

**Preliminary Study
Of Resident-Nonresident
Proportions
In Montana Accommodations**

Methodological Attempts

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Technical Completion Report 98-4

June 1998

Acknowledgements

The authors wish to thank the participants of the Accommodations Proportion Count Study. Their time and cooperation made the study possible. A special thanks to the Montana Innkeepers Association board members for their input and suggestions throughout the process and report writing, and to Stuart Doggett, Robert Dompier, and Mike Scholtz for their time and efforts.

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Methodological Attempts

Introduction

In 1987, the Montana State Legislature instituted a statewide four-percent lodging facility use tax, or bed tax, at all overnight accommodations. In 1996 this tax, applied to hotels/motels, bed & breakfasts, campgrounds, and any other overnight accommodation establishment, generated \$9.3 million for Montana.

Bed tax dollars collected each year are allocated as follows:

- \$400,000 to the Historic Preservation Commission for Virginia and Nevada Cities
- 87% to the Montana Department of Commerce (75% of which goes to Travel Montana, with the remaining 25% going to travel regions and convention & visitor bureaus)
- 6.5% to state parks for operation and maintenance
- 3% to the Department of Revenue for services, administration, and state employee reimbursement
- 2.5% to the Montana University System for research
- 1% to the Montana Historical Society for sites and signage

Source: Travel Montana, Department of Commerce

Study Overview

The Institute for Tourism and Recreation Research (ITRR), in cooperation with the Montana Innkeepers Association (MIKA), was commissioned by the Tourism Advisory Council to conduct a study of overnight accommodations at Montana hotels/motels. This information was gathered to:

1. Estimate the proportion of residents to nonresidents staying at Montana hotels/motels.
2. Estimate the proportion of accommodation taxes paid by residents and nonresidents.

However, the study does not represent all Montana hotels/motels for two reasons:

1. It was not possible to obtain a representative sample of the entire state of Montana. It is apparent, after the completion of this study, that each hotel/motel is unique in day-to-day and month-to-month operations. Therefore, a seemingly representative sample was not appropriate and a full population count is required.
2. Collecting the amount and type of information required for accurate determination of annual bed taxes paid by residents and nonresidents in Montana overnight accommodations is not feasible. Charges for overnight accommodations are different for each person who rents a hotel/motel room. The price fluctuates so greatly that it would be necessary to obtain the exact price paid for each room rented throughout the state. Therefore, a random sample of participant hotels/motels would not be representative of all hotels/motels in Montana. This type of study would require the property owner to record room prices for each room rented, which would be a huge burden on participants.

This report provides a brief description of the study followed by proportion count results from the sample and recommendations for future studies based on the results and methods.

Methodology

Thirty-seven MIKA-member establishments volunteered for this study at the 1996 annual MIKA conference. The sample is a “convenience sample” because participant selection was *not* based on a random sample of all establishments in Montana who pay the bed tax.

There were large differences among participating establishments in terms of number of rooms, amenities, and type of establishment (Table 1). Of these 37 establishments, half were independently owned and half were chains/franchises. A total of 2,233 rooms were available at participating establishments. Thirty-eight percent of the rooms represented independently owned establishments and 62 percent represented chains/franchises.

Table 1: Participating Motels/Hotels

| Motel | # Rooms | Ownership* | Restaurant | Lounge | Pool | Hot Tub |
|-------|---------|------------|------------|--------|------|---------|
| A | 22 | I | | | | |
| B | 44 | I | | | | X |
| C | 79 | C/F | | | X | |
| D | 50 | I | | | X | |
| E | 135 | I | X | X | X | |
| F | 120 | I | X | X | X | X |
| G | 40 | C/F | | | | |
| H | 240 | C/F | X | X | X | X |
| I | 18 | I | | | | |
| J | 75 | C/F | | | | |
| K | 124 | I | X | X | X | |
| L | 158 | I | X | | | X |
| M | 112 | C/F | X | X | X | |
| N | 102 | I | X | | X | X |
| O | 33 | C/F | X | | | |
| P | 123 | C/F | X | X | X | X |
| Q | 75 | C/F | X | X | | |
| R | 315 | C/F | X | X | X | X |
| S | 44 | I | X | X | | |
| T | 220 | C/F | X | X | X | |
| U | 76 | C/F | X | X | X | |
| V | 28 | I | | | | |

