Storytelling Utilizing Data and GIS Technology: Creating Visual Frameworks to Aid Decision Making in Child Welfare and ICWA

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**Introductions**

**Kathryn Kulbicki** is a GIS/Research Analyst at Westat working with the Capacity Building Center for Tribes. She has 15 years of experience in health, child welfare, and human services research. Ms. Kulbicki has led numerous GIS projects with child welfare agencies exploring transportation solutions, optimization of resources, and placement stability for children in foster care. Ms. Kulbicki holds a Master of Arts in geography and a Master of Science Administration in regional planning and is currently a doctoral candidate in the Department of Geography and Geoinformation Science at George Mason University.

**Jhon Goes In Center** has over 30 years of experience in empowering Native American communities in the use of new technologies and GIS. Mr. Goes In Center is an enrolled member of the Oglala Lakota and serves in an advisory capacity within his own Nation. As a member of the Oglala Lakota Tribal Historic Preservation Advisory Council he endeavors to assist Native American organizations and emerging professionals with a belief in ancestral ideals that keep alive the entrepreneurial spirit needed for success.
The Center for Tribes collaborates with American Indian and Alaska Native nations to help strengthen Tribal child and family systems and services in order to nurture the safety, permanency, and well-being of children, youth, and families.

Services include peer networking, distance learning, consultation, product development and dissemination.

Tailored capacity building service projects with Tribal child welfare programs that receive Title IV-B funds.

https://capacity.childwelfare.gov/tribes/
The Need for Geography and New Technology in Child Welfare and Social Services

• Assists in organizing and presenting data (telling your story)
• Enhances understanding of community needs and planning
• New technologies streamline work flow
• Encourages better data collection and managing with data
Sense of Place, Knowledge of Home

The relationship that all people have with their homeland provides a powerful connection to their origin story, their history, their community, and their future.

Maps allow for:

- Nation building through information
- Community preservation and child welfare through mapping
- Understand where children are placed in foster care and how to allocate resources to best help their children
Historical Connection to Maps
Map by: Amos Bad Heart Bull
Oglala Lakota, Ca. 1890

Photo by: Astronaut John B. Herrington,
Chickasaw, 2002
A Lakota World View of the Black Hills of South Dakota

1. Ki yanka o canku (Race Track)
2. Mato Tipi Paha (Devil’s Tower)
3. Paha Zipela (Slim Buttes)
4. Paha Sapa (Black Butte)
5. Pe Sla (Old Baldy)
6. Hinhan Kaga Paha (Owl Butte)
7. Mato Paha (Bear Butte)
8. Mni Kata (Hot Springs)
9. Pte Tali Yapa (Buffalo Gap)
10. Wakiyan Paha (Thunder Butte)
11. Harney Peak
Building Tribal Resilience through Enhancing Child Welfare Practice

• **Resilience**: capacity to anticipate, prepare for and to recover from issues

• Greater awareness of issues through visual display of data (maps)
  • Enables seeing connections, patterns, scope

• Assists managing resources and identifying cultural connections

• Enables greater empowerment and self-determination through knowledge

• Tool to inform Tribal leadership, plan social well being of community
Geographic Information Systems (GIS)

A geographic information system (GIS) integrates hardware, software, and data for capturing, managing, analyzing, and displaying all forms of geographically referenced information ~ ESRI

Image from: http://catalog.flatworldknowledge.com/bookhub/reader/3798?e=campbell_1.0-ch07_s02
Geographic Data

Point

Line

Polygon
GIS Technology – a visual framework to aid planning, decision making and tell a story

Tribal Child Welfare/Social Services questions:

• Where are our children?
• Where are our foster parents?
• Where are our referrals coming from?
Geographic Data Starts in Excel Spreadsheets

- Data are already being collected
  - Services
  - Foster homes
  - ICWA homes
  - CPS Cases
- Data needed
  - Address
  - City
  - State
  - Zip
Getting Prepared - Making Excel Work for Your Tribal Community

https://tribalinformationexchange.org/index.php/making-excel-work-for-your-tribal-community

Video tutorials and printable reference guides on:

• Basic Excel skills
• How to develop/plan your spreadsheet
• Enhancing spreadsheets with drop-down lists
• Using formulas to pull data for reporting and analysis
• Displaying data with Excel charts
Challenges

• Matching need, desire of child welfare program to technological capabilities
  • Availability and quality of data (addresses, ability to obtain waypoints)
  • Computer capacity for GIS software
  • GIS software technical expertise
  • Ongoing support (updated data, technology)
• Developing partnerships with Tribal agencies with GIS capabilities
• Data sharing and confidentiality protocols (“do no harm”)
• Formalized implementation strategy and support from Tribal leadership
Tribal Child Welfare Information Exchange

https://www.tribalinformationexchange.org/

WELCOME!

