approaches to planning (Hibbard, 2006). This act allowed tribes to begin to make autonomous decisions, which is considered more effective than previous top-down approaches (Duffy & Stubben, 1998). It is for this reason that comprehensive planning must be an initiative of the tribe itself, instead of the prescription of the federal government.

A trend that has continued throughout the decades since tribal self-determination is the inability of the federal government to effectively support tribal comprehensive planning (Ulibarri, n.d.). Interviews with officials of the Navajo Nation have revealed that this problem persists to this day (Personal Interviews, 2013). It should be noted that tribes have had greater success with the planning process using public participation methods, operationalizing the concepts of self-determination and self-governance. This success has been exemplified in the British Columbia First Nations, as can be seen in the First Nations Comprehensive Community Planning Handbook, and in the section of this report that examines national tribal planning.

After the ISDEAA, the next significant event in indigenous planning was the landmark U.S. Supreme Court case *California v. The Cabazon Band of Mission Indians* (1987), which ruled that states did not have the authority to shut down casinos on tribal lands, strengthening the status of tribes as sovereign nations. It could be argued that the implications of this decision for indigenous planning lie in the independent source of funding that gaming creates for tribal nations, but the most important outcome of this decision is the reaffirmation that tribes have sovereignty in decision-making and planning, and are not required to abide by state laws as far as land use regulation is concerned.

In recognition of the dire economic situation of American Indians, the overcrowded nature of Native housing, the lack of solid waste management systems, indoor plumbing, homelessness, and excessive poverty rate, the United States Congress passed the Native American Housing and Self-Determination Act (NAHASDA) of 1996. Housing stocks were in poor condition on most

reservations nation-wide; NAHASDA was created in order to address this problem head on by simplifying the process by which housing grants were administered to tribal entities and by reorganizing regulations in order to streamline the application process. Generally, NAHASDA has been effective on reservations (Government Accountability Office, 2010), but the significant impacts of public housing efforts on the reservation prior to NAHASDA have left a much less desirable legacy (Biles, 2000). Interviews with Navajo Nation officials and members of the tribe have revealed that this is the case on the Navajo Nation, and that, generally speaking, public housing subdivisions often have a stigma of crime, poverty, and social ill (Personal Interviews, 2013).

NAHASDA has been the funding source behind many of the Navajo Nation's Chapter-level Community-Based Land Use Plans (CBLUPs), as part of the Navajo Local Governance Act of 1998, and well as in other Native nations. The funding is often given for plans that focus on housing, as was the case with the 22 CBLUPs that were reviewed for this report. Thus as the 2010 GAO report states, infrastructure investments are vastly underemphasized (GOA Report, 2010).

The Navajo Local Governance Act of 1998 (LGA) sparked a movement of local-scale community-based planning in the Navajo Nation. Fully 98 out of 110 Chapters have completed a CBLUP, which is required in order to become certified for more autonomy from the Navajo Nation central government (Local Governance Act, 1998). The LGA has been a driving force in the spirit of self-determination in the Navajo Nation. As of this writing, 34 Chapters have now become certified and been granted autonomy for certain areas from the Navajo Nation central government.

In 2005, the Navajo and Hopi tribes came to an agreement to lift the Bennett Freeze ("President Obama Repeals Bennett Freeze Law," 2009), and in 2008 the act was repealed by congress (Dorgan, 2008), which set in motion new thinking about regional planning in the Navajo Nation. The first regional plan of its kind, the Former Bennett Freeze Area (FBFA) Recovery Plan was created in 2008 by the consulting firm WH Pacific. The plan spans nine Navajo Nation Chapters, and was developed to identify community priorities, assess the need for recovery, and identify short-term and long-term needs for the FBFA. The plan

also prioritizes funding for projects that were designed to improve housing conditions, develop infrastructure, and build much needed community facilities (FBFA Recovery Plan, 2008).

The Bennett Freeze area required a “recovery” regional plan, but there were a number of congressional acts and legislation in addition to Executive Orders to help in the relocation of Navajo peoples from the Joint Use area. The post-land dispute included the ability to buy additional land on the part of the Navajo Nation (400,000 acres of new land), and land was added to existing reservation area. Currently, large sections of these lands are being planned for housing and economic development.

The FBFA consists of nine Chapters in the Navajo Nation. These are: Bodaway, Coppermine, Kaibeto, Coalmine Canyon, Leupp, Tolani Lake, Tuba City, Tonalea, and Cameron. As a result of Navajo–Hopi disputes, around 12,000 Navajo people experienced a 41–year stop to development. Following the Congressional freeze, the Navajo Nation conducted a regional recovery plan in 2008 and with funding from the BIA the Navajo Nation commissioned WH Pacific, Inc. to complete it. The plan was not comprehensive but was limited to an inventory of basic needs; it focused on a survey of the area’s infrastructure, conditions of the housing stock, public facilities and other issues identified through a needs assessment and participation of community members through workshops in the nine Chapters. Arizona State University was asked to review the plan and to re-evaluate costs and future needs for planning in the area, and a report was sent to the U.S. Congress. Plans are currently underway to develop the land area augmented to the Nation resulting from dislocation of Navajos from Hopi land in the 1970s.

The most current congressional act affecting tribal planning on a national scale is the Helping Expedite and Advance Responsible Tribal Homeownership (HEARTH) Act of 2011 (Public Law 112–151, 2012). The HEARTH Act allows tribes to create their own leasing regulations, which would then be subject to approval by the Secretary of Interior. The purpose of the act is to expedite land leases for home ownership, which have been historically cumbersome. It also allows for the creation of business and agricultural leases of up to 25 years without the approval of the Secretary of the Interior, which will have a

substantial benefit to tribes for business and economic development. A timeline of relevant legislation is presented in **Table 1.1**.

In continuation of the current policy of self-governance for American Indians, the White House Council on Native American Affairs was established on June 26, 2013 (Executive Order, 2013). The council consists of the heads of executive departments, agencies, and offices. The executive order seeks to establish a national policy that ensures the federal government maintains a relationship with federally recognized tribes. In addition to this, the White House has hosted annual Tribal Nations Conferences in order to address pressing current needs of native nations (Executive Order, 2013).

The advancement of indigenous planning in the United States is dependent upon continuous evolution, the embracing of traditional cultural values, and innovative policy-making. Self-determination and self-governance are essential to the advancement of indigenous planning; ending the paternalistic approach that the federal government has taken in the past will hasten the flourishing tribal sovereignty that has grown stronger in recent years. In 2007 and 2008, Arizona State University hosted two regional workshops for Native American planning practitioners, with keynote speeches and break-out work sessions, with the primary goal of information exchange (Pijawka & Mariella, 2008; Pijawka et al., 2011). The outcome of these workshops was the development of several measures of success (Ayyangar, 2010) and best practices. A continued collaboration from tribal leaders, academia, and federal policy makers will be critical to the sustained success of indigenous planning in the United States. The success of indigenous planning thus far has hinged upon the sustained efforts of tribal leaders to produce more effective planning processes, this effort must be carried on into the future.

<b>Evolution of Planning Eras in Indian Community Development</b>			
<b>Historical Period</b>	<b>Historical Events</b>	<b>Territorial Effects</b>	<b>Planning Activities</b>
Pre-1850	Pre-Reservation Period	Territorial Retainage	Self-Governance
1850-1869	Treaty-Making Era	Reservation Formulation	Isolationism; Social Trauma
1886	Allotment Act	Territorial & Political Fragmentation	Resource Exploitation; Cultural Assimilation; Territorial Incorporation
1934	Indian Reorganization	Reconstruction Period	Political Structural Organization
1950s	Termination	Territorial and Political Termination	Political Survival; Basic Social Planning
1966	Civil Rights and Indian New Deal	Governance Reconstruction	Initial Community Planning; Treaty Rights Assertions
1970s	Self-Determination	Governance-Building; Reservation Infrastructure Investment	Mid-Strategic Planning; Treaty Rights, Self-Help, Advocacy, Structured Development
1980s - present	Self-Governance	Territorial Reconstitution; Tribal Proprietary & Regulatory Programs; Regional Coordination & Co-Management	Advanced Strategic Planning, Self-Governance; EPA-Treatment as State; Advanced Economic Development; Cultural & Political Plurality

**Table 1.1:** Timeline of planning events. Source: Zaferatos, N. (1996), *Political Sovereignty in Native American Community Development: Implications for Tribal Planning Strategies* (Dissertation).

## **1.4 The Many Facets of Planning**

Planning is useful in any number of forms, especially when it comes to planning for the future of a community. The types of planning we have chosen to cover are some of the most common types, and while the Navajo Nation has familiarity with each of these types, it is important to expand upon that knowledge base in order to determine the most appropriate type of planning for each situation. The following types of planning will be described in detail in this section, in an effort to illuminate the purposes of each type of planning and demystify the processes for each: Community Based Planning, Comprehensive Planning, Land Use Planning, Master Planning, and Strategic Planning.

### **1.4.1 Community-Based Planning**

Community-based planning is the current model used by the Chapters of the Navajo Nation at this point in time. Community based planning focuses on the involvement and empowerment of the community. The passage of the Local Governance Act of 1998 (the LGA) in the Navajo Nation was a first step in embracing the idea of community based planning. The involvement of community in the planning process has proven successful in many communities; communication and collaboration have proven to be among the most important aspects of successful planning in Indian country (Pijawka et al., 2011).

### **1.4.2 Comprehensive Planning**

*Comprehensive planning* is the type of planning that the Navajo Nation has asked our team to prepare a report on, and is the primary focus of this section. Comprehensive planning is the broadest plan prepared to guide the development of a community (Levy, 2011). Comprehensive planning generally addresses the entire community, geographically speaking, and often moves beyond the realm of simple land-use strategies, and begins to address issues such as economics, the provision of services and facilities, fiscal responsibilities, and the like. There is also a movement within comprehensive planning to embrace



the ideals of community-based planning; whereas comprehensive plans used to be created by a small group of technocrats, the process is now a participatory one (Levy, 2011).

Comprehensive planning has become the standard in jurisdictions across the nation, especially as it becomes required by statutes in many states. Cities in America have been comprehensively planned since the 17<sup>th</sup> century when Williamsburg, Pennsylvania, was laid out in 1699. What many consider to be the true birth of comprehensive planning is the Columbian Exposition of 1893, with the revelation of the Chicago Plan and the birth of the City Beautiful Movement (Conglose, 1999). The urban comprehensive plan has a certain set of requirements to fulfill in order to be considered completely comprehensive. These requirements, as stated by Goodman & Freund in *The Principles and Practice of Urban Planning* (1968), are:

1. The plan should be comprehensive
2. The plan should be long-range
3. The plan should be general
4. The plan should focus on physical development
5. The plan should relate physical design proposals to community goals and social and economic policy
6. The plan should be first a policy instrument, and only second a technical instrument

There also are basic requirements as to the procedure for creating a comprehensive plan:

1. There should be only one official comprehensive plan
2. The plan should be formally adopted by the legislative body
3. There should be a lengthy period of public debate prior to adoption
4. The plan should be available and understandable to the public
5. The plan should be formulated so as to capitalize on its educational potential

It should be noted that these requirements were written in 1968, and although 45 years have passed since their adoption by the planning profession, they still hold substantial weight and authority as guidelines. Several scholars and practitioners have added to lists of proposed requirements for comprehensive plans and what they should comprise, as well as legislative bodies (i.e. state congresses), but these simple requirements laid out by Goodman and Fruend almost half a century ago still have a great deal of validity for 21<sup>st</sup>-century planners.

#### **1.4.3 Land Use Planning & The Local Governance Act**

*Land use planning* has a much narrower focus than the comprehensive plan. Its emphasis is only on the physical aspect of planning. This type of planning is heavily dependent upon the utilization of land-suitability analysis (Steiner, 2008). Land-use planning is concerned with on-the-ground outcomes of the planning process, and is often less community-based. Crucial steps in this process are (as adapted from LaGro, 2008):

1. Site identification, evaluation, and selection
2. Site inventories of physical, biological, and cultural attributes
3. Land use suitability analysis using Geographic Information Systems (GIS)
4. Concept planning and design development
5. Graphic communication with clients, government agencies, and other stakeholders

The Local Governance Act (LGA) provided individual Chapters greater local autonomy and decision-making authority, delegated from the Nation. In order to gain the capacity for greater local governance, Chapters needed to become “certified” under the LGA. The 1998 LGA (Title 26 of the Navajo Nation Code) and its proposed amendments provided the criteria for certification, and since the promulgation of the LGA 34 Chapters have passed audit. To do so, Chapters must demonstrate that there are policies and procedures in place in five

management areas: personnel, procurement, record keeping, land use and accounting. Today, while only 34 Chapters are certified, 98 chapters have approved land use plans, and only one chapter has an updated plan which has been approved by the Nation's Resources and Development Committee, the committee that implements Chapter certification and land use plans. Chapters administering and managing land are required under the LGA to develop a land-use plan based on concepts and rules governing Community Assessments and community participation. One important change to the LGA in the area of land uses was the Amendment to the LGA in 2004 that changed the scope of the plans from "Comprehensive" to "Community-Based". This simplified the planning process but also reduced the plans considerably in their scope and analytical depth. Nevertheless, the concept of "Community-based" planning assures an important role for community participation.

Community-Based Land Use Plans are also required to be based on a "community assessment", but the nature of the assessment is not specified in the LGA. A land-use plan has to be "guided by community assessments including natural resources, cultural resources and should project future community land needs by location and extent of areas for residential, commercial, industrial and public purposes". The CLUPC is also required to establish processes for public education, community principles and concepts, identification of needs, and general planning. Certified Chapters are given authority to approve and plan for business as well as home site leases, yet the LGA stipulates approved departmental processes at the Nation. Moreover, although rarely enacted, the LGA supports zoning ordinances in the plan or in Amendments to the Plan. Zoning is permitted after Plan approval and implementation. Identification of key planning elements and plan processes are also identified in the LGA (26 N.N. C. 2004). Another important mandate embedded in the LGA is that planning addresses Land Carrying Capacity for all land uses. Although the early Chapter plans may not have adequately met the LGA planning objectives, certainly the report herein argues for revisiting these attributes for plan updates. Lastly, and perhaps most important, is that the LGA identifies development based on education and participation of the community in its planning, where goals, priorities and a community vision is fundamental to the planning process.

The major thrust in developing land use plans at the Chapter level came between 2000 – 2004 when the nation approved NAHASDA funding for the development of plans. The funds resulted in Chapters hiring consulting firms to conduct the land-use planning exercises. The LGA also stipulates that established plans need to be updated every five years, which was seen as an important activity for a number of reasons. Because the first such plans were developed through NAHASDA funding, the focus of land use planning would likely be on housing site leases and their locations at the expense of other land use processes and plans. The five-year updates would permit the expansion of planning for uses in addition to housing and would lead to a more community-based or comprehensive approach to land management. Five-year updates would also permit reviews of implementation efforts and accomplishments and provide feedback on the plans' effectiveness. It would also enhance the strategic planning activities required for annual performance reviews of Chapter policies and project completions.

The development of a Chapter land-use plan under the LGA has been viewed as a critical step in managing a Chapter's future. The Beclabito Chapter's 2011 updated plan notes that "the land use plan satisfies the land use certification process and moves the Chapter closer to managing and making decisions regarding local matters pertaining to land uses." In addition the same Chapter plan articulates that "The land use plan serves as a guide for future development and provides a foundation for zoning ordinances ...It also allows the Chapter to evaluate potential development projects while balancing the diverse needs of the community with concerns, cultural traditions and natural resources...a solid land development plan is needed." Under Title 26, the LGA provides authorization to develop a Community-Based Land-Use Plan. This is an option, not a requirement, however, and a small number of Chapters have chosen not to fulfill this. If Chapters seek certification and choose to administer land within their boundaries, a land-use plan has to be established and approved at the central level. The approved plan requires updates every five years. This report shows an evaluation of the Chapter plans and provides recommendations and guidelines as to what should be required in plan updates.

Effective land withdrawal for business and home leases is needed for such developments. Under LGA authorization certified Chapters are permitted to both zone and withdraw land. However, except for one township, Chapters have not moved toward zoning as part of implementing land use plans, and land withdrawal actions are currently dealt with at the Navajo Nation land department. However, there is significant interest that the Chapters demarcate land for development through zoning and provide a process for land withdrawal at the local level. At this point this type of land use activity remains at the national level as we begin to see some small changes being made. At one point it was the BIA who was involved in site leasing, and now that authority rests with the Navajo Nation. Although the Land Department oversees home site leasing, the Chapters can transact their own leases, as seen for example in the Shonto Chapter.

Two important organizations have been established pursuant to the LGA that help govern the development and maintenance of the land-use planning process and resulting plans. These are the Community-Based Land-Use Committees and the Local Governance Support Centers.

#### **1.4.4 Local Governance Support Centers**

Within the Division of Community Development the Local Governance Support Centers (LGSCs) provide administrative support and assistance to Chapter governments including land-use planning. In addition to managing Chapter governmental funds and monitoring compliance with the “five Management Systems,” the LGSCs provide assistance relating to local management and comprehensive land use planning, according to specifications of the LGA. Three additional services are stipulated that have relevance; this report thus addresses the important role the Agency-level LGSCs can play in updating the plans especially in assistance for mapping and a liaison between the Chapters and the departments as well as in educating the Chapter officials and membership (CLUPCs) as to planning processes.

The LGSCs can provide support through obtaining additional sources of funding for local and regional economic development and other “pertinent

planning priorities”. This is an important potential source of plan funding and also serves to bring a number of small Chapters together for regional planning for economic development. In this area of responsibility the LGSC has an important role. The challenge is of course to have resources available for such a responsibility. Post-certification assistance is another area of support for Chapter planning, especially for updating plans. Lastly, LGSCs have the authority to provide pre-planning activities involving planning education, support for participatory activities, and dealing with capital project implementation—a critical phase of land use plans.

Under resolution GSCAU – 75 – 99 the LGSCs are required to “assist Chapter governments with implementation of the LGA....with implementing community projects and local community planning decisions....facilitate the community land use planning process pursuant to 26 N.N. C. 2004... provide guidance to Chapter governments to obtain necessary land clearances consistent with the approved community land use plan and any amendments...and... assist with identifying needs assessments and community governmental infrastructure and capital projects, including community planning and prioritization consistent with local community decisions.” Their role is critical to plan updates—especially for land withdrawal for economic development and for identifying community needs in planning assessment. It certainly is not a passive role with clear lines of responsibilities for Chapter planning. The development of guidelines for updating Chapter plans must include the role of the LGSCs in pre-planning, education, training, and implementation of plans.

#### **1.4.5 Community Land Use Planning Committee**

Typically a Chapter will establish a Community Land Use Planning Committee (CLUPC) charged with developing the land use plan. The Committee consists of locally elected members and operates according to an approved plan of operations and under a Chapter resolution. CLUPC responsibilities usually include: attendance at public meetings to arrange and discuss the development of the Land Use Plan, and to review information and make recommendations on

land uses. The CLUPC guides the community members through the planning process and approves the plan. The CLUPCs can approve amendments to the plan including changes to maps, policies, and any other component. Approved amendments become part of the Land Use plan as an Addendum, which are reviewed and adopted into the plan during a plan update.

Each Chapter going forward with a land use plan votes for a planning committee or commission, and a general plan of operations is established as part of the planning process. The CLUPC is established under the authority of the Chapter government as part of the LGA Title 26, section 101(B). The Oljato Chapter articulates the purpose of the CLUPC as being “to promulgate, develop, and implement plans, policies and procedures and ordinances necessary that will guide the Chapter administration and multiple uses of community lands”. While this is generalized, it is important to note that expectations of the plan include an implementation phase as well as zoning ordinances; however, while the plan does establish zoning, it has rarely been used in planning at the chapter level.

The CLUPCs consist of six members, all of whom are appointed by the chapter membership by resolution, and one of which must be a Grazing Committee member. CLUPC members are subject Navajo Nation policy with respect to the development of zoning ordinances, boundaries, and issuance of business site or home site leases; they are typically tasked with implementing improvements and expansion of infrastructure and to “develop plans for and implement economic development at the local level in order for the community to become self-sustaining”. In the Oljato Chapter, CLUPC responsibilities also include the “development of lease management plans for leasing community property” as well as Chapter legislation for “land acquisition, land lease and land disposal including a process for land acquisitions by Eminent Domain”. Here, again, the processes are allowed to be developed at the Chapter level but the implementation is carried out at the National level.

#### **1.4.6 Master Planning**

A fourth planning type, *master planning*, is sometimes referred to as *site planning* or *master site planning*. Master plans often focus on the development of a specific

site. Examples of master-planned communities include Levittown, New York (one of the most famous master planned communities of all time), Anthem, north of Phoenix, in Arizona, and in the Navajo Nation, many Chapters include a small master-planned community (often referred to as “subdivisions” by Chapter members). The development of such communities is often undertaken in order to prevent future land use conflicts, though conflicts may still arise among community members, which may be managed through community-based approaches. An exemplary master planning effort by a Navajo Nation Chapter is the Justice Complex Master Plan by the Chinle Chapter.

#### **1.4.7 Strategic Planning**

Lastly, *strategic planning* refers to an organization’s process of identifying its goals and objectives, and clarifying the strategies needed to achieve them. Performance measures are often based upon the completion of goals and objectives within the prior planning session. Strategic planning has its roots in business administration, and includes priorities for resource allocation as well as performance measures; comprehensive planners in particular have borrowed from its methodology as an extremely valuable tool, especially during implementation. Several Chapters were kind enough to allow us to use their strategic planning documents as examples of on-the-ground strategic planning in the Navajo Nation. These are often internal plans, focused on the inner workings of an organization. Strategic planning is not based on standardized requirements, but several elements are commonly accepted by planning organizations undertaking strategic planning. Richard Mittenthal of TCC Group (n.d.), a non-profit consultancy firm, compiled this list of requirements:

1. A clear and comprehensive grasp of external opportunities and challenges
2. A realistic and comprehensive assessment of the organization’s strengths and limitations
3. An inclusive approach
4. An empowered planning committee
5. Involvement of senior leadership



6. Sharing of responsibility by board and staff members
7. Learning from best practices
8. Clear priorities and an implementation plan
9. Patience
10. A commitment to change

**Table 1.2** illustrates the Tsaille/Wheatfields Strategic Plan draft that addresses each objective and the strategies that are necessary to the implementation of the CLUPC and other planning objectives. Note that specific grants, agencies, people, and completion dates are included. The documentation of the above elements may not be possible in table form, but it may be possible to write these requirements into the strategic plans.

	<ol style="list-style-type: none"> <li>2. Collect baseline data.</li> <li>3. Compile archaeological clearances, environmental assessments, historical preservations, legal surveys, etc.</li> </ol>	Board, Grazing Rep., WUA			
Actively seek NRCS through USDA	<ol style="list-style-type: none"> <li>1. Conduct conservation study.</li> <li>2. Provide rural development plan.</li> <li>3. Review potential grant opportunities by contacting Grant Resources at: <a href="http://www.grantwriters.net">www.grantwriters.net</a></li> </ol>	Chapter Official CSC, Farm Board, Grazing Rep., WUA	2/25/13	8/31/13	Programs, Review current <b>Emergency Community Water Grant from USDA</b>
Utilize CIP funds as a cost sharing for infrastructures such as roads, cell towers, grade and drain roads, multipurpose building, cemetery, Tsaille/Wheatfield Roundabout,	<ol style="list-style-type: none"> <li>1. Develop a budget.</li> <li>2. Compile all required clearances such as EA, AC, Arch. Designs, etc.</li> <li>3. Identify projects with needs.</li> <li>4. Review Scope of Work/RFP &amp; Guidelines.</li> <li>5. Develop Proposal and obtain Supporting Resolution.</li> <li>6. Submit Close Out Reports.</li> </ol>	CSC, Chapter Official, Funders, Farm Boards, Grazing Reps, WUA, Committees, etc.	2/25/13	3/31/13	Budget
Obtain a professional Grant Writer and/or Business Consultant to set up Chapter's grants.gov account to increase federal/state grant opportunities.	<ol style="list-style-type: none"> <li>1. Draft Scope of Work and identify funding.</li> <li>2. Base grants on strategic plans and priorities such as economic development, housing, and community development goals.</li> <li>3. Review all grant proposals and include a supporting resolution indicate any leveraging or in kind services.</li> </ol>	CSC, Chapter Officials	3/2013	Ongoing	Review leveraging or cost sharing requirements.

**Table 1.2.** Excerpt from Tsaille / Wheatfields Chapter Strategic Plan.

## **1.5 Problems with the Current Approach to Chapter Land Use Planning**

We reviewed 22 Community Based Land Use Plans (CBLUPs), and conducted a number of focus groups with Chapter and Agency officials, as well as interviews with Navajo Nation personnel in the course of several months to discover both common weaknesses as well as successful practices used in planning. A number of problems were found with the current approach to land use planning in the Navajo Nation, which have formed the basis for the recommendations made herein. There are 11 key omissions or deficiencies in the CBLUPs:

1. *Pre-planning and Community Education*: Pre-planning and community education techniques are only considered in a few of the CBLUPs.
2. *Community participation*: Community participation is often only mentioned cursorily in the majority of the CBLUPs. This missing element should be integral to the update of these plans.
3. *Implementation*: Most CBLUPs have lacked implementation plans, and in all interviews, CLUPC members expressed that their plans have not been implemented since their approval.
4. *Community assessment (data collection and analysis)*: Community assessment has often been based solely on Census data, which offers a wealth of information, but that information is often not granular enough to express community needs. Surveys have been completed in many cases, and this is highly recommended, but the information is not always applied in order to express community needs and objectives. Moreover, the census data is not utilized for future population and housing projections. This results in a major limitation in planning for future growth.
5. *Land suitability analysis*: Land suitability analysis in the current CBLUPs has been unsuccessful in identifying the most suitable sites for specific uses. The outcomes have been failed projects after an initial injection of capital, and a new approach to land suitability analysis should be adopted. A GIS-based approach is recommended in this report, and specific methods are highlighted.

6. *Mapping*: Mapping is inconsistent or sometimes non-existent in the current CBLUPs. A consistent standard for mapping should be adopted and implemented in the updated plans, in order to improve usability and clarity. Support for Chapter mapping capacity is required.
7. *Focus on land stewardship*: Land stewardship is, in most cases, out of the realm of the current CBLUPs. Land stewardship and land tenure are integral to the Navajo culture and should be integrated into the updated plans in order to embed the culturally important aspects of the land into the plans.
8. *Land withdrawal and zoning*: Land withdrawal has been an obstacle in every case in the Chapters that were interviewed. This should be addressed by creating a more streamlined process and support systems for efficient implementation of land withdrawal. Zoning is a crucial tool in this process, as it shows that a plan has been developed for the proposed withdrawal area.
9. *Scope beyond housing*: Because of the funding from NAHASDA, many of these early land use plans have focused primarily on housing, often to the detriment of other aspects of land use planning, such as community and economic development. The updated plans should link housing with other land use planning elements and issues identified during the community assessment exercises.
10. *Economic development*: Economic and commercial development are vital to the success of the Navajo Nation, and Chapters can benefit greatly from the tax revenues and employment opportunities that businesses can provide. Economic development may be best implemented at a regional level, in order to minimize duplication of services and reduce capital costs per Chapter.
11. *Regional planning*: Regional planning will be beneficial to the future land use planning endeavors of the Chapters. The Navajo Nation should institutionalize regional planning in order to encourage cooperation, and Chapters should be given the latitude to form coalitions for regional projects.

It is with these points in mind that the following report has been crafted. The report seeks to address these issues by making recommendations based upon observations from current CBLUPs and interviews with key planning figures in the Navajo Nation.

It should be noted that while most comprehensive plans vary somewhat in their content, there is a typical set of elements that is included in most. The essential elements of a comprehensive plan are the identification of community goals and objectives, the statement of current conditions and future projections, land use patterns, housing conditions and housing stock, circulation (or roads), and other infrastructure such as electric, natural gas, water, wastewater, and solid waste (Conglose, 1999). Some critics argue that separating information into these categories prevents ease of use and fails to highlight the connection between all elements. The City of Phoenix, in its *2010 General Plan Update*, expressed the desire to move away from the “silos” of information locked away in specific categories and instead moved toward a more integrated approach, placing ideas and comments on a circular “compass” to express the priorities of citizens in a single image (**Figure 1.1**). In Arizona, plans for large cities are required by law to address certain elements, which are: growth, land use, cost of development, circulation, housing, neighborhood preservation and revitalization, environmental planning, open space, water resources, conservation, recreation, transit, public services and facilities, public buildings, conservation, rehabilitation and redevelopment, bicycling, safety, and energy (A.R.S. §9-461.05). The City also expressed the desire to include overarching themes or “guiding principles” that span all of these elements, in order to ensure a cohesive, broad approach to sustainability in their general plan update (illustrated in **Figure 1.2**).



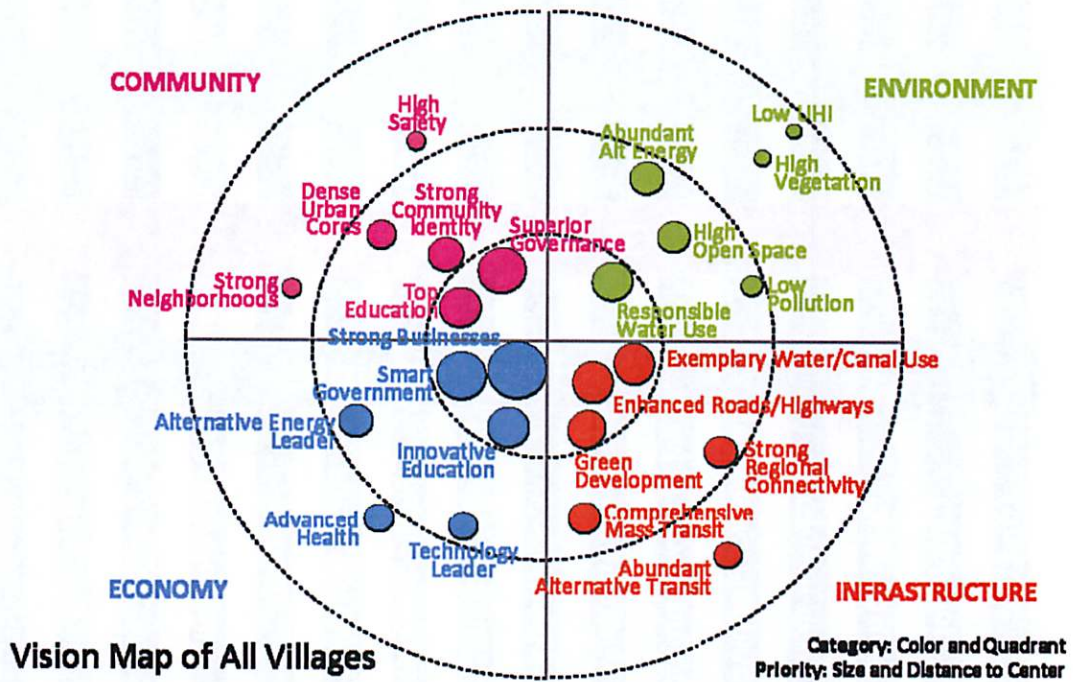


Figure 1.1. City of Phoenix Compass of Priorities.

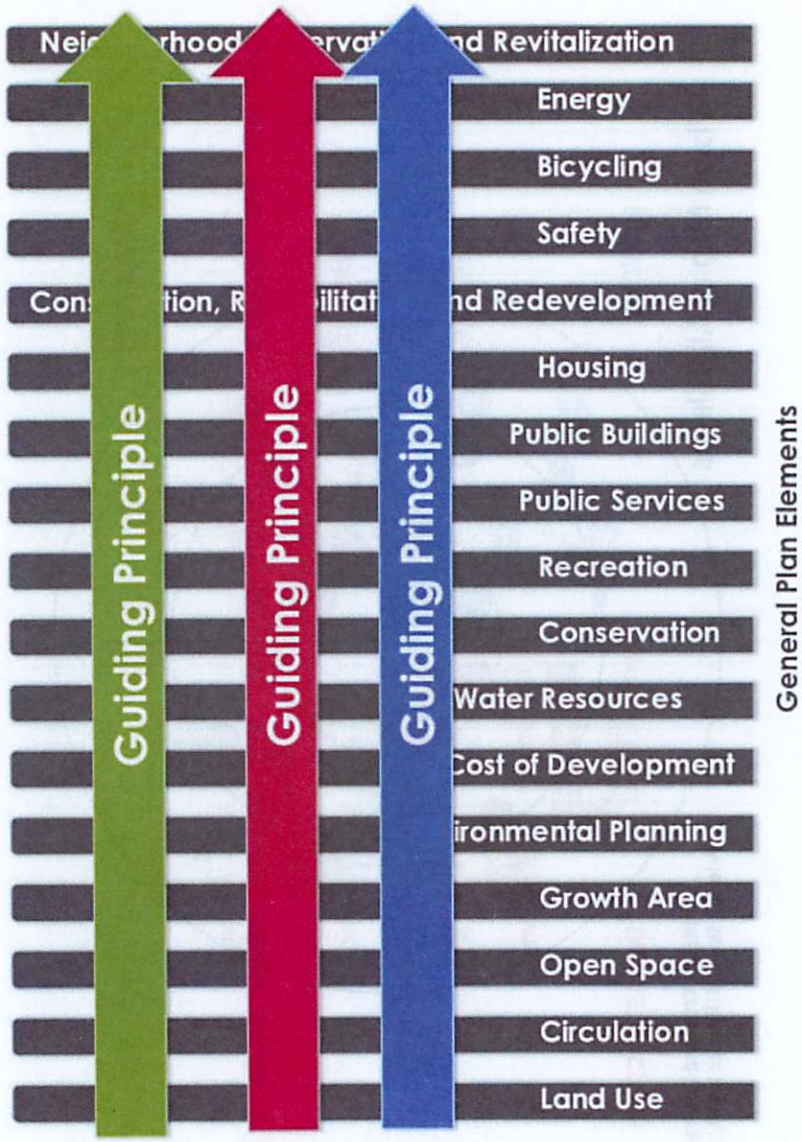


Figure 1.2. City of Phoenix Guiding Principles.

Recently, a relatively simple process has been developed to conquer this extremely complex task. Comprehensive planning is, by its very nature, “wickedly” complex (see Rittel & Webber, 1973), involving interdependent elements of people, politics, and complex issues such as a changing landscape, unknown variables such as future growth, and limited resources to deal with all of these things. The standard framework for completing the comprehensive planning process is as follows, and is adapted from Levy’s comprehensive planning process:

1. *A research phase:* The ability to plan begins with the understanding of current conditions, best clarified through data gathering and forecasting. The existing CBLUPs employ this phase in what is referred to as a “community assessment”, which presents current conditions of

population, housing, and occasionally the existing infrastructure. The forecasting comes in the form of a population projection.

2. *Clarification of community goals and objectives:* This is the phase of the planning process that involves the community most deeply, and has thoroughly embraced the practices of community-based planning practitioners. This is when community members must come together with the planners involved in order to come to a consensus on the intent of the community and the comprehensive plan.
3. *A period of plan formulation:* The phase where the planning professionals analyze the information gathered during the research and clarification phases and use it to outline the plan.
4. *A plan implementation phase:* The period that occurs after completion of the plan, where objectives that were formulated by the community members are carried out. This phase is often dependent upon 1) the securing of capital investments, which is to say, a budget, and 2) the power to control land-use decisions. Both of these are often missing in Chapter governments.
5. *A period for review and revision:* This part of the planning process is a reflection upon the process itself, and the outcomes of that process. The Local Governance Act requires that a revision be completed every five years for Chapter Community Based Land Use Plans. It is inevitable that an unforeseen event will hinder the completion of the comprehensive plan in the way that it was envisioned. This inevitability is the reason that review and revision of the plan are such essential functions. When an update is being considered, it is important to realize that the current conditions are not the same as they were at the outset of the prior planning process, and it is therefore necessary to update not only the data upon which the plan is built (such as Census, housing, and economic data) but also the goals and objectives that were expressed by the community. These may change with time, as opinions, new information, and community demographics change.

## 1.6 The Four Sacred Directions

The traditional Navajo (Diné) “living system” seeks to create harmony with the natural world and the universe. Within the living system, four sacred mountains represent four sacred directions. This report has sought to embrace those four sacred directions and their meanings in order to embed the Navajo culture into the land use planning process, and ensure a sustainable cultural process. These directions are *Nitsáhákees* (thinking), *Nahat’á*, (planning), *liná* (living) and *Sihasin* (assuring). These four directions must be representative of larger parts of the land use planning process. *Nitsáhákees* represents in our case pre-planning—the thinking about the upcoming land use planning process. It is important to note that this is also representative of east, the direction of the rising sun and new beginnings. *Nahat’á* represents the active planning process, organization and communication, and correlates to south. *liná* is representative of implementation, and the living of the principles of the land use plan. Finally, *Sihasin* is often associated with hope, new beginnings as re-planting of the seed, or in the context of land use planning can be interpreted as the beginning of the sustainable cycle of evaluating and revising the land use plan to incorporate contemporary and traditional cultural values.

It is our intent to integrate Navajo culture into the land use planning process in order to perpetuate Navajo culture.



## 2. National Experience With Planning in Indian Country

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### **2.1 Introduction**

As they move forward socially, culturally and economically, many tribes are utilizing a comprehensive or community based plan to assure the sustainability of the community's assets for future generations. This section of the report examines the processes employed in developing community and comprehensive plans in Tribal nations across the U.S., which may prove valuable to Navajo Nation Chapters as they begin to update their Community Based Land Use Plans. The review comprises 18 Tribal plans, mostly consisting of comprehensive plans, as well as the literature on Tribal planning issues (for a summary of each, see **Appendix VIII**). While there are numerous existing comprehensive planning models, in Native American communities a somewhat different approach is required—one that supports diversity, culture, empowerment, self-governance and tribal involvement.

These aspects reflect the unique context of planning among Native Americans and Tribal nations, in that the processes of deliberation and plan-making are just as important to future direction, if not more-so, than the final plan or achieving consensus. Our review found a variety of approaches used in plan-making, including innovative ways to ensure respect for tribal identity as well as methods for encouraging and utilizing public participation to develop the community's vision. For example, to what degree were these plans specific to a particular issue such as economic development, verses a comprehensive plan that takes an integrative approach to a number of planning elements such as infrastructure, land uses, community services and transportation?

## **2.2 Overall Planning Process in 18 Plans**

Most of the 18 plans used a basic three-step planning process, but several additional framework aspects were included due to the nature of working with sensitive populations, specifically Native American Nations. First, significant time must be dedicated to pre-planning activities, in part due to inexperience with the land-use planning process among tribal communities; communicating openly about the steps that will be taken to operationalize the community's objectives in a comprehensive plan will be beneficial to the tribe, its stakeholders and the principal investigator of the planning process (i.e. consultants, staff, researchers as well as Tribal Council members). There are also a number of cultural and religious considerations that impact the lives and activities of the tribe, making pre-planning a critical but sometimes lengthy process. Finally, many times, deliberation and the process of achieving it among all applicable stakeholders are of parallel importance to the output and information derived from public participation. Many tribal communities require careful education on the planning process and understanding of the methods utilized in these processes.

Second, the overall negotiation of the planning process, including procedures and methods, has to be articulated to the public. Planning must be interpreted and communicated at a level understandable to the general population. The best plans we reviewed included aggressive and deliberate action steps taken to provide information to the public and associated stakeholders.

Third, the planning process must be implemented in ways that maintain and engender trust among stakeholders, governing bodies, and contributing experts. Trust in the process will provide a basis for trust in outcomes. In many plans, trust was supported through the use of someone from the community in the role of facilitator or community representative. Having a shared background with members of a group helps to not only ensure that a deeper understanding of the community's needs is reflected in the plan, but establishes a comfort level with stakeholders that is difficult to achieve through someone who is outside of the community.

### **2.3 Community Assessment**

Most of the plans reviewed begin with a Community Assessment (CA) phase, which summarizes the community's key social, demographic and economic conditions. Typically, data on the number and size of households, population size, gender distribution, age, workforce and other common identifiers are used to characterize the community or area under the plan. Many tribes also choose to contextualize their community assessments by providing a background in local tribal culture, native language, geography and history, including a community timeline beginning with the oldest documented history to the present day. Sacred religious sites and sites of collective remembrance of trauma within Native American history are important features for consideration in future land-use planning, some of which are not identified on maps for spiritual reasons or for their protection. Natural features can also become special cultural places that require preservation.

### **2.4 Public Participation**

The public participation phase is crucial for ensuring that the planning process proceeds toward goals that are shared and agreed upon by individuals, groups, institutions and other stakeholders within the community. Meaningful and ongoing participatory processes including deliberation (Abelson et al., 2003) and collaboration (Fisher & Ball, 2003) can ensure that plan goals are operationalized. Public participation is particularly important for historically disempowered groups, for whom "culturally sensitive, respectful and appropriate research" must be conducted (Davis & Reid, 1999). Participatory interventions can range from informal public hearings to larger conferences (Rowe & Frewer, 2000); in the Native American context it is often useful to appoint an individual or group from within the tribe to act as a facilitator, who can ensure that trust is maintained and that stakeholders' independence is preserved (Rowe & Frewer, 2000). Furthermore, planning groups must consider what constitutes appropriate benchmarks that measure success or failure of the public participation process.

Five public participation techniques are commonly used in land use planning: 1) a SWOT analysis that identifies Strengths, Weaknesses, Opportunities, and Threats to the community; 2) Public meetings with a semi-structured agenda that facilitates stakeholder input; 3) Interviews with groups and/or individuals to provide structure to a question-and-answer process; 4) Surveys can present specific questions to a targeted or random group affecting the Tribe; 5) Joint meetings of stakeholders can provide a neutral environment to absorb information and make recommendations on comprehensive plan goals.

Part of the public participation process often involves the development of a Vision Statement that reflects the community's shared land-use goals. A successful visioning process requires respectful consideration of the cultural and religious landscape, clarifying perceptions about the vision process to participants, the inclusion of all stakeholders, use of range of appropriate techniques, and assurance of confidentiality (Avigne et al., 1995; Chaneski, 2011; Tarnow, 1997). A diversity of stakeholder goals can be discussed in focus groups, committees, appointees or interest groups. The actual content and direction of the vision statement are diverse among the plans reviewed. Typically, tribal comprehensive or community vision statements included the following four components:

1. *Community Assets*: What is good about the community
2. *Identify Cultural Values*: What are the cultural values
3. *Current Community Condition*: Where is the community today
4. *Future of Community*: Where does the community want to be in the future

Public participation is discussed in more detail in Section 5.7.

## **2.5 Predictive Modeling**

Predictive modeling (PM) describes the use of data and projections to predict future events; more recent comprehensive plans have taken advantage of these techniques to provide forecasts of future circumstances. There are two basic

types: first, *tabular data forecasting* provides estimates on how many of certain types of data will be present in the future. Second, *spatial predictive modeling* shows what geographic areas and changes may occur based on information provided. Many times these models can dovetail and be used together. If economic growth is predicted for a region, commercial zones or the cluster of businesses could be spatially identified in the future.

## **2.6 Comprehensive Analysis**

Before final recommendations in a plan are presented, an analysis of all components of a comprehensive plan should have been conducted in order to understand potential outcomes. It is important that each of the plan elements be analyzed and recommendations articulated in an implementation phase. Below are the overall components identified in many Native American comprehensive plans:

1. Infrastructure/Utility Analysis
2. Natural Resources
3. Open Space/Parks and Recreation Analysis
4. Cultural/Language Analysis
5. Government Analysis
6. Transportation Analysis
7. Housing Needs
8. Economic Development

## **2.7 Implementation Strategy**

In order to move a comprehensive plan forward, concrete action steps must be taken. Three tools are described below for ensuring that implementation is proceeding as planned:

- *Goals and Objectives*: What are each of the goals identified within the comprehensive plan and what is each of the goals' overall intent of achievement?

- *Performance Indicators:* How will the progress toward the goals be measured? It could be based on a pass-fail rating (did it occur) or be scored with progress reporting (i.e. 90% complete). Indicators may be developed by the administrative stakeholders for internal use, or through participatory methods.
- *Benchmarks:* What are the intermediate goals and when should these levels should be reached? This is not used as a punitive process, but as a method to see how efforts are progressing and address any challenges.

## ***2.8 Land Use Plan/Maps***

Based on the recommendations, objectives, and benchmarks established, a land use plan needs to be created in order to literally provide a map on how the Tribal nation should align itself geographically within its jurisdictional as well as extra-jurisdictional boundaries. A land use map should be used in conjunction with the classifications and/or zones that are established within the land use plan.

## ***2.9 Land Suitability Analysis, Development Opportunities & Master Planning***

With the comprehensive analysis complete as well as predictive modeling of future events, this can be balanced with guiding principles as well as the community vision to identify potential sites for development, preservation or of interest and importance of the community. This will allow attributes to be applied to the geographic area and spatial boundaries can be created in order to create guidance for master plan areas as well as development or preservation opportunities. This leads to future planning activities as well as a framework and justification for future action.

## 3. Focus Groups: Lessons Learned, Moving Forward

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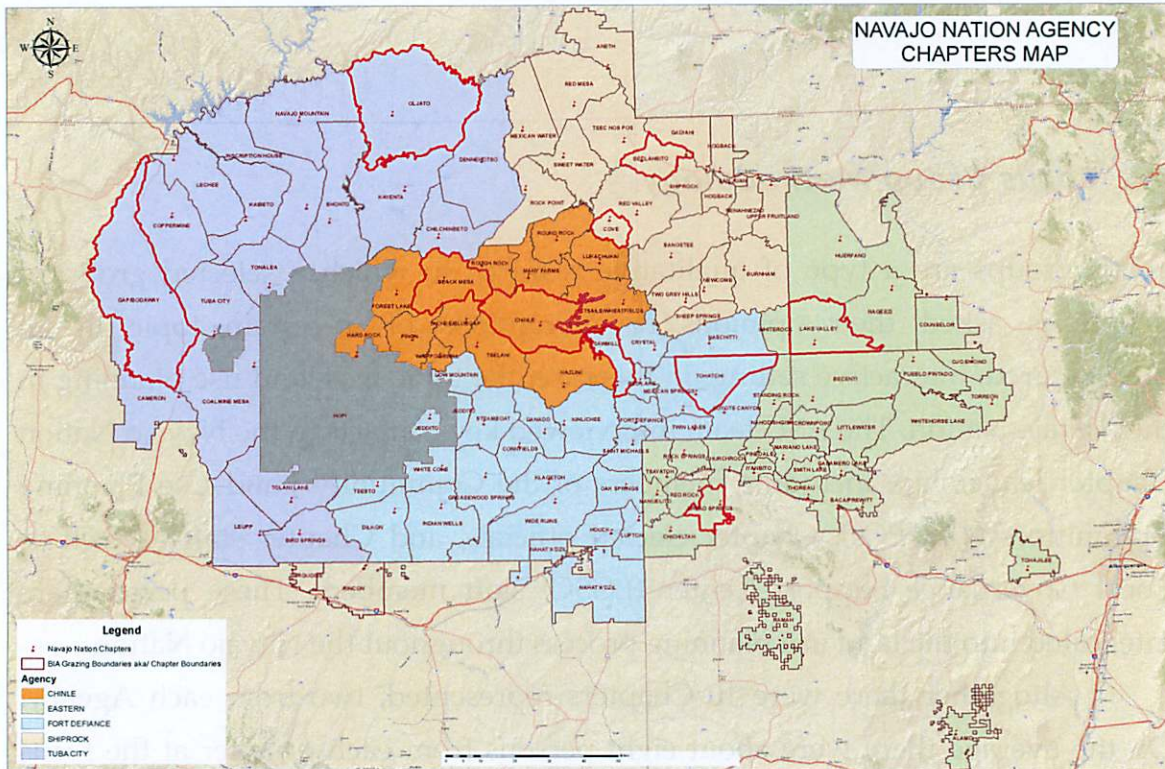
### *3.1 Focus Group Methodology*

Focus groups are a type of qualitative research in which a selected group of people is asked their opinions or perceptions of a certain topic in an unstructured, interactive setting. In this case, the topic was land use planning in the Navajo Nation. The ASU team interviewed key contacts in the Navajo Nation Chapter leadership, including members of the Community Land Use Planning Committees (CLUPCs), Chapter elected officials, and Chapter staff as well as Local Governance Support Center (LGSC) staff members. These persons are integrated into the land use planning process throughout the Navajo Nation.

