

Questions and Answers: National Animal Identification System Benefit-Cost Analysis Beef Sector

Q. Was the beef sector considered in the benefit-cost analysis for the National Animal Identification System (NAIS)?

A. Yes. The beef sector was one of the main areas of research and analysis for the study. The analysis focused on the bovine, porcine, ovine, poultry, and equine industries. The report also includes some discussion about minor species groups.

The study looked at the benefits and costs for livestock producers (divided into subgroups by production phase), livestock markets, and packers. All three groups were broken down by operation size to provide additional accuracy in the analysis. The benefits and costs for Federal and State governments also were examined.

Q. What segments of the beef sector were examined?

A. The study was very thorough in its examination of the beef sector. In order to see the impact of NAIS on the different segments of the beef cattle industry, the costs for each were estimated separately. The following sectors were analyzed: cow/calf, backgrounder/stocker, feedlot, auction yards, and packers. Within each segment, the groups were divided by operation size, to provide an even better estimate of the impact on the industry.

For the cow/calf segment, the operations were also evaluated by operations that already tag calves and operations that do not currently tag calves, as this can affect cost estimates.

Q. What form(s) of identification were used for beef cattle in the study?

A. For the purposes of this study, it was assumed that individual cattle would be tagged with radio frequency identification (RFID) eartags. If the cattle were already being tagged, it was assumed they would

be tagged with an RFID tag at the same time as their management tag. Cattle operations that do not currently tag were assumed to use a tagging service at the auction yard.

Q. Why were radio frequency identification eartags used?

A. RFID tags were used as the basis for the study at the recommendation of the NAIS Cattle Species Working Group. The working group consists of representatives from various levels and segments of the cattle industry and is jointly led by one beef and one dairy representative.

Q. What costs did the study indicate?

A. The study estimates that the overall costs for 100 percent participation in a fully traceable NAIS system for all four major species (cattle, swine, sheep, poultry) is \$228.27 million annually. Costs for 90 percent participation in the same system would be \$192.22 million.

The cattle sector (beef and dairy) costs for a fully traceable system at 90 percent participation would be \$175.87 million.

Specifically within the beef sector, here are some average costs per animal or head sold:

- beef cattle—\$4.91 per animal
- backgrounding—\$0.71 per head sold
- feedlot—\$0.51 per head sold
- auction markets—\$0.23 per head sold
- packers—\$0.10 per head sold

For cost details broken down by operation size, please reference tables 4.2 and 4.3 on page 30 of the full report, which is accessible at http://www.usda.gov/nais/naislibrary/documents/plans_reports/Benefit_Cost_Analysis_NAIS.pdf

Q. Why were the overall cattle sector costs so high?

A. The costs for cattle (beef and dairy) are higher than the other species because of the nature of the industry and the necessary identification procedures. Cattle move more frequently than other livestock species, and the industry is not vertically integrated. While group/lot identification is an option for cattle in NAIS, the researchers based their estimates on all cattle being individually identified with RFID tags. Identification tags and tagging costs account for 75 percent of the cattle sector's adoption cost.

Other species in the study were estimated using group/lot identification in whole or in part. Additionally, other species used lesser expensive, visual (non-RFID) tags. Together, the combination of using group/lot identification and less expensive tags helps keep the overall costs lower.

Q. Why are the beef cow/calf costs higher than the other segments?

A. The cow/calf costs are higher since they bear the cost for identifying the animals, either at the birth premises or before the first sale. Other sectors only need to cover the costs of replacing lost tags. The loss rate in this study is 2.5 percent.

Q. What size operations had the highest and lowest costs of participation?

A. The average cost per animal marketed throughout the cattle sector is \$5.97. The study found that cow/calf operations that have 1–49 animals and that do not currently tag represent the group with the highest average cost per animal. For this group, the average cost is \$6.16 per cow.

It was assumed in the study that operations not currently tagging would pay to have their animals tagged by the auction yard. This makes the tagging cost for these operations higher than the costs for operations that currently tag. Operations that currently tag already have the needed tagging equipment and facilities, and can place the additional RFID tag for NAIS when placing their existing tags.

In general, cow/calf operations have a higher cost per animal because they need to tag every animal. The other beef sectors have a lower cost per animal because the animals are tagged before they arrive on site.

Feedlots with a capacity of 32,000 animals or more represent the group with the lowest average cost per animal, at \$0.30 per head sold. Animals enter feedlot operations already tagged, so the only tag-related costs are for replacing lost tags and reading RFID tags.

Q. Why should beef producers tag their animals? Are there any benefits listed in the study that apply to them specifically?

A. Yes, there are benefits mentioned in the study that affect all producers, as well as benefits that specifically affect beef producers.

Beef-specific benefits include:

- reduction of animal disease testing time and associated costs through the use of mobile information management technology for diseases like brucellosis and bovine tuberculosis

- helping to ensure markets remain at current levels or better. Traceability is becoming a global standard, especially for beef. A lack of traceability can cause markets to weaken
- ability to use NAIS animal identification methods in other value-added and certification programs

General benefits include:

- better disease management and surveillance—identification can help pinpoint exposed animals
- reduction of economic impact of disease events—quickly containing the outbreak and reopening markets for unaffected producers
- ability to use NAIS animal identification methods to easily prove U.S. origin for country of origin labeling (COOL) requirements

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