Each business category has two rates: a rate base and a balance-of-sales rate. The rate base is the percentage of sales revenue the average ski area pays as a fee when sales revenue is up to twice the break-even point. A higher balanceof-sales rate is applied to all sales revenue exceeding twice the break-even point.

To account for varying levels of productivity, fees are calculated in three steps: (1) The fee applied to sales revenue up to the break-even point is 50 percent of the rate base; (2) the fee applied to sales revenue between the break-even point and twice the breakeven point is 150 percent of the rate base; and (3) the fee applied to sales revenue over twice the break-even point is the balance-of-sales rate.

If a ski area generates income from more than one business category, each category's break-even point, rate base, and balance-of-sales rate are multiplied by the percentage of the ski area's total sales revenue that results from that category. Results for all categories are totaled to obtain a composite break-even point, rate base, and balance-of-sales rate. Composites are applied to gross sales revenue to determine the fee. Fee determinations for each ski area are periodically subject to audit by the Forest Service through the examination of each ski area's financial records.

GRFS has proven to be very controversial, primarily because of questions concerning whether GRFS meets the legal requirement to charge a permit fee based on the fair market value of the use of National Forest System lands by ski areas. The controversy surrounding GRFS and assessment of the appropriate permit fee has generated appeals and litigation and several audits by the General Accounting Office and the Department of Agriculture's Office of Inspector General. These audits concluded that GRFS does not ensure that the Forest Service receives a permit fee based on fair market value from ski areas operating on National Forest System

Due to the historical controversy of the ski area permit fee issue and the need for multidisciplinary expertise in this area, a Departmental Working Group was formed in July 1994. This group, which includes representatives from the Forest Service, the Office of Inspector General, the Office of General Counsel, and the Office of the Chief Financial Officer, has met regularly to expedite development of a new ski area permit fee system based on fair market value.

Methods for Determining Fair Market

On September 26, 1994, the Forest Service awarded a contract to identify methods pertinent to determining the fair market value of the use of National Forest System lands by ski areas and to recommend promising methods for testing. The contractor assembled a team of specialists in various fields, including real estate appraisal, land economics, and financial analysis, to work on the contract.

The contractor's December 19, 1994, report analyzes 14 valuation techniques: Six land valuation methods (sales comparison, ground rent capitalization, land residual, sales allocation, extraction, and subdivision development); seven business valuation methods (capitalization of earnings, excess earnings on assets, excess earnings on sales, discounted cash flow, price/earnings ratio, dividend payout, and net worth); and one additional valuation method (competitive bidding). The report discusses the theoretical basis of each method, its advantages and disadvantages, the required frequency of updating for each method, and its applicability to assessing the fair market value of the use of National Forest System lands by ski areas. The report recommends testing seven valuation techniques in order of preference: four land valuation methods (sales comparison, ground rent capitalization, residual (both land and business), and allocation (in conjunction with land residual)) and three business valuation methods to be used in conjunction with the land valuation methods (capitalized earnings, excess earnings on assets, and excess earnings on sales).

At the request of the Departmental Working Group, the Forest Service contracted for a technical written review of the contractor's report by two expert real estate appraisers. The two real estate appraisers were asked to assess (1) whether the contractor's analysis identifies all pertinent techniques for determining the fair market value of the use of National Forest System lands by ski areas and (2) whether the methods recommended by the contractor for testing are the most likely methods on which a new ski area fee system could

In their reports and during a teleconference with the Departmental Working Group, the two appraisers advised that the contractor's report covered all land valuation methods and the common business valuation methods. With regard to the contractor's recommendations, the appraisers advised that there is no need to test any

of the business valuation methods because none of these methods gives an independent estimate of land value. Rather, these methods provide an estimate of the value of a business. Consequently, neither appraiser believed that any of the business valuation methods identified by the contractor would assist in estimating the fair market value of the use of National Forest System lands by ski areas.

To determine land value, one of the appraisers advised that the first and most important step is to develop a database of sale and rental transactions involving land used for skiing or for a use comparable to skiing. He stated that based on his own research and experience, data are available for comparable sales and rentals of land

used for skiing.

The appraiser explained that once the database of comparable transactions is developed, the agency would be able to ascertain whether the fair market value of the use of National Forest System lands by ski areas can be determined. He advised that the direct comparison and ground rent capitalization methods would provide the most objective basis for making this determination.2 From this information, the agency may then be able to decide whether subjective methods, such as land residual, should be considered.

Both appraisers underscored the weaknesses and subjectivity inherent in applying the land residual method, particularly in developing an estimate of business value 3 that is independent from the value of the land.4 Neither

The ground rent capitalization method applies when property is leased for a ground rent or some other type of fee. Ground rent is the amount paid for the right to use and occupy land according to the terms of a ground lease. Market-derived capitalization rates are used to convert ground rent into the market value of the property. While a Forest Service ski area permit is not a lease and does not convey any interest in real property, the permit may be analogous to a lease for the purpose of assessing the applicability of the ground rent capitalization method to determine the fair market value of the use of National Forest System land by ski areas (Contractor's Report, pp. 10-11).

² The direct comparison method produces a value estimate for land by comparing the property being appraised to similar properties that have sold recently, applying appropriate units of comparison, and making adjustments to the sale prices of the comparables based on the elements of comparison (United States Department of Agriculture, Forest Service, "An Analysis of Methodologies for Determining the Fair Market Value of the Use of National Forest System Land by Ski Areas' [hereinafter Contractor's Report], p. 6 (1994)).

³ Business value accrues from items of intangible personal property, such as marketing and managerial skill, an assembled work force, working capital, trade names, trademarks, franchises patents, contracts, leases, and operating agreements (Contractor's Report, Glossary).

⁴The land residual method produces a value estimate for land as a component of an investment