* I = Independently Owned, C/F = Chain/Franchise Establishment

Data Collection

The study was conducted from January 1 through December 31, 1997. Each month, participants were provided with instructions, forms for data collection, and business reply envelopes (Appendix A). When necessary, reminder phone calls were conducted to encourage continued participation. Participants were asked to provide ITRR with two types of data: monthly proportion counts of rooms rented to residents and nonresidents, and average monthly room rates. While the majority of participants provided data based on every day of each month, a few establishments either provided data for seven random days each month, for every day of each third month (i.e., quarterly), or on a seasonal basis depending on their months of operation. This flexibility was allowed in order to reduce the burden of data collection on participating establishments.

Participants reported the total number of room nights rented to visitors from each of the 50 U.S. states, 10 Canadian provinces, and foreign countries. A room night was defined as one room rented for one night. For example:

- if a travel group rented one room for one night, it would be one room night.
- if a travel group rented two rooms for one night, it would be two room nights.
- if a travel group rented one room for two nights it would be two room nights.

One room night is the same as one rental. *The total number of visitors from each place of residence was **not** collected because bed taxes are paid on a per room basis, not per person.*

Participants were also asked to report their average monthly room rate. While at the onset of this study it seemed that average room rates would be a useful tool in determining bed taxes paid, it proved to be a simplification not useful for this study. Room rates varied depending on the season in which the room was rented. Average room rates were highest during peak tourist seasons (i.e., summer and winter) and lowest during the “shoulder” seasons (i.e., spring and fall). For example, room rental prices tripled at some establishments during summer months when nonresidents dominated room rentals in many Montana accommodations. Also, as previously discussed, room rates varied for each person. The following are some of the factors which contribute to room rate fluctuations in hotels/motels.

- AARP/Senior Discounts
- State rate
- Federal rate
- Corporate rate
- Preferred Corporate rate
- Negotiated rates
- Tour Bus rate
- Group rate
- School/team rate
- Infinity rate (group of people who come together but don't have group affiliation)
- Rack rate
- AAA/Auto Club rate
- Travel Agent rate
- Package Deal rate

After months of data collection and analysis, this portion of the study (using average monthly room rates to determine bed tax proportions) was viewed as inappropriate. It was impossible to accurately estimate bed taxes paid by residents and nonresidents because of room charge fluctuations.

Participation Rates

Proportion Counts

Participation occurred in varying levels. Response rates were calculated for each month based on how many of the 37 establishments provided proportion count data (Table 2).

Table 2: Establishment Response Rate

| | Proportion Counts Requested | Proportion Counts Received | Response Rate |
|--------------|--|---------------------------------------|--------------------------|
| January | 36 | 19 | 53% |
| February | 36 | 19 | 53% |
| March | 36 | 20 | 56% |
| April | 36 | 21 | 58% |
| May | 37 | 22 | 59% |
| June | 37 | 22 | 59% |
| July | 37 | 19 | 51% |
| August | 37 | 21 | 57% |
| September | 37 | 18 | 49% |
| October | 37 | 14 | 38% |
| November | 36 | 16 | 44% |
| December | 36 | 14 | 39% |
| | | | |
| Total | 438 | 225 | 51% |

Most data was provided in a usable form, meaning that the nature of the data was compatible with the study procedure. However, some data was not usable. For example, some establishments provided proportions based on room reservations, not on actual room rentals. Therefore, of the 37 establishments who volunteered for the study, 10 provided complete data sets, 12 provided adequate data sets, and 15 properties did not provide usable data.

