

The Closing of Trinity Hospital:
The Impact on Property Values in Trinity County

May 2004

County of Trinity
PO Box 1230
Weaverville, CA 96093

Chairman, District 5 Supervisor	Bob Reiss
Vice Chairman, District 4 Supervisor	Howard Freeman
District 1 Supervisor	Bill Chambers
District 2 Supervisor	Billie Miller
District 3 Supervisor	Ralph Modine

Study conducted by the Center for Economic Development
California State University, Chico
Chico, California 95929-0765
Phone: 530-898-4598
Fax: 530-898-4734
www.csuchico.edu/cedp/



Introduction

In April 2004, the Center for Economic Development (CED) at California State University, Chico conducted an impact analysis of the closure of Trinity Hospital on property values in Trinity County. This report presents the results compiled from this analysis. The following introduction describes the purpose of this analysis and relevant aspects of Trinity County and Trinity Hospital.

Facilities at Trinity Hospital are in need of modernizing and upgrading. The necessary improvements will be expensive for Trinity County and difficult for the county to finance. In order to help the county and its residents better understand the financial value of Trinity Hospital in the community, this study was commissioned to determine the impact on Trinity County property values if the hospital were to close permanently.

Trinity County is located 265 miles north of San Francisco and 205 miles north of Sacramento in a remote part of Northern California between the Pacific Coast and the northernmost part of the Sacramento Valley. The county is bisected by State Highway 299, which connects Redding in the Sacramento Valley with Eureka on the Pacific Coast. Trinity County is heavily forested and primarily mountainous with elevations ranging from less than 500 to over 9,000 feet. The entire county covers approximately 3,200 square miles, making it the nineteenth largest out of 58 counties in California.

According to the latest estimate produced by the California Department of Finance, approximately 13,500 people resided within Trinity County in 2003. This is an increase of over 400 from when Census 2000 counted 13,022 people in the county. Trinity County is the third least populous county and fifth least densely populated in terms of persons per square mile.

Weaverville is both the county seat and chief population center in Trinity County. With 3,709 people, it is located 48 miles west of Redding and 108 miles east of Eureka on State Highway 299. Other population centers include Hayfork (population 2,546), 30 miles south of Weaverville; and Lewiston (population 1,892), 20 miles east

Table 1 – Communities of Trinity County

Zip Code Tabulation Area	Community	Population in 2000	Percent of County
96093	Weaverville	3,709	28.5 %
96041	Hayfork	2,546	19.6 %
96052	Lewiston	1,892	14.5 %
96024	Douglas City	923	7.1 %
96091	Trinity Center	733	5.6 %
96048	Junction City	723	5.6 %
95563	Salyer	641	4.9 %
95527	Burnt Ranch	484	3.7 %
95526	Ruth	352	2.7 %
95552	Mad River	250	1.9 %
96010	Big Bar	236	1.8 %
95595	Zenia	234	1.8 %
96046	Hyampom	234	1.8 %
---	Not Associated	65	0.5 %
---	Trinity County	13,022	100.0 %

Source: Census 2000

of Weaverville and north of State Highway 299. Population by residential zip code was tabulated by Census 2000 to provide community-level data.

Trinity County, one of the original counties established in California, originally developed around a gold rush along the North Fork of the Trinity River, currently paralleled by State Highway 299. As the gold rush waned, timber became the most prominent commodity sold in the county. This remains true even today, despite the closure of a major sawmill in the late 1990s. Tourism does account for a substantial amount of goods and services sold in the county; however, a large proportion of county residents receive non-labor income, including retirement, social security, and medical payments. Non-labor income, plus services provided to those who receive it, has become a vital part of Trinity County's economy as well.

Trinity Hospital is located in Weaverville and is operated by the County. The hospital contains 65 licensed beds, employs about 150 people, and offers 24-hour emergency service to county residents. The hospital is located on Taylor Street, three blocks north of downtown from State Highway 299.

