NCAI’s 12th Annual Tribal Leader/Scholar Forum
BREAKOUT SESSION
Salon C1
1:30pm-4:00pm

What is our Economic Base?
Mapping Industries and Capital on Tribal Lands

Moderated by Councilman Roger Rader, Pokagon Band of Potawatomi Indians

Tribal governments are aware of their primary industries and economic drivers—from health care to gaming, from fishing to timber. But how often have these industries been analyzed or mapped out with real economic data? How often are we thinking about future returns on investments or diversification? And where do community institutions that lie beyond the government shape and propel economic futures for local businesses and entrepreneurs? Join us for this exciting and interactive session that will inform the ways in which we grow our economic base.

Presenters:

Tribal-County Comparisons in Workforce Opportunity: Questions of Infrastructure and Social Capital
Dr. Dick Todd, Federal Reserve Bank of Minneapolis

Spatial Economic Data on Industries on Indian Reservations
Dr. Lawrence Gross & Mariah Tso, University of Redlands

Community Integrity through Community Investment: Insights from a Native CDFI
Jonathan Taylor

International Responders
Dr. Tahu Kukutai & Maui Hudson, University of Waikato, Aoteroa/New Zealand
Tribal-County Comparisons in Workforce Opportunity: Questions of Infrastructure and Social Capital

NCAI Mid Year Conference, Mohegan Sun, Uncasville, CT, June 14, 2017

Presented by Richard M. Todd (dick.todd@mpls.frb.org), Vice President, Federal Reserve Bank of Minneapolis and Advisor to its Center for Indian Country Development and its Community Development Department

Based on joint work with Randall Akee (Dept. of Public Policy, UCLA), Elton Mykerezi (Dept. of Applied Economics, Univ. of Mn.), and Orges Ormanidhi (Dept. of Applied Economics, Univ. of Mn.)

The views, opinions, findings, conclusions, or recommendations expressed here are those of the presenters and not necessarily those of the Federal Reserve Bank of Minneapolis, the Federal Reserve System, the U.S. Department of Agriculture, or the U.S. Census Bureau. All results have been reviewed to ensure that no confidential information is disclosed. This material is based upon work that is supported by the National Institute of Food and Agriculture, U.S. Department of Agriculture, under award number MIN-14-G19.
Key Points

• The reservation job market is poorly measured
• We geocode Census data on *employer establishments* to compare reservations w. nearby counties, finding
  – Reservations have a similar industry mix of *establishments* but fewer of them in nearly all sectors
  – But big casino-related and gov’t. sectors give reservations an edge in total *job numbers*, even though reservations jobs are lower in many other industries
• Reservations of <15K pop. dominate our data and are much more prone to deficits in establishments and jobs
• Differences correlated w. factors such as remoteness and lower income and education, but not fully accounted for
  -- Many gaps unexplained -- No causal explanation claimed -- Results are avgs.
Overview of the Data

• 277 federally recognized reservations and 514 nearby county areas (Navajo not included)
• Reservation residents = 8.2% of this population
• 18 industries (or sectors)
  – E.g., mining; ag/forestry/fishery/hunting; construction; manufacturing; wholesale; retail; education; etc.
• About 281,000 total establishments, of which 5.2%, or not quite 15,000, are on reservations
• About 3.3 million jobs at these establishments, with 9.2%, or just over 300,000 on reservations
Reservations Resemble Counties in Their Industry Mix of Establishments

Establishment Shares by Sector and Place

GeoType
- Cnty
- Res
But Reservations Generally Have Fewer Establishments per Person

Index = 1 if establishments/person are same for res. and counties. Overall value is 0.63 (37% below parity with reservation population)
The Industry Mix of Jobs on Reservations Skews toward Recreation and Government

Employment Shares by Sector and Place
Jobs per Person Varies Much More by Sector and Is Not Lower, Overall, on Reservations
Reservation Population Distribution Suggests a Need to Focus on Low-Population Areas