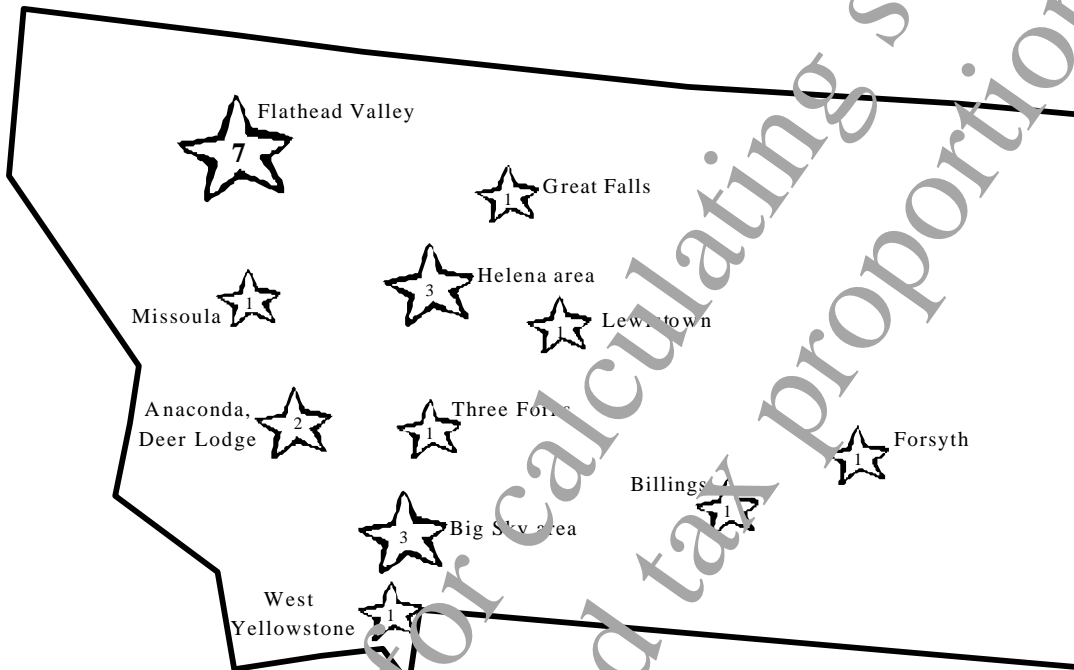
Average Monthly Room Rates

Some participants provided ITRR with an average monthly room rate. Five of the 22 establishments declined to provide room rate data. These properties either believed the information was proprietary or they were unable to produce an “average”. When room rates were supplied, only one room rate was given as an average for the month.

Participant Distribution

While there was an attempt to include all areas of the state in the study, it is apparent that the distribution of participating properties left some areas, especially Eastern Montana unaccounted for (Figure 1). The 22 establishments whose data were usable and included in the analysis are shown on the map. The number inside each star represents the number of participating establishments from the area.

Figure 1
Distribution of the 22 Participating Establishments



Not applicable for calculating statewide visitor and bed tax proportions!

Results

Resident-nonresident room rental proportions at participating establishments are shown in Figure 2. From the graphs it can be seen that room rental proportions fluctuate among establishments. While some establishments are mostly “resident” establishments (the majority of rooms are rented to residents over the course of the year), others are “nonresident” establishments because more rooms are rented to nonresidents during the year. Obtaining complete data sets from all establishments was difficult. This is demonstrated by the many monthly resident-nonresident proportions missing from some participant data sets.