Altogether there were 10 Chapters represented, two from each Agency. On the average there were about eight persons from each Chapter at the focus groups for a total of about 80 participants in the focus groups for Chapter plan updates. Most of these individuals were officials of the Chapter, CLUPC members, and at times the elected Council delegate. Interviews were conducted in February and March 2013. The five agencies were represented at the LGSC focus groups, Chinle Agency, Eastern Agency, Fort Defiance Agency, Shiprock Agency, and Western Agency. There were ten Chapters represented at the Chapter focus groups, including Black Mesa Chapter, Chinle Chapter, Bahaallii Chapter, Lake Valley Chapter, Beclabito Chapter, Tohatchi Chapter, Sawmill Chapter, Bodaway Gap Chapter, and Cove Chapter. Several of these had Chapter members come for the focus groups, but generally, the Chapter leadership were represented as the interviewees. A map showing the Chapters that participated in this process is shown in **Figure 3.1**. The Chapters were selected carefully, with a focus on diversity in representation; two Chapters from each agency were



selected, both rural and urban Chapters, geographically diverse Chapters in terms of location within agencies, and both LGA-certified and uncertified Chapters.



**Figure 3.1.** Navajo Nation Agencies & Chapters

Generally, the concerns stated at the Chapter level are also reflected at the Agency level. Agency representatives gave insight into the connections between the Chapter and National governments, and their input was extremely valuable but opinions were generally similar to Chapter officials. Focus Groups are intensive group discussions based on well-developed questions to the group on a particular topic where all individuals in the session can and should participate. The focus groups were intended to obtain information on Chapter plan-making (status, issues, needs) and specific questions pertaining to the issues centered on plan updates. The focus groups were accomplished on March 19th, 2013 in the NDOT Building, Division of Community Development, Window Rock. The following questions were used to initiate discussion:



- Tell us about the Chapter: geography, resources, people, housing and other factors.
- What issues/elements should be addressed in the plan update: housing, development, schools, and infrastructure?
- What were the weaknesses, strengths, and limitations of the first land use plan?
- What is the status of updating the land use plan?
- Describe the CLUPC membership. Are the members new? Has the CLUPC convened? Is there a need for education of Chapter officials as to the planning process and need for the update?
- Has the community been informed about the duties of the CLUPC? Has the community been informed about the participation element of the plan or visioning?
- What are your thoughts about the first land use plan? Have you read the plan/manual? If yes, what is the process of moving forward for the plan update? What are the concerns you have with the first land use plan?
- Have any of the recommendations in the first plan been implemented? Which ones? How were they implemented? If not implemented, why not?
- How will you address current issues in the update? Issues with mapping? Issues with land withdrawal? Community visioning? CLUPC training needs?
- What are your thoughts on using a regional approach to land use planning?
- What is your relationship with Navajo departments in the planning area? How can that relationship improve for the plan update? In this, what support is needed with the plan update? Do you need someone to show you how to do the plan update? Has the Agency provided the support you need for the update process?
- What guidelines would you suggest for plan updates?

- What can be done at Window Rock to help your chapter with land use planning?

### **3.2 Emergent Themes**

Several emergent themes surfaced from the interviews and discussions with the Chapter leadership and LGSC staff. There were important barriers to land use planning identified by people in our focus groups, in addition to successful practices in developing the Community-Based Land Use Plans (CBLUPs). The following concerns were identified by many participants as substantial impediments to the planning process, often getting in the way of achieving plan outcomes:

#### **3.2.1 Capacity for GIS & Mapping**

At every individual focus group, one of strongest concerns identified was the difficulty with mapping and providing maps as part of the CBLUP. Mapping has proven difficult for many Chapters, especially those without certification. Building mapping capacity is a challenge, not least because Geographic Information Systems (GIS) are expensive to purchase, maintain, and operate. Chapters are often limited by the amount of funding they receive from the Navajo Nation government, and choose to spend the money on other operational functions for the Chapter rather than investing a large sum in GIS, the training for a technician, and other expenses related to GIS.

*When asked about the capability for mapping, a Chapter official from Beclabito stated, "We have to pay a consultant to do that." When asked about inconsistency between consultants, the reply came: "We started to do it ourselves, but we have to update some software first. Then we can start to do it again." Cove Chapter officials stated, "I don't think we have the tools for it." One Chapter stated that the mapping would be easier to implement at the regional level, with "five or so Chapters coming together to use one machine, and more rural areas could go to Fort Defiance or Ship Rock for mapping..."*

Additionally, we found that there was very little capacity for the use of GIS among Chapter officials or Chapter CLUPCs. Chinle Chapter was an exception to this rule, with a full-time planner on staff, fully capable of using GIS to prepare maps, perform analysis, and other necessary related tasks. Because of the evident struggle with GIS and mapping, the ASU team has prepared a section in this report focusing on mapping challenges and recommendations for updating plans. Obtaining LGA certification is helpful in building capacity for mapping activities because of the funding associated with being a certified Chapter.

### **3.2.2 Land Withdrawal**

Proceeding with land withdrawal for the purposes of community-based land use planning has been a cumbersome process for all Chapters participating in the focus groups, and it was the one issue participants raised most often. Conflicts have mainly arisen with individuals holding grazing permits, the boundaries of which may be poorly defined. As there is limited land that is suitable for major economic or commercial development, the permit holder can hold disproportionate power over community leaders wishing to plan and implement large-scale economic development projects. The Navajo Nation Division of Community Development (DCD) has been conducting seminars and training sessions on the land withdrawal process during the writing of this report, and the outcomes of those sessions have yet to be seen.

It is interesting to note that many of the Chapters stated that they knew that eminent domain was available as a tool for enforcing the community's wishes, based on the LGA authority, but that at this time it is not culturally embedded, and therefore not applied by Chapters or the central government. During a visioning session in Chinle Chapter, a Chapter official spoke to the fact that when eminent domain was used to assemble land for the airport there, Chapter members with grazing rights gave up their rights to that land but in the end received only \$60 per person and were very dissatisfied. A CLUPC member from Beclabito expressed the discomfort with eminent domain eloquently,

stating, "You respect your people, your relatives. I think it all goes back to that, so I don't know, I don't foresee eminent domain [being applied] in the future."

*"The Land Department has its process. They even have flowcharts. Let's go to home site leases. They have flowcharts for home site leases, which have been refined and could be easily understood. Now, the other part of land withdrawal is for economic development purposes and or, say, schools or whatnot. There's another...the same flowchart but it goes to a different venue. But the process is there. The key person is the grazing official. Sometimes they're not there, sometimes they're ...politically on the other side of the plan."*

*- Oljato Chapter CLUPC*

*"It is good to talk about economic development, but the problem we run into here is land withdrawal. No one wants to give up their grazing land."*

*- Black Mesa Chapter Member*

*"But once we plan something, there's always a sheep roaming out there. The next day, someone hears about it, and they put one or two sheep up there, and say 'That's my grazing area.'"*

*- Chinle Chapter Official*

### **3.2.3 Cumbersome Certification Process**

The Chapters that were uncertified generally expressed the view that the process for LGA certification was very cumbersome, and that the Five Step Management System was difficult to implement, especially without greater assistance from the Navajo Nation. Several CLUPCs have also encountered problems with the Chapter membership not understanding the importance of certification. A few comments from Chapter members illustrate the problem:

*"There's a real lack of support within the Navajo Nation – different divisions... And then there's a lack of knowledge about LGA certification and attitudes towards chapters. DCD [Division of Community Development] knows what's all involved with being a certified chapter but personnel may not."*

*– Beclabito Chapter CLUPC member*

*"And beyond that, start educating the community about the whole thing about the LGA certification, where they need to go, and what the next step [is] – I think that's where they get hanged up..."*

*- Bodaway Gap Chapter CLUPC member*

Community involvement, education, and empowerment are critical to improving public knowledge about the importance of LGA certification and community-based land use planning in general. The Local Governance Act of 1998 does not require a CBLUP for certification, but it does require one for any Chapter wanting to administer land. This means that all Chapters that are interested in regulating land development within their boundaries must create a CBLUP.

#### **3.2.4 Inability to Perform Land Suitability Analyses**

Much time and money has been wasted by many Chapters because of their inability to properly perform land suitability analyses. This was a common theme among the Chapters that were interviewed. Land suitability analysis is covered broadly in this report, and will be an important tool in implementing the next round of CBLUPs. Land suitability analysis is a vital step in land use planning, and the proper performance of a land suitability analysis for a certain type of use will aid in the expedient implementation of the land use plan. For example, Oljato Chapter attempted to build an airport in their Chapter, but to their dismay, and after considerable effort, because of the lack of suitability analysis their efforts went nowhere, because ultimately their soils were found not suitable for building a landing strip.

In conclusion, it would seem that many Chapters are facing the same set of problems in land use planning and development. In one sense this may

actually be encouraging, because possible effective policy shifts at the Navajo Nation level will be beneficial to all of the Chapters.



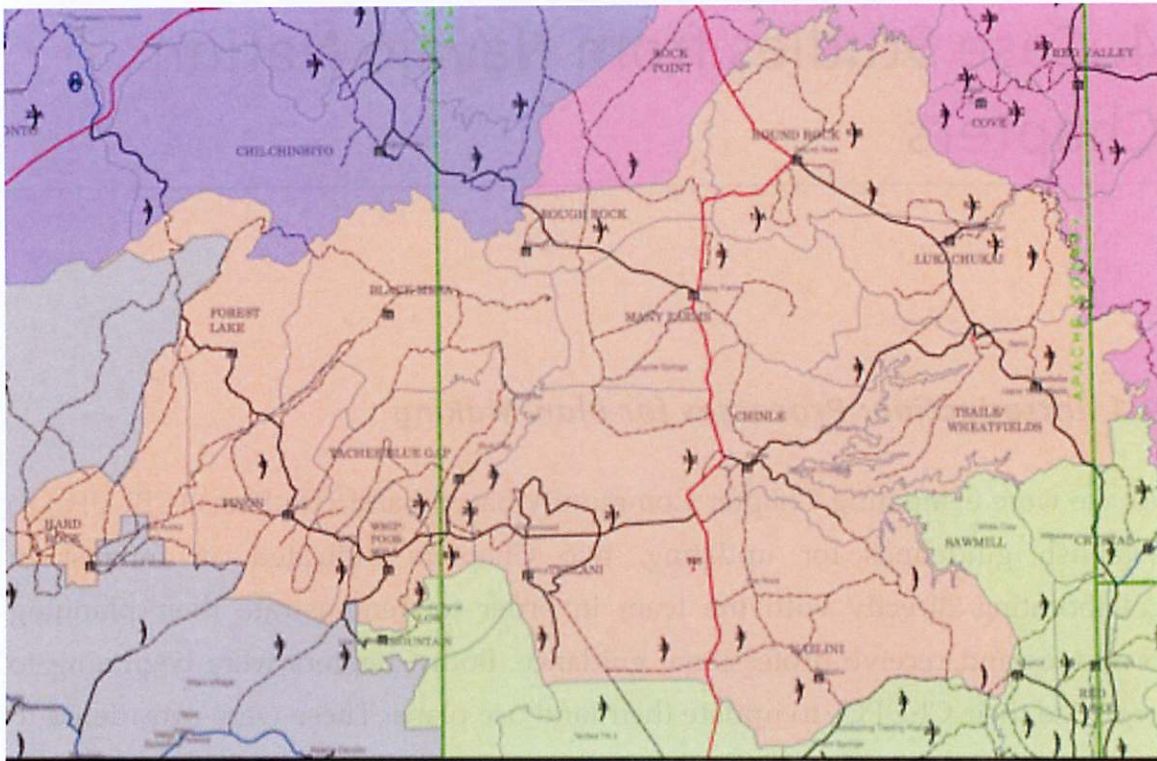
## 4. Case Studies from Navajo Nation Chapters

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### ***4.1 Introduction: Processes for Plan-Making***

As we were evaluating Chapter Community Based Land Use Plans (CBLUPs) to establish guidelines for updating, two Chapters indicated an interest in collaborating directly with the team in order to demonstrate their planning processes and receive professional guidance. Both Chapters were beginning to organize their CLUPCs to update their land use plans. These were considered to be “pilot-projects”. However, due to time constraints, this collaboration was limited to one facilitated visioning session in each Chapter and meetings to discuss the necessary information and work to be accomplished for updating their Chapter CBLUPs. These Chapters were Black Mesa and Chinle Chapters, both located within the Chinle Agency. **Figure 4.1**, below, depicts the Chinle Agency and the location of each Chapter within it. The original intent was to take these two Chapters through the entire planning process for a plan update, however, because the Chapters were undergoing a new election cycle, the newly elected CLUPC members and Chapter officials first required information on land use planning for the Chapters and this would then be followed by a participatory program. Because these activities required time commitments beyond the period of the contract, the emphasis for the two pilot projects was on developing a visioning dimension of the plan and identifying community issues.





**Figure 4.1.** Chinle Agency

Our first facilitated visioning session was held with approximately 30 residents of the Black Mesa Chapter on February 3, 2013 at the Black Mesa Chapter House. The facilitated community visioning session gave the ASU team a window into difficulties in the planning process, what was done in the prior CBLUP, identification of best practices and issues. The session provided the citizens of Black Mesa an opportunity to express their concerns with land use planning issues facing the Chapter, a demonstration of a facilitated community visioning for Community Land Use Planning Committee (CLUPC) members who had expressed interest in learning the process, and a chance for collaborative learning. The process commenced with a two-day meeting with CLUPC members to discuss the key components of plan update materials, such as census data and community surveys. Navajo Nation DCD staff was in attendance to present information on the requirements for the CBLUP and disseminate technical information (Presentation Slides, 2012).

In Chinle Chapter, the ASU team met with CLUPC members, Chapter elected officials, and Chapter staff to conduct a facilitated visioning session with



these key members of the community. Because Chinle had begun its update process for the CBLUP, this meeting served to garner ideas from the group as well as provide a model for a community facilitated visioning session to be performed by Chapter staff at a later date. The ASU team also interviewed Chapter staff about the logistical details of planning for the Chapter, the long-term visioning and strategy for the Chapter, and the short-term projects that are being worked on.

Two other case studies will be included in this chapter. First is a case study presenting the Kayenta township model, a project initiated by local businesspeople from Kayenta and endorsed by the Navajo Nation Council in 1996. The case illustrates successes from the township model, and recommendations for its use in other communities in the Navajo Nation. The second case study presents the Beclabito Chapter's process for updating its CBLUP. The Beclabito Chapter is the only Chapter to complete an update of their 2003 CBLUP, making this an important case to evaluate and highlight.

## ***4.2 Case Study: Black Mesa Chapter***

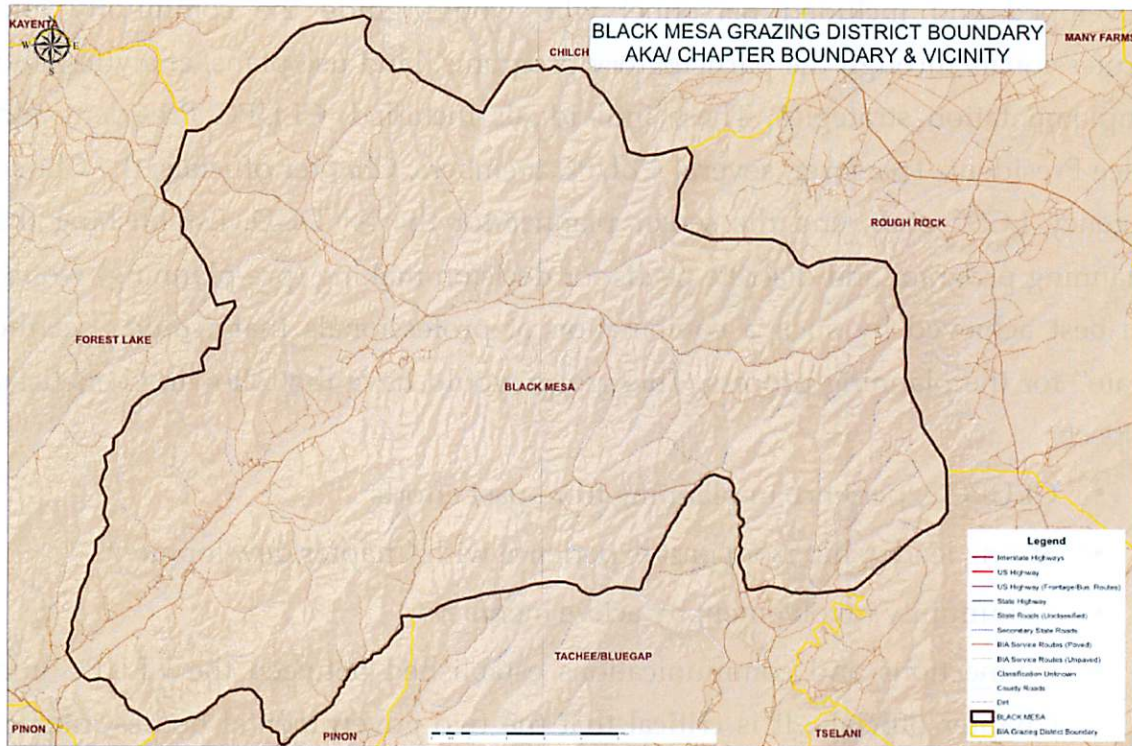
### **4.2.1 Introduction**

Black Mesa Chapter's Community Based Land Use Plan (CBLUP) was completed in 2002, as were many of the other Chapter plans. The Chapter leadership expressed interest to the Agency's Local Governance Support Center (LGSC) staff in working with the Arizona State University (ASU) planning team to demonstrate their current planning process and also to receive professional assistance with the development of a CBLUP update. Members of the Chapter's Community Land Use Planning Committee (CLUPC) met with the ASU team and toured the Chapter in order to examine sites identified for development in the 2002 CBLUP, none of which had been implemented since the completion of the plan. The ASU team also interviewed CLUPC members in order to understand the planning process for the plan update. Since the 2002 Chapter

plan was completed, membership on the CLUPC had changed, as did the structure of council delegates in the Navajo Nation. The political context for land use planning had changed and there was a shift to greater involvement in the planning process from the Agencies and their staff. The requirement by the LGA to update Chapters' CBLUPs every five years added significant weight to begin the process of reviewing what had been done previously and establishing new methodologies and data for updating the plan.

Black Mesa Chapter is a rural Chapter, home to just 428 residents, slightly more than the 400 residents living there in 2000, according to Census data (Census.gov, 2000 & 2010) with a scattered development pattern and a strong grazing tradition. Black Mesa Chapter is located in the Chinle Agency, in northeastern Arizona. The community visioning session was facilitated on February 3rd, 2012; in attendance were members of the Navajo Nation DCD and members of Black Mesa Chapter, including chapter officials and members of the chapter CLUPC. The community members in attendance shared their opinions on the future of the Black Mesa Chapter, provided a consensus vision for a prosperous future, and the frustrations they had experienced in the past. The visioning process also resulted in identifying the most critical problems related to land use planning. Recognizing that the first plan did not result in any significant development, there were strong voices heard about making the plan update meaningful and implementable. There was also public concern expressed that the updated plan should be broader than the previous one, which focused solely on housing needs and potential sites for home site leases.

The Black Mesa Chapter of the Navajo Nation is one of the most rural chapters in the nation, with a population of just 428 in the approximately 157,320 acres of land within their chapter boundaries—a population density of less than 2 people per square mile. The CLUPC used \$40,000 dollars provided by the Native American Housing Assistance and Self Determination Act of 1996 (NAHASDA) through the Navajo Housing Authority to hire a consultant to prepare a CBLUP in 2002. Pursuant to the Local Governance Act of 1998 (LGA), the Black Mesa CBLUP focuses primarily upon the development of housing.



**Figure 4.2.** Black Mesa Chapter Boundary

#### 4.2.2 Pre-Planning in Black Mesa

Updating existing CBLUPs is a significant interest at local Chapter levels as well as at the central government level. Most of the first Chapter plans were completed between 1998 and 2004, with funding from the NHA as a result of the passage of NAHASDA. Our evaluation of 22 CBLUPs revealed major limitations, incomplete analyses, and shortfalls in implementation strategies as part of the process for plan-making. Given apparent deficiencies in the first land use plans it was important to recognize the role of a pre-planning exercise to educate Chapter officials about the planning process and the content of the first CBLUP, in addition to formulating a program for how to develop the plan update. It was also critical to broaden the scope of the plans and to evaluate land uses other than home sites. The program was to include work sessions, task assignments, planning education and organization.

The Black Mesa Chapter CLUPC started the “pre-planning” phase at a 2-day work session on September 15<sup>th</sup>, 2012. The work session was carefully

developed and included personnel who would guide the community and professionals through the participatory programs, land use plans, analytics, and implementation strategies. These individuals included: CLUPC President and Vice President, Treasurer, several CLUPC members, Chapter officials, the Chinle Agency LGSC staff, and the senior planner for the NNDCD. Establishing the planning program and discrete needs for decision-making (pre-planning) would be best achieved by such a combination of professionals that would “set the state” for the planning process. This group would have the following beneficial aspects:

- CLUPC experience in planning from past efforts
- Strong leadership from past experience with Chapter development
- Community involvement by active members
- Connections and communications established between the CLUPC and Chapter officials. It is critical that the two governmental bodies interact and exchange information regularly because the land use plan development can not be independent from other Chapter developments in the socioeconomic, health, and educational aspects, land use, and these other aspects must interact in synergistic ways.
- Experience from the Agency LGSC provides important lessons from multiple Chapter CLUPCs
- The inclusion of a senior planner from NNDCDC provides direct connections with the executive branch of the Navajo Nation government.

The work session was highly organized to first include relevant background information on: 1) the 2002 CBLUP and critical decisions that were made at the time but never implemented (such as five areas identified as feasible for land withdrawal), and 2) areas that need updates or where analyses were incomplete. Identified areas included land capacity because land areas were not sufficiently differentiated and particular vegetation/land cover was absent. Informational coverage that was particularly important for the “pre-planning” included a detailed review of the LGA, its amendments and requirements for a CBLUP and what the typical structure covered in Chapter plans. CLUPC

members were tasked to continuously review the 2002 CBLUP to identify areas in the plan for updates. Required updates were identified in the Community Assessment areas, especially updating Census data, demographics and updating the Community Survey with a new version. Serious shortcomings in the prior planning approach were also identified. Such discussions are imperative in the pre-planning education phase to help in establishing a specific Chapter-based approach to the plan updates.

*“There is a need for more land space (for development). Who can we get help from to identify more land for business development, etc.? We need direction for this. We need to set up an action plan with tasks to be done; who is going to do this and set timelines for our action... perhaps we need to talk to local community members to see if they could give up some of their grazing lands.”*

In the Black Mesa case, there were serious questions asked at this juncture about the community assessment element of the previous plan and land uses. For example, personnel at the meeting identified the needs for evaluating expanded Chapter lands for commercial development and not just land set aside for planning a 10-acre confined area for development near the Chapter House for housing. The Chapter personnel wanted to expand the breadth of the plan to ensure development and employment for their youth.

At the pre-planning discussion and program development phase, decisions were made about:

1. Planning elements needed for updates
2. Shortcomings of the previous plan and how to improve upon the plan
3. The need for a socioeconomic survey to complement the Census data
4. Improvements in analysis in the planning elements of land suitability and development implementation
5. Establishment of an action plan by task, who is responsible, timelines and outcomes – a strategic planning phase.

### **4.2.3 Facilitated Community Visioning**

The ASU team facilitated a community visioning session on Sunday, February 3, 2013. Approximately 20 residents of Black Mesa Chapter attended the session, hosted by the Community Based Land Use Planning Committee and held in conjunction with the Chapter House meeting. Officials from the NNDCD and from the Chinle LGSC were also in attendance. There is often an issue of whether such a low level of participation is sufficiently representative of the population in the Chapter, especially because one of the key goals of the early phase of participation is to discover or identify problems and issues that confront the Chapter and to reach a consensus on a vision for the future of the community. Given the long distances required to travel to the session and sparse, rural nature of population distribution, any single session will likely not be representative. This problem is addressed elsewhere in the report. Responding to this limitation and broad-based problem across Chapters, the report argues for a multi-phased and multi-faceted approach to rectify the representation issue. See the recommended steps below:

1. Place emphasis on a “pre-planning” program, which includes public education on the planning process, a phased approach to meetings, workshops, and hearings on the plans, ensuring widespread communication and public input.
2. The participatory program on visioning certainly could be held at different times and places in the Chapter, and various methodologies can be utilized—visioning, problem identification, SWOT analysis, small breakout discussions, and strategic planning exercises. Utilizing repeat sessions and triangulation of methods will increase representation and validity of the sample.
3. The use of surveys can be expanded to go beyond socioeconomic and housing data to include goals, objectives, and problem identification. We strongly recommend adding surveys as part of the public participation element of Chapter plan updates.

The session procedures were laid out prior to the CLUPC and Chapter meeting, but were changed in order to accommodate two meetings in a single place. The CLUPC Chair called the visioning session to order, a group prayer was held, and discussion commenced. Community members were asked to share their thoughts about living in Black Mesa, and what their concerns were for the future. It is important to note that, because of the joint meeting schedule, the proposed formal structure of the visioning session had been broken down, and a more informal discourse took place.

During this facilitated community visioning session, notes were taken on large pads of paper to give a visual of what was said during the meeting. These notes were then referenced after the meeting in order to determine which issues were most important to the members of the community. **Table 4.1**, below, represents a summary of the issues voiced during the community visioning session. It is important to note that visioning with community members demonstrates concerns that at first glance do not reflect land use *per se*. However, each of these problem areas can be dealt with through planning, included social well-being and employment. The more recent literature on economic development in Indian Country suggest that economic development projects on their own are important, but to have overall and sustainable development, these projects need to become integrated with community objectives through “community planning”—housing growth, commercial sector expansion, improved utilities, etc.



Issues		Attention Given
Road	The paved portion of the road is incomplete. During storms, the dirt road gets muddy. This can be solved with gravel, but the gravel is not regularly placed in the right areas. This is the most important issue to solve, because all of the other services depend on it.	****
Water	Only 42% of surveyed houses have running water according to 2002 Plan. Plumbing issues arise from weather conditions, no preventative maintenance, no running water in non-NHA homes, and travel over 30 miles to nearest potable water. Only 39% of people have septic disposal according to the 2002 Plan.	.
Power	Only 31% of people have electricity according to the 2002 Plan. Power is an assumed service that follows roads, but many are without power, even in close proximity to powerlines. Power attracts youth and encourages development.	**
Housing	75% of houses needed repair in the 2002 Plan	***
Education/Training	Not enough education in vocational skills, education is essential to changing situation. The Chapter House could hire community members who have specific training, jobs would be created, as suggested by members of Black Mesa Chapter	***
Land Withdrawal	Land withdrawal is not accepted because of the implications to grazing rights. The grazing rights holders have the power to prevent development because of the land withdrawal laws. Many people want development, but no one wants to give their grazing rights away to bring that development. The existing 10 acre withdrawn land is the only land withdrawn at this time.	****
Veterans' Care	In 2002 the survey revealed 10 veterans of the 100 households surveyed. The Veterans who return to the nation are left without proper housing and care. The process to get a house is usually long and complicated. The Veterans are not supported.	**
Assistance	Some people are excluded from the elderly food and water distribution service, there are a limited amount of resources to distribute, and they are often delivered to the same families multiple times. The roads prevent this service from running consistently.	**
Cell Tower	The cell service is inconsistent and difficult to bring to the area. This can be assisted with roads and electricity.	**
Outsiders/Crime	People move into the area and bring unlawful behavior "city issues". This includes gangs, drugs, violence, pollution/trash, often aided by NHA housing.	**
Accountability	There is a problem with accountability.	**
Waste Management	Waste management is a problem primarily in NHA housing units. The "clustered" design of these neighborhoods is perceived as a primary source of litter, and the NHA housing units are put in without proper waste management	.
Elderly	Elderly care was mentioned many times, and elder care is a service that is not being provided adequately. Elder care is dependent upon the roadways for shuttling to the senior center in Pinon, provision of services such as food delivery and water delivery also affect elderly more than others.	****

**Table 4.1:** Issues highlighted at the Black Mesa Community Visioning Session. More important issues are represented by a higher number of asterisks.

#### 4.2.4 Black Mesa Chapter Wants and Needs

The residents of Black Mesa expressed many specific ideas for the future of their community, especially the need for effective infrastructure improvements. We have included below quotes in both English and Navajo reflecting public concerns. Several residents express the need for the development of reliable roads as one of the top concerns:

*"The roads are our main concern so that we can have access to the services. Even though we have leaders, like school board members that should be here. We need homes for ladies like us that are elderly and can't do a lot of physical work and the only roads are always muddy. We need a senior home. The roads are just really bad. Think about the roads as the main priority. Please!"*



*"Naanish ha'niit'chaad bit hazint'gi bee bich'i' anohooti' igit' ee' keyah binaaltsoos doo yaadaadlee'dah. Dine' keyah binaaltsoos yaadanichi'"*

*"Talking about economic development that would be nice but the problem that we have here is land withdrawal. No body wants to withdraw their grazing area. How can we withdraw land to do economic development?"*

*"Atiin iyisit' bee niheedit'i. Atiin ya'a't'eeh go ba' hasht'e dahoolyaa go olta' goo nida'aldeeh dooleel. Doo nanitl'ah da dooleel. Dine' alah nahadlee' goo nidaakai dooleel. Inda azee neikahi bit haazqaji doo naanish ha'niit'chaad bit hazanigoo nizhoniigo bich'i' atiin dooleel."*

*"Atiinigiti' alahgo nihida'diit'a - Doo nanitl'ahgoo baahonit'i' atiin nizhoniigo alyaa go."*

Economic development is a primary concern for the Black Mesa Chapter: currently, there are no businesses within the Chapter boundaries. The land withdrawal process has proven problematic in this case. Many of those who hold grazing permits will not give up their rights for the development of land even in or near areas not utilized for grazing. Because so many members of the Chapter acknowledged this problem as inevitable and lingering without solution, they instead expressed a desire to redevelop the existing 10-acre withdrawn land where the Chapter House currently sits. The redevelopment vision for this land included an updated Chapter House integrated into a mixed-use complex. This facility would include a Chapter Community Center with many services. These services would be essential community functions such as an eldercare facility and clinic, which could possibly employ a single staff of medical professionals. Other facilities that the Black Mesa community expressed are a Veteran's Affairs Center, with counseling services, and a police substation, which would house 2-3 officers.

A Head Start program is desired at the community center as well. The community expressed a need for education in all aspects, from early childhood to higher education, and the Head Start center was expressed as a priority. The community center would provide counseling to Veterans, who the community members identified as needing significant support due to a number of factors,

including drug use, alcohol use, post traumatic stress disorder, and the unique situation of being unable to obtain housing through the Navajo Housing Administration (NHA), and being without the proper means to build their own home.

One of the primary concerns in the Black Mesa Chapter has been the quality and quantity of housing. During the visioning session the question was asked: "What percent of all the homes need repair?" In a resounding voice, the community members spoke:

*"Sáani náás daazli'ígíí bee bich'i anídahazt'i'ígíí dóó t'áá nihká aná'álwo' daniidzint'ígíí bá hooghan la' daniidzin. Atiin t'áá áko ayóo hasht'ish leh. Atiin ígíí aláahgo nihida'diilá."*

*"80-90%! Because we are in the Navajo Partitioned Land area and that blocks us from getting any assistance."*

Housing should be expressed in the updated plan as the priority for this community, especially the repair of existing homes, despite the emphasis and recommendations on housing in the early CBLUP. There is a sense of frustration among the members of Black Mesa, and when asked about the expectation in 10 years regarding housing, a man replied: "I don't know. 10 years ago they asked us that before and it's the same. So I don't know."

Another group of community members facing a housing crisis are college graduates. College-educated students often return to the community without the means to purchase a home, or start a home site lease, but they are also in the unique position of earning too much money to qualify for housing from NHA. A suggested solution for this problem was to bring jobs into the area so that young graduates could stay in the community and afford their own separate home. A road to welcome home community members who left for some time, and the electric utilities that typically follow from Navajo Tribal Utility Authority (NTUA) were top priority items for the solutions to this problem.

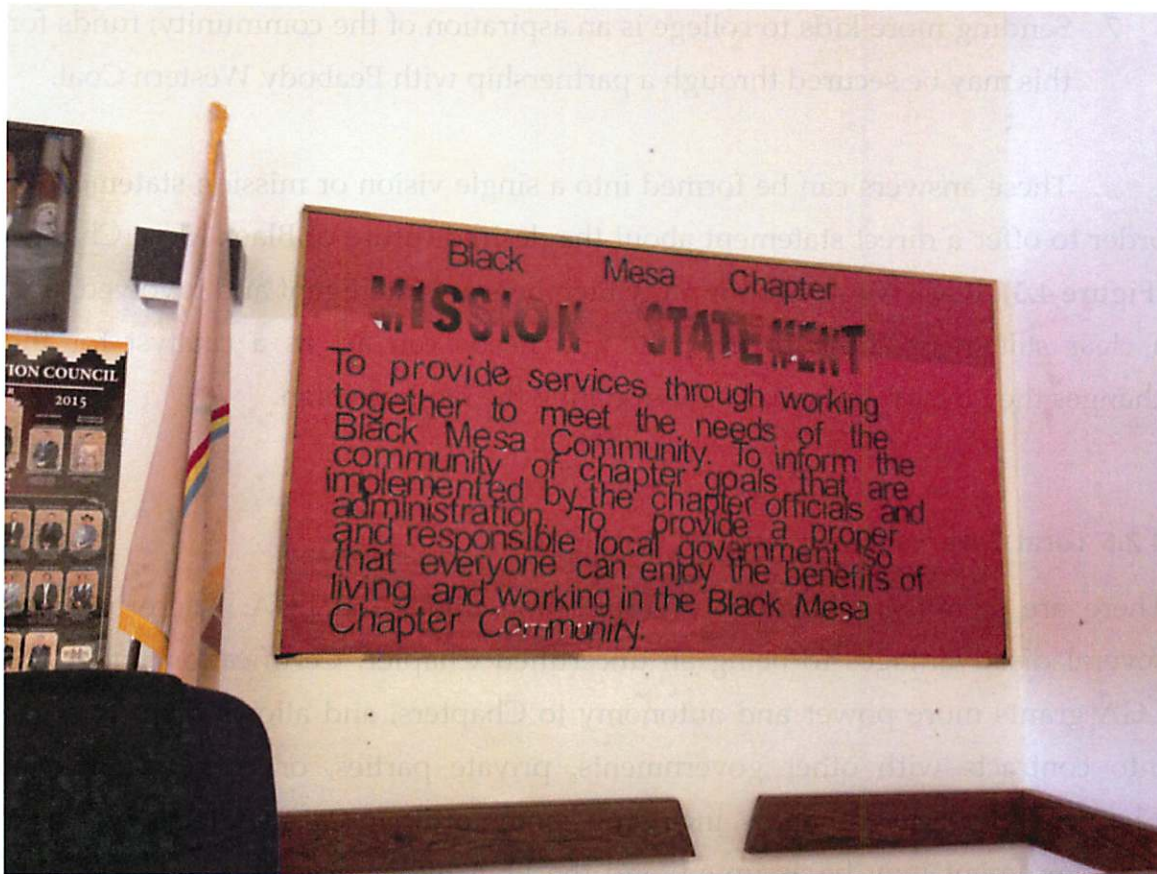


Figure 4.3: Black Mesa Chapter's Mission Statement displayed in the Chapter House

#### 4.2.5 Vision Statement

Participants were asked what they wanted to see in the Chapter in 10 years. The primary interests were identified as the following:

1. Safer Neighborhoods
2. Behavioral Health
3. Finishing existing projects as part of the original land use plan
4. Connectivity of roads to essential services
5. Youth Development
6. College students and military veterans are not welcomed home—no one takes care of them. Veterans do not welcome college students back, the connection is not strong enough, but they are both important groups in the community. There are not opportunities for college-educated youth.

7. Sending more kids to college is an aspiration of the community; funds for this may be secured through a partnership with Peabody Western Coal.

These answers can be formed into a single vision or mission statement in order to offer a direct statement about the desired future of Black Mesa Chapter (Figure 4.3). Black Mesa's community members are intelligent and involved, and a clear statement about their wants and needs can act as a catalyst for the changes they desire and a basis for updating the land use plan.

#### **4.2.6 Local Governance without LGA Certification**

There are significant hurdles to certification under the LGA. There are also several disadvantages to being an uncertified Chapter. Certification under the LGA grants more power and autonomy to Chapters, and allows them to enter into contracts with other governments, private parties, or corporations; the Chapter can enact ordinances, including zoning ordinances, an Alternative Form of Government may be assumed, and the LGA allows for the appointment of CLUPC members by Chapter elected officials. The Chapter also receives additional funding for operations, such as staff salary or planning processes such as attendance at public meetings.

The advantage of appointment of CLUPC members rather than elections is the possibility of keeping a sustained CLUPC membership for the update of the CBLUP and thus the retaining of local expertise. The difficulty of training a new CLUPC every four years while having to complete a CBLUP every five years was brought up on many occasions in focus groups with Chapter officials (March 19 & 20, 2013) as well as in interviews with Black Mesa and Chinle Chapter officials. We suggest that the Chapter consider an expanded CLUPC, holding onto local experts who work on the plan, a rotational system that assures experienced as well as new membership. The CBLUP should be viewed as a "living document".

In Chapters without Chapter staff, the Chapter CLUPC serves as a *de facto* planning staff, and the acquired experience of the five officials over the four years is extensive; when these members are subject to an election every 4 years,

valuable experience is lost if a member leaves, and valuable time for planning activities must be devoted to an election rather than focused on planning issues.

Finally, the biggest disadvantage of operating local government without LGA certification is the lack of autonomy granted to uncertified Chapters. Chapters cannot form an Alternative Form of Government without LGA certification, which means that they are subject to the strict operational rules set for uncertified Chapters. These include the day-to-day management of the Chapter, which must be conducted through resolution by the Chapter officials, whose meetings must have a 25 person quorum in order to pass a resolution (Local Governance Act, 1998); this is problematic in the summer when many Navajo people customarily leave the reservation (Hale, 2012). Chapters have expressed that it is particularly difficult to become certified under the LGA, especially with a lack of capacity to do so. Fifteen years after the passage of the LGA there are only 34 certified Chapters at the time of this report, or just over 30% of the Chapters. This may be an indication that Chapters require more assistance in the certification process, or that the process should be modified to accommodate a Chapter government with few resources.

### **4.3 Case Study: Chinle Chapter**

#### **4.3.1 Introduction**

Chinle Chapter's first Community Based Land Use Plan (CBLUP) was completed in 2006, and the Chapter Community Land Use Planning Committee (CLUPC), staff, and community members are in the process of updating the CBLUP at the time of this report. The Arizona State University (ASU) team was asked by the Navajo Nation DCD to work with Chinle Chapter to facilitate a visioning session and work with Chapter staff to help guide the development of the community planning process for that Chapter. The ASU team travelled to Chinle, in northeastern Arizona, on Saturday, February 23<sup>rd</sup>, 2013 and toured the Chapter with Chapter staff, including the Chapter planner and manager. The Chapter

staff was knowledgeable of the plans for the area and identified sites that had been marked for development in the Chinle 2006 CBLUP. The tour served as an education in local development, planning successes and challenges, and finally, the community assets that could serve as springboards for future planning.

Chinle Chapter is home to approximately 8,005 residents (Census, 2010), a slight decline from the 2000 Census of 8,294. According to the 2006 CBLUP, approximately 4,883 residents lived in the canyon area, and the remaining population lives in what is referred to locally as the “City” of Chinle. The Chapter is divided into these two areas, which are diametrically opposed in a number of ways (Interview, Chinle Chapter staff, 2/23/13). First of all, the “City” of Chinle has a much denser settlement pattern, with many homes built along Main Street. The geology of this region is not as rocky as the region near the Canyon, sits low near the creek, and floods often, according to local residents. It is clear to see that this area rests in the floodplain. The two areas also feature different economies. The Canyon economy is primarily one of subsistence through herding livestock, with a few of the Canyon dwellers utilizing the land for farming. The “Canyon Communities”, as they are called locally, are primarily scattered homes, many without running water or electricity. The “city” dwellers, in contrast, are primarily involved in the service sector or government employment for offices such as the Navajo Tribal Utility Authority (NTUA) or the local hospital.

#### **4.3.2 Facilitated Visioning in Chinle Chapter**

As part of the case study, a facilitated visioning session was conducted with key members of the Chinle Chapter, including Chinle Chapter staff, Chapter CLUPC members, and Chapter officials (herein known as “Chinle community members”). The visioning session was held on February 24<sup>th</sup>, 2013 in the Chinle Chapter House. The event consisted of a series of questions, a presentation regarding the 2006 CBLUP, and a SWOT analysis of existing conditions in the Chapter. It opened with an overview of the 2006 CBLUP, highlighting several points from the plan that held importance to the current visioning process, community demographics, and finally, revisiting the vision statement from the



2006 CBLUP. When presented with the prior vision statement, many of the Chinle Chapter membership stated that this was no longer a relevant statement given the current conditions in 2013. When asked for a relevant changes to the current version, Chinle community members offered the explanation that elderly members of the community are focused on traditional ways and preservation of their lifestyle through land, and the youth of the Chapter are often educated off of the reservation, and bring back ideas from their education that include a certain style of development and governance. Chinle community members explained the desire to find a balance between the two schools of thought. A SWOT analysis followed.

SWOT stands for Strengths, Weaknesses, Opportunities, and Threats, and is a frequently used method in planning workshops. This method of analysis is often performed in a group setting and participants are asked to describe the strengths, weaknesses, opportunities, and threats of a certain area, be it a physical area, or even a programmatic area, such as a certain plan for development of a site. The process is used because it provides a relatively simple structure for people to discuss the need for change or the aspects of a place, organization, or process that are desirable (Creighton, 2005).

Stengths	Weaknesses	Opportunities	Threats
Educational facilities	Flood plain in middle of "City"	Canyon de Chelly	Floods
Tourism	Waste management	Tourism	Water diversion
Current jobs	Lack of law enforcement	Business development	Waste management problems
Sheep, grazing	Not enough jobs	Police academy	Utilization of washes for dumping
143-acre to Chinle Chapter to build a Tribal Office Complex	Navajo Nation is too slow for the young minds who return	Land here	Businesses development dependent upon whims of Chapter officials
Alternative Form of Governance	Eminent domain is difficult to administer, and does not pay fairly	Old airport (redevelopment)	Not enough education about local economies
Much withdrawn land available for redevelopment		New Housing	Unsustainable way of development
Organic farming in Canyon		Banana Curve (commercial corridor)	Poor housing conditions
		Creative outreach through school teachers, police department, etc.	Cannot put water line, sewer line into Canyon Communities because of bedrock
		Navajo Technical College will further develop	
		Tourism economic development	
		Buy Navajo - spend money in Nation	
		Farmer's Market	

**Table 4.2:** SWOT analysis outcomes for Chinle

**Table 4.2** shows the outcomes of the SWOT analysis for the Chinle Chapter. This can be an important step in strategic planning, which will be discussed in a later section. SWOT analysis was found to be an effective tool for the start of the participatory planning process for Chinle's plan update. The analysis supports community communication on issues and permits the Chapter members to begin to look at their community in analytical terms, to examine the Chapter's "opportunities" in real terms by identifying them as a community but also in evaluating the strengths and weaknesses in achieving these "opportunities". The SWOT analysis at Chapter levels seems to work for plan building, especially as a device for plan updates, as it is complementary to visioning and the articulation of goals. As we can see in the results from the Chinle SWOT analysis, some of the identified "strengths" reflect implementation of projects based on the 2006 CBLUP, including land withdrawal. We suggest consideration of SWOT analysis for the Chapter CBLUPs.

Following the SWOT exercise, participants were asked to share their vision for the Chinle Chapter. Participants were presented with the beginning of the statement, "In ten years, I would like Chinle Chapter to (have/be/look like)..." and asked to finish it in his or her own words. Eight members responded, and their answers varied widely. The results of this exercise are listed below:

- [have] more college facilities, a Barnes and Noble, and a big king size recreation building plus a sport stadium for rodeos and fairs
- [have] self-sustaining and progressive community with a balanced traditional and business environment
- [have] improved housing and living conditions, educational institutions, higher education, and more business development – grandchildren say "after my graduation, I'm going out and not coming back to the reservation because there is nothing out here to do"
- [be] a self-sustainable community in agriculture and economic development through tourism, development of a city government, green initiatives in energy



- [have] major businesses and more educational opportunities for professionalism and growth for our children
- [have] a livestock area, AFOG government, parks, home for working people, zoning the Chinle area, cleaning up the area, recreation for the younger community, livestock feed market
- [have] some more eating places, a college building for students, wind farm on top of the mesa, new police department, new nursing home, more shopping places
- [have] a nice clean community with recreation and parks for our children, perhaps a movie theatre, nice farming plots along the flood plains, organized office buildings so people won't travel back and forth.

This exercise produced concise, strong vision statements about the future of Chinle Chapter. It is strongly recommended that this exercise be used to garner a vision for the future in updating the Chinle CBLUP. If Chinle community members were to conduct a facilitated visioning session with a large number of attendees, consensus on contentious development issues may be arrived at more easily. In interviews with Chinle community members, the issue of an uninformed member of the community stopping the development process was a common theme, especially through cultural and grazing land. This quote is illustrative of the situation:

*"...But once we plan something, there's always a sheep roaming out there. The next day somebody hears about it. They put one or two sheep up there and say that's my grazing area."*

- Chinle Chapter official

#### **4.3.3 Chapter Certification and Local Governance**

Chinle Chapter became certified under the Local Governance Act (LGA) on December 21, 2010 (Chinle Chapter Strategic Plan, 2012), which affords it more

autonomy and power. The Chapter's certification comes as a result of its adoption of the "Five Management System" and a Community Based Land Use Plan (CBLUP) as defined in Chapter 26 (Local Governance Act of 1998) of the Navajo Nation Code. As part of its authority as a Certified Chapter, Chinle can opt to go one step further and proceed with the formation of an Alternative Form of Governance (or AFOG), according to interviews with Chapter staff (2/23/13). Chapter officials and Chapter staff seemed to have different visions for the AFOG in Chinle. The AFOG allows the Chapter to operate in a fashion similar to a municipality by creating either a council-mayor form of government or a council-city manager form of government. The AFOG in Chinle has not yet made a decision about the form of government it wants for the Chapter, and the staff members are currently exploring the respective benefits and drawbacks of various governance structures. Staff expressed a need for change in Chapter-level planning. For example, Chapters in the nations currently view themselves as independent from each other and do not interact in the process of creating plans or even inventory the regional assets such as hospitals. Moving toward a regional approach for land use planning is supported. Another desired change is more direct communication with the Navajo Nation Government, which would enable quicker decision-making and implementation. This is one reason for the lengthy deliberation of the topic of an AFOG, which would enable stronger leadership at the Chapter government level, and provide accelerated solutions to these stated problems.

The LGA provides a number of options for the development of an AFOG for Chapters that have become certified by the Navajo Auditor General's office (Navajo Nation Code, Title 26). These options include a council style of governance, a township form of government (such as in Kayenta, which will be explored in another case study) and the formation of Chapter sub-units. These forms of governance are an alternative to the Chapter form of governance that was developed in 1927 by BIA Superintendent John Hunter (Wilkins, 1999). The council form of government would grant the elected local council more authority in coming to decisions, whereas the Chapter form of governance provides the Chapter President broad authority over the agendas of the Chapter and decision-making authority over the issues that will be addressed during the Chapter

meetings. The council form of government is also advantageous in that the council can move forward Chapter level legislation without the need for a 25-person quorum, as is required without the AFOG (Hale, 2012).

If Chinle were to adopt the AFOG, this would allow the CLUPC to move forward with relative ease in the update process, especially in terms of the passage of ordinances to adopt the CBLUP. The AFOG also has benefits in empowering the local government to hasten decision-making, appoint CLUPC members, and more.