In addition to an emergency room, the hospital houses the following services:

- Surgery
- Medical/Surgical/Telemetry Unit
- Laboratory (on-site testing)
- Diagnostic Imaging (radiology, ultrasound, echocardiography, mammography, CT scan)
- Respiratory Therapy
- Physical Therapy (inpatient)
- Skilled Nursing Facility
- Home Health
- Cardiac Rehabilitation
- Community Health Clinic
- Telemedicine

Methodology

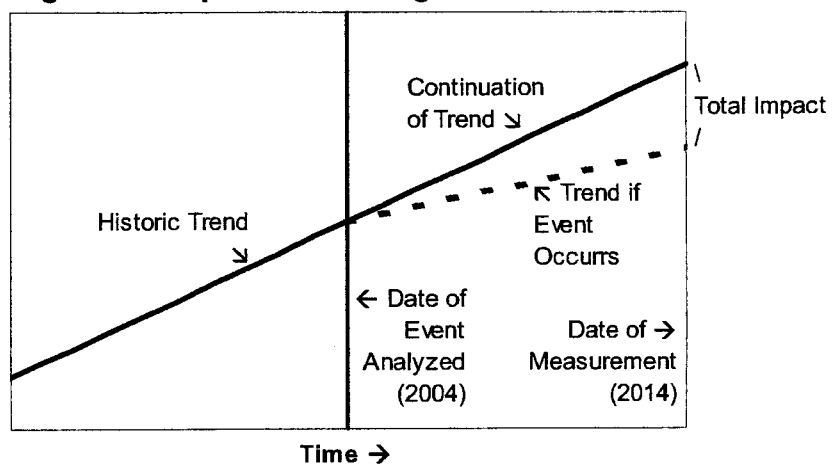
In order to understand the hospital's impact on property values, two things must be understood:

1. The number of people and households that would leave the county if the hospital were no longer available. CED, in conjunction with this report, produced a study on the economic impact of Trinity Hospital. In this report, CED estimated that 1,125 seniors would leave the county because of inadequate provision of local health care should the hospital close. This population as a percent of total was calculated and applied to total households to estimate the total number of households that would be lost in Trinity County due to the closure.
2. The price elasticity of demand for residential units (the degree to which prices go up or down due to change in demand for residential units). This was determined using change in home value and vacancy rate in the 1990 and 2000 Census, with additional modifications based on information about vacancy and sales price since 2000 in Trinity County from the local multiple listing service.

The impact that the hospital closure would have on real estate values is measured by calculating the difference between real estate values if the hospital remains open and if it closes. The anticipated loss of residents in Trinity County would not occur immediately, but over time. It cannot be known exactly how long it will take for those who need local health care to move, but it is reasonable to assume that the trend will occur gradually over the next ten years. With no hospital, the in-migration trend for persons 60 to 70 will lessen significantly, while the out-migration trend for persons 70 and over will accelerate. Over time, the number of seniors in Trinity County would be reduced by 60 percent (see the Economic Impact of Trinity Hospital for more information). Therefore, the impact will increase over at least the first ten years after the closure.

The historic trends for population, housing, occupancy and vacancy status, vacancy rates, and home values in Trinity County was collected from 1990 and estimated for 2004. If the hospital were to remain open, the trend between 1990 and 2004 is projected to continue the same trend into the future. However, if an event were to occur such as the closing of Trinity Hospital, the future trend would be quite different. The

Figure 1 – Impact Model Diagram



future trend after the hospital closes may still be positive (if the historic trend is positive), which is why it is necessary to compare this scenario with the trend if the hospital were to remain open. The difference after ten years, in 2014, is the total impact of the hospital's closure.

A model was set up by CED to compute changes in population, housing, the number of owners and renters, units for sale and for rent, and second homes based upon changes in population and households in Trinity County resulting from the loss of the hospital. The model assumes the following trends:

- Home ownership rates in Trinity County increasing at the same rate
- Persons per household remains the same whether or not the hospital remains open
- Units available for rent increases when number of renter-occupied units decreases
- Units available for sale increases when number of owner-occupied units decreases
- Units rented or sold increases when number of units for rent or for sale decreases
- Units for seasonal or recreational use (second homes) increases when occupied units decrease
- Home value decreases as owner-occupied vacancy rate increases

Mathematical formulas were applied for each variable and tested for reliability. Adjustments were made in cases where calculations resulted in an unreasonable estimate. Changes in all figures can be connected to real trends in Trinity County and/or in California and are explained in the following section.

