

## **A Brief Summary of the Economic Impact of the Red Cloud Indian School on the Pine Ridge Indian Reservation**

In estimating the economic impact of the Red Cloud Indian School, we used an approximate budget of \$12 million per year.<sup>1</sup> We calculated the economic impact of 12,000 visitors to the Red Cloud Indian School per year, with approximately 80% coming from outside the Pine Ridge Indian Reservation.<sup>2</sup> These ‘nonlocal’ visitors (an estimated 9,600 per year) bring money, through their local expenditures, into the Pine Ridge Indian Reservation economy that most likely would otherwise have been spent in their own region.

The results below estimate the total economic impact of the Red Cloud Indian School using an inter-industry model of the flow of goods and services between sectors of the economy in the Pine Ridge Indian Reservation. Expenditures are made by the Red Cloud Indian School; those monies circulate through the regional economy. The suppliers of goods and services to the Red Cloud Indian School increase their own purchases to meet the new demand; increased employment results in additional expenditures by households. Similar modeling has been undertaken to estimate the impact of expenditures by nonlocal visitors as well.

The results are calculated for the specific case of the Red Cloud Indian School. Estimates of average spending by each nonlocal visitor are based upon an extensive national survey by Americans for the Arts of expenditures made by nonlocal visitors on the day of attendance to a cultural site or event.<sup>3</sup>

### Results:

- The \$12 million in annual expenditures by the Red Cloud Indian School has an estimated economic impact of \$13.54 million. Sectors of the Pine Ridge Indian Reservation economy (beyond the private schools and colleges sector) that experience a significant increase in economic activity due to the presence of the Red Cloud Indian School, after private schools and colleges, are state and local enterprises, state and local electric utilities, rental value, postal service, telecommunications, and food and drinking places. In addition, the expenditures of the Red Cloud Indian School result in an estimated 227 jobs regionally.

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<sup>1</sup> The estimate of \$12 million in annual expenditures uses as its starting point the Red Cloud Indian School 2007 Annual Financial Report.

<sup>2</sup> Our figure of 12,000 visitors to the Red Cloud Indian School annually uses as its starting point the 10,000 visitors to the Heritage Museum art show as reported in the article “41<sup>st</sup> Red Cloud art show ‘up a notch’”, Rapid City Journal, July 18, 2008, by Sarah Beu at [http://rapidcityjournal.com/news/local/article\\_38fe6e44-9e5c-54d9-b0e9-8aa848df35ab.html](http://rapidcityjournal.com/news/local/article_38fe6e44-9e5c-54d9-b0e9-8aa848df35ab.html) To estimate the economic impact of the Red Cloud Indian School based on alternative visitation figures please visit our interactive web page at <http://web.williams.edu/web/Economics/ArtsEcon/econpages/c3ddisplay.php?file=HCEconModelCounty.xml> where you can update visitor and budget numbers to calculate different economic impact scenarios.

<sup>3</sup> Information on the Americans for the Arts study is available for download at [http://www.artsusa.org/information\\_services/research/services/economic\\_impact/default.asp](http://www.artsusa.org/information_services/research/services/economic_impact/default.asp). The survey was carefully designed to count only the expenditures directly tied to visiting a cultural organization on a specific day, so as not to ‘take credit’ for expenditures primarily resulting from an extended vacation or other reasons for traveling.

- The local expenditures made by 9,600 visitors from outside the Pine Ridge Indian Reservation to the Red Cloud Indian School have a total economic impact of approximately \$562,772. Sectors of the economy that benefit most from visitor expenditures are food and drinking places, hotels and motels, retail stores, gasoline stations, rental value, and state and local enterprises. The expenditures of 9,600 nonlocal visitors to the Red Cloud Indian School result in an additional 12 jobs in the Pine Ridge Indian Reservation.
- The total economic impact of the Red Cloud Indian School consists of the impact of its own annual expenditures and the local expenditures made by visitors who reside outside the Pine Ridge Indian Reservation. ***The total economic impact of the Red Cloud Indian School is approximately \$14.1 million annually. The total impact in terms of employment in the Pine Ridge Indian Reservation is an estimated 239 jobs.***

The presence of the Red Cloud Indian School in the Pine Ridge Indian Reservation results in benefits to the community far beyond its economic impact. This summary is only an estimate of the economic impact of the Red Cloud Indian School on the economy of the Pine Ridge Indian Reservation.