The Capacity Building Center for Tribes works to design and deliver tools and resources for tribal child welfare professionals. Our hope is that they are helpful in determining how best to support tribal communities and meet their unique needs.
Additional Information

https://www.tribalinformationexchange.org/

Mapping to Protect Children & Preserve Communities

The relationship between Native people and our homelands provides a powerful connection to our origins, our histories, our communities, and our future. References to place are spiritual: our stories of Creation and Emergence give us a deep spiritual connection to a geographic place and tribal identity. Geography is an intimate part of our being, which often leads us to ask questions about where people are, where we live, and where we are from. This geographic knowledge is often depicted on maps and through storytelling, which provides a connection to home.

Sense of Place, Knowledge of Home

Much like our ancestral systems for survival, gathering and using information and data is critical for collective decision-making about business, resource, and cultural management, which are in turn tied to empowerment and self-determination. Data visualized on a map becomes personal because we can relate it to where we are.

From a social services perspective, geographic data can help us understand spatial patterns that create a picture of what is happening within our community. This could include location of tribal members, tribal offices, services, public safety, natural resources, or cultural or sacred places. Each type of data can be layered with other data to provide an enhanced picture of the community, what resources are available, and where resources are needed. In this way, maps can help our social services agencies better understand the connection of relational and spatial data through geography, such as where the greatest needs are or how to connect families with the closest resources.

Where are our children?

Our philosophies about our children are based on Indigenous language and culture. Language

The urgency to know where our children are located can feel daunting without the right tools to visualize location data. Especially when tribal children are moved to foster homes outside of tribal boundaries, knowing where children are located can help keep cultural ties intact. Child welfare agencies can map location data, such as addresses, to assist in meaningful visualization and interpretation.

Mapping and GIS: A Vision for Child Welfare

A Geographic Information System (GIS) is a mapping program for capturing, managing, analyzing, and displaying all forms of geographical reference information (e.g., addresses, tribal boundaries, social demographics), including sensitive or secure data. Tribes have traditionally used GIS for mapping jurisdictional boundaries, environmental resources (e.g., forestry, range, and fisheries programs), and cultural locations (e.g., sacred or historical sites). Only in recent years have tribes also started using GIS for mapping health and human services data.

GIS and child welfare are a natural fit. GIS allows us to see where our children and resources are located, whether they are on reservation or several towns—or even states—away.

How Can Geographic Data Be Useful in Child Welfare Practice?

Maps make data visual and relatable. This visual presentation can help child welfare programs:

- make better decisions about where to place children
- determine where to target foster family recruitment
- show the impact of decisions over time
- share with funders, Tribal leaders, and other Tribal departments to help with their decision-making.

Today, technology allows us to easily record large quantities of geographic information, and tools like Geographic Information Systems (GIS) help us learn more from it. Any federally recognized Tribe can get GIS software and training through the BIA free of charge. The GIS mapping program analyzes and displays all forms of geographically referenced information (e.g., addresses, Tribal boundaries, and resources). For an introduction to GIS and its applicability to Tribal child welfare, see Mapping to Protect Children & Preserve Communities. A list of available GIS Data Sources and Training.

Indigenous Connection to Place

Native cultures have a natural connection to geography that comes from strong historical and spiritual connections to indigenous homelands. Native people have recorded information about time and place for thousands of years. This knowledge is important to understanding our history and the culture of our ancestors.

Connecting Place to Decision Making

Everyone has their own personal geographic understanding, or “mental map” of their community. Mental maps could include the location of children in care, homes where child protective services has been called, or distances to services, schools, or family members. These locations might be known in a worker’s mental map, but it may be hard to communicate what someone innately knows about the geography of their work to others in their office, community partners, or Tribal leadership. Using GIS provides a way to visualize and communicate the information we have gathered in our mental maps. When information is visualized and shared, it creates a new set of questions around geography that may not have been previously asked.

Developing Geographic Questions

Once data is on a map, patterns begin to emerge. These patterns will begin to form a new set of questions. When child welfare data is mapped, program staff may begin to ask:

- Are we getting a lot of referrals or reports in one area or part of the community? Why?
- Are there preventative services that we can provide in a certain part of the community?
- Where are foster parents most needed? Where are they most available? Are they placed close enough to their families, schools, and community or cultural resources?
Thank You!

Please visit us at our booth to learn more!

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