Additional information collected includes median home sales price and the number of units for sale and pending in Trinity County in 2000 and 2004, plus the cost of living between 1990 and 2004. Median home value is not home sales price, but rather the value as claimed by the owner and reported by the U.S. Census Bureau. Median home value provides a better representation of value change for the county's purposes because it is closer to the assessed valuation subject to property tax throughout the county than median home sales prices.

In addition to the analyzed impact, there would also be an out-migration of workers having to leave the county looking for a job—most of them in the health care sector. This number is estimated to represent between 150 and 200 households. Even with the closing of the hospital, many people under age 65 may still choose to live in Trinity County. Again, it is the senior population who are most in need of local health care that will probably choose to leave or never location in Trinity County. While many will lose their jobs locally, it is unknown how many of these workers would leave Trinity County or take a lower-paying job to remain in order to enjoy the quality of life the county has to offer. For this reason, loss of households due to a reduction in the number of health care jobs available is not included in this analysis.

Analysis

The following analytical description presents trends in population, housing, and home value between 1990 and 2000 and an estimate to 2004 based upon known data prior to 2000. For projections to 2014, two scenarios are given.

- Scenario 1: Growth trends between 1990 and 2004 continue
- Scenario 2: Growth trend based on 1,125 people leaving or deciding not to locate in Trinity County by 2014

Population in Trinity County decreased slightly between 1990 and 2000, while the number of housing units in the county increased substantially. Occupied housing showed the greatest increase.

Table 2 – Analysis of Home Availability and Value

	1990 ^c	2000 ^c	2004 ^e	2014 ^p	2014 ^h
Population	13,063	13,022	13,350	13,893	12,431
Total Housing Units	7,540	7,980	8,125	8,852	8,871
Occupied	5,156	5,587	5,695	6,184	5,533
Owner-Occupied	3,591	3,981	4,095	4,540	4,019
Renter-Occupied	1,565	1,606	1,602	1,644	1,514
Vacant	2,384	2,393	2,430	2,668	3,338
For rent	178	150	180	152	282
For sale only	90	157	46	98	473
Rented or sold, not occupied	130	56	25	70	30
For seasonal, recreational, or occasional use	1,592	1,646	1,790	1,946	2,151
For migrant workers	27	5	5	5	5
Other vacant	367	379	384	397	397
Owner-Occupied Vacancy Rate	2.4 %	3.8 %	1.1 %	2.1 %	10.5 %
Median Value (Nominal)	\$ 82,200	\$ 112,000	\$ 145,045	\$ 221,039	\$ 156,865
Median Value (\$2004)	\$ 118,307	\$ 122,348	\$ 145,045	\$ 167,769	\$ 119,061

^c Source: U.S. Census Bureau

^e Estimated by CED using known values in 2003 and 2004

^p Projected by CED using trends between 1990 and 2004

^h Projected by CED assuming demand shock associated with the loss of people who depend upon the hospital

Between 1990 and 2000, owner-occupied housing increased by 390, accounting for over 90 percent of the increase in occupied housing. The next-highest component of housing in terms of increase between 1990 and 2000 were units for sale (increased by 67) and

units for seasonal or recreational use (increased by 54). This heavy increase in units for sale pushed the owner-occupied vacancy rate up from 2.4 percent to 3.8 percent between 1990 and 2000. The vacancy rate for this analysis is calculated as follows:

$$\text{Owner-occupied vacancy rate} = \frac{\text{Units for sale}}{\text{Units for sale} + \text{Owner-occupied units}}$$

Home value reported by Trinity County residents in the Census indicated an increase in median value from \$82,200 to \$112,000 between 1990 and 2000, an increase in price despite increasing vacancy. This discrepancy is the result of the chronic housing shortage in California and accelerating home prices throughout the state as demand for limited housing opportunities increases competition for every unit available and, therefore, increases the sales price.