Figure 2: Resident-Nonresident Room Rental Proportions

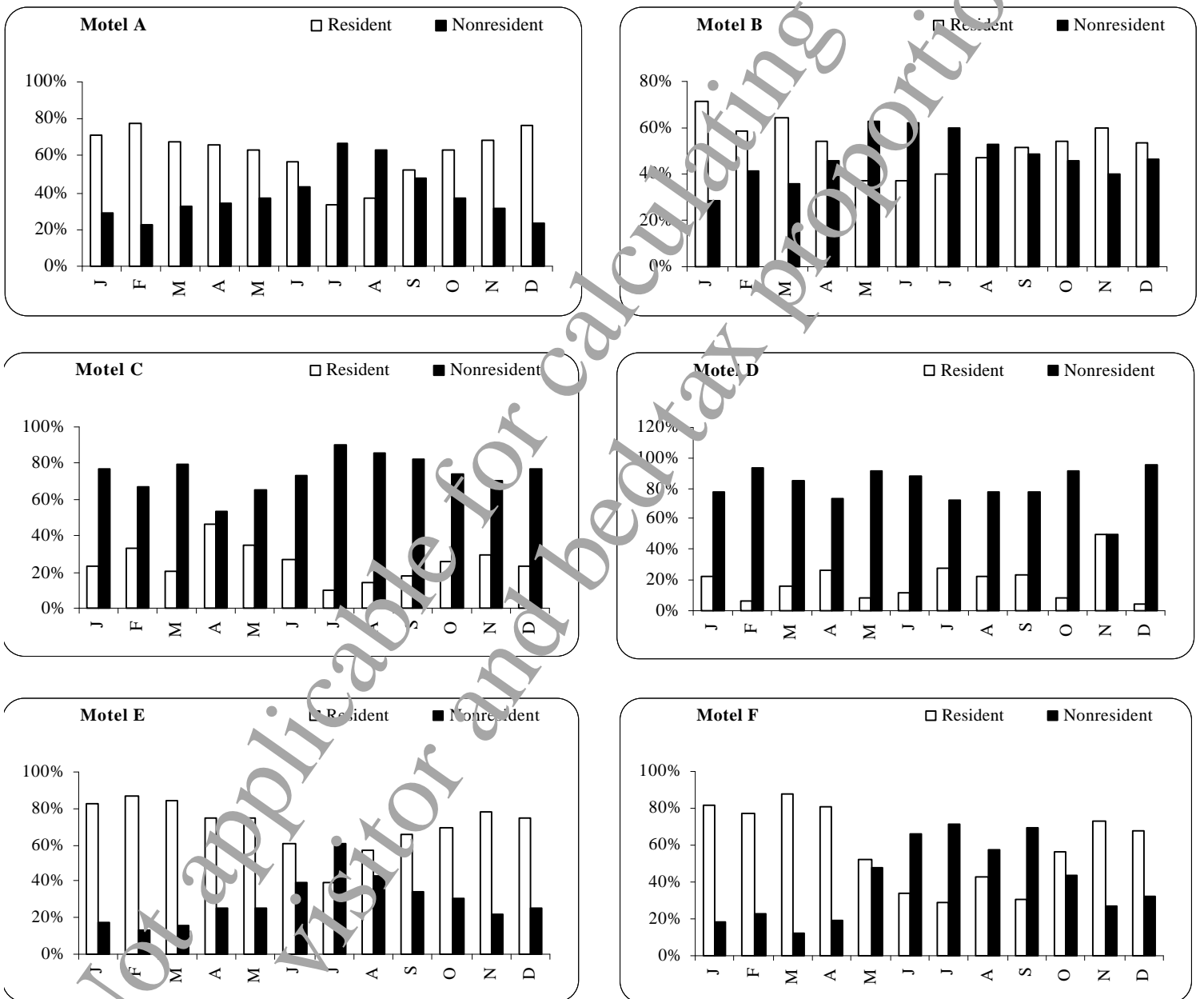


Figure 2 (cont'd): Resident-Nonresident Room Rental Proportions

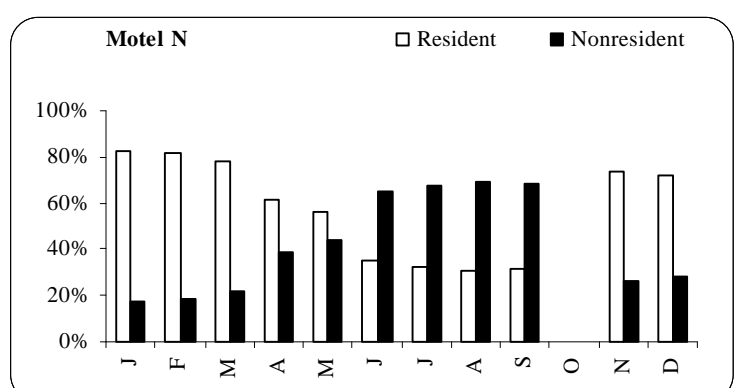