From 2010 publicly available Gazetteer files for reservations and 2008-2012 ACS for county complements; not equivalent to somewhat smaller sample used within the RDC, which omits certain areas with missing values for other variables.
Estimating Establishments and Jobs by Population Allows Us to Focus on Low-Pop. Areas

Ag_For_Fish_Hunt Jobs

6 var. WLS -- Res. ((solid, blue)) & Cnty.(dashed, red)
Double Gap Example: Construction

Construction Establishments

6 var. WLS -- Res. ((solid, blue)) & Cnty.(dashed, red)

Construction Jobs

6 var. WLS -- Res. ((solid, blue)) & Cnty.(dashed, red)
Other “Double Gap” Sectors

- **Ag/Forestry/Fishing/Hungint** (up to 15,000)
- **Mining** (up to 10,000)
- **Utilities** (up to 15,000)
- **Manufacturing** (from 5,000 to 30,000)
- **Wholesaling** (up to 17,500)
- **Retailing** (up to 7,500)
- **Transportation/Warehousing** (up to 17,500)
- **Information** (up to 7,500)
- **Finance/Insurance/Real Estate** (up to 7,500)
- **Education** (up to 2,500)
- **Health Care/Social Services** (up to 10,000)

*Reverse establishment gap – reservations higher than counties – at high population levels

^Reverse employment gap – reservations higher than counties – at high population levels
Opposing Gaps Example: Public Admin.

The Arts/Entertainment/Recreation and Other sectors show variations of this pattern.
Establishments Per Person Are Low in All Sectors for Small-Population Reservations

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Legend:
- Reservation significantly lower
- Reservation lower, not significant
- County lower, not significant
- County significantly lower
Job Number Deficits Are Still Common at Low Pop. Levels but Not Consistently across Sectors

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Legend: Reservation significantly lower  Reservation lower, not significant  County lower, not significant  County significantly lower
What Explains These Patterns?

• Bottom line: We don’t know yet
• However, we can add variables that statistically account for some of the gaps
  – Population density
  – Rural vs. urban indicator (USDA)
  – Per capita income and poverty rate measures
  – Percent of 25+ population with bachelor’s degree
• This suggests that the gaps may not be inherent in reservation status, but we plan more work to look at these and other geographic/demographic variables as well as policy variables that may shed light on how to close the gaps
Questions?

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www.minneapolisfed.org/indiancountry
Increasing Economic Resilience in Indian Country: Is Agriculture the Answer?

Larry Gross (Anishinaabe), Ph.D.
San Manuel Band of Mission Indians
Endowed Chair of Native American Studies

Johannes Moenius, Ph.D.
William R. and S. Sue Johnson
Endowed Chair of Spatial Economic Analysis and Regional Planning
Institute for Spatial Economic Analysis

June 2017
Draft
Preliminary Remarks

All views presented are solely the authors and do not represent official positions neither of the University of Redlands nor any of our sponsors.

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Support of Native American Studies at the University of Redlands by the San Manuel Band of Mission Indians is gratefully acknowledged.

We acknowledge and give thanks to the Mohegan people, the original owners of the land upon which we are meeting.
Summary

• The Good:
  ▪ Agriculture reduces employment volatility in Indian Country
  ▪ It also improves employment growth in the short run

• The Bad:
  ▪ It reduces employment growth in the long run

• The Unavoidable:
  ▪ Agricultural jobs have a high automation potential
Outline

• History Matters – the ISEA Experience

• What We Did

• The Results

• What This Means for Indian Country Economic Development Policy
ISEA Was “Born” Out of the Housing Bubble

• The colors imply that housing prices:
  ▪ No more than doubled: green
  ▪ Tripled: orange
  ▪ Quadrupled or more: red

• Let’s again start by orienting ourselves and then see how housing prices grew …
Risks Vary Across Locations

2008 Q4 Inland Empire Skewness of Negative Equity

Data Source: DataQuick
What Is Resilience?