#### **4.3.4 Strategic Planning in Chinle Chapter**

During interviews, staff also spoke of the need to plan for a greater length of time than the 5-year updates than is afforded to CBLUPs in the LGA. The literature on Comprehensive Planning states that plans should be long-term in order to be effective (Goodman & Freund, 1968), as can be seen in the list of requirements in the “Many Facets of Planning” section of this report. The Chinle Chapter strategic plan, which is prepared on an annual basis to meet requirements of the Navajo Nation Office of Management and Budget (NNOMB), exemplifies this concept, and has been completed to plan for a period of 20 years, while the CBLUP only encompasses a 5-year planning horizon as is mandated by the LGA. The strategic plan, prepared by the Chapter planner with public input, identifies problems in the Chapter and proposes actions to manage these problems. For example, the strategic plan identifies the Chapter’s 40% unemployment as a problem, and specific economic development plans in certain sectors are identified by the strategic plan as a management solution.

Chinle Chapter staff was also kind enough to share documents and results from their most recent strategic planning session, known as Plan Week, which was held the first week of April 2013. These documents show how, with public input, strategic decisions for the future of the Chapter are made. These decisions included direct strategies and quality-of-life initiatives that were developed in order to move the Chapter forward. These included education development, healthcare, pass-through visitor services, value-added agriculture, environmental restoration, and cultural tourism.

Similar to Black Mesa Chapter, a key part of the facilitated visioning session in the Chinle Chapter was the SWOT analysis. The SWOT analysis is often part of a larger public participation strategy. Along with SWOT analysis, visioning, focus groups, workshops, interviews, and other techniques are all important tools for the gathering of information from the public. A descriptive step-by-step method of public participation has been included in Section 5.7 of this report. It is important to point out that there is an on-going annual strategic planning process that differs greatly from the CBLUP 5-year update process. The strategic plan is largely independent from the CBLUP, yet it may specify strategies to carry out goals from the CBLUP. In some cases, we have seen the strategic plan act as an implementation process for CBLUP goals, but to this point, the two have remained unconnected, often to the detriment of Chapter governments. It may be beneficial for the Navajo Nation Office of Management and Budget (NNOMB) to consider changes in strategic planning requirements to integrate strategic planning with land use planning at the Chapter level.

#### **4.3.5 Next Steps in Chinle**

Though the Chinle Chapter has exemplified progress in planning in the Navajo Nation, the Chapter must maintain its momentum in order to make the changes its membership desires. Many expressed the need for a more concerted planning effort, with support from the Navajo Nation, LGSCs, and Chapter members for the Chapter government to reach its goals. Chapter staff expressed the need for more data, more readily available funding, and an integrated process for economic development and redevelopment in the Chapter.

An example of the need for more data, funding, and an integrated planning process is Chinle community's downtown area, which is developed almost entirely in a floodplain, and which must be redeveloped in order to prevent storm water pollution, massive damage to existing homes, businesses, and infrastructure. Access to floodplain data from the Federal Emergency Management Agency (FEMA) for example would enable the Chapter to identify areas (through land suitability analysis) for redevelopment, and funding for planning activities would enable a master plan to be created for the

redevelopment area. Chapter staff expressed a desire to redevelop the downtown floodplain area into a park that would also act as a storm water retention basin during floods; this effort could be aided by Navajo Parks and Recreation (NPS) or the Navajo Nation Parks Service (NNPS), and is just one example of a planning project that could help Chinle Chapter obtain its vision. The plan update would have to consider this issue and make clear the implementation phases to actualize this.

#### **4.4 Case Study: Kayenta Township**

Kayenta is located in northeastern Arizona and is only about 20 minutes from Monument Valley, a destination for tourists from around the globe. Kayenta is part of the Chinle Agency, and hosts a unique government structure. There is the local Chapter government, which operates as an arm of the Navajo Nation government like the 110 other Chapters, but there is also a “township”, which operates in a similar manner to a city or town government. Kayenta has been chosen as a “Harvard Project”—a case study of successful Indian economic and community development, especially in regards to their taxation initiative (Harvard Kennedy School, 1999). The Navajo Nation Council endorsed the township model in 1996, giving local business owners the opportunity to lead in the zoning, planning, and building initiatives. Comprehensive Planning, jurisdictional authority, and community development are all themes of the Kayenta model (Hale, 2012).

The proximity of Kayenta to Monument Valley is a major influence on the large number of business people in the area. From the early 1900’s on, traders recognized Kayenta as a place with good business prospects. The historical presence of so many traders and a strong market economy led the Navajo Nation Council to loosen its hold on the regulation of land use within the Navajo Nation (Hale, 2012). Interviews with Navajo Nation officials as well as with local business leaders indicated that Kayenta is often a destination for Navajo families on their weekly trips to town for shopping, dining, and services (Interviews, March & June, 2013).

The Navajo Nation Council, after lobbying by local advocates, recognized this opportunity, and in 1996, passed the Kayenta Retail Sales Tax Project. A year later, the Kayenta Township Commission was established, a sales tax passed, and staff hired. The land withdrawal process prior to 1996 was such that business site leases within the Township required a recommendation by the local chapter, Navajo Nation administrative review and recommendation, approval by the Tribal Council's Economic Development Committee, the signature of the Navajo Nation President, and finally, review and approval from the BIA Area Office. Now, these leases only require approval from the Township Commission, along with the Navajo Nation President's signature and BIA approval as trustee—a radical change that has worked to attract new businesses (Harvard Kennedy School, 1999). For many Chapters, there is hope that the LGA can support this type of process for the CLUPCs.

This model, endorsed by the Navajo Nation Council prior to the passage of the LGA, may be an appropriate model to emulate for other Chapters who would like to harness local revenues, which may allow for greater Chapter sovereignty in a fiscal sense. Like all of the other Chapters in the Navajo Nation, Chapter officials handle the government-to-government relationship between the Chapter and Navajo Nation, as well as the budget and other local economic and political matters, such as land use and water resources. As part of the requirements of the LGA, the Chapter officials must assess the needs of their Chapter through a Community Assessment (Local Governance Act, 1998). The township has become a de-facto second government, along with the Kayenta Chapter Government, that manages only the land within its boundaries (Hale, 2012).

The land within the boundaries consists of approximately 3,500 acres, all of which can now be developed with far fewer requirements and obstacles than the land outside of the Township (Harvard Kennedy School, 1999). Focus groups with 10 Chapter CLUPCs from the Navajo Nation have revealed that business site leases and land withdrawal are some of the biggest issues facing Chapter governments, and are major barriers to economic development at a Chapter level (see Focus Groups section for more details). An obvious benefit of this model is that the land withdrawal process is substantially shortened, because over half of

the agents involved in the process are no longer required to review and approve land withdrawal applications.

Another benefit of this model is that the township is autonomous and can function without oversight from the Kayenta Chapter government, which would undermine the self-governing nature of the township (Hale, 2012). This may also be viewed as a disadvantage to some in the Navajo Nation, especially if they are concerned about mismanagement or the possibility for a patchwork of inconsistent policy in overlapping geographical areas. The requirements set in place by the LGA, especially the Five Step Management System, are included for the purpose of creating a consistent governance system among the Chapters, which could be undermined by the creation of township governments. The township form of government was also a grassroots initiative taken to the Navajo Nation Council by a group of business people who were interested in setting out on a different path (Harvard Kennedy School, 1999), which may be part of its success. Because the government structure was created by the people who intended to run it, they were in the position to do so effectively.

As Hale (2012) points out, the township government is not well suited for every community in the Navajo Nation. It is, however, recommended for growth centers or for communities with an entrepreneurial spirit. The township government structure has its distinct advantages when it comes to economic development and land withdrawal, which makes it a strong model for communities looking to harness tax revenue from tourist activities or other basic economic activities. The implications of this model are clear, though, and the advantages are tangible. The land withdrawal and zoning processes face far fewer obstacles in this model, and allow for swifter decision-making and the ability to implement projects more quickly and with less risk.

## **4.5 Case Study: Beclabito Chapter**

### **4.5.1 Overview**

The Beclabito Chapter was added as a case study for analysis and implications

for several reasons. First, it received approval for its CBLUP in 2003 along with many other of the Nation's Chapters, but one year before approval, the Chapter's CLUPC adopted a Community Participation Plan. This participation plan has importance for its structure and approach especially for identifying approaches for updating plans. Community members were involved in every step of plan-making in various kinds of participatory processes. Understanding these processes has value in evaluating the guidelines needed for updating land use plans. The second and more important reason for inclusion of the Beclabito Chapter is that in 2011 the Chapter decided to revise and update its 2003 plan. At a public hearing of the Navajo Nation's Natural Resources Committee, the Chapter requested certification of the revised and updated CBLUP. Our understanding is that the 2011 land use plan was the first updated plan approved for a Chapter. The fact that an updated plan was approved provides lessons learned on the process of plan making for Chapter-level planning.

By way of background, in 1998 the Local Governance Act (LGA) was passed giving greater decision-making authority to Chapters as long as Chapters can demonstrate the ability to govern themselves and have accountability in their management. Chapters can also be "Certified" once they meet these LGA standards and to-date 34 out of the 110 Navajo Chapters have done so. Under the LGA Chapters can administer land within their boundaries, and if they opt for managing their land, a land use plan must be established. This plan must be implemented and according to the LGA updated every five years. Unfortunately, after the first plans were completed, very few have gone through the implementation phase; while 98 out of the 110 Chapters developed a land use plan, only the Beclabito Chapter has gone through the process of updating it. One major problem is the lack of funding for plan updates, although there have been discussions. The funding issue also coincides with the recent transformation of the Navajo Nation legislature to 24 council delegates from the traditional 88. Funding discussions have therefore shifted toward funding at regional levels by a delegate district that contains several Chapters, rather than chapter-by-chapter. An additional hurdle to plan updates has been the awareness that the plans must be greatly expanded from their previous emphasis on housing sector planning toward more comprehensive land use planning, especially involving economic



development and community services. In fact, in 1996, the Office of Navajo Government Development received NAHASDA block grant funding and most of the funds were available for land use planning by 2001. The emphasis on new housing site development was and continues to be a pressing land use issue among all chapters, but participatory involvement clearly demonstrates other pressing issues including infrastructure, education, community services and employment.

Two critical elements were articulated in the Beclabito 2003 planning document that speak to the importance of the land use plan and especially the update. First, the original CBLUP states “The land use plan serves as *a guide for future development* and provides a foundation for zoning ordinances. It allows the Chapter to evaluate potential development projects while *balancing the diverse needs* of the community with concerns, cultural traditions and natural resources...”(page 9). The emphasis is on a guide and development projects, but the idea of balance is also critical to the plan. The second concept embedded in the planning process is the importance placed on “the community’s commitment and participation throughout the process”. To prepare for the 2011 plan revisions the CLUPC put in place three actions for plan-making. First, it approved a CLUBC “plan of operations” under a Chapter Resolution which was approved in 2009; second, it laid out the “amendments and update process”; and third, it developed a “Community Involvement and Participation Plan” in 2011.

The CLUPC’s amendment process thus permits the public to propose changes to the land use plan. Amendments can be proposed as needed and once approved by the CLUPC become part of the updated land use plan as an “Addendum”. The concept was to have the first land use plan, once approved, become a living document for which changes could be made with community input as part of their annual strategic planning for chapter management. However, comparing the original planning document to the update demonstrates underlying deficiencies in the update process. These are as follows:

1. The original plans generally did not prepare an “Implementation Strategy,” resulting in a general lack of response and feedback by the CLUPCs over time.
2. The CLUPCs are elected personnel that likely change every 4 years due to

election cycles that generally result in continuous loss of knowledge and skills relevant to land use planning or to the specific land use plan.

3. Typically the focus on site selection uses housing as the basis for the land use plan, without evaluating suitability of selected sites or feasibility of funding, left the plan as a document limited to the purposes of LGA Certification and without real applicability. There is little evidence of implementation or implementation strategies.
4. While the diverse elements of land use planning are included in the plans there is little evidence of integration that is bringing plan elements such as transportation, developable land areas, infrastructure and community assets/services together for project development of significance. The focus remains on individual site leases for home development and small community services near Chapter houses. The planning horizon typically is short term rather than long term. While the emphasis on housing was mandated by the NAHASDA in 1996, plan updates should direct attention at broader issues (including housing) that are integrative and respond to both critical short-term or immediate community needs, but certainly long-term development projects.

#### **4.5.2 Lessons Learned from the Plan Update**

- *Importance of Public Education and Participation.* The LGA gave strong authority for plan-making to the community in planning its own future. In response the Chapter CLUPC developed a “Community Involvement and Participation Plan”. This plan served to educate and guide community members through the plan-making process. One comment noted, “The participation plan fostered community education and active participation”. The activities falling into participation included plan reviews, public meetings to inform community members about updating, work sessions (for example, assembling community survey questions), and public hearings. Participation is seen as serving three objectives: to inform and educate, to obtain feedback about the assessments, and to

prioritize plan objectives. As in other Chapter plans, a major thrust in participatory activities was to define the goals of the community and to identify objectives which begins to operationalize each goal. In the plan update, however, the objectives were left as highly generalized statements without timelines for achieving the objectives or defining strategies and responsibilities. Without taking these steps implementation actions will likely slip away.

- *Continuing Issue with Data Analysis in the Community Assessment.* The 2003 planning document emphasized land analysis for affordable housing. Eight years later in the update, the major focus of the CLUPC was again on finding sites for housing. In this case, sites were first located by community members, and only after was each site examined for its suitability. The suitability analysis was not done integratively, to identify places that were first deemed to be suitable for development and to determine the amount of space that would be available and where for community development. A greater effort is required to collect precise data on demographic trends, household size, distribution by age, and other factors, and use these data to develop projections for housing needs. Examining the 2003 database used for plan-making in the 2011 update demonstrates the difficulty in making projections of needs despite U.S. Census data and data made available by the Chapter community survey.

Based on the US Census data for 2000, the 2003 plan indicates that the Chapter population increased from 388 persons to 819 persons from 1990 to 2000. The Chapter had 337 houses of which 75% were occupied, and a NHA Subdivision had 30 units to add to the housing sector. Based on the population growth rate in the chapter and on the then-current growth rate in the Nation of 2.7%, the 2010 population projection was estimated at 1,249 persons. Based on a declining household size, 59 housing units would be needed by 2010. The 2011 Plan, however, shows serious discrepancies in the data analysis and therefore on projections of housing needs. To illustrate, despite growth projections of 1,249 persons in 2010, the Chapter population actually declined to 749 persons in 2010,

a decrease of 8.5% that could not be explained. With an apparent declining population and 20 new homes built between 2000 and 2004, it would put into question the need for more home sites and houses since the first CBLUP. The updated plan discussion suggested a number of factors to explain the data issue, including household absences from the Census. The data analysis and the need for housing have not been reconciled, and the updated plan continued to emphasize home siting and suitability of those sites as principal plan objectives. The updated CBLUP states as much: "The Land Use Plan is the community's general guide for managing growth... of future land development... this plan is not reflective or intended for zoning of individual areas but generalizes future land uses...specific decisions will be required". We argue that greater specificity is required in the plan with respect to translating the community's goals and objectives into tangible projects, sites and timelines, as in strategic planning for land uses. Chapters have experience in doing this but the focus should be on land uses. The case study update demonstrates the need for evaluating a broader base of land uses and more careful projection and analysis of housing needs.

## 5. Evaluation of Chapter Plans

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### **5.1 Introduction**

Since the enactment of the Local Governance Act (LGA) in 1998, individual Chapters of the Navajo Nation have developed Community Based Land Use Plans (CBLUPs). Of 98 total plans, most were completed between 1998 and 2002, with a small number between 2002 and 2009; so far, only one has been updated. Most of these plans were completed by consultants following a planning model that included a public participation element, community assessment, land suitability analysis, infrastructure analysis, and a housing or economic development section. The emphasis in these plans was on selecting home sites for development, which is reflective of a significant housing shortage in the Navajo Nation at the time, but also the plans' funding source, the Navajo Housing Authority (NHA). This chapter reports on an evaluation of 22 selected Chapter CBLUPs.

In order to determine best practices in the preparation of CBLUPs, lessons learned from the public participation, community assessment, land suitability, infrastructure suitability, and implementation portions of these CBLUPs, the plans were carefully analyzed for deficiencies, approaches used, mapping quality, and implementation strategies in order to provide guidelines for updating them. Recommendations are offered in a later section based upon a comparative evaluation of the plans, as well as the planning, public participation, and Geographic Information Systems (GIS) literature. Rigorous analysis of each plan along with interviews of Community Land Use Planning Committee (CLUPC) members from 10 Chapters have provided insight into and recommendations for land use planning processes.

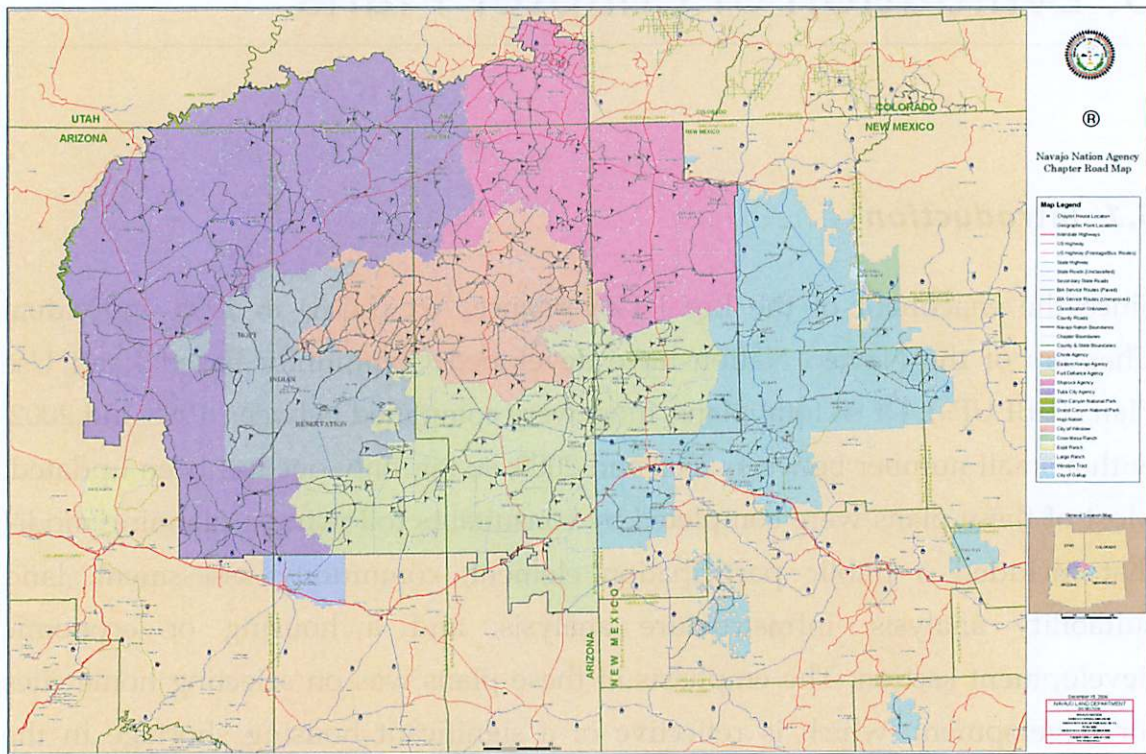


Figure 5.1. Navajo Nation Agency Map

## 5.2 Selection Process

With assistance from the Navajo Nation Division of Community Development, 22 Chapters were chosen for evaluation of their respective CBLUPs; Chapters were selected from among all five Agencies, both LGA-certified (9) and uncertified (13), rural and urban, and representative of a wide geographic, socioeconomic and demographic range (Figure 5.1, Table 5.1). Appendix I lists the Chapter plans reviewed.

<b>Selected CBLUPs by Agency</b>			
<b>Chinle Agency</b>		<b>Shiprock Agency</b>	
<i>Chapter Name</i>	<i>Certified/Un</i>	<i>Chapter Name</i>	<i>Certified/Un</i>
Black Mesa	Uncertified	Beclabito	LGA Certified
Blue Gap	Uncertified	San Juan	Uncertified
Chinle	LGA Certified	Sanostee	Uncertified
Hard Rock	Uncertified	Shiprock	Uncertified
Many Farms	Uncertified		
<b>Eastern Agency</b>		<b>Western Agency</b>	
<i>Chapter Name</i>	<i>Certified/Un</i>	<i>Chapter Name</i>	<i>Certified/Un</i>
Baca	Uncertified	Bird Springs	LGA Certified
Bread Springs	LGA Certified	Chilchinbeto	LGA Certified
Lake Valley	Uncertified	Navajo Mountain	Uncertified
Little Water	LGA Certified	Tolani Lake	Uncertified
Whitehorse Lake	Uncertified		
<b>Fort Defiance Agency</b>			
<i>Chapter Name</i>	<i>Certified/Un</i>		
Dilkon	LGA Certified		
Fort Defiance	Uncertified		
Nahat'a'dzil	LGA Certified		
Red Lake	Uncertified		

**Table 5.1:** Selected Community-Based Land Use Plans, by Agency (Source: Chapter certification list, via correspondence with NNDCD staff)

### **5.3 Community Land Use Planning Committee or Consultant?**

The selected CBLUPs were often completed by consultants from outside the Chapter or, occasionally, from outside the Navajo Nation. There were no examples of Chapters whose CLUPCs went through the planning process without some assistance from a consultant. Funding from the Native American Housing and Self-Determination Act of 1996 (NAHASDA) was often used to pay for consultants' services, which, in turn, often led to a limited scope of work focusing primarily on housing. The use of consultants is not inherently good or bad, but often did not perform the rigorous analysis that should have been

conducted in order to determine land suitability, identify goals and objectives of the community, or implement the plans. A number of Chapter officials and CLUPC members expressed the desire to complete the CBLUPs “in-house” (Interviews with Chapter officials and CLUPCs, March 19 & 20, 2013). In order to do so, a great deal of capacity building will be needed. Without external funding, it will be the responsibility of the CLUPC members with support from the executive branch departments to provide the plan updates, expand analysis beyond the emphasis on housing, and build capacity in broad-based land use planning.

#### **5.4 Methodology**

Each chapter’s CBLUP was evaluated for individual merits and deficiencies within each section (sometimes known as “elements” in comprehensive or general plans in non-native communities) (Kent, 1990). Particular attention was paid to the approach or methodology taken in each section, when the approach was provided in the plan. Content analysis was performed by comparing word usage, the amount of attention paid to particular subjects (such as NAHASDA), and the quality of analysis when compared with recommendations from the planning literature. Each plan was individually compared with the literature from contemporary urban planning and comprehensive planning, but also with the other plans in order to determine best practices and needs for plan updates. Triangulation of this knowledge with focus groups of selected local leaders has helped determine outcomes from the planning process, and identify strengths and weaknesses in these processes. The recommendations made later in this report are based upon findings from the literature, the reviews of the CBLUPs, and the focus groups and interviews conducted over a period of approximately four months.



## **5.5 Findings & Recommendations**

The majority of CBLUPs followed a standard format. Consultants completed a majority of the plans, and many of these consultants authored more than one plan. Similarities arise from the use of a CBLUP template by the consultant, but also because the parameters are well-defined by either the LGA or NAHASDA. The LGA requires that Chapters wishing to administer land have a CBLUP, and that the plans must:

1. Include projections of future community land needs, shown by location and extent
2. Identify areas for residential, commercial, industrial and public purposes
3. Be based upon the guiding principles and vision as articulated by the community
4. Include information revealed in inventories and assessments of the natural, cultural, human resources, and community infrastructure as well as consideration for land-carrying capacity.

The plan may also include the following:

1. An open-space plan which preserves for the people certain areas to be retained in their natural state or developed for recreational purposes
2. A thoroughfare plan which provides information about the existing and proposed road networks in relation to land use in the surrounding area
3. A community facilities plan which shows the location, type, capacity, and area served, of present and projected or proposed community facilities.

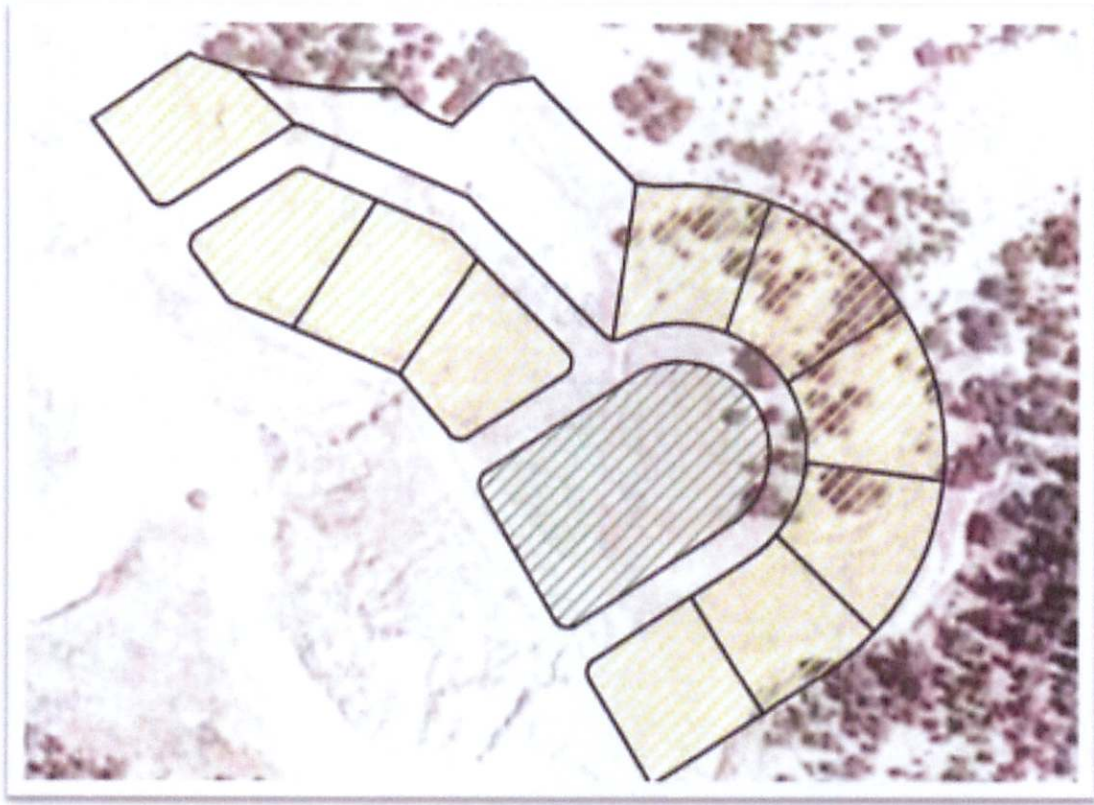
Below are overall findings from the CBLUPs, separated by theme.

### **5.5.1 General Scope of the Plans**

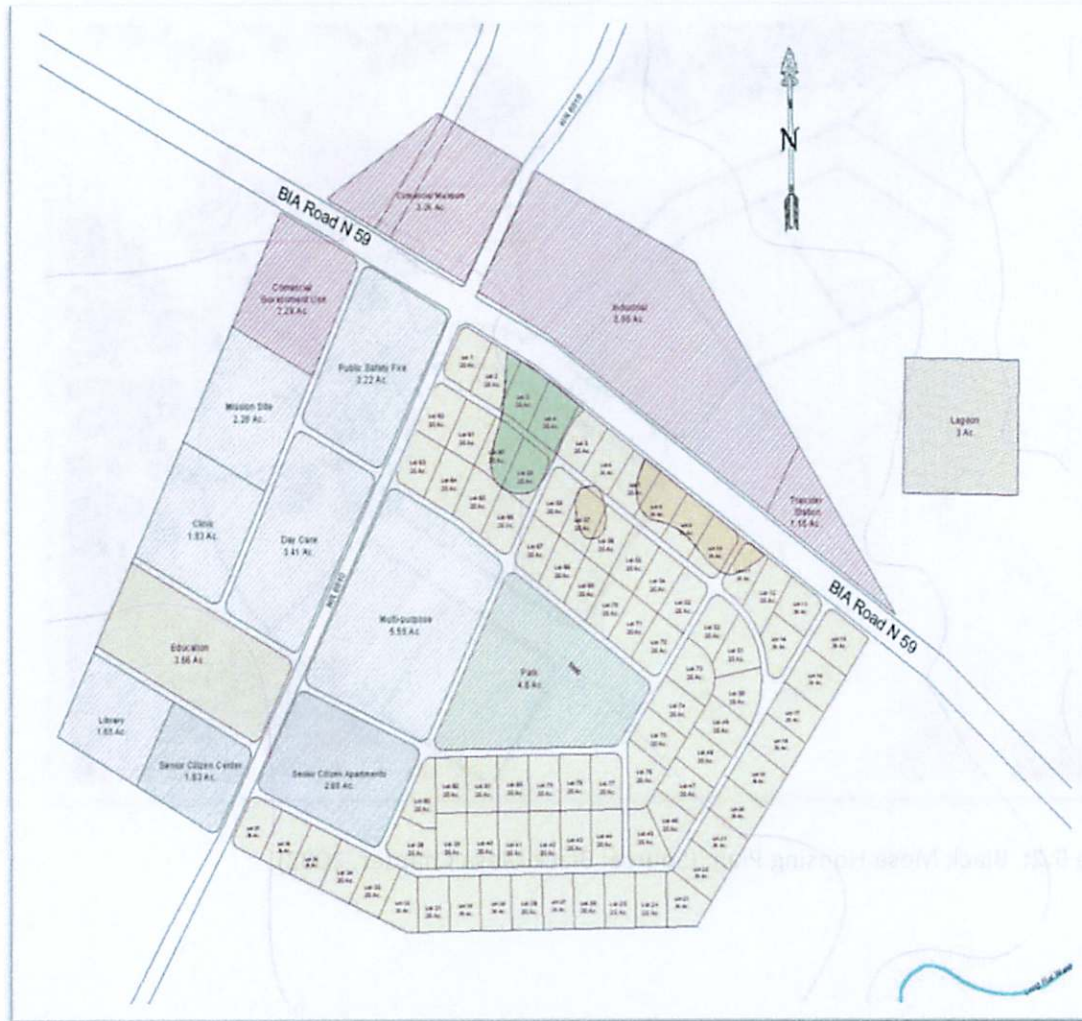
Several of the CBLUPs were completed very shortly after the Local Governance Act (LGA) was passed in the late 1990's and the early 2000's. The plans completed between 1999 and 2005 in particular are heavily influenced by the

implementation of the Native American Housing and Self-Determination Act of 1996 (NAHASDA). Many Chapters received \$40,000 grants from the Navajo Housing Authority (NHA) through NAHASDA to create housing plans; as a consequence their CBLUPs focus primarily on the siting of housing projections of housing needs, the suitability of sites for housing, and occasionally the infrastructure associated with it. Thus one shortcoming of many plans is the failure to address housing needs in the context of efforts at broader planning and economic development. Although many residents indeed identify housing as a primary issue, it is not the only pressing issue identified by community members (Community Visioning sessions, Black Mesa & Chinle, 2013). Comprehensive planning must begin with the identification of issues by the planner, community members, and/or elected officials; it should also identify the future needs of a community (10-20 years) based on projected population growth and needed land use development over time. Yet the exercise of problem identification in early CBLUPs tends to be narrowly focused on present housing needs, especially when NAHASDA is the funding source.

In plans completed after 2005, the focus broadens substantially. For example, in Chinle's Comprehensive Community-Based Land Use Plan, we see the inclusion of thoroughfare and open-space plans. Many other recent Chapter plans include a master land use plan as well, which is in stark contrast to some of the earlier plans that only reference housing (see **Figures 5.2** and **5.3** on the next page for a comparison).



**Figure 5.2:** Black Mesa Housing Plan. (Source: Black Mesa Chapter, 2002)



**Figure 5.3:** Chilchimbeto Master Plan. (Source: Chilchimbeto Chapter, 2007)

The broader scope of the newer plans is a step in the right direction; it is a move toward more comprehensive planning efforts and improvement in planning analysis, and begins to address more of the issues identified during the community participation phase. In addition to the broader scope and improved analysis, newer CBLUPs embrace the use of GIS technology, as can be seen by the inclusion of more maps, more creative planning and more innovative analysis.

### 5.5.2 Community Participation & Surveys

Community participation procedures varied greatly throughout these plans. In some cases, CBLUPs only mentioned the process in passing; in others, a detailed community participation program was initiated. A common feature that was noted in our review of the community participation segments of the 22 plans was that community education was highly important throughout the community participation process. Community education leads to buy-in the planning process by community members, as they understand the importance of the process to themselves and individuals as well as the implications for the community in general; and finally, community education is cited as an inspiration for change.

In all of the examined plans, community participation took the form of public meetings. Some plans did not state how many meetings were held (Black Mesa Chapter, 2002), but many Chapters discussed the CBLUP planning process at regular monthly CLUPC meetings, asked for input in special hearings, and conducted workshops to obtain more in-depth input from community members. In contrast, there were also Chapters whose CLUPC made decisions on community needs first and then presented these to the community for feedback later—a top-down rather than bottom-up approach. Generally speaking, when there was a public participation phase it lasted from 8 to 18 months, and between 4 and 15 meetings were held.

A common omission was any detail as to the nature of engagement with community members. While there were often regularly scheduled monthly CLUPC meetings, public hearings, or work sessions, plans did not state what the differences between these types of meetings are, and the number of community members in attendance, the methods of engagement, and the duration of meetings are not described. It is generally understood that work sessions, or workshops, are an informal format that allows general access to give input into a plan, either in the form of written or oral statements, or by placing dots on maps (a common method for geographically identifying desired uses or functions). On occasion, there is mention of CLUPC members making decisions without the community, but for the most part the plans do not profile who participated in the

planning process, and no record is included of community members' commentary made during these meetings. The intent of the meetings is typically to inform the CLUPC of the issues facing the community—a form of needs assessment—and to direct the Chapter toward a guiding vision. A number of CLUPCs did direct their attention toward information about potential development sites and about recommendations for land uses (Chilchinbeto Chapter, 2010; Black Mesa Chapter, 2002; Chinle Chapter, 2006), but also, in some cases, toward guiding the vision for the future of the Chapter (Dilkon Chapter, 2001; Chinle Chapter, 2006). For the most part, the public participation and visioning elements of the plan were successful in identifying concerns and issues, although these were not always addressed at later stages. The strategies for achieving goals or mitigating concerns through land use planning were often not considered.

Another common method used to garner community input during the planning process was the dissemination of a survey, often asking questions that were not answered by the U.S. Census. Response rates varied considerably among Chapters, with Navajo Mountain Chapter for example admitting that they received exactly zero responses to their survey. These surveys were not always provided in the CBLUP as an appendix item or exhibit, but where they are included, they are approximately 3-5 pages long, with no standard number of questions. The focus of the surveys also varied. An overview of survey content is provided in **Appendix II**, and some examples are included in **Appendices III-VII**.

Community participation is one of the cornerstones of planning. One of the desired outcomes of the current evaluation is to identify positive and recreatable processes and practices. The best of the different successful approaches seen in this study comes from Fort Defiance Chapter's 2004 CBLUP. This plan stood out on the basis of its 1) identification of stakeholders to include in the planning process; 2) inclusion of community members, governmental bodies and companies; 3) community visioning that acted as a tool for community education and assessment of current conditions; and 4) identification of participation strategies. Fort Defiance is one of the few Chapters that included this information. Beclabito Chapter's 2003 CBLUP was drafted with community

involvement each month at a CLUPC meeting, four workshops, and three public hearings. Both are examples of how consistent and frequent community involvement give validity and strength to the plan, as it reflects the values of community members as well as CLUPC members and Chapter officials.

### **5.5.3 Community Assessment (Socioeconomic & Demographic Analysis)**

Chapters performed disparate levels of socioeconomic and demographic analysis, and it appears that many did not use standard socioeconomic and demographic analysis techniques, such as projection, comparison, and the assessment of current capacity versus future demands. Socioeconomic and demographic analysis is conducted for the purpose of building a solid understanding of the community's core features and structures, which include not only the physical features, such as those addressed in the land suitability section, but also the social and economic features that make up the body of the community assessment section. Title 26 of the LGA requires that the CLUP be derived from the results of the community assessment; therefore, it stands to reason that the community assessment should contain the driving data behind the CLUP.

What is less clear in Title 26 is how this community assessment must be conducted. It has to be completed before the planning process is implemented, but it is also necessary to continue analysis throughout the planning process, in order to capture insights that may not have presented themselves prior to community engagement. Socioeconomic and demographic analysis is an iterative process, with important implications for the development of a truly community-based land use plan. Many in the field recognize that socioeconomic and community analysis is the basis for any planning process, and that this analysis needs to be ongoing; for example, if in Black Mesa Chapter, the population continued to grow at the same rate seen over a single 10-year period between two Censuses, the Chapter would be expected to require many new housing units; but if one looks beyond the scope of this period, it becomes clear that the population is aging, and that planning for a glut of new housing stock may be ill-advised. Community assessment can be a complicated analysis because it is the



basis for estimating future capacity needs for housing, schools, infrastructure, and other community facilities. Therefore, sociodemographic projections need to be done carefully and fully to assure reliance. This has not been the case in earlier CBLUPs. This lack of analysis should not be continued in the plan updates.

Analysis of economic, employment, housing, gender, age distribution, population, and health data is an important activity in identifying problems to be managed as well as creating appropriate plans for the future of a community. This type of analysis has been done sparingly in the CBLUPs evaluated, and is often presented as raw data without interpretation, extrapolation, or any thought for the implications of those data for future community needs.

Most of the aforementioned data can be collected from the U.S. Census and analyzed for the purposes of near-term projections of population, distribution, and composition of the community. While these demographic data are fundamental to the success of the CBLUP, economic data are also imperative for the development of policies and programs to address the economic and development needs of the community or region. Understanding the base of the economy is necessary in order to grow the local or regional economy, and comparison of basic and non-basic sectors in an economy is important in determining the necessary businesses for the growth of the economy. The CBLUPs that were examined exhibited a large range in terms of depth of analysis, and many did not analyze data or conduct projections, but merely presented baseline census data. For example, several of the CBLUPs (e.g. Black Mesa, Beclabito) present survey data on the percentage of homes in poor condition, but do not make any policy recommendations, or take stock of when the houses in poor condition were built in order to predict when other housing would be in poor condition.

#### **5.5.4 Population Projection**

Projections of population are done for the purpose of estimating future magnitude, direction, and new demands for infrastructure, housing, services, schools, and for numerous other reasons. The Community Assessment should include population projections for at least the planning period (i.e. 5 years), but it



is advisable to project further into the future for the purposes of planning for infrastructure improvements, business development, and housing, and especially demarcating new land uses and their size and spatial distribution. Projections for a five-year planning horizon are problematic because most projects of significance may take at least that long to be actualized.

The need for projections becomes clear when planning for the growth of an area. In terms of land use, population projections are necessary to determine how much and what type of housing will be needed, how much demand there will be for business services, and how much space is necessary for these projected land uses. Transportation planning, economic development, environmental planning, public facilities and services (landfills, transfer stations, water delivery, etc.), and open-space planning are all affected by population growth (Wang & Hofe, 2007), and this should be considered in the Community Assessment section.

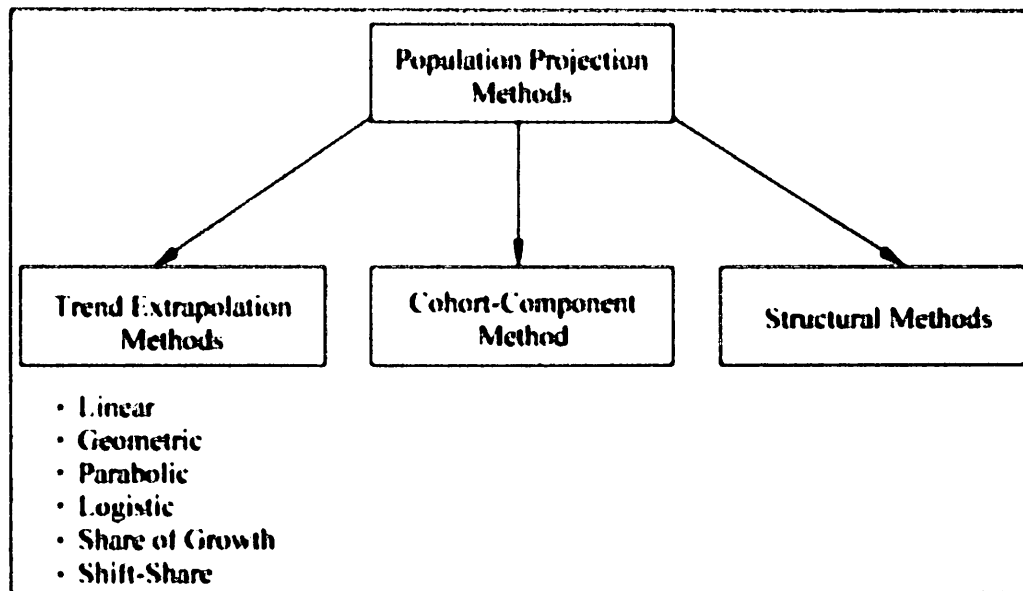


Figure 5.4: Population projection methods (Wang & Hofe, 2007)

Population projections have been done in about two-thirds of the CBLUPs, with most of these using simple trend-extrapolation methods (Figure 5.4). The trend extrapolation method relies solely on historical data, which is

obtained primarily from the U.S. Census. Such methods are commonly used in the planning profession, but do not account for the causes of past growth; for this, cohort-component methods that address specific sex-age cohorts are necessary (Wang & Hofe, 2007). While many of the CLUPs include a simple trend extrapolation projection of some sort, most do not use the data obtained from this projection to assess the demand for infrastructure, housing or public services.

The cohort-component method uses stratification of population data into age and sex cohorts (usually men and women, divided into 5-year cohorts, i.e. 0-4, 5-10, and so on) in order to allow for detailed analysis on population growth rates in each sex-age cohort. Next, fertility, mortality and migration rates are applied to each of the cohorts to determine further growth due to the combination of each of these factors (Wang & Hofe, 2007). These data, when extrapolated, can tell us the number of births, deaths, and in-or-out-migrations during the projection period, and the number of people within each age range.

One Chapter, Bodaway-Gap, uses the cohort-component methodology in their CLUP. The plan was completed in 2008, which is late in the history of land use planning process, which may explain the insight into the process. The cohort-component model may not be necessary in all cases, but in terms of projected growth, it is recommended in order to understand the composition of the community along with the size of the population. In most cases, simple population extrapolations are not responsive to the complexities of demographic structure and it is important to recognize household size, school-aged population, and the elderly as important indicators of future growth in population. These cohorts demand a different means of planning, especially when it comes to disabilities, provision of education, and provision of housing. Cohort-component methodology will make it easier to recognize school-aged and elderly populations, and it is recommended as a strong method for population projections. **Figure 5.5**, below, illustrates the projection of age cohorts in the cohort-component method

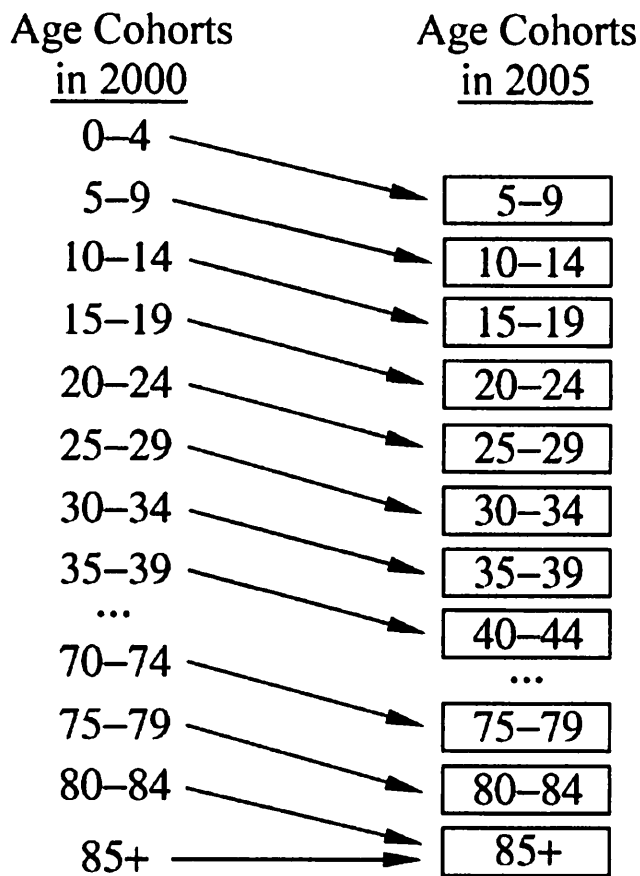


Figure 5.5: Cohort-component age cohorts. (Source: Wang & Hofe, 2007)

Chinle Chapter's 2006 CBLUP is an example of successful use of the trend extrapolation method of population projection. This plan addressed the past growth of the population and accounted for the growth trends in planning for provision of public services and infrastructure. Chinle Chapter uses population projection for 5-year periods in order to extrapolate future population for 10 years into the future. The expected future population of the Chapter is then used to project the needs for housing. The population growth rate is also applied to the average number of daily trips made on highways, and interpreted as future demand for highways as well as surface streets, which do not currently exist (Chinle Chapter, 2006).

### 5.5.5 Vision, Goals & Priorities

The Local Governance Act requires that a vision, goals, and priorities for the Chapter be established in the Community Assessment section of the CBLUP. This information is often formulated through community participation, which acts as the basis for the land use planning process. Many of the methods for community participation are designed to elicit a vision for what the community wants to be—setting goals to establish the community vision or to solve existing problems—or to identify over time the community’s planning priorities and help establish desired conditions. Once goals are established, the community, through a strategic planning session, sets priorities or objectives. Objectives help define the specifics of the goals in terms of tangible achievements over time, operationalizing the goals. Typically, there are several objectives for each goal. If objectives are clearly defined, then the community as part of the visioning process can establish strategies to accomplish them. This process of 1) visioning community change, 2) establishing goals, 3) operationalizing goals through identifying performance objectives or indicators, and 4) identifying short- and long-term strategies through political activity, financing, policy, and implementation falls within the definition of strategic planning. Only some of the Chapters have fully and systematically integrated strategic planning into their land use planning process. Certainly, identifying strategies to implement the goals of plan can also be part of the implementation planning process, but this portion of the planning process has been largely omitted from the 22 CBLUPs that were evaluated. Gaining insight into the visioning process is difficult through evaluation of the CBLUPs, as many of them did not include a description of these activities.

Chinle Chapter’s 2006 CBLUP contained a short paragraph on a “democratic” community visioning session performed by the consultant from which the vision, goals, and objectives were ascertained, and goes on to list those goals. There are 190 goals in total, a number that has proven to be unmanageable according to the community visioning session on February 24, 2013 facilitated by the Arizona State University group. Baca/Prewitt Chapter’s 2005 CBLUP has a more detailed description of the questions asked at the community visioning

session (Figure 5.6). The answers received are also included under each question; this helps to identify individual responses to concrete questions, and is one of the better examples of how to report the findings from a visioning session. Giving this level of detail can help to build trust, which has been identified as an important element in the visioning literature for Native American communities.