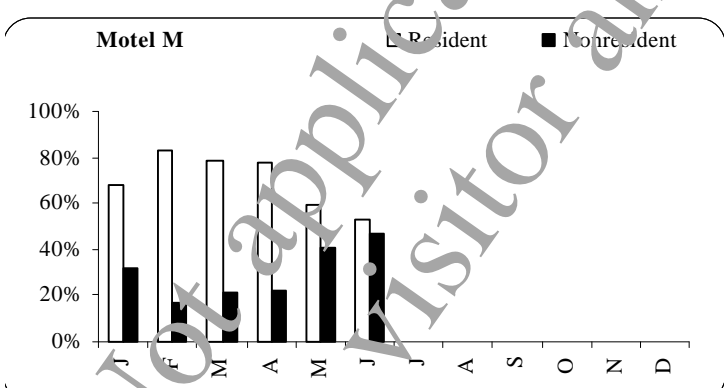
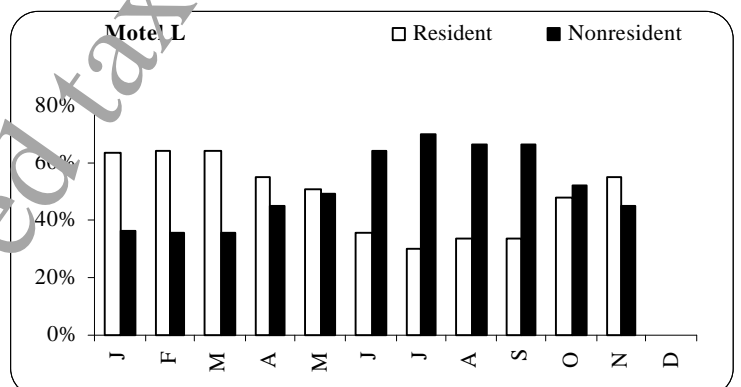
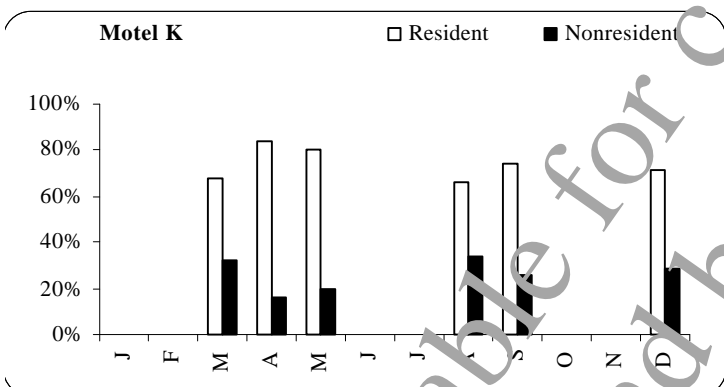
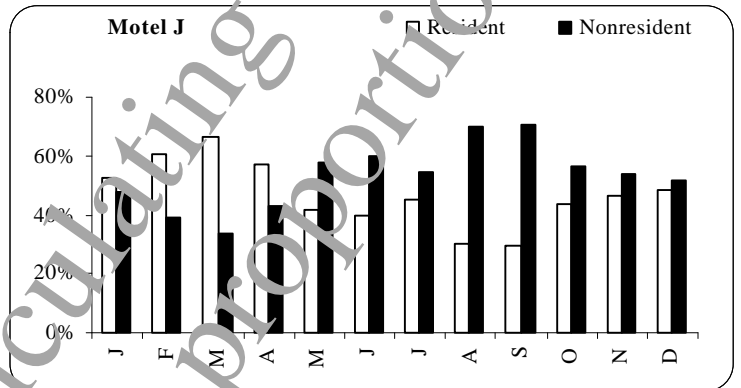
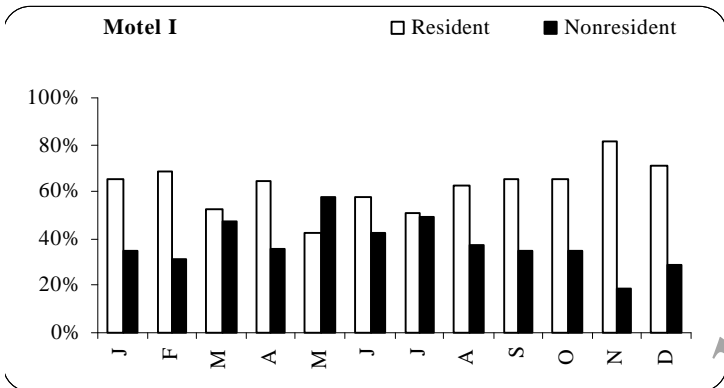
