

Economic Impact Analysis Remote Alaska Parks Case Study: Katmai National Park and Preserve



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Research Partners

National Park Service, Katmai National Park and Preserve

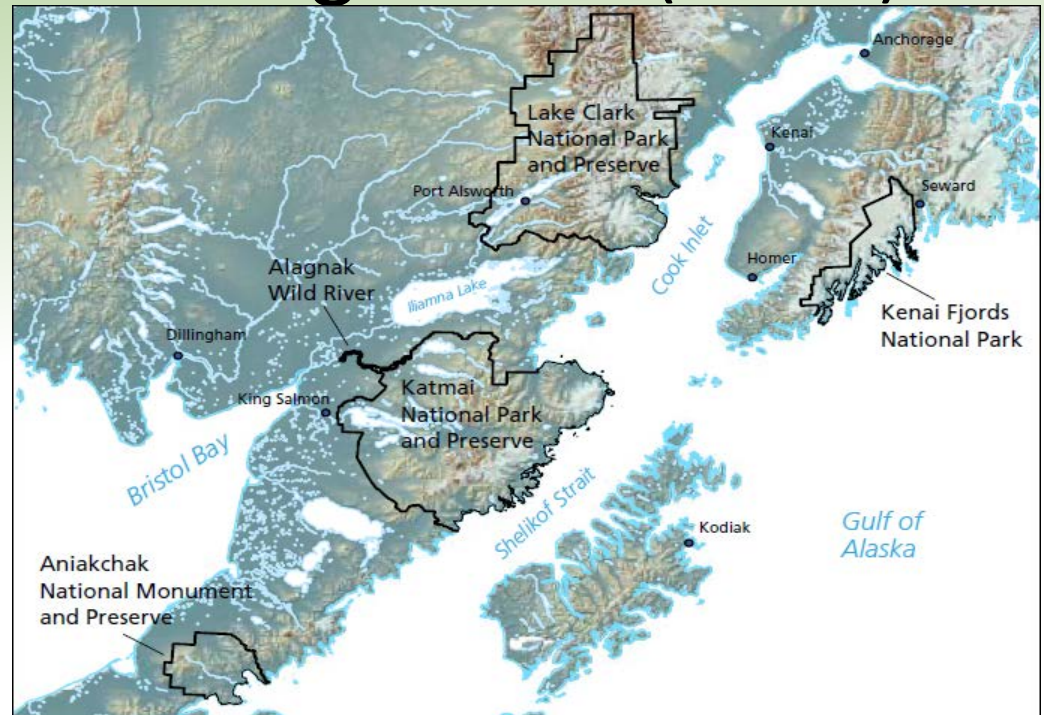
National Parks Conservation Association



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Research Purpose

- Review and suggest improvements to visitor economic impact assessment procedures in remote, isolated Alaska National Parks
- Compare Money Generating Model (MGM) & IMPLAN
- Case study: Katmai National Park and Preserve