*A "Visioning" exercise was held with the Community Land Use Planning Committee at which time these questions were asked:*

- 1. What makes Baca/Prewitt Chapter unique and different from any other chapter?*
- 2. What do you want to preserve in the Chapter?*
- 3. What would you change?*
- 4. Looking ahead 20 years, what do you want Baca/Prewitt Chapter to be like?*

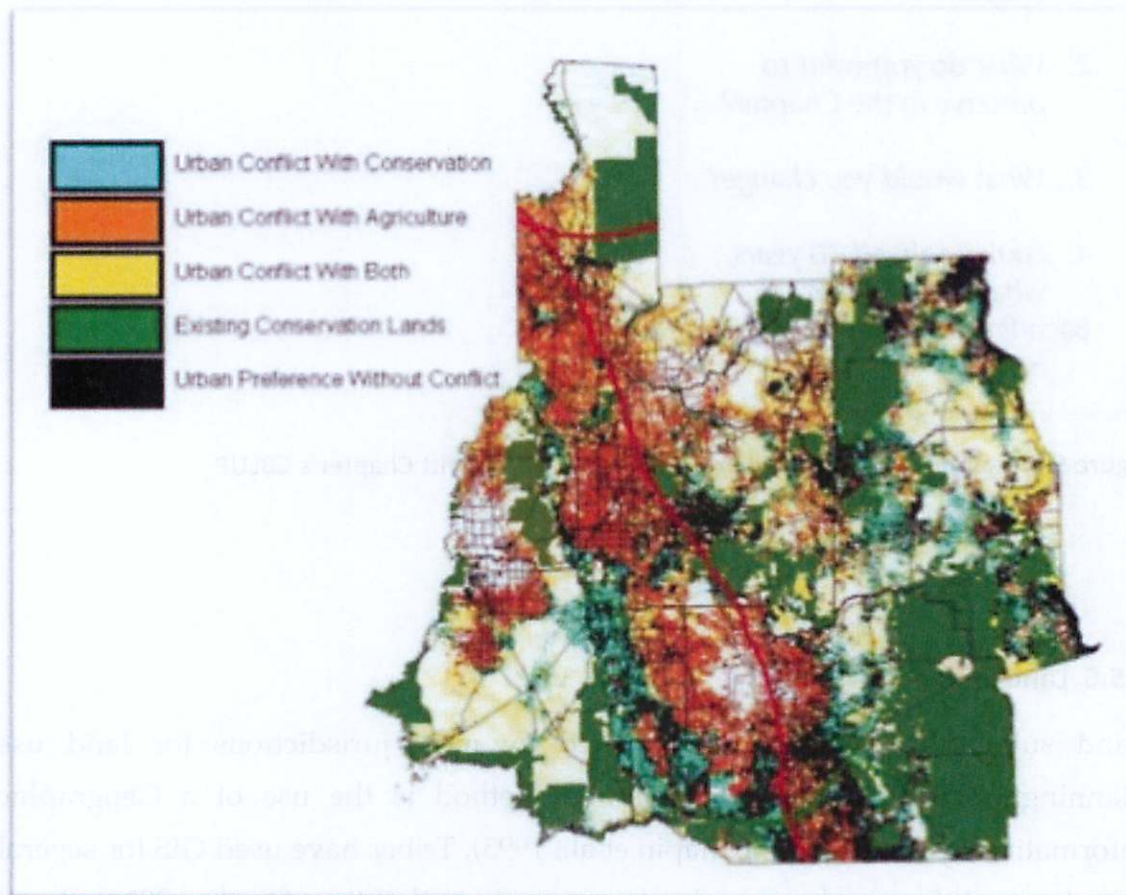
Figure 5.6: Example of a visioning exercise from Baca/Prewitt Chapter's CBLUP

### 5.5.6 Land Suitability Analysis

Land suitability analysis is performed by most jurisdictions for land use planning purposes. The most common method is the use of a Geographic Information System, or GIS (Chapin et al., 1995). Tribes have used GIS for several decades, and the uses have evolved immensely in that time (Taylor, 2012). Land suitability analysis is critical to successful development, as it can give advance

information on how well a site is suited for the development of a certain use, such as housing, or a Chapter house, but it can also inform the community and planners as to *what* uses can be feasible in a community, and *how* feasible these uses are. During an interview with Beclabito Chapter officials on March 19, 2013, a member of the CLUPC stated, when talking about their suitability analysis process:

*"... they just said, that's not a feasible area, even at the first area where we had [chosen] the 5 acres, it wasn't feasible, because the sewer line was going to go so many miles and the sand wasn't feasible again (for development). And that's right where they have that water, that kind of like a flash area, so they just decided not to go with that because it was going cost a lot."*



**Figure 5.7:** Example of land suitability analysis using LUCIS Model (Source: Zwick & Carr, 2007)

Land suitability analysis, when performed on a regional level in GIS, can identify sites that are suitable for development, given certain criteria, such as soils, proximity to infrastructure, certain flora and fauna qualifications, and the type of development being proposed. The layering of this data in a GIS map can show the potential sites with or without conflicts, and, with weighted analysis, can determine which of those conflicts would make a certain development unsuitable at a certain site. None of the 22 CBLUPs evaluated included land suitability analysis using GIS. An example of a particular method of land suitability analysis is the Land Use Conflict Identification System (LUCIS), which identifies land use conflicts to prevent them, it is portrayed in **Figure 5.7**.

Land suitability analysis in the existing CBLUPs in all cases has been insufficient, typically consisting of a shallow review of the existing flora and fauna, proximity to culturally or traditionally sensitive sites, proximity to existing infrastructure (roadways, electricity, water and wastewater services), and occasionally water resources. In order to analyze land suitability in a more efficient, more rigorous, and more scientific way, it is recommended that land suitability analysis include both GIS methodology as well as field surveys and data.

#### **5.5.7 Infrastructure Analysis**

Infrastructure analysis must be performed regularly in order to identify any capacity or maintenance issues, and connection to land uses. A majority of the Chapter plans include identification of the locations of water, roads, wastewater, electricity, and natural gas infrastructure and their conditions. The occasional CBLUP addresses solid waste facilities in this section, but that is an exception to the rule.

Infrastructure analysis has not been performed in a way that addresses future demands and land uses but instead primarily characterizes current conditions that may infer immediate or future needs. For example, the lack of close potable water and unpaved roads is inadequately addressed. When plans included a population projection, they did not address the impacts of population growth on infrastructure demands. Sewer systems, where they exist, have not

been analyzed for their capacity based on future population growth, nor are water resources addressed. Most Chapters do not have a landfill or solid waste transfer station, but those who do are not addressing existing capacity versus future demand. This will become problematic in the future as populations expand. Moreover, there is little seen in the land use plans as to the conditions of the infrastructure and the costs of updating or repairing that infrastructure.

Chinle Chapter's 2006 CBLUP is the one exception to this trend, but it still only addresses population growth in its thoroughfare plan. Chinle included average daily trips for all of the roads in their chapter, as well as a 20-year travel demand projection on these roads based on ADOT projections from 1993, and these data were used in conjunction with future population projections in order to project future demand. Where these data are available for other Chapters, transportation planning would be aided tremendously by the inclusion of travel demand projections based upon population projections.

Baca/Prewitt Chapter's 2002 CBLUP is an example of a straightforward analysis of existing conditions in major infrastructure areas. The transportation section includes an inventory of their existing roadways, the current conditions of each of those roadways, and proposed improvements based upon identified needs. Transit service is then addressed, with proposed improvements, based upon the needs of seniors in the Chapter. Railroad and airport facilities are addressed, with no changes planned, due to no community-desired changes. Utilities are then addressed, existing and proposed, with the proposed utilities based upon the cost-effectiveness of the improvements, which is advisable. The cost-effectiveness of improvements is often based upon the projected costs of construction compared to the projected benefits.

The infrastructure analysis for CBLUPs could be aided substantially by the use of GIS modeling. Navajo Nation Department of Transportation (NNDOT) already uses GIS for roadway infrastructure analysis, and the expansion of their GIS analysis for roadway inventories resulted in a 30% increase in revenues from the Federal Housing Administration (Taylor, 2012).



### **5.5.8 Land Use Plan**

The land use plan or land use recommendations section typically contains the land use plan in a graphical format (map) and a narrative of land uses. Because many of the CBLUPs examined were primarily focused on housing, these maps were often more similar to site plans rather than community-focused maps as is typically seen in comprehensive or general plans from municipalities. Because housing was the focus, it is arguable that the focus of the land use maps should be the location of housing and the infrastructure to support it, but the very narrow focus of the land use maps does not allow for the planning of other land uses.

The land use plan cannot be adequately communicated without maps, as has been discussed in the literature (Platt, 1996). There are many CBLUPs that do not include land use maps. This is problematic because there are not clearly defined areas designating particular uses, which can lead to disagreements. Furthermore, many of the land use maps used are derived from USGS quadrangle maps rather than GIS-based. The use of such maps for topographical reference is acceptable, but for mapping of potential land uses, GIS can offer a far richer analysis (Zwick & Carr, 2005) as well as have a direct planning impact that a narrative form cannot.

### **5.5.9 Implementation**

Implementation was weakest, and least complete, section of the CBLUP in all of the plans evaluated, reflecting a lack of focused objectives and strategies leading to specific outcomes. CBLUPs have not been implemented in many cases (CLUPC interviews, March 19 & 20, 2013). Often, new CLUPC members or planners who are using the plans are unaware of the steps to follow in order to navigate the policies and political realm and implement them. The failure to articulate a completed implementation element is a serious deficiency in land use planning at the Chapter level for several reasons. First, critical and immediate needs may be overlooked, leading to future vulnerabilities. Second, opportunities for investments in the Chapters may be overlooked and not acted

upon. Third, an implementation plan is vital to the overall planning process, as it is what guides the CLUPC in executing the projects set out previously. Fourth, the lack of implementation often halts community input into the planning process, creating distance between Chapter CBLUPs and the public; re-establishing these connections can be difficult. Fifth, implementation implies a serious and continuous commitment to planning, braiding feedback to the Chapter, adaptation and community education and updates.

While most of the CBLUPs lacked focus on implementation, there were notable exceptions. For example, Baca/Prewitt Chapter's 2002 CBLUP completed an implementation section, which contained clear and specific policies directed toward the implementation and advancement of the land use plan, as shown in **Figure 5.8**. These policies are essentially a commitment to specific goals for implementation. Further, each of these policy goals contains a set of specific objectives to be met (as seen in the five objectives under Policy 1, illustrated by **Figure 5.9**). The next step or phase would be to identify strategies or approaches to accomplish each of the five objectives. For example, what should the CLUPC do to begin a reforestation program? Where would the funds come from? What agencies should the Chapter work with on reforestation? Is a reforestation plan required? Which areas of the Chapter need reforestation? And so on. One of the most important aspects of any implementation plan is the development of clear, actionable statements. As stated before, many of the CLUPC members interviewed were at a loss for steps to take in order to implement the goals set forth in their CBLUP.

A number of planning policies have been identified to implement the land use plan:

Policy 1: Preserve significant natural and cultural resources

Policy 2: Develop appropriate housing projects

Policy 3: Promote housing to meet the entire community's needs

Policy 4: Create local business opportunities

Policy 5: Identify business locations

Policy 6: Identify community facility locations and funding

Policy 7: Land Use Procedures

Policy 8: Use Master Leasing

Policy 9: Continue grazing

Policy 10: Define chapter service area

Policy 11: Acquire the water rights to Bluewater Lake for revenue generated from recreational users

Policy 1. Preserve the scenic landscape, forested mesas, riparian areas and open spaces of the Chapter.

- a. Identify sites for potential development that have the least impact on the landscape.
- b. Prohibit development on steep slopes, in floodplains, in areas with poor soils, or natural and cultural significance.
- c. Limit the height of all structures, including signs.
- d. Designate protected areas where development is restricted.
- e. Begin a reforestation program to plant native trees, e.g., juniper, piñon.

Figure 5.9: Example of the objectives for one policy with specific steps for achieving the goals the policy serves.

Figure 5.8: Baca/Prewitt's planning policies as defined in the implementation section

### 5.5.10 Overall Update Process

Of the 98 CBLUPs completed by Navajo Nation Chapters, only one has yet been updated. As CLUPCs across the Nation are beginning to look at revisions, it is important to discuss the overall update process, and what should be included in new versions. The update process needs to follow a systematic set of criteria for successful planning. The last chapter of this report summarizes the findings of our review and provides recommended guidelines for updating the plans. Based on deficiencies in the CBLUPs, a review of literature regarding comprehensive and indigenous planning, and interviews with CLUPC members, Chapter officials, and Chapter staff, we have identified three critical planning areas for improvement:

*Demographic analysis:* More rigorous demographic and socioeconomic analysis is needed in order to properly evaluate future needs. The demographic analysis must include population projections based upon data from the Census and other sources for as many years as possible. Planning for housing, infrastructure, schools, and commercial needs is dependent upon the rate of population growth in the community. The suggested population projection methods are listed above in the Community Assessment section. Often, housing needs were proposed without a justifiable basis. Housing recommendations should be made based upon a rigorous demographic analysis, an assessment of conditions of current housing stock, and finally the estimated cost of providing housing and infrastructure. It is important to incorporate in any housing analysis cultural preferences for housing type and specific needs by demographic sector (i.e. the elderly).

*Land Suitability Analysis:* Land suitability analysis for proposed development sites or where development can occur must be based upon a systematic process, most efficiently undertaken using GIS, local knowledge, and data from Navajo Nation government departments. Infrastructure analysis can also be conducted using GIS, especially with network analysis tools. Further recommendations for land suitability and infrastructure analysis are provided in the Guidelines section of this report.

*Implementation:* Implementation strategies have been the weakest component of the CBLUPs that have been evaluated by our team. From several interviews with Chapter CLUPC members, it has been determined that a “strategic planning” process has been undertaken outside of the scope of the CBLUP process, and is often where plans begin to get implemented. Careful evaluation of this strategic planning process has led the research team to believe that this process may be best incorporated into the CBLUP process itself, therefore accomplishing the implementation of more of the plan’s goals and objectives, and lending relevance to the CBLUP process beyond its purpose as a step in the LGA certification process.

## **5.6 Community Education and Engagement Through Pre-Planning**

Pre-planning can be an important step in the community-based land use planning process. The notion of pre-planning stems from Canadian First Nations, who have, together, created a report for the development of comprehensive community plans (Kehm & Hardy, 2009). The concept of pre-planning is more complicated than the name implies, as it involves steps outside of the planning process entirely. Pre-planning is often the step in the process that involves the initial formation of an idea, a team to carry that idea through the community, a strategy for communicating that idea, and even a plan for engaging the community. It acknowledges the connectedness of Thinking, Planning, Living and Assuring (Figure 5.10). The often-convoluted process that is community engagement must also continue throughout the planning process as a public participation program, and community education must also ensue in order to develop an informed citizenry.

## Sa'ah Naaghái Bik'eh Hozhoo Planning Model

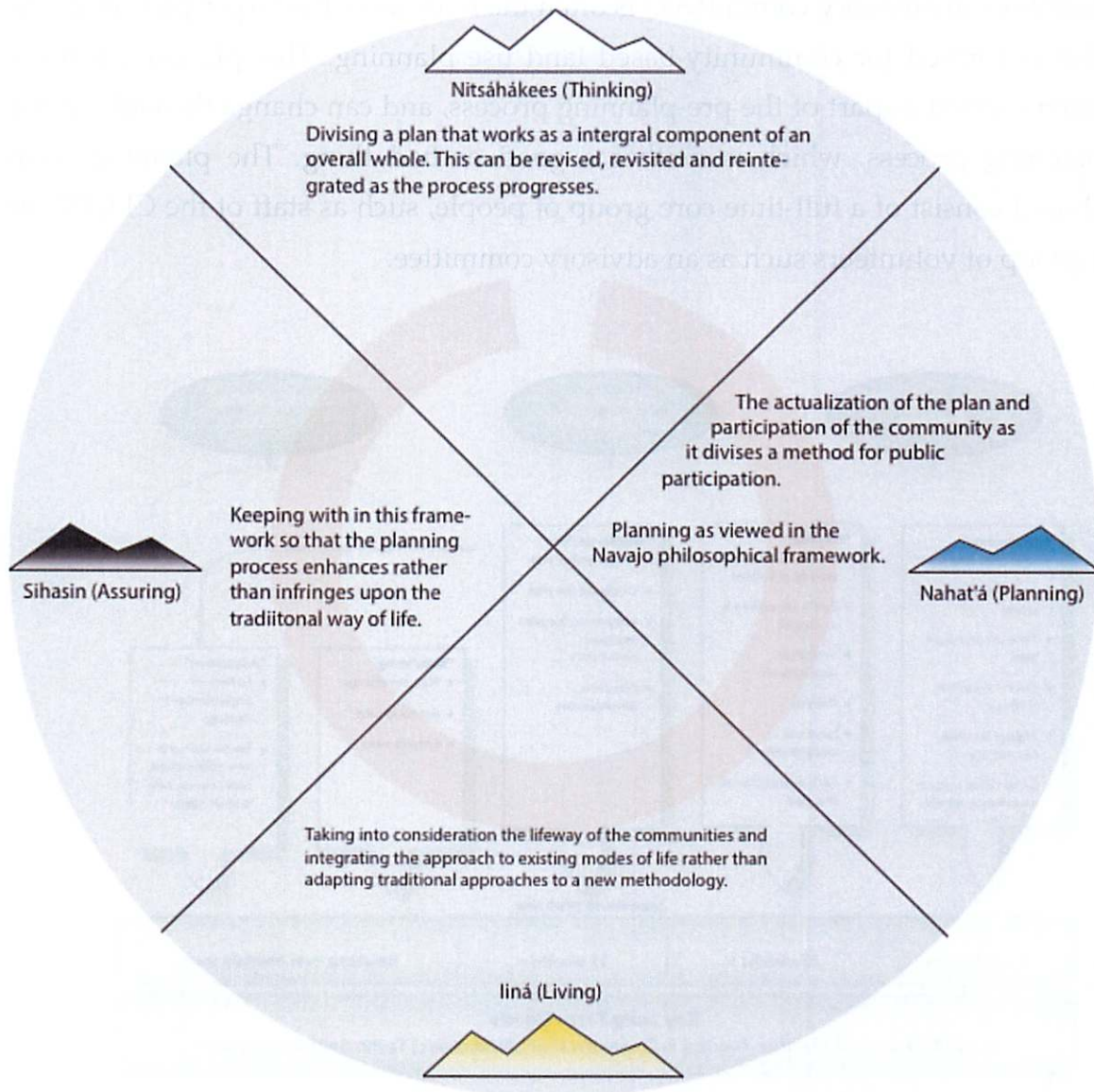


Figure 5.10. Sa'ah Naaghái Bik'eh Hozhoo Planning Model

### 5.6.1 Pre-Planning – What is it, and why do it?

Pre-planning could be described as getting prepared for the planning process. More broadly speaking, however, pre-planning must also occur throughout the



process in order to maintain capacity (Figure 5.11). The planning team (CLUPC, Chapter officials, Council delegates, LGSC staff, and interested community members in advisory committees) is often the nucleus of the larger planning unit that is formed for community-based land use planning. This planning team is often formed as part of the pre-planning process, and can change throughout the planning process, which is neither a good or bad thing. The planning team should consist of a full-time core group of people, such as staff of the CLUPC, or a group of volunteers such as an advisory committee.

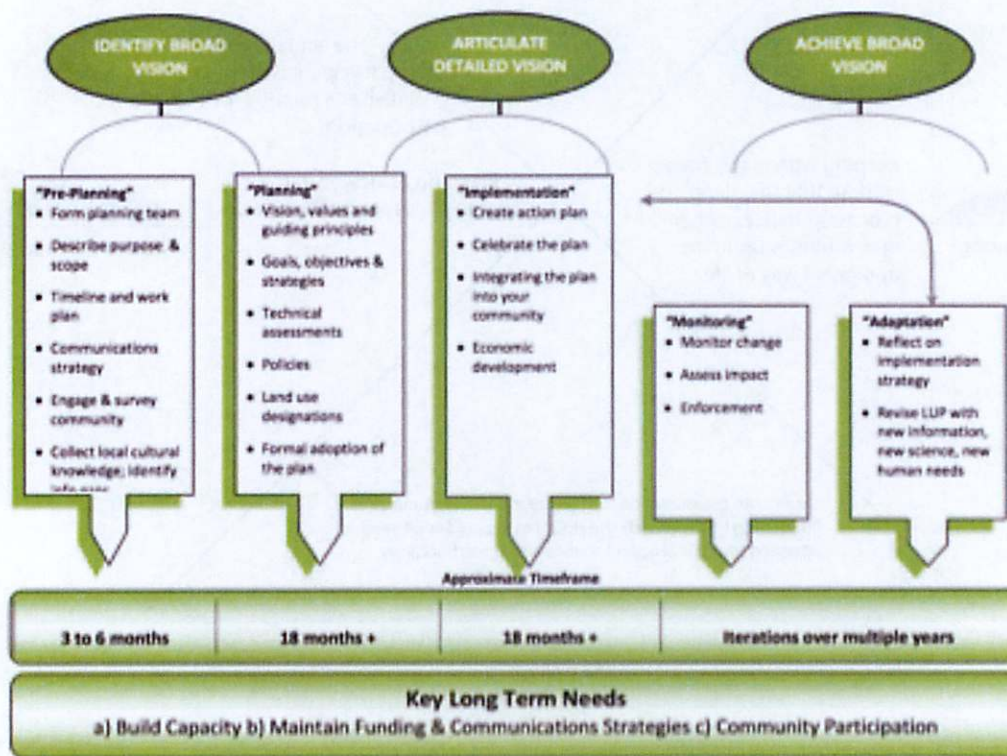


Figure 5.11: Planning process map illustrating the role of pre-planning (Source: Kehm & Hardy, 2009)

One often-mentioned difficulty throughout the interviews was the lack of continuity in the planning process following dissolution of the CLUPC during election periods. While the LGSCs are tasked with bringing newly elected CLUPC members up to date on the Chapter's land use plans and implementation phases, there is no similar effort to inform elected officials and the public as to

their involvement. Several Chapters have a process to keep CLUPC members involved even without membership through the electoral process. Efforts at extra-electoral education have been undertaken in Chinle and Beclabito Chapters, for example, in order to quickly and effectively educate new CLUPC members prior to the beginning of their service. This type of public service adds significantly to continuity and planning capacity of Chapters, especially during plan updates and annual strategic planning. Particularly following elections, pre-planning is critical for educating and engaging the public on community's past and present goals, objectives, issues, and current strategic planning activities, as well as in organizing the CLUPC members in terms of tasks they must accomplish. Educating the CLUPC about the various elements of the "updated" plan and communicating what needs to be done characterizes the pre-planning process.

### 5.6.2 Defining Scope

Once the planning team is formed, it is important for the CLUPC to understand the purpose and scope of the CBLUP or other planning process. A quote from the BC First Nations Report illustrates the importance of defining the scope of the plan:

*"Figuring out what we needed to do to get ready for our land use planning made us realize how big the project was going to be and how much money we were going to need to do it the way we wanted to."*

Without a definite scope, costs can be underestimated, which may lead to exceeding budgets near the end of the project, slowing the implementation of the plan, and causing people to lose trust in the process. Once the scope of the plan is defined, a clear schedule of public participation will be easier to develop, which, when published, will create a more reliable source of information on the planning process (Kehm & Hardy, 2009).

An overall communications strategy must be developed in order to present a unified source of information about the planning process, the public participation program, and progress on the CBLUP. A communications strategy



helps to identify the key audiences for the public participation program, how best to involve those key audiences in the planning process, and in what ways involvement will benefit the land use plan (Kehm & Hardy, 2009). It is also a strategy for ensuring that every opportunity to provide information to community members is taken from the onset of the planning process. The published schedule of events is important for making announcements about the launch of the planning process, each public meeting, updates on progress, and the project's completion (Kehm & Hardy, 2009). Depending upon the constituency, certain Chapters may want to develop both a traditional announcement to be placed at the Chapter House, or other meeting places in the community, as well as a social media and other online venues, especially where youth and the elderly identified as a key audience and their participation is desired.

### **5.6.3 Communication**

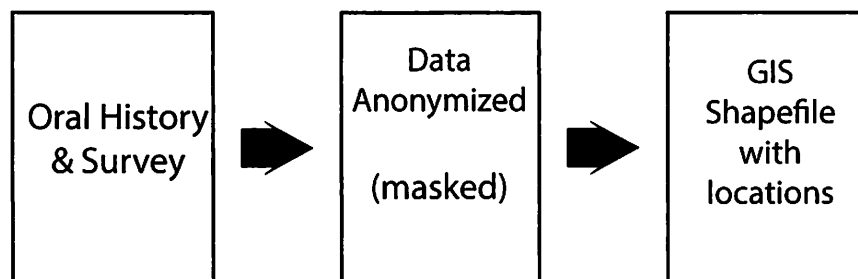
Just as important as communicating to the public is developing a mechanism for their feedback. According to the BC First Nations Report on Comprehensive Community-Based Land Use Planning, the communities that were most successful in community participation implemented both a strategy for disseminating information to the public as well as a feedback mechanism for the community to offer opinions on the planning process or the plan itself. The communication will be most effective if the community receives it in a timely manner, and the feedback will be most effective if the means for communication are familiar to the community (Kehm & Hardy, 2009). It is also important that communication regarding the plan follows traditional community lines, so that it is accepted as a valid form of communication.

### **5.6.4 Collection of Cultural Knowledge**

As with the First Nations of BC, the Navajo Nation is in the fortuitous position of having a rich cultural heritage, which is largely intact. The Navajo Nation Chapters were kind enough to share their individual histories with us, and it strengthens the idea that the collection of local and cultural knowledge must be

integrated into the community-based land use planning process. Many of the CBLUPs we evaluated were already using this opportunity of plan updates to put into writing the rich oral histories of their Chapter. The First Nations of BC have been using a basic tool for the collection of local and cultural knowledge: the Use and Occupancy Map Surveys (UOMS), formerly known as the Traditional Use Study (TUS), is a survey technique that aims to turn oral histories into written or printed histories. The UOMS combines standard interview techniques with the documentation of place-based activities on a map, leading to a mapping of past and current activity on the landscape (Kehm & Hardy, 2009). These data are saved as a GIS shapefile, which can be revised later when new data are available.

Defining a clear purpose for the collection of these data is important to the establishment of trust. The data are often personal in nature, especially as it comes to grazing, traditional uses such as the collection of medicinal herbs or even sites of traditional worship. These data can be anonymized in order to protect privacy and prevent intrusions, (see **Figure 5.12**) as is discussed in the Mapping section of this report.

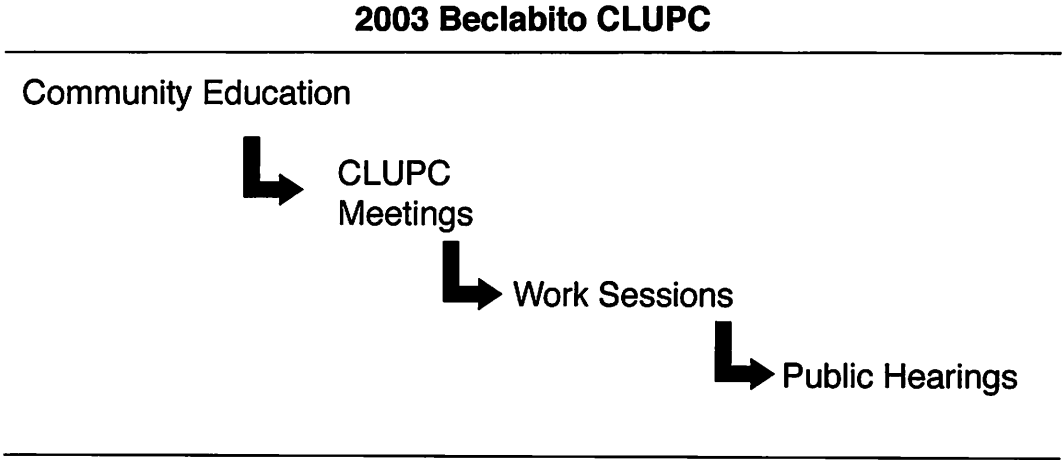


**Figure 5.12.** Flow of private data into Use and Occupancy Maps (UOMS)

### 5.6.5 Why Community Education?

Community (public) education is critical to the land use planning process. Community education can take many forms, but is most often a public meeting or meetings where the community and planning team interact in order to inform

the public of the planning process. Community education is also an integral piece of self-determination. It is the first step in the development of a community needs assessment, as it enables the community to begin the process itself. By empowering the community with knowledge about the planning process and the role and designation of public meetings, a more active participatory program can be established and a stronger consensus can be built, as well as improved implementation strategies (Creighton, 2005). Community education provides a link for community members to a community future that they desire and articulate through planning. It provides empowerment and reinforces a sense of community. As is exemplified in the 2003 Beclabito Community-Based Land Use Plan (Figure 5.13), there is a clear benefit to community education, especially when it is carried out in an orderly manner. CLUPC meetings, work sessions, and finally, public hearings were carried out in order to keep the community continuously involved in the planning process.



**Figure 5.13.** Integration of community education in Chapter land use planning.

The pre-planning phase includes engaging the community, but also surveying the community. Developing Census data analysis techniques is critical for determining housing and infrastructure needs, however, the population and natural environment of the Navajo Nation have characteristics that are unique to the area in addition to preferred development patterns. Survey of the community fabric became very critical at this state in obtaining information regarding

housing conditions, grazing, education, employment, special community needs, and other information not necessarily featured in the Census. These Chapter-based surveys were found in many of the CBLUPs we evaluated (many are included in the Evaluation section of this report), and each Chapter should develop their own for their special social or geographical needs. The development of surveys takes special thought about what data are desired and will be beneficial to the planning process, so it is important to determine what information will need to be put into the plan for its success.

## ***5.7 Public Participation: Methods and Cases***

### **5.7.1 Introduction**

Public participation methodology has been identified in each of the 22 CBLUPs evaluated for updates, to some extent. The methods are not always clearly shared in the CBLUPs, but where they are, these methods have been taken into account for updating CBLUPs. The development of recommendations for public participation was based upon the evaluation of the 22 CBLUPs, an examination of planning literature, as well as a review of public participation methods from other tribal visioning sessions in both land use planning and community development. Of particular interest is the Beclabito Chapter CBLUP, primarily because it is the only Chapter to have completed an update of the CBLUP, and community participation methods for each of those planning processes can be compared.

Public participation is integral to the planning process, especially when it comes to the development of a community vision. Public participation has many benefits, and has been used extensively since the 1960s (Altschuler, 1970), the benefits include enhancing capacity of citizens to cultivate a stronger sense of commitment, increasing user satisfaction, creating realistic expectations of outcomes, and building trust (Al-Kodmany, 1999), improving the quality of decisions, minimizing cost and delay, consensus building, increasing ease of implementation, avoiding worst-case confrontations, maintaining credibility and

legitimacy, anticipating public concerns and attitudes, and developing civil society (Creighton, 2005). A short list of goals for community participation in planning was developed by analysis of 239 public participation cases over a period of 30 years (Beierle & Cayford, 2002), and these goals are similar to the list of benefits above; the goals are:

1. Incorporating public values into decisions
2. Improving the substantive quality of decisions
3. Resolving conflict among competing interests
4. Building trust in institutions
5. Educating and informing the public

It is clear that there are many benefits of public participation, and from review of the 22 CBLUPs, it is also clear that Chapter governments under the authority of the LGA have embraced public participation as a principal planning tool, but often without consistency, and without clear goals for the outcomes of that public participation. This is the reason for the establishment of recommendations for the public participation process in the Navajo Nation.

### **5.7.2 Public Participation in Navajo Nation Chapters**

As part of the evaluation of 22 CBLUPs, emphasis was placed upon the public participation methods used in the development of these plans, primarily because of the extreme importance to the planning process that public participation has come to have. Public participation has come to represent a more active form of democracy, especially as government becomes a bigger part of our everyday lives (Creighton, 2005). Where there were consistent processes in the Chapter CBLUPs, they were centered on community education, strategic planning, surveys, and public meetings. Surveys were completed in 14 of the 22 evaluated CBLUPs, sometimes as part of the participation plan, and sometimes not, but many of the surveys did not draw conclusions from the data collected from the community. Surveys were typically part of the descriptive "Community Assessment" element of plan making, as a means to enhance the information about a Chapter and to help in identifying needs – a parallel goal to public participation. One of the most consistent processes mentioned in CBLUPs is the

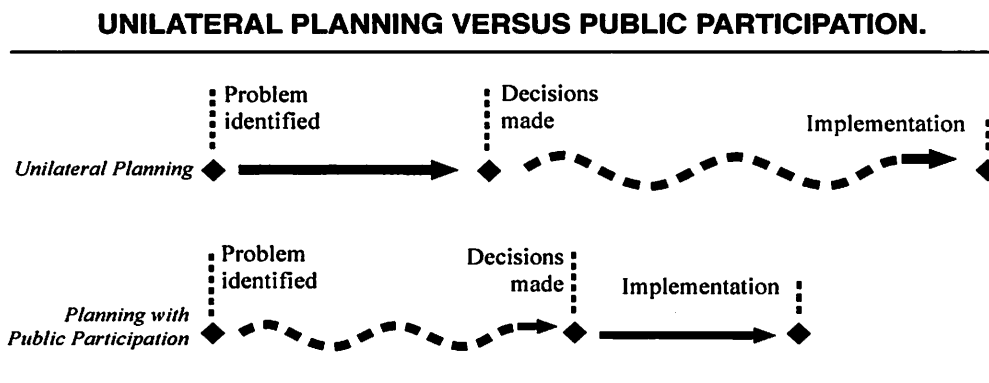
community education process, whereby Chapter Community Land Use Planning Committees (CLUPCs) held public meetings to educate the public on the upcoming planning process and prevent future conflict in the process, as a way to involve community members from before the outset of the process, and even as a vehicle for change in the community.

An important aspect of public participation in planning is the formulation of goals for the future of the community. The goals for the community guide the process toward the incorporation of public values, increased consensus building, increased trust in institutions, and a more educated and informed public (Creighton, 2005). The CBLUPs that were evaluated were devoid of goals for the public participation process, with one notable exception: Whitehorse Lake Chapter. The plan included a series of goals for the participation process itself, then listed the data that would be needed for informed decision making, and after the identification of this data, listed the forms of public participation to be performed and models for communication with the Chapter members (Whitehorse Lake CBLUP, 2006). Most often, goals were defined for the community.

One shortcoming of the CBLUPs where public participation is concerned is the selection of sites for development. This is an important element of the land use plan because it typically follows the goals and objectives section and the site suitability analyses. In almost all of the cases that were evaluated, the sites were selected unilaterally by the CLUPCs, often inappropriately, and without proper land suitability analysis and often without public input. While this process is highly technical, the CLUPC was often selecting the sites based upon casual judgment of the site, and without rigorous scientific analysis of soils, flora and fauna, the site's geology, topography, water resources and other factors. Later, delays in development to unsuitable conditions often arose in some of these Chapters. Interviews with Chapters revealed the gravity of the situation. For example, in an interview with Beclabito Chapter CLUPC members on March 19, 2013, it was pointed out that land suitability was not conducted on the 5-acre site that had been identified for development, which led to wasted resources and undevelopable land.

*"... they just said, that's not a feasible area, even at the first area where we had [chosen] the 5 acres, it wasn't feasible, because the sewer line was going to go so many miles and the sand wasn't feasible again (for development). And that's right where they have that water, that kind of like a flash area, so they just decided not to go with that because it was going cost a lot."*

Public participation in the site analysis and selection process generally was not involved, which, if done through community based involvement, may have yielded more sites for suitability analysis, which in turn may have minimized costs and delays. Minimizing costs and delays is one of the benefits of public participation over unilateral decision-making. **Figure 5.14** illustrates the unilateral decision-making process versus the public participation process. And its advantages, particularly as it relates to the length of time it takes to implement decisions. Typically, this is because there is public support for the decision, and the public is willing to stand behind a decision that was arrived at in a transparent manner.



**Figure 5.14:** Comparison of Length of Time in Decision-Making Processes (Adapted from Creighton, 2005)

Another reason for public participation in the land-use process is the increased ease of implementation and the propensity for consensus building (Creighton, 2005). There were difficulties with the implementation of CBLUPs in all of the Chapters that were interviewed during our focus groups on March 19<sup>th</sup>

& 20<sup>th</sup>, 2013. These were primarily due to obstacles arising during the land withdrawal process, which requires the permission of a grazing permit holder for the withdrawal. With increased consensus and ownership in the decision-making process, it is far more likely that the grazing permit holder would allow for withdrawal of their land. This quote from Chinle Chapter illustrates the difficulties that arose during the land withdrawal and development process.

*"...But once we plan something, there's always a sheep roaming out there. The next day somebody hears about it. They put one or two sheep up there and say that's my grazing area."*

- Chinle Chapter official, February 24<sup>th</sup>, 2013

### **5.7.3 Methods for Public Participation**

Different methods of public participation should be used based upon the situation and the appropriateness of each method for that situation. The Navajo Nation Chapters currently use many of these methods, including visioning, strategic planning, and workshops, and it is important that when consultants perform these methods they should be "culturally sensitive, respectful and culturally appropriate research" (Davis & Reid, 1999). To date, consultants have had a hand in the completion of all CBLUPs, it is extremely important that these standards are upheld; through respecting the Tribal nation, identification of benefits and the merit of the research, a progressive research approach can provide a framework to move forward. It is also important to realize that multiple and mixed methods may be appropriate as well. Many Chapters utilize strategic planning methods on an annual basis after becoming LGA certified, and as an implementation phase tool. Below, we have highlighted several common methods for public participation and their advantages.

### **5.7.4 Strategic Planning**

Strategic planning is currently used extensively throughout the Navajo Nation government, including the Chapter level. The Chapters have a directive from the



Navajo Nation Office of Management and Budget (NNOMB) to conduct strategic planning on an annual basis. The Chapter Manager, Chapter officials, and LGSC staff all review the strategic plans before sending the information to the NNOMB. A section in this report highlights strategic planning efforts being undertaken by Navajo Nation Chapters, and includes recommendations for strategic planning. As of 1989, over 60 percent of cities with a population of more than 25,000 in the United States used some form of strategic planning (Poister & Streib, 1989). The process of strategic planning is essentially an organized effort to produce decisions and actions that shape and guide what a community is, does, and why it does it (Sanoff, 2000). Goal articulation for a community is an essential part of the strategic planning process, and can be seen as the guiding process, which is necessary for successful community design (Sanoff, 2000).

#### **5.7.5 Visioning**

Visioning is the process in which the public is asked to think about and articulate how the community should be. It is done so by identifying, strengthening, and moving toward a community vision (Sanoff, 2000). In one model, participants of the visioning session are asked how they would like their community to look in 10 or 20 years, and these statements are compiled to create a visioning statement. Often, if the group is large enough, participants are arranged into smaller workgroups of about seven people, but this is not required, especially if there is stigma associated with the separation of participants. Through this process, it is easy to identify common themes and identify strategies to suit the implementation of elements of the vision. This report includes case studies from Black Mesa and Chinle Chapters, where we conducted visioning sessions with community members, Chapter staff, Chapter officials, and Chapter CLUPCs, these are included in the next section of this report. These case studies serve to highlight the method of visioning as an important one for the Navajo Nation, because it is particularly tailored to the community based land use planning process that Chapters are already familiar with. The National Civic League has a useful ten-step guide for the development of a community vision, which is a standardized process that tends to produce good results (Okubo, 1997).

### **5.7.6 Charrettes**

*Charrettes* are multi-day meetings that act as both a process as well as a product. The typical charrette is three-to-five day structured process that maximizes community participation in order to achieve three objectives. The three objectives are all part of the larger goal of communicating ideas for particular community design projects. These three objectives are: 1) idea generation, which requires the transfer of knowledge among all involved parties, 2) decision making, which requires a dialogue between the participants and the planning team about the ideas presented, and 3) problem solving, which provides recommendations and proposals as outcomes of the charrette process (Sanoff, 2000). When these three objectives are completed, the charrette product should be completed, offering concrete details about a planning project such as a redevelopment plan or a street redesign. As the end product, most charrettes provide community-based designs or design options. This mode of participatory engagement is most appropriate for master planning of sites that desire urban or neighborhood designs. Charrettes have been developed for a master planning effort in Window Rock. The charrette is useful for gaining the unified support of a cross section of the community who are committed to the implementation of plans. Charrettes are commonly used for small design projects, but can be used for larger land use plans, especially if the community and the CLUPC desire an interactive process.

### **5.7.7 Workshops**

Workshops are a generalized term for any meeting in which the community is engaged in planning activities. This can mean that the community provides ideas on particular sections in the CBLUP, identifying desired locations for land uses, or even commenting on a site plan. Workshops are often short sessions where the community gives the planning body (CLUPC) their ideas on broad topics in land use and transportation planning. Workshops are often most effective when called for a clear reason, such as for comments on the community assessment section of

the CBLUP, and when the group at the workshop is given strict instructions on how the participation will be structured.

### **5.7.8 Surveys**

Of the 22 Chapter plans (CBLUPs) evaluated for this report approximately 67% percent utilized community surveys as part of the Community Assessment planning element (see **Appendix II**). As mentioned in the report, some but not all CLUPCs have developed and carried out surveys of the community (Chapter) to augment data and information they have from the Census on the characteristics and changes experienced in the Chapter. Moreover, surveys of Chapter households provide data beyond what is typically found in demographic, housing, and economic Census databases and can enhance public input into needs identification and community goals. Surveys can also be used to improve the validity of visioning and participatory processes particularly in Chapters where the level of public turnout in planning exercises is low. In these cases, surveys can be developed along the lines of articulating preferences for planning goals and strategies as has been done for some CBLUPs.

**Appendices III-VII** show sections of surveys taken from several CBLUPs. For example, Chinle Chapter supported its CBLUP through a community survey that had its members respond to questions about how they would rate Chapter services and problems in the Chapter on various scales. Community preferences for various planning policies could be measured as in which options were preferred to finance improvements or choices for paying additional taxes for certain investments and developments. An interesting example found in the Chinle survey was a question of rating the effectiveness of various governmental bodies in meeting Chinle's community needs – the Navajo Nation Government, Chinle Chapter Government, State Government, BIA, among others. In addition, this survey also added a needs assessment question specifically to bolster the Community Assessment plan element and asked the responders to identify the top three community issues the Council Delegate or the Chapter should address.

Some chapters such as the Torreon/Star Chapter used a survey approach to gain public sentiments and information on the direction to take regarding

economic development. For example, several questions targeted the kinds of development the Chapter should go after and invest in; or if the members felt there was enough land set aside for commercial development; and, what infrastructure investments would improve economic development. In community assessment surveys, one can obtain significant and widespread responses from community members that can fill gaps in public participation programs, particularly in low turn-out rural places where the Chapter House is relatively isolated. In contrast to these kinds of survey topics, the Burnham Chapter conducted a survey "to gain information about community members, living conditions, and opinions to improve quality of life'. Included in the survey were questions concerning age of residents, household size and other socio - demographic factors; housing conditions (type of structure, owner status, source of financing); problems with utilities including water delivery systems, electricity, sewer and gas systems; and information on grazing rights. These questions were supplemented with questions pertaining to places for shopping, education, and interestingly, familiarity with the Local Governance Act and the Chapter Land Use Planning process.

Community surveys done for Chapters to assess the community for planning purposes is a critical dimension or element of local planning especially for rapidly changing Chapters or more traditional, rural chapters where conventional socioeconomic databases may be inadequate. However, if there is an argument for assuring validity for member participation in visioning, it is also important to make sure that there is statistical validity in the surveys and especially in response rates. The methodologies for developing survey instruments and implementing surveys in a community is complicated and requires professional attention. It is a critical and important undertaking for a number of reasons. First, surveys of Chapters can enhance Census data certainly, but can also furnish community-based data in years between the Censuses especially in areas that experience rapid change. Second, information can be obtained specifically directed at land use problems or issues and these identified problems can be rated in various ways in terms of seriousness, importance, among other weighting factors. The availability of these community responses can then be used to offset inadequate representation of members' participation

rates or attendance at meetings. Third, surveys done by Navajo Chapters themselves for Chapter-specific planning may have levels of public trust that other forms of public involvement in planning processes may not. Fourth, questions can be asked in Chapter surveys that pertain to the Navajo way of life, cultural assets, and education and experiences that are difficult to be obtained through any secondary data reports.

Another benefit of these surveys is that the response data can be utilized in longitudinal comparisons; that is, if the surveys are done regularly over time, the data can be analyzed to show trends in socioeconomic characteristics and community preferences. According to the LGA, plan updates are mandated every 5 years making community surveys a critical and necessary element of the planning process. If community surveys were completed as part of the first CBLUP, then repeating the questions on surveys for plan updates would provide longitudinal data of importance to plan-making. Moreover, Chapter planners should not be hesitant to expand the earlier surveys to gain more information on the Chapter, its changes, and recent public concerns and needs.

One of the major weaknesses of earlier plans was the limited and constrained use of Census data as well as the data from the community surveys. In nearly every plan these data were descriptive, mostly there to characterize the Chapter at the point in time the survey was carried out or at the time of the Census. Several plans however, did take the next steps and projected their population growth through extrapolation methods and then examine their future housing needs based on these population projections. To reiterate, these kinds of analyses are important and central to making plans for housing, employment and infrastructure planning. The combination of statistical data from the Census, Chapter surveys, Navajo Nation housing sector and data from other sources need to be evaluated for identifying needs, developing specific projects, and implementing plans. Survey data have to be examined carefully and surveys developed with questions that will help in determining the directions to take to address Chapter problems.

# 6. Land Use Mapping: Challenges and Recommendations

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## **6.1 Introduction**

Difficulties in mapping for the Community Based Land Use Plans have been identified multiple times throughout this study. Chapters have shown considerable difficulties with mapping in their Community Based Land Use Plans, and they are often left without training for Geographic Information Systems (GIS). Not having such training then denies them the capacity to conduct land suitability analyses, demarcate map interactions among land uses, and communicate desired land uses adequately. This limitation in Chapter planning capacity was identified in interviews with agency personnel and in focus groups with CLUPCs, as well as with personnel in the NNDCD.

Chapter CLUPCs often struggle with the technical aspects of establishing, maintaining, and operating a Geographic Information System. The cost of hiring a GIS technician or training a member of the Chapter in GIS may be cost intensive, but there may be solutions to this problem. As noted in the evaluation of the 22 CBLUPs, mapping was insufficient, and interviews with CLUPC members Chapter Staff, and Chapter officials revealed that the lack of clear mapping led to land disputes and hampered land suitability analysis. The CLUPCs have sought assistance from several Navajo Nation departments. One of the greatest challenges to Chapter governments will be the communication with the Navajo Nation governmental departments. The Navajo Nation departments are in a unique and difficult position in that they must assist Chapter level governments without sufficient resources and staffing. Based on interviews with CLUPC members and departmental personnel, shortages in

resources are reflected at both the Chapter and the departmental ends in regard to the needs of Chapters for land use planning and map development.

This section of the report will focus on information provided through review of the CBLUPs, as well as interviews with Chapter CLUPCs, Chapter officials, LGSC staff, and Navajo Nation departmental staff. Examples of successes from outside of the Navajo Nation will also be used, from both indigenous nations and jurisdictions outside of the tribal planning realm. Challenges will be highlighted and recommendations for moving beyond these challenges will be presented.