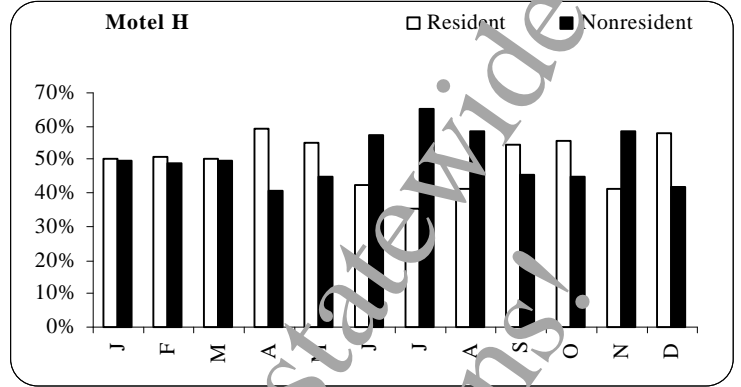
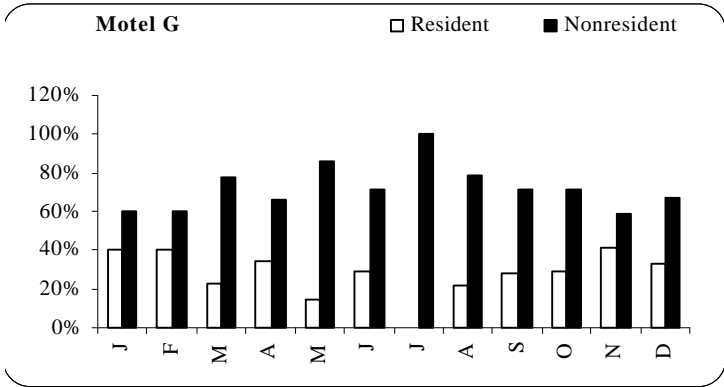
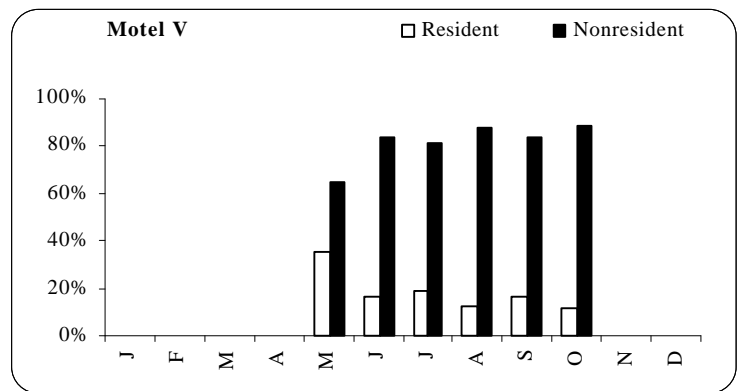
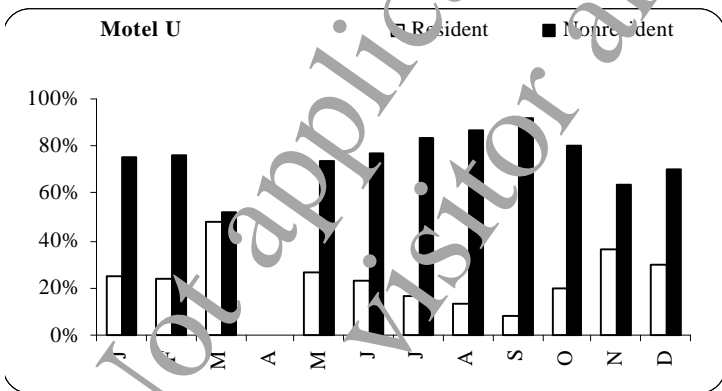
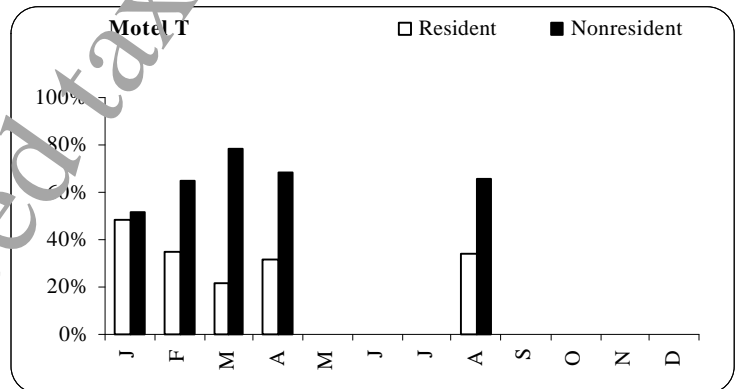