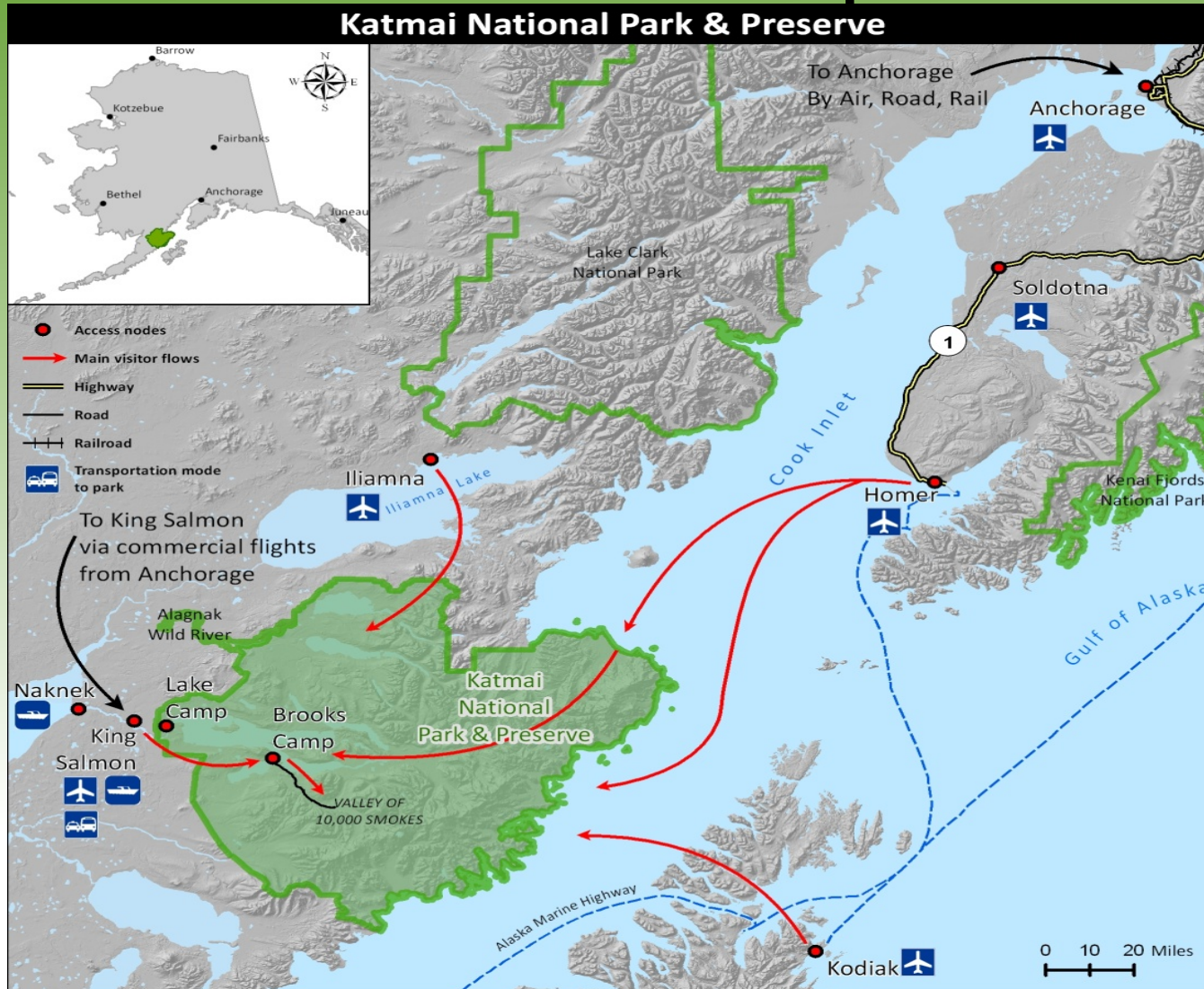


Katmai NPP Background

- Created in 1918 to preserve the Valley of Ten Thousand Smokes
- Alaska National Interest Lands Conservation Act (ANILCA) expanded park to ~ 4 million acres
- Known for brown bears that congregate at Brooks Falls for the salmon run
- Sporting fishing continues to be a major draw



Visitor Travel Complexities



Research Challenges

- 2006 visitation survey estimates – limited, non-random sample did not match Park visitation estimates
- Visitor type categories – remote Alaska visitation do not match lower-48 and MGM
- Expenditure survey results- visitors, especially package visitors, confused by survey map and expenditure questions



Research Methods

- Adjusted visitation estimates
 - No staffed portals w/ visitor counts so estimation is difficult
 - Cross referenced Katmai Commercial Use Auth. (CUA) database
 - Developed a more accurate estimate of all visitors
- Adjusted for visitor patterns and itineraries
 - Air and boat access creates complexities and unusual patterns for day and overnight visitors
- Visitors not recorded in CUA data
 - Visitors with own planes and boats
 - Visitors dropped below mean high tide
 - Multiple days overnight visitors
 - Hunters & concession visitors



Katmai NPP 2006 Visitor Survey

- Expenditure group size (survey question # 23c)
- Length of stay in Katmai NPP (survey question # 12)
- Group expenditures by category inside Katmai NPP (survey question # 23a)
- Group expenditures by category outside Katmai NPP but in Alaska (survey question # 23b)
- Relative role of Katmai NPP in overall Alaska travel plans (survey question # 3)



Research Methods

Adjustments to economic modeling:

- Used IMPLAN software because more flexible
- Standard MGM expenditure and visitor type categories do not fit Katmai (or Alaska) visitors;
- Created visitor categories that fit Katmai visitor patterns
 - Independent day visitors
 - Guided day visitors
 - Overnight in park visitors
- Many visitors with guided package tours
- Adjusted package expenditures to allow IMPLAN model data input