## ***6.2 Successful Models in Tribal Mapping & GIS***

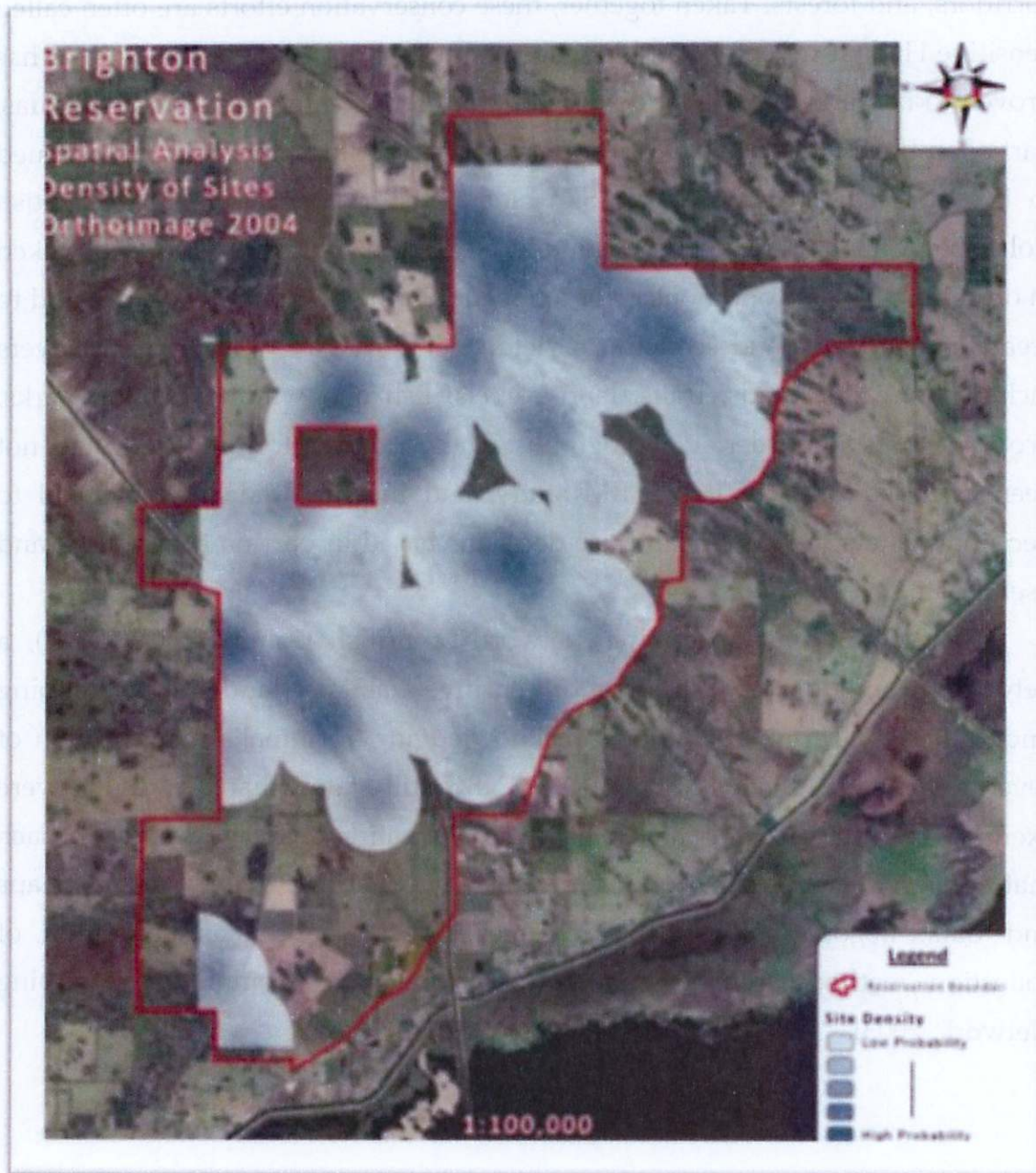
Many First Nations in British Columbia (FNBC) have been highly successful in completing what they refer to as Comprehensive Community Land Use Plans (CCP Handbook, 2006). These are similar in nature to the Community Based Land Use Plans completed by Chapters in the Navajo Nation. Much of the success in Comprehensive Community Land Use Planning has been documented for the betterment of indigenous planning everywhere. In general, mapping is viewed as integral to the planning process in these communities. Interestingly, The FNBC employed maps throughout the planning process—not just including them in the final plans. For example, planners integrated mapping strategies early in the process at public meetings to map their communities, and they invited focus groups to draw what they wanted on the map—infrastructure, cultural zones, traditional gathering areas, economic development zones, and the like (CCP Handbook, 2006). Mapping was also used as an evaluative tool to plot the locations of community members who had participated in visioning exercises, providing a visual that would make it possible to ensure an even level of community engagement across the geographic region of the community.

Integrated Resource Management Plans (IRMPs) have proven to be some of the most successful uses of GIS in Canadian First Nations, with the most ubiquitous use being applied to the conservation of fisheries, wetlands, wildlife

corridors, and forests. Taken together, these conservation efforts are often called Sensitive Habitat Inventory and Management (SHIM). One SHIM effort that has proven to be particularly successful is that of the Sunshine Coast Habitat Atlas, part of an IRMP. Undertaken by Terminal Forest Products, Inc., this SHIM aimed to inventory the habitat of the Sunshine Coast Regional District in British Columbia, Canada for the First Nation located there. The IRMP was undertaken in order to evaluate conditions prior to logging in the region by Terminal, and to create a sustainable and economical yield. A multiple array of mapping layers included streams, roads, trails, land parcels, fish and wildlife habitat, parks, protected areas, and aerial photographs. These richly informing data had not been included prior to this SHIM study, and the new data will be vital to decision makers in making land use decisions based in part on such varied and useful data.

The Community Mapping Network of British Columbia (CMNBC), a network promoting the mapping of sensitive habitats, lauded the mapping undertaken by Terminal. Although acknowledging Terminal's identification of several challenges to this approach, CMNBC still stated that the results were exemplary. The identified challenges include: creating a collaborative approach that sees all stakeholders working together, negotiating "free" access to maps and data, negotiating various exchanges for data and standardization of collection methods, reliability and validity of data (Community Mapping Network, 2003).





**Figure 6.1.** Density of heritage sites, masked for suitability analysis; Source: Cancel (2008).

The Seminole Tribe of Florida (STOF) represents another highly successful example of mapping and use of GIS for information analysis in the planning process. Environmental Systems Research Institute (ESRI) has identified their GIS methods as successful in the preservation of historic resources, something for which the Navajo Nation has expressed an interest in emulating. The STOF is

split across seven reservations, totaling about 91,000 acres of land, similar to the size of many Navajo Nation Chapters. The STOF has evidenced a strong connection to their heritage, and they have a strong desire to preserve their physical history, be it buildings or traditional worship sites. They accomplished some of their historic preservation by taking a series of approaches, all of which encompassed a strong emphasis on GIS and remote sensing for data collection. When they collected their heritage data, they utilized it as an input into a GIS system (also inventorying it for future preservation work). Further, this data was also “masked” in order to protect its confidentiality, as seen in **Figure 6.1**.

The tribe also uses GIS to track communications with federal, state, and local governmental entities, as well as for nongovernmental organizations. The frequency of correspondence with these agencies is measured at the county level, and is presented in the context of compliance review. This visualization of data can serve as a highly effective means of communicating a considerable amount of information in an easy-to-read format. (See **Figure 6.2**, below.)



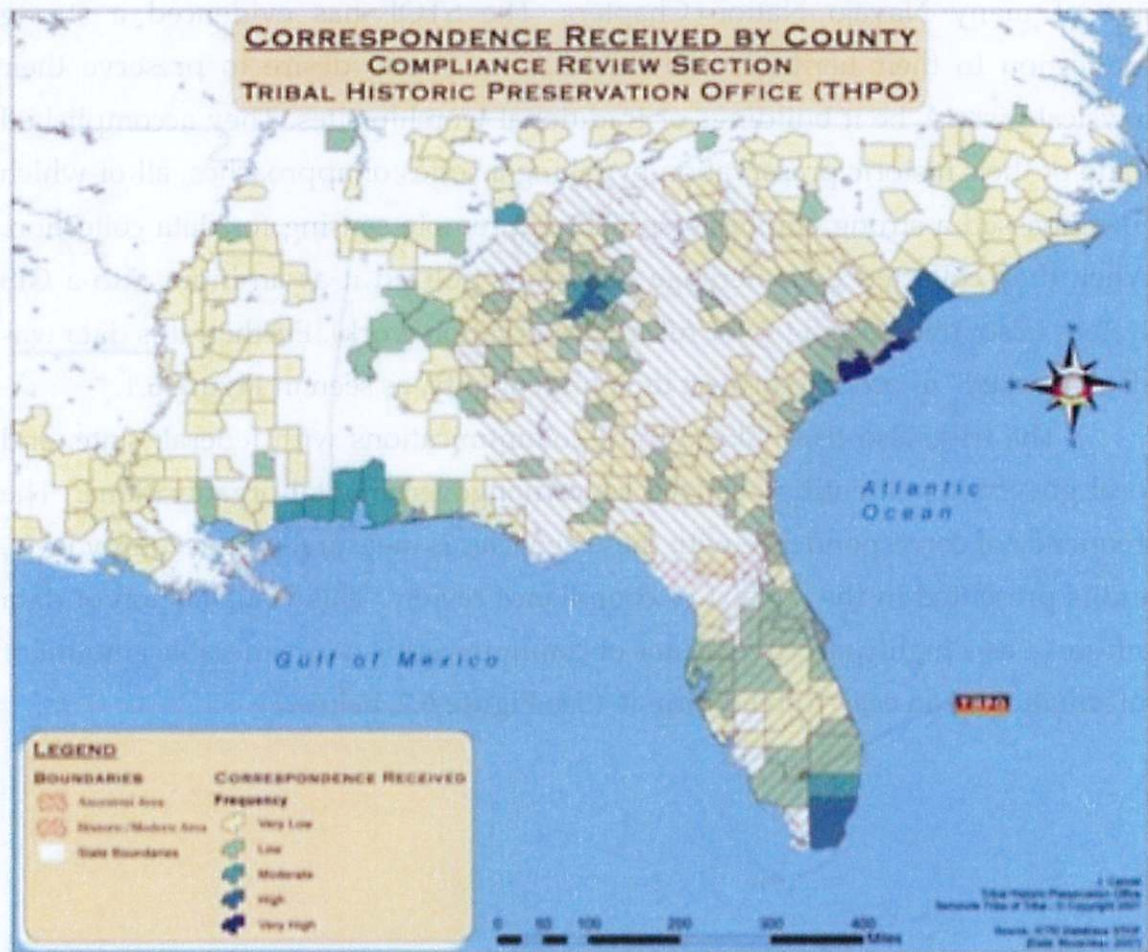


Figure 6.2. Correspondence frequency by county. (Source: Cancel, 2008).

### 6.3 Unique Challenges

Chapters in the Navajo Nation are faced with many unique challenges that municipal governments do not have to consider. Before receiving funding as a Local Governance Act Certified Chapter, the Chapters must first adhere to a complicated process to become certified. Certification means that a Chapter can enter into contracts with other governmental agencies, developers, and private individuals. Further, the Chapter receives the authority to pass ordinances, zone land, exercise eminent domain, and initiate the land withdrawal process. Today, of the 110 total Navajo Nation Chapters, there are 34 certified Chapters (Local

Governance Act, 1998). The Chapter, in order to obtain certification must (among other things) prove that they are reaching minimum standards in the Five Step Management System. The Five Step Management System requires that minimum standards be met by Chapters in:

1. Accounting Systems
2. Personnel management
3. Records management
4. Procurement procedures
5. Property control

These requirements must be met and inspected for compliance by the Navajo Nation Auditor General. The Navajo Nation Auditor General's office and staff assess the Chapters for LGA certification. This office also interacts with the Navajo Nation departments, which are tasked to assist Chapters in their LGA certification, including the Navajo Nation DCD, the Local Governance Support Centers (LGSC), and the Commission on Navajo Government (CNG) (Hale, 2012). The Local Governance Support Centers were created in order to assist with the technical and procedural demands and capacities with which the Chapters sometimes struggle. Chapters that are not certified under this process have limitations because they have less funding and encounter considerably more difficulty in managing funding, personnel, and records. This constrains their ability to undertake land use planning and mapping. Despite this lack of universal certification, 98 of the 110 Chapters did complete their first CBLUP.

Chapter CLUPC members raised many concerns about mapping, the lack of technical knowledge in their Chapters, and the resources available to them to develop that technical knowledge. For example, when asked whether they had done their mapping for the first CBLUP, Cove Chapter CLUPC members stated, "We didn't know anything about computers at the time." Many echoed this sentiment when it came to the technical capability to operate GIS and create maps for their Community Based Land Use Plans. In Beclabito, the only Chapter with an approved and updated Community Based Land Use Plan, one CLUPC member said, "We have to pay a consultant to do GIS." The ASU team addressed

the inconsistency in the CBLUPs and noted that they have seen that each consultant employs a different type of mapping and observed that there should be better mapping and GIS consistency. The response came:

*"We have a system [started] at our chapter ... we [have] purchased a GPS unit and we are still getting the software updated. So once we do that, we are going to go and ID each home again. [Take] all the descriptions [and] put them into our GIS."*

When asked about their ability to use that system, the need for training and assistance from the Navajo Nation was noted. The resources to acquire and operate a GIS system are sparse, even in Chapters with funding through the LGA. A more cost-effective approach may be to institute a Nation-wide (or regional system) to allow Chapters to connect without the up-front cost of a software license and training for ArcGIS. Other options may be on-the-job training for CLUPC members, as the Beclabito Chapter did, or to receive training from the Navajo Nation departments with expertise in GIS. There was a consensus among the CLUPC focus groups that responses to Chapter mapping needs have largely been slow and generally ineffective.

#### **6.4 Community Based Land Use Plans**

The 22 Community Based Land Use Plans that were evaluated as part of this report varied greatly in the quality and quantity of maps, and it is clear that no universal standard has been set for Chapter mapping activities. Many Chapters were using basic United States Geological Survey (USGS) topographic maps and adding proposed improvements directly on top of these maps, involving little or no GIS. In a few instances, some CBLUPs included no maps at all. The lack of coherent mapping standards is not only an issue in and of itself, but it has also led to numerous other issues, especially among grazing rights holders and CLUPCs who have tried to go through the process of land withdrawal. Other issues that have arisen include: a lack of coordinated and integrated land suitability analyses in the CBLUPs, limited infrastructure analyses in the

CBLUPs, and (therefore) the subsequent development of difficulties in plan implementation.

There are several examples of Chapters that have successfully used GIS throughout their CBLUPs, and these include Ft. Defiance, Whitehorse Lake, and Shiprock. These CBLUPs not only map the proposed and existing land uses, but they also implement GIS in order to identify the proximity of land uses to important infrastructure, other land uses of similar type(s), and in some cases, even map the grazing rights boundaries in order to illustrate possible locations for future development. While maps have been completed previously for numerous planning functions, they have mostly been used separately and not integrated. Suitability studies require evaluating sites based on a set of maps so that the most suitable sites can be identified for specific uses. In order to take an informed approach to planning for new development uses, these maps would likely need to include water resources, wildlife corridors, location of utilities and other infrastructure, soil types, vegetation types, and so on.

Interviews with CLUPC members, Chapter staff, and Chapter officials revealed that the consultant hired to prepare the CBLUP completed much of the mapping in the existing CBLUPs. Chapter CLUPC members also expressed dissatisfaction with this situation, stating that they would prefer to have technical staff trained and available to perform these tasks (CLUPC Interviews 3/19/13).

The successful integration of GIS into CBLUPs has been achieved by few Chapters—with varying degrees of success. The best examples of complete integration of mapping products into the CBLUP come from the three aforementioned Chapters: Ft. Defiance, Whitehorse Lake, and Shiprock constitute three of the better examples of CBLUP GIS use. For the purposes of satisfying the requirements of Title 26 (the Local Governance Act or LGA), GIS can be used for a number of purposes.

Most CBLUPs, however, included land use plans or site plans in the form of maps and descriptions. The maps created in GIS greatly improve the quality of the land use plans, acting as a visual aid, especially in the interpretation of the land use plan. The maps are also important for readily conveying the identification of existing utilities, infrastructure, and variant land uses. **Figure**



6.3, from the Shiprock Community Based Land Use Plan, is an example of a completed master plan created with GIS.

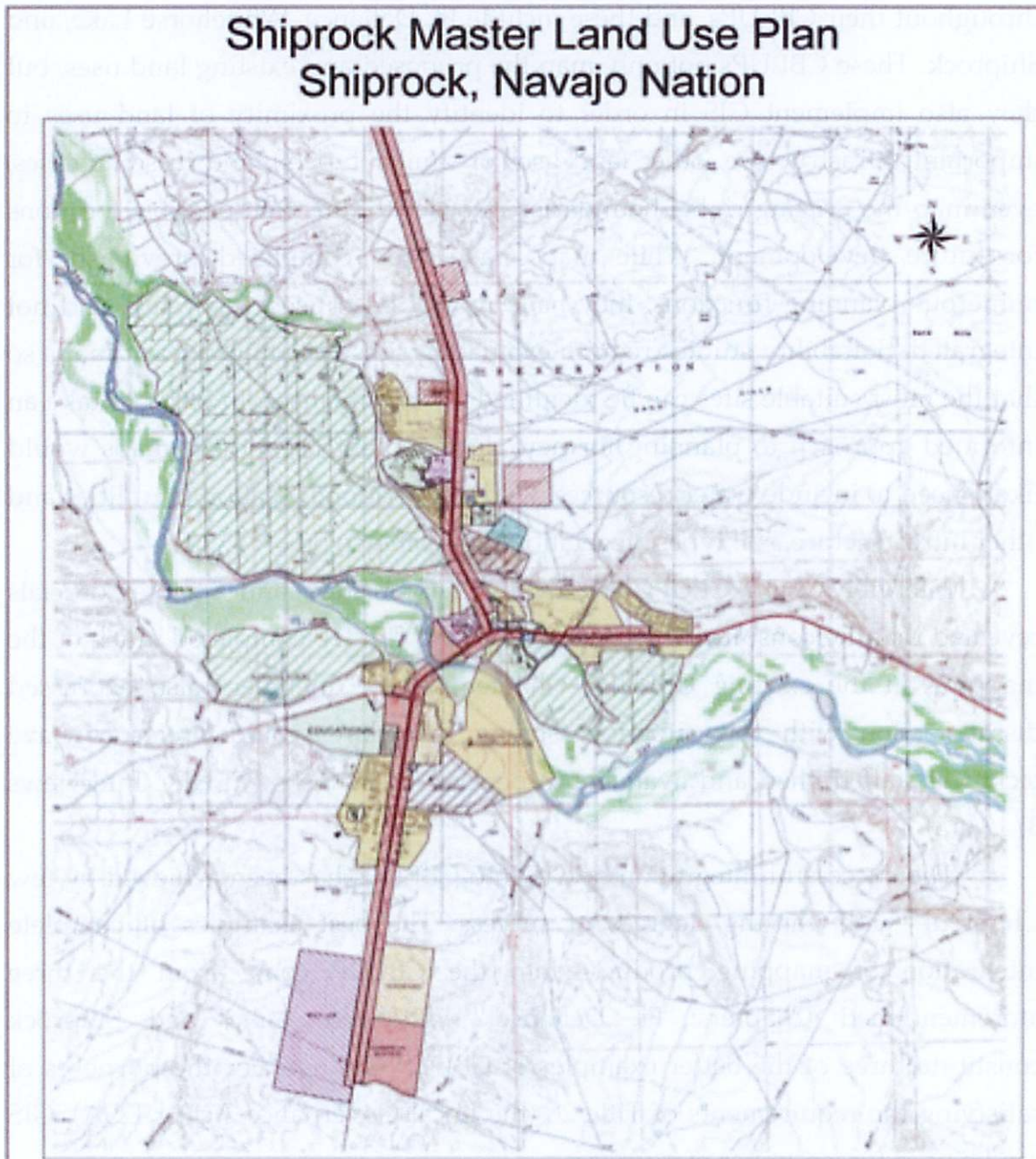


Figure 6.3: Shiprock Chapter Master Land Use Plan, 2001

Zoning has largely been avoided as a legal tool in the development and planning of the Chapters, but many of the maps included in the CBLUPs illustrating desired uses mirror the typical municipal zoning map (See **Figure**

6.4). There is a justification for the ubiquity of zoning maps in municipal planning and zoning documents: as a visual tool, maps are imperative in conveying geographical or spatial information, especially in terms of proposed uses. Many of the 22 CBLUPs examined did not include maps of this type, often conveying proposed uses in colorless boxes, or labeled otherwise. Although this type approach is not necessarily wrong, typical users of land use plans don't often understand such conventions. Using a standardized color scheme for land use plans can solve this inconsistency (e.g. yellow is often residential; red, commercial; and purple, industrial).

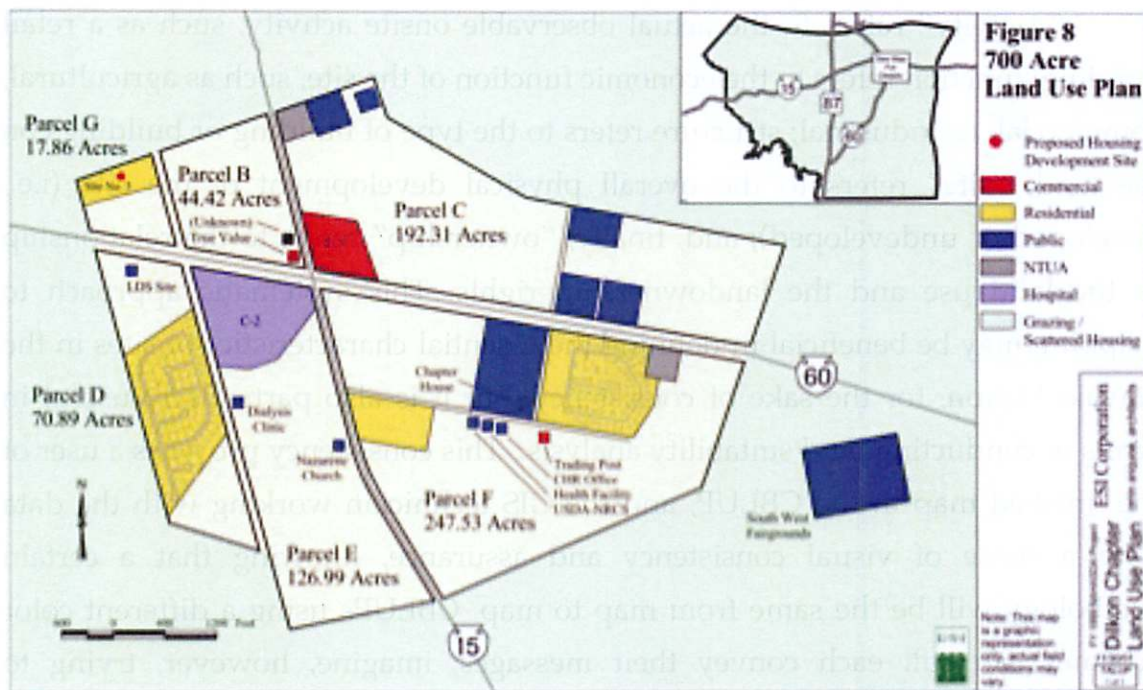


Figure 6.4: Dilkon Chapter Land Use Plan (2001)

Although these zoning classifications are often expressed as layers in a GIS system, they are not the only available layers. It is important to note that they can be used in conjunction with the other mapping layers for the performance of land suitability analysis. For example, a land suitability analysis can be performed by overlaying a commercial zoning area with the aforementioned mapping layers (soils, vegetation, wildlife, etc.) in order to determine the suitability for a commercial facility.



Though many jurisdictions tend to subscribe to their own mapping standards, many are based upon ESRI's common zoning symbology, which is in turn based loosely upon the American Planning Association's (APA) Land Based Classification Standards (LBCS). These standards were created to classify land uses across five dimensions: activity, function, structure, site, and ownership. The LBCS system was created in 1994 by the APA and six federal agencies at the request of the Federal Highway Administration (FHWA) for the purposes of creating national-level standardized land-use coding for local, regional, and state land-use planning applications. The first LBCS version was released in 2000, and the standards have been periodically updated since (planning.org, 2013).

"Activity" refers to the actual observable onsite activity, such as a retail building; function refers to the economic function of the site, such as agricultural, commercial, or industrial; structure refers to the type of building or buildings on the land; "site" refers to the overall physical development of the site (i.e., developed or undeveloped); and, finally, "ownership" refers to the relationship to the land use and the landownership rights. This systematic approach to mapping may be beneficial in defining the essential characteristics of sites in the Navajo Nation, for the sake of consistency, but it is also particularly useful in terms of conducting land suitability analysis. This consistency provides a user of the finished map in the CBLUP, and the GIS technician working with the data with a sense of visual consistency and assurance, knowing that a certain symbology will be the same from map to map. CBLUPs using a different color schemes can still each convey their messages; imagine, however, trying to compare many of the CBLUP's maps side by side – it would be vastly more user-friendly and readily interpretable if all the maps embraced the same color scheme and meanings for particular colors. This consistent approach to conveying and interpreting this information is why the LBCS was created, and is implemented by many jurisdictions across the country.

## ***6.5 Geospatial Data and Navajo Nation Governmental Units***

In the spirit of self-determination, many Chapters wish to become proficient in GIS and mapping in order to become more independent and less reliant on the Navajo Nation government for technical maps and assistance. With this in mind, it remains important to identify governmental units with the ability to assist Chapters with mapping and provide information regarding utilities, infrastructure, and land uses. Interviews with NNDCD officials yielded information on what each of the Navajo Nation departments contributes to digital data and GIS resources for the Nation. Chapter officials and CLUPC members may contact these departments to request information. Thus far, information has not been integrated into an information system that would allow for direct access by Chapters to the Navajo Nation departmental entities' servers. Moreover, there is a serious lack of resources in the Nation's governmental departments to respond quickly to the mapping needs of Chapter planning. **Table 6.1** describes the Navajo Nation Governmental Units and geospatial data they presently make available to Chapters.

<b>Navajo Nation Governmental Units</b>	<b>Geospatial Data Available</b>
<b>Navajo Nation Land Department</b>	Chapter Service Area Grazing Boundaries Chapter House Location Agency Boundaries Joint-Use Area Navajo-Hopi Partition Land Arizona-Navajo Ranches New Mexico-Navajo Ranches Land Surface Ownership Public Land Survey Homesites Business Sites Mission Sites Census tracts
<b>Navajo Nation Division of Transportation</b>	Roads (major, secondary, unimproved, county, and streets) Bridges Centerline Bus Routes Rail Routes
<b>Navajo Nation Water Management Branch</b>	Watershed Floodplain Streams Rivers Lakes Basin Dams Livestock wells Washes Springs Water pipelines
<b>Navajo Nation Department of Natural Resources</b>	Uranium Mill Tailings Remediation Action (UMTRA) Coal Lease Boundaries Reclamation Oil and Gas Fields
<b>Navajo Nation Department of Fish and Wildlife</b>	Fish hatcheries Hunting Boundaries Wildlife Conservation Areas
<b>Navajo Environmental Protection Agency (EPA) (public water, public utilities, underground storage tanks (USTs), superfund)</b>	Public drinking water wells Water Storage tanks Underground storage tanks (USTs) Environmental Cleanup Sites Artesian Wells
<b>Navajo Tribal Utility Authority</b>	Customer water and electric meters Customer water and electric lines
<b>Arizona Public Service</b>	Transmission Lines Natural gas pipeline Logging roads Conservation easements

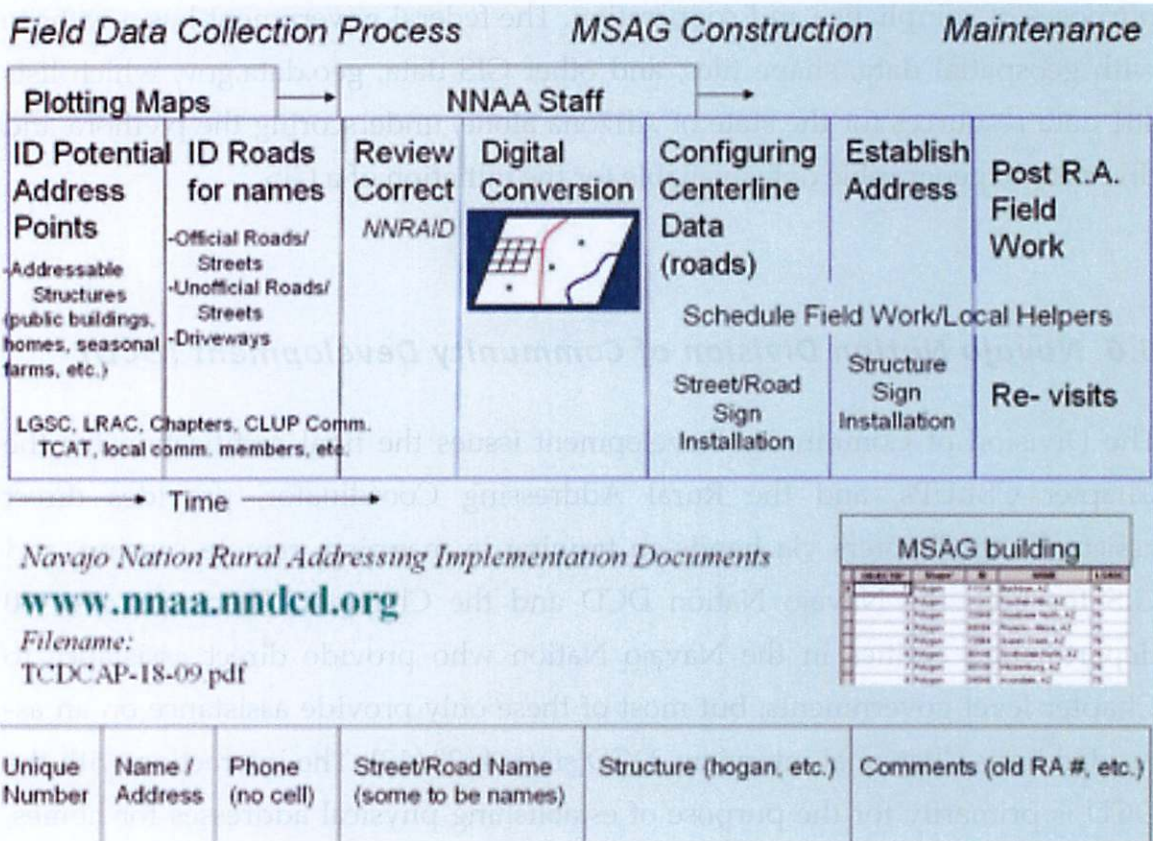
**Table 6.1: Navajo Nation Governmental Units and Geospatial Data Available from each**

In order to facilitate effective mapping, it is important for relevant data to be directly accessible by Chapters, especially when it comes to land use planning, which includes the need to conduct land suitability and infrastructure analyses. The states and counties may also furnish maps to the Chapters; states, counties, and municipalities collect much of the same data for their geographical regions, and the states and counties provide this data to the Navajo Nation for the

purposes of compliance and cooperation. The federal government has a website with geospatial data, shape files, and other GIS data, [geo.data.gov](http://geo.data.gov), which lists 481 data resources for the state of Arizona alone, underscoring the plethora and diversity of geographic data available for the initiation of a GIS.

## **6.6 Navajo Nation Division of Community Development (DCD)**

The Division of Community Development issues the final certification for the Chapter CBLUPs, and the Rural Addressing Coordinator, provides direct assistance to Chapters via hands-on training in mapping, remote sensing, and GIS for both the Navajo Nation DCD and the Chapters. There are over 30 departmental entities in the Navajo Nation who provide direct assistance to Chapter level governments, but most of these only provide assistance on an as-needed basis. (Personal interview, DCD staff, 4/23/13). The interaction with the DCD is primarily for the purpose of establishing physical addresses for homes, public buildings, and businesses. The department trains CLUPC members, Chapter officials and Chapter staff in 7-hour training sessions, in which Chapter members travel to Window Rock, Arizona. While these training sessions are completely free, many Chapters have not taken advantage of them, perhaps because of the cost of paying for five CLUPC members to travel to Window Rock. The DCD also walks Chapters through the digitization of data in order to ensure the proper steps are taken, and a process map is provided to all attendees of these training sessions. These training sessions are meant to assist the Chapters in the creation of maps, and the use of computer programs such as ESRI's ArcGIS. There are, of course, limitations to this infrequent training process, as we have seen few positive outcomes in the ability to create mapping for the CBLUPs. **Figure 6.5**, below, depicts a process that has been created by the Navajo Nation Addressing Authority (NNAA) the creation of GIS data.



**Figure 6.5.** Data Collection Flowchart

### 6.7 Navajo Nation Division of Transportation

The Navajo Nation Division of Transportation (NNDOT) has undertaken a highly successful implementation of GIS. The NNDOT has used GIS to assess and manage their transportation infrastructure. In order to receive more funding under the Indian Reservation Roads (IRR) Program, the NNDOT began to inventory all of the Navajo Nation roadways, including unpaved roadways. The goal of this effort was to maintain a complete inventory of reservation roads and secure more federal funding for the operation of the division (Taylor, 2012). The Bureau of Indian Affairs Division of Transportation (BIA-DOT) maintains a national reservation road inventory system called the Road Information Field Data System (or RIFDS) as part of a broader system called the Integrated

Transportation Information Management System or ITIMS (bia.gov, 2013). This system allows tribes to submit their road inventory data to the BIA at a regional office (the Navajo Nation's regional office is located in Gallup, New Mexico). When the tribe submits their road inventory data to the BIA, the data are analyzed and evaluated for expanded funding. In 2006, the NNDOT initiated a 4-year project to expand its internal data and IT capacities, establish a systematic method for identifying eligible public tribal roads, and to improve the quality and quantity of roadway data (Taylor, 2012). This proved to be an extremely successful process that led directly to increased funding from the federal government for operations.

By implementing a standardized, systematic approach to expanding the roadway inventory data, the NNDOT increased its funding by over 30 percent, receiving over 15 times their initial investment into the system as of 2012. The process has been historically difficult given the rural nature of the Nation, but the NNDOT overcame this obstacle by creating a set of guidelines that each NNDOT employee should follow for determining inclusion eligibility under IRR standards (Taylor, 2012). This example well illustrates the point that taking the guesswork out of complex processes by adhering to well-recognized standards and criteria creates a more direct, simple-to-follow process with obvious positive benefits -- and doing so with mapping for CBLUPS is no exception to this rule.

The CLUPCs could use this example as a model for creating maps and geographical data. The Navajo Nation governmental departments have more experience with planning and day-to-day operations than most of the Chapters do, and they are also privileged to a larger operational budget, in part because of their expertise. It then follows that it would be recommended to use successes at the Navajo Nation government level and replicate them at the Chapter level. The CLUPCs can emulate this model by creating a standardized process for all of their mapping needs; this will be a more efficient and effective use of resources.

## **6.8 Interfacing with Chapter Leadership**

Much of the concern regarding the ability to create maps, analyze geospatial data, and communicate results graphically has been stated as limited because of the paucity of expertise and resources to train those experts at the Chapter level. Technical skills in GIS require intensive and ongoing training. The training provided by the Navajo Nation Addressing Authority (NNAA) staff is important, but costly for Chapter members to attend. And, the complex information provided may be difficult to retain for the length of time required to complete a CBLUP, for all of the other mapping processes involved therein, and beyond. Chapter leadership may be better served by interfacing with a LGSC staff member who has been given extensive, long-term training in GIS, and whose training and expertise could serve multiple Chapters. The cost of providing workstations at the regional level (such as at LGSC) would be considerably less in terms of both capital and operating expenses. Chapters could save a considerable amount of resources in conducting their CBLUPs by receiving maps, geospatial information, and land suitability analysis from LGSCs rather than hiring a consultant for GIS and mapping. This system could be modeled similarly to the WIND system (<http://wind.enavajo.org>).

Offering GIS services at the LGSC offices would require the training of a staff member or hiring a GIS analyst. The staff member would require knowledge in operating a GIS programs but would also need the skills to write a simple computer program for use by those who are untrained. This would reduce the number of people who would need intensive training, while still allowing Chapters the power to create their own maps with assistance from the LGSC.



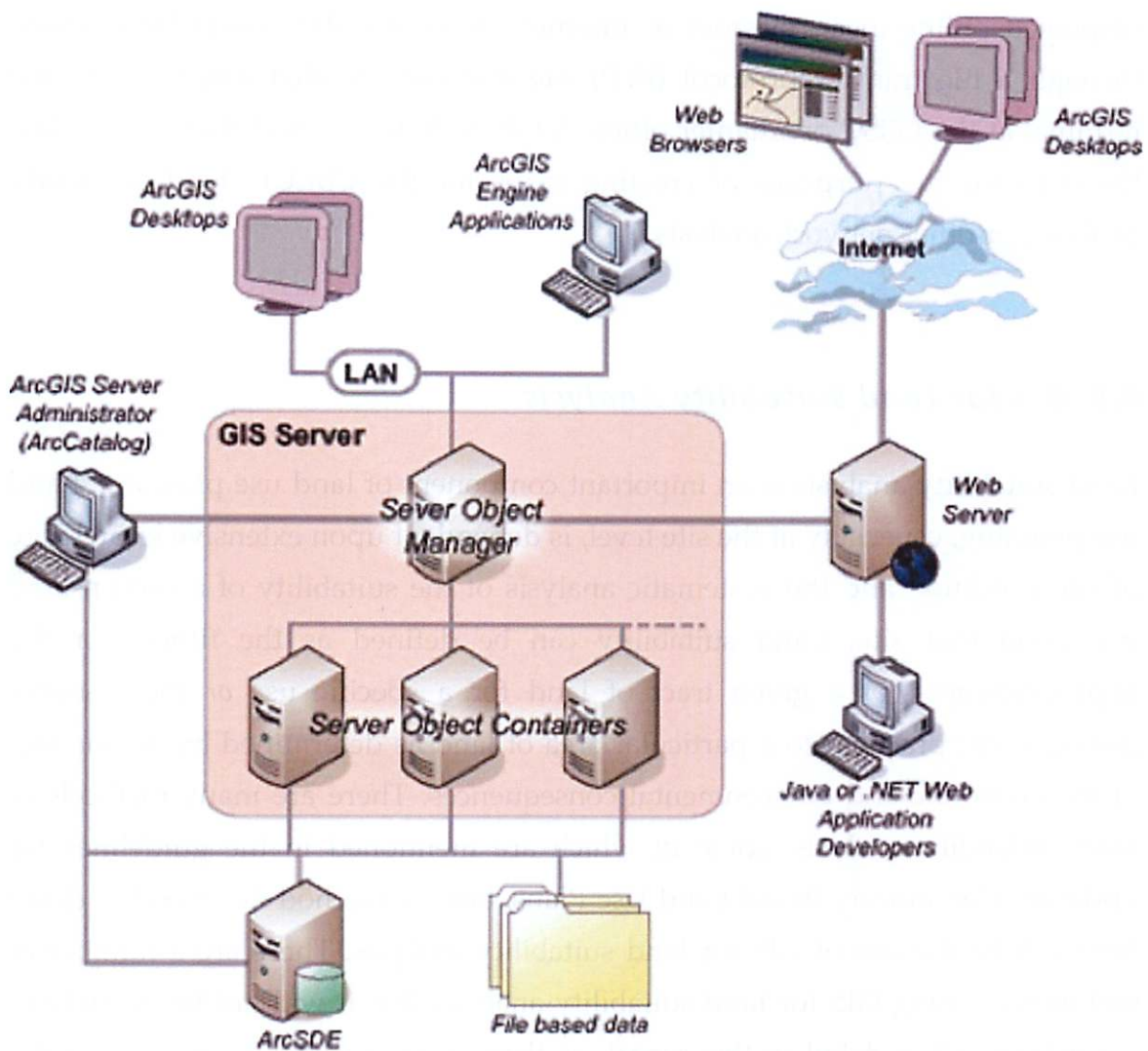


Figure 6.6: A systems diagram of a possible GIS server and terminal network

This approach would also limit the number of people creating new data, allowing for more control of the data management system, and reducing the likelihood of loss of data. **Figure 6.6** shows a rudimentary conceptual model of an option for distribution of data from the Navajo Nation departmental agencies to the LGSC terminals.

The Navajo Nation, in setting up a distributed GIS system, would be in a position to determine the way in which their system would be established. The main components of the system would consist of a server or servers, which would contain the data objects to be pushed to the computer terminals at LGSC offices or Chapter offices with the capacity to use it. The ArcGIS system could be

displayed online in an intranet or Internet site or the data could be accessed through a file transfer protocol (FTP) site and downloaded directly onto the terminal at the LGSC or Chapter office. A GIS technician could then manipulate the data for the purposes of creating maps for the CBLUP, land suitability analysis, or other network analysis.

## **6.9 GIS for Land Suitability Analysis**

Land suitability analysis is an important component of land use planning. Land use planning, especially at the site level, is dependent upon extensive knowledge of site condition and the systematic analysis of the suitability of a certain land use upon that site. Land suitability can be defined as the fitness, or the appropriateness, of a given tract of land for a specific use *or* the resource management practices to a particular area of land as determined by an analysis of the economic and environmental consequences. There are many methods of land suitability analysis, some of which are mentioned in the guidelines for updating Community Based Land Use Plans, but the method described in detail here will be the use of GIS for land suitability analysis. There are a number of methods of using GIS for land suitability analysis, but it will not be possible to cover them all in detail in this report, as there are numerous books on specific methods (Theobald, 2003; Pamuk, 2006; Carr, Zwick, 2007; Mitchell, 2012; Steinitz, 2012).

A generalized synthesis of GIS methods for land suitability will be presented in this report in order to convey the overall idea. Land suitability as performed in GIS uses a series of layers of information, usually characteristics of the geography (e.g., topography, hydrology, species of flora, etc.) to evaluate the suitability of a site for a specifically identified use. These layers of information are useful and important for finding the best uses for sites and also for predicting areas susceptible to risks such as floods, landslides, fires, insect infestation, invasive species, or overgrazing (Figure 6.7). This capability is of particular importance in the Navajo Nation, as many Chapter CBLUPs we interviewed have experienced issues with soil erosion and other problems after going

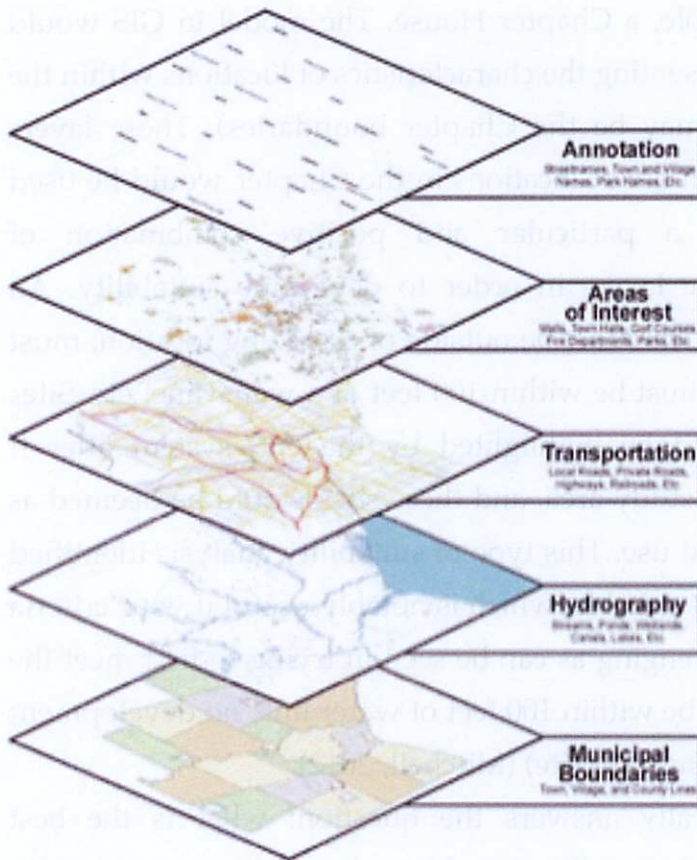
through costly planning and surveying processes (CLUPC interviews, 03/19/2013 & 03/20/2103).

Suitability models are typically used to find a best or appropriate location for a particular use -- for example, a Chapter House. The model in GIS would include a number of layers representing the characteristics of locations within the study area (in this case, they may be the Chapter boundaries). These layers containing particular information about locations in the Chapter would be used to identify locations having a particular and positive combination of characteristics as defined in the layers in order to determine suitability. An example of this may be that the site must be outside of a grazing location, must comprise a certain type of soil, must be within 100 feet of a water line, etc. Sites with these characteristics would be highlighted by the GIS system after it analyzed all the sites within the study area, and these sites would be deemed as suitable for the particular desired use. This type of suitability analysis identified locations as either suitable or not suitable, which is notably useful if your criteria are phrased and somewhat challenging as can be seen in trying to first meet the all example criteria above (must be within 100 feet of water line, no development within 200 feet of a culturally significant site) (Mitchell, 2012).

Suitability analysis typically answers the question: what is the best location? In a process often mired by political problems in rural lands, especially as they relate to grazing, suitability analysis may be able to remove most subjective factors from the process by providing evidence regarding why a specific location is best suited for proposed developments. As in the map shown below, areas are highlighted based upon their suitability, and they can be further mapped in varying degrees of suitability.

This type of mapping may be essential in determining whether areas are susceptible to flood, contain endangered species, would disrupt wildlife corridors, would disturb archaeological resources, or whether grazing areas would be disturbed. Suitability analysis prior to the public determination of potential sites may prevent a large amount of time and money being wasted on a proposed development only to learn subsequently that soils are not suitable or that a grazing permit covers the subject site. It is recommended that GIS be used

as an integral part of the land use planning process in order to prevent land use conflicts and to take a more efficient approach to land use planning.



**Figure 6.7:** Steiner's Layer Cake Diagram, showing the layering of information in a GIS, and the nature of the information sitting geographically on top of the other information. (<http://wilkmanshire.wordpress.com>).

### **6.10 Mapping Recommendations**

It is recommended that training in GIS be implemented at all levels of the Navajo Nation government, including national level government, Local Governance Support Centers, and Chapter governments. The extent to which each level of government needs training and capacity building in GIS is dependent upon the applicable uses of GIS needed for that particular level of government. An

integrated system of GIS terminals that allows users to access data and manipulate local copies of that data is an ideal system for the creation of consistently formatted land suitability maps, maps for planning purposes outside of the CBLUP planning process, and maps required in CBLUPs.

It is also recommended that a centralized network be created for the dissemination of geographic data in order to streamline the process of data collection for the Chapters and LGSCs. Additionally, this approach would eliminate the need for Chapters to attempt to access data from multiple departments, thereby hastening the process, reducing the number of employees needed to safeguard the information, and preventing the compartmentalization of geographic data across Navajo Nation departmental agencies.

Finally, it is recommended that successful approaches to GIS and mapping be emulated. The examples listed in this section include the Navajo Nation DOT for their expansion of roadways inventories through a systematic approach to collecting and organizing data, and their investment in more staff and training, and the development of an approach that simplifies decision making. Many of the Chapter CBLUPs stated that environmental and cultural resources were important to them, yet there are no efforts to inventory these resources; a great example of the use of GIS to protect natural resources is the protection of the Sunshine Coast Regional District through the Sensitive Habitat Inventory and Management (SHIM) approach. It recommended that the chapters adopt a similar approach in order to integrate resource protection and management into CBLUPs.



# 7. Guidelines & Recommendations

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## ***7.1 Recommendations for Public Participation in Planning***

### **7.1.1 Introduction**

The recommendations for updating land use plans are based on studies conducted over the last six months primarily in the Navajo Nation. Individual studies included detailed analysis of 22 Chapter land use plans selected on the basis of Agency, rural versus urban, demography and other criteria. The analysis of the plans was based on performance evaluation criteria, coverage of land use planning elements, quality of analysis and consistency with the standards of the planning profession. In addition, the study conducted focus groups with members of 10 CLUPCs and Chapter staff and a focus group with Five Agency officials and staff. In-depth interviews were taken with Navajo Nation departments' personnel and officials. The study also included active participation with two Chapters on their planning process and Chapter Visioning for the plan updates – Chinle and Black Mesa Chapters. Detailed examination was completed of one Chapter's plan update in addition to interviews and a focus group of that Chapter. The study also examined the literature on planning in Indian Country and specifically analyzed eighteen plans from around the country as to implications for our study. Throughout the report are references to the key literature on land use planning as a basis for making recommendations. It is important to note that the study did not just look at the planning elements that are typically contained in plans, but also at education around planning and other processes for consideration in plan updates, as well as taking a regional approach to land use planning among Chapters. The issues encountered in updating plans include issues of resources,

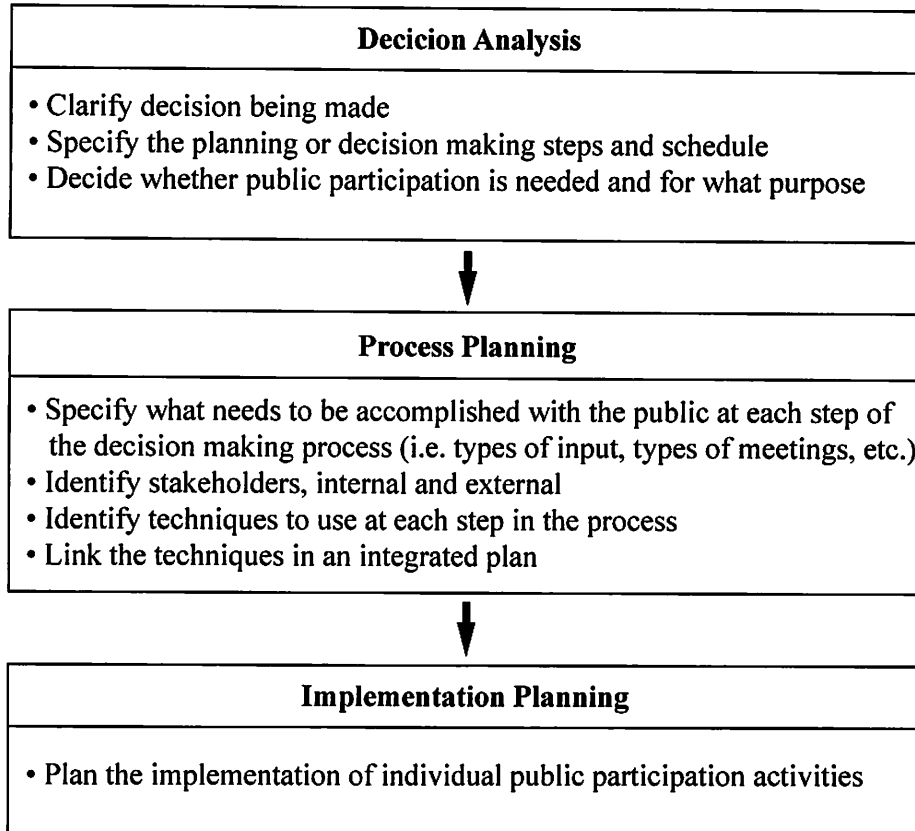
training, pre-planning and consistency among the plans as well as mapping and especially the quality of the data analysis. The study's recommendations follow.