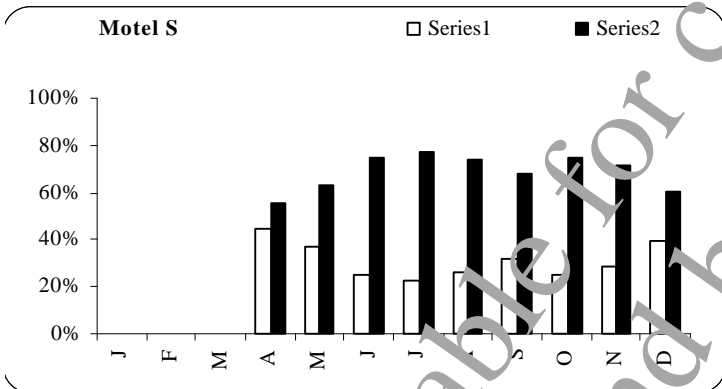
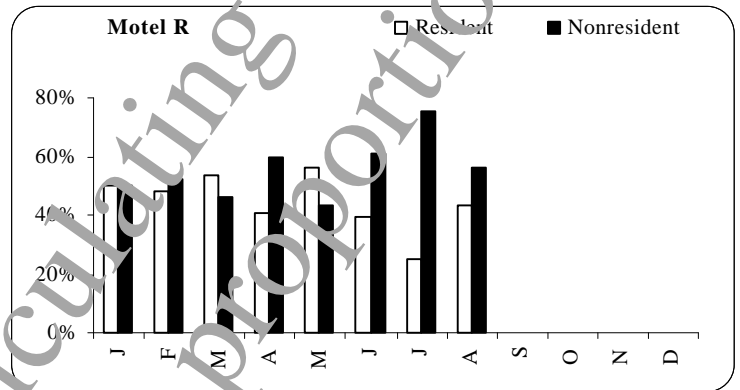
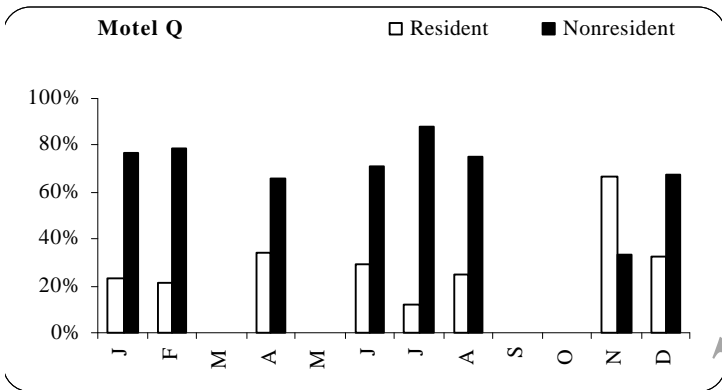
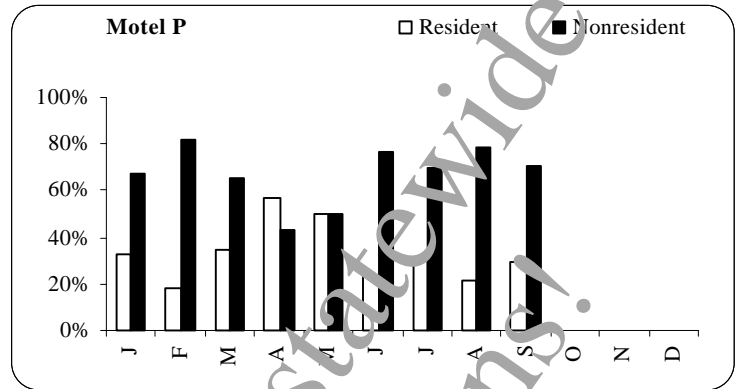
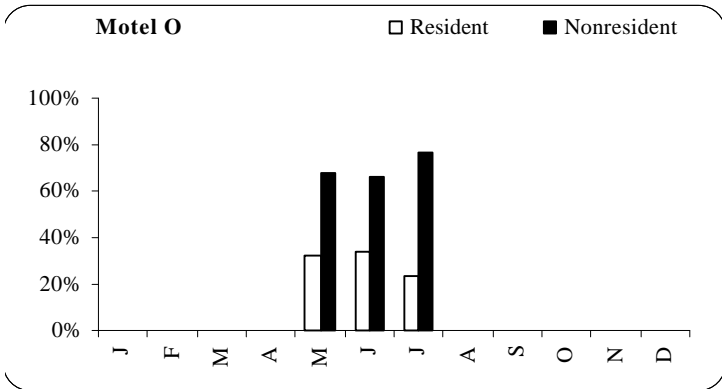