Economic Modeling

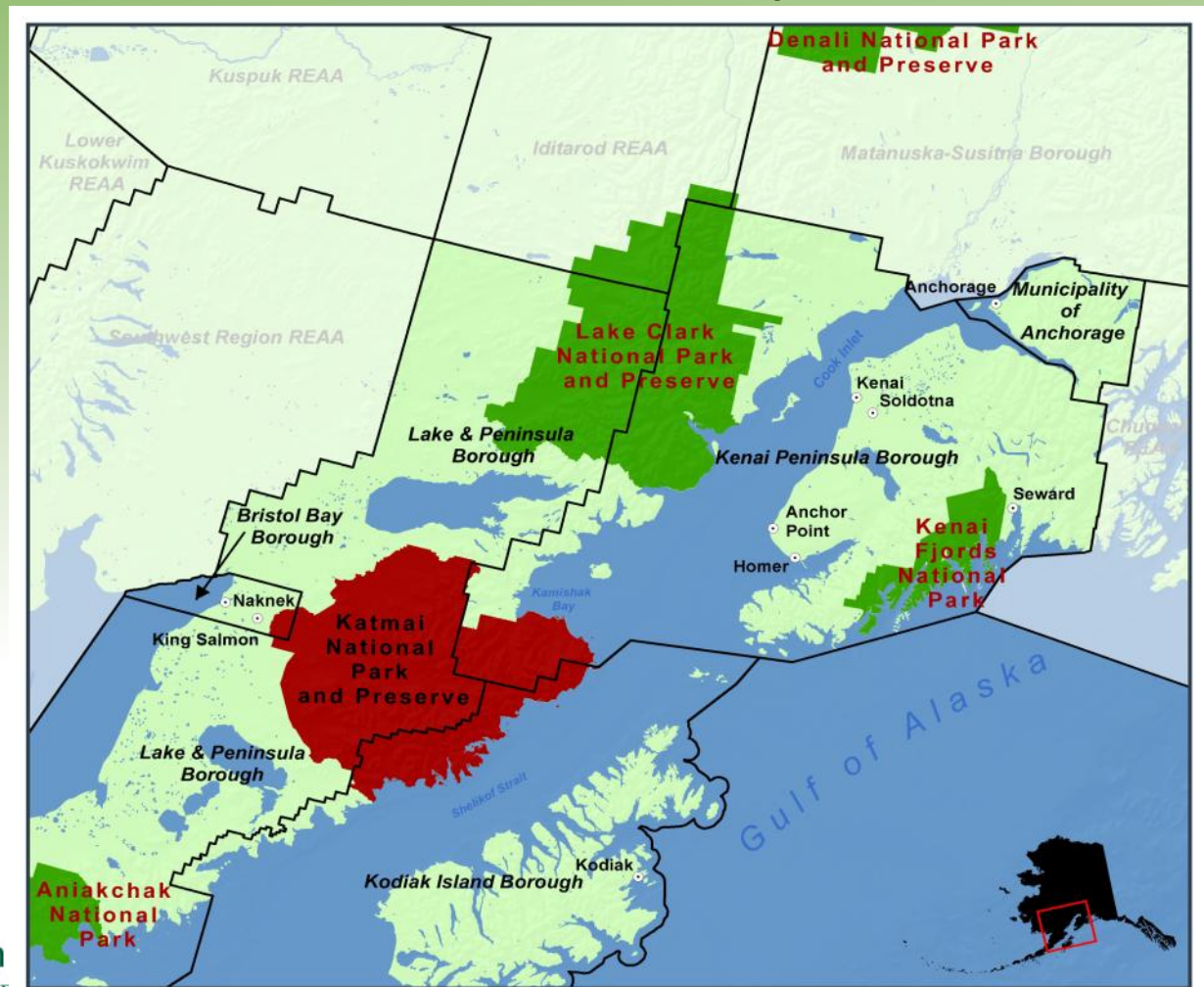
Adjusting expenditure categories:

- Package day visitors expenditures adjusted to reflect breakout of independent day visitors
- Overnight visitor expenditures based on similar types of visitors to Alaska
- Allowed expenditures to be included in IMPLAN or a modified MGM



Economic Modeling

Five borough economic impact region based on visitor travel patterns, itineraries and expenditures



Economic Impact Results

Expenditures in Alaska by Visitors to Katmai NPP

	<u>2009\$\$</u>
Direct Expenditures i/s Katmai NPP	\$13,161,640
Direct Expenditures o/s Katmai NPP in Alaska	\$40,117,130
Total	\$52,859,210

IMPLAN Modeling Results:

Total Industrial Output	\$73,066,210
Employment	650
Labor Income	\$23,102,890
Value Added	\$37,051,950



Economic Impact Results

Alternative 5-borough local model reducing expenditures un-related to Katmai NPP portion of Alaska visit

	<u>2009\$\$</u>
Total Direct Expenditures i/s Katmai NPP	\$12,335,900
Alaska - weighted for Katmai NPP influence	\$19,411,820
	<u>\$31,747,720</u>

IMPLAN Modeling Results:

Total Industrial Output	\$47,319,200
Employment	390
Labor Income	\$15,155,680
Total Value Added	<u>\$24,126,240</u>



Recommendations

- Expand survey methodology to be random and full season, more survey locations
- Or better yet, use technology to reach more visitors @ lower cost
- New expenditure questions: suggested rewrite @:
iser.uaa.alaska.edu/tmp/KatmaiAlaska-ginny.pdf
- Use IMPLAN economic impact software or create a new user interface for Alaska parks/public land

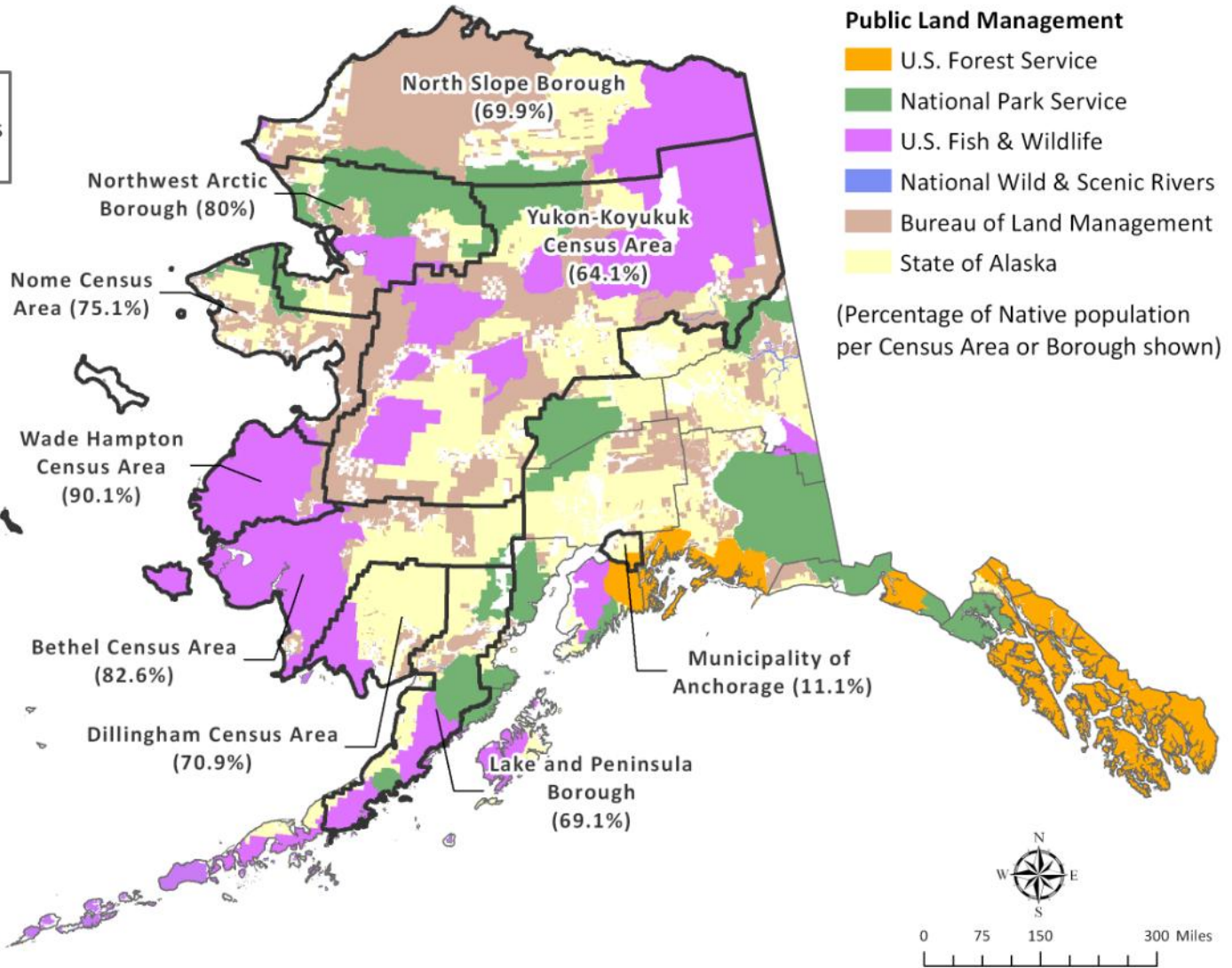
Research Limitations

- Did not include taxes and other public sector payments
- Economic significance is not VALUE
- Does not include VALUE of Katmai
 - visitor willingness to pay, habitat, ecosystem services, cultural preservation



Cultural Values

The average for the Majority Native Areas as a whole is 77.6%



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