### **7.1.2 Creating a Plan for Public Participation**

Designing a public participation program is essential to the success of the planning process, and integrating that program into the overall planning process is imperative to the realization of land use planning objectives. The opportunity for the public to offer meaningful input and influence decision-making is strengthened when the public participation program is designed to be an integral part of the planning process (Creighton, 2005). There is no perfect public participation program for all planning processes, but there is a systematic and proven model for designing public participation programs that have worked and been acceptable and provide all of the essential components of participation at the local level and by which most municipalities create their public participation programs.

The model for designing a public participation plan contains three steps, with several subparts to each step. These steps are illustrated in **Figure 7.1**.





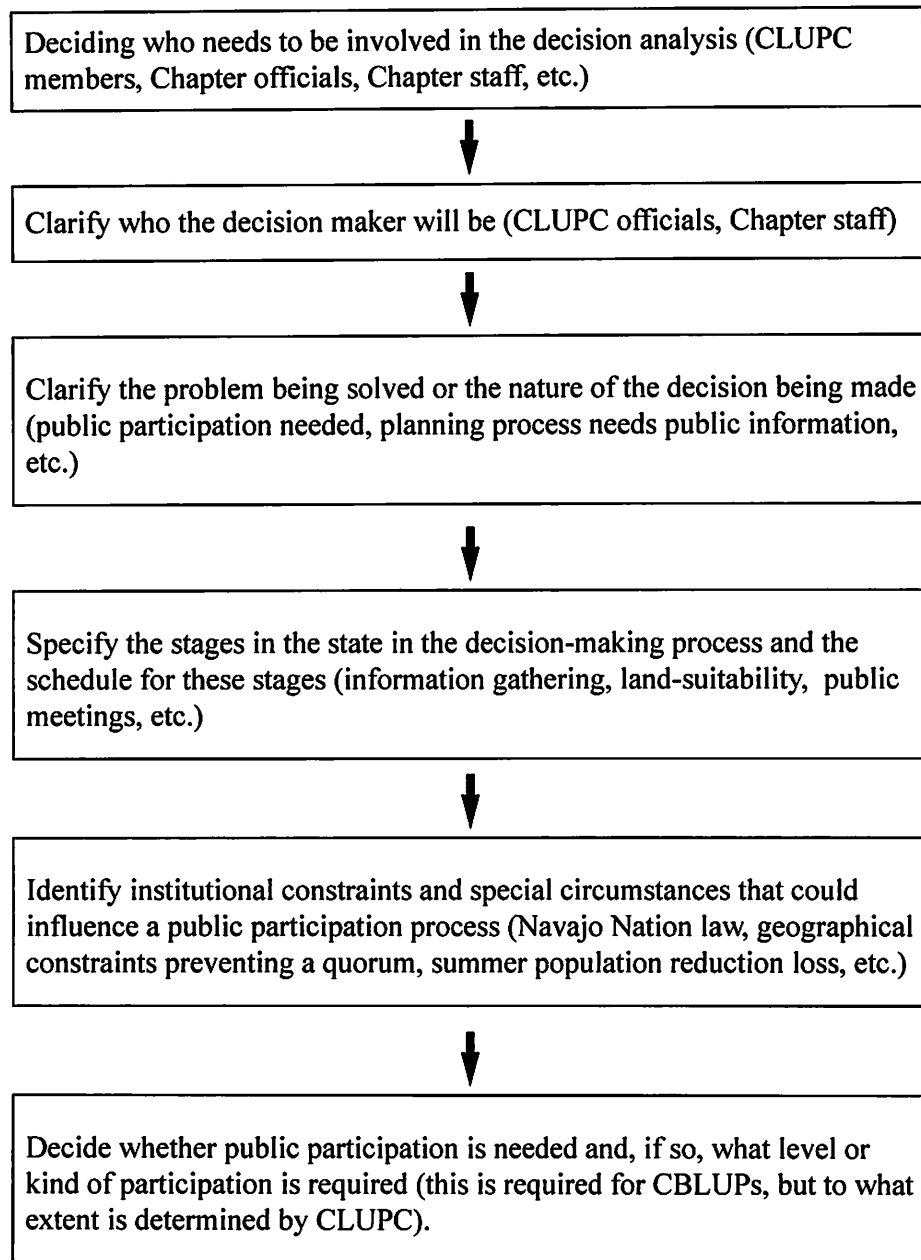
**Figure 7.1.** Steps for creating a public participation plan (adapted from Creighton, 2005).

These steps can be modified to suit the Navajo Nation and especially shaped and designed for the Chapter level in ways appropriate to the culture and laws of the Nation, and should be considered as guidelines rather than rules.

### **7.1.3 Decision Analysis in Participation**

Decision analysis is designed to get everyone within the organization to start from a common understanding of the public participation process. The steps, timing and milestones of the planning process are clarified at this phase. It is during this phase that the decision is made about whether the public needs to be involved and at what level. The decision-maker should be identified prior to this process, and will typically be the CLUPC or a combination of CLUPC and

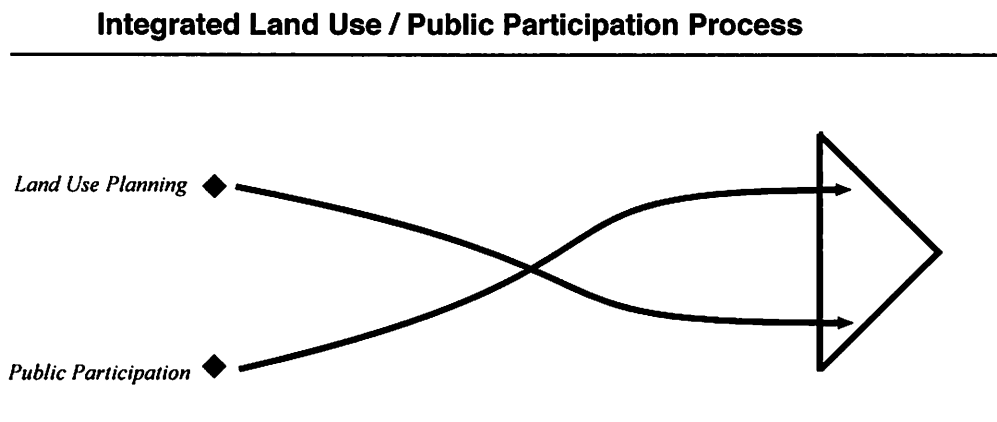
Chapter officials, as determined by the Chapter government. A suggested workflow for decision-making is illustrated in **Figure 7.2**.



**Figure 7.2.** Participatory Decision Tree.

#### 7.1.4 Process Planning in Participation

*Process planning* identifies specific public participation activities for each phase of planning process. The activities are scheduled and documented in a public participation plan, which is important to ensure a more prominent turnout for public participation. During this phase of the public participation process the CLUPC should identify the stakeholders (Navajo Nation government, Bureau of Indian Affairs (BIA), Local Governance Support Centers (LGSC), businesspeople, grazing rights holders, grazing officials, etc.), assess probable controversies – particularly important when considering land withdrawals – define objectives for the public participation process (i.e. what information to gather from the public and what information to convey to the public), and finally, the preparation of the public participation plan. As stated before, the public participation should be integrated into the land use planning process in order to achieve the best public participation outcomes for planning (Figure 7.3).



**Figure 7.3.** Integrating land use planning and public participation.

#### 7.1.5 Implementation Planning for Participation

Implementation planning is the phase of the public participation process where the plan is brought to fruition and, as the name implies, different aspects of the

plan are evaluated for implementation. This is where the decision-making body will determine the detailed actions that must be taken to implement the public participation program, and will undertake the steps necessary to complete the program as planned. This is also the phase in which the questions must be asked about logistics of the public planning process, such as:

- How many meetings are needed?
- What meeting facilities will be used? (Chapter house, high school gymnasium, etc.)
- What is the agenda for each of the meetings?
- How will meetings be advertised?
- Who will write the advertisements, stories, and other materials? (Local newspaper, part of the CLUPC, Chapter staff, etc.)
- Will meetings involve public involvement, CLUPC discussions, workshops, hearings, etc.?)

These questions can all change dependent upon the identified stakeholder, the design of the public participation plan, and the size of the organization and community. Implementation must be integrated into the planning process in order to avoid wasted time and resources. The swift implementation of the public participation plan as integrated into the land use planning process is critical in achieving desired public participation and planning outcomes, such as consensus building, user satisfaction, building trust, and realistic expectations. Public participation, as a critical element of land use plans, is more than just learning about issues and developing a vision for a community or place. It builds community through communication and engagement. It is a clear means of building resiliency. It enables the expression of individual concerns and supports consensus-building. It does back to the roots of the Navajo people, conceiving the future of community and operationalizing it. Public participation is critical to cultural sustainability, embracing the sacred Navajo principles of *nitsáhákees*, *nahatá*, *iiná* and *siih hasin*.

## **7.2 Land Suitability Analysis**

### **7.2.1 Introduction**

A land suitability analysis is a detailed study of a place that can help determine the future use of the place. When developing a land suitability analysis it is important to understand what land suitability means. Land suitability can be defined as the fitness, or the appropriateness, of a given tract of land for a specific use or the resource management practices to a particular area of land as determined by an analysis of the economic and environmental consequences. There are many different ways of conducting a land suitability analysis and it is helpful to understand that there are different types of analyses that can be used. A few different types of land suitability analyses that can be used are the Natural Resource Conservation Service (NRCS) Systems and the Pennsylvania Method. Below is a brief description of the NRCS Systems and the Pennsylvania Method. The land suitability analysis that is most widely used and accepted as a powerful tool to planning is Graphic Information Systems (GIS). GIS is explained in more detail because it is one of the most contemporary ways of conducting a land suitability analysis.

### **7.2.2 Natural Resource Conservation Service (NRCS) System**

NRCS is the oldest and most established system for defining the ability of soil to support agronomic uses. The way in which NRCS analyzes soil is through different interpretive groupings. One type of group is the capability classification. This classification is the most common soil classification systems in the United States. This capability classification was developed to help farmers with agricultural management practices. Although this is a great analysis for agriculture it does not account for major construction activities, reclamation projects and special management crops. The NRCS also includes soil limitations for some land uses such as septic tanks, homesites, streets, sanitary landfills, cemeteries and a few others. Although the NRCS is structured toward soil surveying it has been increasingly utilized by planners, landscape architects, and

civil engineers because it is the most standard source of information of the natural environment in the United States. Also, the NRCS is available to individuals on a local level. This type of land suitability analysis that focuses on soil surveying is seen to be useful to community and regional planning.

### **7.2.3 The McHarg Method**

The McHarg Method (sometimes called the University of Pennsylvania Method) is a method for suitability analysis that identifies areas of concern and ranks them by their value. The steps in the suitability analysis are:

1. Identify land uses and define the needs for each use
2. Relate land-use needs to natural factors
3. Identify the relationship between specific mapped phenomena concerning the biophysical environment and land-use needs
4. Map the congruences of desired phenomena and formulate rules of combination to express a gradient of suitability. This step should result in maps of land-uses opportunities
5. Identify the constraints between potential land uses and biophysical process
6. Overlay maps of constraints and opportunities, and through rules of combination develop a map of intrinsic suitabilities for various land uses
7. Develop a composite map of the highest suitabilities of the various land uses

The McHarg Method can be used for the conservation and development of resources. Balancing conservation and development is important to sustainability and the Pennsylvania Method does just that.

### **7.2.4 Geographic Information Systems (GIS)**

The GIS technology is a tool that gives answers to simple geographical information which aids in the land suitability analysis process. Determining the suitability of land for a particular use involves evaluating locations and analyzing movement.

To evaluate locations various characteristics, a location or locations need to be identified and evaluated for the intended use. In GIS these characteristics are represented in layers of Information. These layers could include types of nearby vegetation, slopes of steepness, and nearby highways and streams. These layers of information are useful and important for finding the best uses for sites and also predicting areas susceptible to risks such as floods, landslides, fires, insect infestation, invasive species, or overgrazing. Analyzing movement can identify least travel cost between two or more locations. Cost can be in the form of money, time, or distance and movement can be done by people, animals, or inanimate objects like rainfall runoff.

The modeling process begins with defining the goal of the analysis, this can be a problem that needs to be solved or a question that needs to be answered. The following bulleted numbers are examples and brief descriptions of GIS methods used for a suitability analysis along with possible problems or questions that need to be answered.

1. Logical and spatial selection: Identifying existing locations that match the suitability requirements for the intended use. "What locations are suitable for a distribution center?"
2. Vector and raster overlay: Finding suitable locations within a study area for a particular use. "What locations are suitable for sheep herding?"
3. Weighted and fuzzy overlay: Rating suitability of locations. "What areas are the most and least suitable housing development locations."
4. Path-distance analysis: Finding the best traveling paths or corridors between locations. "Which paths will cost least and have the least environmental impact for new power line construction.
5. Least-cost path: Finding paths that are shortest, quickest, and least expensive when en route." What travel routes have the least travel times and allow me to deliver water to all the elderly in the area.
6. Flow-direction analysis: Identifying where and how water flows over and accumulates on land surfaces. "what directions will melting snow from the mountain flow and where will it accumulate."



7. Geometric network trace: Trace the flows of water or other fluids through pipes. "Trace the flow of dumped motor oil through storm drains."
8. Location allocation: Finding the best locations for a facility that ensures the most people are served in a population. "Where is the best location for a community center, that will also serve the most people."
9. Spatial interaction model: Predict usability and visitation of a facility based on attractiveness, distance, and surrounding competition. "What is the likelihood that professionals and people will utilize the new conference center with the amenities provided."

The following are Characteristics of layers in GIS that can be used to answer questions or solve problems:

1. Characteristics or *spatial data* types used to determine suitability:
  - a. Vector data which shows coordinate pairs that define location and geographic features. Vector data is useful for showing, streets, buildings, or grazing lots.
  - b. Networks are a type of vector data that allow the user to see connected features in a system. This can be useful when identifying networks of stream-flow, streets, and delivery routes.
  - c. Raster data is another layer used to show geographic phenomena that are spatially continuous. These could include soil moisture, land cover, solar radiation, and land surfaces. Finding suitable locations, rating suitable locations, modeling paths, modeling flow.
2. *Attribute data* used to determine suitability (attribute data is descriptive geographical information used to filter criteria). It is found in the form values which are the following:
  - a. *Nominal values* describe features often time is categories like land-use codes.
  - b. *Ordinal data* orders values from high to low but the difference in rank is unknown. For example soil may be rank at 8 for high suitability or not so high at 6 but the drop in this rank is unknown.
  - c. *Interval scales* show the difference of each value on the same scale. Interval data can be in the form of temperature

- d. *Ratio* is an interval scale that has an absolute zero which is the absence of the thing being measured. When measuring population an area selected can have a population of zero. furthermore the population in one area could be twice (1000) that of another (500). Ratio data types are important when measuring costs and of least-cost paths.
3. Accounting for spatial bias. Spatial bias can occur in data so being aware of bias before conducting analysis will allow you to take step to keep bias data from greatly affecting the results.
    - a. Spatial autocorrelation: Values that are close together can skew or overemphasize the results versus values that are placed further apart. Examples could be temperatures across a region, crime rates within an area, or vegetation within a location.
    - b. Correlated data occurs when two or more layers are very similar which will also be overrepresented in the results. An example could be one layer being sun exposure and solar radiation. these two layers can overshadow other layers like soil nutrient or vegetation in an area.
  4. Other things to keep in mind are the quality and accuracy of data. The information of data provided in GIS need to be the most accurate and up to date information. If the data is missing a street, stream, travel route, or land use type it could determine suitable areas as unsuitable when it actually is.

GIS is a powerful and useful tool that can aid in determining suitability of land for an intended purpose. It has a wide array of data sets, functions, and options that allow the user to answer simple geographical information to help understand what locations are most or least suitable. With this information the user can make informed decisions that answer question and solve problems to better a community.

## **7.3 Land Withdrawal, Zoning & Eminent Domain**

### **7.3.1 Introduction**

Several interviews and focus groups with Navajo Nation Chapters and Local Governance Support Centers (LGSCs) revealed an overwhelming difficulty with the land withdrawal process and its negative effects on communities. Traditionally, in land use planning, the mechanism of eminent domain is used in order to assemble property and develop it for a public use, or a use that benefits the greater good. Another popular tool used by planners worldwide is the establishment of zoning districts to encourage certain necessary land uses. Currently, the Local Governance Act (LGA) of 1998 allows for the use of both of these tools by certified Chapters (Local Governance Act, 1998). The focus groups held by ASU with 10 Chapters and the 5 LGSCs also showed us that these mechanisms are not being used by Chapters to their fullest extent, and sometimes not at all (Focus Groups, January-March, 2013). These tools are quite important for economic development, especially when the market fails to provide certain services, so it will be imperative to encourage Chapters to use these tools in the future – perhaps through a more formalized mechanism or mechanisms, preventing personal conflict, which has been seen as a reason for not using eminent domain, according to many Chapter Community Land Use Planning Committee (CLUPC) members.

### **7.3.2 The Importance of Zoning and Eminent Domain in Land Development**

Land withdrawal is necessary for all development in the Navajo Nation. Generally speaking, each Chapter has withdrawn land around its Chapter house for public purposes such as a senior center or parking for the Chapter house. In many Chapters, the rest of the land is held by grazing rights permittees, who have a right to run their livestock on the land and also establish a homesite there. The Chapter Grazing Official, who has a great deal of power in the current governmental structure, issues the grazing permits. Often, once these permits are granted, the grazing rights holders have power to prevent development on the

land, and Chapter CLUPCs do not pursue eminent domain in order to override the permit holder. This leads to a lack of development, preventing the building of vital services, job centers, and important infrastructure.

Land withdrawal should be mechanized in order to ensure a streamlined process and a predictable outcome for stakeholders. The process is complicated, time and capital intensive, and the outcomes are not always as desired. Developers are used to a certain amount of risk and uncertainty, but this is exacerbated by the need for consensus of grazing rights holders, environmental reviews, archeological reviews and business site lease processes. In order to streamline the process, Chapters should enter into discussions with all stakeholders, including the Navajo Nation Department of Justice (NNDOJ), the Navajo Nation Land Department, the Navajo Nation Division of Community Development (NNDCD) and finally, the investors who are interested in moving the project forward (see **Figures 7.4 and 7.5**).

### The Business Site Lease Flowchart

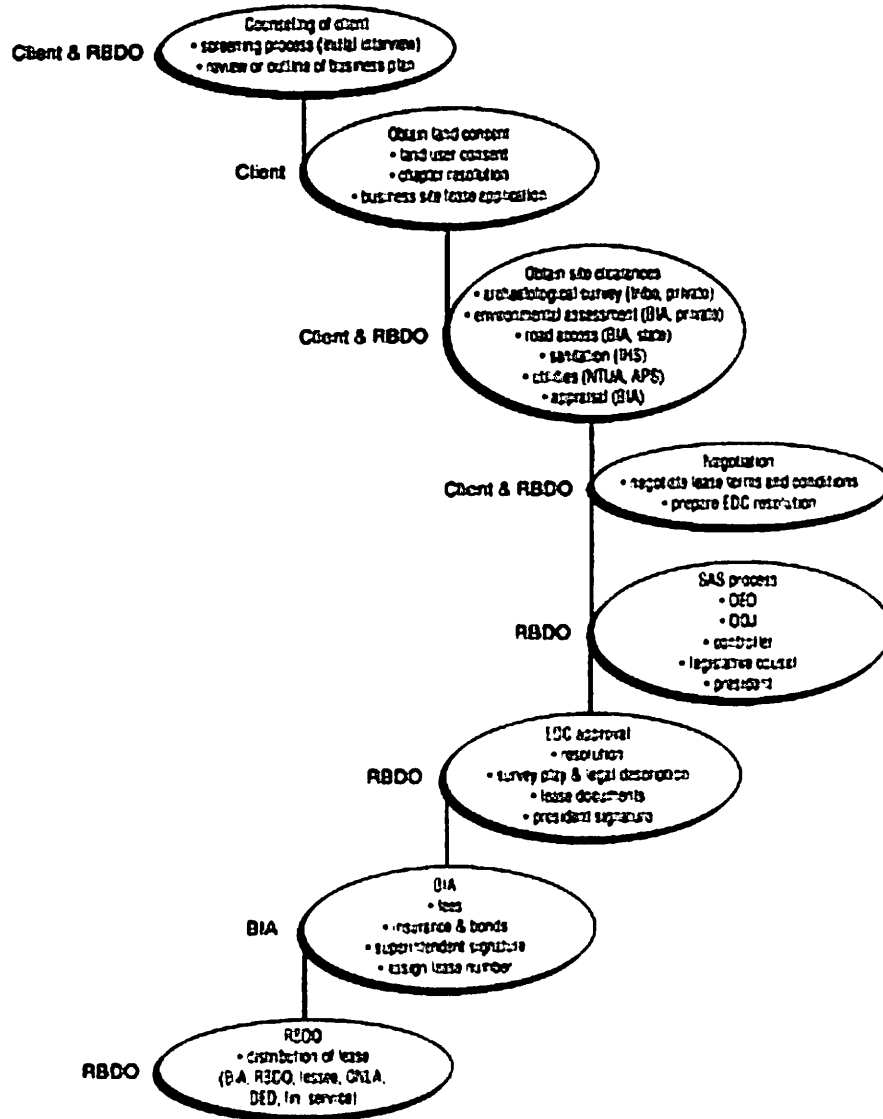


Figure 7.4: Business Site Lease Flow Chart (undated). Navajo Nation Department of Economic Development. Retrieved May 24, 2013, from [www.navajobusiness.com/pdf/DngBus/Leasing/Bus%20Site%20Lease%20Flwchrt.pdf](http://www.navajobusiness.com/pdf/DngBus/Leasing/Bus%20Site%20Lease%20Flwchrt.pdf)

# HOMESITE LEASE FLOW CHART

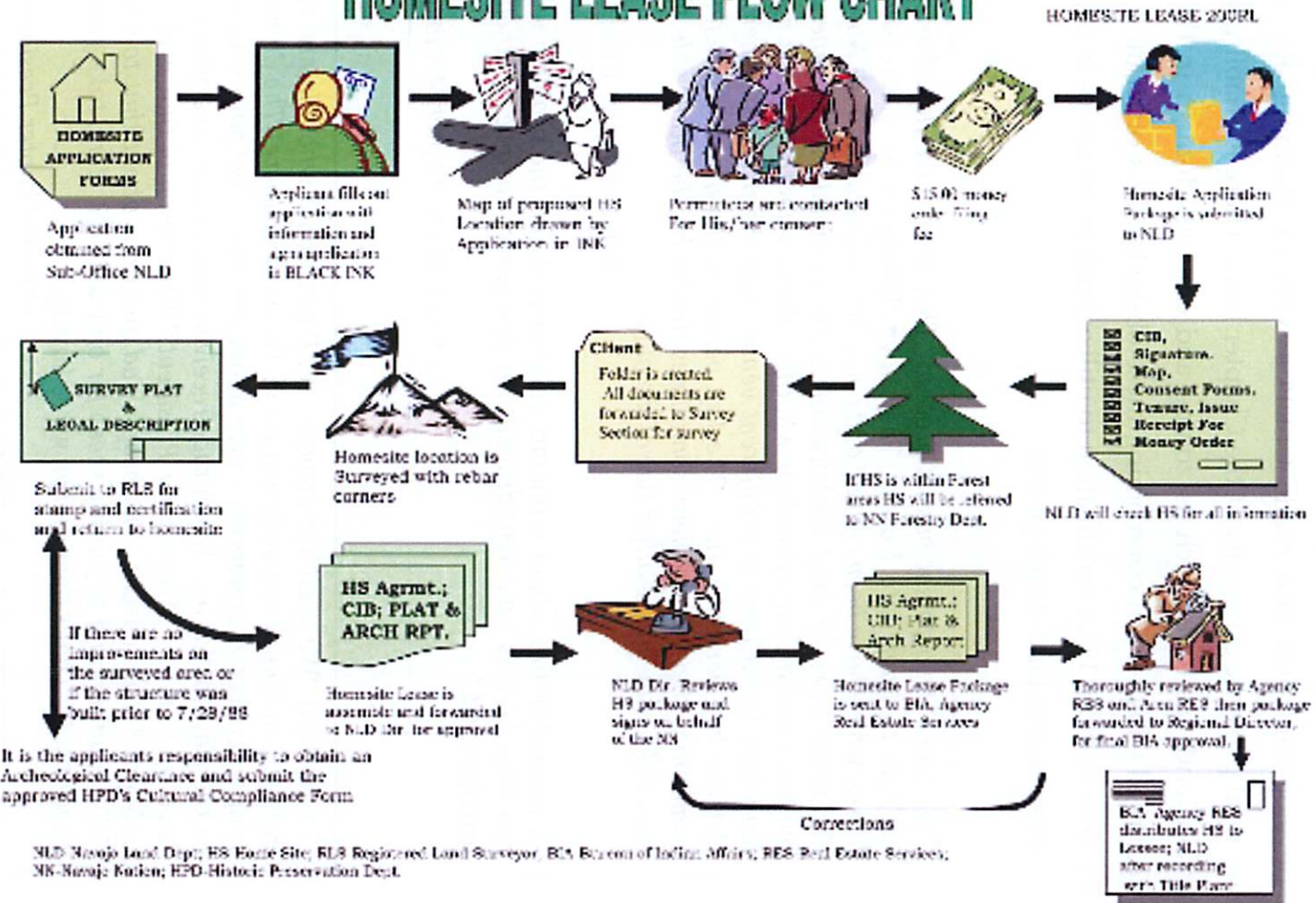


Figure 7.5: Homesite Lease Process, Navajo Nation Land Department. Retrieved May 23, 2013, from www.dinehbikeyah.org/HSL/HS2009L.pdf

The labyrinthine system of departments, each with their own requirements for land development, has also made CLUPCs wary of planning any economic development projects, especially at the Chapter level. There is enabling language for certain land use tools, such as zoning and eminent domain in the LGA to assist certified Chapters in overcoming these obstacles. It is often more difficult for Chapters without LGA certification to utilize built-in processes to cope with a lack of consensus in land development.

*"The Land Department has its process. They even have flowcharts. Let's go to home site leases. They have flowcharts for home site leases, which have been refined and could be easily understood. Now, the other part of land withdrawal is for economic development purposes and or, say, schools or whatnot. There's another...the same flowchart but it goes to a different venue. But the process is there. But the key person is the... The key person is the grazing official. Sometimes they're not there, sometimes they're on the other side of the...politically on the other side of the plan."*

*- Oljato Chapter CLUPC*

*"It is good to talk about economic development, but the problem we run into here is land withdrawal. No one wants to give up their grazing land."*

*- Black Mesa Chapter Member*

*"I told them, 'We need our airport. We'll give you a whole bunch of money.' And boy, everybody was for it. We went up there. The Chinle chapter collected signatures – over about 200 days – we gave it back to the Navajo Nation. When they received their checks, everybody's lined up to me – 'Where's our President?' The reason of that is they only got \$60.00 checks. The people had questions about that to me. 'Where am I going to put my sheep for only \$60.00? Here, take your check back.' That's the problem we're having."*

*- Chinle Chapter President*

It is recommended that zoning and eminent domain be used at all times when land development for economic development or for housing is being initiated. Though the LGA requires Chapters to be certified in order to carry out



zoning and eminent domain, it may be beneficial to examine an amendment that allows Chapters, under direct supervision of the Navajo Nation DCD, to implement these powerful tools in order to leverage CBLUPs. During interviews, Chapters also stated the difficulty with fully implementing eminent domain, especially due to a lack of funding for compensation.

This is an example of how eminent domain can be problematic, and beyond wasting time and resources, can build mistrust in local government, which undermines the spirit of self-determination that the LGA is built upon. A concerted effort by the Navajo Nation government and local Chapter governments must be put forward in order to properly compensate residents for the land they are giving up for the greater good of the community, or the mistrust will hinder development for more years to come. As stated by the Chinle Chapter President, the eminent domain process took about 200 days, over 9 months, and after the checks were distributed, nothing came to fruition, due to an unjust compensation for the land for the airport. This slows down the development process and leads to uncertainty for all stakeholders, including investors in the project, and could be prevented with a more streamlined process.

One tool that streamlines the development process is zoning. Zoning has its origins in the U.S. in the early 1920's (Erickson, 2012). Popularized by the United States Chamber of Commerce under Herbert Hoover and passed as the Standard State Zoning Enabling Act, printed in 1927. Zoning has been delegated to cities and counties as arms of the state, and zoning is now ubiquitous throughout the United States. Zoning clearly defines the proposed future land use on a certain site – for example, commercial zoning typically allows retail and office buildings, while residential allows only apartments or homes. When zoning is in place throughout a community, it is easier for all parties involved in the land development process to understand what the people of that community have envisioned for the future.

It may be beneficial to create a pathway for uncertified Chapters to implement zoning and eminent domain through the LGSCs or through council delegates. Uncertified Chapters could implement the Kayenta zoning model in order to swiftly execute change in the community. The Navajo Nation Council has endorsed this model for Kayenta, and it may be advantageous to consider it

as an alternative to a cumbersome certification process in uncertified Chapters wishing to grow, or as a model for established growth centers in the Navajo Nation. This will allow certain Chapters to flourish and attract the economic development that is needed.

Another important consideration is that of timely development. Chinle Chapter officials stated that many development opportunities were missed in Chinle due to a 3-5 year timeline for land development. This process could be hastened considerably by beginning the environmental and archaeological reviews that are required directly after a land suitability analysis by the CLUPC or Chapter staff. Any sites identified in a Chapter's Community Based Land Use Plans (CBLUPs) as suitable for development should immediately begin an environmental and archaeological review process as well as receive an appropriate zoning (as defined by the Chapter) for the proposed used. This will signal to all stakeholders involved that the Chapter is serious about its plans for that site.

## **7.4 Housing Policy**

### **7.4.1 Introduction**

The Native American Housing and Self-Determination Act of 1996 (NAHASDA) has enabled a more streamlined approach to the funding of public housing in the Navajo Nation through the Department of Housing and Urban Development (HUD). The Navajo Nation has its own separate department for housing – the Navajo Housing Authority (NHA), which was founded May 1, 1963. NHA appropriates funds independently from the Navajo Nation Council and appropriates these funds only for housing and infrastructure related to housing. This agency is vital to the development of adequate and culturally appropriate housing, and will continue to be a large source of funding in the foreseeable future.

Developing a housing section for the Community Based Land Use Plans (CBLUPs) will remain an important task, but there must be a shift away from the

tight focus on housing issues, and a broader scope must be adopted to develop a more comprehensive and effective CBLUP. Stronger analysis, with a focus on needs assessment, should be adopted as a strategy for developing a housing plan that will satisfy the needs of the community and the goals and objectives that have been identified by the community at large. The public participation process, which is covered in another part of these guidelines, will be integral to the formation of goals and objectives for housing, once these are discerned, it will be important to use analysis to justify the need for new housing, or perhaps to focus on the maintenance of the current housing stock. Whatever the housing needs of each Chapter, these should be determined on a case-by-case basis through a combination of analysis and public participation, and should be addressed in the housing section.

#### **7.4.2 Considering Various Needs**

When evaluating current housing stock or planning for new housing, it will be important to consider the needs of different segments of each Chapter. These data will be gathered from many sources through the update process (U.S. Census, Navajo Nation databases, public participation, surveys, Veterans Affairs, and the like), and will be important to take into consideration when planning a new housing venture or in the development of programs to support existing housing stock. Simple projections and formulae can be employed to come to logical conclusions about the future of housing in any community.

The importance of population projection, demographic and socioeconomic (for publicly provided housing) analysis, and citizen input, through surveys and public participation, is paramount to the development of appropriate housing options. For example, if a Chapter has an aging population, it will be important to develop housing options for the elderly, with easy access, less reliance upon automobiles (or perhaps a shuttle instead), and close proximity to services for the elderly. There are many projection methods for population, with a simple trend extrapolation being the most commonly used projection method. Many Chapters told us of a projected population decline, and it will be important to make appropriate housing plans for this, if Chapters are expected to distribute funds in an effective manner. Other methods that are popular among social scientists are

the cohort-component method and the shift-share method. The cohort-component method is covered in further depth in the Evaluations Chapter of this report.

### 7.4.3 Housing Typology

There are three general settlement patterns in the Navajo Nation, and while this is an oversimplified version of actual on-the-ground patterns, it is a good summation of typologies. The three typologies are:

- *Scattered* – single homes on acreage
- *Clustered* – small clan-based clusters
- *Subdivisions* – subdivisions must be master planned, and should be paired with community facilities.

Each of these typologies has its own distinct advantages and disadvantages, as many members of the Navajo Nation have informed us. Scattered housing is preferred by many members of the Navajo Nation, stated to be closest to the traditional way-of-life, but this is expensive to provide infrastructure to, especially utilities, such as waterlines and electricity. Clustered housing, generally based on clans of extended families, alleviates some of the cost-prohibitive features of scattered housing while still allowing for grazing to occur near home-sites, and is not susceptible to the social ills of subdivision style housing. Lastly, subdivision style housing, with curvilinear, planned streets and small lots in a concentrated pattern, is seen as a more efficient way to provide utilities, infrastructure, and housing, but has been associated with social ills such as gang activity and litter.

These typologies all have distinct impacts on the environment, and they should be considered thoughtfully when housing plans are made. An approach focusing on environmental impact and balancing the cost of providing infrastructure with community preferences should be taken.

#### 7.4.4 Housing Plans from NAHASDA Funds

The current Community Based Land Use Plans (CBLUPs) focus heavily on housing issues, and this is primarily because of the direct funding for many of them through NAHASDA. These plans addressed other issues as is required by the Local Governance Act of 1998 (LGA), but often did not link the housing issues to the remaining community needs, which, in some cases, led to disjointed and ineffective CBLUPs. This ineffectiveness, in turn, led to a lack of implementation, which has undermined the planning process in some Chapters, and a lack of faith in the system.

An approach that is more comprehensive may be a remedy to this situation – linking community development to the development of housing options will be imperative for implementation of the CBLUPs. This is in line with the stated objectives of NAHASDA, which are:

- To assist and promote affordable housing activities to develop, maintain, and operate housing in a safe and healthy environment on Indian reservations and in other Indian areas for occupancy by low-income families
- To ensure better access to private mortgage markets for Indian tribes and their members and to promote self-sufficiency of Indian tribes and their members
- To coordinate activities to provide housing for Indian tribes and their members and to promote self-sufficiency of Indian tribes and their members
- To plan for and integrate infrastructure resources for Indian tribes with housing development for Indian tribes
- To promote the development of private capital markets in Indian country and to allow such markets to operate and grow, thereby benefiting Indian communities

(Office of Native American Programs, 2000)

The promotion of affordable housing activities, especially the development maintenance, and operation of safe and healthy housing options should be part of every plan. The integration of housing and infrastructure in a CBLUP is also imperative for properly estimating the cost of providing housing and the appropriate infrastructure and securing funding to do so. In many cases, the CBLUPs have reflected an extremely tight focus on housing, with little care given to other sections, such as community assessment, economic development, and the provision of infrastructure, public facilities and services, and thoroughfare planning. This is a reflection of the limited funding received from NAHASDA through the Office of Navajo Government Development (ONGD).

One Chapter, in particular, has expressed an interest in broadening the scope of the plan. Beclabito Chapter, in their 2011 (updated) CBLUP states:

*“The 2003 land use plan was prepared with a focus on housing due the funding source. The purpose of that plan was to identify land available for the development of affordable housing. A Native American Housing Assistance and Self-Determination (NAHASDA) grant funded the plan under the Office of Navajo Government Development.”*

In addition to this change in their 2011 CBLUP, the Community Land Use Planning Committee expressed in an interview that had expanded their CBLUP from 2003 to 2011 in a conscious effort to include economic development, infrastructure and more (Focus Group Interview, March 19, 2013). This change represents important progress in thinking about planning in Navajo Nation Chapters. A majority of the 22 CBLUPs we evaluated were focused almost entirely upon housing, with a mere mention of other issues. For example, Black Mesa’s 2002 CBLUP investigated only sites for the purpose of housing – land suitability analysis was performed on each of the proposed sites, and housing conditions were examined for the remainder of the Chapter. This narrow focus has led the Chapter to be stuck without even basic infrastructure (Black Mesa CBLUP, 2002). At the facilitated vision session we held in Black Mesa on February 3, 2013, community members stated that roads were their main priority:

*"The roads are our main concern so that we can have access to the services. Even though we have leaders, like school board members that should be here. We need homes for ladies like us that are elderly and can't do a lot of physical work and the only roads are always muddy. We need a senior home. The roads are just really bad. Think about the roads as the main priority. Please!"*

Yet the 2002 CBLUP does not reflect this priority. It will be important in updates to reflect all priorities of the Chapter, and not to avoid economic development for the sake of housing. The development of an implementation plan will also be imperative in the updated CBLUP, as was noted in the visioning session – none of the former CBLUP was implemented.

The Navajo Housing Authority (NHA) has recognized many of the stated problems with the housing implementation policy and has taken steps toward a paradigm shift. The NHA commissioned a new, comprehensive housing plan, recently undertaken by the architecture and planning firm Swaback and Associates.

#### **7.4.5 The Former Bennett Freeze Area**

An area where housing should be a priority is the Former Bennett Freeze Area (FBFA). The FBFA covers over 1.5 million acres in the western portion of the Navajo Nation. The Bennett Freeze prevented all development and even prevented maintenance to existing homes and structures in the area, contributing to poor living conditions and widespread poverty. WH Pacific created a regional plan in 2008 in order to address the planning needs in the FBFA. This regional plan represents one of the first regional plans to be completed for the Navajo Nation.

The FBFA Recovery Plan estimates that repairs alone for housing in the FBFA will cost \$515 million (Former Bennett Freeze Area Recovery Plan, 2008)(**Figure 7.6**). This change must come over time, and the same is true for the rest of the Nation. Analysis of the type of housing and dwelling patterns has been performed in the FBFA, and it is recommended that this analysis be



undertaken in each Chapter, those data should be digitized and used to create a GIS database. These data should be available at both Chapter level and Nation level.

Another exemplary element of the FBFA Recovery Plan is its scope. Regional planning has been largely informal in the Navajo Nation, but this plan acts as a step toward formalizing regionalism in the Nation, the benefits of which are outlined in the regionalism guidelines in this report. Planning regionally in the FBFA led to a more coherent plan for the area as well as a more efficient planning process and economy of scale for infrastructure projects in the area. Planners in the Navajo Nation must learn from this approach, and embrace the successful practices that have been demonstrated in this regional planning effort.

# HOUSE CONDITIONS

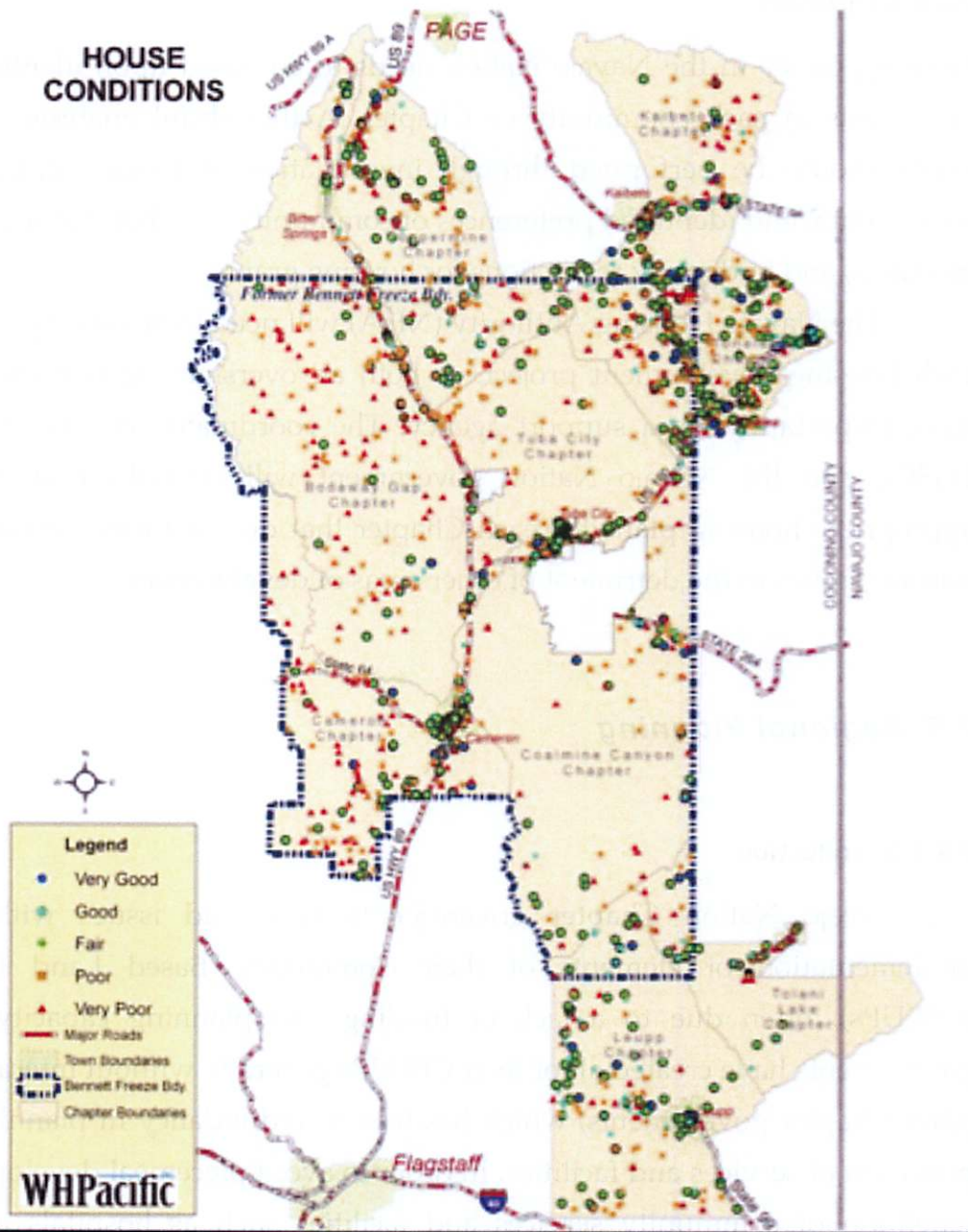


Figure 7.6: Former Bennett Freeze Area Housing Condition Inventory. (Source: Former Bennett Freeze Area Recovery Plan, 2008).

#### **7.4.6 Conclusion**

Housing policy in the Navajo Nation needs to be based upon identified needs and wants in each community or Chapter. A thoughtful analysis of housing needs should be performed through investigation of Census data, collected survey data, and identified preferences of community members from community meetings, and budgetary restrictions for housing grants.

The Navajo Housing Authority (NHA) will need to be directly involved in each housing development project, as both an oversight agency and, perhaps more importantly, as a support agency. The coordinated efforts of Chapters, LGSCs, and the Navajo Nation government will be critical in developing appropriate housing plans for each Chapter that do not focus too narrowly on housing issues to the detriment of other areas of development.

### **7.5 Regional Planning**

#### **7.5.1 Introduction**

The Navajo Nation Chapter governments have had issues with the full implementation of elements of their Community Based Land Use Plans (CBLUPs), often due to a lack of funding and planning capacity. Chapter governments have created all of their CBLUPs generally without interaction with other Chapter governments, which has led to redundancy in planning for the provision of services and facilities. In order to avoid piecemeal development and repetition of community services and facilities such as hospitals and senior centers, it is recommended that a regional approach to planning be adopted in the Navajo Nation. The duplication of major service facilities can be inefficient and ineffective, meaning that funds at the Chapter level and from the Navajo Nation government are wasted, and services may be repeated without need. Many Chapters that were interviewed received the idea of regional planning warmly, and welcomed a collaborative approach to development with other Chapters (Chapter Focus Groups, 3/19 & 3/20/2013).

Navajo families are accustomed to traveling for goods and services, and are not opposed to traveling many hours in order to reach a destination, in fact, it is a common part of the culture (Hale, 2012), and it can be assumed that traveling for services that are offered by the Navajo Nation governments and coalitions of Chapter governments would be an amenable situation. Planners worldwide have embraced regional planning as a solution to efficiently placed land uses, infrastructure, and growth management; this proliferation of a regional approach can be seen by the presence of Councils of Governments (COGs), Metropolitan Planning Organizations (MPOs), Regional Planning Councils (RPCs), and Unified Settlement Planning Organizations (USPOs).

Regional planning has a rich history in the U.S. dating back to the 1920's, with the first large-scale regional plan being published in 1929, by the New York Regional Plan Association (RPA.org, 2013). The RPA still exists today, functioning as a quasi-governmental body whose focus is entirely on the issues revolving around regional planning. Common elements in regional planning include community design, economic development, energy, environmental protection, transportation, infrastructure and housing. Many regions are now considering the concepts of resiliency and adaptation as an integral part of the planning process, especially in the face of increasing frequency of environmental disasters closely correlated with climate change (RPA.org, 2013)(BC First Nations Report, 2009). Often, regional plans involve large multi-municipal planning on certain planning elements, such as transportation, air quality, fundamental geographical and physical formations that cross municipal boundaries such as planning in the Maricopa Association of Governments. This section of the report focuses on the idea of planning based on multiple-Chapter cooperation.

### **7.5.2 Chapter and Local Governance Support Center Focus Group Comments**

In a series of 10 focus groups with Chapter Community Land Use Planning Committees (CLUPCs) and officials, often regionalism was brought up repeatedly, and described as a possible solution to several identified issues in the land use planning and implementation process. Among the most prominent of these issues is the lack of capacity to plan and implement large-scale economic

development projects. The interviews conducted with CLUPC members, Chapter officials, Chapter staff, and Council delegates revealed that some Chapters in the Navajo Nation had embarked upon a regional planning approach, for some planning elements and many support the approach.

During an interview with members of Chinle Chapter government (collectively Chinle Chapter officials, Chinle Chapter staff, Chinle Chapter CLUPC), it was revealed that a regional approach to land use issues was desired and considered important for several regions. For example, a member of the Chinle Chapter government suggested that regionalism was particularly successful in providing services to a larger area than just the local Chapter and cited the success of the regional senior center in Tsaile/Wheatfields Chapter (Interview, 2/23/13), which opened October 24, 2012, after over a decade of planning and construction (Abasta, 2012). The success of this senior center is in its regional focus, attracting seniors from all over Chinle Agency, and its appropriation by the Navajo Nation Council. Another example offered was a regional dental office that is operated out of Many Farms and serves the greater area. Another regional planning force cited during our Visioning Session with Chinle Chapter members was the Regional Business Development Office (RBDO), which operates as a sub-agency of the Navajo Nation Division of Economic Development. While the RBDO operates solely to develop and support Navajo entrepreneurship, the model was one that the Chapter members pointed to for emulation, to develop ties to the Navajo Nation government rather than staying at the Chapter level, in order to garner more authority, especially in business site leasing.