Figure 2 (cont'd): Resident-Nonresident Room Rental Proportions



Conclusions and Recommendations

This study was designed to meet two specific objectives:

1. To determine the proportion of Montana hotel/motel rooms rented by residents and nonresidents.
2. To estimate the amount of bed tax paid by each type of visitor group (i.e., resident or nonresident).

By conducting a preliminary study of accommodation proportions for selected Montana establishments, it was possible for ITRR and MIKA to assess whether the burden of data collection placed on participants would be feasible on a statewide level and whether an adequate response rate would be achievable with the adopted methodology.

It is apparent from this study that the burden of collecting data was unbearable for many participants. A year-long study of proportion counts required the participants to supply data for each month of the year. Thirty-seven properties volunteered to participate in the study. While 22 establishments provided some information, only 10 provided proportion count data for each month. These responses came from properties who *volunteered* for the study. If a random sample of all accommodations were drawn from a list of statewide properties, the response rate would probably be so low no conclusions could be drawn.

As already stated, applying a monthly average room rate to proportion counts to determine the amount of bed taxes paid by residents and nonresidents is an inaccurate procedure. It would be necessary to collect room rental data on each room every night to determine these amounts. In an industry as competitive as the hotel/motel industry, gaining access to this much information would be very difficult, if not impossible.

Finally, this study was an attempt to determine whether a study of resident-nonresident room rental proportion counts and paid bed tax proportions could be conducted throughout the state on an annual basis. This study was conducted with hotels/motels and excluded campgrounds, bed & breakfasts, guest ranches/resorts as well as any other overnight accommodation establishment that paid the bed tax. Since it was difficult to gather the necessary information from motels/hotels, it is assumed that generating this information from these other (and often smaller) properties would be an even greater burden since many do not have the conveniences of computerized data.

It is concluded, therefore, that collecting accurate information about the proportion of nonresident and resident room rentals at overnight accommodations who collect the bed tax is not within the realm of a research institution's capacities. In addition, the figures needed to estimate accurate amounts of bed tax paid by each visitor group are not available. Some participants feel the information is proprietary and, therefore, does not have to be released.

It is recommended that different approaches be explored for determining bed tax contributions of residents and nonresidents. One approach may be to look at other states that charge a bed tax and examine the proportion of contributions received from residents and nonresidents. If that information is available, the method used to collect the data, or some variation of it, may then be applicable to Montana. If exact proportions are not available, estimates of resident-nonresident contributions to the tax could be used. In a worst-case scenario, relative proportions could provide some basic information on contributions in terms of which group, resident or nonresident, pays more of the tax. Caution should be exercised when examining these types of data because the relative proportions and estimates from other states may not be accurate for Montana, or they may just be educated guesses not grounded in any type of research data. Operating on “a hunch” may not be an adequate application of these data.

Another approach could involve a collaborative effort between policy makers and the accommodations industry. Discussions on this issue could present other possible solutions.

Not applicable for calculating statewide visitor and bed tax proportions!

Appendix A

Resident-Nonresident Room Rental Proportion and Average Monthly Room Rate Forms

Institute for Tourism and Recreation Research, The University of Montana, Science Complex 441, Missoula, MT 59812

Phone: (406) 243-5686

Fax: (406) 243-6656

Name of Establishment: _____ City: _____

Please fill in the average room rate for your property below the appropriate month.

All information will be kept confidential! Thank you for your support.

| | | | | | | |
|--------------------------|------------|------------|--------------|--------------|------------|-------------|
| Month | Jan | Feb | March | April | May | June |
| Average Room Rate | | | | | | |

| | | | | | | |
|--------------------------|-------------|------------|-------------|------------|------------|------------|
| Month | July | Aug | Sept | Oct | Nov | Dec |
| Average Room Rate | | | | | | |