- Resilience is a measure of vulnerability, e.g. high swings in employment and unemployment.

- Think Stock Market: high risk, high (expected) return, low risk low expected return.

- For economic regions, more difficult as unemployment comes with human hardship.
How to Achieve Resilience?

- Economic Regions: Need to find optimal portfolio of sectors to provide employment and income growth with tolerable volatility / fluctuation in employment within region

- Individuals and small, local businesses (think retailers): Seek out localized information and forecasts for better business decisions
ISEA Goal: Make Small Businesses and Areas More Resilient

- Provide Zip Code-level economic information and forecasts so people and businesses can adjust more quickly

- Provide free localized reports to news media and individuals
  - Example: Monthly report on employment in urban Indian Country

- Provide low-cost big-data-driven economic consulting services
Outline

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Data

• Have historical data (25 years) for employment by month, Zip Code, and sector

• Used three definitions of Indian Country:
  ▪ Wide Definition: All Zip Codes that touch Indian reservations
  ▪ Narrow Definition: All Zip Codes that fall completely within Indian reservations
  ▪ “Exact” Definition: Use Secondary Data on Establishments to find out what the share of each Zip Code is that falls in or outside of Indian reservations
Methodology

- Used Regression Analysis to find out what determines growth and volatility of growth

- Drivers (Hypothesis):
  - The share of Agriculture (growth –; volatility –)
  - Lead Sector (growth +; volatility –)
  - Sector Portfolio (growth –; volatility –)
Outline

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Effect on Employment Growth*

*Regression Analysis

Data Sources: DataQuick Information Systems and ESRI
Effect on Employment Resilience*

Data Sources: DataQuick Information Systems and ESRI

*Regression Analysis
Outline

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Increase Share in Agriculture?

• Unfortunately, not uniformly recommendable

• Reduces employment volatility, which is good

• Short run improves growth, long run hinders growth

• Within 20 years, more than 80% of all agricultural jobs can be automated away
Share of Jobs Facing Automation Risk by 2035, by Metropolitan Statistical Area

Expected Job Losses (%)

- <40
- 43
- 46
- 49
- 52
- 55
- 58
- 61
- >64%

Total Jobs in MSA

- >1.25 Mil
- <50k

Data Sources: Frey and Osborne (2013), BLS OES
Map created by:
The Institute for Spatial Economic Analysis (ISEA), University of Redlands, 2017
Summary

• Agriculture
  ▪ Increases resilience
  ▪ Improves short run growth
  ▪ Likely reduces long run growth

• What We Need to Do
  ▪ Find out how susceptible Indian Country is to automation
  ▪ What Sector Portfolios may fare the best?
  ▪ What do we need to do to prepare our people?
Miigwech!
Thank you!

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New Paths Home
The Impact of Four Directions Development Corporation on Indian Island, Maine
2001–2014
Executive Summary

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Jonathan B. Taylor
The Taylor Policy Group
1990 Main Street, Suite 750
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June 2, 2015
This research was conducted under a contract between Four Directions Development Corporation and the Taylor Policy Group, Inc. (TPG). TPG is an independent consulting firm unaffiliated with Four Directions. While the work was produced under contract, it adhered to academic standards for Indigenous community research, including: i) approval of the research project by appropriate tribal bodies; ii) subject consent in the interview and survey processes and for the use of interview and survey data; and iii) evaluation of Four Directions outcomes data against community-appropriate local, regional, or national comparators. The study relied on Four Directions and the Penobscot Indian Nation Housing Department for internal data. Nonetheless, all analyses and interpretations of results are the authors’ own and the views expressed herein do not necessarily reflect those of any of the funding organizations or of the institutions with which the authors are affiliated. Four Directions provided data and photos not otherwise cited or credited.

This work is licensed under the Creative Commons Attribution 4.0 International License. To view a copy of this license, visit the Creative Commons online or send a letter to Creative Commons, 543 Howard Street, 5th Floor, San Francisco, California, 94105, USA.

