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Niche News: Methods and Analysis – 2005 Nonresident Study

This niche news describes the methods used in collecting data for the 2005 nonresident travel survey. Data were collected throughout 2005 by 12 surveyors located across the state. Nonresidents were defined as persons who entered Montana by private vehicle or commercial air carrier during the study period and whose primary residence was not MT at the time. 15,126 nonresident visitors were contacted for the initial front end survey with a 95% response rate. 6,152 mail-back questionnaires were returned for a response rate of 43%. Surveys represent travel groups, not individuals. The survey can be viewed at 2005 Survey Instrument.

SAMPLING SCHEDULE

- Surveyors averaged 2 days per week for 12 months.
- Days were randomly selected and included both weekdays and weekends.
- Surveyors worked 8 to 10 hour shifts with times covering 7:00 am to 8:00 pm on highways and 5:00 am to 9:00 pm at airports.
- Surveyors did not work past 8 pm due to darkness and for safety reasons.

LOCATIONS

- Surveying occurred at gas stations, rest areas, Canadian border crossings, and the 8 major airports in Montana. These sites were considered as neutral and unbiased to specific visitor types.
- Prior permission was received from each establishment and airport security.
- Locations were surveyed at different times and on different days to represent the variability of travelers around the state.

FRONT END SURVEY and MAIL-BACK SURVEY

- Two surveys were used for this study – an initial interview called the front end survey and a longer mail-back survey.
- To obtain the data, surveyors approached vehicles with nonresident license plates at gas stations and rest areas, and asked airport visitors if they were from out of state.
- Surveyors introduced themselves, explained the study, and asked visitors if they would answer a few front end questions, usually taking less than 1 minute.
- Front end questions asked travel method, group type and size, state of residency, zip code, purpose of trip, entry point, direction of travel, planned exit and length of stay.
- Surveyors then asked if visitors would complete a longer mail-back survey. 95% agreed to take the survey. They were given a survey, pre-paid business reply envelope, and a coupon for a monthly prize drawing and year end drawing as an incentive to respond.

EXPENDITURES

- Surveyors directed nonresidents to track their expenses for a single day. This day was hand-written on the pre-paid business reply envelope.
- For airport nonresidents: If the survey ID was odd, expenses were recorded for that day. If the ID was even, expenses were recorded for the previous day.
- For gas station, rest areas and border crossings: If the nonresident was not staying another night, expenses were recorded for that day. If they were staying another night and the survey ID was odd, they also recorded expenses for that day. If they were staying another night and the survey ID was even, nonresidents recorded expenses for the next day.
- Only expenses occurring in the state of Montana were considered.
- All expenditures were documented by category, amount spent, and the town in which the money was spent.

POPULATION ESTIMATION

- To estimate the nonresident travel population, two sources of information were used: 1) traffic counts provided by the Montana DOT, Idaho DOT, Wyoming DOT, North Dakota DOT, U.S. Customs, and Helena Regional Airport Authority 2) Resident/Nonresident proportion counts provided by ITRR surveyors.
- Traffic counts were collected from 34 border entry points and 8 airports.
- Airport proportion counts were obtained by questioning boarding air passengers about their place of residence. A stratified sampling of days, airlines, and times was used.
- Highway proportion counts were obtained by surveyors observing license plates at all border points using a stratified sampling frame based on highway traffic load. Proportion counts were only conducted in daylight hours.

WEIGHTING DATA

- Since the larger mail-back survey was not returned by all travelers, it was necessary to adjust the mail-back survey data to reflect the traveler population. Three variables on the front end survey were used to adjust the mail-back data: entry point, main purpose of trip, and group type. Weighting the mail-back survey data on these three variables adjusted the data so it reflected the front end "population" data.

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