

Sonoma State University

**VALUE OF SONOMA EQUESTRIAN ACTIVITIES
METHODOLOGY OF THE STUDY**

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Data Sources

This study of the equestrian economy is based on two sets of data: the physical counting of horses in Sonoma County; and an economic survey of households and horse related commercial operations. We estimated the number of horses of Sonoma County using data gathered by the Sonoma County Horse Council. Approximately 70 volunteers performed the physical horse count in a methodical way. We generated the social, and economic data reported in this study, after processing the information of one mail survey, also conducted by the Sonoma County Horse Council.

Data Processing and Analysis

The economic impact of the equestrian sector was estimated by means of farm budgeting and regional accounting. The information from the private survey mailed to the Sonoma County Horse Council members was classified into the following groups: households with backyard horses, households with horses boarded in commercial stables or in pastures, household with racing and high priced horses, and commercial operations with horses.

For each one of these groups, using farm budgeting, we estimated the value of the capital stock necessary to run an average¹ operation. Likewise we estimated a statement of the production value per year for the average operation. Following conventional regional accounting procedures² the production value was classified into value of intermediate goods and value added by the operation. The value added provides an

¹ An average operation refers to the statistical mean of the operations of our sample. Some are modern operations with high priced horses and others are old operations with low priced horses.

² We have used the conceptual framework of input-output and inter-industrial analysis, and the methodologies of farm budgeting and regional accounting. We have also relied on the economic impact assessment modeling system of IMPLAN, of the Minnesota IMPLAN Group, Inc.

estimation of the gross domestic output of an activity and it is more accurate than the production value as an indicator of economic impact. Value added includes the dollar value of labor, both family and hired labor; the dollar value of professional services; the dollar value of capital services, including land within capital; and the dollar value of government services to the sector. The valued added by labor was estimated with the information gathered from the survey.

The value of capital services, also referred to as “capital use cost,” was estimated by the sum of the annual depreciation of the capital stock, and the annual interest of the capital stock. That is, the annual value added by capital is not the value of the capital stock, but an estimation of that part that was used in one year.

Following conventional procedures, the value of services supplied by government was estimated by the property taxes paid by horse operations.

The capital production values for each of the above average operations were projected for Sonoma County as a whole, as a proportion of the number of horses. The budget items of the average operations were transformed into per horse units, e.g. land value per horse, labor value per horse, feed and food supplements by horse, and so forth. In the case of household operations (backyard, boarded, racing) budgets per horse were multiplied by the number of horses in each kind of operation. In the case of commercial operations--stables and boarding operations, trainers—the average budget of the commercial operation was multiplied by the number of commercial operations.

The information gathered for the county as a whole was integrated into a matrix (see appendix) showing their interrelationships. This matrix allows the estimation of the overall contribution of the equestrian sector.

The contribution of the equestrian sector to other production sectors of Sonoma County was estimated using multipliers. It was assumed that the multiplier effect of the Sonoma equestrian sector was similar to the multiplier of the agricultural sector as a

whole. This multiplier value is the same used in the previous study (for the year 1998), using the IMPLAN's inter-industrial model for Sonoma County.