Cover: Indian Island; Awendela Dana; Christopher and Shaunda Neptune; Wenona’s Place apartments; the ferry to Indian Island; Rick and Joyce Nicolar. Sources: Google Maps (2015); historical photo courtesy of James Francis.
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June 2, 2015
Awendela Dana wasn’t aware of any loan programs for buying on-reservation properties until she heard about Four Directions Development Corporation from other tribal members on the Penobscot Indian Island Reservation. As recent graduates of the University of Maine, Ms. Dana and her significant other were eager to have a home of their own within the Penobscot community. In 2004, they received a Four Directions loan to purchase a single-family home from another tribal member for $43,000. Coupled with down payment assistance from the Penobscot Nation, their Four Directions mortgage provided affordable payments for a young couple starting out in their professional careers.

In 2008, Ms. Dana returned to Four Directions to refinance the loan in her name only. Four Directions approved the request. Ms. Dana was thrilled because the refinance allowed her to maintain her independence and economic self-sufficiency: “It was all mine and in my community! My mother taught me the importance of being able to take care of yourself, provide for your family, and not be dependent on others.”

Over the years, Ms. Dana’s relationship with Four Directions adapted to her goals and needs. After many years of successful borrowing, in 2013 Ms. Dana received a home improvement loan to replace her aging roof. Then, during the summer of 2014, Ms. Dana’s young daughter required an emergency medical procedure. Mindful of the costs, Ms. Dana contacted Four Directions, which was able to temporarily defer her loan payments so the family medical emergency would not have lasting consequences on her finances and credit. Ms. Dana was extremely happy with the support that she received from Four Directions, remarking that, especially when having a child with special medical needs, “getting help and support from the Tribe and from Four Directions is amazing!”

Being able to own a home in her home community gives Ms. Dana a sense of security and pride. Most of her family is right within walking distance from her home, and each weekend she is able to cook breakfast for her mother.
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“This is more than a house. You have a place within your community.”

– A. Dana
Without savings, home equity, budgeting ability, and the good credit that comes from them, working American Indian families are just one calamity away from dependence. With them, they are on the road to financial security and greater family wellbeing. Native communities are also better off when the benefits of capital appreciation through homeownership are widespread—the Native nation’s overall economic growth will be more vigorous and sustainable.

This is not news to Penobscots. Asset building against risk—making baskets, drying fish, stockpiling wood, teaching the next generation to weave, tan, and sew—is a traditional strategy for surviving and thriving. What is new is Four Directions Development Corporation’s concerted effort to close the gap between Penobscot households and modern financial markets. America’s capital markets neither fully understand nor adequately serve Indian Country. Four Directions stepped into the breach to create a housing market in which equity can be built, values can rise, homes can be bought and sold efficiently, and residents have choices to rent or buy, build, or improve.

A decade and a half ago, the Penobscot Indian Nation made a choice to construct a Native Community Development Financial Institution (CDFI), with the intent to specialize in housing finance for Penobscot and other Wabanaki peoples. Native CDFIs like Four Directions work to address the particular challenges of Indian Country capital formation, especially collateralization. They also participate in multipronged Native nation rebuilding efforts that address centuries’ worth of privation and its consequences. Yet the promise of Native CDFIs goes further still: ultimately, they help Native nations develop robust capital markets.

Importantly, a financial organization that is in tune with local understandings about money, debt, savings, and assets will be better able to address economic conditions in Indian Country. Its loan products, counseling, and other services will better cohere with local community members’ preferences and needs for lending. In central Maine, this is more likely if the institution is owned and controlled by Wabanaki people and its board and staff come from Wabanaki communities. Four Directions meets these needs. While its staff, administrators, and board include experts in banking and community development from outside the Wabanaki nations, their expertise is second in importance to Four Directions’ Wabanaki foundation and control.