Beclabito Chapter is already engaged in a regional planning effort with an informal coalition of Chapters called the Northwest Regional Compact Chapters, which are the seven Chapters represented by their Council delegate. The LGSC staff has supported this model, as we mention later in this section. There is also support for a movement to regionalism in the planning process from the Local Governance Support Centers (LGSCs) who operate as support to Chapter governments in many facets of their work. The LGSCs also act as conduits for information between the Chapter governments and the Navajo Nation government. This gives the LGSC staff a unique point of view in many issues,

especially when it comes to capacity building, government structure, and the like. One member of the Western Agency stated,

*"This regional concept is getting stronger and stronger... They are beginning to talk about: 'how do we regionalize all the chapters so that we don't have to divvy up the same amount of chapter to 200 people over here versus 2000 people on this side', I really think that it's going to calm down the boundary issues"*

– Western Agency LGSC

*"San Juan County has a Comprehensive Plan that does work for Farmington, Bloomfield, Aztec, for Flora Vista, for Blanco... Yes, it would work. Whether these communities are incorporated or not, they have a comp plan for the entire San Juan County."*

- Eastern Agency LGSC

Another LGSC staff member pointed to the San Juan County Comprehensive Plan as a successful regional comprehensive plan that served communities in the Navajo Nation, and gave his support for the implementation of a regional approach in the Nation. But, it is not at the agency level alone that LGSC staff sees the regional approach taking place. LGSC staff (and Chapter CLUPCs) point to the success of the council delegate as a regional force in planning.

*"We have no choice but to go regional. I see what Dwight Witherspoon's region is beginning to look like. He has the Chinle region... he has that group together, working toward one need, not separate senior citizen centers over here, another center over here. He has the whole five chapters working toward one goal and beginning to push a central government in each division."*

– Chinle Agency LGSC

*"I think a delegate needs to come in – for them to be supportive of what LGSC is doing to the CLUPC. Those are important roles at the Chapter [level]. But they need support of our legislators in order for things to happen. We need their support. We need their funding."*

– Tohatchi Chapter CLUPC

### **7.5.3 Advantages of Regionalism**

Regionalism has distinct advantages in certain situations, especially when resources are limited. The regional plan allows for a more efficient distribution of land uses, leads to economies of scale, enables planning of large-scale economic development, and allows for more efficient use of regional infrastructure. Planning for a region must move toward a comprehensive approach because of its broad scope and the complexities that arise when multiple communities are involved. The Navajo Nation desires a more comprehensive approach, and many Chapters have reflected this desire during the focus groups. Beclabito's 2011 CBLUP expresses the need to move away from a housing-only plan and become more comprehensive in scope, developing a land use plan that integrates several different elements to create a cohesive vision for the Chapter.

The resounding support at both the Chapter and LGSC for a regional approach to planning calls for the development of a model based on the evolving needs of government in the Navajo Nation. The change in 2010 from 88 Council delegates to a manageable 24 would enable planning regions to reflect the Council districts. This change would also take advantage of the pre-existing legislative system for a direct representation of Chapter level planning needs. We highly recommend a move toward a regional approach to planning that implements the thriving council districts. A regional plan would take advantage of integrating natural resources assets with transportation systems for tourism development across Chapters. Major facilities can also be planned for much larger service areas where all Chapters in a region can benefit from the development. Regional plans should be considered through the council delegate structure, but Chapters can come together outside of that framework as well on special projects that are regional in scope.

## **7.6 Recommendations for Updating Chapter Plans**

### **7.6.1 Pre-planning & Community Education**

Preparations must be made for the planning process, preparations that include not only the CLUPC and planner, but also the community. In order for planning to proceed effectively, the community must be educated on the process, which can begin prior to it and should continue throughout. This will lead to a more informed public that is able to provide more relevant input.

Community education can be carried out in a number of ways. Some of the most effective methods are: 1) public workshops, public hearings, public forums; 2) communication with community members about the planning process and desired outcomes. It is recommended to develop a pre-planning strategy, community participation and education plans, and a strategy with clear steps to ensure continuous community engagement. It will be important to include elected officials, community members, and staff in the process for a holistic representation of interests.

### **7.6.2 Community Participation**

Community participation in decision-making is imperative throughout the entire planning process. As discussed in the Community Participation section of this report, decisions made with public support often reach implementation more quickly, because there is consensus built around that decision. Community participation also serves as a tool to build trust between the CLUPC and the community, which is important for all planning endeavors; the community can rely on the CLUPC to be the agent for proposed changes that affect it.

Community participation entails a range of techniques; these should be thoughtfully combined and employed over a period of time in order to improve validity of findings from community participation. Examined in this report are: Visioning, charrettes, SWOT analysis, and community advisory committees.



### **7.6.3 Strategic Planning for implementation**

Chapters currently perform strategic planning throughout the nation in order to fulfill a requirement of the NNOMB; thus they are familiar with the process of creating actionable goals and objectives, assigning them to a particular team or person, and establishing a timeline and priorities for these goals. The strategic planning process could easily be applied to the CBLUPs, which would create a process for dedicating resources to the implementation of goals and objectives for land use planning. Recommended strategic planning methods are 1) the creation of a step-by-step process for carrying out each goal and objective, 2) regularly evaluating ongoing projects in order to identify successful processes for timely completion of future projects, 3) establishing short-term and long-term goals, and 4) prioritizing goals in order to determine order of implementation.

### **7.6.4 Community Assessment Data Gathering and Analysis**

Updating the CBLUPs will require updated data regarding community needs and current conditions. What a community needs and wants are in a state of constant change, and measuring them via a survey during the land use planning process is an opportunity to develop a baseline understanding. Data should be gathered from several different sources, including the Census, which will be necessary for every Chapter, since all of the CBLUPs were created prior to 2010 using Census 2000 data. Often, however, issues pertaining to Chapter-level government do not manifest themselves in a way that is measured by the Census—surveys are therefore useful for supplementing Census data and capturing a more in-depth understanding of community development needs. A one-time survey will not be sufficient for this, and it is recommended that surveys be given periodically. Data can also be gathered at public meetings, workshops, charrettes, and CLUPC meetings. These data can be utilized for the formulation of goals and objectives to address certain issues directly.

Specific projections should be made for population, housing, infrastructure needs, and business development. The projections should be based upon current and past population growth in the Navajo Nation, and an accepted

method of projection such as shift-share or cohort-component should be used. The data used to characterize the current conditions of each Chapter will vary, but it is important to have a modicum of consistency. At a minimum, population data from the current US Census should be included, housing stock and condition should be taken from the Census, and surveys should explore community needs, such as community facilities and services. If regional projects are being planned for, these surveys should stretch beyond the Chapter boundaries and begin to assess the region that is being planned for, and questions about specific opinions relating to the proposed project should be included.

#### **7.6.5 Land-suitability analysis (using GIS)**

Land-suitability analysis has been performed to some extent in all of the previous CBLUPs, but it has often been insufficient and inaccurate, leading to problems with the implementation of land use plans and wasting valuable resources along the way. High-quality land-suitability analysis will be a vital component of any proposed projects in the future of Navajo Nation Chapter. This report details several methods.

Land-suitability analysis should be the *first* tool used in the selection of appropriate sites for certain development. In current Chapter CBLUPs, sites were selected by CLUPC members based upon local knowledge of the area and educated guesses about soils, flora and fauna, floodways, proximity to roadways and utilities, and the like. These data should be entered into a geographic information system (GIS), analyzed systematically, and results should be prioritized by feasibility, cost, and, lastly, community preference. An information-layering approach, as described in the land-suitability analysis section of this report, should be taken in order to maximize the benefits of data collection and analysis.

#### **7.6.6 Land-Use Mapping**

Land-use mapping in the current CBLUPs has been completed inconsistently and often created without the use of GIS. This does not allow for future analysis of

data presented in map format. The use of GIS allows for convenient and immediate reference to any embedded geodata in the map, analysis of these data, and the ability to layer multiple datasets in order to visualize any potential land use conflicts, proposed projects, and other land use data.

Mapping is also a highly effective form of communication—a rich amount of information can be displayed on a single map. Maps in the CBLUP should contain proposed development, zoning, and proposed areas for land withdrawal, in addition to the elements included in the land-suitability analysis. Maps should also convey the appropriate infrastructure, roads, community facilities, and any information relevant to proposed development.

#### **7.6.7 Certification and AFOG**

Certification under the Local Governance Act of 1998 holds many advantages and should be pursued. Among these advantages are greater funding, more autonomy from the Navajo Nation government, the ability to appoint members to the CLUPC, and perhaps most importantly, the ability to form an Alternative Form of Government (AFOG). An AFOG can enable the Chapter government to form a stronger local governing structure and create policy without the need for a quorum of 25 Chapter members present for decision-making. Empowering the local government in this way will enable swift decision-making.

#### **7.6.8 Land Stewardship**

Currently, CBLUPs focus on development of certain areas within the Chapter, but neglect rural and undeveloped areas. It is important to plan for all areas of the Chapter within the CBLUPs. Designating open space, land conservation areas, and integrated resource management plans will ensure the sustainability of the undeveloped portions of Chapters. Grazing rights holders may need to be consulted in order to develop a rangeland management program that prevents overgrazing, a problem commonly addressed in current CBLUPs.

A narrow focus on housing has been detrimental to broader economic development and land stewardship, and it is recommended that updates include

plans for the sustainability of natural resources in the Navajo Nation. An analysis of the location of grazing permits and should be mapped in the CBLUPs in order to begin land restoration on overgrazed areas, and in order to expedite the land withdrawal process.

#### **7.6.9 Land Withdrawal & Zoning**

Land withdrawal has been cited by a number of CLUPC and LGSC members as a significant barrier to development in the Navajo Nation. Often, when land is identified for withdrawal, grazing rights holders are able to slow or completely stop the process by staking claim to the proposed withdrawal area. Development of a consensus through community participation may enable a more swift land withdrawal process by creating a coalition of community members who support the proposed withdrawal and development of a certain piece of land. Once consensus is developed and the CBLUP approved, land withdrawal and zoning processes should begin. Expediting land withdrawal is a pivotal step in preparing the land for potential development, because withdrawn and zoned land can be acted upon much more quickly.

The relationship of designated areas for commercial development with land withdrawal should be discussed with Chapters and the NNDOJ, NNDCD, and the Navajo Nation Land Department. Implementation plans for next steps for these lands should be inserted into every CBLUP in order to clarify the required process for completion of objectives. In order to zone land, an ordinance must be passed by the CBLUP, and it may be advantageous to develop a process by which zoning ordinances can be passed contingent upon the passage of a CBLUP, allowing for automatic withdrawal and zoning and the speedy preparation of areas for development.

#### **7.6.10 Housing Policy & Community Development**

The Navajo Housing Authority (NHA) currently directs housing policy, which has been problematic because it has not integrated housing into a planning context. The separation of housing from land use and community planning has

led to a number of problems in the community, according to interviews with Navajo Nation leadership. Perceived social ills have accompanied the development of subdivision-style housing by the NHA, causing the homes to be abandoned and therefore quickly deteriorate, exacerbating criminal activity and leaving the neighborhoods to deteriorate. The inclusion of job centers, community activities, and mixed land uses within these master-planned communities should be embraced, because having people present at all hours of the day will help reduce criminal activity and nurture community.

Integrating housing with economic development is an important consideration, as well. As it stands, housing is the sole focus of many CBLUPs, often to the detriment of other types of development. Planning for whole communities, with services, housing, infrastructure, and community facilities is vital to the success of comprehensive land use planning in the Navajo Nation.

#### **7.6.11 Economic/Commercial Development & Capacity-Building**

Economic and commercial development is vital to the resilience of a region, and must be made a priority in the updated CBLUPs. A vibrant mix of businesses and employment are essential to a functioning economy and create a tax base that is less vulnerable to economic shocks. Unemployment on reservations is more than double that of the rest of America, and high unemployment will persist along with a welfare-dependent population if diverse employment opportunities are not developed. Linking economic and commercial development to land use planning is vital to the success of economic development in the Navajo Nation. The heightened importance of this nexus is due to the trust relationship that the Navajo Nation has with the federal government—land withdrawal is essential to the feasibility of economic development projects.

It is recommended to adopt a regional, land-use based approach to economic development. The regional planning approach will be advantageous in handling larger projects and infrastructure development. When necessary, coalitions of Chapters could be formed to work on certain projects, and costs, time, and taxes could be shared according to need.

Increasing capacity is vital to the success of planning, and is slowed by an election cycle that regularly replaces the knowledgeable figures on the CLUPC. The embedded knowledge in the CLUPC membership should be taken advantage of with the creation of an advisory committee consisting of volunteer CLUPC members and other community members with planning knowledge. Another strategy to build residual capacity is to hire a planner at each Agency. This planner can act as a regional planner, creating maps and acting as an agent for the Chapters to communicate with the federal government. Lastly, in order to continue to build capacity and expertise, funding must be increased. Expertise in integrated land suitability analysis with GIS, projections (population, housing, community services and infrastructure) for land uses, and implementation should be developed. Planners should be specifically trained in these three areas and in order to be cost effective, and they should be hired at the regional level.

#### **7.6.12 Regional Planning**

Regional planning will be an essential tool for economic development and large-scale infrastructure projects. The principles of regional planning should be institutionalized by the Navajo Nation in order to develop inter-Chapter relationships, strengthen ties between Chapters and the legislative branch of the Navajo Nation, and to more effectively implement certain projects.

A project-based approach to regional planning may be the most effective form of regional planning, allowing Chapters to form coalitions in order to disperse responsibilities and benefits from projects. A more permanent approach to forming regional planning structures would be through the Council delegate framework, allowing each of the 22 delegates to interact directly with Chapter government on land use planning issues.

Funding for land use planning purposes should also be looked at at the regional level. The current system of funding planning at each Chapter is inefficient. The funding mechanisms should be discussed and consensus formed with the Agencies, Chapters, and Council delegates. Effective funding will be essential to the implementation of planning at all levels.

### **7.6.13 Conclusion**

This report is an important review of land use planning in the Navajo Nation at the Chapter level. Updating Chapter land use plans based on these recommendations will not only enhance the planning process but will strengthen land management practices and administration and support community resiliency.

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## Appendix II: Summary of Chapter Survey Content

Chapter Name	Survey Y/N	Nature of survey	Analysis of survey data Y/N	Presentation of survey data
Baca	Y	Employment,	Y	Y
Beclabito	N	NA	NA	NA
Bird Springs	N	NA	NA	NA
Black Mesa	Y	Housing data	N	Y
Blue Gap	N	NA	NA	NA
Bodaway Gap	Y	Housing, employment	N	Y
Bread Springs	N	NA	NA	NA
Chilchinbeto	Y	Employment, housing (condition and type), grazing, family needs	Y	Y
Chinle	Y	unknown	unknown	N
Church Rock	Y	Employment,	Y	Y
Dilkon	Y	Employment, housing (condition and type), grazing, housing preference	Y	Y
Chapter Name	Survey Y/N	Nature of survey	Analysis of survey data Y/N	Presentation of survey data
Fort Defiance	N	NA	NA	NA
Hard Rock	N	NA	NA	NA
Kinlichee	N	NA	NA	NA
Lake Valley	N	NA	NA	NA
Leupp	N	NA	NA	NA
Little Water	N	NA	NA	NA
Many Farms	N	NA	NA	NA
Nahat'a'dzil	Y	Economic development, housing, grazing, open space preservation	Y	Y
Navajo Mountain	Y	unknown	NA	NA
Red Lake	Y	Housing,	N	Y
San Juan	N	NA	NA	NA
Sanostee	Y	Demographics, household income, employment	Y	Y
Shiprock	Y	Housing,	Y	Y
Tolani Lake	Y	Housing data	Y	Y
Whitehorse Lake	Y	Employment,	Y	Y

Source: 22 Community Based Land Use Plans

## Appendix III: Chinle Chapter Community Survey Instrument

This survey is sponsored by the Chinle Chapter Government and the Chinle Chapter Officials. We appreciate your help. For your confidentiality do not put your name on the survey. Please check and/or rate the answers to each question.

### SERVICES

1. How would you rate each of the following services in the Chinle Chapter area?

(EXCELLENT, GOOD, POOR, DON'T KNOW)

	EXC	GOOD	POOR	DON'T KNOW
a. Law enforcement.. .....	---	---	---	---
b. Fire protection.....	---	---	---	---
c. Ambulance service.....	---	---	---	---
d. Emergency 911.....	---	---	---	---
e. Mental health service.....	---	---	---	---
f. Garbage collection.....	---	---	---	---
g. Roads/ highways/streets.....	---	---	---	---
h. Snow removal.....	---	---	---	---
i. Parks and recreation.....	---	---	---	---
j. Animal control.....	---	---	---	---
k. Sidewalks/people safety.....	---	---	---	---
l. Storm drainage.....	---	---	---	---
m. Street lighting.....	---	---	---	---
n. Navajo Transit bus .....	---	---	---	---
o. Water quality .....	---	---	---	---
p. Sewer/waste water .....	---	---	---	---

**2. The Chinle Police District of the Navajo Nation performs a variety of services. How do you rate the effectiveness of the following?  
(EXCELLENT, GOOD, POOR, DON'T KNOW)**

	EXC	GOOD	POOR	DON'T KNOW
a. traffic speed control.....	---	---	---	---
b. other traffic laws.....	---	---	---	---
c. parking control.....	---	---	---	---
d. visible residential patrol...	---	---	---	---
e. school safety.....	---	---	---	---
f. neighborhood watch.....	---	---	---	---
g. narcotics enforcement.....	---	---	---	---
h. gang control.....	---	---	---	---

**4. How safe do you feel in your neighborhood during the:**

	SAFE	UNSAFE	UNDECIDED
a. day.....	---	---	---
b. night .....	---	---	---

**5. Which, if any, are problems in your neighborhood?**

	YES	NO	DON'T KNOW
a. Vacant lots.....	---	---	---
b. Condition of houses.....	---	---	---
c. Cost of housing.....	---	---	---
d. Vandalism.....	---	---	---
e. Burglaries.....	---	---	---
f. Recreational drug use....	---	---	---
g. Gangs.....	---	---	---
h. No street parking.....	---	---	---
i. Other .....	---	---	---

(please list \_\_\_\_\_)

**6. Please provide an answer for the following methods to finance improvements in the Chinle Chapter area.**

	YES	NO	DON'T KNOW
a. User/service fees.....	___	___	___
b. Sales tax .....	___	___	___
c. Property tax.....	___	___	___
d. Community fund raisers..	___	___	___
e. Other .....	___	___	___
(Please list _____)			

**7. Below is a list of services that usually require taxes for maintenance and construction. Would you be willing to pay taxes if you knew the money would be spent in the Chinle Chapter area for that reason?**

	YES	NO	DON'T KNOW
a. To improve fire protection.....	___	___	___
b. To improve police protection.....	___	___	___
c. To improve ambulance service....	___	___	___
d. To improve streets and roads.....	___	___	___
e. To improve street lighting.....	___	___	___
f. To improve sidewalks.....	___	___	___
g. To improve curb and gutter.....	___	___	___
h. To provide additional parks.....	___	___	___
i. To provide fairgrounds.....	___	___	___
j. To provide recreation facilities....	___	___	___
k. To expand and improve storm & ground water drainage system..	___	___	___
l. Other (List _____)...	___	___	___

**LOCAL GOVERNANCE**

**8. Rate the effectiveness of each of the following in meeting the Chinle community needs?**

	EXC	GOOD	POOR	DON'T KNOW
a. Navajo Nation Government...	---	---	---	---
b. Chinle Government.....	---	---	---	---
c. State Government.....	---	---	---	---
d. BIA.....	---	---	---	---
e. County Government .....	---	---	---	---

**9. Within the past 12 months, how would you rate your experience in working with the following levels of Government?**

	EXC	GOOD	POOR	NO CONTACT
a. Navajo Nation Government.....	---	---	---	---
b. Chinle Chapter Officials .....	---	---	---	---
c. County Government .....	---	---	---	---
d. State Government .....	---	---	---	---
e. BIA .....	---	---	---	---

**10. Please rank your preferred type of governance for the Chinle Community. Rank these by placing a 1 next to your top choice, a 2 by your next choice, and a 3 by your third choice. If you use the "other" category, rank it 1 through 3. (Choose three, then prioritize 1 through 3)**

**EXAMPLE**

a. Chapter Council - President.....	---	a. Chapter Council - President.....	<u>3</u>
b. Commission - Manager.....	---	b. Commission - Manager.....	<u>2</u>
c. Council of Nat'aa.....	---	c. Council of Nat'aa.....	<u>1</u>
e. Other .....	---	(List .....	)

**11. Would you participate in a recycling program? YES NO DON'T KNOW**

-----

**12. How would you rate the enforcement of the following:**

	EXC	GOOD	POOR	DON'T KNOW
a. zoning regulations .....	___	___	___	___
b. home business permits/regulations..	___	___	___	___
c. grazing permit fees.....	___	___	___	___
d. land and livestock management .....	___	___	___	___
e. speeding.....	___	___	___	___
f. littering/trash dumping.....	___	___	___	___

**13. From the issues listed below, choose the top three that you feel the Council Delegate and Chinle Chapter Officials should address during the next year. Rank these by placing a 1 next to your top priority, a 2 by your next priority, and a 3 by your 3<sup>rd</sup> priority. (Choose three, then prioritize 1 through 3)**

**EXAMPLE**

a. Develop parks and trails..... ___	a. Develop parks and trails..... <u>3</u>
b. Install/repair sidewalks..... ___	b. Install/repair sidewalks..... ___
c. Install street lights..... ___	c. Install street lights..... <u>2</u>
d. Pedestrian safety near schools... ___	d. Pedestrian safety near schools... ___
e. Repair streets with drainage problems ___	e. Repair streets with drainage problems ___
f. Speeding..... ___	f. Speeding..... <u>1</u>
g. Enforcing regulations..... ___	g. Enforcing regulations..... ___
h. Economic Development ..... ___	h. Economic Development ..... ___
i. Other ..... ___ (Please Specify _____)	



## PARKS AND RECREATION

14. Which of the following recreation services would you like to see in the Chinle Chapter area? Rate by numbers 1-3, 1=More Important, 2=Less Important, 3=Not Important. (Choose three, then prioritize 1 through 3) (SEE EXAMPLE ABOVE)

- a. Community parks..... \_\_\_
- c. Baseball..... \_\_\_
- d. Track facilities \_\_\_
- e. Tennis..... \_\_\_
- f. Practice gyms... \_\_\_
- g. Equestrian paths \_\_\_
- h. Volleyball..... \_\_\_
- i. Ice skating..... \_\_\_
- j. Picnic areas.... \_\_\_
- k. Soccer..... \_\_\_
- l. Football..... \_\_\_
- m. Hockey..... \_\_\_
- n. Other \_\_\_\_\_

15. Do you have access to the Internet?..... \_\_\_ Yes \_\_\_ No

IF YES, do you access the internet through:

- |                                   | YES | NO  |
|-----------------------------------|-----|-----|
| a. a computer in your home....    | ___ | ___ |
| b. a computer at your work.....   | ___ | ___ |
| c. a computer at the library..... | ___ | ___ |
| d. other ( _____ )                | ___ | ___ |

**THANK YOU FOR YOUR VALUABLE INPUT!**

# Appendix IV: NAHASDA Community Assessment Instrument

Exhibit 2.9.1. **NAHASDA Chapter Land Use Plan Project**  
**Phase 1-Community Assessment** No: \_\_\_\_\_

**Survey Instrument- Shiprock** Date: \_\_\_\_\_

Interviewer: \_\_\_\_\_ Location of Residence: \_\_\_\_\_

No.	AGE	M	F	TRIBE	RACE	EDUC.	IN-SCHOOL	VETERAN Y N	EMPLOYED Y N	OCCUPATION/ SKILLS	REGIS. N S	CHAPTER
1.												
2.												
3.												
4.												
5.												
6.												
7.												
8.												
9.												
10.												

NO.	AGE	M	F	CEN. Y N	EDUC.	IN-SCH.	VETERAN Y N	E.M.P Y N	OCCUP. SKILLS	LIVE WHERE	REGIS N S	CHAPTER
1.												
2.												
3.												
4.												

- A. Where employed? \_\_\_\_\_ B. How long? \_\_\_\_\_  
 C. Total household annual income? \_\_\_\_\_ D. Source of income? \_\_\_\_\_  
 E. Type of home? \_\_\_\_\_ F. Year built? \_\_\_\_\_ G. Own or rent? \_\_\_\_\_  
 H. Type of exterior wall? \_\_\_\_\_ I. Problems with dwelling? \_\_\_\_\_  
 J. Electricity? \_\_\_\_\_ K. Water? \_\_\_\_\_ L. Sewer? \_\_\_\_\_ M. Gas? \_\_\_\_\_ N. Phone? \_\_\_\_\_  
 O. Grazing permit? \_\_\_\_\_ P. Land use permit? \_\_\_\_\_ Q. How many vehicles? \_\_\_\_\_  
 R. Where does family buy food? \_\_\_\_\_  
 S. Where does family buy gas? \_\_\_\_\_  
 T. Where does family buy clothes? \_\_\_\_\_  
 U. Where does family buy vehicles? \_\_\_\_\_  
 V. Where does family go for medical care? \_\_\_\_\_  
 W. Do family members attend Chapter meetings? \_\_\_\_\_ X. Civic organizations? \_\_\_\_\_  
 Y. If you were to get a new house, where would you want it? \_\_\_\_\_  
 Z. What do you feel are your greatest needs? \_\_\_\_\_

NOTES: \_\_\_\_\_  
 \_\_\_\_\_

# Appendix V: Torreon/Star Lake Community Survey Instrument

## 5.0 Torreon/Star Lake Community Survey

Torreón Chapter has received a grant to create an economic development plan to guide our efforts to make our community a better place to live and work. We need participation from our residents to help guide the direction we pursue for our plan. Please help us by filling out this survey.

	A. Yes	B. No	C. Neutral/ Don't Know	Totals	% Yes	% No	% Neutral
1. Torreón should focus on developing local arts or agricultural cooperatives.	40	4	3	47	85%	9%	6%
2. Torreón should actively seek outside manufacturing and/or mining industries.	32	10	5	47	68%	21%	11%
3. Torreón has enough land set aside for commercial and industrial uses.	18	5	24	47	38%	11%	51%
4. Torreón should develop a zoning ordinance to ensure and enforce compatible land uses and guard against incompatible ones.	29	2	15	46	63%	4%	33%
5. The Navajo Nation should make business start-up requirements easier and quicker.	40	0	7	47	85%	0%	15%
6. What infrastructure improvements do you think would improve economic development for Torreón?							
6.1 More Paved Streets	45	1	0	46	98%	2%	0%
6.2 Water/Sewer	47	0	0	47	100%	0%	0%
6.3 Telephone Service	43	2	1	46	93%	4%	2%
6.4 Internet Service	43	1	3	47	91%	2%	6%
6.5 Trash/Litter Control	46	0	1	47	98%	0%	2%

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Torreón Chapter has received a grant to create an economic development plan to guide our efforts to make our community a better place to live and work. We need participation from our residents to help guide the direction we pursue for our plan. Please help us by filling out this survey.

	A. Yes	B. No	C. Neutral/ Don't Know	Totals	% Yes	% No	% Neutral
1. Torreón should focus on developing local arts or agricultural cooperatives.	40	4	3	47	85%	9%	6%
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4. Torreón should develop a zoning ordinance to ensure and enforce compatible land uses and guard against incompatible ones.	29	2	15	46	63%	4%	33%
5. The Navajo Nation should make business start-up requirements easier and quicker.	40	0	7	47	85%	0%	15%
6. What infrastructure improvements do you think would improve economic development for Torreón?							
6.1 More Paved Streets	45	1	0	46	98%	2%	0%
6.2 Water/Sewer	47	0	0	47	100%	0%	0%
6.3 Telephone Service	43	2	1	46	93%	4%	2%
6.4 Internet Service	43	1	3	47	91%	2%	6%
6.5 Trash/Litter Control	46	0	1	47	98%	0%	2%

## **Appendix VI: Burnham Chapter Community Survey Results**

### **2.0 The Burnham Survey: What the Community Tells Us**

During the fall of 2002, ARC conducted a survey of the Burnham Chapter to gain information about community members, their lives and living conditions and their opinions on what is needed to improve the quality of life in Burnham. 317 surveys were completed and analyzed. This number reflects approximately 57% of the community's households as reported in the 2000 Census, which lists 559 occupied year-round houses.

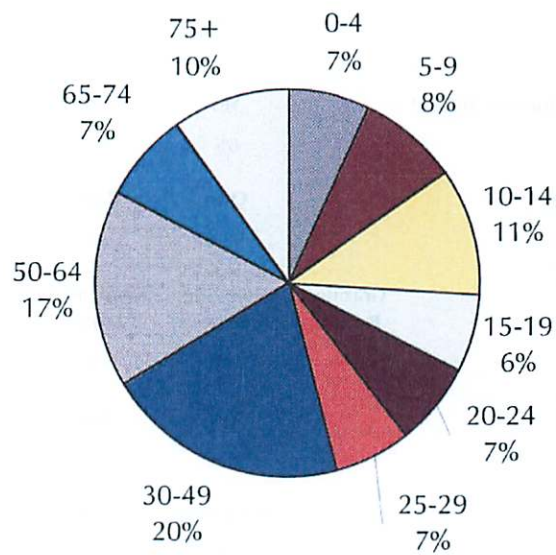
#### **The Surveyed Households: Demographics**

Within the surveyed households, there were a total of 1009 household members. The average number of people per household was 3.18. According to the 2000 Census, the average number of people per household was 3.41.

- **Age of Household Members**

Forty-six percent of the household members within the surveyed households were under the age of 20. Thirty-seven percent were between the ages of 20 and 64, while the remaining 17% were 65 and older.

## Burnham Chapter Community Survey: Ages of Individuals in Participating Families



## Burnham Housing Conditions

Type of Structure	Frame	Stone	Block	Adobe
	43%	20%	9%	0%
	Hogan	Mobile Home	Other	
	2%	17%	10%	
Structure Built By	NHA	NHS	BIA	
	4%	13%	4%	
	Self-built	Mobile Home	Other	
	57%	4%	17%	
Waiting List for New House?		Yes	No	
		8%	92%	
Owner Status		Own	Rent	
		98%	2%	
	Grazing Permit	Homesite Lease	Residential Lease	
	42%	16%	4%	
Surveyed?		Yes	No	
		48%	52%	
Land Status		Tribal Trust	Other	
		99%	1%	
House Condition Component	Good	Fair	Poor	
Foundation	50%	39%	11%	
Floor	43%	40%	17%	
Roof	41%	42%	17%	
Walls	52%	40%	8%	
Electrical	73%	25%	3%	
Plumbing	38%	41%	21%	
Heating/Cooling	21%	68%	11%	

## Burnham Utilities

<b>Sources of Heat?</b>	<b>Electric</b>	<b>LP Gas</b>	<b>Natural Gas</b>
	18%	8%	2%
	<b>Wood</b>	<b>Coal</b>	<b>Other</b>
	36%	34%	2%
<b>Sources of Water?</b>	<b>Water line</b>	<b>Cistern</b>	<b>Haul-in</b>
	20%	2%	76%
	<b>Windmill</b>	<b>Other</b>	
	1%	1%	
<b>Do you pay for water?</b>		<b>Yes</b>	<b>No</b>
		80%	20%
<b>Source of Electricity</b>	<b>Power Co.</b>	<b>Solar</b>	<b>Other</b>
	54%	1%	45%
<b>Who installed your electric system?</b>	<b>Certified Electrician</b>	<b>Power Company</b>	<b>Other</b>
	70%	11%	18%
<b>Complete Plumbing?</b>	<b>Kitchen</b>	<b>Pump</b>	<b>Bathroom</b>
	36%	5%	28%
	<b>Privy</b>	<b>Other</b>	
	11%	20%	



## Use of Chapter House

Do you go to the Chapter House?	Yes	No		
	93%	7%		
Why do you go to the Chapter House?	Senior programs	Youth programs	Social Services	Chapter Meetings
	12%	1%	4%	31%
	Vote	Social events	Project Planning	Veterans Group
	30%	12%	3%	1%
	To Use a Computer	Other		
	3%	3%		

## LGA and Land Use Planning

Are you familiar with the LGA?	Yes	No
	16.30%	83.70%
Are you familiar with the land use planning process?	Yes	No
	17%	83%

## Burnham Socio-economics

### Education

How much education has this person completed?

Some School	Attended High School	HS Diploma or GED	Some College	Technical School	
31%	23%	20%	9%	3%	
Military Training	Certificate	Associates	Bachelors	Master's	Doctorate
4%	2%	6%	0%	2%	0%

### Employment

Are you employed?	Employed	Unemployed	Self-employed	Retired
	38%	29%	9%	23%
In what community are you employed?	Gallup	Farmington	Shiprock	Bloomfield
	2%	42%	4%	6%
	Crownpoint	Newcomb	Lake Valley	Fruitland
	2%	6%	2%	8%
	Chapter	Other		
	13%	17%		
Household Income	\$0-\$15K	\$15K-\$20K	\$20K-\$25K	\$25K-\$30K
What is your total household income?	53%	10%	23%	3%
	\$30K-\$40K	\$40K-\$50K	\$50K+	
	3%	1%	6%	

## Burnham Shopping/Services

	Gallup	Farmington	Albuquerque	:
Where does your family buy food?	0%	83%	0%	
Where does your family buy gas?	1%	79%	0%	
Where does your family buy clothes	3%	86%	3%	
Where does your family buy vehicles?	2%	84%	3%	
Where does your family get medical care?	0%	38%	2%	

	Newcomb	Crownpoint	Other
Where does your family buy food?	5%	0%	3%
Where does your family buy gas?	12%	1%	2%
Where does your family buy clothes	0%	0%	7%
Where does your family buy vehicles?	0%	0%	10%
Where does your family get medical care?	0%	2%	10%

## Burnham Grazing Issues

Do you graze livestock?	Yes	No
	59%	41%
Do you haul water for your livestock?	Yes	No
	69%	31%
What is the condition of the range that you use for livestock?	Poor	Fair
	7%	67%
	Good	Excellent
	25%	2%

## Appendix VII: Dilkon Chapter Land Use Plan Survey Instrument

### DILKON CHAPTER LAND USE PLAN SURVEY FOR DILKON RESIDENTS AND DILKON CHAPTER MEMBERS ONLY

Please take a few minutes to fill out this housing survey. It will be used to help direct the land planning process in the Dilkon Chapter. Only one survey should be filled out per household. The survey is due back to the Chapter House no later than Friday, January 19, 2001.  
**THIS IS NOT THE CENSUS**

- 1) Are you or anyone in your home a member of the Dilkon Chapter? Yes No
- 2) Do you live in the Dilkon Chapter? Yes No If no, Please skip to Question 18
- 3) Which of the following does your home currently have:
- |                     |        |                      |        |
|---------------------|--------|----------------------|--------|
| Electricity         | Yes No | Septic System        | Yes No |
| Gas                 | Yes No | Cesspool/Sewage Pond | Yes No |
| Land Telephone Line | Yes No | Outhouse             | Yes No |
| Cellular Telephone  | Yes No | Heating – Electric   | Yes No |
| Indoor Plumbing     | Yes No | Heating – Gas        | Yes No |
| Indoor Hot Water    | Yes No | Cooling              | Yes No |
- 4) What type of home do you live in? (circle one)  
 House    Mobile Home    Hogon/Octagon    Apartment    Other \_\_\_\_\_
- 5) What is the condition of your home? (circle one)    Very Good    Adequate    Sub-Standard
- 6) Where is your home located in the Dilkon Chapter? (circle one)  
 Grazing Land    Homesite Lease    Mobile Home Park    Subdivision    Apartment    Other \_\_\_\_\_
- 7) In what year was your home built? \_\_\_\_\_    \_\_\_ Don't Know
- 8) Which of the following best describes your household's total annual income from all sources?  
 \_\_\_ Less than \$5,000                      \_\_\_ \$15,000 to \$19,999                      \_\_\_ \$30,000 to \$34,999  
 \_\_\_ \$5,000 to \$9,999                      \_\_\_ \$20,000 to \$24,999                      \_\_\_ \$35,000 or More  
 \_\_\_ \$10,000 to \$14,999                      \_\_\_ \$25,000 to \$29,999
- 9) Do you consider your home to be overcrowded? Yes No
- 10) Do you or someone in your household:  
 \_\_\_ Pay a mortgage on your home                      \_\_\_ Own your home outright  
 \_\_\_ Pay rent for your home
- 11a) If given the choice between clustered housing (such as an NHA subdivision) or scattered housing, which would you prefer? (circle one)  
 Clustered    Scattered    Other (please specify) \_\_\_\_\_
- 11b) Why? \_\_\_\_\_

(OVER)

## ***Appendix VIII: Summaries of 18 Land Use Plans in Indian Country***

### **Bois Forte Band of Chippewa Indians**

#### **Comprehensive Plan Bois Forte, Minnesota 2010**

##### Details

3068 Citizens

Bois Fort, Minnesota

Koochiching and St. Louis Counties, Minnesota

##### Summary

Bois Forte, or “strong wood”, was the French name given to the Indians living in the densest forests of what is now extreme northern Minnesota. The history is referenced from the Bois Forte website at [www.boisforte.com](http://www.boisforte.com). The Bois Forte Band of Ojibwe (also referred to as Chippewa) has lived in northern Minnesota for centuries, but they did not originate there. The people journeyed from the east coast up the Saint Lawrence River, around the Great Lakes and followed rivers and lakes inland.

The Bois Forte Comprehensive Plan is intended to provide a road map for growth, development, redevelopment and preservation within the Tribal area. The fundamental difference between a comprehensive land use plan and zoning ordinance is the word... policy. A comprehensive plan provides policies for land use decisions within Bois Forte. This “higher-elevated” look at land uses is based upon the best interests of the Tribe. A zoning ordinance is intended to provide a detailed framework for the policies described herein.

Bois Forte is made up of six primary land planning areas. These include: Nett Lake, Vermilion, Sugar Bush, Indian Point, Deer Creek and Palmquist. Each area offers a range of land classifications, topographic and history within the Bois Forte Tribal area.

##### Process/Culture/Data

###### Process

Monthly committee meetings

Public open house meetings

Ground truth exercises  
Stakeholder interviews  
Public hearing and formal adoption

**Culture**

Strong Wood  
Ancient traditions; harvesting wild rice, tapping maple trees and  
picking berries  
Embraces education, keeping ancient traditions alive

**Data**

Secondary Data (census, document analysis)  
Meeting Summary  
SWOT Analysis

**Stakeholders**

Bois Fort Planning Commission  
Consultant- Short Elliott Hendrickson Inc (SEH) Team  
Bois Forte Band of Chippewa Indians Tribal Council  
Tribal Citizens

**Methods**

Monthly committee meetings  
Public open house meetings  
Ground truth exercises  
Stakeholder interviews  
Public hearing and formal adoption  
SWOT Analysis

**Outcome**

Comprehensive Land use Plan  
Action Steps  
Transportation Plan  
Utility/Transmission Plan  
Sensitive Land Mapping Inventory/Community Assessment  
Tribal Wayfinding  
Comprehensive Trail Plan  
Zoning Ordinance  
Land Classifications  
Zoning  
Land Use Goals 2010-2015  
Maps

**Opportunities**

Guiding Principals

Infrastructure Analysis

Land Suitability Analysis/Development Options

Increased analysis with all comprehensive sectors

Economic Growth Analysis/Economic Impact Study

Integration into regional plans/inclusion of stakeholders



## **Confederated Salish & Kootenai Tribes**

### **Flathead Reservation Comprehensive Resources Plan 2000**

#### Details

6,800 Citizens  
Flathead Reservation, Montana  
Lake and Sanders Counties

#### Summary

The Flathead Reservation has a variety of landforms that support a diversity of ecosystems. There are low, broad valleys; some, nourished by abundant rainfall, are fertile and green; others, like the Camas Prairie, are much drier and have only sparse vegetation. There are high and low elevation forested hills with both wet and dry vegetation types. There are rocky buttes that support shrub and grass communities. There are dozens of rivers, streams, lakes and ponds, all with their companion wetlands and riparian habitats. Glaciers have formed on the highest peaks, surrounded by rock and alpine tundra.

All of this falls within a Reservation roughly 60 miles long and 40 miles wide, an area that is but a fragment of the Salish and Kootenai Tribes' aboriginal territory. This chapter describes the Reservation and its physical setting.

The purpose of this plan is to guide natural resource management and development on the Flathead Indian Reservation. It presents an up-to-date profile and assessment of the condition of natural resources on the Reservation. It identifies Tribal goals for each natural resource and explores a series of integrated alternatives for management. Finally it defines policies and processes that will guide future resource management on the Reservation.

#### Process/Culture/Data/

##### Process

Workshops (Multiple/Random over 2 years)-design options  
Data Compilation  
Workshops-Tribal Members  
Workshops BIA Department Heads and Program  
Managers Meetings  
Workshops-State agencies  
Secondary Data Review  
1998-2000  
Two (2) Years

## Culture

Two Tribes-Salish-speaking tribes—the Salish and the  
Pend d'Oreilles—and one band of the Kootenai Tribe  
Connected to nature (animals and humans treated the same)  
Between two (2) National Forests Flathead and Lolo National

## Forests

Rivers Important-Stillwater and Whitefish rivers and Ashley Creek  
join the main river near Kalispell

Territorial areas spread all directions, including into Canada  
Mission, Rattlesnake, Cabinet, Salish Mountains are surrounding  
Flathead Reservation

### Salish

Traditional hunting, fishing and harvesting  
Bitterroot is traditional agriculture product

### Kootenai Tribe

Fish Trap People  
Used River

Lewis and Clark across the Bitterroot Mountains In 1800's  
Hellgate Treaty Forced Relocation  
Native and Catholic Teachings

## Data

Secondary Data (census, document analysis)  
Workshops (Multiple/Random over 2 years)-covered planning

## options

### Stakeholders

Consultant The Johnson-Trussell Company  
Tribal Elders  
Tribal Council members  
Tribal programs  
Flathead County Staff  
Lake County staff  
Missoula County Staff  
Sanders County Staff

### Methods

Workshops (Multiple/Random over 2 years)

1998-2000  
Two (2) Years  
Summary of Demographic Information

### Outcome

Existing Conditions/Community Assessment  
Transportation Plan  
Natural Resources/Sustaining Plan  
Smaller Master Plan Areas  
Productive/Extraditive Resource Plan (Forests, Mineral and Energy)  
Developed Resources (Residential, Economic, Utilities)  
Government and Institutional Facilities  
Guiding Principals

### Opportunities

Defined Stakeholder Process  
Greater organized inclusion of stakeholders  
Land Suitability Analysis/Development Options  
Maps  
Zoning  
Economic Growth Analysis/Economic Impact Study

### Summary

The Confederated Salish & Kootenai Tribes Comprehensive Resources Plan provides an expansive summary of the history of the Tribe, its existing lands as well as natural resources. The guiding principles provided a framework to approach the planning process. Whereas, there may have been a purposeful outreach process, the Tribal citizens and other stakeholder can have increased involvement and record of the meetings.

There may be economic opportunity for the tribe as well, however with increased comprehensive planning; the cultural importance of these resources and their analysis can provide guidance of what can be used for economic benefit. Additionally, it will help guide housing decisions and development of community through their master plan areas.

### Navajo Adaptation

This plan provided a structure for completion of a comprehensive plan for the Navajo nation. Whereas, the analysis could be stronger within this plan, the structure provides a solid framework which can be utilized by the chapters. By incorporating analysis of the data, a diligent recommendation can be determined.

## **Confederated Tribes of the Chehalis Reservation**

### **Chehalis Reservation Comprehensive Land Use Plan 2003**

#### Details

691 Citizens  
Oakville, Washington  
Grays Harbor County

#### Summary

The Confederated Tribes of the Chehalis is situated approximately 26 miles southwest of Olympia and 6 miles northwest of Centralia. The City of Oakville is adjacent to the northwest corner of the reservation. Thurston and Grays Harbor Counties bisect the reservation's boundaries. Approximately 80 percent of the reservation lies within Grays Harbor County and 20 percent within Thurston County boundaries. The majority of the reservation population resides on the Grays Harbor County side of the county boundary.

The comprehensive land use plan was completed in 2003, however was very basic and represented more of a summary document. In 2010, a transportation plan was completed that referred to the comprehensive land use plan. This summary uses the comprehensive land use plan completed in 2003 and then expands using the transportation plan of 2010.

#### Process/Culture/Process

##### Process

Secondary Data Review (census)  
Comprehensive Plan (no explanation of process) 2003  
Transportation Plan-2010  
No Discussion of Comprehensive Land Use Plan  
Zoning  
Infrastructure Analysis  
Five (5) Meetings  
30 Day period November 20, 2009 to December 20, 2009  
Zero participants

##### Culture

Connected to nature (water, prairies, mountains)  
Baskets important to food  
Animal and vegetables  
Chehalis River is source of life

Rejected US Treaty / Chehalis regarded as a “non-treaty” tribe.

#### Data

Secondary Data (census, document analysis)  
Five (5) Meetings / Zero participants / Zero Data

#### Stakeholders

Confederated Tribes of the Chehalis Tribal Council

#### Methods

Five (5) Meetings  
30 Day period November 20, 2009 to December 20, 2009  
Zero participants  
Summary of Demographic Information

#### Outcome

Land Use Plan  
Zoning Ordinance  
Guiding Principals

#### Opportunities

Community Assessment / Existing Conditions  
Infrastructure Analysis  
Land Suitability Analysis / Development Options  
Maps  
Increased analysis with all comprehensive sectors  
Zoning  
Economic Growth Analysis / Economic Impact Study  
Integration into regional plans / inclusion of stakeholders

#### Summary

The Confederated Tribes of the Chehalis Reservation has the beginning foundation of a comprehensive plan. With the plan completed in 2003, the transportation plan in 2010 provided updated information and additional analysis. However, it is very focused on transportation and without other areas of critical analysis.

The process of the completion of a comprehensive plan could also include Tribal citizens, other Tribal departments as well as other individual and group stakeholders. Additional housing, natural and economic analysis would not only help drive land use decisions, but also expand on transportation planning.

#### Navajo Adaption

The Navajo nation and its chapters have a basic outcome to measure the comprehensive analysis. Many of the structural requirements and analysis of the comprehensive plan is missing. Additionally, the public participation meetings were provided, however the yield of attendees were none. This does make the case to have improved public meetings and the importance of participation.

## **Confederated Tribes of the Umatilla Indian Reservation (CTUIR)**

### **Umatilla Indian Reservaiton Comprehensive Plan 2010**

#### Details

2,787 Citizens  
Umatilla Reservation, Washington  
Umatilla County, Washington

#### Summary

The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) Comprehensive Plan (Plan) is based on the principle that decisions affecting the CTUIR community development, economy and social needs should be created and coordinated in a responsible way. Comprehensive planning aids the CTUIR in its efforts to preserve the unique character of the Tribal community and Reservation lands while taking advantage of the positive aspects of growth.

This Plan articulates a vision for the future of the CTUIR community that sustains the values of the people and establishes a flexible policy framework to guide decision making over the next 20 years. The Plan directs the creation of Tribal statutes and plans; the implementation of actions and services that support the vision. The Plan reflects the long-term values and aspirations of the CTUIR community as a whole and shows how various elements, such as economy, land base restoration, housing, transportation, community facilities, natural resources, health, education and culture can work together to achieve a desired vision.

This Plan provides the policy framework that directs day-to-day decision making. As the CTUIR is faced with increased population growth and its resulting complexities, the reservation community looks for ways to accommodate new development without sacrificing quality of life, traditional values, sovereignty or Treaty Rights. The broad goals and objectives contained in this Plan are carried out through various programs and statutes (codes) to achieve the CTUIR vision.