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### **About the Red Cloud Indian School**

The Red Cloud Indian School is a Jesuit-sponsored school founded in 1888 on the Pine Ridge Indian Reservation in South Dakota. Red Cloud Indian School educates approximately 600 Lakota youth in two elementary schools, a middle school and a high school. School buses travel over 300,000 miles per year transporting students on the reservation, which covers an area the size of Connecticut. No tuition is charged. Private donations support 97% of operating expenses and no Tribal funds or Federal or State tax monies are received.

The Heritage Center museum opened at the Red Cloud Indian School in 1982 with the mission of collecting, preserving and exhibiting the fine arts and tribal arts of Native Americans. In 2011 the Heritage Center museum received a planning and pre-development grant from the Space for Change program overseen by Leveraging Investments in Creativity (LINC) in partnership with the Ford Foundation. This report on the economic impact of the Red Cloud Indian School is part of research on the Heritage Center and other Space for Change grantees.

### **About the Williams College Center for Creative Community Development (C<sup>3</sup>D)**

The Center for Creative Community Development (C<sup>3</sup>D) was founded in June 2004 with an initial grant from the Ford Foundation and subsequent funding from the Institute of Museum and Library Services (IMLS), Leveraging Investments in Creativity (LINC), Massachusetts Cultural Council (MCC) and others. This report is part of a research initiative on organizations awarded Space for Change planning and pre-development grants. The Space for Change program is funded by LINC in partnership with the Ford Foundation. C<sup>3</sup>D is a research organization working to better quantify and characterize the impacts of neighborhood-based arts and cultural organizations on their surrounding communities. The Center provides sound data and case studies that can be used for case-making as well as for planning and evaluation purposes. Such measurements are essential for communities to manage the process of change, and to ensure equitable distribution of the benefits created by cultural economic development.

C<sup>3</sup>D is located on the campus of Williams College in Williamstown, Massachusetts, and is directed by Stephen Sheppard, Class of 2012 Professor of Economics. Professor Sheppard (PhD from Washington

University in St Louis) is an economist who specializes in urban and regional economics and the use of economic geography to analyze the impacts of cultural and environmental amenities on housing markets, job creation, and neighborhood development.

More information about C<sup>3</sup>D and its analyses is available<sup>3</sup> at [www.c-3-d.org](http://www.c-3-d.org).

### **About this Study**

The economic impacts reported above are based on standard input/output analysis. This type of model has been in use at least since the publication in 1960 of Walter Isard's important book *Methods of Regional Analysis: an Introduction to Regional Science* (M.I.T. Press). An input/output model is a set of mathematical formulas whose values are based on statistical analysis of actual observations. In this case, the formulas are designed to present the workings of the regional economy. The economic impact estimates provided here are the result of a predictive model that estimates the amount of aggregate regional income and employment that is attributable to expenditures by a particular cultural organization and its nonlocal visitors (visitors living outside the county). The model discussed in this report is designed for analysis at the county level, meaning the estimates cover impacts occurring throughout the county.

The input/output model utilizes data from a variety of sources (including the US Bureau of Economic Analysis, the US Bureau of Labor, and the US Census Bureau) to characterize the flow of goods and services among sectors of the economy and the employment and consumption patterns of different sectors of the regional economy. The sectors are identified by NAICS (North American Industry Classification System) codes. Much of the data is collected at the county level through a survey process that examines the spending patterns of representative firms in every sector of the economy in every county in the US. The data collected are used to provide estimates of the purchasing patterns of each sector of the county economy, identifying how much of every dollar spent in one particular sector is received as income in every other sector of the county economy, and how much of every dollar 'leaks' outside the county economy or is considered 'final consumption'. The input/output economic model divides the economy into over 400 sectors ranging from 'Abrasive products' to 'Wood window and door manufacturing'. Not all of these sectors are present in every region. The model also draws heavily on data from the federal ES202 database of unemployment insurance filings and the 'Regional Economic Information System' of the US Bureau of Economic Analysis.

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For more detailed background information on our input/output model for cultural organizations, we encourage you to visit <http://www.williams.edu/Economics/ArtsEcon/econpages/FAQ.html>.