This report looks back over fourteen years of Four Directions’ work on Indian Island, the heart of the Penobscots’ territory, assessing its impact on households and housing. Based on this research and analysis, the creation of Four Directions has had its intended effects. Over its lifetime, Four Directions has issued more than $7.4 million in housing loans to 162 Wabanaki families statewide. In Penobscot County, it issued 114 mortgages, home improvement loans, consumer, and energy efficiency loans worth $5.29 million. Nearly half of these loans—54, which together
What is new is Four Directions’ financial markets. The gap between Penobscot households and modern financial markets is a traditional strategy for surviving and thriving. What comes from them, working American Indian families are just one calamity away from dependence. With them, they are on the road to financial security and greater appreciation through homeownership are widespread—the Native nation’s overall family wellbeing. Native communities are also better off when the benefits of capital formation, especially collateralization. They also participate in Earned Income Tax Credits.

Four Directions services are not limited to lending. Critically, it provides homeowner and financial counseling—often alongside the lending process and sometimes independently of it. Through September 2014, Four Directions has provided homeowner and financial counseling to 53 Penobscot applicants and co-applicants. Four Directions’ Volunteer Income Tax Assistance (VITA) has helped Wabanakis file 217 tax returns for tax years 2008-2013, recovering $227,000 in Earned Income Tax Credits.

The quantitative and qualitative data gathered and analyzed for this report show that Four Directions:

- Provides quality services
- Expands the home mortgage market on Indian Island
- Helps clients gain confidence in the financial marketplace
- Assists its clients improve the quality of their housing
- Helps clients budget their money
- Assists its clients become financially stable
- Assists its clients to lower the costs of operating their homes
- Helps its clients reduce their bad debt
- Helps clients increase their savings
- Helps clients improve their credit scores
- Promotes community integrity

Four Directions achieves more than just these direct results. Its collaborations with the Penobscot Nation and its Housing Department have streamlined the lending process on Indian Island and resulted in new and creative homeownership projects. Four Directions’ position in the vanguard of the Native CDFI movement, its comparatively large capitalization, and its operating strengths contribute to the longevity of its impact. Moreover, Four Directions’ efforts do not merely transfer funds to a place that needs them, they help overcome economic inefficiencies that impede capital markets.

1 Through September 2014, Four Directions had provided five loans totaling $88,352 to businesses belonging to Penobscot individuals, and counseled three additional Penobscot citizens in business development. And, it joined in three participation loans on two Penobscot housing development projects (Lot 13 and Wenona’s Place) for a total of $737,500.
Being in the community, being near family, being home—these statements capture a final important impact that Four Directions has on the Penobscot Nation. While intangible, there is great value in the contributions to community integrity that Four Directions has made. By making a move back to the reservation possible, by helping family members locate near one another, by implicitly supporting the idea of “tribe,” Four Directions is helping sustain the nation into the future. Four Directions is not only in the housing business, but also in the nation building business.

Critically, and to the Penobscot Nation’s credit, Four Directions’ work reinforces and is reinforced by the work of tribal programs—the Penobscot Nation’s Housing Department, its Social Services Department, its Legal Department, and more. Working together they have achieved much more than they could on their own.

In sum, Four Directions’ impact on the Penobscot Nation is evident in the way it helps citizens:

1. **Access financial capital:** Four Directions lends to qualified borrowers and helps them save money through the lending process. It also raises awareness off-Island about the possibilities for lending on-Island, improves Penobscots’ attractiveness to outside lenders, and refers Penobscot citizens to off-reservation banks when it would suit the clients’ needs well.

2. **Accumulate assets:** Through Four Directions’ efforts, citizens are able to qualify for mortgages and build home equity (by obtaining mortgages and paying them down and by investing in rehabilitation). They also are able to budget better and save more (through fixed interest rates and lower home operating costs).

3. **Develop human capital:** Through engagement with Four Directions, citizens increase their financial literacy, gain budgeting skills, improve saving habits, and raise their credit scores.

4. **Build community:** Four Directions home loans enable return migration and help resolve family housing constraints.
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