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COMPARATIVE ECONOMIC CONTRIBUTION ANALYSIS OF THE SAN ANTONIO ZOO AND THE DALLAS ZOO

Rational: Most zoos are non-profit entities that rely on ticket sales, donations and other sales to support 365 days a year of animal care and conservation. Zoos often research their own economic contribution as a way to promoting their zoo to investors. Most studies run the Impact Analyses for PLANning (IMPLAN) model sector for museums, historical sites, zoos, and parks (Sector 493) without customizing it to the specific zoo. This research considers the question of how zoos' allocation of expenditures and revenues change the default economic multipliers and asks if a modified zoo IMPLAN sector will result in a higher economic contribution than running the sector without modification.

Methods: This study compares and contrasts the economic contributions of the San Antonio Zoo and the Dallas Zoo to the local and state economies using both multipliers calculated from zoo-specific cost functions and default multipliers. The IMPLAN input-output model was modified with data specific to each zoo and ran as analysis by parts. Differences in the expenditure patterns and outcomes of the default zoo IMPLAN sector and the modified zoo IMPLAN sector were observed. The individualized information was gathered through the correspondence with the Chief Financial Officers of the San Antonio and Dallas zoos using a questionnaire formulated by logically observing each commodity within the IMPLAN zoo sector and deciding which sectors, if modified, would differentiate zoos from museums, historical sites, and parks.

Results: Locally, the default Dallas IMPLAN zoo sector under-estimated the modified Dallas zoo sector by 0.18 in a total output multiplier and over-estimated the San Antonio default total output multiplier by 0.08. State wide, the default Texas IMPLAN zoo sector saw the San Antonio and Dallas zoo as contributing equally to the Texas economy; after the customization for each zoos specific data, the San Antonio's contribution to Texas was being over-estimated by 0.11 in total output multiplier and the Dallas zoos' contribution to the state economy was being under-estimated by 0.21 in total output multiplier.

Conclusion: A notable difference between running a default IMPLAN sector and going the extra mile in customizing the sector with zoo-specific information was found. Not only did customization of the IMPLAN production function matter but the percent shares of goods and services purchased locally showed a substantial difference when specified. This study demonstrates that although running zoo-specific information through analysis by parts may not result in a higher multiplier, it can rationally be inferred that a more reasonable and zoo-specific multiplier is generated. Zoos can use their own cost data to produce more specific economic contribution estimates. This may help them more effectively secure infrastructure and to request support from government or private funders. In the long run, imprecise economic impact estimates are detrimental to effective decision-making and the reliability of impact studies, even if (or perhaps especially if) models over-estimate economic contributions.