By 2004, the total number of housing units increased to over 8,100. Increase in owner-occupied units are responsible for nearly all of the housing growth since 2000. Low interest rates have made home ownership accessible for more people and families in Northern California. The price differential between the state and Trinity County has made the county particularly valuable to people who like to live in rural mountain communities, appreciate other amenities of living in Trinity County, and are not deterred by its remote location. A number of second homes continue to be built and purchased in the area, as well. Median home value is estimated to have increased to \$145,045, a dramatic increase from \$112,000 for a four-year period. The increase was due largely to increased competition for housing from people moving there or purchasing existing homes for seasonal or recreational use.

If these trends continue, about 13,900 people will reside in Trinity County by 2014. The county will include over 8,800 housing units, approximately 700 more than in 2004. Much of the increase will be in owner-occupied units, which would rise to over 4,500, although the number of second homes would also experience a substantial increase to over 1,900. The number of units for sale are anticipated to increase because people from outside the county would likely buy and/or build homes that are valued at the middle- to higher-end of the pricing scale while older and smaller homes are likely to remain unsold longer. This is a trend that has become recognizable in other recreational areas in Northern California that have developed over the last twenty years, including the Fall River Valley, Lake Almanor, and Graeagle. Because of the continually-increasing demand for housing and potential topographic limitations on new housing development in mountain communities that will likely limit the ability to meet all of the future demand, median home values are expected to jump to \$221,039.

If, however, the hospital were to close its doors in 2004, some of these trends would change dramatically. While there would still be an increase in housing units, it would not be as significant because of the reduced demand for housing from seniors. The number

of owner-occupied units would experience a slight decrease, as most new units would be built as second homes rather than for year-round owner-occupants. There would be a continued oversupply of housing in Trinity County, especially of older and smaller homes, and so the number of vacant homes available for rent or for sale would jump dramatically. Instead of hovering around 2 percent, the vacancy rate for owner-occupied dwellings would shoot up to 10 percent. This high vacancy rate would have a devastating effect on home values. While total value would actually increase slightly between 2004 and 2014, from \$145,045 to \$156,865.

Because the increase in home values if the hospital closes (\$156,865) would be substantially lower than if the hospital were to remain open (when median home values would jump to \$221,039), the total impact of the hospital closing on home values in Trinity County would be \$64,174 on average for each housing unit in Trinity County. When dollar values are fixed at their 2004 levels, the total impact is \$48,708 on average for each housing unit (\$167,769 if the hospital remains open and \$119,061 if it closes). The potential decrease in assessed valuation for the county will be as high \$429 million (2004 dollars) after 2014, when factoring in the difference in median prices and the reduced number of units constructed if the hospital were to close.

Conclusion

A reduction in housing demand such as that analyzed in this report would produce many impacts on the economic and demographic makeup of Trinity County, including land prices. Many newly-vacant units would suddenly be for sale, leading to intense competition among sellers to find a buyer. Under these conditions, home values are likely to remain stagnant, at best, and probably decrease when adjusted for inflation. It is likely that as home values in California overall continue to accelerate due to improving job markets and continued low interest rates, a lack of acceleration in Trinity County home values would make the area very attractive to second-home purchasers or to people who are not as concerned with physical location, nor the presence of a hospital, when choosing a place to buy or build a home. The forests, mountains, and lakes comprising Trinity County's natural environment makes the area an attractive location for people who do not require access to a local hospital.

Despite those who will live in the area without the hospital, the overall effect of Trinity Hospital's closure, and the associated 1,125 seniors who would eventually leave or not locate in Trinity County because of it, would have a dramatic impact on property values in the county. If the hospital were to close in 2004, the median home value in Trinity County would only increase by 8 percent, from \$145,045 to \$156,865 in 2014. In contrast, if the hospital were to remain open, median home value 2014 would increase by 52 percent to \$221,039. Therefore the impact on home value over ten years is \$64,174. In constant dollars, home value would decrease by 18 percent if the hospital were to close and increase by 16 percent if it were to remain open for a total impact, in year 2004 dollars, of \$48,708.