#### Process/Culture/Data

1996 Original Comprehensive Plan Update  
Review Secondary Census Data  
Plan Review-Past Plans and Strategic Documents

Tribal community vision-series of community meetings and a visioning rally, Vision Quest 2020 (February 2010)  
A 2010 Comprehensive Plan Summary and Public Hearing Notice was mailed to all Tribal Members registered with the Tribal Enrollment Office (March 9, 2010)  
CTUIR internal review through the Tribal Staff Review Committee, Committees and Commissions (March and April 2010)  
General Council Meeting to present and discuss the Plan (March 25, 2010)  
Work Sessions with Board of Trustees to present and discuss the Plan (June and July 2010)  
Publication of the Public Hearing Notice in the Confederated Umatilla Journal and the East Oregonian  
Natural Resources Commission conducted a public hearing two (2) and made a recommendation of approval to the Board of Trustees April 13, 2010 and May 25, 2010  
The Board of Trustees held Work Sessions on June 16, 2010, July 7, 2010 and August 8, 2010.  
Tribal Council approved Comprehensive Plan was adopted on September 13, 2010

#### Culture

Three Tribes at same area- Umatilla, Walla Walla and the Cayuse Tamánwit (Columbia River Shahaptian) "throw down"  
Water is respected as sacred  
Spiritually no separation from nature  
Hunting, fishing and gathering part of subsistence living  
Language- Indian dialects of Shahaptian, as well as, Salish, Chinookian, and Klamath.  
Later they adapted to French and English.  
British Protestants and French-Canadian trappers introduced

#### Catholic faith

Allotment Act of 1887 failed to assimilate Umatilla into American culture

#### Data

1996 Original Comprehensive Plan Update  
Review Secondary Census Data  
Plan Review  
Tribal community vision-series of community meetings and a visioning rally, Vision Quest 2020 (February 2010)



A 2010 Comprehensive Plan Summary and Public Hearing Notice was mailed to all Tribal Members registered with the Tribal Enrollment Office (March 9, 2010)

CTUIR internal review through the Tribal Staff Review Committee, Committees and Commissions (March and April 2010)

General Council Meeting to present and discuss the Plan (March 25, 2010)

Work Sessions with Board of Trustees to present and discuss the Plan (June and July 2010)

Natural Resources Commission conducted a public hearing two (2) and made a

recommendation of approval to the Board of Trustees April 13, 2010 and May 25, 2010

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#### Stakeholders

Tribal Board of Trustees

Tribal Planning Office

Tribal Citizens

University of Oregon, Rural Development Initiatives

Northwest Tribal Networks=Paula Wallis

#### Methods

1996 Original Comprehensive Plan Update

Review Secondary Census Data

Plan Review

Tribal community vision-series of community meetings and a visioning rally, Vision Quest 2020 (February 2010)

A 2010 Comprehensive Plan Summary and Public Hearing Notice was mailed to all Tribal Members registered with the Tribal Enrollment Office (March 9, 2010)

CTUIR internal review through the Tribal Staff Review Committee, Committees and Commissions (March and April 2010)

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Tribal Council approved Comprehensive Plan was adopted on September 13, 2010

### Outcome

#### Comprehensive Plan

- Organizational Effectiveness
- Economic Development
- Land Development
- Workforce Development
- Community Development
- Natural Resources
- Cultural Heritage
- Treaty Rights Protection
- Housing
- Education
- Health and Human Services
- Community Facilities
- Transportation
- Public Safety
- Energy
- Tribal Government
- Administration Department

Comprehensive Plan Indicators and Benchmarks  
Community Vision/ Guiding Principals  
Comprehensive Plan Monitoring  
Comprehensive Plan Goals and Objectives

### Opportunities

- Community Assessment
- Guiding Principals
- Land Suitability Analysis
- Land Use Plan
- Zoning
- Economic Growth Analysis/ Economic Impact Study

### Summary

The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) Comprehensive Plan (Plan) provides a framework for the overall operations of the Tribal government. This intensive overview of the CTUIR provides a clear direction on a reflective document of previous plans as well as the development of indicators and benchmarks

This process seems to include all of the above choices for public participation. This way, Tribal Citizens as well as the surrounding areas can be a part of guiding the Board of Trustees in sound comprehensive decisions and direction for the Tribe. By using this analysis, a greater direction can be provided to look at specific improvements through identifying lands for development or preservation, assess the community and provide direction of land use decisions.

#### Navajo Adaption

The Navajo nation can review the final outcome for an expected layout of a comprehensive plan. However the structure is empty without community assessments, principals and any suitability analysis. This would be an example of missing pieces of a comprehensive direction and even though it is obviously absent, this shows why these missing pieces are necessary in the successful completion of a comprehensive plan.

## **Coquille Indian Tribe**

### **Empire Reservation Five -Year Strategic Plan 2006**

#### Details

1,000 Citizens  
North Bend, Oregon  
Coos County, Oregon

#### Summary

In 2005 and early 2006, as the strategic planning process was being implemented, the Tribal Council responded to the input received from the Tribal members during the forums and community survey. The Tribal Council voted to adjust and enhance several services to be in line with priorities that Tribal members had identified. These included increasing the monthly Elders benefit, and increasing Tribal support to Tribal members attending college or vocational training. Both of these services were identified in the community engagement process as priorities.

In the spring of 2006, a copy of the attached *Community Survey Report to the General Council* was prepared and distributed to all Tribal members and their families. The Tribal Council then directed Tribal administration and all staff to use the results of the survey and community forums to implement a comprehensive strategic planning process that sets priorities for Tribal services available to the Tribe and its government. The information provided by the Tribal members is the foundation of this update. This plan is founded in the following Vision, Values, and Guiding Principles established by the Tribal Council.

#### Process/Culture/Data

Workshops-Tribal Members facilitated community forums held throughout 2004 in each of the five (5) counties  
Written, in-depth survey that was mailed to all Tribal members above 18 years of age  
Secondary Data Review  
2004-2006  
Two (2) Years

## Culture

- Land and Natural Resources
- Culture Exchange Opportunities
- Basis of economic and land use decisions-culture

## Data

- Secondary Data (census, document analysis)
- Workshops (Multiple/Random over 2 years)

## Stakeholders

- Tribal Elders
- Tribal Council members
- Tribal employees
- Tribal citizens
- Coos County

## Methods

- Workshops-Tribal Members facilitated community forums held throughout 2004 in each of the five (5) counties
- Written, in-depth survey that was mailed to all Tribal members above 18 years of age
- Secondary Data Review
- 2004-2006
- Two (2) Years

## Outcome

- Tribal values/Guiding Principals
- Existing Conditions/Community Assessment
- Five-Year Strategic Plan-Government Operations

## Opportunities

- Housing Plan
- Economic Development Plan
- Comprehensive Land Use Plan
- Realty Plan
- Land Suitability Analysis/Development Options
- Maps
- Zoning
- Economic Growth Analysis/Economic Impact Study

## Summary

The Coquille Indian Tribe Five -Year Strategic Plan provides a framework for the overall operations of the Tribal government. Within this document are sections that provide justification for the completion of comprehensive plans as well as related plans, such as housing, transportation, economic development and land use.

Through using this foundation, these plans can begin with the same amount of diligence used within the strategic plan. Additional data will need to be collected and detailed plans of implementation will be outlined for these supportive directions

#### Navajo Adaption

This comprehensive plan example provides many opportunities to strengthen toe over all core of the plan. The structure and final recommendations of the strategy meet the participatory diligence needed for a comprehensive direction. Including the specific comprehensive planning components are needed in order to provide the backup to the plan. Without the necessary skeleton, this strategic government plan provides the how to, but not why this needs to be complete. The Navajo nation could align the comprehensive planning process to merge into a more efficient government operations.

## Grand Traverse Band of Ottawa and Chippewa Indians

### Grand Traverse Reservation Community Master Plan 2012

#### Details

608 Citizens  
Peshawbestown, Michigan  
Leelanau County

#### Summary

The Grand Traverse Band of Ottawa and Chippewa Indians (GTB) is a tribe in northwest Michigan situated 25 miles north of a high traffic and tourism destination, Traverse City. The reservation is placed in beautiful Leelanau peninsula within Lake Michigan and Grand Traverse Bay. This Tribe was federally recognized in 1980 and has aggressively sought planning since 2005. Mii maanpii mgiziik yaawat: *"This is the place of eagles."*

There was a solid foundation of previous plans from transportation to housing from 2005 to the adoption of the plan. With the completion of these studies, it allowed a final component of all of these studies to be included within one (1) comprehensive plan.

#### Process/Culture/Data

##### Process

Previous Plan Literature Review  
Housing, transportation, energy,  
Business development and marina feasibility  
Community Assessment/Existing Conditions  
Infrastructure Analysis  
Leakage Analysis=dollars leaked to other communities due to  
inadequate economy  
Land Suitability Analysis/Development Options  
Retail Market Segment Analysis  
Public Survey/Public Meetings  
Youth Focus Groups  
Priority List  
Community Master Plan  
Community and Economic Analysis  
Four (4) Meetings/Public Meetings July 18, 2011 -July 21, 2011 6PM  
Spring 2011-June 2012

7-11 Months

**Culture**

Strong Traditional Foundation  
Seventh Generation and Sustainability  
Smart Growth  
Catholic -Kateri Tekakwitha Church  
Strong Support for Art Community  
Youth Involved in Planning  
Recreate Community and Core Economy  
Respect and Utilize Resources (water and agriculture-wine)

**Data**

Secondary Data (census, ESRI, document analysis)  
Primary Data-Survey  
Youth Focus Groups  
Retail Market Segment Analysis  
Leakage Analysis

**Stakeholders**

GTB Tribal Council  
GTB Former Tribal Council Members  
GTB Administrative Staff  
GTB Economic Development Corporation  
Region (County, Cities, Townships)  
Consultant-Beckett-Rader  
Consultant-Shantel Sellers

**Methods**

Four (4) Meetings/ Public Meetings  
Community Survey  
Youth Meeting/ Focus Groups  
Retail Market Segment Analysis  
Leakage Analysis  
Summary of Demographic Information

**Outcome**

Community Master Plan  
Land Use Plan  
Land Acquisition/ Development Sites  
Guiding Principals/ Pillars of Prosperity

**Opportunities**

Future Actions



Sustainable Enterprises  
Tribal Private Partnerships  
Site and Building Guidelines  
Wayfinding  
Comprehensive Housing Plan (revisited)  
Natural Resources Management/Integrated Resource Management Plan  
(revisited)  
Greater detail within Comprehensive Plan Components  
Balanced analysis with all comprehensive sectors  
Zoning  
Economic Growth Analysis/Economic Impact Study

### Summary

The Grand Traverse Band of Ottawa and Chippewa Indians are in a great position to move the Tribe forward. There are successes with economic development, beginning with gaming, hospitality, golf and tourism that are paving the way. There have been solid studies in the past, however the vast focus of this plan is economic development and how the other plans can support this. A balanced approach among all sectors will ensure that there is economic development as well as supportive systems that are part of the overall community.

### Navajo Adaption

The Navajo could use the economic analysis as a guide to analyze the economy and what opportunities would fit within a specific comprehensive master plan. This identified resources in the area and potential opportunities to achieve these economic results. It also provides an opportunity for the community to use the data for the design portion of the planning.

This was very economic focused and may have missed other elements of a comprehensive plan. BY using this framework as a foundation to maximize economic data and analysis, the other steps can be added in as they are addressed.

## **Jamestown S’Klallam**

### **Olympic Peninsula, Washington Tribal Comprehensive Plan 2008**

#### Details

579 Citizens  
Sequim and Blyn, Washington  
Clallam and Jefferson Counties Washington

#### Summary

For ten thousand years, a nation of people lived and prospered on these lands of the Olympic Peninsula. These “strong people” of the S’Klallam tribes had a system of governance, engaged in commerce, managed natural and human resources, and exercised power over their territorial boundaries. The people created a rich culture of art, song, spirituality, traditional knowledge and social structure. They promoted leadership, self-sufficiency, self-reliance, and a code of conduct within their community that served as a basis for strength, pride and survival. This was a nation, a government and a community, independent and interdependent.

The Comprehensive Plan is the Tribe’s road map. It tells us where we expect to end up, and how we intend to get there. It helps us know how much the journey will cost and how much time we will need. It also tells us what landmarks to look for along the way so we know if we are on the right track, or if the Tribe is straying too far from the route.

#### Process/Culture/Data

##### Process

2000-Survey  
2000-2008 Tribal Council/Executive Committee Three (3) retreats  
2000-2008 Plan Analysis  
Comprehensive Economic Development Strategy  
Housing Improvement Plan  
Transportation Plan  
Vision Master Plan (Land Use Plan)  
Hazard Mitigation Plan  
Family Network Plan  
Self-Governance Plan  
Outdoor Recreation Plan  
Utility Plan

Library Long-Range Plan  
Watershed and Natural Resources Restoration  
Plans, including the Dungeness-Quilcene Water  
Resources Plan and the Tribal Watershed Plan  
2002 General Membership Meeting  
2002 Committee (Enrollment, Fish, Elders, Culture) Input  
2004 Draft and Goals  
2004 General Membership Meeting  
2004 Committee (Enrollment, Fish, Elders, Culture) Input  
2005 Tribal Council Draft  
2006 Tribal Council Updates  
2008 Tribal Council Adoption  
2000-2008 Tribal Council/Executive Committee Three (3) retreats  
2000-2008 Plan Analysis  
Secondary Data Census  
Membership Meetings (2)  
Committee (Enrollment, Fish, Elders, Culture) Meetings (2)  
2000-2008

#### Culture

“The Strong People”

Definition

“Culture:

All that we are and all that we do

All that our People have done for centuries and all that our People  
do today.

All activities: our language, songs, work, play, art, family and  
life ways that make us a unique group of people.”

Olympic Peninsula Salish cultural related to British Columbia

Tribes as

well as to most Tribes in the Puget Sound area.

S’Klallam Tribes three (3) separate bands

Jamestown S’Klallam Tribe

Lower Elwha Klallam Tribe

Port Gamble S’Klallam Tribe

Point No Point Treaty of 1855 Established Land and

Hunting/Fishing Rights

Federally Recognized 1981

Data

Secondary Data (census, document analysis)

2000-2008 Plan Analysis

2002, 2004 Meeting Minutes Membership Meetings (2)

2002, 2004 Committee (Enrollment, Fish, Elders, Culture) Meetings

(2)

Stakeholders

Tribal Council  
Tribal Executive Committee  
Tribal citizens  
Tribal Committees

Methods

2000-Survey  
2000-2008 Tribal Council/Executive Committee Three (3) retreats  
2000-2008 Plan Analysis  
Secondary Data Census  
Membership Meetings (2)  
Committee (Enrollment, Fish, Elders, Culture) Meetings (2)  
Secondary Data review (Census)

Outcome

Community Goals  
Governance Goals-government benchmarks  
10 Year Tribal Comprehensive Plan 2005-2015  
Culture  
Social and Community Services  
Health  
Education  
Housing  
Natural Resources  
Transportation  
Economic Development  
Sovereignty and Self Governance

Opportunities

Community Assessment  
Guiding Principals  
Land Suitability Analysis  
Culture Plan  
Social and Community Services Plan  
Health Plan  
Education Plan  
Zoning  
Economic Growth Analysis/Economic Impact Study

Summary

The Jamestown S'Klallam Tribal Comprehensive Plan provides a framework for the overall operations of the Tribal government. Within this

document are sections that provide justification for the completion of comprehensive plans as well as related plans, such as housing, transportation, economic development and land use. These plans are mentioned by reference as the detail explaining each of these plans is in summary and reference only.

The overall comprehensive planning process began in 2000 with a Tribal citizen survey. The final adoption of the plan was in 2008. There were many opportunities to gather more information as well as identify additional meetings to ensure that there is consistency of the original draft in 2004 to the adoption in 2008. The other plans adopted provide a solid foundation and can be utilized to an even greater extent for development and usage of the comprehensive plan

### Navajo Adaption

The Navajo Chapters could use the outcomes as a framework to develop the final comprehensive plan outcomes. There is missing analysis which not only guides how the outcomes are formed, but it protects decision makers when they are developing the final recommendations. Also, the social conditions of the community are not researched and this could provide additional insight to the areas completed as well as the opportunities of the Tribe to include new areas to the comprehensive plan.

## **Little River Band of Ottawa and Chippewa Indians**

### **Land Use Plan 2005**

#### Details

2700 Tribal Citizens  
Manistee, Michigan  
Muskegon County

#### Summary

The Ogema worked with the consultant to develop and recommend for approval to the Tribal council a Land Use Plan. This provided light statistical analysis of survey data. A regional outreach was provided for its Tribal area and there was strong influence for economic development in areas and preservation in other areas.

#### Process/Culture/Data

##### Process

Public Meetings  
General Meetings  
Meetings with Tribal Departments  
Presentation with Draft Guiding Principles and Land Use Plan

##### Culture

Little River Band of Ottawa Indians is a federally recognized tribe of Ottawa Indians whose headquarters are located on their 1836 reservation in Manistee, Michigan  
They represent 9 villages or bands of the original Grand River Bands. The tribe's original language is Anishinaabemowin, an Algonquian language.

##### Data

Literature Review  
Past Land Use Plans  
Past Strategic Plans  
Secondary Data  
Census  
GIS-State of Michigan  
Primary Data  
Public meetings  
Community Surveys

#### Stakeholders

Ogema (Chair)

Land Use Department  
Tribal Administration  
Tribal Council  
Consultant  
Tribal Membership  
Regional Governmental Entities

#### Methods

Statistical Analysis  
Survey  
Focus Groups  
Secondary Data Collection

#### Outcome

Implementation Plan  
Land Use Maps  
Guiding Principals  
Gateway Areas  
Regional Analysis/Land Use

#### Opportunities

Economic Growth Analysis/Economic Impact Study  
Housing Market Analysis  
SWOT Analysis  
Ordinance Drafting  
Capital Improvement Planning

#### Summary

This plan provided overall guidance for the Little River Band. It did provide basic statistical analysis through the collection of primary data through meetings and community survey. This was then placed into a spatial analysis for the creation of development zones. This provided guidance in the overall plan document.

Once the plan was finalized, there is opportunity to develop action steps and ordinance in guiding the future steps. Increased analysis could have created a stronger case and provided an argument on why to move aggressively to implement the plan.

#### Navajo Adaptation

This plan provides guidance toward the development of a comprehensive plan and develops the beginning of an analysis that could be applied to a regional analysis of economic and housing opportunities. Much more analysis would need to be applied in order to have data based decisions. The process and deliberation of the Tribe grounds acceptance and consensus of the plan and this additional analysis strengthens the argument of the final recommendations.

## **Little Traverse Bay Band of Odawa Indians**

### **Master Land Use Plan A Policy Plan for Land Acquisition and Development Petoskey, Michigan 2004**

#### Details

3,800 Citizens  
Petoskey, Michigan  
Charlevoix and Emmet Counties, Michigan

#### Summary

The Little Traverse Bay Bands of Odawa Indians or Ottawa people have been in this geographical area of Michigan long before the Europeans arrived here on Turtle Island, known as Canada, North and South America. The Odawa were a migratory people, traveling from the Upper Peninsula and the northern area tip of Michigan in the fall, to the southern part of Michigan, where the climate was more hospitable during the winter months.

In the spring, the Odawa people returned to their homelands to collect maple syrup, fish and plant crops. When they weren't tending their gardens or doing their day-to-day chores, they gathered fruits, herbs, medicines, as well as any other food products they could dry and put away to be used during the long winter months.

With the advent of gaming and other revenue to the Tribe, more opportunities exist for both land acquisition and property development. The rapid growth of tribal programs and services also place pressure on the Government to fully provide the infrastructure needed to deliver them. It is against this backdrop that the LTBB Master Land Use Plan is being developed.

The resources utilized to prepare and review the plan consist primarily of Planning Department staff. To ensure the highest quality content for the Plan document, a Master Land Use Plan Working Group was formed by the Tribal Administrator to act as an editorial committee. This Working Group includes staff that has prior experience with Land Use Planning and the process of developing this kind of document. The work effort was begun in earnest in late fall of 2003, with initial drafts complete in early fall of 2004.

#### Process/Culture/Data

Process

Working Group developed

Data collected from Tribal GIS and Land Use Department (2000  
Census)



Tribal Planning Department Analyzed All Data Collected  
(Demographic Analysis)  
Survey was sent to all Commissions and all Program Directors  
Draft document developed by working group  
Public Input sought after draft document was released  
Final comments given to Tribal Council by working group  
Tribal Council Adopts Plan  
Feedback sought from surrounding government and Tribal  
government program directors  
2003-2004 (1 Year)

#### Culture

Migratory Tribe  
Signed Treaty in 1855, Government Benefits did not materialize  
Three (3) groups defended this injustice:  
Michigan Indian Defense Association of 1933  
The Michigan Indian Foundation 1947  
Northern Michigan Ottawa Association in 1948  
Dispute with Mormon Church over settlement of Beaver Island  
1994 Federal recognition given through reaffirmation

#### Data

Secondary Data (census, document analysis)  
MIRIS-Michigan Resource Inventory System

#### Stakeholders

Little Traverse Bay Band of Odawa Indians Tribal Council  
Tribal Planning Department  
Tribal Citizens  
Emmitt Township

#### Methods

Public Input Nominal Group Technique (NGT)  
Traditional Survey  
Public Comment Box  
Focus Groups  
Regional Site Visits (4)  
Public Input Meeting  
Facilitated  
Presentation  
Small Group Discussion  
Individual and Group Idea Presentations

## Outcome

- Master Land Use Plan
  - Population and its Characteristics/Community Assessment
  - Physical Features/Topography and Soil Analysis
  - Zoning/ LTBB Uniform Zoning Classification System
  - Development Sustainability Model
    - Quantitative Predictive Model
    - Development Sustainability Indicators
  - Membership and Input Assessment
  - Overview
    - History
    - Housing
    - Economics
    - Income
  - Land use
  - Zoning
  - Soil capabilities
  - Other development limitations
- General Land Development Policies
- Maps
- Land Use Plan
- Development Goals
- Integration into regional plans/inclusion of stakeholders

## Opportunities

- Guiding Principals
- Infrastructure Analysis
- Land Suitability Analysis/Development Options
- Economic Growth Analysis/Economic Impact Study

## Summary

The Little Traverse Bay Bands of Odawa Indians provided a well thought out plan and process for their master plan. With the size of area that their master plan covers, the purpose was to assist in the making of land development decisions. Whereas, development areas are mapped within their GIS system, more specific areas and development sites could be recommended as part of this document.

Additionally, the plan touches on related comprehensive issues, such as housing, economic development and transportation, but each one of those areas need to be thoughtfully and professionally planned in order for the Master land

use plan to have a foundation. If this was complete, then the plan did not provide guidance or acknowledgement to these documents.

Furthermore, the introduction of a predictive model with scores for developable areas is the foundation for decision makers to make sustainable decisions. Additionally, when this is provided to the public (Tribal Citizens) as it was with the LTBB Tribal citizen meeting, decisions are not influenced with bias, but directed with analysis. This is a critical step as the Tribal nation plans and resources that are allocated must be guided with as much data and analysis as possible.

### Navajo Adaption

This strategy is a good comprehensive framework for the Navajo Nation to work with chapters. IT provides many of the overall comprehensive planning components, but still needs additional analytics in order to provide guidance to decision makers. This may include, but is not limited to, Guiding Principles, Infrastructure Analysis, Land Suitability, Analysis/Development Options, Economic Growth Analysis/Economic Impact Study or other approaches. There was an abundant of public participation methods utilized and with additional data and analysis; the participation will be able to solidify a comprehensive strategy.

## **Match-E-Be-Nash-She-Wish Band of Pottawatomi Indians**

### **Gun Lake Tribe**

#### **Bodewatomi' Akiing**

#### **"Place of the Pottawatomi"**

#### **An Integrated Resource Management Plan**

**2010 – 2014**

**2012**

#### Details

410 Tribal Citizens

Bradley, Michigan

Allegan County

#### Summary

Gun Lake Tribe entered into a contract with a consultant to provide a land use plan for recommendations by the Land Use Committee to the Tribal Council. There was basic review of existing data as well as a survey administered to the Tribal citizens. The result was a compilation of this data with secondary data as well as visionary concepts.

#### Process/Culture/Data

##### Process

##### Structure

- Phase One: Understanding Current Challenges
- Phase Two: Outlining a Preferred Future
- Phase Three: Developing the Blueprint
- Phase Four: From Planning to Action

##### 12 Month Process

##### Culture

- Matchebenashewish (Bad Bird) was a well respected leader for the Anishinabe or people of the Three Fires (Pottawatomi, Odawa, and Ojibwe).
- Signer of the 1795 Treaty of Greenville and the 1821 Treaty of Chicago.
- Matchebenashewish's people were the northernmost band of Pottawatomi in the lower peninsula of Michigan.
- In 1821 a reservation was established for the band near what is now downtown Kalamazoo. This reservation was ceded in 1827 by the Treaty of St. Joseph

- Most of our people live within a five-county service area (Allegan, Barry, Kalamazoo, Kent and Ottawa)

## Data

Secondary Data (census)  
 Primary Data  
 Survey  
 Focus Groups

## Stakeholders

Land Use Committee  
 Tribal Council  
 Consultant  
 Tribal Membership

## Methods

Survey  
 Focus Groups  
 Secondary Data Collection

## Outcome

Land Use Plan  
 Overall Land Use Planning  
 Low-Impact Development  
 Land Stewardship/Cultural  
 Recreation Conservation  
 Housing  
 Transportation/Connections  
 Services/Economic Development  
 Infrastructure/Utilities  
 New Land Acquisition  
 Zoning  
 Implementation Plan  
 Land Use Maps  
 Guiding Principals  
 Concept Drawings

## Opportunities

Economic Growth Analysis/Economic Impact Study  
 Housing Market Analysis  
 SWOT Analysis  
 Regional Analysis/Land Use  
 Ordinance Drafting  
 Capital Improvement Planning  
 Regional Government Involvement

### Summary

The comprehensive plan provides many components that are included within a typical comprehensive planning process. Many of the gaps, defined as opportunities, are actual analysis on how data was used to make a decision. Through a diligent process, this analysis can guide decision making in a correct direction. This plan may have met a political level of acceptance, however, without analysis; the final outcomes may or may not be in the best interest of the community.

### Navajo Adaptation

The Navajo Nation could use this plan to follow an overall structure of a comprehensive plan; however, additional analysis would need to be complete in order to ensure recommendations are in the best interest of the community based on expected results. Without additional analysis, this would follow only public opinion and may have good intentions, but unexpected results.

## **Nottawaseppi Huron Band of Potawatomi Indians**

### **Pine Creek Reservation Master Plan for the T Drive Property 2010**

#### Details

1,200 Citizens  
Fulton, Michigan  
Calhoun County, Michigan

#### Summary

The Nottawaseppi Huron Band of Potawatomi finalized and implemented the Integrated Resource Management Plan as a comprehensive plan for the Tribal nation, but specifically for the main reservation in Fulton, Michigan-Pine Creek Reservation. Adopted in 2006, this plan identified need for additional housing and government services. Property adjacent to the Pine Creek reservation, herein referred to as the T Drive Property (T Drive) was acquired to meet this need. The master plan for this property is to convey a collective vision for the Tribe for planning for growth, while preserving natural resources of the property.

The plan was completed through a collaborative process through the Planning and Land Use Advisory Committee, Tribal Council, Consultants as well as officials from Calhoun County and Athens Township.

#### Process/Culture/Data

##### Process

##### Plan Review

Integrated Resource Management Plan  
Calhoun County Master Plan  
Athens Township Master Plan and Zoning Ordinance  
Nottwa Creek Watershed Plan

##### Regional Development Analysis

Evaluation of Natural, Physical, Social Resources

##### Public Participation

Tribal Citizen Meetings (2)  
Youth Tribal Citizen Meeting-(1)  
Collaborative Planning Process  
Land Use Map Development

Tribal Council and Planning Land Use Advisory Committee  
Joint Meeting  
Secondary Data Analysis (Census)  
2010 (6 Months)

**Culture**

Federal recognition through reaffirmation 1995  
Originally settled near Detroit/Huron River  
Moved to Nottawaseppi River near Pine Creek reservation  
Tribe is experience growth while balancing cultural and natural resource preservation

**Data**

Secondary Data (census, document analysis)  
Spatial/Visual Analysis and Outcome  
Public Participation Summary  
Joint Meeting

**Stakeholders**

Tribal Council  
Tribal Citizens  
Tribal Planning Land Use Committee  
Consultant-Wightman and Associates  
Consultant-Native Connections  
Consultant-Public Consulting Team  
Calhoun County  
Athens Township

**Methods**

Plan Review  
Master Plan/Site Development  
Regional Development Analysis  
Evaluation of Natural, Physical, Social Resources  
Public Participation  
Secondary Data Analysis (Census)

**Outcome**

Primary Goals/Guiding Principals  
Implementation Plan  
Inventory and Analysis/Community Assessment  
    Natural Resources  
    Infrastructure



Land Use Allocation  
Master Plan

Opportunities

Land Suitability Analysis/Development Options  
Monitoring and Evaluation Plan/Performance Indicators and Benchmarks  
Implementation Strategies  
Economic Growth Analysis/Economic Impact Study  
Land Use Plan  
Zoning Ordinance  
Housing Plan  
Cultural Plan

Summary

The Nottawaseppi Huron Band of Potawatomi Indians took their future planning of the nation and identified the need to acquire additional property to expand specifically with government offices and housing opportunities. Without review of the process determining the need for this expansion, there was involvement with the public, the Tribe as well as surrounding governmental units of Athens Township and Calhoun County that provided a consensus approach to this development.

There are opportunities to have a more complete analysis with other comprehensive analysis of specific areas, such as transportation and economic development. Even if there was not the intent to develop additional park opportunities or other areas that were not the intention of the development, at least there will be diligence to show the overall intent of these areas.

Navajo Nation

This document was heavy on the implementation strategy and what needs to be complete. The overall comprehensive planning components that are typical were not included in this master plan document. However, the Navajo nation could use the process for master planning to then refocus on development options within a comprehensive planning approach in order to develop sound area plans. Many areas are overlaid between these plans, however the master planning component shows where data and public participation can provide a holistic overlap of a successful approach.

## **Oneida Nation of Wisconsin**

### **Oneida Reservation Oneida Reservation Comprehensive Plan 2008**

#### Details

15,503 Citizens  
Green Bay, Wisconsin  
Dorr County, Wisconsin

#### Summary

The Oneida Reservation Comprehensive Plan (Plan) is the result of a multi-year effort involving Tribal leadership, departments, and members. Coordinated by the Planning Department, the Plan includes significant public participation efforts, statistical trends and projections, community history, and a variety of other sources. It represents the Oneida People's voice in addressing several factors (Planning Elements) affecting the community. It also acts as a "needs assessment" by which the Oneida People may continuously express their ideas, reactions, and concerns.

The Oneida Reservation Comprehensive Plan is a plan by and for the people. It was developed through a "grassroots" approach, which included: thirty public meetings; Tribal Membership questionnaires; and four Seven Generation Summits. During the planning process, several community members provided their input - 1,034 instances of participation were documented, which includes some repeat participants. Further, a number of Oneida Departments assisted the Planning Department in generating goals and objectives based upon the public input gathered during the process.

The Oneida Reservation Comprehensive Plan is designed to assist the Tribe with making daily and long-range decisions that influence a range of aspects affecting the Oneida People, including physical, social, political, economic, and aesthetic factors. Over time, it should fulfill the Oneida Mission and Vision Statements and achieve the Plan's stated goals and objectives. However, the Plan document cannot succeed on its own. In order for the Plan to reach its full potential and provide the Oneida community with the greatest benefit, it must be linked to dedicated actions.

#### Process/Culture/Data

Process

Tribal Plan Review

Oneida Nation of Wisconsin Balanced Scorecard  
Area Development Plans  
Twenty Four Year/Phase 2006-2030 Residential  
Development Plan  
Oneida Farm Plan  
Oneida Code of Laws  
Zoning and Shoreland Protection Ordinance  
Building Code  
Water Resources Ordinance  
Protection and Management of Archeological & Historical  
Resources  
Sanitation Ordinance  
Capital Improvement Program  
Public Participation Meetings (15)  
Mailings (3)  
Flyers (2)  
Planning Process Booklets (3)  
Planning Workshop Booklets (4)  
Posters-planning process  
Community Meetings (37)  
Total 1034 Instances of Public Participation  
Adopted by Oneida Business Council  
1999-2008  
Nine (9) Years

#### Culture

Culture and Language Interchangeable for 7 Generations  
Cultural foundation of the KayeLakowa  
tsi niyukwalihot^-Department of Culture  
"traditional" practices of the Haudenosaunee (Iroquois),  
Oneida Cultural Heritage Department  
Oneida National Museum 1979  
Oneida Nation Cultural Center  
Oneida Nations Veteran's advisory council

#### Data

Secondary Data (census, document analysis)  
Public Meeting Summary  
Plan Integration (by reference)

#### Stakeholders

Oneida Business Council

Tribal Planning Department  
Consultant- Planning & Design Institute, Inc  
Tribal Citizens  
Tribal Departments  
Tribal Boards and Commissions  
General Tribal Council

### Methods

Plan/Literature Review  
Public Participation  
Primary (public meetings) and Secondary (census) data analysis  
Plan Integration (by reference)

### Outcome

Ten National Priorities/Guiding Principals  
Goals and Objectives  
Land Policy Framework  
Community Assessment/Comprehensive Inventory and Trends  
Implementation/Tribal Action Plan  
Comprehensive Plan  
*16 Interrelated Elements-Health Care, Education, Housing, Community Design, Parks and Recreations, Utilities, Community Facilities, Transportation, Public Safety, Governmental Coordination and Regulations, Economic Development, Agriculture, Natural Resources, Environmental Protection, Department of Culture, and Land Use*  
General Land Development Policies  
Plan Incorporation  
    Transportation Plan  
    Economic Development Plan  
Land Policy Framework Map  
Land Suitability Analysis/Development Options  
Master Plan Areas/Corridor Development  
Development Goals  
Infrastructure Analysis

### Opportunities

National Executive Summary-Unified Direction  
Integration into regional plans/inclusion of stakeholders  
Housing Study  
Community Assessment  
Economic Growth Analysis/Economic Impact Study

## Summary

The Oneida Reservation Comprehensive Plan (Plan) is a very detailed summary of the action steps to be taken in what areas with planning concentrations as well as geographically. The depth of recommendations is organized as well as detailed. This provides a clear direction of goals and priorities for each of these cross-sectional items.

There are great opportunities to provide these specific directions with a national foundation for the comprehensive strategy. Whereas there are national priorities, it appears that the plan is specific and creates individual silos around each of the planning areas. By providing an unified direction, this may root the planning areas into a combined, cooperative strategy and direction. It would be interesting to see the working dynamics between these entities and the acceptance of the plan without national governance approval.

## Navajo Adaptation

The Navajo Nation could use this strategy to focus on regional assessment and directions. The Oneida plan looks specifically at a regional development focus, action steps and analysis for these steps. Additional analysis would be necessary to determine how this affects the economy as well as housing; however, this lays the groundwork to move forward.

Additionally, the Oneida Nation does generate income through its enterprises; however, it receives federal dollars. This can be leveraged into enterprises for additional revenue. With the Navajo Nation receiving these same dollars, planning could result in outcomes to maximize this investment.

## **Pascua Yaqui**

### **Pascua Yaqui Reservation Strategic Economic Development Plan 2006**

#### Details

3,737 Citizens  
Tucson, Arizona  
Pima County, Arizona

#### Summary

A key challenge confronting Native American Tribes today is creating sustainable economic development and building wealth for tribal members. The Pascua Yaqui Tribe (PYT) is preparing to address these issues by developing an economic development plan that not only identifies strategies to diversify the Tribe's economy, but also identifies strategies to improve the quality of life for tribal members.

The economic development planning process that the PYT selected follows the "Nation-Building" approach. This approach is characterized by the inclusion of leadership and the community, emphasis on long term results, and fostering the environment to sustain economic development projects.

The Pascua Yaqui Economic Development Strategic Plan was created under the direction of the Pascua Yaqui Steering Committee, with input from the Tribal Government and the Pascua Yaqui community. This planning process included a comprehensive approach with the intent of setting the tribal course of economic development for the next five years.

#### Process/Culture/Data

##### Process

Plan/Literature Review  
Economic Growth Analysis/Economic Impact Study/Economic

##### Base Analysis

Interviews  
SWOT  
Steering Committee Meetings  
Community Town Halls  
Public Participation  
Primary (public meetings) and Secondary (census) data analysis  
Plan Integration (by reference)  
Tribal Council Approval

2006  
Culture  
None

Data  
Secondary Data (census, document analysis)  
Town Hall Summary  
Interview Summary  
Plan Integration (by reference)

#### Stakeholders

Pascua Yaqui Tribal Council  
Pascua Yaqui Steering Committee  
Consultant-ESI Corporation  
Tribal Citizens  
Tribal Departments  
Pima County Planning Department

#### Methods

Plan/Literature Review  
Economic Growth Analysis/Economic Impact Study/Economic Base

#### Analysis

Interviews  
SWOT  
Steering Committee Meetings  
Community Town Halls  
Public Participation  
Primary (public meetings) and Secondary (census) data analysis  
Plan Integration (by reference)

#### Outcome

Economic Growth Analysis/Economic Impact Study  
Strategic Economic Development Plan  
Transportation  
Economic Development  
Workforce  
Real-estate  
Incentives/Regulation  
Quality of Life  
Guiding Principals/Primary Recommendations/Focus Areas  
Goals and Objectives  
Community Assessment

Plan Incorporation  
    Transportation Plan  
    Economic Development Plan  
Pascua Pueblo Land Use Plan  
Zoning Ordinance (reference)  
Development Options/ Corridor Development  
Development Goals and Objectives  
Strategy Plan Responsible Party Summary

### Opportunities

Land Suitability Analysis  
Infrastructure Analysis  
Integration into regional plans/inclusion of stakeholders  
Housing Plan  
Natural Resources Plan  
Cultural Plan  
Comprehensive Plan  
Community Assessment

### Summary

The Pascua Yaqui Strategic Economic Development Plan provided direction on what items were preferred for future economic growth. Whereas, the discussion of analysis was provided, there was no evidence, other than reference, that this was provided. Furthermore, the goals and objectives were based on qualitative output and not quantitative analysis.

This is not a comprehensive plan nor can evidence be found of this planning effort being present. This was determined through online research as well as lack of reference in the Pascua Yaqui Strategic Economic Development Plan. This will be critical in future planning as development opportunities continue to grow.

### Navajo Adaption

The outcomes listed within this document are appropriate for Navajo development. However, the methods and analysis to get to these outcomes is absent and needs further study. If the direction can be to work towards a consensus approach, then the analytic and research approach can be applied appropriately.

Once this approach is used, suitability can be analyzed and with this information, consensus can be applied to a comprehensive approach. Then nation building techniques of creating appropriate infrastructure and governance models can be used through the chapters.



## **Southern Ute Indian Tribe Reservation**

### **Ignacio Area Corridor Access Plan (IACAP) Southern Ute Indian Tribe Long Range Transportation Plan Update Southern Ute Indian Tribe 2011**

#### Details

3,737 Citizens  
Town of Ignacio, Colorado  
La Plata County, Colorado

#### Summary

The Ignacio Area Corridor Access Plan (IACAP) is a joint effort of the Southern Ute Indian Tribe (SUIT), the Colorado Department of Transportation (CDOT), the Town of Ignacio (TOI), and La Plata County (LPC). The IACAP is an important tool for the community as it enters into this period of sustained growth. The new Sky Ute Casino, the Museum and Cultural Center, and other projects have already begun to transform the area. Energy development in several nearby areas is a significant contributor to local traffic and a leading regional employer. More development is on the way, bringing new opportunities for jobs, businesses, and community improvements.

The Southern Ute Indian Tribe Long Range Transportation Plan Update, completed in March 2006, recognized that the Reservation's administrative campus just north of Ignacio, CO was on the verge of significant redevelopment. The IACAP is the result of a concerted effort by staff members to bring the four entities into the planning process.

The IACAP creates a "blueprint" for how the major corridors in the area will serve traffic for residents, workers, and visitors. The Plan identifies a series of recommended improvements and a phased implementation approach. All recommendations and costs are at the conceptual planning level. Implementation of these recommendations will require additional engineering and design elements.

#### Process/Data/Culture

##### Process

Agency Input  
Public Participation  
Stakeholder Meetings

Decision/Policy Maker Meeting-Leaders of agencies  
Tribal Meetings  
Property Owner Meeting  
General Public  
Alternative Analysis-sought multiple approaches  
Draft Development  
Final Alternative Analysis  
Corridor Plan  
Agency Adoption  
Tribal Council Approval  
2010-2011

#### Culture

Pow-Wow Grounds (Planned Development)  
Museum (Planned Development)

#### Data

Secondary Data (census, document analysis)  
Public Participation Summary  
Level of Service (LOS) Analysis-Traffic Study  
Interview Summary-discuss the proposed routes

#### Stakeholders

Southern Ute Indian Tribe (SUIT)  
Colorado Department of Transportation (CDOT)  
Town of Ignacio (TOI)  
La Plata County (LPC)  
Consultant-URS

#### Methods

Plan/Literature Review-reviewed ast plans  
Level of Service (LOS) Base Analysis-analyzed intersections and their grades A-E  
Interviews  
SWOT  
Steering Committee Meetings  
Community Town Halls  
Public Participation  
Primary (public meetings) and Secondary (census) data analysis  
Plan Integration (by reference)

#### Outcome

Tribal Campus Master Plan  
Ignacio Area Corridor Access Plan (IACAP)  
Southern Ute Indian Tribe Long Range Transportation Plan Update  
Master Plan Areas/Corridor Development  
Goals and Objectives-Plan benchmarks  
Development Options/Corridor Development  
Integration into regional plans/inclusion of stakeholders  
Alternative Analysis  
Implementation/Funding Plan

### Opportunities


Comprehensive Plan  
Guiding Principals  
Land Suitability Analysis  
Infrastructure Analysis  
Community Assessment  
Economic Growth Analysis/Economic Impact Study  
Land Use Plan  
Zoning Ordinance (reference)  
Housing Plan  
Natural Resources Plan  
Cultural Plan  
Community Assessment

### Summary

The Southern Ute Indian Tribe Reservation participated in a multi governmental effort through the development of the Ignacio Area Corridor Access Plan (IACAP). This was based on the existing plan of the Southern Ute Indian Tribe Long Range Transportation Plan Update completed in 2006. Whereas, this is not a comprehensive plan, the lack of a comprehensive plan (as evidenced through internet research and plan reference) raises caution to the overall intent of the tribe, its elected officials and citizens. Whereas, the overall governmental cooperation was a progressive step toward joint stakeholder participation, there is a lack of deliberation of the Tribal citizens and past case studies have shown that deliberation is a significant part of the public participation process.

### Navajo Adaption

The Navajo Nation could apply this to transportation, however within a comprehensive planning process, the approach of regional cooperation and the outreach of multiple stakeholders would strengthen the plan. This would provide multiple approaches as well as consensus building.



With this transportation plan, there are many comprehensive opportunities; however, it provides a framework to develop future opportunities. The approach taken with this transportation component could be provided across the board and used to fill in the gaps of a comprehensive approach.

## **Spokane Tribe of Indians**

### **Sustainable Community Master Plan The STOI 2012 Comprehensive Plan (Draft) 2012**

#### Details

2,712 Citizens  
City of Spokane, Washington  
County, Washington

#### Summary

Across every Sustainable Community Master Plan element, we received hundreds of community comments hoping to address social issues. Many of these were not comprehensively addressed in the goals. Social issues and planning efforts can find themselves intertwined and any updates to this document should be inclusive of both. Unfortunately these are beyond the current scope of this plan and should be discussed and incorporated at a later time as the tribe pursues solutions. Seven Generation thinking/ planning and traditional knowledge are the sustainable solutions to social issues, economic growth, environmental protection, and social equity.

The Sustainable Community Master Plan as part of the Sustainable Community Project could not have been completed without the help of all mentioned below. Community assistance is priceless and necessary. Lěmlm-t-š from the Spokane Tribe of Indians and Antithesis Research. Many Tribal citizens completed surveys, came to meetings, and contributed throughout the project.

A Comprehensive Plan is a road map to the future. It is a living document intended to change with the people. The community's vision expressed through their voice and involvement guides the plan's creation and development. It is the official policy document of the Tribe and is intended to be used as a decision making tool to achieve an orderly, harmonious, equitable, environmentally and economically stable community. This is a long-range plan that determines community goals and development as an ongoing project.

The Comprehensive Plan is a tool used by Tribal citizens, Tribal staff, and the Tribal Business Council. By approaching planning in a holistic manner, the community knows what needs to be done to be successful. Putting everyone on the same page and sharing goals, the whole community has the opportunity to play a part in the success of the Tribe.

As a Sovereign Nation, the comprehensive plan holds additional significance. The goals, objectives and policies developed here assists Tribal decision makers, and inform state and local governments, agencies, as well as the

United States, as to the Tribe's self-determined outcomes. For each one of the elements, the community has identified a list of goals for future planning and prioritization.

### Process/Culture/Data

#### Process

Secondary Data Analysis (Census)  
Meaningful Community Participation (MCP)-public participation technique  
Community meeting attendees  
MCP survey responders  
Grounded Theory Approach-open without direction/looking for foundation with data  
Tribal leadership Guidance  
Alternative Participation Analysis  
Surveys  
    Community meetings  
    Tribal Business Council (STBC)  
    Spokane Tribe of Indians (STOI) Executive Leadership Team (ELT)  
Results distributed in *The Sustainable Community Newsletter*  
Community meeting  
    Listening posts-planning updates  
Community Fun Day-day celebrating planning  
Additional Surveys  
    Two separate economic development surveys-seeking economic development ideas  
    Transportation surveys  
    Five page housing survey  
    Static display was created showing ten different examples of tourism ventures  
2004-2012  
Eight (8) Years

#### Culture

Result)  
Cultural relevance in tribal planning issues is important (Survey  
Three (3) Groups- Upper, Middle and Lower Spokane 1800's  
Multiple Small Villages during initial development 1800's  
Hunter-gatherer peoples  
Transitional population

Donation Land Claim Act (DLCA)-Oregon Territory Development  
for Indian and Non Indian  
Future Development Focused on Spokane Tribal Culture

Data

Secondary Data (census, document analysis)  
Spatial/Visual Analysis and Outcome  
Public Participation Summary  
Interview Summary  
Word Cloud/Discourse Analysis

Stakeholders

Spokane Tribe of Indians Tribal Council  
Tribal Citizens  
Consultant-Antithesis Research Staff  
Tribal Citizens  
Tribal Departments  
Federal Agencies (HUD)  
State Agencies  
Academia

Methods

Salmon Word Cloud-“word cloud” visually represents community issues,  
concerns and resources as identified by the community Plan/Literature  
Review  
Public Meetings  
Community Participatory Events  
Interviews  
Public Participation  
Primary (public meetings) and Secondary (census) data analysis  
Plan Integration (by reference)

Outcome

Spokane Tribe of Indians-Sustainable Community Master Plan-The STOI  
2012 Comprehensive Plan (Draft)  
Sustainability  
Transportation  
Economic Development  
Housing  
Capital Facilitates and Utilities  
Tourism  
Community Assessment  
Principals

Guiding Principals  
Smart Growth Principals  
Master Plan Areas/ Corridor Development  
Sustainable Land Use Goals and Objectives  
Community Vision  
Land use Plan  
    Natural Resource's Integrated Resource Management Plan 2004-2014  
    Spokane Tribal Comprehensive Economic Development Strategy  
    Spokane Tribe of Indians Draft Comprehensive Plan (STOI 2004)  
    Spokane Reservation Transportation Plan Draft Report (STOI 2008).  
Community Master Plan  
Sustainable Community Project  
Monitoring and Evaluation Plan/Performance Indicators and Benchmarks  
Implementation Strategies  
Bibliography  
Maps

### Opportunities

Land Suitability Analysis  
Infrastructure Analysis  
Economic Growth Analysis/Economic Impact Study  
Land Use Plan  
Zoning Ordinance  
Housing Plan  
Cultural Plan

### Summary

The Spokane Tribe of Indians Sustainable Community Master Plan Draft is a great example of many items that need to be included within a comprehensive plan. Based on the concept of sustainability, many methods are utilized and primarily based in an academic foundation (grounded theory, static display, survey, public participation, word cloud-discourse analysis, and other related). This leads to great opportunities to tie the components together and produce a framework to make sustainable decisions.

There are many methods, participatory conclusions and data to lead decisions. This must be integrated in an understandable, organized fashion to move the document from draft to adopted status.

### Navajo Adaptation

The Navajo Nation could use this plan to identify long term areas of progress monitoring and the development of a solid comprehensive plan. It also



provides grounding in guiding principles and strategies of implementation. This document could show comparables of what characteristics drive the planning process with Tribes and may be applicable to approaches set by the nation.